



SOCIOECONOMIC REPORT 2021





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CHAPTER 1

Accelerating and Sustaining Social and Economic Recovery

President Rodrigo Roa Duterte began his term by adopting a vision where Filipinos enjoy a *matatag, maginhawa* at *panatag na buhay*, alongside his administration's zero to ten-point socioeconomic agenda. Accelerating and sustaining economic growth was important; beyond this, many reforms needed to be in place to ensure that the growth is inclusive and that it enables every Filipino to achieve his or her aspirations.

In the past five years of the Duterte administration, game-changing policy reforms and programs that could result in long-lasting changes have been put in place. These reforms were clearly intended to be the foundation for inclusive growth, a high-trust and resilient society, and a globally competitive knowledge economy. While the COVID-19 pandemic has set back a number of the gains, additional reforms were set in motion even amidst the pandemic.

The pandemic has certainly entailed major disruptions and forced the world to rethink the way things are done. While the fact that we now live in a volatile, uncertain, complex, and ambiguous (VUCA) world has been talked about, it has never become more real and felt than when the pandemic struck. In this light, the Socioeconomic Report (SER) 2021 pays due attention to the impact of major disruptions like the pandemic especially on ordinary people's lives. Correspondingly, the SER contains recalibration of strategies under the Philippine Development Plan (PDP) 2017-2022 to ensure that government programs and policies are responsive to people's needs and aspirations, as well as to new developments or emerging trends.

In the last year of the Duterte administration and the transition to a new regime, the government will need to sustain efforts to end the pandemic and navigate towards a new and better normal. The SER 2021 highlights the need for more reforms to further increase the country's potential for economic growth and greater inclusivity. In the transition year 2022, there is a need to focus on: 1) accelerating and sustaining social and economic recovery; 2) building resiliency; and 3) developing agility. The latter two are meant to ensure that the country can bounce back quickly in the event of another crisis.

Social and economic recovery is about getting back to pre-pandemic levels of economic output, and optimizing that economic performance to bring the country back its our pre-pandemic economic growth path. The Duterte administration has already put in place the foundations for inclusive economic growth. The smart strategy, therefore, for economic recovery is to build on these foundations, while addressing weaknesses that multiplied our difficulties and hindered the effectiveness of the government's response to the pandemic.

In addition, as in any recovery plan, it is important to begin with a rapid appraisal to determine the adverse effects of the country's pandemic experience. The government needs to formulate a catch-up plan promptly to address social and economic scarring, if any.

Building resiliency is about reducing exposure to risks and mitigating the impact in case the risk materializes.

Building resiliency requires new routines and early warning technologies that compel us to be attentive to the most significant risks. These systems, as well as our knowledge of the limits of private capabilities and gaps in insurance coverage should be the basis of well-calibrated public action. This requires vigilant surveillance of all possible sources of risks and their consequences, with data coming from various sources, which will then be compiled and analyzed using state-of-the art data analytics. We must accompany this with a protocol for classifying risk level and responding accordingly.

Mitigating the adverse impact of a crisis is about re-gaining or improving from the pre-crisis quality of life. The key to having an effective mitigation mechanism is a buildup of sufficient resources—such as in the form of savings, assets, food reserves, and insurance. Meanwhile, the means to an efficient mitigation mechanism is to enable individuals, families, and local government units (LGU) to build up these reserves. But for those who do not or are unable to build up reserves or buy insurance, the government then needs to implement a social protection mechanism with a system for targeting, accounting, and auditing.

Developing agility is about improving our ability to anticipate and decide swiftly. In a VUCA world, stimuli or shocks can be numerous and can come from various fronts: a novel virus or disease, geopolitical tensions, financial crisis, climate crisis, and technological breakthroughs, among others. An agile response to shocks in a VUCA world requires a collective effort of experts from several disciplines. Developing agility prepares one to anticipate and respond well to unforeseen stimuli or shocks.

The COVID-19 experience showed the importance of agility or organizational speed and nimbleness in responding to the pandemic. When the pandemic struck, resources had to be freed up, budgets were updated, agencies broke through silos, some rapid feedback mechanisms were set up, and adjustments were made. However, frontline workers and citizens encountered logistical difficulties and confusion as new standards and routines were not quickly and clearly communicated. Learning our lessons, it is important to introduce and encourage innovations that will make interactions between and among public institutions—from national to local—and private sector fast, nimble, and smart to be responsive to fast-changing circumstances.

Economic and social recovery, resiliency, and agility must be incorporated into the Budget Priorities Framework and must also form part of the goals of action plans as the government prepares for the next PDP. This first chapter of SER 2021 discusses the major foundations that have been laid down by the Duterte administration for inclusive growth, a high trust and resilient society, and a globally competitive knowledge economy. The discussion already embeds recommendations to quickly build on these foundations. This is followed by a short introduction of the National Action Plan Phase 5, being formulated by the National Task Force (NTF) against COVID-19. The chapter then concludes with the proposed priority development themes for the next PDP.

The rest of the chapters report on recent trends and prospects, progress made in terms of the targets in the Updated PDP 2017-2022, and the strategies and actions that need to be implemented.

FOUNDATION FOR ECONOMIC GROWTH

Macroeconomic stability. The PDP 2017-2022 included policies and programs for macroeconomic stability, strategic trade and fiscal policy, and competition. These are intended to ensure sound macroeconomic fundamentals.

The Tax Reform for Acceleration and Inclusion or TRAIN Law corrected the inequity of the tax system by reducing personal income taxes while broadening the tax base. The net fiscal effect is higher revenue, which allowed the increase of budget allotted to both infrastructure and social development.

Various expenditure management reforms, such as cash-based budgeting have also been introduced to address underspending while ensuring the effective and efficient delivery of public services. These reforms were instrumental to the country's credit rating improvement to BBB+, the highest rating it has achieved so far. In turn, this enabled government to draw on affordable financing for a massive social assistance package during the COVID-19 pandemic.

Even as government continues to mitigate the effects of the pandemic, the big challenge now is to maintain sound macroeconomic fundamentals, especially given the increased fiscal spending to fund the COVID-19 response amounting to 5.0 percent of 2020 gross domestic product (GDP)¹, and to address the economic contraction of -9.5 percent GDP growth in 2020. The economic team is recommending a package of fiscal consolidation strategies, consisting of a mix of growth-enhancing, revenue-increasing, and expenditure-rationalization measures. A few will require legislation but most only need executive action for these to be implemented immediately.

Increasing investments. Very recently enacted are amendments on laws governing foreign investments. These are amendments to the Foreign Investments Act (FIA, Republic Act No. 11647), the Retail Trade Liberalization Act (RTLTA, RA 11595), and the Public Service Act (PSA, RA 11659). Primarily, the amendments are intended to attract more foreign investments by relaxing foreign equity restrictions. More importantly, RA 11659 is expected to bring in more competition in strategic industries, like telecommunications, transport, and logistics, as soon as the law's implementing rules and regulations (IRR) and the corresponding sector regulations are issued. The improved and more affordable services, in turn, are expected to boost the overall competitiveness of the economy and enhance quality of life.

But to manifest the intent of these laws and realize the benefits, executive departments, especially the regulatory agencies, must ensure that their regulations and protocols are aligned accordingly.

Another measure that is expected to increase investments is RA 11534, otherwise known as the Corporate Recovery and Tax Incentives for Enterprises (CREATE). The law provides immediate fiscal relief to domestic and foreign businesses in the Philippines by reducing the corporate income tax rate. At the same time, the investment incentive regime has been rationalized, with clear preference for investments to be placed outside of the National Capital Region (NCR), and to sectors covered by the Strategic Investment

¹ International Monetary Fund (IMF) Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic as of October 2021. <https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>

Priority Plan. This will need to be complemented by a business-friendly environment, especially in the prospective LGU destination.

Improving physical infrastructure. The government has embarked on an ambitious Build, Build, Build (BBB) program, which increased spending for infrastructure from 3.9 percent of GDP in 2016 to 5.8 percent in 2021, based on actual disbursement, and 4.5 percent² in 2022. In terms of count, Luzon (excluding NCR) has the greatest number of Infrastructure Flagship Projects (IFPs) with 30 (26.%), closely followed by NCR with 29 projects (25.9%), out of a total of 112 projects. Meanwhile, in terms of cost, Luzon also has the highest amount with PHP3.20 trillion, followed by NCR with PHP639 billion.

The BBB program is not yet completed. There are several projects still for completion in the coming years and there are other projects that remain in the project development pipeline. There may be revisions in project costs, which will require a re-appraisal. Re-prioritization may also be needed, with the expected tighter fiscal space. Despite these challenges, the government needs to sustain the BBB program to secure the economic and social benefits it promises to deliver—from the jobs generated during the construction phase, but more importantly, the better access to opportunities created once the infrastructure projects are completed.

Fostering a competitive business environment. As countries reel from the economic impact of the pandemic, competition policy has become even more crucial to guide decisions and strategies in boosting market efficiency. Administrative Order No. 44, s. 2021 (AO 44) issued on October 20, 2021 directed the adoption and implementation of the National Competition Policy. All government instrumentalities are mandated to: 1) adopt pro-competitive policies and interventions; 2) foster a level playing field between public and private sector businesses; and 3) assist the Philippine Competition Commission (PCC) in enforcing the Philippine Competition Act (PCA).

To fully implement AO 44, the government needs to conduct capacity building programs on competition policies, including the PCA.

FOUNDATION FOR INCLUSIVE GROWTH

Improving food accessibility and agricultural productivity. The Rice Tariffication Law (RTL), which replaced the quantitative restrictions on imported rice with tariffs, has improved consumers' access to the country's staple food with lower and more stable prices of rice. Compared to the peak in October 2018³, the average retail price of well-milled rice and regular milled rice decreased by PHP7.44 and PHP8.23 per kilo, respectively.⁴ These correspond to a 14.62 percent and 17.56 percent reduction in prices. At the same time, the RTL has enhanced farmers' productivity with the creation of the Rice Competitiveness Enhancement Fund (RCEF) to support programs on farm mechanization, seed development and distribution, credit expansion, and extension services. The RCEF programs, which complemented the interventions under the National Rice Program, contributed to the record-high production of almost 20

² Based on the revised PDP target for 2022, consistent with 2021 BESF.

³ Retail prices of well-milled rice and regular milled rice in October 2018 were at PHP50.90 and PHP46.87 per kilogram, respectively.

⁴ As of October 2021 data from the Philippine Statistics Authority.

million metric tons (MT) in 2021. Based on the Q4 2021 DA-PhilRice survey⁵, the integrated implementation of all RCEF programs increased the yield to 4.47 MT per hectare in the 2021 wet season from the 2019 baseline of 3.69 MT per hectare. This translates to an increase in gross revenue of PHP11,700 per hectare for rice farmers.

Increasing productivity and building resilience are critical issues for other agricultural commodities as well, including fish and livestock. Noting that these are the basic building blocks to achieving food security, interventions in the form of policies and programs should adopt the farm-to-plate framework and must be targeted and results-oriented, using indicators such as farmer's profits, adequacy of supply, affordability, and nutrition quality.

Expanding digital infrastructure. The Free Internet in Public Places Act aims to provide free, secure, and reliable internet service in public places across the country. Prior to this, the National Broadband Plan (NBP) was approved in 2017, which called for the government to also initiate investments in broadband infrastructure to complement private sector efforts in the delivery of universal, fast, and reliable broadband internet services to enable the shift towards a more digital economy. These are critical initiatives to bridge the digital divide and ensure that no one is left behind even while we transition to the new normal.

To further expand the coverage of the digital infrastructure, the government enabled the entry of a third telecommunications provider. DITO Telecommunity began its commercial operations on March 8, 2021, following the approval of its franchise.⁶ As of December 18, 2021, DITO Telecom achieved its 2021 target of five million subscribers.⁷ As of end-2021, DITO has coverage in Metro Manila and 44 provinces and major cities across the country.⁸

The next step is to further increase the digital infrastructure. While the amended PSA is expected to bring in more investments in digital infrastructure, there is still a need to address the digital divide. This may come by way of policies and government undertakings that might enable and direct private investments to the underserved areas. However, this may also be supported with direct public investments in digital infrastructure in currently underserved areas.

Enactment and Implementation of the Telecommuting Act. The enactment of the Telecommuting Act laid out the necessary legal framework to support telecommuting. The application of this law was maximized during the pandemic. In April 2020, the number of establishments implementing Flexible Working Arrangements (FWAs) reached 15,791, registering a 250 percent increase from March 2020. Meanwhile, establishments that specifically implemented telecommuting increased by 300 percent month-on-month (m-o-m) in April 2020. By the end of 2020, a total of 62,857 firms have adopted FWAs and 1.4 percent (or 872) of these implemented telecommuting. Most of these establishments are in the services sector (other services, accommodation and food, and retail trade).⁹

⁵ Presented during the 14th meeting of the RCEF Program Steering Committee on 01 April 2022.

⁶ The House of Representatives and the Senate approved the 25-year franchise of DITO Telecom on 24 August 2020 and 24 March 2021, respectively. On 18 May 2021, the President signed Republic Act No. 11537 extending DITO Telecom's franchise for another 25 years from its expiration on 24 April 2023.

⁷ <https://www.rappler.com/business/dito-telecommunity-users-december-18-2021>

⁸ <https://dito.ph/network-coverage>

⁹ Data on the establishments which resorted to Flexible Working Arrangements (FWAs), including telecommuting are based on the DOLE Job Displacement Reports.

Improving human capital. The impact of the pandemic and the attendant COVID-19 response measures on people's health, education, and overall well-being can be felt over many years and can affect the quality of present and future workforce. Even without the pandemic, there has been much to catch up on in terms of human capital development.

Education: The first senior high school cohort started during the Duterte administration in 2016. The following year, tertiary education in state universities and colleges were provided for free. The Universal Access to Quality Tertiary Education Act (UAQTE) was enacted in 2017. Implementation of free higher education began in Academic Year (AY) 2018-2019 which benefitted almost 1.2 million students in state universities and colleges (SUC) and Commission on Higher Education (CHED)-recognized local universities and colleges. As a result, enrollment in higher education, and technical-vocational education and training (TVET) increased to 1.6 million in AY 2020-2021.¹⁰

During the COVID-19 pandemic, face-to-face classes were suspended. Instead, learning was delivered using online classrooms, giving out printed modules, or a blended method combining the two modes of delivery. Access to the online delivery of instruction was severely limited by the low coverage and poor quality of digital connectivity. A study covering United States (US) students revealed that online learning is only 52 percent as effective as face-to-face learning. Adjusting this percentage by the performance of the Philippines in the 2018 Programme for International Student Assessment (PISA) relative to the US, NEDA estimates that the loss due to the suspension of face-to-face classes amounts to PHP11 trillion over the next 40 years without in-person learning, as each year of lost learning reduces future incomes of learners.

Going forward, there needs to be an aggressive plan to catch up on learning losses. The Department of Education (DepEd), CHED, and Technical Education and Skills Development Authority (TESDA) will require additional budget for Personal Services (PS) and Maintenance and Other Operating Expenses (MOOE) to conduct remedial classes. Additionally, schools must be upgraded and learning systems must be developed for online learning. Necessarily, students will need to have access to reliable digital infrastructure.

Nutrition: The United Nations Children's Fund (UNICEF)¹¹ has labeled the first 1,000 days of a child as the brain's window of opportunity when cognitive skills develop dramatically, but this depends on the child's health and nutrition status during this time. RA 11148, or the *Kalusugan ng Mag-Nanay* Act, was enacted in November 2018 specifically to improve the delivery of essential services during the first 1,000 days of the child.

In 2020, the National Nutrition Council (NNC) began implementing *Tutok Kainan* in selected LGUs. *Tutok Kainan* is a dietary supplementation program for children 6-23 months and nutritionally-at-risk pregnant women. Its implementation during the COVID-19 pandemic only demonstrates the resolve of the government to ensure the well-being of the next generation of Filipinos.

¹⁰ Source: CHED-UniFAST

¹¹ <https://www.unicef-irc.org/article/958-the-first-1000-days-of-life-the-brains-window-of-opportunity.html>

The next step is to conduct a comprehensive evaluation of the project for possible expansion and replication, as this is one of the programs to be developed by NNC to LGUs. In addition, a service continuity plan is needed in the likely event that some mobility restrictions may have to be imposed.

Reintegration and Repatriation Programs for Overseas Filipino Workers (OFW). The government provided assistance to OFWs who were displaced due to the pandemic. From March 2020 to September 2021, 1.437 million overseas Filipinos were processed for repatriation through One Stop Shops. Moreover, from March 2020 to August 2021, 120,903 OFWs were provided with livelihood assistance and 134,602 OFWs were provided with training assistance.

FOUNDATION TO BUILD A HIGH-TRUST SOCIETY

Enactment and implementation of the Philippine Identification System (PhilSys) Act. The PhilSys Act was enacted in late 2018 and is intended to establish a single identification system for all citizens and resident aliens in the Philippines. Equally important, the Philippine Identification (PhilID) card will then be utilized to promote seamless service delivery, enhance administrative governance, reduce corruption, strengthen financial inclusion, and promote ease of doing business.

As of December 31, 2021, more than 52.8 million individuals have completed registration Steps 1 and 2 (demographic data collection biometrics capture), while 4.8 million have completed the Step 3 of the registration process (distribution of PhilID cards). In addition, more than 7 million PhilSys registrants applied for opening of bank account in LANDBANK, which co-locates in the registration centers. Executive Order No. 162, s. 2022 has recently been issued to “institutionalize the acceptance of the PhilID and PhilSys Number (PSN), as authenticated, as sufficient proof of identity and age in all government and private transactions.” To implement EO 162, frontline government agencies need to **reconfigure their databases and systems to recognize the PhilID and PSN**, especially the agencies that maintain registries for various government programs.

Enactment and Implementation of the Ease of Doing Business and Enhanced Government Service Delivery (EODB-EGSD) Act. The law created the Anti-Red Tape Authority (ARTA) under the Office of the President (OP) to oversee the harmonization and mainstreaming of various government processes that govern business-to-government and citizen-to-government transactions.

A major program of ARTA is the National Effort for the Harmonization of Efficient Measures of Interrelated Agencies (NEHEMIA). This aims to reduce time, cost, requirements, and procedures in sectors of economic and social significance by 52 percent within 52 weeks. The first phase covers common towers and connectivity (from 241 to 16 days), housing (obtaining building permits from 120 to 3 days for simple construction projects, 7 for complex, and 20 for highly technical projects), food and pharmaceutical (from 63 to 21 days), logistics (from 271 to 35 days), and energy sectors.

One of the major accomplishments of NEHEMIA is the Central Business Portal (CBP) that serves as a single window for all business-related information and transactions. It allows business applicants to register their businesses in just one step in less than a day, as compared to the previous manual process

with 13 steps that took up to 33 days to complete. The CBP is complemented by the Integrated Business Permits and Licensing System (iBPLS), which is a platform that enables electronic application and processing of business permits, building and occupancy permits, barangay clearance, and e-payment. There are 377 LGUs that are implementing the iBPLS module on business permit, 48 LGUs on barangay clearance, 11 LGUs on building permit and certificate of occupancy, and 5 LGUs utilizing e-payment. Of these, 267 LGU iBPLS have already been linked to the CBP while 17 have been integrated.

ARTA also developed a manual on Regulatory Impact Assessment (RIA) to provide guidance and information on the tools, processes, and procedures for appraising the potential impact of proposed regulations. The objective is to help government agencies design sound and effective regulations that provide the most benefit for citizens and stakeholders without causing any undue burden or cost.

The government needs to sustain efforts to ease business-to-government and citizen-to-government transactions. As with the previous initiatives, this will entail digitalization of more government processes and the acceptance of digital documents.

Peace initiatives. The Duterte administration has successfully negotiated peace agreements with all internal armed groups and is currently implementing these agreements.

The Bangsamoro Organic Law (BOL) provided for the establishment of the Bangsamoro Autonomous Region of Muslim Mindanao (BARMM) and for the Bangsamoro Government to be elected after a transition period. During the transition period, the Bangsamoro Transition Authority (BTA) served as the interim government. RA 11593, signed into law on October 28, 2021, extended the transition period given the challenges in instituting reforms and complying with the expectations set in the BOL, aggravated by the impacts of the pandemic. With the passage of RA 11593, the BTA will be able to further undertake relevant functions necessary for the establishment of a fully functioning BARMM Government. These functions include the enactment of priority legislations, determination of parliamentary districts, organization of the bureaucracy, full transfer of powers and properties to the Bangsamoro Government, and disposition of personnel of the ARMM, among others.

Meanwhile, peace initiatives with the Communist group were pursued through the National and Regional Task Forces to End Local Communist Armed Conflict. These were implemented to free barangays from communist-terrorist groups (CTG), reintegrate former rebels, and spur socioeconomic development in these conflict-affected areas.

Amnesty is an integral component of the government's comprehensive peace efforts towards reintegration, social healing, and reconciliation among former rebels and the affected families and communities. For this reason, the National Amnesty Commission was created (EO 125, s. 2021), and several Proclamations granting amnesty to members of internal armed groups (Proclamation Nos. 1090, 1091, 1092, and 1093) were signed on February 5, 2021.

FOUNDATION TO BUILD RESILIENCE

Enactment and progressive implementation of the Universal Health Care (UHC) Act. RA 11223 was enacted in 2019 to increase financial risk protection, enhance health system responsiveness, and improve health outcomes. Every Filipino is automatically covered in the National Health Insurance Program with expanded benefits like the *Konsultasyong Sulit at Tama (Konsulta)*,¹² and updated policies on No Co-payment/No Balance Billing for Philippine Health Insurance Corporation (PhilHealth) Benefit Packages.¹³ Social insurance premium adjustments are due in 2022 to enable even better coverage for health contingencies and to further reduce out-of-pocket expenses of members,

Meanwhile, 58 LGUs or UHC Integration Sites (UHC-IS) declared their commitment to establish a province- and city-wide health system (P/CWHS). The Department of Health (DOH) has developed a menu of technical assistance and support for UHC IS¹⁴ and capacity building interventions¹⁵ to augment the capacity of the centers for health development (CHDs) and LGUs to implement UHC. In addition, DOH and the National Privacy Commission (NPC) issued guidelines on the use of Telemedicine in COVID-19 Response.¹⁶ DOH also issued rules and regulations¹⁷ to set the minimum standards and licensing requirements of primary care facilities in the Philippines.

The COVID-19 pandemic has amplified the weaknesses of our health systems, including the governance structure. Hence, it is urgent to fully implement the UHC, which includes improving health facilities and human resources for health.

Enactment and implementation of the 4Ps Act. RA 11310 institutionalized the *Pantawid Pamilyang Pilipino Program* (4Ps), which provides cash grants to qualified beneficiaries subject to their compliance to certain conditions. These conditions are intended to break the inter-generational cycle of poverty by ensuring that the children receive healthcare and attend school. The enactment of the law provided certainty in program funding.

As of December 31, 2021, 4,091,590 household beneficiaries are covered under the conditional cash transfer (CCT) program.¹⁸ However, this group of beneficiaries is based on an outdated list. There is a need to update the CCT registry or the *Listahanan*, ideally in time for the implementation of the 2023 General Appropriations Act, especially amidst the COVID-19 pandemic. This will reduce targeting inefficiencies such as leakage and under-coverage for future subsidies.

Enactment and implementation of the Amended Social Security System (SSS) Act. The amended SSS Act included unemployment insurance as among the benefits of its members, which proved useful during the imposition of mobility restrictions. As of December 2021, the number of members provided with unemployment insurance benefits is 220, 443 since its implementation in 2019.

¹² PhilHealth Circular No. 2020-0002

¹³ PhilHealth Circular No. 2020-0024

¹⁴ DOH Memorandum No. 2021-0212

¹⁵ Includes creation of a UHC Implementers' Course, which aims to educate the policy implementers on the requirements, systems and tools available in strengthening the health system

¹⁶ Joint Memorandum Circular No. 2020-0001

¹⁷ DOH Administrative Order No. 2020-0047

¹⁸ Source: DSWD. Monthly Report on Pantawid Pamilya Implementation.

FOUNDATION TO INCREASE POTENTIAL FOR HIGHER GROWTH

Enactment of laws to promote the innovation ecosystem. Four landmark laws, recently enacted, will help promote a dynamic innovation ecosystem: (a) the *Philippine Innovation Act* which establishes the National Innovation Council (NIC) and elevates policy and planning on innovation to the highest levels of government; (b) the *Innovative Startup Act* which provides incentives, monetary, and operational support to innovative and technology startups to foster an innovative entrepreneurial culture; (c) the *Philippine Space Act* which provides the institutional framework to enable the country to reap the benefits from the development and use of space technologies; and (d) the *Balik Scientist Act* which further encourages Filipino experts, scientists, inventors, and engineers who are currently abroad to return and share their knowledge and expertise.

Establishment of Regional Inclusive Innovation Centers (RIICs). RIICs are a network of innovation agents that collaborate to commercialize market-oriented research towards the competitiveness of the region, thereby generating better employment opportunities and more entrepreneurial activities.¹⁹

As of end-2021,²⁰ there are 8 pilot RIICs,²¹ 9 local innovation programs launched, 5 innovation guidebooks, 5 RIICs with online platforms that have database of commercial technologies in the region, and 6 RIICs implementing innovation for business recovery (IBR).²² Further, over 100 Micro, Small, and Medium Enterprises (MSME) have been assisted through IBR activity, research and development (R&D) ideation workshops and industry-academe partnerships, 43 SUCs tapped in RIIC-facilitated activities and program, 9 industry-academe R&D projects in development, 5 technologies adopted by MSMEs, and 8 Local Grants-In-Aid (LGIA) funded industry-academe R&D project.

There is a need to expand these RIICs to other regions of the country and serve as convening platforms in the implementation of the National Innovation Agenda and Strategy Document (NIASD).

Issuance of EO 12 on the Strict Implementation of The Responsible Parenthood and Reproductive Health (RPRH) Act within the broader objective of realizing the demographic dividend of having a young, economically active population. DOH prioritized the following strategies to reduce unmet need: 1) post-partum family planning (FP, facility and community based); 2) outreach missions; 3) demand generation; 4) stock-out reduction; and 5) public sector availability of FP commodities. These are implemented with other government agencies, LGUs, development partners, and civil society organizations (CSO). In addition, a National Family Planning Communication Strategy 2020-2022 was developed to increase FP use among sexually active young people and post-partum women, among others. As a result, modern contraceptive prevalence rate among all women of reproductive age women (15-49 years old) gradually increased from 25.3 percent in 2017 to 27.4 percent in 2019.²³

¹⁹ <https://innovate.dti.gov.ph/programs/riics/>

²⁰ Based on the information provided by DTI (as of May 2022)

²¹ SHINE Cagayan Valley (Region 2), THRIVE Central Luzon (Region 3), LINC CALABARZON (Region 4A), BRIDGE Bicol (Region 5), Startup Island (Region 7), ZamPen InnoHive (Region 9), OROBEST (Region 10), ILIGANICE (Region 10), iSTRIKE Davao (Region 11)

²² A program designed to present a menu of options for micro, small and medium enterprises (MSMEs) through potential partners such as HEIs, startups, government partners and financial institutions to help MSMEs recover and ensure continuity of operations amidst the pandemic.

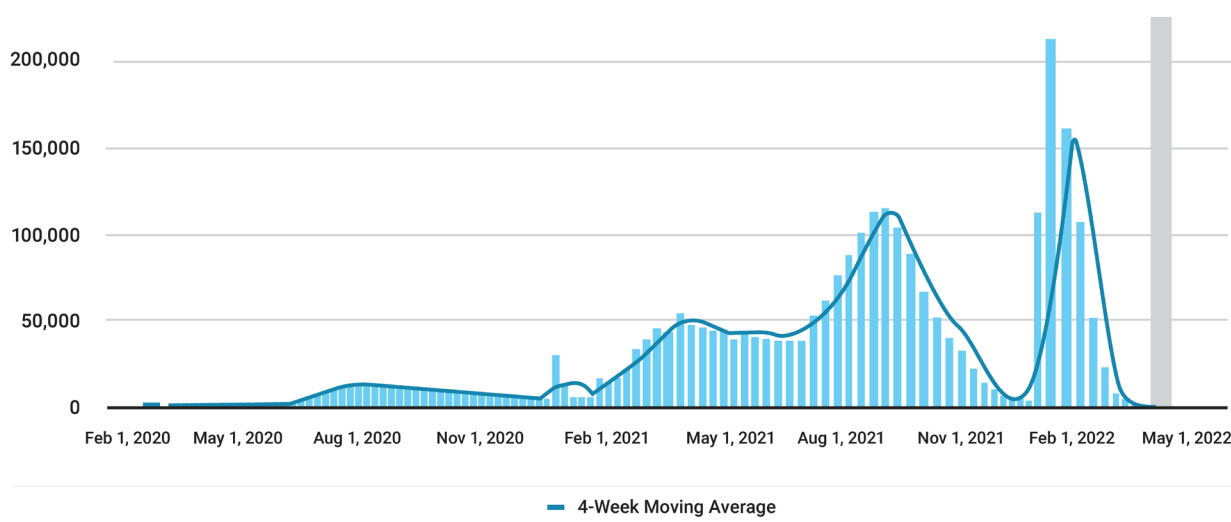
²³ Field Health Service Information System (FHSIS) data on mCPR does not show “true” prevalence but FP service statistics provided by public health facilities.

DepEd Order No. 31 s. 2018 “Policy Guidelines on the Implementation of Comprehensive Sexuality Education (CSE).” DepEd developed Detailed Lesson Plans (DLPs) for teachers integrating CSE key concepts and messages to the different learning areas. They also trained public school teachers in select regions (CALABARZON, VII and XI) on CSE.²⁴ This was then followed through by capacity building sessions on the enhanced CSE curriculum along with a Baseline Assessment of Capacities in Teaching CSE in three pilot Regions (I, VII, and XI).²⁵ DepEd also developed a CSE Primer for Parents and guardians that will serve as job aid for teachers to introduce the basic concepts of CSE to parents and guardians during school meetings. The DepEd, DOH, and the Commission on Population (POPCOM) also launched the Convergence of the CSE and Adolescent Reproductive Health Program in 2021 that is part of the whole-of-government response to address the high level of adolescent pregnancies and other reproductive health issues among young people.

ENDING THE PANDEMIC AND RECOVERING FROM ITS IMPACT

The first case of COVID-19 in the Philippines was recorded in late January 2020. Since then, there have been at least three episodes of COVID-19 waves, the highest being observed in January 2022 at around 40,000 cases in a day. This occurred three weeks after the case numbers had been very low.

Figure 1.1 Weekly Cases by Date of Onset of Illness



Note: There are still 698,429 cases with unreported date of onset of illness and date of specimen collection.

The Philippines’ COVID-19 response is summed up as PDITR+V (Prevent, Detect, Isolate, Treat, Reintegrate, and Vaccinate). Mobility restrictions were first implemented region-wide, then shifted to province- or city-wide in May 2020. Beginning October 2021, there was shift to granular lockdowns (GL). The GLs were accompanied by capacity restrictions in establishments or activities in the 3Cs (crowded, closed spaces, closed contact activity).

²⁴ DepEd Memorandum, DM-CI-2020-00237 “National On-line Training of Teachers on the Integration of CSE in the K to 12 Basic Education Curriculum”
²⁵ Ibid.

Figure 1.2 Annual Gross Domestic Product (in current prices)

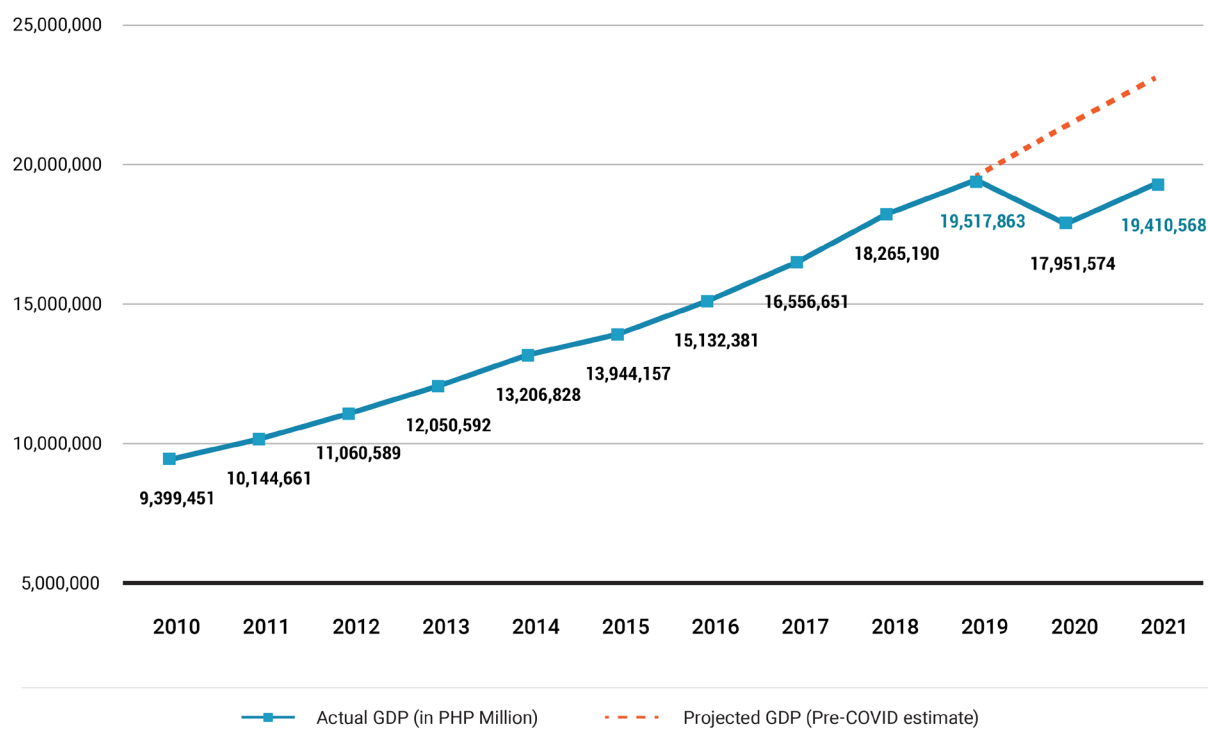


Figure 1.2 shows the economic impact of these mobility restrictions, including the gradual recovery coinciding with the easing of mobility restrictions. We see that the full year (nominal) GDP for 2021 was 99.5 percent of what it was in 2019. There have been social and economic losses over the past two years that need to be addressed.

NATIONAL ACTION PLAN PHASE 5 (NAP5)

Focusing on health and economic recovery, the National Task Force (NTF) against COVID-19 initiated the formulation of NAP5.²⁶ This is intended to guide government instrumentalities to transition from Alert Level 1 to a situation where COVID-19 is considered an endemic disease—where the country can return to normalcy but with caution. At the same time, NAP5 calls for the formulation and implementation of a catch-up plan to address possible social and economic scarring.

From a situation where government imposes the rules on minimum public health standards and mobility, NAP5 aims for a situation where individuals take responsibility for keeping themselves informed and protected against health threats. From a situation where anxiety over the health scare is compounded by anticipated and real financial stress, NAP5 aims to develop a plan to make individuals and businesses more resilient while building the capacity of health research and innovation.

²⁶ It must be noted that the NAP5 is still being finalized by the NTF, then to be approved by the IATF. Only a short introduction is given here.

Figure 1.3 Outcomes for a Healthy and Resilient Philippines



Figure 1.3 enumerates the outcomes desired to have a healthy and resilient Philippines and lists the strategies to realize these.

The implementation of the NAP5 will require public investments to: 1) increase health system capacity (health care facilities, equipment, testing kits and paraphernalia, procurement and/or manufacturing of medicines and vaccines, human resources for health, biosurveillance, health information systems, etc.); 2) repair structures to ensure proper ventilation; 3) accelerate digital transformation; 4) increase capacity for science, technology, and innovation; 5) enhance social protection programs; and 6) implement other programs that build resiliency and develop agility of individuals, businesses, civil society and government.

SUGGESTED PRIORITY THEMES FOR PDP 2023-2028

The next Philippine Development Plan must continue the reform agenda to enable and empower all Filipinos to enjoy a *matatag, maginhawa at panatag na buhay*. There is yet the unfinished business of the Duterte administration—the adverse social and economic impact of COVID-19 and the increasing likelihood of more risks and greater uncertainty in the future. Given this context, NEDA proposes the following priority themes: 1) regional equity; 2) smart infrastructure; 3) innovation; and 4) climate change adaptation and action.

Regional equity in opportunities is necessary for inclusive growth. The inequity in opportunities leads to inequity in outcomes. For instance, the national average life expectancy of Filipinos is 72.95 years, but this varies across regions. An individual born in 2010 is expected to live up to 75.19 years if born in NCR, but only up to 65.51 years if born in ARMM where access to services and development opportunities are much less than in NCR. This difference is expected to decline over time, but the impact of COVID-19 on life expectancy is still to be determined.

Smart infrastructure is the result of better planning with key result areas defined with respect to user experience. For instance, rather than reporting the kilometers of roads constructed, the time and cost for an average commuter or motorist to get from home to office should be addressed. Instead of the number of housing units built, it should be about communities re-settled. Instead of number of mobile subscribers, it should be about cost for a desired quality of service. At the minimum, this requires systems thinking and the conduct of regular user surveys.

“Innovation refers to the creation of new ideas that results in the development of new or improved products, processes, or services which are then spread or transferred across markets.”²⁷ Innovation is key to developing agility which, in turn, improves our chances of achieving *AmBisyon Natin 2040*, regardless of the challenges that may arise. It is important, therefore, that the innovations produce an inclusive, resilient, and sustainable society. Policies that encourage innovations must be accompanied by programs that hone the character qualities of innovators, and are informed by the needs of the MSMEs, especially those that serve the disadvantaged sectors of society.

Climate change is expected to gradually alter weather patterns, increase temperature, raise sea levels, and have other slow onset adverse impacts. The Philippines is one of the most vulnerable countries with respect to climate change.²⁸ The government has been preparing for this with the creation of the Climate Change Commission (CCC). However, capacities need to be increased. More climate experts working within various government agencies are needed. There is also a need to invest in mechanisms to monitor environmental quality and in regularly measuring the country’s natural capital so as not to be blindsided by climate trends and their social and economic impact.

²⁷ RA 11293 Section 3, g

²⁸ <https://niccdies.climate.gov.ph/climate-change-impacts#:~:text=Impacts%20of%20climate%20change%20in,as%20women%20and%20indigenous%20people.>

ABOUT THE SER 2021

The Socioeconomic Report (SER) 2021 is structured similar to the previous SER under the PDP 2017-2022, except in three respects: 1) inclusion of a new chapter on “Protecting the rights, promoting the welfare, and expanding opportunities for Overseas Filipinos;” 2) a depiction of alternative futures in Chapter 2, considering the combined effect of the digital divide (whether the divide is bridged or not) and the continued spread of COVID-19 and impacts of the ensuing restrictions (whether mobility restrictions will continue or not); and 3) for chapters 5 through 21, the “in-focus” section, which is a characterization of a persona²⁹ with his or her aspirations and current frustrations, mostly arising from the COVID-19-induced restrictions. The inclusion of such persona³⁰ serves as a reminder that strategies and interventions need to be human-centered and address realities on the ground.

Part I, including this chapter, provides the framework for SER 2021: environment scan covering the short term, alternative futures for the medium-term, the National Spatial Strategy, and the overall strategic framework.

Parts II-VI elaborate the strategies corresponding to each pillar of the PDP 2017-2022 Strategic Framework: *Malasakit, Pagbabago, Patuloy na Pag-unlad*, Enabling and Supportive Economic Development, Foundations for Sustainable Development, and International Migration. As previously stated, the inclusion of new or enhanced strategies was motivated particularly to address the personas characterized in each chapter.

²⁹ Not a real person or family and used for the purpose of illustrating the Filipinos’ aspirations and challenges faced with respect to the topic of the chapter.

³⁰ Not a real person or family but used for the purpose of illustrating the Filipinos’ aspirations and challenges faced with respect to the topic of the chapter.

CHAPTER 2

Global and Regional Trends and Prospects

The global economy is expected to gradually recover from COVID-19 pandemic over the next two years, while emerging risks such as pandemic scarring, policy normalization, financial market volatility, inflation, and geopolitical events will influence global and regional developments in the near term. Thus, the country needs a balancing act as it maneuvers through health, environmental, economic, social, political, and technological trends while pursuing development towards a healthy and resilient Philippines.

HEALTH TRENDS AND UNCERTAINTIES

Some 517 million people around the world have contracted COVID-19.¹ Several variants have been identified since the start of the pandemic.^{2,3} Meanwhile, 65.5 percent of the world's population had received at least one vaccine dose,⁴ but vaccine inequity remains across regions. The Vaccine Equity Dashboard reported that over 72 percent of the population in high-income countries had received at least one COVID-19 vaccine dose while the coverage is only at about 17 percent for low-income countries.⁵

Nonetheless, the International Monetary Fund (IMF) expects Omicron variant cases to abate by the latter half of 2022, while emerging economies will have broad access to vaccines by 2022 to 2023. Consequently, improved access to vaccines and treatments as well as more targeted and effective protocols will bring down hospitalizations and deaths by end of 2022.

Accessible and equitable vaccination rollout will be critical to the global recovery moving forward.

ECONOMIC TRENDS AND UNCERTAINTIES^{6,7,8}

After contracting by 3.1 percent in 2020 amid the pandemic and the Great Lockdown, the IMF estimated that the global economy expanded by 6.1 percent in 2021 as economies reopened and vaccination programs were rolled out. For 2022, the IMF expects global economic growth to slow down to 3.6 percent for both 2022 and 2023, before stabilizing to around 3.3 percent moving forward. The outlook is tempered by the

¹ Cumulative Confirmed Covid-19 Cases. Johns Hopkins Data via Our World in Data. <https://ourworldindata.org/covid-cases> (accessed 10 May 2022)

² WHO. Tracking SARS-CoV-2 variants. <https://www.who.int/en/activities/tracking-SARS-CoV-2-variants> (accessed 8 February 2022)

³ CoVariants. <https://covariants.org> (accessed 8 February 2022)

⁴ Our World in Data. <https://ourworldindata.org/covid-vaccinations> (accessed 21 April 2022)

⁵ UNDP-WHO-University of Oxford. Vaccine Equity Dashboard. <https://data.undp.org/vaccine-equity> (accessed 21 April 2022)

⁶ IMF. "World Economic Outlook: Recovery During a Pandemic". (October 2021)

⁷ IMF. "World Economic Outlook Update: Rising Caseloads, a Disrupted Recovery, and Higher Inflation." (January 2022)

⁸ IMF. "World Economic Outlook: War Sets Back the Global Recovery". (April 2022)

Ukraine-Russia conflict, inflation risks, monetary and fiscal normalization, financial market volatility, China slowdown, pandemic uncertainties, and gaps in vaccine access.⁹

From a contraction of 4.5 percent in 2020, advanced economies have recovered with growth reaching 5.2 percent in 2021. For 2022 and 2023, advanced economies are expected to grow by 3.3 percent and 2.4 percent, respectively. Meanwhile, after a 2.0 percent decline in 2020, emerging economies grew by 6.8 percent in 2021 and are projected to expand further by 3.8 percent in 2022 and 4.4 in 2023. After a 3.4 percent decline in 2020, Association of Southeast Asian Nations (ASEAN)-5¹⁰ is estimated to have grown by 3.4 percent in 2021. For 2022 and 2023, the region is forecasted to grow by 5.3 percent and 5.9 percent, respectively.

After rebounding from a contraction of 7.9 percent in 2020 to 10.1 percent growth in 2021, the IMF expects global trade growth to moderate to 5.0 percent in 2022 and 4.4 percent in 2023.

Global foreign direct investment (FDI) flows beat pre-pandemic levels¹¹ as it rebounded by 77 percent from USD929 billion in 2020 to USD1.65 trillion in 2021. ASEAN FDI flows also stayed resilient with an average growth of 35 percent. The United Nations Conference on Trade and Development (UNCTAD) forecasts global FDI flows to remain robust in 2022,¹² primarily driven by international project finance for infrastructure.¹³

Reopening economies and recovering global demand create upside pressures on inflation. At the same time, geopolitical tensions, supply chain bottlenecks from production restrictions, rising shipping costs, weather externalities, and domestic idiosyncrasies have pushed up global oil, freight, and food prices. Amid this confluence of factors, the IMF sees elevated inflation as much more broad-based, persistent, and at risk of outpacing expectations that may in turn require aggressive policy responses in 2022.

The “unprecedented” fiscal response to the pandemic reached over USD16.9 trillion. This led to the global fiscal deficit widening to 9.9 percent and global government debt rising to 99.2 percent of global GDP in 2020.¹⁴ Despite the persistence of the pandemic, the global fiscal deficit began to narrow to 6.4 percent in 2021 and is expected by the IMF to fall further to 4.9 percent in 2022.¹⁵ Nevertheless, global government debt is estimated to remain elevated at 94.4 percent in 2022.¹⁶

In 2020, central banks across the world implemented accommodative monetary policies¹⁷ to counter the COVID-19 induced recession. However, emerging broad-based inflation pressures have induced several central banks to start normalizing monetary policy in 2021 to 2022. Most notably, the US Federal Reserve

⁹ The IMF removed the US Build Back Better fiscal policy package from its baseline outlook in January 2022.

¹⁰ Indonesia, Malaysia, Philippines, Thailand, Vietnam

¹¹ USD1.5 trillion in 2019

¹² United Nations Conference on Trade and Development (UNCTAD), “World Investment Report 2021: Investing in Sustainable Recover”. <https://unctad.org/webflyer/world-investment-report-2021> (accessed 20 October 2021)

¹³ UNCTAD, “Investment Trends Monitor: Global FDI rebounds strongly in 2021, but recovery highly uneven”. Global Investment Trends Monitor, No. 40. https://unctad.org/system/files/official-document/diaeiainf2021d3_en.pdf (accessed 9 February 2022)

¹⁴ Gaspar, Vitor, Paulo Medas, and Roberto Perrelli. IMF Blog. “Global Debt Reaches a Record \$226 Trillion”. <https://blogs.imf.org/2021/12/15/global-debt-reaches-a-record-226-trillion> (accessed 9 February 2022)

¹⁵ IMF, “Fiscal Monitor: Fiscal Policy from Pandemic to War”. April 2022

¹⁶ IMF WEO April 2022

¹⁷ Measures include low to negative interest rates, expansion of asset purchases, provision of credit loans and guarantees, alternative monetary facilities, and regulatory easing.

hiked its policy rate by 75 basis points and cited plans to reduce its securities holdings beginning June 2022.¹⁸ Meanwhile, the European Central Bank signaled more aggressive asset purchase tapering, while other central banks have started hiking interest rates.^{19,20} In the near-term, the IMF warns of more volatile global financial conditions that limit policy space to support growth. A faster-than-expected policy normalization may result in debt repayment pressures, capital outflows, and foreign exchange volatility, among others.

POLITICAL TRENDS AND UNCERTAINTIES

Protectionist, populist, and inward-looking policies are expected to persist. The Ukraine-Russia conflict has raised the risks of further escalation of tensions between superpowers.²¹ Despite a Brexit agreement in December 2020, the outlook remains fragile as part of the agreement remains under dispute.²² Geopolitical risks in the Middle East are expected to remain high due to multiple factors, including the Taliban takeover in Afghanistan and the Iranian nuclear program.^{23,24} Tensions between the US and China are expected to continue over trade, technology, and security.²⁵ Disputes over territorial claims in the West Philippine Sea will likely persist as well.

Domestically, the key uncertainties are with regard to the policy agenda of the incoming Administration.^{26,27} Another source of uncertainty how local government units (LGU) will choose to utilize additional resources under the Mandanas-Garcia Ruling and implement the full devolution of certain functions under Executive Order No. 138, s. 2021.²⁸

SOCIAL AND DEMOGRAPHIC TRENDS AND UNCERTAINTIES

The World Bank (WB) estimates the total COVID-19-induced new poor population relative to pre-pandemic levels at about 93 million in 2020 and 85 million in 2021. In 2022, the WB forecasts that added inflation pressures and the Ukraine-Russia conflict will create an additional 75 to 95 million individuals in extreme poverty.²⁹ Meanwhile, the International Labour Organization (ILO) estimated

¹⁸ Fed Press Release, "Federal Reserve issues FOMC statement" <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220316a.htm> (accessed 23 March 2022)

¹⁹ Fed Press Release, "Federal Reserve issues FOMC statement". <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504a.htm> (accessed 10 May 2022)

²⁰ ECB Press Release, "Monetary policy decisions". <https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220310~2d19f8ba60.en.html> (accessed 23 March 2022)

²¹ Roubini, Nouriel. Project Syndicate. "Russia's War and the Global Economy" <https://www.project-syndicate.org/onpoint/russias-war-and-the-global-economy-by-nouriel-roubini-2022-02> (accessed 28 February 2022).

²² Article 16, or trading arrangements for Northern Ireland.

²³ Middle East Institute. "2022 trends and drivers to watch in the Middle East". <https://www.mei.edu/publications/2022-trends-and-drivers-watch-middle-east> (accessed 23 February 2022).

²⁴ Roubini, Nouriel. Project Syndicate. "Clouds Over 2022". <https://www.project-syndicate.org/commentary/economic-market-outlook-2022-by-nouriel-roubini-2021-12> (accessed 23 February 2022).

²⁵ The Economist. "Rivalry between America and China will shape the post-covid world." <https://www.economist.com/the-world-ahead/2021/11/08/rivalry-between-america-and-china-will-shape-the-post-covid-world> (accessed 8 February 2022).

²⁶ Leather, Gareth. "A guide to political events in 2022". Capital Economics. <https://www.capitaleconomics.com/publications/emerging-asia-economics/emerging-asia-economics-update/a-guide-to-political-events-in-2022> (accessed 10 May 2022)

²⁷ The Economist, Another Ferdinand Marcos is set to become president of the Philippines, 7 May 2022.

²⁸ World Bank. "PHILIPPINES: Mandanas Ruling Provides Opportunities for Improving Service Delivery Through Enhanced Decentralization, June 10, 2021." <https://www.worldbank.org/en/news/press-release/2021/06/10/philippines-mandanas-ruling-provides-opportunities-for-improving-service-delivery-through-enhanced-decentralization> (accessed 10 May 2022).

²⁹ Mahler, Daniel Gerszon, Nishant Yonzan, et al. World Bank Blog. "Pandemic, prices, and poverty". <https://blogs.worldbank.org/opendata/pandemic-prices-and-poverty>

global employment loss³⁰ of 114 million in 2020³¹ and 14 million in 2021.^{32,33} Long-term scarring^{34,35} may lead to further delays in poverty reduction.

Moreover, the UN estimates that migrant levels were 2 million lower in 2020 compared to a non-COVID-19 environment.³⁶ Moving forward, international migration trends will be influenced by structural forces such as geopolitical, technological, and environmental dynamics.³⁷ While demand for migrant workers will remain in the long run, downside risks emanate from remote work and more prevalent technology use for services.³⁸

Meanwhile, the UN maintains its outlook of continued but slower population growth and long-term “demographic transition.”³⁹ It expects that trends such as increasing life expectancies, decreasing fertility rates,⁴⁰ and ageing populations⁴¹ will persist beyond the pandemic.

ENVIRONMENTAL TRENDS AND UNCERTAINTIES

After a short respite at the start of the pandemic and the subsequent global lockdown, concentrations in global greenhouse gases (GHG) continued to rise in 2020.⁴² The National Aeronautics and Space Administration (NASA) reported that 2020 and 2021 were among the hottest on record as the global surface temperature increased by 1.2°C⁴³ and 1.1°C,⁴⁴ respectively, relative to the previous century. According to the Intergovernmental Panel on Climate Change (IPCC), the projected global warming by 1.5°C to 2.0°C will continue in the absence of significant GHG emission reductions in the coming

prices-and-poverty (accessed 21 April 2022)

³⁰ Mainly from rising inactivity and unemployment

³¹ ILO Monitor. “COVID-19 and the world of work”.

https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_767028.pdf (accessed October 21, 2021)

³² International Labour Organization. “World Employment and Social Outlook: Trends 2021”. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_794452.pdf (accessed 10 May 2022)

³³ International Labor Organization, “World Employment and Social Outlook Trends 2022”. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_834081.pdf (accessed 9 February 2022)

³⁴ Das, Sonali and Wingender, Philippe. IMF Blogs. “Slow-Healing Scars: The Pandemic’s Legacy”. <https://blogs.imf.org/2021/03/31/slow-healing-scars-the-pandemics-legacy> (accessed 21 October 2021)

³⁵ Nguyen, Van. UN ESCAP Blogs. “A new legacy of inequality behind COVID-19”. <https://www.unescap.org/blog/new-legacy-inequality-behind-covid-19> (accessed 21 October 2021)

³⁶ UNDESA. “International Migration 2020 Highlights”. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd_2020_international_migration_highlights.pdf (accessed 10 November 2021)

³⁷ International Organization for Migration (IOM), “World Migration Report 2022”. <https://publications.iom.int/books/world-migration-report-2022> (accessed 9 February 2022)

³⁸ KNOMAD-World Bank. “Migration and Development Brief: Resilience – COVID-19 Crisis Through Migration Lens”. https://www.knomad.org/sites/default/files/2021-05/Migration%20and%20Development%20Brief%2034_1.pdf (accessed 10 November 2021)

³⁹ UNDESA. “Global Population Growth and Sustainable Development”. <https://desapublications.un.org/publications/global-population-growth-and-sustainable-development> (accessed 21 April 2022)

⁴⁰ UNDESA. “The impact of the COVID-19 pandemic on fertility: Ten key messages” August 2021. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/files/documents/2021/Aug/undesa_pd_egm_fertility_2020_key_messages_23aug.2021.pdf (accessed 10 November 2021)

⁴¹ UNDESA. “World Population Ageing 2020 Highlights”. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/undesa_pd-2020_world_population_ageing_highlights.pdf (accessed 10 November 2021)

⁴² World Meteorological Organization. “State of the Global Climate 2020”. https://library.wmo.int/doc_num.php?explnum_id=10618 (accessed 9 November 2021)

⁴³ Greene, Tylar and Peter Jacobs. “2020 Tied for Warmest Year on Record, NASA Analysis Shows”. <https://www.nasa.gov/press-release/2020-tied-for-warmest-year-on-record-nasa-analysis-shows> (accessed 22 November 2021)

⁴⁴ Bates, Sofia and Michael Carlowicz. NASA Earth Observatory News. “2021 Continued Earth’s Warming Trend”. <https://earthobservatory.nasa.gov/images/149321/2021-continued-earths-warming-trend#:~:text=Global%20temperatures%20in%202021%20were,global%20temperatures%20change%20over%20time.> (accessed 21 April 2022)

decades.^{45, 46} Consequently, intensified tropical cyclones and storms, rising sea levels, increased flooding, coastal erosion, and increased severity of heatwaves and droughts brought about by climate change and variabilities will cause food and water insecurity, human displacement, and vector-borne diseases.⁴⁷

Similarly, the Department of Science and Technology-Philippine Atmospheric, Geophysical, and Astronomical Services Administration (DOST-PAGASA) projects that the Philippines will experience warming at an average rate of 0.1°C per decade, more frequent extreme rainfall and tropical cyclone events, and rising sea levels that render infrastructure and agricultural and coastal communities particularly vulnerable.⁴⁸

TECHNOLOGICAL TRENDS AND UNCERTAINTIES^{49,50}

COVID-19 has fast-tracked the progress of the Production Revolution and Industry 4.0.—with advancements in Artificial Intelligence (AI), the Internet of Things (IoT), robotics, engineering biology, and space travel. Blockchain technology ushered in a new “web3” trend, such as cryptocurrencies and ‘tokens,’⁵¹ which has applications in social media, marketplaces, and digital art. The field of medicine saw a breakthrough in messenger ribonucleic acid (mRNA) vaccine technology. Other plans in the pipeline include a “multivalent” equivalent that will protect against multiple COVID-19 variants, anti-body treatments, and antiviral drugs.⁵² Of particular interest to the Philippines are expected technological developments in vertical farming, artificial meat and fish, HIV and malaria vaccines, and 3D printed houses.⁵³ The use of e-commerce and hybrid work arrangements, which were boosted by the pandemic, are expected to persist.^{54, 55} For the Philippines, addressing the digital divide is an important challenge to remaining competitive in the “new normal.” On the other hand, the breakneck speed of technological development requires policymakers to manage trust, privacy, ethical risks, and cybersecurity.

⁴⁵ Masson-Delmotte, V. P. Zhai, A. Pirani, et al. IPCC. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. “Climate Change 2021: The Physical Science Basis – Summary for Policymakers”. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf (accessed 9 November 2021)

⁴⁶ Portner, Hans-Otto, Roberts, Debra C., et al. IPCC. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. “Climate Change 2022: Impacts, Adaptation and Vulnerability - Summary for Policymakers”. https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf (accessed 21 April 2022)

⁴⁷ Smith, K. R., A. Woodward. D. Campbell-Lendrum, et al. IPCC. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. “Human health, impacts, adaptation, and co-benefits”. https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap11_FINAL.pdf (accessed 9 November 2021)

⁴⁸ DOST-PAGASA. “2018: Observed and Projected Climate Change in the Philippines”. <https://www.pagasa.dost.gov.ph/climate/climate-change/dynamic-downscaling> (accessed 26 November 2021)

⁴⁹ OECD, “Science, Technology, and Innovation Outlook 2021: Times of Crisis and Opportunity”. https://www.oecd-ilibrary.org/science-and-technology/oecd-science-technology-and-innovation-outlook-2021_75f79015-en (accessed 9 November 2021)

⁵⁰ Standage, Tom. The Economist. “The World Ahead 2022: Ten trends to watch in the coming year”. https://www.economist.com/the-world-ahead/2021/11/08/ten-trends-to-watch-in-the-coming-year?utm_campaign=the-economist-today&utm_medium=newsletter&utm_source=salesforce-marketing-cloud&utm_term=2021-11-08&utm_content=article-link-1&etear=nl_today_1 (accessed 10 November 2021)

⁵¹ Dixon, Chris and Packy McCormick. The Economist. “Chris Dixon and Packy McCormick on the future of crypto”. https://www.economist.com/the-world-ahead/2021/11/08/chris-dixon-and-packy-mccormick-on-the-future-of-crypto?utm_campaign=a.22worldahead_vertical_prospect.2021-11-21&utm_medium=email-owned.np&utm_source=salesforce-marketing-cloud&utm_term=11/21/2021&utm_id=959886&sfmc_id=0033z00002ykmqHAAQ (accessed 22 November 2021)

⁵² Loder, Natasha. The Economist. “What to expect in year three of the pandemic”. <https://www.economist.com/the-world-ahead/2021/11/08/what-to-expect-in-year-three-of-the-pandemic> (accessed 22 November 2021)

⁵³ The Science and Technology Correspondents of The Economist. “What next? 22 emerging technologies to watch in 2022”. https://www.economist.com/the-world-ahead/2021/11/08/what-next-22-emerging-technologies-to-watch-in-2022?utm_campaign=the-economist-today&utm_medium=newsletter&utm_source=salesforce-marketing-cloud (accessed 10 November 2021)

⁵⁴ Ignacio, Chelsey Keith P. BusinessWorld News. “Retail’s transformed future with e-commerce”. <https://www.bworldonline.com/special-features/2021/10/07/401849/retails-transformed-future-with-e-commerce/> (accessed 21 April 2022)

⁵⁵ Nauta, Sacha. The Economist. “How to ensure that the future of work is fair for all”. <https://www.economist.com/the-world-ahead/2021/11/08/how-to-ensure-that-the-future-of-work-is-fair-for-all> (accessed 21 April 2022)

ALTERNATIVE FUTURES

From the above trends and uncertainties, two of the most critical uncertainties that have the largest impact on the country's future are the **COVID-19 pandemic** and the **digital divide**. Based on these critical uncertainties, four potential futures were considered and guided the development of the strategies elaborated in the succeeding chapters, especially in Chapters 6, 7, 9A, 9B, 9C, 10, 13, 14, 15, 16, and 19.

Scenario A: “Best of Both Worlds.” In this ideal scenario, the country learns to live with COVID-19 in a non-disruptive manner as part of the new normal, while at the same time policy reforms and technological improvements narrow the digital divide. In the near term, these restore confidence, increase mobility, and revert economic activities to pre-pandemic levels. The country's digital transformation is incentivized and enabled, raising productivity and efficiency across sectors.

For instance, the industry sector is strengthened by innovative technologies and automation that improve manufacturing capacity, logistics management, and integration into global value chains, and enabled production of higher-value goods (Chapter 9). Transportation improves amid the proliferation of e-transactions, contact-tracing, and real-time advisory on public transit systems (Chapter 19). Micro, small, and medium enterprises (MSMEs), including farmers and fisherfolk, gain access to affordable and diverse digital financial services and information (Chapter 15). Consumers benefit from the increased availability of goods and services, as well as reasonable prices. As the economy recovers, strong investor confidence attracts more players, increases competition, and prompts private and public sectors to innovate and allocate more resources towards Research and Development Innovation (R&DI) investments (Chapters 16 and 14).

Digital connectivity aids learning, career, and startup opportunities, particularly in the Science, Technology, Engineering, the Arts, and Mathematics or STEAM fields (Chapters 14 and 10). Basic public health services and information, particularly for maternal and child health, become more accessible and affordable through both physical (e.g., primary care facilities, barangay health centers) and digital platforms (e.g., telehealth, electronic medical records system). The Philippine Identification System (PhilSys) facilitates the transfer of cash grants and other social protection programs for the most vulnerable sectors (Chapters 10 and 13).

Justice system procedures are streamlined through digital adoption, while livelihood and aftercare programs are provided to foster appropriate care and eventual rehabilitation of inmates into society (Chapter 6). Culture is safeguarded and enhanced through digital means such as online markets, which also sparks interest among the youth. Accessibility to cultural sites and the promotion of natural locations also increases as the economy reopens (Chapter 7).

Scenario B: “Return to Status Quo.” In this likely scenario, the country learns to live with COVID-19 in a non-disruptive manner as part of the new normal, but there is insufficient progress in narrowing the digital divide. Mobility and economic activities resume, primarily through traditional mechanisms.

The local culture scene is revived through the resumption of domestic and international travel (Chapter 7). However, travel procedures remain inefficient and uneven due to the slow uptake of digital systems.

The industry sector's global value chain (GVC) participation is constrained by limited adoption of sustainable and innovative technologies, e-commerce, and logistics management (Chapter 9). The transportation system experiences a strong rebound in demand, but is overwhelmed due to slow booking, price surges, and inadequate supply of units (Chapter 19). The Justice system suffers from case backlogs because of the lack of improvement in the accessibility of its services (Chapter 6). Health and nutrition services become more accessible and affordable but also face delays due to problems with electronic records systems (Chapter 13). Online learning remains a challenge due to unstable and expensive gadgets and internet connectivity (Chapter 10). R&DI investments are not fully maximized (Chapter 14). Urban SMEs that have better access to digital platforms outperform those in rural areas (Chapters 9 and 16). Foreign investments and investor confidence are dampened as production and transaction costs remain high (Chapter 15).

Scenario C: “Survival of the Fittest.” In this middling scenario, the country continues to struggle with the effects of COVID-19, but policy reforms and technological improvements narrow the digital divide and accelerate digital transformation.

Businesses adopt a hybrid of face-to-face and digital channels, but mobility restrictions, frequent border restrictions and constricted supply continue to hamper distribution of physical goods. Similarly, digital services flourish, including telemedicine, distance education, digital financial services, and online entertainment. However, experiential services (e.g., tourism, transport, medical procedures) continue to lag given mobility and physical distancing restrictions. Digital platforms boost the market for indigenous products but mobility restrictions hamper cultural tourism. Failure of smaller firms in lagging sectors reinforce the market power of larger firms. Economies of scale and scope and network effects associated with digitalization also lead to dominance for some digital firms. Despite the uptake of digital technologies, licensure exam disruptions continue stemming the R&D talent pool, while hands-on technical-vocational training remain limited. Adversely affected households are assisted through digital transfers linked to PhilSys.

Scenario D: “Sinking Ship.” In this worst-case scenario, COVID-19 continues to ravage the country, and at the same time, there is poor progress in narrowing the digital divide. Mobility remains low due to the protracted COVID-19 outbreak and subsequent restrictions. Meanwhile, inadequate technological infrastructure leads to lower productivity, costly information and communication technology (ICT) services, and irregular and disrupted economic activities. In particular, smaller enterprises and lower income households and communities struggle to survive amid limited access to information, digital platforms, and social protection programs. Ultimately, this leads to long-term scarring in investments, R&DI, output growth, and human capital.

CHAPTER 3

Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

The National Spatial Strategy (NSS) sets the direction of the physical development of the country. It promotes sustainable human settlements development, access to social services, integration of leading and lagging regions, and building resilience. It recognizes the increasing role of cities as drivers and venues of economic growth and poverty reduction. The NSS has three core strategies: 1) regional agglomeration; 2) connectivity; and 3) vulnerability reduction.

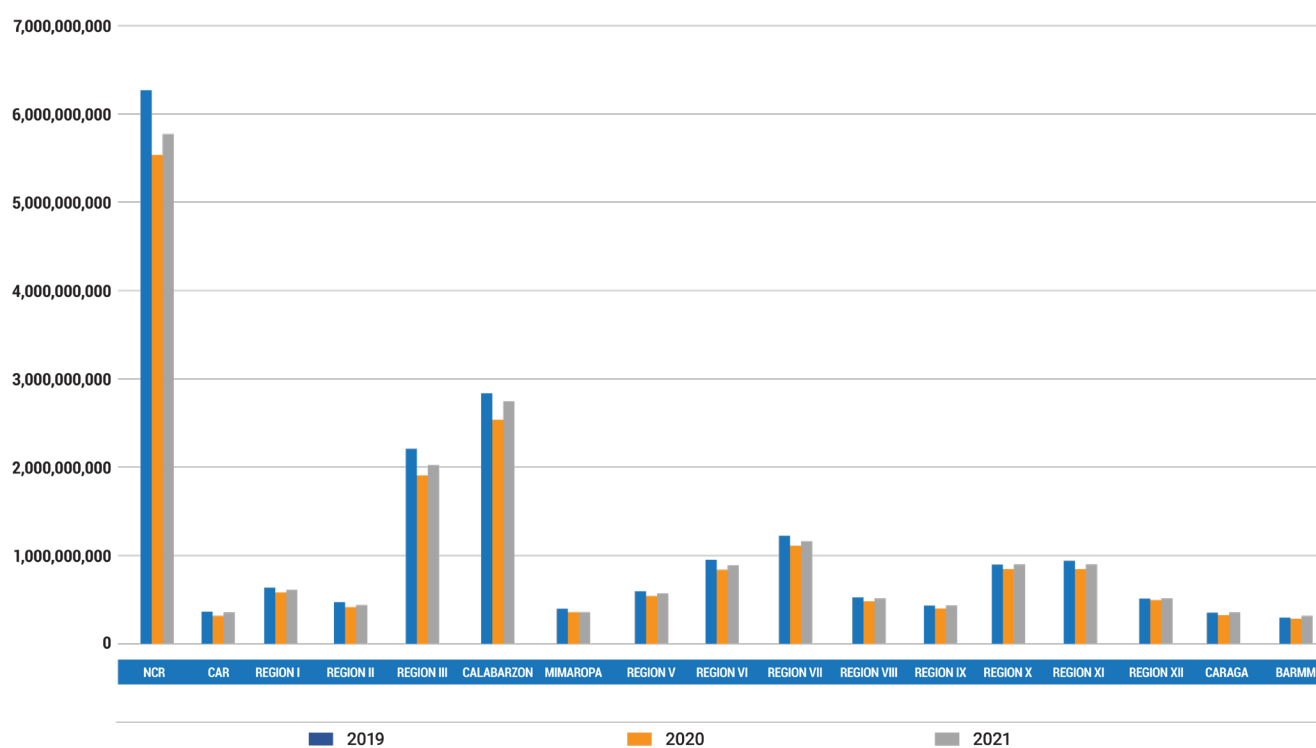
Regional agglomeration aims to build on the efficiency and economies of scale present in major urban growth centers. It seeks to manage growth in these centers and spread benefits to rural areas. Based on population trends, service catchments, and economic activities, the country's settlements have a three-tiered network: 1) metropolitan centers, namely, Metro Manila, Metro Cebu, Metro Davao, and, by 2025, Metro Cagayan de Oro; 2) regional centers; and 3) sub-regional centers.

Connectivity seeks to improve linkages between growth centers as well as connections between production and settlement areas. The objective is to equalize opportunities in various areas of the country by linking lagging regions with leading ones. Vulnerability reduction, on the other hand, improves the safety of communities from natural hazard events. This entails building their capacities to mitigate and respond to health emergencies such as the COVID-19 pandemic.

GROSS REGIONAL DOMESTIC PRODUCT (GRDP) TRENDS IN 2021

Signaling continuous recovery from the COVID-19 pandemic, all regions posted positive GRDP growth rates in 2021 following contractions in all the regions in 2020. The Bangsamoro Autonomous Region of Muslim Mindanao (BARMM); Northern Mindanao (Region 10); SOCCSKSARGEN (Region 12); and Zamboanga Peninsula (Region 9) have surpassed their 2019 pre-pandemic GRDP levels. On the other hand, the rest of the regions are yet to fully recover with the National Capital Region (NCR), Central Luzon (Region 3) and CALABARZON (Region 4A) recording GRDP that are most far-off from their pre-pandemic levels.

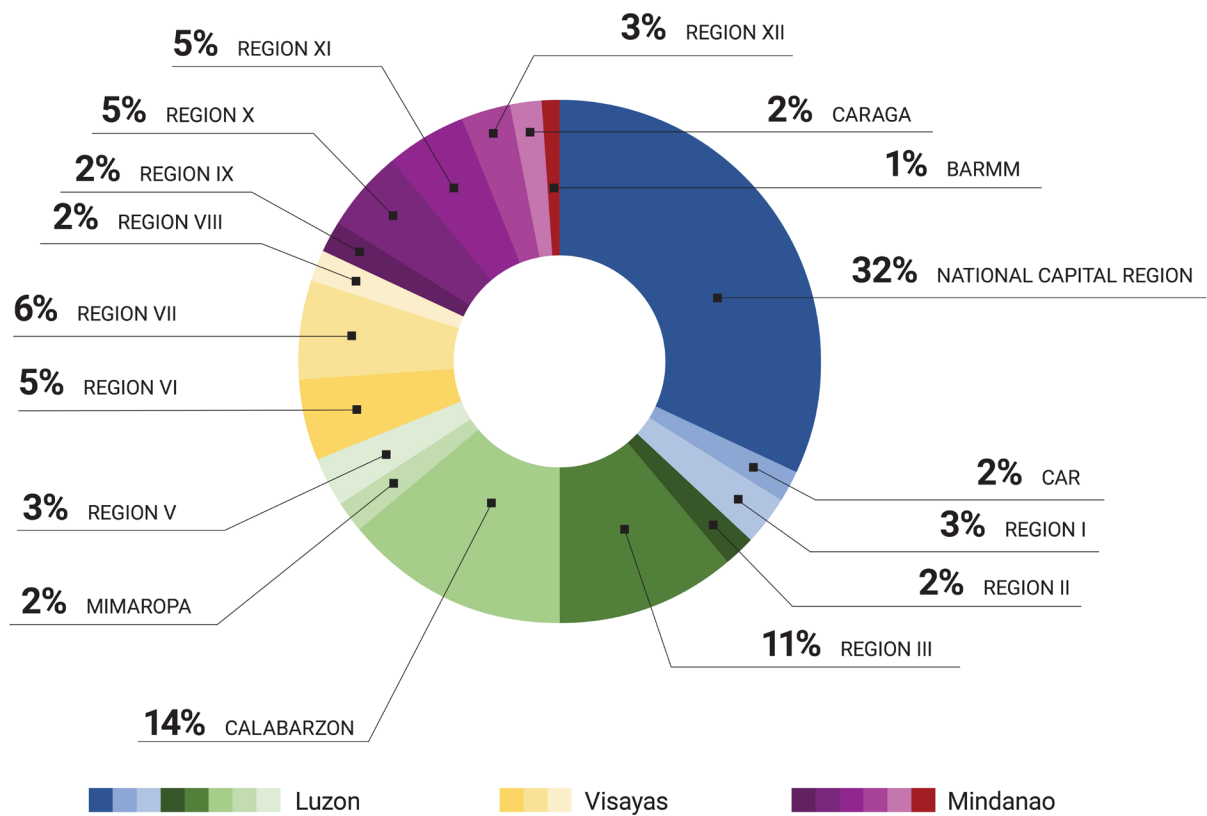
Figure 3.1 GRDP levels 2019-2021



Source: Philippine Statistics Authority (PSA)

The NCR remains to have the largest share of the national economy accounting for 32 percent, followed by CALABARZON with 15 percent, and Central Luzon (Region 3) with 11 percent. These three regions combined contribute 58 percent to the national output.

Figure 3.2 GRDP Shares, 2021



Source: Philippine Statistics Authority (PSA)

ASSESSMENT

REGIONAL AGGLOMERATION

The NSS recognizes the role of cities as engines of growth. However, cities face urbanization challenges such as traffic congestion, pollution, waste, floods, lack of open spaces, and increased demand for social services such as housing, health, and education. These concerns are often interconnected, requiring an integrated approach to urban planning. To help address these issues, NEDA commissioned the preparation of the Sustainable Urban Infrastructure Development Master Plans for the 11 regional centers.¹ These plans will serve as basis for identifying infrastructure projects, such as those on socialized housing and settlement, tourism and recreation, disaster risk reduction, transport, information and communication technology, power and energy, water supply and sanitation, and solid waste management. These master plans can also serve as basis for land use decisions to help cities achieve orderly physical development and efficient use of physical resources.

The decreased activity brought about by quarantine restrictions during the pandemic afforded some degree of recovery for the urban environment. For instance, the Department of Environment and Natural Resources (DENR) reported that air quality has significantly improved in Metro Manila. This indicates that the negative impacts of human activities are reversible if we develop within environmental limits. NEDA also conducted urban carrying capacity studies for Tagaytay City and Baguio City. These assessed their ecology, urban infrastructure and facilities, land use, water supply, solid waste management, flood and drainage management, and institutional governance. The studies showed that both cities have already reached certain urban carrying capacity thresholds. Results and insights from the studies can guide decision makers in crafting responsive policies and programs that can steer the cities towards a more sustainable development. NEDA is developing a manual for the conduct of urban carrying capacity assessment in order to scale up this initiative.

The government has also exerted efforts to address traffic congestion in metropolitan areas. In Metro Manila, the Light Railway Transit (LRT) 2 extension was completed as part of the Infrastructure Flagship Projects (IFPs). The construction of Metro Rail Transit (MRT) 7 and extension of LRT 1 are also ongoing. In Metro Cebu, the Cebu Bus Rapid Transit (BRT) project is ongoing and is expected to be completed by 2022. For Metro Davao, the ongoing implementation of the Davao Public Transport Modernization Project will be finished by 2022 while the Davao City Bypass Construction Project is still ongoing.

On urban development, Phase 1 of the New Clark City Project was completed. Phase 1 included the mixed-use industrial development site and the development of the National Government Administrative Center (NGAC). The NGAC is envisioned to be the location of all administrative offices of the government. It will also serve as back-up facilities to ensure the continuity of public service in times of disasters.

¹ 11 Regional Centers: Baguio-La Trinidad-Itogon-Sablan-Tuba-Tubay (BLISTT), and the cities of Vigan, Tuguegarao, Calapan, Iloilo, Bacolod, Ormoc, Pagadian, Cagayan de Oro, General Santos, and Butuan.

CONNECTIVITY

Connectivity aims to improve mobility and provide access to economic opportunities and social services across geographic space. It also aims to enhance the link between growth centers and production areas. The revised list of IFPs includes 77 connectivity-related projects consisting of roads, bridges, rails, airports, and seaports.

For roads and bridges, the Metro Manila Skyway Stage 3 and Metro Manila Logistics Network Project (Bonifacio Global City-Ortigas Center Link Road Project, Binondo-Intramuros Bridge, and Estrella-Pantaleon Bridge) comprise the completed IFPs. Ongoing projects include the North Luzon Expressway-South Luzon Expressway (NLEX-SLEX) Connector Road, SLEX Toll Road 4, NLEX Harbor Link Extension to Anda Circle, and Camarines Sur High-Speed Highway Project. In Visayas, ongoing IFPs include Bacolod-Negros Occidental Economic Highway and Samar Pacific Coastal Road Project. For Mindanao, the Cagayan de Oro Coastal Road, Sindangan-Bayog-Lakewood Road in Zamboanga del Sur and Zamboanga del Norte, Improving Growth Corridors in Mindanao Road Sector Project, and Road Network Development Project in Conflict Affected Areas in Mindanao are being implemented. Moreover, the Surallah-T'Boli-San Jose Road in South Cotabato is scheduled to be completed by the end of 2021.

In terms of rail, ongoing projects to enhance the Philippine National Railway (PNR) include the North-South Commuter Rail (PNR North 1), North-South Commuter Railway Extension (PNR North 2 and PNR South Commuter Rail), and PNR South Long Haul. The Subic-Clark Railway and Mindanao Rail Project Phase 1 are also in progress.

For air transport, the Sangley Airport and Clark International Airport Expansion Project Phase 1 under the IFPs were completed. The ongoing rehabilitation and expansion of the General Santos Airport and the construction of the Bicol International Airport Development Project are targeted to be completed in 2021. For sea transport, the New Cebu International Container Port Project is being implemented. Those in the IFP pipeline are the Iloilo Port, Davao-Sasa Port, and General Santos Port.

In terms of information and communications technology (ICT), the Luzon Bypass Infrastructure Project was completed as part of the IFPs. This project provides a path for international cables across Luzon which, in exchange, allows government to use these cables for increased internet capacity. In addition, a Joint Memorandum Circular has been issued by concerned agencies² to streamline the procedural requirements and reduce delays in the processing of permits for telecommunications towers. This is to facilitate internet connectivity in unserved and underserved areas in the country.

² Including the Department of Information and Communications Technology (DICT), Anti-Red Tape Authority (ARTA), Department of the Interior and Local Government (DILG), Department of Public Works and Highways (DPWH), Department of Human Settlements and Urban Development (DHSUD), Bureau of Fire Protection (BFP), Civil Aviation Authority of the Philippines (CAAP), National Telecommunications Commission (NTC), Department of Health (DOH), and Food and Drug Authority (FDA)

VULNERABILITY REDUCTION

The NSS gives due attention to disaster risk reduction (DRR) and climate change adaptation (CCA), especially in urban growth centers where there is high concentration of population and economic activities. One of the completed initiatives under the IFPs is the Pasig River Improvement Project (Delpa Bridge to Napindan Channel) which will help mitigate flooding in Metro Manila. The IFPs also include ongoing flood mitigation activities in Cagayan River, Tagaloan River, and Imus River under the Department of Public Works and Highways' (DPWH) Flood Risk Mitigation Project. These activities are targeted to be completed by end of 2021.

On earthquake resilience, the implementation of the Metro Manila Priority Bridges Seismic Improvement Project is ongoing. This aims to strengthen the resilience of Metro Manila's transport network by rehabilitating and improving the Lambingan Bridge and Guadalupe Bridge to withstand high magnitude earthquakes. Moreover, the ongoing Philippines Seismic Risk Reduction and Resilience Project focuses on increasing the seismic resilience of public buildings, such as schools and health centers, in Metro Manila.

On data generation and management, the Philippine Institute of Volcanology and Seismology (PHIVOLCS) has implemented the GeoRisk Philippines Project (GeoRiskPH). It aims to establish a centralized source of information for hazard and risk assessment. One of the tools developed under GeoRiskPH is HazardHunterPH, which enables users to find out if a location is prone to hazards such as ground rupture, ground shaking, liquefaction, earthquake-induced landslides, tsunamis, severe wind, storm surge, floods, and rain-induced landslides. PHIVOLCS also developed the Spectral Acceleration Maps of the Philippines Atlas. These maps provide important seismic parameters to guide engineers in designing and retrofitting infrastructure to withstand Intensity VIII earthquakes.

The current pandemic has exposed the vulnerability of our cities to disease outbreaks. In terms of pandemic response, the ongoing efforts under the IFPs are the Health System Enhancement to Address and Limit COVID-19 Project and the Philippine COVID-19 Emergency Response Project. Also included in the IFPs is the establishment of the Virology Science and Technology Institute of the Philippines that will serve as a research facility on viral diseases.

The National Disaster Risk Reduction and Management Council (NDRRMC) has approved the updated National Disaster Risk Reduction and Management Plan 2020-2030. The council issued resolutions and circulars for the creation of national and regional committees on dam safety, enhancement of the pre-disaster risk assessment process, and adoption of guidelines on the accreditation, mobilization, and protection of community disaster volunteers. The NDRRMC also approved the organizational structure for the National Disaster Risk Reduction Training and Research Institute and institutionalized the country's Sendai Framework for Disaster Risk Reduction reporting and monitoring processes.

STRATEGIES

Growth of settlements across geographic space has to be constantly examined. This can help identify emerging concerns and implement the needed measures before these concerns become bigger problems. In view of this, the following strategies will be pursued for the remaining period of the Updated Philippine Development Plan (PDP).

REGIONAL AGGLOMERATION

Managing growth in major urban centers requires cohesive effort from national and local governments in implementing the following strategies:

Support growth centers in the regions. The NSS seeks to decongest the NCR and direct growth to regional urban centers where high growth potential has a greater chance of being realized. The highest number of COVID-19 cases was recorded in Metro Manila given its high population density and concentration of economic activities. To minimize further congestion, development shall be promoted in growth centers in the regions partly through the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Law, which provides incentives for businesses to locate outside the NCR.

Increase investments in social services. There is a need for increased government investments to expand and improve the quality of social services to meet the high demand brought about by increasing population in cities. This is particularly important for poor urban communities which rely on government for basic social services such as health, housing, and education (*see Chapters 10 and 12*). The inadequacy of social service provision has become apparent during the COVID-19 experience, where a number of provincial and municipal local government units (LGUs) could not provide critical care to the severe COVID-19 cases. When there was a surge in cases, the situation became even more acute because of the lack of ambulance equipment and the fact that hospitals in the cities could no longer accommodate the patients in both the cities and nearby provinces/municipalities.

The implementation of the Mandanas-Garcia Ruling will increase LGU share in national taxes and will give greater responsibilities to LGUs in delivering devolved social services. The role of concerned national government agencies, including the Department of Health (DOH), Department of Social Welfare and Development (DSWD), and Department of Education (DepEd), is to set the standards and implement capability building for LGUs in line with their respective devolution transition plans.

Promote development of Smart Cities. The adoption of smart city principles will be promoted in urban centers. This involves applying the concepts of urban mobility to include cycling lanes and walking paths, greener city, sustainable energy, public safety, and economic competitiveness to achieve sustainable urban development. Platforms for sharing best practices among city LGUs will be encouraged to facilitate exchange of experiences and lessons learned.

Ease traffic congestion and improve mobility. As centers of employment and economic activities, there is a need to ensure the smooth flow of people and goods in our cities. Investment in transportation infrastructure to reduce traffic congestion and shorten travel times between business and industrial centers, and residential areas (*see Chapter 19*) will be fast-tracked. Applying intelligent transportation systems will be explored to help manage traffic flow and provide transport and traffic information to passengers, particularly in major business centers.

Managing waste and minimizing pollution. Cities, being market and consumption centers, typically produce large volume of waste. If not managed, these can lead to pollution and environmental degradation. While solid waste management is primarily an LGU mandate, national government agencies such as the DENR and the National Solid Waste Commission will continue to provide technical assistance to LGUs on waste reduction, segregation, collection, recycling, and disposal.

CONNECTIVITY

To improve and strengthen connectivity in the country, the following strategies will be pursued:

Enhance national and local transport networks. A closer engagement between national transport agencies and LGUs will be promoted to adopt an integrated approach to transport planning and project implementation. The DPWH and Department of Transportation (DOTr) can assist LGUs in coming up with local transport and traffic management programs to align local initiatives with national priorities. These can then be integrated in the spatial and development plans of LGUs. For transport infrastructure exposed to natural hazards, redundancy structures have to be constructed to establish alternate routes for disaster response and relief.

Ensure the accessibility, affordability, convenience, and reliability of public transport. Improved public transport will be pursued through route rationalization, fleet modernization, and enhanced mass transit systems. Transport terminals that cater to inter-modal public transportation will be established in strategic locations. The nautical highway will be strengthened through the improvement of existing Roll On-Roll Off (RORO) ports and the establishment of new ones to serve emerging destinations and origins. Improvements and expansion of airport facilities across the country will also be continued to meet the demand and improve the quality of air travel (*see Chapter 19*).

Develop an efficient and resilient logistics system. Transport agencies will collaborate with concerned agencies such as the Department of Agriculture (DA) and the Department of Trade and Industry (DTI) in mapping out supply chains, identifying logistical bottlenecks, and implementing the corresponding measures needed to ensure that raw materials and finished products reach their destinations on time (*see Chapter 19*). Transport infrastructure will be made disaster- and climate risk-resilient to safeguard the movement of goods during disaster events. Logistics hubs in strategic locations will be established to support national and local supply chains.

Increase investment in ICT infrastructure. Government investments in ICT infrastructure must be expanded to support the increased demand for internet access brought about by work-from-home arrangements, online learning, and internet business transactions—all of which increased during the COVID-19 pandemic. Under the new normal, business and personal transactions, as well as government service delivery, are expected to further expand the use of digital technology and connectivity. Related to this, Republic Act No. 11659, which amended the Public Service Act, is expected to induce more private investments in ICT.

VULNERABILITY REDUCTION

To further reduce vulnerability in the growth centers, the following strategies are recommended:

Give attention to DRR and CCA in growth centers. Development projects and urban expansions will integrate DRR and CCA measures. This is to minimize the exposure of population, assets, and livelihoods to hazards and increase resilience to disaster impacts. The lessons from the COVID-19 pandemic will be integrated in local development plans and programs to make them more resilient to future pandemics and other hazard events. Moreover, the preparation of business and public service continuity plans for disaster events must be institutionalized.

Continue development and dissemination of science-based information. Continuous disaster and climate risk data build-up and updating of relevant information-sharing platforms of the Department of Science and Technology and other agencies will be supported. Moreover, there will be active efforts to promote the use of this information among LGUs and for citizens to come up with science-based disaster preparedness and mitigation actions.

Build capacities to mitigate and respond to disasters and pandemics. Disaster preparedness, response and recovery amidst the pandemic have created new challenges for disaster management agencies and LGUs. Traditional DRR management and crisis management approaches must be reviewed and updated to adapt to the new normal. In line with this, the NDRRMC will promote capacity building for concerned national and local government offices considering lessons from the COVID-19 pandemic.

PROVIDING SPATIAL DIRECTIONS TO THE BALIK PROBINSYA BAGONG PAG-ASA (BP2) PROGRAM

The BP2 program aims to promote balanced regional development and equitable distribution of wealth and opportunities. This involves complementary strategies of enabling economic growth in areas with high potential and providing better opportunities for the countryside. The NSS will guide the implementation of the BP2 program by providing the trends in settlement development and the roles of various urban centers in the country. These will inform more detailed planning and analysis of BP2 interventions such as the possible locations of agri-industrial areas, housing projects and infrastructure facilities that will address the needs of communities, the connectivity among urban centers and production centers, and other critical spatial functions that will determine comparative advantages of specific areas.

CHAPTER 4

Philippine Development Plan: 2021 Headline Accomplishments

The COVID-19 pandemic entered its second year in 2021 and the country, like the rest of the world, had another full year of coping with or living with the virus. In 2021, we partially recovered from the initial devastation brought about by the pandemic. The reversal in our growth rate in 2020 resulted from stringent and widespread quarantines that severely affected key economic sectors and people's incomes and jobs. Gross Domestic Product (GDP) growth declined to -9.5 percent compared to 6.1 percent in 2019. In the fourth quarter of 2020, we began to gradually relax restrictions and managed risks better. By the first half of 2021, quarantine impositions became more targeted to areas with the highest risks while vaccination was pursued relentlessly. Targeted quarantine resulted in more effective and efficient delivery of social protection programs and allowed more businesses to operate and more Filipinos to resume work. Thus, we were able to achieve relatively high growth rates in the second to fourth quarter of 2021, resulting in a 5.7 percent growth rate in 2021.

2021 TARGETS AND ACCOMPLISHMENTS

For this Socioeconomic Report, we compared the 2021 headline accomplishments against the targets in the Updated Philippine Development Plan (PDP) which was approved by the NEDA Board on January 7, 2021. The updating process of the PDP had to be done twice. NEDA initiated the updating process in 2019 and by early 2020, the Updated PDP was about to be completed. However, when the pandemic struck in early 2020, NEDA decided to postpone its release and revisit the whole PDP update. Given the pandemic, it was imperative to review the plan and integrate concrete strategies, interventions, and policy responses that would facilitate transition into the new normal, foster adaptive recovery, and build socioeconomic resiliency.

Some of the headline targets for 2021 and 2022 in the Updated PDP were revised downwards, taking into consideration the adverse impact of the pandemic in 2020, thus altering their envisioned trajectories. However, since updating the PDP was done during the second half of 2020, the targets for 2020 were maintained. The headline or core targets of the PDP reflect the higher-level goals of: (a) an inclusive society; (b) a high trust and resilient society; and (c) a globally competitive knowledge economy. Achieving these goals depends on how well the strategies and initiatives are implemented and the extent to which these effectively yield the intended sector and sub-sector outcomes.

While 2021 was a year of continuing challenges brought about by the pandemic, we saw that the adverse socioeconomic impact was cushioned by the reforms enacted before 2020 and the sustained macroeconomic performance in 2017, 2018, and 2019. These reforms are discussed in Chapter 1.

Economic growth. FY 2021 recorded a growth rate of 5.7 percent, which is below the 6.5 to 7.5 percent target for 2021. However, this exceeded the revised growth target, approved in December 2020, of 5.0 to 5.5 percent.¹ Had the pandemic not occurred, the Philippines would have become an upper middle-income country in 2020 due to the favorable growth in 2016 to 2019. The impact on per capita incomes is more pronounced as gross national income (GNI) per capita growth rate for FY 2021 is 0.4 percent against our target of 5 to 6 percent.

Poverty incidence. The 2021 target for reduction in overall poverty incidence is 15.5 to 17.5 percent, which implies that there would be no significant reduction in poverty incidence from the 16.7 percent poverty incidence in 2018. The full year 2021 poverty incidence results will be released in September 2022. However, the first semester results indicate a slight worsening of poverty incidence in 2021 compared to 2018. Overall poverty and subsistence poverty rates increased in the first semester of 2021 compared to the first semester of 2018. Food inflation in 2021 was recorded at 4.5 percent, which is above the target of 2 to 4 percent. This was mainly driven by supply constraints from the African Swine Fever. Top contributors to the high food inflation include meat, fish, and vegetables, which contributed 1.8 percentage points to full year headline inflation.

Human development. The 2021 Human Development Report, which is supposed to contain the 2020 human development indices (HDI), was not released by the United Nations Development Programme in 2021. Hence, assessment of 2020 target could not be completed. The combined 2021/2022 HDI report is expected to be released at the end of the second quarter of 2022.

Unemployment. Sustained improvement in employment levels from 2017 to 2019 suffered a setback in 2020 as mobility and operating restrictions were imposed on a number of sectors, resulting in an increase in unemployment rate of 10.3 percent and 2.58 million employment losses in 2020. Employment levels recovered in 2021, with a decrease in unemployment rate to 7.8 percent and a total of 4.61 million employment generated. Likewise, youth unemployment worsened in 2020 but improved in 2021 at 15.1 percent, which is within the target band of 14.5 to 16.5 percent. Similarly, underemployment, particularly in areas outside the national capital region, improved to 16.7 percent in 2021, achieving its target for the year.

Innovative society. Improvement of the country's rank in the Global Innovation Index (GII) in 2019 and 2020 was not sustained in 2021, where the Philippines ranked 51 out of 132 economies. The end-of-plan target is for the country to be within the top one-third of all economies (rank 44 and above). The country's rank in the GII infrastructure pillar pulled down the overall rank in 2021. This means that there is a need to improve the country's ICT access and use.

¹ In August 2021, the Development Budget Coordination Committee (DBCC) revised its growth assumptions for FY 2021 to 4.0 to 5.0 percent in light of the re-imposition of stricter mobility restrictions to effectively address the heightened risks brought by the COVID-19 Delta variant. Though these assumptions were readjusted upwards to 5.0 to 5.5 percent in December 2021 given the continued easing of restrictions and increasing mobility, they remain below the PDP target of 6.5 to 7.5 percent for FY 2021.

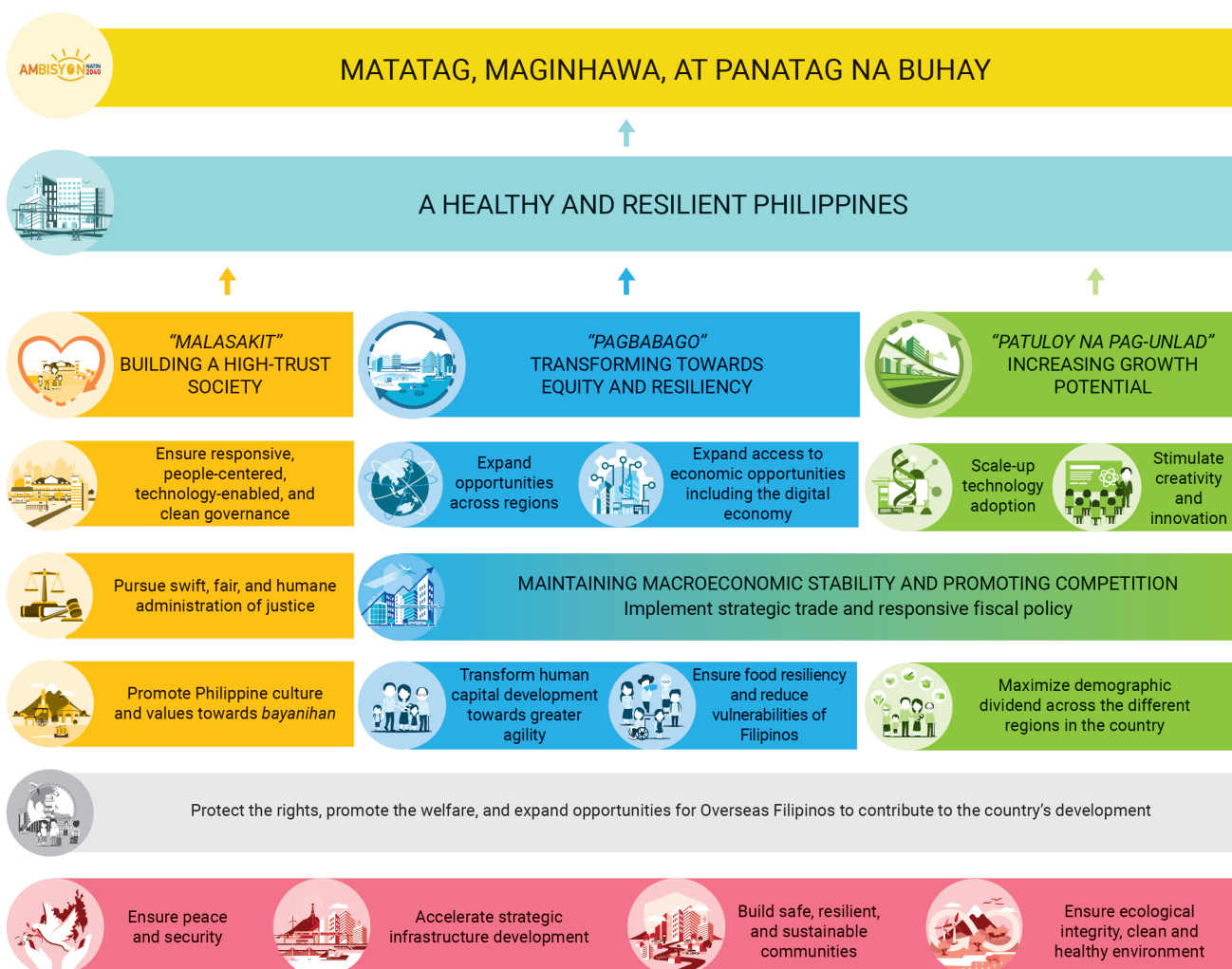
STRATEGIC FRAMEWORK

The thematic and sectoral accomplishments will be presented in the succeeding 17 chapters of the Socioeconomic Report. Using the Updated PDP framework (Figure 4.1), each chapter contains an assessment of the accomplishments and challenges, a chapter strategic framework, and the corresponding strategies for 2022 and 2023.

The formulation of these strategies considered the global and regional trends and prospects and the critical uncertainties that were elaborated in Chapter 2. Four potential futures were considered and guided the development of the said strategies. In addition, every chapter includes a persona that manifests the frustrations over the past couple of years and aspirations for the future.

The strategies will be the basis for proposed programs, projects, and activities of the relevant government agencies as well as the required budgets.

Figure 4.1 Updated Philippine Development Plan 2017-2022 Strategic Framework



RESULTS MATRIX

Table 4.1. Headline Indicators Results Matrix

INDICATOR	Baseline (YEAR)	TARGETS				ACCOMPLISHMENTS			REMARKS
		2019	2020 ²	2021	2022	FY 2019	FY 2020	FY 2021	
GDP (growth rates) sustained	7.1 (2016) ^r	7.0 – 8.0	7.0 – 8.0	6.5 – 7.5	6.5 – 7.5	6.1	-9.5	5.7	
GNI per capita (growth rates) increased	4.5 (2015)	5.0	5.0	5.0 – 6.0	5.0 – 6.0	3.9	-12.7	0.4	
Poverty incidence (% of population) reduced ¹	23.5 (2015) ^r	-	-	15.5 – 17.5	-	N/A	N/A	-	H1 2018: 21.1% H1 2021: 23.7% Full-year 2021 to be released in September 2022
Subsistence incidence (%) reduced ¹	9.1 (2015)	-	-	5.0 – 7.0	-	N/A	N/A	-	H1 2018: 8.5% H1 2021: 9.9% Full year 2021 to be released in September 2022
Food inflation (%) kept stable	1.6 (2016) ^a	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0	1.5	3.0	4.5	
HDI improved	0.701 (2015) ^r	Increasing	N/A	Increasing	N/A	0.718	TBD	TBD	
Unemployment rate (%) decreased	5.4 (2016) ^r	4.3 – 5.3	3.8 – 5.2	7.0 – 9.0	7.0 – 9.0	5.1	10.3	7.8 ^p	
Employment generated increased (count)	NA (2016)	900,000 – 1.1 Mn	900,000 – 1.1 Mn	2.4 – 2.8 Mn	1.0 – 1.2 Mn	1.27 Mn	-2.58 Mn	4.61 Mn ^p	
Youth unemployment rate (%) decreased	11.5 (Oct 2016)	9.8	9.2	14.5 – 16.5	20.5 – 22.5	12.9	19.4	15.1 ^p	
Underemployment rate (%) in areas outside NCR decreased	19.7 (2016)	17.4 – 19.4	16.9 – 18.9	16.0 – 18.0	15.7 – 17.5	15.1	17.3	16.7 ^p	
GII (rank) improved	74 out of 128 economies (2016)	Increasing	Increasing	Increasing	Top one-third	54 out of 129 economies	50 out of 131 economies	51 out of 132 economies	

^{r/} revised; ^{a/} adjusted; ^{p/} preliminary and may change

^{1/} No target/data since FIES is conducted every three years.

^{2/} The 2020 PDP targets set in 2016 were retained.

^{p/} Based on 2021 annual estimates released by PSA in May 2022

CHAPTER 5

Ensuring Responsive, People-centered, Technology-enabled, and Clean Governance

The government instituted major reforms to improve service delivery, such as the Ease of Doing Business and Efficient Government Service Delivery (EODB EGSD) Act and the Philippine Identification System (PhilSys) Act, and by supporting digitalization to build resilience amid economic shocks. With the end of the plan period fast approaching, the government will continue to pursue strategies in the Updated PDP, such as boosting the capacities of local government units (LGUs) towards full devolution, streamlining government processes, and empowering and engaging citizens. The government will also continue pushing for the passage of the Freedom of Information Bill, strengthening public sector capacity, and reinforcing monitoring and evaluation mechanisms to ensure accountability.

ASSESSMENT

The Philippines has made marked improvement in promoting ease of doing business, digital transformation, and ensuring public access to budget information in the past two years. The implementation of the EODB EGSD Act, which required streamlining processes and requirements for starting a business and granting construction permits, boosted the confidence of the private sector and eased the burden of the public in transacting with government.

The continuous establishment and enhancement of online government services and development of human capital improved e-government systems in the country.¹ The relatively less developed telecommunications infrastructure, however, stalled digitalization efforts.² The government needs to accelerate the rollout of the National Broadband Plan (NBP) to improve connectivity and access throughout the country.

¹ The country met its target e-Government Development Index score of 0.7 in 2020. The United Nations Department of Economic and Social Affairs conducts the e-Government Survey every two years, and the next assessment will be in 2022. (UNDESA, E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development, UNDESA 2020)

² In the 2020 e-GDI assessment, the Philippines scored 0.58 in the Telecommunications Infrastructure Index subcomponent pertaining to the development status of telecommunication infrastructure. This is lower than the average score of 0.61 for Southeast Asia. The Department of the Interior and Local Government (DILG) also identified limited access or poor connectivity as one of the factors hindering LGUs' automation of business permitting and licensing systems. Only 580 of the 1,600 LGUs (or 36.3 percent) were able to comply despite the requirement of the EODB EGSD Act that all LGUs should have automated their business registration processes or established their electronic Business One Stop Shops or e-BOSS within three years after the law's effectivity (i.e., 17 June 2021) (PNA 2021).

With respect to promoting transparency and accountability, the government has maintained comprehensive, timely and online publication of all eight key budget documents and strong budget oversight by the Congress and the Commission on Audit.³ Despite this, negative public perception persisted due to issues on the seemingly shrinking civic space and media freedom, prolonged enforcement of strict lockdowns, and alleged irregularities and delays in the delivery of social services.⁴

BROADENING PARTICIPATORY GOVERNANCE

The government continues to inform, engage and empower citizens. The Department of the Interior and Local Government (DILG) rolled out the guidelines⁵ on the accreditation of civil society organizations (CSOs) to enhance their participation in local governance processes and implementation of programs. As of October 2020, there are 33,719 accredited CSOs.⁶

The government likewise launched platforms that allow citizens to participate in information sharing, public resource management, policy and regulation review, and other related processes. These include the Development LIVE mobile app, Report Card Survey 2.0, and Philippine Business Regulations Information System (PBRIS).⁷

ENSURING SEAMLESS SERVICE DELIVERY

The continuous streamlining and automation of processes improved mechanisms for effective and efficient service delivery. Through a sector-based inter-agency streamlining effort, key economic sectors were able to meet the goal of reducing time, costs, and requirements or procedures by 52 percent in 52 weeks.⁸ In the common towers and connectivity sector, streamlining efforts have decreased the number of required permits from 30 to 8, the number of other requirements from 86 to 35, and the number of days from 241 to 16 to secure permits and licenses for the construction of shared passive telecommunications

³ The Philippines' Open Budget Index score climbed nine notches higher to 76 from 67 (2018). The Philippines' score of 76 in 2019 remains until the release of the 2021 report, as the international Budget Partnership conducts the Open Budget Survey every two years. The eight key budget documents include the Pre-Budget Statement, Executive's Budget Proposal, Enacted Budget, Citizens Budget, In-Year Reports, Mid-Year Review, Year-End Report and Audit Report. (DBM, "Philippines Remains No.1 in Southeast Asia for Budget Transparency." DBM Website, last updated May 4, 2020.)

⁴ The Independent Reporting Mechanism (IRM): Philippines' Design and Implementation Report 2017–2019 highlighted that: (i) civic space in the Philippines is obstructed amid the deepening militarization and the use of laws and policies against CSOs; and (ii) freedoms of expression, assembly, and association have recently been constricted in light of strong anti-drug and anti-terror campaigns. (OGP-IRM 2021)

On irregularities in delivery of social services, the DILG received and acted on a total of 441 complaints against barangay officials on alleged corruption, violation or abuses related to the implementation of community quarantine protocols, relief distribution and the implementation of the Social Amelioration Program. The Philippine National Police - Criminal Investigation and Detection Group had to investigate 782 complaints filed against 505 elected officials for alleged abuses or corrupt acts. (DILG 2020)

These adversely affected the Philippines' performance, which led to the failure of meeting 2020 targets in the Worldwide Governance Index indicators on Voice and Accountability, Regulatory Quality, Government Effectiveness, Control of Corruption, and in the Corruption Perceptions Index.

⁵ DILG Memorandum Circular No. 2019-72: Guidelines on the Accreditation of CSOs and Selection of Representatives to the Local Special Bodies

⁶ Latest available data from DILG.

⁷ Developed by the DILG in partnership with the United Nations Development Programme, DevLIVE is a mobile application where citizens can report status of projects in their communities that allows greater transparency, accountability, and efficiency in the implementation of government infrastructure projects. The ARTA administers the RCS, features an online Client Satisfaction Measure that will allow citizens to assess and provide feedback on government service availed, and PBRIS, which serves as a repository of all government regulations and regulatory impact assessment documents and platform for stakeholder consultation.

⁸ Launched in March 2020, the National Effort for Harmonization of Efficient Measures of Interrelated Agencies (NEHEMIA) Program is a sector-based inter-agency streamlining effort that aims to reduce time, cost, requirements, and procedures in sectors of economic and social significance by 52 percent within 52 weeks. The first phase includes common towers and connectivity, housing, food and pharmaceutical, logistics, and the energy sectors.

tower infrastructure.⁹ In the logistics sector, the QR-coded Unified Logistics Pass System has expedited the issuance and validation of certificates of public convenience for logistics firms and their cargo trucks, bringing down the number of steps from 209 to 56, and the number of days from 271 to 35.¹⁰ In food and pharmaceuticals, integrating the process applications for the Food and Drug Administration's License to Operate to the Central Business Portal (CBP) has lessened the number of steps from 28 to 9, the number of requirements from 41 to 12, and the number of days from 63 to 21. For the acquisition of land for socialized housing, the steps have been reduced from 11 to 1 and the days from 475 to 108.4.¹¹ For obtaining building permits or certificates of occupancy, the steps have been lowered from 22 to 3, while the days have been shortened from 120 to 3 for simple construction projects, 7 for complex, and 20 for highly technical projects.¹²

The number of eServices linked to the National Government Portal increased from 156 in 2018 to 222 in 2021. The CBP (business.gov.ph), launched in January 2021, serves as a single window for all business-related information and transactions.¹³ The number of LGUs implementing the Integrated Business Permits and Licensing System (iBPLS), which enables electronic application, and processing of permits, clearances and payments, has also increased. There are 377 LGUs that are implementing the iBPLS module on business permit, 48 LGUs on barangay clearance, 11 LGUs on building permit and certificate of occupancy, and 5 LGUs utilizing e-payment. Of these, 267 LGU iBPLS have already been linked to the CBP while 17 have been integrated.¹⁴

DEVELOPING SMART AND RESILIENT PUBLIC ORGANIZATIONS AND FUTURE-READY PUBLIC SERVANTS

Programs for strengthening competencies and civil service values of public servants and officials continued via online platforms. Due to limitations on face-to-face trainings posed by the COVID-19 pandemic, the Career Executive Service Board has migrated its training courses under the Leadership and Management Proficiency Program (LAMP) for third-level officials to online platforms in June 2020. However, the transition has been challenging as only 45 eligible officials were able to complete the LAMP in 2020 and 73 in 2021¹⁵ out of the target 105 officials per year. The Development Academy of the Philippines (DAP) has also been conducting its Public Management Development Program (PMDP) online using flexible learning management systems. It has also launched the Local Government Executives and Managers Class under the PMDP in 2020 to capacitate local government leaders on development and

⁹ The following joint memorandum circulars were issued: (i) JMC No. 01, s. 2020 (dated July 23, 2020) on the Streamlined Guidelines for the Issuance of Permits, Licenses, and Certificates for the Construction of Shared Passive Telecommunications Tower Infrastructure (PTTIs); and (ii) Revised JMC No. 01, s. 2021 (dated June 11, 2021) Revising and Expanding Joint Memorandum Circular no. 01, s. 2020 or the "Streamlined Guidelines for the Issuance of Permits, Licenses, and Certificates for the Construction of Shared Passive Telecommunications Tower Infrastructure (PTTIs)".

¹⁰ Currently under pilot implementation, the guidelines for full implementation will be issued in 2022.

¹¹ The JMC is being circulated for signature of concerned agencies

¹² The JMC is being circulated for signature of concerned agencies.

¹³ The CBP allows business applicants to register their businesses in just one step in less than a day, as compared to the previous manual process with 13 steps entailing up to 33 days. It now hosts the following frontline services: business registration with the Securities and Exchange Commission (SEC) and the Bureau of Internal Revenue (BIR); generation of BIR tax identification number; payment for BIR filing and registration fees; registration of employer numbers and Unified Employee Reporting for Social Security System, PhilHealth, and Pag-IBIG.

¹⁴ ARTA, "Yearender 2021: ARTA Rides Momentum in Eradicating Red Tape, Improving Government Processes; Vows Better Services in 2022." ARTA Website, date created December 31, 2021

¹⁵ As of third quarter of 2021 (latest available data from CESB)

governance, strategic public management, and leadership.¹⁶ In 2020, DAP trained 180 officers and senior technical personnel, exceeding the target of 175 for the year.¹⁷ The Civil Service Commission, through the Civil Service Institute, has administered its Public Service Values Program (PSVP) with one batch for non-supervisors and ten batches for government leaders, managers, and supervisors. A total of 2,969 government officials and employees were trained on PVSP in 2021.

STRENGTHENING PUBLIC ACCOUNTABILITY AND INTEGRITY

The government simplified reporting mechanisms to encourage active involvement of citizens in curbing corruption and inefficient delivery of government services. The Office of the President, in partnership with telecommunications companies, relaunched free text messaging to the 8888 Citizens' Complaint Center in November 2020.¹⁸ The DILG also implements the *Sumbungan* Online under its *Bantay Korapsyon* Program, which allows citizens to file complaints through email.

¹⁶ DAP. (2020, September 25). DAP's PMDP Class for Local Government Leaders Opens this Year. Retrieved from <https://www.dap.edu.ph/daps-pmdp-class-for-local-government-leaders-opens-this-year/>

¹⁷ As of third quarter of 2021 (latest available data), DAP was able to train 131 out of the target 245 officers and senior technical personnel under the PMDP

¹⁸ PCOO, "Statement on Text 8888." PCOO Website, date created November 25, 2020.

IN FOCUS: MARIE, ASPIRING ENTREPRENEUR



Marie is a full-time mother of two school-aged children. Her husband, who works on a construction project in another town, is often unable to come home due to long work hours. Most days, she takes care of the kids on her own. She also ensures their participation in the blended learning program by picking up the printed modules from their school. She hopes that the kids will be provided with an internet connection and gadgets as these would save them time and effort to complete class requirements.

If she had more time on her hands, Marie would open a sari-sari store to ensure that they have enough income to send their kids to high school and college. Doing so would also be a way to preserve her good standing in the community, as she would help provide access to basic goods that are hardly available in their area. However, with the town center and the municipal government offices located far from their residence, she finds the business registration process difficult. Support from the LGU is often limited, and business operations are often disrupted by sudden weather changes. She prays for an easier way to realize her dreams.

STRATEGIC FRAMEWORK

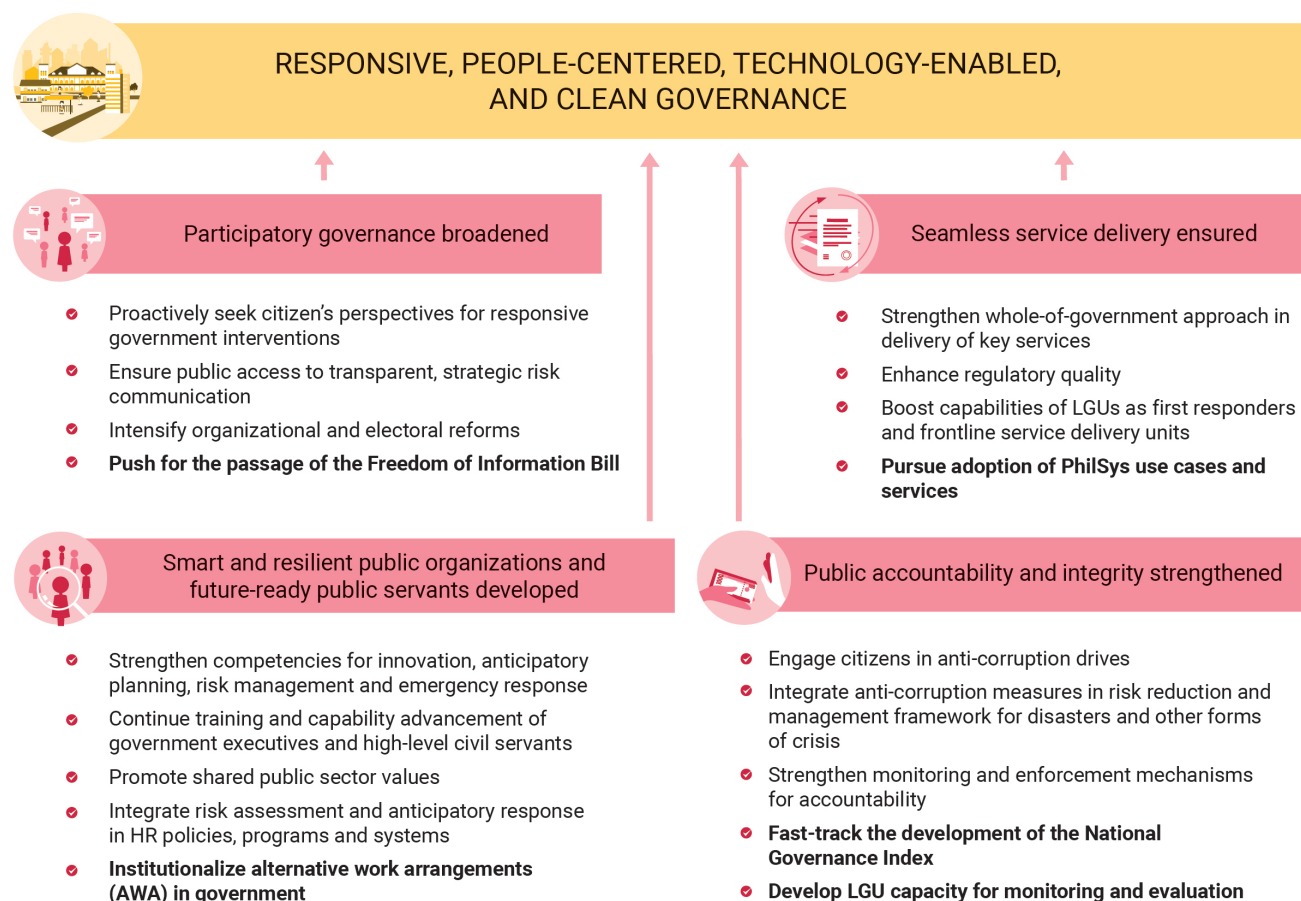
The pandemic has exposed and amplified the governance weaknesses in the country, which have hindered Filipinos like Marie from coping with the challenges of the pandemic and from pursuing dreams and ambitions. But our experience has also served as impetus for sustaining gains from the institutional and governance reforms.

The EODB EGSD Act will address the frustrations of Marie in accessing public services and pursuing business or employment opportunities that can enable her and her husband to provide for the needs of their family and achieve work-life balance. The EODB EGSD Act aims to ensure continuous and efficient delivery of public services despite the occurrence of crises.

To make significant improvements in public service delivery, the government will also intensify efforts to accelerate the implementation of the PhilSys Act, the Community-Based Monitoring System (CBMS), and the National Broadband Program (See [Chapter 19](#)) as the country progresses towards digitalization to build resilience against shocks. With the implementation of the Mandanas-Garcia ruling, LGUs will be empowered towards full devolution.

The government will continue enhancing feedback, transparency, and accountability mechanisms to build public trust and encourage collaboration. A whole-of-society approach is crucial in achieving development goals and in recovering from the ill effects of various crises. Figure 5.1 shows the strategic framework containing intended results and corresponding strategies to ensure responsive, people-centered, technology-enabled, and clean governance. The following new strategies have been included: 1) push for the passage of the Freedom of Information Bill; 2) pursue adoption of PhilSys use cases and services; 3) institutionalize alternative work arrangements in government; 4) fast-track the development of the National Governance Index; and 5) develop LGU capacities for monitoring and evaluation.

Figure 5.1 Strategic Framework to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO BROADEN PARTICIPATORY GOVERNANCE

Mainstream the use of technology in informing, consulting, collaborating with, and empowering citizens. The government will maximize the use of online platforms to provide timely and responsive public information including policies, advisories, statistics, and other government data. It shall also generate feedback on the quality of government services.

Push for the passage of the Freedom of Information Bill to increase meaningful citizen participation in decision-making and in ensuring public accountability. The proposed Freedom of Information Act will address current limitations and related issues on government transparency.

Encourage volunteerism to promote shared responsibility and accountability in achieving development goals. The DILG will also explore volunteerism as a criterion in the Seal of Good Local Governance to institutionalize citizen engagement in local governance.

TO ENSURE SEAMLESS SERVICE DELIVERY

Fast-track the digitalization of frontline services and contactless transactions with the government. The automation of government processes and systems builds the country's resilience under the new normal, particularly ensuring continuous, efficient, and safe delivery of public services.

Strengthen the implementation of policies on expediting ICT development and ensuring cybersecurity to address the digital divide and data security concerns. The Oversight Committee on Passive Telecommunications Tower Infrastructure (PTTI) Permit Reforms¹⁹ will promote and monitor closely the implementation of the streamlined guidelines²⁰ on the issuance of permits, licenses, and other certificates for the construction of PTTIs. The DICT-Cybersecurity Bureau will continue conducting vulnerability assessment and penetration testing of government systems.

Harmonize and provide needs-based capacity development interventions for LGUs to effectively provide devolved public services. The DILG, in collaboration with DAP and other government agencies, will provide learning and development interventions to ensure that LGUs are prepared for bigger responsibilities and accountability with increased financial resources.

Strengthen public sector capacity and data collection for effective conduct of regulatory impact assessment. DAP and the Anti-Red Tape Authority (ARTA), in partnership with the University of the Philippines - Center for Policy and Executive Development will continue providing training courses on Regulatory Impact Assessment (RIA) and Regulatory Compliance Cost Assessment for government

¹⁹ The Oversight Committee is composed of the following agencies: ARTA, DICT, DILG, Department of Human Settlements and Urban Development, Bureau of Fire Protection, Department of Public Works and Highways, National Telecommunications Commission, and the Department of Health-FDA.

²⁰ The DICT, ARTA, and concerned agencies jointly issued: (i) JMC No. 01, s. 2020 (dated 23 July 2020) on the Streamlined Guidelines for the Issuance of Permits, Licenses, and Certificates for the Construction of Shared Passive Telecommunications Tower Infrastructure (PTTIs); and (ii) Revised JMC No. 01, s. 2021 (dated 11 June 2021) Revising and Expanding Joint Memorandum Circular no. 01, s. 2020 or the "Streamlined Guidelines for the Issuance of Permits, Licenses, and Certificates for the Construction of Shared Passive Telecommunications Tower Infrastructure (PTTIs)".

agencies and LGUs. ARTA will periodically update the RIA Manual to ensure that it remains a relevant guide for government agencies and LGUs. The PBRIS will enhance access to relevant data, such as compliance costs, for prospective RIA.

Pursue adoption of PhilSys use cases and services. Recognition of the PhilSys ID as a sufficient and valid proof of identity will allow both government and the private sector to streamline identification and authentication of individuals. Government agencies, such as the Department of Social Welfare and Development, Social Security System, and Philippine Health Insurance Corporation, will start improving databases and building the necessary digital registries to enable integration with PhilSys as an authoritative source of basic demographic and biometric information.

TO DEVELOP SMART AND RESILIENT PUBLIC ORGANIZATIONS AND FUTURE-READY PUBLIC SERVANTS

Capacitate public servants on ICT use, risk-informed planning, and strategic foresight. This will harness the benefits of digitalization, improve resiliency of operations, and encourage innovative and futures thinking within the public sector.

Institutionalize alternative work arrangements (AWA) in government for resiliency to future shocks. The adoption of AWA in the public sector will ensure continued operations while guaranteeing the welfare of government workers despite the occurrence of health issues or emergencies, natural or man-made calamities, and other crises. At the same time, government agencies will implement and maintain their respective Public Service Continuity Plans, incorporating necessary and applicable alternative work arrangements to ensure continued service delivery under any situation.

TO STRENGTHEN PUBLIC ACCOUNTABILITY AND INTEGRITY

Fast-track the development of the National Governance Index (NGI). This index will be a more context-sensitive indicator to gauge the state of governance in the country. More importantly, it will serve as a mechanism for exacting accountability. In line with the implementation of the Mandanas-Garcia case ruling, the NGI will incorporate subnational indicators to measure LGU performance.

Develop LGU capacity for monitoring and evaluation (M&E). All cities and municipalities will establish or strengthen (in collaboration with PSA, DILG and other government agencies) their respective M&E units to ensure effective implementation of the CBMS, particularly in data collection and analysis for evidence-based development planning.

RESULTS MATRIX

Table 5.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Responsive, people-centered, technology-enabled, and clean governance							
Score in the National Governance Index improved ²¹	None (2015)	Increasing	Increasing	Increasing	N/A	N/A	N/A
Subsector Outcome: Participatory governance broadened							
Percentile ranking in the WGI-Voice and Accountability improved	51 (2015)	60	60	60	45	41	Data not yet available
Open Budget Index score improved	64/100 (2015)	67/100	71/100	71/100	76/100	76/100 (2019)	Data not yet available
Subsector Outcome: Seamless service delivery ensured							
Percentile ranking in the WGI-Regulatory Quality sustained ²²	52 (2015)	60	59	59	55	53	Data not yet available
Percentile ranking in the Global Competitiveness Index sustained ²³	59 (2016)	62	61	61	55	GCI rankings paused	Benchmarking exercise
Score in the Global e-Government Development Index improved	0.6/1.00 (2016)	0.7/1.0	N/A	0.7/1.0	N/A	0.7/1.0	0.7/1.0 (2020)
Percentile ranking in the WGI-Government Effectiveness improved	57 (2015)	60	60	60	55	56	Data not yet available
Subsector Outcome: Public accountability and integrity strengthened							
Percentile ranking in the WGI-Control of Corruption improved	40 (2015)	50	50	50	31	34	Data not yet available
Percentile ranking in the Corruption Perceptions Index improved	43 (2015)	50	50	50	37	36	35
Score in the Corruption Perceptions Index improved	35/100 (2015)	37/100	38/100	38/100	34/100	34/100	33/100

²¹ NEDA and the Philippine Statistics Authority will develop the index. NEDA's procurement of consultancy services for the development of the Philippine Governance Statistics Operational Framework failed in 2021. The NEDA will instead form a team, under its direct supervision, to conduct the study in 2022.

²² Regulatory quality captures perceptions of the ability of government to formulate and implement sound policies and regulations that permit and promote private sector development. Given the economic slowdown due to the impact of COVID-19 and enhanced community quarantines, it is expected that there will be reduced private sector development. Thus, the targets for 2021 and 2022 were decreased by 1 percentile rank.

²³ The Global Competitiveness Report analyzes competitiveness along 12 pillars: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication and innovation. Given the economic contraction due to the pandemic, 2021 and 2022 targets were lowered by 1 percentile rank. Due to the pandemic, the World Economic Forum (WEF) paused the GCI rankings in 2020. Instead, it released a special edition of the GCR, which lays out priorities for recovery and revival, and the building blocks of transformation towards new economic systems. For 2021, it will recalibrate benchmarks, tools and metrics for measuring levels of productivity and shared prosperity.

RESULTS OF THE NEDA SURVEYS FOR CONSUMERS, BUSINESSES, AND AGRICULTURE SECTOR WORKERS

The National Economic and Development Authority (NEDA), in coordination with the Inter-Agency Task Force - Technical Working Group (TWG) for Anticipatory and Forward Planning (AFP), launched nationwide surveys in 2020 to assess the economic outcomes of the Enhanced Community Quarantine (ECQ).

The survey amassed 389,859 respondents for the consumer survey; 6,863 respondents for the agriculture sector survey; and 44,097 respondents from micro, small and medium enterprises (MSMEs) for the industry/services sector survey.

The results were used to identify pain points of consumers, businesses and agricultural sector workers linked to the emergence of the COVID-19 pandemic and implementation of the ECQ.

Consequently, the “We Recover As One” report was crafted to identify programs, projects, and activities of different agencies deemed critical to mitigate the adverse effects of the pandemic on the Filipino people, especially those belonging in vulnerable sectors.

Salient points from the survey revealed the experiences of consumers during the ECQ including: a significant decline in income; loss of source of livelihood; reduced food consumption that led to increased informal borrowing; difficulty in accessing groceries, public markets, banks and drugstores; and receipt of support in the form of relief goods.

Consumer confidence is expected to remain low even after the ECQ is lifted due to worse family income situation that is more pronounced among the low-income group. Those residing in the National Capital Region appear to have the most pessimistic outlook.

For the agriculture sector, concerns were mainly focused on disrupted farming activities in agricultural lands equivalent to 1,169 hectares or larger, and the difficulty in selling produce.

In contrast to the respondents of the consumer survey, those in the agricultural and fisheries sectors appear to be more auspicious during the ECQ. This may be because the sector is used to confronting challenges in the production chain even before the pandemic emerged. This, however, does not mean any good as losses will possibly limit their ability to bounce back.

Meanwhile, the business sector represented by MSMEs raised aggravations in the cost of raw materials, sales, work arrangements, number of workers, management of cash flow, and assistance received.

Based on sectors, the most pessimistic are in the education, tourism and transport sectors because restrictions on social distancing will continue to be implemented even after the ECQ is lifted.

In response, the PDP 2017-2022 strategic framework was updated to align recovery priorities grounded on the overall goal of a healthy and resilient Philippines, which is anchored to three pillars: **malasakit** (building a high-trust society), **pagbabago** (transforming towards equity and resiliency), and **patuloy na pag-unlad** (increasing growth potential).

CHAPTER 6

Pursuing Swift, Fair, and Humane Administration of Justice

Access to justice is a fundamental aspect of the rule of law. This is underscored in the Updated Philippine Development Plan 2017-2022, which aims to ensure access to civil and criminal justice, especially by the poor and the vulnerable and marginalized sectors through ICT-enabled systems, digital infrastructure, and strengthened alternative dispute resolution mechanisms. The courts and justice sector agencies envision an enhanced and inclusive administration of justice as the country gears towards recovery.

ASSESSMENT

The courts and justice sector agencies were able to sustain case disposition rates despite the impediments posed by the COVID-19 pandemic. This accomplishment can be attributed to streamlined justice processes, revised judicial rules and procedures, and sector-wide collaboration. These developments were complemented by improvements in the legal framework and ICT-enabled systems of judicial and investigation procedures.

Despite said improvements, the overall scores of the Philippines in cross-country indices remain low. The country scored well in civil justice but failed to meet 2020 and 2021 targets in the fundamental rights and criminal justice sub-indicators under the World Justice Project and in the rule of law index of the Worldwide Governance Indicators. The weak performance may be attributed to poor public perception and expert opinion on fundamental rights and criminal justice, particularly on its sub-indicators on freedom of expression¹, freedom of assembly², and due process of law.³ The country saw a sharp decrease in the due process of law in 2021, slipping 17 ranks lower with a 13 percent decrease in score. While the ranking and score of the country in both the freedom of expression and freedom of assembly decreased by 14 ranks and by 8 percent in score.

¹ Under fundamental rights, the sub-indicator on freedom of expression measures whether an independent media, civil society organizations, political parties, and individuals are free to report and comment on government policies without fear of retaliation,

² Under fundamental rights, the sub-indicator on freedom of assembly measures whether people can freely attend community meetings, join political organizations, hold peaceful public demonstrations, sign petitions, and express opinions against government policies and actions without fear of retaliation

³ Included in both fundamental rights and criminal justice, the sub-indicator on due process of law and rights of the accused measures whether the basic rights of criminal suspects are respected, including the presumption of innocence and the freedom from arbitrary arrest and unreasonable pre-trial detention.

STREAMLINING ICT-ENABLED CRIMINAL, CIVIL AND ECONOMIC JUSTICE PROCESSES

Initiatives to improve criminal, civil, and economic justice processes were implemented to facilitate speedy disposition of cases and to declog court dockets. The enactment of Republic Act No. 11576 expanded the jurisdiction of first-level courts by setting higher threshold values for civil cases, allowing them to hear more cases. The law is expected to address delays in the disposition of cases due to the overload of cases assigned to regional trial court judges.⁴ The use of Alternative Dispute Resolution (ADR) has also contributed to unclogging court dockets. In its 2021 data, the Office for Alternative Dispute Resolution (OADR) under the Department of Justice (DOJ) reported 201,498 cases that were settled through mediation, conciliation, and arbitration under the *Katarungang Pambarangay*.

In ensuring the continued operation of the trial court system, the Supreme Court institutionalized the use of videoconferencing for hearings.⁵ Related to this, it also authorized Philippine embassies and consulates to serve as venues for online hearings for Filipino litigants abroad.⁶ A total of 778,206 online hearings in both criminal and civil cases were conducted from May 2020 to February 2022.

Efforts to decongest jails and prisons were pursued. As part of the government's efforts to decongest penitentiaries in order to mitigate health risks, the Bureau of Jail Management and Penology released 50,489 persons deprived of liberty (PDL) in 2021.⁷ Construction of new penal facilities continued to be carried out, including the inauguration of jail facilities in Mandaluyong City and completion of Phase 1 of the New Quezon City Jail Building in Payatas.⁸ The Bureau of Corrections has also entered into a joint venture agreement for the transfer of prison facilities from the National Bilibid Prison in Muntinlupa City to Nueva Ecija, which is expected to accommodate 30,000 male PDLs and 4,000 female PDLs.

The *e-Dalaw* system was intensified to lessen the risk of exposure to COVID-19 of PDLs and their families. In 2021, a total of 104,838 PDLs availed the *e-Dalaw* System in 474 jails nationwide.

IMPROVING SECTOR EFFICIENCY AND ACCOUNTABILITY

Mechanisms to enhance sector-wide coordination were improved. The Justice Sector Coordinating Council (JSCC) has designated Calamba City, Laguna as a Justice Zone through JSCC Joint Resolution 01-2021, bringing the total number of special focus areas to seven (see box article on Justice Zones on [page 58](#)). The DOJ, in partnership with the Department of Information and Communications Technology, updated the National Justice Information System (NJIS) plan to focus on the registry systems for cases and PDLs, and on the information exchange procedures among law enforcement and penology/corrections agencies.

⁴ "An Act Further Expanding the Jurisdiction of the Metropolitan Trial Courts, Municipal Trial Courts in Cities, Municipal Trial Courts, and Municipal Circuit Trial Courts, Amending for the Purposes Batas Pambansa Blg. 129, Otherwise Known as 'The Judiciary Reorganization Act of 1980,' As Amended," (RA 11576)

⁵ A.M. No. 20-12-01-SC (effective December 9, 2020) on Proposed guidelines on the conduct of videoconferencing

⁶ Office of Court Administrator (OCA) No. 133-2021 (effective November 3, 2021) Guidelines on the conduct of videoconferencing with respect to remote appearance from abroad

⁷ The release of PDLs can be attributed to the following measures: 1) BJMP's continuous paralegal interventions; 2) Supreme Court's issuance of A.C. No. 38-2020, which provides the guidelines on reduced bail and recognizance as modes for releasing indigent PDLs; 3) Supreme Court's issuance of OCA Circular No. 91-2020, which requires the effective implementation of the rights of the accused to bail and to a speedy trial; and, 4) RA 10592 or the Good Conduct Time allowance Law, among others.

⁸ Other facilities constructed are in Negros Occidental, particularly in the cities of Escalante, La Carlota, Himamaylan, and Sagay. Construction of more city and municipality jails is in the pipeline with the BJMP's acquisition of properties in the cities of Baguio and Tabuk and municipality of Tanudan.

As of November 2021, the procurement of services to develop and further enhance the NJIS was underway.⁹

The Philippines signed the Jakarta Declaration. The Philippines, through the Chief Justice, signed the Jakarta Declaration during the 9th Meeting of the Council of ASEAN Chief Justices on October 7, 2021. The Jakarta Declaration supports the establishment of a task force within the ASEAN Judiciaries Portal (AJP) Working Group to consider issues related to the use of social media as an additional platform for engaging the public and wider international community.

The Supreme Court has adopted a child-friendly and gender-sensitive justice system. The Supreme Court, through Memorandum Order No. 90-2021, adopted the Civil Service Commission guidelines, among others, on the use of gender-fair language in issuances, decisions, orders, and communications in the Judiciary.¹⁰ It also issued OCA Circular No. 136-2021 to ensure that evidence containing sensitive photographs and recordings shall only be presented through in-court proceedings and not through videoconferencing to protect the welfare of women and children.¹¹

⁹ The NJIS includes the following components: 1) Middleware Exchange Platform; 2) Philippine Crime Index; 3) Prosecution Case Management System; and 4) Single Carpeta System.

¹⁰ Memorandum Order No. 90-2021 (effective September 24, 2021) on Use of gender-fair language in the judiciary

¹¹ OCA No. 136-2021 (effective November 10, 2021) on Presentation of evidence containing sexual abuse photographs and recordings

IN FOCUS: JANO, PERSON DEPRIVED OF LIBERTY



Jano was a construction worker who had a part-time job as a personal courier for several establishments. While doing a delivery, he was caught carrying drugs in a police entrapment operation.

Now behind bars and waiting for his drug trafficking case to move forward, Jano faces several challenges. A qualified indigent, he is assigned a public attorney. However, mobility restrictions due to the pandemic continue to cause a delay in his investigation, hearing, and trial.

The prolonged detention exposes Jano to a greater risk of contracting the virus. He is also susceptible to developing psychological issues given the limited physical interaction with his family and his frustration with the justice system. Jano hopes that poor and marginalized individuals like him have greater access to justice, especially during emergencies.

STRATEGIC FRAMEWORK

The challenges confronting Jano are shared by many PDLs, who seek to be released from jails and start anew with their loved ones. To attain this aspiration, it is important to ensure greater access to swift, fair, and humane administration of justice especially by the poor, vulnerable, and marginalized sectors, even during national emergencies.

To sustain the gains achieved by the justice sector, the government will continue to pursue strategies to achieve the following outcomes: 1) ICT-enabled and streamlined criminal, civil, and economic justice processes; and 2) improved sector efficiency and accountability. As the country transitions to the new normal, it will also adopt new strategies that are responsive to the challenges that confronted the justice sector, especially during the COVID-19 pandemic.

Figure 6.1 Strategic Framework to Pursue Swift, Fair, and Humane Administration of Justice



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO STREAMLINE ICT-ENABLED CRIMINAL, CIVIL AND ECONOMIC JUSTICE PROCESSES

Streamline and digitalize the justice system for unhampered and speedy resolution of criminal and civil cases. The justice sector will continue to streamline and adopt ICT-enabled systems to ensure continuous administration of justice even during emergencies. Specifically, it will undertake the following: 1) maximize the use of digital technology in the administration of justice; 2) strengthen the witness protection program and establish a whistleblower protection program; 3) construct and rehabilitate disaster-resilient, green and IT-enabled courthouses nationwide; 4) advance the use of alternative dispute resolution mechanisms; and 5) strengthen the OADR.

Ensure access to justice especially by poor, vulnerable and marginalized groups. The justice sector will continue to improve its capacity to ensure accessible and affordable justice for all. The DOJ will review the allocation of new positions for prosecutors and Public Attorney's Office (PAO) lawyers to address the shortage of public attorneys in organized salas. The Supreme Court will pursue the creation of new court plantilla positions to complement the digitalization of the judiciary system. The limited practice of law will be promoted through the implementation of the Revised Law Student Practice Rule to allow externship¹² in courts as a means of complying with the Clinical Legal Education Program of law schools. Lastly, the Board of Claims will strengthen its victim compensation program by educating the marginalized groups and increasing the compensation for victims.

Pursue jail and prison management and corrections reforms. The government will continue construction and repair of penal facilities to provide humane living conditions for PDLs. To minimize transmission of COVID-19 and address other health risks, it will sustain the *e-Dalaw* System and introduce the same interface in more jails. The government will also establish a unified penology and corrections system to address fragmentation of the institutional framework of said system. It will pursue corrections reforms by sustaining livelihood and literacy programs for PDLs and by providing educational training with strong ethics course on the use of technology. The Commission on Human Rights (CHR) will pursue legislation to operationalize the National Preventive Mechanism to improve the human rights situations of PDLs, the conditions of detention facilities, and the prevention of torture.

TO IMPROVE SECTOR EFFICIENCY AND ACCOUNTABILITY

Strengthen inter-agency coordination mechanism. To provide more platforms for effective coordination among agencies at the local level, the JSCC will pursue its target to establish seven more justice zones by 2022. The justice sector will also expedite the launch of the NJIS to facilitate the management and exchange of information among law enforcement and justice sector agencies. The rollout

¹² As defined in the Supreme Court's Rule 138-A or the Law Student Practice, externship is part of the clinical legal educational program if: (a) it allows students to engage in legal work for the marginalized sectors or for the promotion of social justice and public interest; and (b) it is undertaken with any of the following: (i) the courts, the Integrated Bar of the Philippines (IBP), government offices; and (ii) law school-recognized non-governmental organizations (NGOs). Source: <https://sc.judiciary.gov.ph/4808>

of the NJIS will include the full implementation of Single Carpeta System. The JSCC will reactivate the Technical Working Group on Evidence Management System. The Evidence Management System will include improvement in the handling and tracking of the chain of custody of evidence and management of digital recordings in view of the use of body-worn cameras in the execution of search warrants.

Pursue international commitments. To strengthen the country's international commitment to criminal justice, the government will revisit the country's withdrawal from the Rome Statute of International Criminal Court.

Establish the Commission on Human Rights Charter. In compliance with the requirements of the UN Paris Principles affecting National Human Rights Institutions, the government will pursue legislation establishing the CHR charter to ensure its independence, including full fiscal autonomy.

RESULTS MATRIX

Table 6.1 Accomplishments in Pursuing Swift, Fair, and Humane Administration of Justice

INDICATORS	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Subsector Outcome 1: Criminal, civil, and economic justice processes ICT-enabled and streamlined							
World Justice Project – Rule of Law Index improved							
Sub-indicator on Fundamental Rights improved							
Percentile rank	26.55 (2016)	28.00	29.00	29.00	16.67	16.41	11.51
Score	0.50 (2016)	Increasing	Increasing	Increasing	0.42	0.41	0.39
Sub-indicator on Civil Justice improved							
Percentile rank	23.01 (2016)	25.00	27.00	27.00	21.43	28.13	27.34
Score	0.45 (2016)	Increasing	Increasing	Increasing	0.44	0.46	0.45
Sub-indicator on Criminal Justice improved							
Percentile rank	25.66 (2016)	27.00	29.00	29.00	10.32	12.50	13.67
Score	0.36 (2016)	Increasing	Increasing	Increasing	0.31	0.31	0.31
Subsector Outcome 2: Sector efficiency and accountability improved							
Percentile rank in the Worldwide Governance Indicator – Rule of Law improved ^a	43.27 (2015)	46.00	50.00	50.00	34.13	31.73	NA

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

^{a/} Due to World Bank's annual recalculation, country scores in the rule of law index may change.

JUSTICE ZONES AS FOCUS AREAS IN UNCLOGGING COURT DOCKETS, SECTOR COORDINATION

The Justice Sector Coordinating Council (JSCC) continues to expand its list of project areas designated as Justice Zones. In a Joint Resolution 01-2021 dated March 11, 2021, the JSCC has added Calamba City, Laguna to the roster that includes the cities of Angeles, Bacolod, Cebu, Davao, Naga, and Quezon.

The Justice Zones are JSCC's project areas supported by the Justice Sector Reform Programme: Governance in Justice (GOJUST) Programme. These areas act as venue for innovative court declogging programs and where local justice sector actors such as the police, prosecutors, public attorneys, judges, and prison staff can work together to identify common problems and generate common solutions.

The Supreme Court, the Department of Justice and the Department of Interior and Local Government comprise the JSCC, which aims to have a total of 14 special focus areas by 2022.

The GOJUST program is funded by the European Union and aligns with JSCC's goals to improve access to justice as a way of achieving inclusive and sustainable socioeconomic development.

CHAPTER 7

Promoting Philippine Culture and Values towards *Bayanihan*

Over the past year, the imposition of community quarantines forced the closure of cultural sites, caused limited social gatherings, and exposed the vulnerabilities of cultural and creative workers and enterprises. However, the Filipino spirit of *bayanihan* demonstrated the collective capacity to enable a whole-of-government and whole-of-society response and recovery. Despite disruptions, Filipinos found creative ways to inspire one another and bring communities together by leveraging on technology and new forms of cultural production, exhibition, and dissemination. As we continue our recovery, foundational efforts for cultural development and promotion of our shared national identity must be strengthened further as we work towards improving social cohesion and realizing our long-term vision that includes vibrant and culturally diverse communities across the country.

ASSESSMENT

Culture is an essential background for our shared values and collective vision as a society. It enriches participation in national life and puts people at the heart of development. Although the contributions of culture to development may be difficult to measure and remain underreported in official statistics, proxy indicators have been used to monitor progress in terms of promoting Philippine culture and values.

The Philippines has shown relatively strong social networks and personal and family relationships, yet there has been a decrease in social capital overall, a decline in social and civic participation, and consistent weakening interpersonal trust. Among the elements reported under the Legatum Prosperity Index (LPI) - Social Capital pillar for 2021, the country scored highest on social networks (i.e., neighbors) and personal and family relationships, but declined in score and ranking on both areas, along with involvement in the civic and social spheres [See [Chapter 5](#)]. Moreover, the country continues to remain near the bottom with regard to trusting strangers. While this downward trend in our perceived social capital was already observed even before the pandemic, how we interact with members of our communities and those belonging to our out-groups will continue to have implications on the level of societal trust in the long run.

Cultural spaces are beginning to reopen but mobility restrictions pose operational risk. Our experience in this pandemic highlighted the demand for open spaces to help improve people's wellbeing. However, the imposition of localized community quarantines will continue to affect the number of visitors or the extent of live events allowed in certain areas. Costs related to implementing minimum public health standards and the adoption of digital technology are expected to rise in the immediate term.

Dissemination of cultural content online provides opportunities for greater reach, but information on culture is also subject to misrepresentation and disinformation. Technology allows participants from different regions to come together virtually in cultural events. However, the existing digital divide affects access to cultural resources across communities. While online media can help promote cultural and creative content, it may also be subject to misuse (e.g., dissemination of materials that propagate stereotypes, historical revisionism, and outright falsehoods). Moreover, digital transmission may alter the overall audience experience and limit the positive impact of face-to-face interactions that deepen intercultural understanding.

Recovery varies across different domains of the creative economy, even as digitalization provides new models for operations, production, and exhibitions for cultural and creative enterprises. Certain industries, such as live performances or traditional arts, may not be able to cope as rapidly as others. Cultural and creative workers, especially freelancers and gig workers, are generally able to adapt to the new ways of working but also face the risks and vulnerabilities related to informality and disruptions. Meanwhile, the Philippine creative economy continues to face stiff competition from its ASEAN neighbors, as they may also leverage on their creative industries as part of their economic recovery.

Local government units (LGUs) mechanisms to measure, evaluate, coordinate, and consolidate efforts towards cultural development have improved. The share of LGUs which have Local Culture and Arts Councils (LCACs) have increased from 51 percent in 2020 to 55 percent in 2021 (both exceeding their respective year targets). Local conservation efforts have slightly improved with an increase of the percentage of LGUs with local cultural inventories from 42 percent in 2020 to 43 percent in 2021 (both significantly below their respective year targets). Additionally, while culture and arts are included in the Seal of Good Local Governance, there are other competing priorities as LGUs begin to implement their devolution transition plans.

IN FOCUS: NENE, ASPIRING MASTER WEAVER



Nene is a young T'boli weaver from South Cotabato. She is a descendant of the master weaver in her community. As an artist, she aspires to continue the traditions of her community and become a master weaver someday. As the eldest child, she also wants to help earn money for the family and hopes to remain close to them while working. Nene used to work as a heritage tourism guide around Lake Sebu. Unfortunately, the pandemic forced her to find other means of living, as tourism sites and the local School of Living Tradition are closed. Although hesitant to leave her family, she now considers finding a job in Davao, Cebu, or even Manila because opportunities in her town are limited.

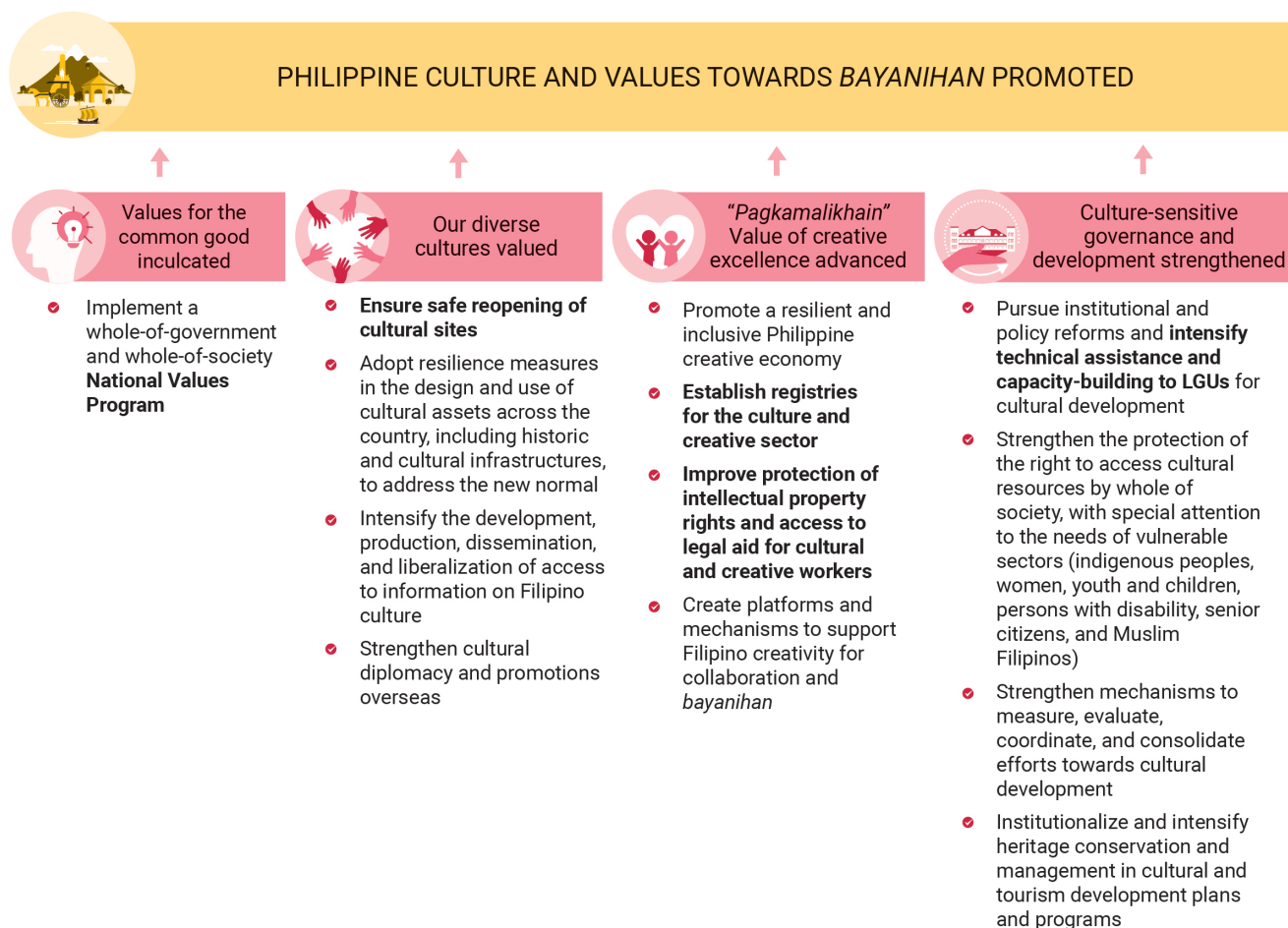
Currently, Nene works part-time as a tailor in a shop that now sells masks using native fabrics. However, she faces discrimination as a Lumad; people in the town center underestimate her because of her background. Moreover, she is worried about her family, especially her parents and grandparents.

STRATEGIC FRAMEWORK

To achieve the long-term goal of a high-trust society, government policies and programs need to be responsive to the needs and aspirations of all Filipinos even those belonging to indigenous cultural communities like Nene, who have faced discrimination and isolation especially during the pandemic. Opportunities must also be created to realize the growth and development potential of cultural and creative artists and enterprises.

Inspired by the Filipino spirit of *bayanihan*, the reopening of social and economic activities is a chance to renew our sense of national identity, creativity, and core values, born out of our collective experience in this pandemic. Technology provides a strong channel to promote Philippine culture and values, but poses both potential risks and opportunities that need to be managed properly. Moving forward, we must continue to pay attention to how our social relations and our sense of national identity evolve. As local governments and communities take on a greater role in safeguarding local heritage, support from the national government and strengthened collaboration with the academe and the private sector will be vital for cultural development. Cultural and creative enterprises must be better prepared for future risks. Data gathering and development of relevant statistics on culture and the creative economy will have to be improved as we endeavor to paint a clearer picture of their contributions to national development.

Figure 7.1 Strategic Framework to Promote Philippine Culture and Values towards Bayanihan



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO INCULCATE VALUES FOR THE COMMON GOOD

Accelerate the implementation of the National Values Program. With the National Commission on Culture and the Arts (NCCA), Department of Education, and Civil Service Commission as lead, government institutions will: (a) mainstream values formation as part of regular agency capacity-building and in educational programs; and (b) harmonize the various values formation programs at the national and local levels. Filipino values that support recovery, such as resiliency, holistic health and wellbeing, innovation and creativity, among others, will be highlighted.

TO VALUE OUR DIVERSE CULTURES

Ensure safe reopening of cultural sites. Minimum public health standards will be strictly observed as the number of visitors is expected to rise. Facilities may have to be renovated or reconfigured to accommodate new equipment, sanitation stations, signage and markers that are needed to be installed for proper ventilation, disinfection, and crowd control. Site managers and personnel must also be trained in first aid and basic medical response. Shifting of cultural programs to digital or hybrid formats will continue to be applied.

Forge collaborative arrangements with the private sector and academe to improve existing cultural infrastructure, public open spaces, parks, and performance and exhibition venues in the regions. To support equitable access to cultural resources across the country, concerned agencies and LGUs, especially those that own or manage cultural properties, will strengthen collaboration with other sectors in the community to maintain cultural sites and design programs that will spur the public's interest in Philippine culture. The use of existing public sites, such as parks and gymnasiums, can be made more purposive to also serve as venues for cultural activities and dialogues. Public libraries, museums, cinematheques, theaters, and galleries can also host local cultural workers, artists, and events.

Intensify the development, production, dissemination, and liberalization of access to information on Filipino culture.

Continuously improve online and digital services of agencies supporting the culture and creative sector. Technology will be utilized to develop digital cultural assets, online program offerings for wider reach and to enable the continuity of information exchange. E-learning capabilities in Institutes/ Schools of Living Tradition will be strengthened. Likewise, cultural agencies will fast-track digitalization of their frontline services [See [Chapter 5](#)].

Support convergence efforts for knowledge management and dissemination of research on Filipino culture. Mechanisms to democratize access to documentation of tangible and intangible heritage, including archival materials from relevant government agencies and independent organizations, will be established to allow for their use as basis for policy and programming.

Encourage state universities and colleges (SUCs) and higher education institutions (HEIs) to support local cultural mapping and heritage documentation. The Commission on Higher Education (CHED), SUCs, and HEIs will support thesis and dissertation writers, professors, and researchers in the humanities and social sciences, who can assist communities in conducting local cultural mapping and research.

Pursue strategic cultural diplomacy. Regular outreach to Overseas Filipinos (OFs) and Sentros Rizal will be vital, as OFs will continue to be tapped as cultural ambassadors in destination countries. Efforts to incorporate nation-branding strategies in cultural diplomacy must be developed further.

TO ADVANCE PAGKAMALIKHAIN OR CREATIVE EXCELLENCE

Future-proof creative careers and businesses as a part of the sector's recovery. Skills retooling, upskilling, digital literacy, and similar capacity-building programs will be offered to cultural and creative workers. Business toolkits that encourage business continuity planning, technology-enabled operations, and innovative practices such as design thinking will be developed for cultural and creative enterprises. Industry roadmaps for specific domains in the creative economy will incorporate strategies to prepare firms for risks and disruptions [See [Chapter 9](#)]. Collaboration and co-creation among local and international stakeholders in the creative economy will be leveraged further.

Establish registries for the culture and creative sector. Agencies such as the NCCA, National Commission on Indigenous Peoples (NCIP), National Commission on Muslim Filipinos (NCMF), Design Center of the Philippines (DCP), and Film Development Council of the Philippines (FDCP), will prioritize the generation of registries of their respective stakeholders. Once established, this will be coordinated with the Department of Labor and Employment (DOLE), Department of Social Welfare and Development, Department of Trade and Industry, and the Social Security System to facilitate access to social protection programs, especially during emergencies [See [Chapter 11](#)].

Improve protection of intellectual property rights and access to legal aid for cultural and creative workers. Interventions to integrate creative workers into the formal economy will be complemented with strategies to assist them in intellectual property rights registration and accessing other relevant legal services when necessary. Concerned agencies like NCCA, DCP, and FDCP will work with DOLE and the Intellectual Property Office of the Philippines to raise awareness among cultural and creative workers of their legal rights, including intellectual property rights [See [Chapter 14](#)].

Maximize the use of traditional media and digital presence to showcase Filipino cultural assets, creative works, and new forms of cultural experiences. Online and offline platforms, including trade fairs, will be utilized to expand the distribution and promotion of cultural products and services.

TO STRENGTHEN CULTURE-SENSITIVE GOVERNANCE AND DEVELOPMENT

Provide technical assistance and capacity-building to LGUs to ensure full functionality of participatory mechanisms for cultural development and realization of cultural rights. The NCCA, NCIP, and NCMF will collaborate with LGUs and Regional Development Councils to ensure that

LCACs, Indigenous Peoples Mandatory Representation, and Unified Muslim Consultative Councils are able to exercise their respective duties. In particular, the LCACs are expected to draft annual plans on culture, arts, and heritage to be integrated in local development plans, including ways to sustain and further develop traditional crafts and local creative industries.

Implement sector-specific action plans for cultural development. Programs designed specifically for vulnerable sectors will be enhanced in line with the principle of respect for cultural diversity and cultural rights. The protection of traditional skills and practices must complement human capital development interventions in indigenous cultural communities so that they could produce their own pool of professionals, such as doctors and teachers, who will support their cultural development [See [Chapter 10](#)].

Strengthen mechanisms to measure, evaluate, coordinate, and consolidate efforts towards cultural development

Align the implementation of the Philippine Cultural Statistics Framework (PCSF) with the Thematic Indicators for Culture in the 2030 Agenda (UNESCO Culture/2030 Indicators). The Philippines was selected as the first pilot site in the Asia-Pacific region for the implementation of the UNESCO Culture 2030 Indicators, a methodology to measure how culture contributes to the realization of the Sustainable Development Goals. The output of this project, which is expected to be completed in 2022, cuts across the economic, social, environmental, and governance dimensions of sustainable development. This will complement the existing PCSF and generate defined indicators related to culture and development needed for evidence-based policymaking.

Support the establishment of a satellite account on Arts, Culture, and Creative Economy. This satellite account will provide a more definite reference on the contributions of culture to the economy. Concerned agencies, together with the Philippine Statistics Authority, will develop a statistical framework relevant to the Philippine context and aligned with the Philippine System of National Accounts.

Strengthen cultural mapping and data collection on culture and heritage. Collaboration between national and local governments will be improved to ensure that LGUs are able to submit their local cultural inventories and that the Philippine Registry of Cultural Property is regularly updated. National cultural agencies will provide relevant trainings and support to LGUs in local cultural mapping, heritage documentation, conservation, preservation, among others. Partnerships with relevant government agencies, such as CHED and SUCs, will also be explored for this purpose.

Streamline interagency mechanisms for safeguarding heritage sites and integrate climate change adaptation and mitigation/disaster risk reduction and management (CCAM/DRRM) in heritage management. Natural and artificial hazards that can affect heritage sites and structures must be identified. Coordination among the NCCA, National Historical Commission of the Philippines, National Museum of the Philippines, Department of Public Works and Highways, and Department of Environment and Natural Resources will be improved to better address heritage-related concerns in infrastructure projects. LGUs are encouraged to utilize a portion of their Internal Revenue Allotment for local heritage management. As heritage sites and structures continue to be exposed to natural and artificial hazards, localized conservation efforts will be crucial.

RESULTS MATRIX

Table 7.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Philippine culture and values towards bayanihan promoted							
Pride of being Filipino increased (%)	92.2 (2013)	-	-	-	99.4 ^a	-	-
LPI - Social Capital pillar score improved ^b	59.4 (2016)	60.5	61.5	62.5	59.3	60.4	58.4
LPI - Social Capital pillar percentile rank improved ^b	83 (2016)	Top 15%	Top 15%	Top 15%	85	82	80
World Intellectual Property Organization (WIPO) - Creative Outputs score improved ^c	22.1 (2016)	22.6	Increased	Increased	27.7	24.2	24.2
WIPO - Creative Outputs percentile rank improved ^c	25 (2016)	27	Increased	Increased	51	56	51
Number of Regional Development Plans with culture components increased (cumulative)	0 (2016)	17	17	17	17	17	17
Percentage of LGUs with LCACs increased (cumulative)	22.5 (2018)	36.0	47.2	58.3	21.7	51.1	55.0
Percentage of LGUs with local cultural inventories submitted increased (cumulative)	3.7 (2018)	55.8	75.5	94.8	39.4	41.7	43.2
Percentage of municipalities, cities, and provinces with Indigenous Peoples Mandatory Representation increased	21.4 (2015)	44.2	44.0	56.5	31.4	27.9	32.1

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic. Actual figures reported for 2021 are based on latest available data.

^a Results of the 2019 Functional Literacy, Education, and Mass Media Survey rider questions were released in 2021 and will serve as end-of-plan accomplishment.

^b This pillar of the LPI measures performance in terms of: social cohesion and engagement (bridging social capital), community and family networks (bonding social capital), and political participation and institutional trust (linking social capital).

^c This sub-index of the WIPO's Global Innovation Index represents the contribution of creativity to the overall innovation-based economy. This sub-index measures performance in terms of: intangible assets, creative goods and services, and online creativity.

CHAPTER 8

Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security

Animal and pest disease outbreaks—coinciding with the global COVID-19 pandemic and the occurrence of more frequent and intense weather-related and climate-induced events—have had serious adverse impact on the agriculture, forestry, and fisheries (AFF) sector. The systemic nature of risk and exposure has presented greater impetus for improving the overall resilience, competitiveness, and long-term sustainability of the AFF sector.

Because the risks from climate change have become ubiquitous, affecting everyone everywhere, programming for resiliency of the AFF sector is no longer just an option but a requirement for the sector to grow and achieve sustainability over the long term. Thus, an integrated approach to mainstream resilience in every segment of the AFF value chain must be operationalized and sustained. Moving forward, the government will focus on implementing strategies that will: a) enhance the capacities of small farmers and fisherfolk (SFF) and micro, small, and medium enterprises (MSME) on technological and digital innovations, diversification, and value-adding activities; b) promote farm consolidation or clustering; c) improve market information and biosecurity systems; and d) facilitate effective linkage between production and markets towards the development of a more diversified and resilient agriculture and food system that will improve food security and enhance the welfare of the rural population.

ASSESSMENT

The AFF sector is yet to recover from an array of shocks in the last two years. The sustained growth in the crop sector, aided by the continued implementation of productivity and competitiveness-enhancement programs, was not enough to boost the overall AFF performance due to the lingering effects of the African Swine Fever (ASF).¹ Most of the core indicator growth targets in the Updated Philippine Development Plan (PDP) 2017-2022 may not be achieved, such as gross value-added (GVA) in AFF, livestock, and poultry, value of fisheries production, labor productivity of farmers and fisherfolk, and value of agriculture and fishery exports.

¹ ASF is a contagious and deadly viral disease that affects pigs and wild boars, causing high fever and internal bleeding. It is harmless to humans but the disease can kill up to 100 percent of infected animals within a few weeks. Currently, there is no approved vaccine to control or prevent the spread of ASF.

ENSURING SUSTAINABLE AND RESILIENT PRODUCTION AND FOOD AVAILABILITY

Growth of the AFF sector continues to decelerate, primarily driven by the contraction in the livestock and poultry subsectors. In 2020, AFF² GVA decreased by 0.2 percent attributed to the Taal Volcano eruption, the occurrence of ASF and Avian Influenza,³ pest infestations, and a series of typhoons.⁴ Negative growth persisted in 2021, with the AFF sector output contracting by 0.3 percent. The reduction in livestock and poultry production outweighed the expansion in the crop subsector, resulting in an overall decline of the AFF sector.⁵

In particular, the livestock subsector growth plunged to -17.3 percent in 2021 from -6.9 percent in 2020 due to the lingering impact of the ASF outbreaks. As of 1 January 2022, the total swine inventory is still lower by 4.5 percent compared to the inventory a year ago. Meanwhile, the poultry subsector posted a 0.3 percent contraction in 2021 from -2.4 percent in 2020 because of lower demand resulting from the temporary closure of institutional buyers during the community quarantines.

Crop subsector posted growth at 2.2 percent in 2021.⁶ The increase in the output of *palay*, corn, sugarcane, and cacao, among others, contributed to the crop subsector growth. *Palay* specifically posted a record-high production of almost 20 million metric tons in 2021, which is 3.4 percent higher than the harvest in 2020. The implementation of the Rice Competitiveness Enhancement Fund (RCEF) programs, created under the Rice Tariffication Law (RA 11203), helped boost *palay* production as evident in the increase in yield among the RCEF beneficiaries.⁷

Municipal and aquaculture subsectors rebounded, while commercial fisheries continued to contract. All fisheries subsectors experienced a decline in their value of production in 2020, primarily due to the imposition of community quarantines to control the spread of COVID-19.⁸ In 2021, municipal fisheries and aquaculture subsectors were able to recover with a growth of 4.0 and 5.1 percent, respectively. The improvements can be attributed to the limited disturbance in coastal and marine ecosystems [see [Chapter 20](#)] along with the continued implementation of rehabilitation programs. Support for aquaculture production was also strengthened with the rehabilitation of Technology Outreach Stations and Production Facilities, as well as the establishment of fish cages, hatcheries, and aquaparks.

² The agriculture, forestry and fisheries (AFF) sector accounted for an average of 9.8 percent of the country's total gross domestic product (GDP) from 2017-2020.

³ AI is a disease caused by Type "A" influenza viruses, which can infect several species of domestic poultry, including chickens, turkeys, quail, guinea fowl and ducks, as well as caged and wild birds. Depending on the type of strain, AI virus may cause few or no clinical signs in poultry or severe clinical signs and potentially high mortality rates among poultry. While humans can be infected with AI virus in some instances when there is direct contact with infected animals or contaminated environments, there is no sustained human-to-human transmission that has been identified to date.

⁴ Total damage and losses to agriculture in 2020 is estimated at PHP24.70 billion, of which PHP15.20 billion is accounted for the damage and losses due to the three typhoons in the last quarter of 2020 (i.e., Quinta, Rolly, and Ulysses). (Department of Agriculture-Disaster Risk Reduction and Management Service)

⁵ Livestock and poultry subsector accounted for 23.8 percent of the total GVA in AFF in 2021. In contrast, the crops subsector accounted for 52.7 percent of the total GVA in the same year.

⁶ *Palay* accounts for an average of 40.6 percent in the total GVA of the crop subsector in 2020 and 2021.

⁷ Based on the survey conducted by the DA-PhilRice, an integrated implementation of all RCEF programs increased the yield of *palay* to 4.47 MT per hectare in 2021 wet season from the 2019 baseline of 3.69 MT per hectare.

⁸ Aisa O. Manlosa, "Aquaculture-capture fisheries nexus under Covid-19: impacts, diversity, and social-ecological resilience," Nature Public Health Emergency Collection, January 16, 2021.

In contrast, growth in the value of commercial fisheries production fell by 12.1 percent in 2021. The decline in commercial production can be attributed to the strengthened enforcement of existing regulations in commercial fishing industry, which includes the restrictions on using Danish seine (*hulbot-hulbot*) and trawl. The establishment and operationalization of the Integrated Marine Environment Monitoring System (IMEMS) also helped improve the monitoring of commercial fishing vessels to prevent overfishing. The enforcement of these regulations and controls is necessary to address the depletion of fish stocks and will eventually benefit the fisheries sector.

Forestry output recovered after a contraction in the previous year. The forestry subsector grew by 3.8 percent in 2021 from a 14.4 percent contraction in 2020. A higher volume of timber harvested from previously established plantations (e.g., Integrated Forest Management Agreement⁹ holders) contributed to the expansion of the forestry output.

Labor productivity further weakened amid the decline in AFF output and increase in sector workforce. The number of workers employed in the AFF sector increased during the COVID-19 pandemic to a total of 10.7 million in 2021. Combined with the overall sector GVA contraction in 2021, this translated to an 8.7 percent decline in labor productivity.

EXPANDING ACCESS TO MARKETS OF SMALL FARMERS AND FISHERFOLK

Growth in agriculture and fishery exports showed signs of improvement. The value of agriculture and fishery exports fell by 7.4 percent in 2020, considering the decrease in major exports (i.e., banana, pineapple, coconut oil, copra oil, and desiccated coconut) that comprise 67 percent of the total agro-based products. This decline can be attributed to weak production, particularly banana,¹⁰ due to *Fusarium* wilt infestation, and worsened by the logistical bottlenecks during the pandemic. In contrast, the growth of the value of agriculture and fishery exports increased by 9.1 percent in 2021. Coconut products, which account for 37 percent of the total agro-based exports increased by 58.7 percent. Additional resources under the Coconut Farmers and Industry Trust Fund Act (RA 11524)¹¹ and the forthcoming Coconut Farmers and Industry Development Plan (CFIDP) will provide an opportunity to further develop the industry, including the promotion of coconut-based exports.

⁹ IFMA is a production sharing contract entered by and between the DENR and a qualified applicant wherein the DENR grants to the latter the exclusive right to develop, manage, protect, and utilize a specified area of forestland and forest resources therein for a period of 25 years and may be renewed for another 25-year period, consistent with the principle of sustainable development and in accordance with an approved Comprehensive Development and Management Plan (CMDP) and under which both parties share in its produce.

¹⁰ Bananas account for 33.9 percent of the total agro-based exports in 2020.

¹¹ Enacted on February 26, 2021. <https://www.officialgazette.gov.ph/downloads/2021/02feb/20210226-RA-11524-RRD.pdf>

IN FOCUS: MANG JOSE, RICE FARMER FROM MINDANAO



Mang Jose is a 53-year-old rice farmer who lives with his wife and four children in Mindanao. He strives to earn a higher income to meet his family's daily needs. Having experienced the hardships of farming for over four decades, he wants his children to graduate from college and find stable employment with better work conditions and salaries outside the field of agriculture.

Given the seasonality of farming, exacerbated by the frequent occurrence of extreme weather events, Mang Jose's income is very unstable. The lack of farm machinery makes timely harvesting of produce even more difficult, especially before the onslaught of a typhoon. Limited access to better-yielding inputs and other technologies, lack of irrigation and postharvest facilities, and limited value-adding opportunities prevent him from attaining higher productivity and greater market access. Living in a remote area about three hours away from the market also forces him to rely on traders who dictate the farmgate price of produce. At the height of the COVID-19 pandemic, he faced additional challenges in obtaining inputs and selling his produce due to the closure of agri-shops and mobility restrictions.

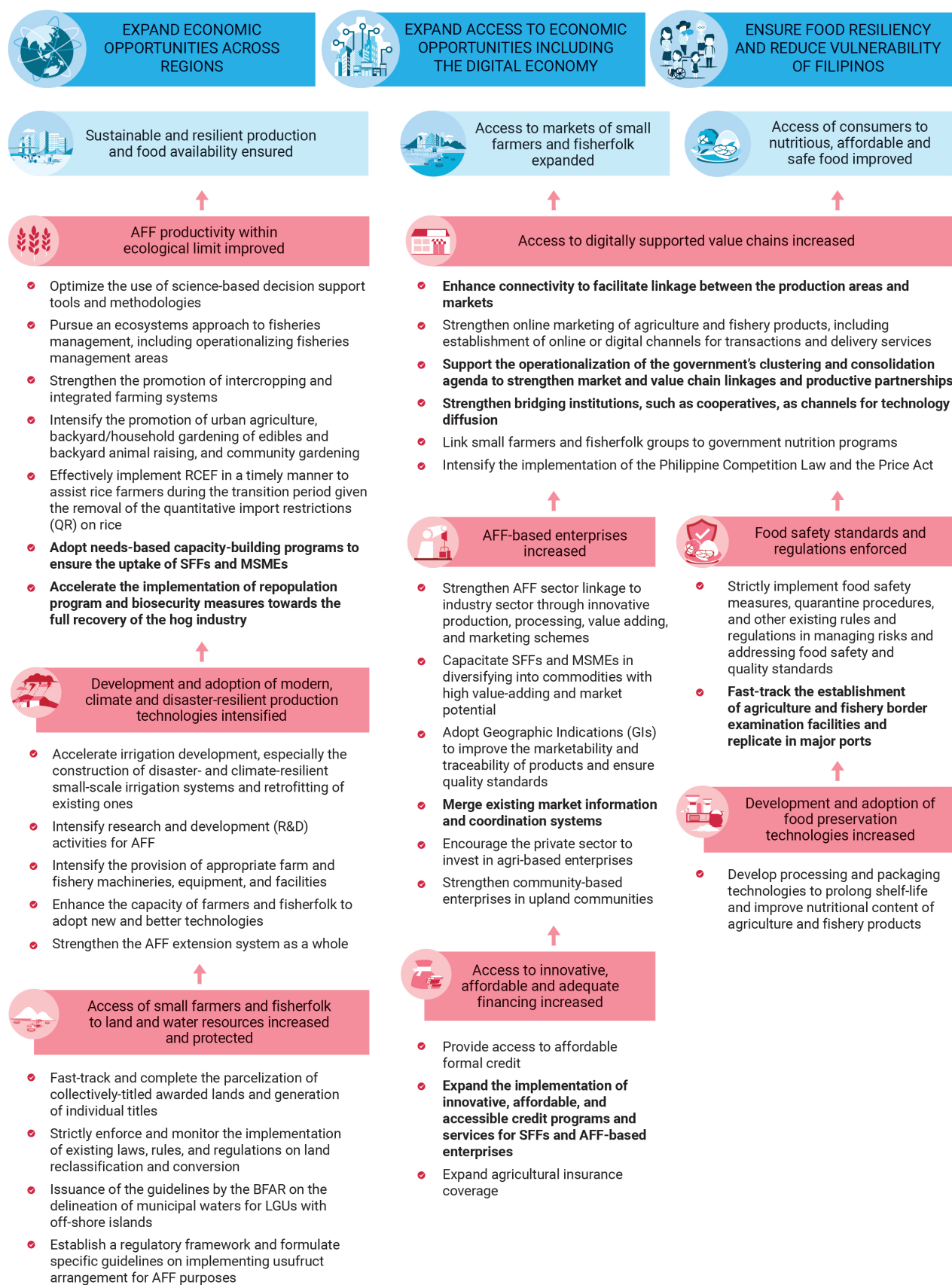
Despite these long-standing problems, Mang Jose remains hopeful that the much-needed government assistance will soon reach farmers in far-flung areas to help realize a better future for their families.

STRATEGIC FRAMEWORK

Mang Jose's situation is typical of local farmers and fisherfolk aiming to boost productivity, attain higher and more stable income, and provide a better future for their families. To realize his aspirations, interventions need to be implemented to make the AFF sector more resilient and competitive, including assistance to enable the country's farmers and fisherfolk adapt to the new normal (e.g., digitalization of value chain).

In this regard, the government will continue to implement the strategies in the Updated PDP 2017-2022 to ensure sustainable and resilient production and food availability, expand access to markets by small farmers and fisherfolk, and improve access of consumers to nutritious, affordable, and safe food [*see Figure 8.1*] In addition, new/modified strategies will be pursued to recover from major disasters faced by the sector in the last two years and accelerate the transformation of Philippine agriculture into a competitive and resilient sector.

Figure 8.1 Strategic Framework to Expand Economic Opportunities in AFF and Ensure Food Security



(Continuation of Figure 8.1)



Cross-cutting Strategies

- Strengthen coordination and convergence of government agencies in undertaking joint planning, monitoring, and budgeting for priority programs and projects
- Utilize and regularly update the A&F management information systems as a strategic targeting mechanism for identification and prioritization of beneficiaries and agriculture-related programs and services
- **Prioritize the completion/updating of farmers and fisherfolk registry and inventory of existing AFF investments**
- Institutionalize the El Niño Task Force as a permanent body rather than an ad-hoc task force, to ensure the preparedness of the AFF sector
- Promote agribusiness courses and training programs under collaborative schemes; and integrate the use of modern agricultural technologies in elementary and high school curriculum to engage the youth in agriculture and fisheries
- Intensify activities on enhancing resilience of the AFF value chain to climate and disaster risks
- **Strengthen the capacities of LGUs to fully assume the agriculture and fishery devolved roles and responsibilities**
- **Integrate into the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) strategic interventions to accelerate the transformation of Philippine agriculture into a competitive and resilient sector**

Note: Text in bold are revised/new strategies to address the challenges identified in the sector. The succeeding section will discuss each revised or new strategy.

STRATEGIES

TO ENSURE SUSTAINABLE AND RESILIENT PRODUCTION AND FOOD AVAILABILITY

Adopt needs-based capacity-building programs to ensure the uptake of SFFs and MSMEs. Capacity-building and retooling of SFFs and MSMEs on integrated farming systems, commodity diversification, use of science-based decision support tools and methodologies,¹² and climate- and shock-resilient technologies¹³ will be intensified to improve productivity and enhance resiliency. The use of basic digital tools (e.g., smartphones and agri-related web-based applications) and more complex services (e.g., e-commerce and online transactions) will also be integrated into capacity-building programs [see *Chapters 9A and 20*]. In designing these programs, the needs, capabilities, and resources of target SFFs and MSMEs will be taken into account to ensure adoption of sustainable practices and better technologies.

Accelerate the implementation of repopulation program and biosecurity measures towards the full recovery of the hog industry. The government's twin program, the Integrated National Swine Production Initiatives for Recovery and Expansion (INSPIRE) and *Bantay ASF sa Barangay* (BaBay ASF), will continue to be implemented in partnership with local government units (LGU) and the private sector to help the hog industry recover from the impact of ASF. The INSPIRE program is a calibrated¹⁴ repopulation program that involves the establishment of breeder multiplier farms, provision of insurance coverage, and access to lending programs¹⁵ to clustered swine raisers. To complement the repopulation program, BaBay ASF is undertaken to institute biosecurity and disease control measures by establishing effective monitoring, surveillance, and reporting systems.

TO EXPAND ACCESS TO MARKETS OF SMALL FARMERS AND FISHERFOLK

Expand the implementation of innovative, affordable, and accessible credit programs and services for SFFs and AFF-based enterprises to complement credit facilities provided by private formal financial institutions. Low interest and flexible credit, such as the *Kapital* Access for Young Agripreneurs (KAYA) and the *Agri-Negosyo* Loan Program (ANYO), will continue to be provided to finance eligible value chain activities of SFFs and AFF-based enterprises, including start-ups.¹⁶ These

¹² These include the use of National Color-Coded Agricultural Guide (NCCAG) Map to assist farmers and other stakeholders in identifying areas where crops could ideally be grown based on soil type, climatic conditions, and bio-physical requirements; and Rice Crop Manager (RCM) and other farm management tools (e.g., AgriDoc App, Minus One Element Test Kit [MOET App], etc.) to provide timely location-specific crop and nutrient management recommendations to farmers to improve yield and increase farm income, among others.

¹³ These include smart greenhouses; short-maturing, high-yielding, flood/drought-tolerant, and stress-resilient crop varieties and animal breeds; and sustainable practices (e.g., alternate wetting and drying technology, integrated pest management, ecosystems approach to fisheries management [EAFM]), among others.

¹⁴ Implemented only in ASF-affected areas, which successfully gone through the sentinel program and reclassified from infected zone (red) to buffer zone (pink) based on the ASF national zoning and movement plan before it can be qualified for restocking and subsequent full repopulation.

¹⁵ Lending programs for ASF-affected farmers include: (a) Swine Window and Interim Support to Nurture Hog Enterprises (SWINE) of Land Bank of the Philippines (LBP); ANYO of DA-ACPC; and (c) Swine Rehabilitation, Repopulation and Recovery (Swine R3) credit program of the Development Bank of the Philippines (DBP).

¹⁶ Under ANYO, eligible individuals may borrow a maximum loanable amount of PHP300,000 while MSMEs, depending on their assets, may borrow a loan amount of PHP300,000 to PHP15 million payable up to five years. On the other hand, KAYA eligible borrowers may avail zero-interest loans of up to PHP500,000 (subject to approval of partner lending conduit [PLC]) payable up to five years.

programs are also designed to encourage the youth and Overseas Filipino workers (OFW) to venture into agriculture. As part of the initiatives on digital transformation, the government will continue to improve the AgriCredit Client E-Signup System (ACCESS)¹⁷ to increase access to these credit programs and strengthen partnerships with digital payment platforms to digitalize loan disbursements and payments. In support of these credit programs, financial management and capacity building¹⁸ for SFFs and AFF-based enterprises will be expanded to integrate digital solutions in agribusiness operations.

Enhance connectivity to facilitate linkage between the production areas and markets. The agriculture and fishery logistics system will be improved to ensure unhampered flow of goods and services, and reduce transport and distribution costs. It will involve the establishment of an interconnected transport system, supported by strategically located facilities such as wholesale food terminals and trading centers, warehouses, cold storage facilities, mobile storage containers, marketplaces, and processing centers [see *Chapters 3 and 19*]. Programs that directly link producers with the consuming public in major urban areas (e.g., *Kadiwa ni Ani at Kita* and its digital platform *e-Kadiwa*) will also be expanded. In addition, more partnerships with the LGUs will be pursued to intensify direct procurement of agriculture and fishery produce from farmers and fisherfolk organizations.

Merge existing market information and coordination systems to reduce information asymmetries and facilitate direct linkage between producers and buyers. Web-based market information systems, such as the Deliver-e¹⁹ and the Agribiz Portal²⁰, should be merged into a common platform to consolidate and harmonize agriculture and fishery production and market information. A common platform will facilitate the management and utilization of reliable and timely information and reach more commodity suppliers and buyers. This will allow them to maximize the benefits of digital platforms. [See *Chapter 9A*]

Support the operationalization of the government's clustering and consolidation agenda to strengthen market and value chain linkages and productive partnerships. Clustering and consolidation arrangements that integrate productivity-enhancing interventions and support services for organized farmer and fisherfolk groups will be scaled up. Organized groups or agricultural clusters will be supported through the development of business plans, provision of capacity-building activities, and facilitation of public-private partnerships to ensure the sustainability of their production and enterprises. Policy support will focus on: (a) enhancing the communication strategy; (b) expanding technical and financial support for the formation of viable clusters; (c) strengthening value chain linkages through investments in critical logistics infrastructure; and (d) increasing education and outreach of clusters through digital agriculture and enabling information technology tools.

¹⁷ ACCESS (acpcaccess.ph) is an online loan application system where loan applicants can monitor the status of their application. It has the following features: (a) self-assessment feature linking applicants to the loan program that is appropriate for their eligibility requirements; (b) online appointment feature allowing the applicants to select preferred schedule for the online program briefing and business planning workshop; and (c) information on the partner lending conduit (PLC) of an applicant once complete documentary requirements are submitted.

¹⁸ Includes capacity-building on credit awareness, acquisition, repayment, financial literacy, and fund management.

¹⁹ Deliver-e is a digital solution that brings together all key players of the agricultural supply chain in one place. Through this system, farmers can (a) receive bigger access to the market; (b) see the demand of the market for their harvest planning; and (c) access transportation/logistics options which help in reducing transport costs.

²⁰ Agribiz Portal is a web-based market information system that facilitates direct business linkage between agricultural and fishery commodity suppliers and buyers. This digital platform is accessible to interested owners or managers of enterprises engaged in the production, processing, trading, marketing, and distribution of agricultural and fishery commodities/products.

Strengthen bridging institutions, such as cooperatives, as channels for technology diffusion.

Cooperatives will be strengthened through the development and conduct of management and training programs that will enable them to provide members with entrepreneurial capabilities, managerial expertise, and technical skills necessary for efficient farm business management. Capacity needs of cooperatives and their members must be assessed and integrated in the programs aimed at improving the sustainability of operations and market competitiveness of these organizations.

TO IMPROVE ACCESS OF CONSUMERS TO NUTRITIOUS, AFFORDABLE, AND SAFE FOOD

Fast-track the establishment of agriculture and fishery border examination facilities and replicate in major ports to strengthen the country's border inspection. The establishment of the first integrated Cold Examination Facility in Agriculture (CEFA) with testing laboratories at the Subic Bay Freeport Zone (SBFZ)²¹ will facilitate the full and thorough inspection of agriculture and fishery products arriving from other countries. The CEFA will strengthen the country's food safety regulatory system and protect consumer health. Replicating it in major ports (e.g., Manila South Harbor, Port of Batangas, Cebu International Port, and Port of Davao) will subsequently ensure the quality of imported agriculture and fishery products, help identify misdeclared shipments, and prevent the entry of transboundary animal and plant pests and diseases.

CROSS-CUTTING STRATEGIES

The following cross-cutting strategies will also be implemented:

Prioritize the completion/updating of farmers and fisherfolk registry and inventory of existing AFF investments. The existing databases such as the Registry System for Basic Sectors in Agriculture (RSBSA)²² and Agricultural and Biosystems Engineering Management Information System (ABEMIS)²³ are essential tools in evidence-based decision making for the AFF sector. The government will prioritize the completion and updating of these information systems to provide reliable data sources. These databases will further help identify the gaps in the AFF sector, target beneficiaries, prioritize areas for investment, and ensure complementation in programs and projects at the national and local levels.

Strengthen the capacities of LGUs to fully assume the agriculture and fishery devolved roles and responsibilities. The national government will continue extending support to LGUs on the following areas: (a) integration of climate and disaster risks (e.g., local climate change trends and projections) in the design of AFF plans, programs, and projects; (b) use of early warning systems and other anticipatory mechanisms (e.g., Philippine Rice Information System [PRiSM])²⁴ that can help reduce and

²¹ This initiative is a partnership between the DA and the Subic Bay Metropolitan Authority (SBMA).

²² An electronic database of information on farmers, farm laborers, and fisherfolk's profile. The main use of the database is to help government planners and policymakers in formulating policies for agricultural development. For those not yet registered, applicants will be provided with enrolment forms for inclusion in the database which upon validation will be included in the RSBSA.

²³ A web-based system providing inventory and status of implementation of all agricultural and fisheries mechanization and rural infrastructure projects of the DA.

²⁴ PRISM is an online system that consolidates and presents accurate, timely, and location-specific information (e.g., area estimates, planting dates, yield estimates, and crop health assessments) on the status of crops which can support the strategic decision making, technology deployment, disaster

manage climate and disaster risks in agriculture and fishery operations; and (c) adoption of climate and shock-resilient technologies to improve the sector's resiliency and enhance the capacity of the LGUs as they move towards full assumption of the devolved agriculture roles and responsibilities pursuant to EO 138²⁵ [see [Chapter 20](#)]. In addition, the LGUs will be provided with necessary training and capacity development interventions to prepare them for greater responsibilities and accountability with their increased financial resources [see [Chapter 5](#)]. Cascading of essential tools to the LGUs such as the RSBSA, ABEMIS, and other decision support tools and methodologies will also be fast-tracked to serve as guide to future investments and avoid overlaps in the implementation of programs and projects at the local level.

Integrate into the National Agriculture and Fisheries Modernization and Industrialization Plan (NAFMIP) strategic interventions to accelerate the transformation of Philippine agriculture into a competitive and resilient sector. The NAFMIP 2021-2030²⁶ adopts a holistic value chain approach to develop the sector into a dynamic and highly productive sector, taking into consideration the variability in local conditions and potential for agricultural transformation. The sector plan should also provide measures that will anticipate and respond to the threats to food security and prevent food supply disruptions. The utilization of digital technology should also be integral in every segment of the AFF value chain. To ensure that the NAFMIP addresses the needs and aspirations of the farming and fishing communities, the plan formulation process will engage relevant government agencies (e.g., Department of Agrarian Reform [DAR], Department of Trade and Industry [DTI], Department of Environment and Natural Resources [DENR], and Cooperative Development Authority [CDA]), LGUs, civil society organizations (CSOs), academe, representatives from farm and fishery associations, among others. A well-crafted sector plan will provide a clear direction and serve as the main reference for the government's prioritization, resource allocation, and support service delivery at the national and local levels in the next medium-term.

preparedness, and rapid response to emergency situations during calamities.

²⁵ Executive Order No. 138, s. 2021, also known as the Full Devolution of Certain Functions of the Executive Branch to Local Governments, Creation of a Committee on Devolution, and for Other Purposes.

²⁶ Successor plan of the Agriculture and Fisheries Modernization Plan (AFMP) 2018-2023.

RESULTS MATRIX

Table 8.1 Results Matrix

INDICATOR	BASELINE (YEAR) ^a	TARGETS ^b			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome 1: Sustainable and resilient production and food availability ensured							
Growth of GVA in AFF increased (%) ^c	-1.0 (2016)	2.5-3.5	2.5-3.5	2.5-3.5	1.2	-0.2	-0.3
Crops	-3.2 (2016)	2.0-3.0	2.0-3.0	2.0-3.0	-2.0	1.6	2.2
Livestock	3.0 (2016)	3.0-4.0	2.0-3.0	3.0-4.0	-0.8	-6.9	-17.3
Poultry	1.8 (2016)	3.0-4.0	2.0-3.0	3.0-4.0	5.8	-2.4	-0.3
Forestry	-4.3 (2016)	2.0-3.0	2.0-3.0	2.0-3.0	5.0	-14.4	3.8
Growth in value of production of fisheries increased (%) ^c							
Commercial	-6.6 (2016)	2.5	1.0	1.0	-3.2	-0.1	-12.1
Municipal	-5.5 (2016)	1.0	3.0	3.0	2.9	-1.8	4.0
Aquaculture	0.5 (2016)	5.0	5.0	5.0	3.9	-2.2	5.1
Growth in labor productivity of farmers and fisherfolk increased (%) ^c	1.3 (2016)	4.7-6.2	5.2-6.2	5.4-6.6	8.5	-4.6	-8.7
Sector Outcome 2: Access to markets of small farmers and fisherfolk expanded							
Growth in the value of A&F exports increased (%) ^d	8.1 (2016)	9.0	9.0	9.0	12.7	-7.4	9.1
Sector Outcome 3: Access of consumers to nutritious, affordable, and safe food improved							
Prevalence of moderate or severe food insecurity in the population based on the FIES ^e							
Severely Food Insecure	5.1 (2019)	TBD	TBD	0.0	No data available	No data available	No data available
Moderately Food Insecure	39.1 (2019)	TBD	TBD	25.8	No data available	No data available	No data available

^a/ 2016 baseline figures in the Updated PDP 2017-2022 Chapter 8 Results Matrix were revised using 2018 rebased data

^b/ The 2020 targets were set before the onset of the COVID-19 pandemic and retained in the midterm update. Years 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

^c/ Constant 2018 prices

^d/ Free On Board value

^e/ See Chapter 11's Results Matrix

CHAPTER 9A

Expanding Economic Opportunities in Industry

The pandemic has caused major disruptions in the domestic and global economy, hampering the growth of the industry sector on account of supply chain disruptions and subdued demand. On the upside, the utilities sector has remained resilient, while the manufacturing sector has already returned to its pre-pandemic levels as of Q4 2021, with easing quarantine restrictions spurring economic activities and boosting consumption.

Moving forward, sustained growth of the sector will depend on calibrated policies to further open the economy including the effective management of COVID-19 risks. The Inclusive Innovation and Industrial Strategy (i3s) will continue to be at the core of the government's initiatives to boost capacity of local enterprises, adopt inclusive business models, and strengthen micro, small and medium enterprises (MSMEs) and the startup ecosystem. In the near-term, strategies will focus on bridging the gaps in innovation and entrepreneurship by strengthening backward and forward linkages of domestic firms, maximizing opportunities in global value chains (GVCs), accelerating digital transformation, and promoting sustainable production and investments.

ASSESSMENT

The industry sector is poised for a broad-based recovery in 2022 led by growth in manufacturing and construction activities. The safe reopening of the economy with better risk management contributed to the achievement of the annual Plan targets in several core industry-related indicators.

EXPANDING ECONOMIC OPPORTUNITIES IN INDUSTRY ACROSS REGIONS INCLUDING DIGITAL ECONOMY

Industry grew by 8.5 percent in 2021 although below the Plan target. Overall industry growth was primarily driven by the partial recovery of manufacturing and construction, which posted 8.8 percent and 10.0 percent, respectively. Mining and quarrying, and utilities also posted positive growth at 5.0 percent and 4.5 percent, respectively, a turnaround from their recorded contractions in 2020.

Despite an overall improvement in the industry sector, its output in 2021 remained below its pre-pandemic level, growing by 8.5 percent compared to the Plan target of 9.8 to 10.8 percent. For most of the year, the country remained under varying levels of community quarantine/alert levels which resulted in below target growth performance.

Manufacturing GVA as a proportion of GDP increased to 19.2 percent, surpassing the annual Plan target of 16.7 percent. The rebound in manufacturing was supported by the resumption of economic activities domestically and abroad. All manufacturing sub-sectors registered positive growth, with the exception of tobacco products, leather and related products, and transport equipment, which still recorded declines.

Industrial employment generated exceeded the target but manufacturing employment as a proportion of total employment decreased to 7.9 percent. The construction (625,000) and manufacturing (270,000) sectors accounted for the bulk of industry total employment generated in 2021. The shift from large-area community quarantines and blanket restrictions to alert level systems and granular lockdowns contributed to increased mobility, particularly in the greater Manila area where several infrastructure projects are being implemented and where most of the manufacturing firms are located.

Around 75 percent of Filipino consumers are aware of their basic consumer rights, down from 81 percent in 2020.¹ Despite the challenges, the government continued the implementation of comprehensive consumer education and advocacy programs.² It also pursued initiatives to ensure establishments' compliance with product safety and standards, and fast-track resolution of consumer complaints, resulting in improved consumer perception of quality products and services, and complaints resolution rate.³

¹ As of the third quarter of 2021.

² These include Consumer Care Webinar Series, Konsyumer Atbp., Diskwento Caravan and Konsyumer Assembly sa Barangay and Business Education Activities, among others.

³ The DTI's Consumer Protection Group (CPG) doubled its efforts in strengthening consumer protection amidst the pandemic. To address consumer queries and ensure their safety while implementing a community quarantine, the DTI-CPG developed a total of 16 policies in 2020 and implemented them accordingly. In October 2021, the DTI also initiated consumer protection reforms through the first ASEAN Peer Review on Consumer Protection. The External Peer Review Report discussed and evaluated the country's legal and institutional framework for the implementation of consumer protection actions across different sectors, the stakeholder landscape and effectiveness of relevant entities in charge of consumer protection, the extent of compliance within the private sector, and consumer awareness, assertiveness, and access to redress.

IN FOCUS: NICO BAUTISTA, MEAT DISTRIBUTOR



Nico Bautista is an owner of an agri-business specializing in the distribution of meat in major cities. His business has been hit hard by the African swine fever (ASF) outbreak and subsequently by the COVID-19 pandemic.

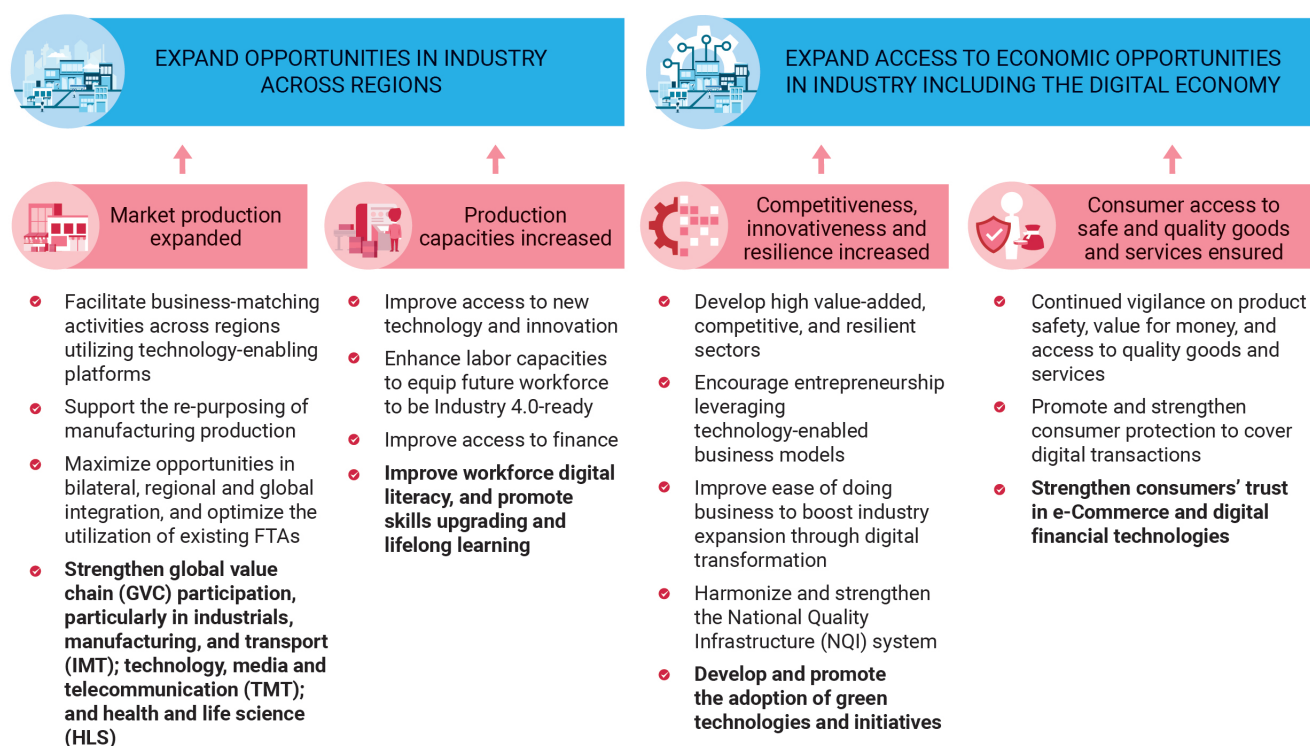
Prior to the ASF outbreak and COVID-19 pandemic, he dreamt of scaling up his operations.

Nico's business is heavily burdened by the prevalence of shipping delays and higher prices of meat from primary suppliers. His business faces weak demand and high operation expenses, exacerbated by supply chain constraints and community lockdowns. He acknowledges that increasing his presence in e-commerce is key to the survival of his business. However, he also knows that many consumers still lack trust in e-commerce and digital financial technologies. Moreover, their area does not have access to a stable and affordable internet connection.

STRATEGIC FRAMEWORK

The strategies for the industry sector are presented in the context of addressing the challenges and constraints faced by our representative stakeholder, Mr. Nico Bautista. To help achieve his goals, strategies will focus on: (a) strengthening backward and forward linkages of domestic firms to attract value-creating investments; (b) strengthening GVC participation to address supply chain constraints; (c) scaling up business matching initiatives by promoting business-to-business (B2B) policies; (d) providing access to and promoting adoption of digital technologies to reduce digital and production divide; (e) implementing digital skills upgrading to increase digital literacy among workers; (f) promoting green technologies and investments to reduce material footprint and encourage sustainable business practices; and (g) strengthening consumer protection in e-commerce and digital payments to build trust in the security and efficacy of digital services.

Figure 9.1 Strategic Framework to Expand Economic Opportunities in Industry



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO EXPAND MARKET PRODUCTION

Strengthen backward and forward linkages of domestic firms. The Inclusive Innovation and Industrial Strategy or i3S will continue to be implemented to integrate production systems across agriculture, industry and services sectors and address production supply and value chain gaps. This will entail addressing the gaps in innovation and entrepreneurship through enhanced coordination among stakeholders and the adoption of appropriate technologies. In line with the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act, the Strategic Investment Priority Plan (SIPP) will be promoted to attract significant value-creating investments and increase the sophistication of products and services that are locally produced.

Strengthen global value chain GVC participation, particularly in industrials, manufacturing, and transport (IMT); technology, media and telecommunication (TMT); and health and life science (HLS).⁴ Infrastructure, institutional, and policy reforms to foster GVC participation in IMT, TMT and HLS clusters will be pursued.⁵ The government will also leverage the country's advantage in electronics to develop the electric vehicles industry, particularly on assembly, component manufacture and charging infrastructure. The transition of information technology – business process management (IT-BPM) services from cost saving to value adding will also be fast-tracked (See [Chapter 9B](#)). Meanwhile, the life sciences and biotechnology ecosystem will be developed not only to capitalize on the growth of the biopharmaceutical sector but also to build resilience for future pandemics (See [Chapter 14](#)).

Scale up B2B matching activities that will link startups and MSMEs to cooperatives and large enterprises. Taking off from the best practices of other countries, an effective B2B (including customer-to-customer) policy framework will be established and implemented (see [Chapter 9C](#)). Existing business matching initiatives will also be monitored, redesigned as needed, and scaled-up to be responsive to the needs of businesses. This will utilize digital technologies, including one stop shop or online portals, to link relevant suppliers and investors both locally and overseas.

TO INCREASE PRODUCTION CAPACITIES

Provide access to and promote the adoption of advanced digital production (ADP) technologies.⁶ As digitally advanced firms are more robust to the impact of the pandemic, initiatives will be pursued to bridge digital and production divides to support firms' access to and adoption of ADP technologies.⁷ The Artificial Intelligence (AI) Roadmap will also be implemented, with emphasis on: (a) improving internet

⁴ Upcoming World Bank report in collaboration with the Department of Trade and Industry.

⁵ These include, among others, the implementation of the amended Retail Trade Liberalization Act, Foreign Investments Act, and Public Service Act; continued implementation of the common tower policy to increase private investments in ICT; effective promotion and implementation of the CREATE Strategic Investment Priority Plan (SIPP); continued access of firms to new technologies, digital platforms, R&D facilities and innovation financing; and upskilling and reskilling of the labor force.

⁶ ADP technologies include: industrial internet of things, machine learning, big data analytics, cloud computing, advanced robotics and cobots, artificial intelligence, computer-aided design and computer-aided manufacturing, and additive manufacturing.

⁷ UNIDO. 2021. "Industrial Development Report 2022. The Future of Industrialization in a Post-Pandemic World." Vienna.

quality, affordability, accessibility, reliability and security; (b) strengthening academic-industry partnerships; and (c) incentivizing investors and venture capitalists to support promising AI startups.

Improve workforce digital literacy and promote skills upgrading and lifelong learning. Under the Department of Education (DepEd) Digital Rise Program, digital literacy skills will be integrated in the K-12 curriculum (See [Chapter 10](#)).⁸ To create a future-ready workforce, the Philippine Skills Framework Initiative will also be implemented, particularly in the following priority sectors: construction, creatives, food (agriculture and fishery); health and wellness; IT-BPM; manufacturing; and tourism.⁹

TO INCREASE COMPETITIVENESS, INNOVATIVENESS, AND RESILIENCE

Develop and promote the adoption of green technologies and initiatives. This could significantly improve the cost efficiency of firms and reduce the material footprint across industries (See [Chapter 20](#)). Financing for innovative and green investments will be continued and expanded to support the Philippines' commitments to the Sustainable Development Goals (SDGs) and contribute to the development of the country's sustainable financial market. The Sustainable Finance Framework (SFF) will also be implemented and promoted to support the country's sustainability commitments and contribute to the development of the Sustainable Financing market domestically.

TO INCREASE CONSUMER ACCESS TO SAFE AND QUALITY GOODS AND SERVICES

Strengthen consumers' trust in e-Commerce and digital financial technologies. The e-Commerce Philippines 2022 Roadmap will be implemented, particularly by promoting cashless transactions and increasing uptake of digital payments, increasing B2B e-commerce transactions, and supporting funding for e-commerce innovation and technology investments. Capacity-building programs on the use of e-commerce and e-payment systems and other available digital platforms will also be implemented to increase consumers' confidence in using digital platforms.

⁸ A holistic framework that will address the infrastructure, software, and capacity building requirements in four major components: (1) Delivery of digital literacy skills required under the K-12 curriculum. These skills are productivity tools (grade 4-6), basic programming (grade 7), multimedia skills (grade 8-10), vocational skills (grade 11-12); (2) ICT assisted teaching that will allow teachers to make use of technology by providing them with skills and equipment needed to access over 6 million open educational resources; (3) ICT assisted learning that will enable learners to take quizzes and exams digitally and immediately get feedback on the e-learning resources they need to review subjects where they encounter difficulties; and (4) Automation of financial and administrative processes which involve the implementation of the DepEd enterprise resource planning system.

⁹ The Philippine Skills Framework (PSF) Initiative is an inter-agency effort to build the skills and competencies of our human capital and better prepare our country's workforce for the future economy. This involves the development of sector-specific skills frameworks that will guide the country's workers in enhancing their skills for particular job roles. The PSF will benefit from the experience of Singapore through their SkillsFuture Singapore (SSG) agency. Singapore's skills framework approach offers a reference for the Philippines on how to develop its own frameworks. This also takes into consideration the circumstances of our local industries and the current skills and competencies of our workers in these sectors.

RESULTS MATRIX

Table 9.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Economic opportunities in industry across regions including the digital economy expanded							
Gross Value Added (GVA) growth rate in the industry sector improved (%) ^a	8.2 ^b (2016)	8.0-9.0	9.8-10.8	6.3-7.3	6.0	-13.2	8.5
Subsector Outcome 1.1: Market production expanded							
Manufacturing GVA as a proportion of GDP increased (%) ^c	19.1 (2016)	24.7-25.3	16.6-16.7	16.8-17.0	18.6	18.6	19.2
Subsector Outcome 1.2: Production capacities increased							
Employment generated by the industry sector increased ('000s) ^d	180 (2015)	440	400-500	200	267	-901	892
Manufacturing employment as a proportion to total employment increased (%) ^e	8.3 (2016)	10.9	8.0-8.6	8.3-8.6	8.7	8.1	7.9
Subsector Outcome 1.4: Consumer access to safe and quality goods and services ensured							
Level of consumer awareness of basic consumer rights increased (%) ^f	74 (2016)	78	75	78	72	81	75 ^g

^a GVA at constant 2018 prices. GVA growth rate in Industry for 2019 and 2020 are based on the original Development Budget Coordination Committee (DBCC) targets as of July 2019. Note that Industry GVA growth rate for 2021 and 2022/EOP are consistent with the DBCC-revised figures as of July 2020.

^b National Income Accounts as of August 2020.

^c Note that baseline (2016) and targets (2021 and 2022/EOP) are in line with the revised DBCC-approved GDP estimates (see Chapter 15) in the same period and rebased at constant 2018 prices. These are also within the DTI-BOI proposed targets (16.4- 19.8% in 2021 and 16.9%-20.2% in 2022/EOP).

^d Employment generated refers to additional employment generated from the preceding year. Annualized employment generation for 2014 and 2015 refer to the average of estimates for April, July and October survey rounds which excluded data of Leyte province. Further note that revision of target employment generation in Industry for 2021 and 2022 is consistent with the revision of target total employment generation (see Chapter 4) and revision of labor productivity in Industry (see Chapter 10) in the same period.

^e Note that revised manufacturing employment as a proportion of total employment for 2021 and 2022 is in line with the revised labor productivity in Industry (see Chapter 10) in the same period. These are also somewhat within the DTI-BOI proposed targets of 8.0% in 2021 and 8.4% in 2022/EOP.

^f Revised downward targets in 2021 to 2022/EOP is due to operational constraints faced by the DTI-Consumer Protection and Advocacy Bureau (CPAB) in carrying out consumer advocacy efforts.

^g As of Q3 2021

CHAPTER 9B

Expanding Economic Opportunities in Services

Services sector growth has been gradually recovering from the impact of the pandemic. While community quarantines, mobility restrictions, and border closures have negatively affected tourism and transportation services, emerging sectors such as e-commerce and digital transactions have expanded. Boosting the sector's growth and sustaining the recovery will require recalibration of programs and policies, institution of much needed reforms to attract investments, promotion of greater competition, and further improvement of the country's business environment with better risk management.

ASSESSMENT

The services sector remained the largest contributor to the country's total output with a share of 60.5 percent in 2021. After a 9.1 percent contraction in 2020, the sector partially recovered, growing by 5.4 percent in 2021 albeit still short of its 5.8 percent low-end target. In terms of employment, services recorded higher-than-expected employment of more than 25 million in 2021. However, tourism performance remained weak as tourist arrivals only reached 163,879, mainly due to the continuous restrictive travel conditions. Nonetheless, the safe reopening of the economy, ramped up vaccination roll-out, and improvements in consumer and business confidence are anticipated to accelerate the sector's full recovery in 2022.

EXPANDING ECONOMIC OPPORTUNITIES IN SERVICES ACROSS REGIONS INCLUDING THE DIGITAL ECONOMY

The services sector grew by 5.4 percent in 2021, falling below the low-end target of 5.8 percent for the year. All services subsectors posted positive growth with human health and social work activities registering the highest growth rate at 14.1 percent, followed by information and communication, and education at 9.2 percent and 8.3 percent, respectively.

Services registered a net employment gain of 2.8 million in 2021, exceeding the target of 1.4 to 1.6 million for the year. Wholesale and retail trade sector posted the largest increase in employment generation, followed by other service activities, and administrative and support activities. Meanwhile, accommodation and food services recorded a dip in employment generation along with activities of extraterritorial organizations and bodies. **Tourism performance plunged given lingering restrictions**

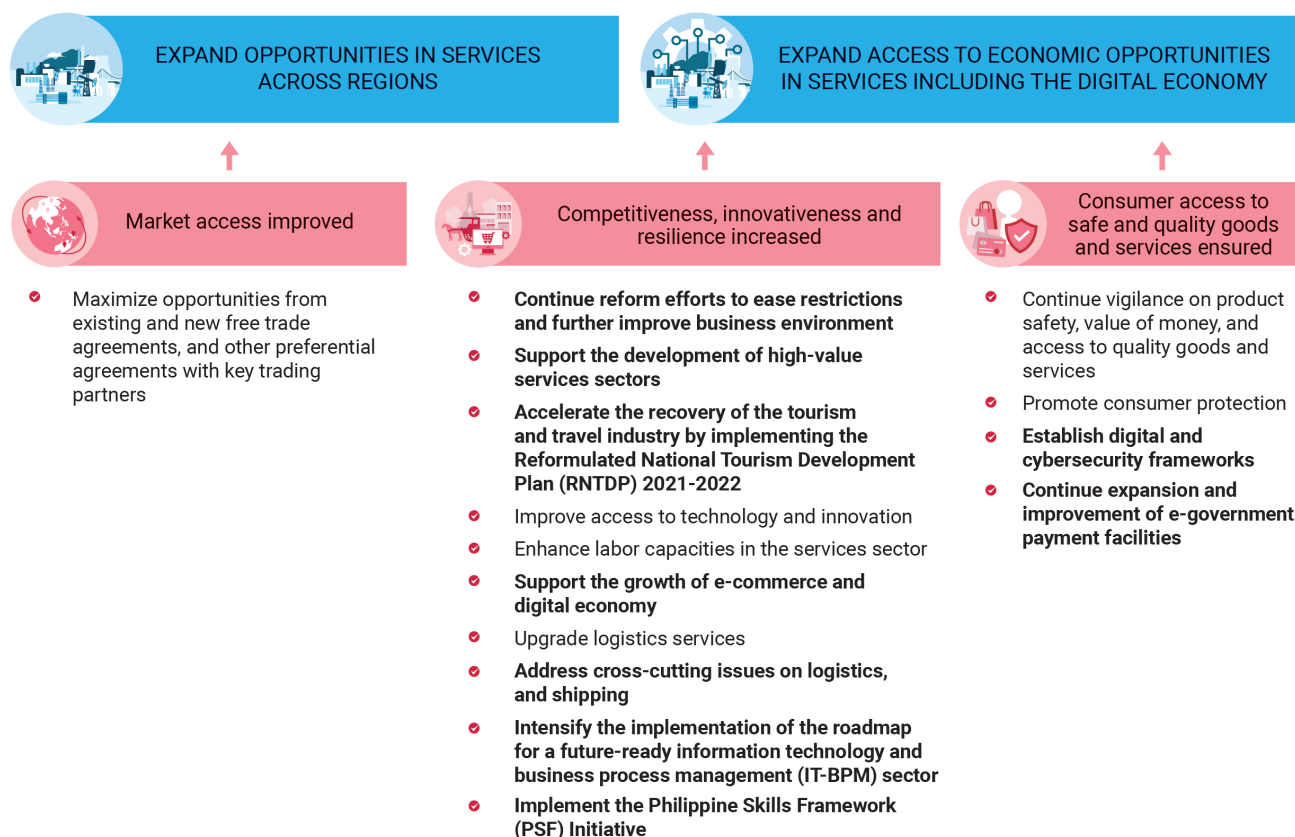
and weak travel demand. In 2020, tourism revenues also contracted by 78 percent while its contribution to the economy declined to 5.4 percent, the lowest recorded since the start of the Plan period in 2017. Total inbound visitors in 2021 dropped sharply by 89 percent, from 1.5 million in 2020 to 163,879 in 2021.

STRATEGIC FRAMEWORK

The strategic framework for Chapter 9B underlines the priority strategies to effectively address the challenges faced by the services sector and to better manage the risks associated with shocks, to achieve the overall sector outcome and targets.

To address the frustrations such as those encountered by Nico and to help him attain his goal of a sustainable and resilient business that is able to leverage on digital technology, the following strategies will be pursued: (a) improve business environment; (b) pursue the development of the country's digital infrastructure; and (c) promote digital payments and advance cybersecurity initiatives to bridge the digital divide.

Figure 9.2 Strategic Framework to Expand Economic Opportunities in Services



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO IMPROVE MARKET ACCESS

Maximize opportunities from existing and new free trade agreements, other preferential agreements with key trading partners. Regularly conduct information and promotion campaigns and make information materials available online to raise awareness on existing and new free trade agreements (FTAs), particularly on how firms can benefit from them. The Philippines' participation in the Regional Comprehensive Economic Partnership (RCEP) agreement will open new opportunities and markets for Filipino firms, and attract foreign investments.

TO INCREASE COMPETITIVENESS, INNOVATIVENESS, AND RESILIENCE

Continue reform efforts to ease restrictions and further improve the business environment. Reforms that focus on relaxing restrictions and promoting a conducive business environment are critical to support the development of services sectors and encourage more foreign investments. These include the swift implementation of recently approved amendments to the Public Service Act, Foreign Investment Act and Retail Trade Liberalization Act.

Support the growth of e-commerce and digital economy. Strengthen the country's digital infrastructure to ensure quality, reliable, affordable broadband and internet services. In addition, fast-track the development of digital financial infrastructure to support digital payments and to make digital financial services more accessible, available, and affordable for Filipinos.

Address cross-cutting issues on logistics, and shipping. Automate, streamline, and decentralize permit issuance processes and requirements across government agencies dealing with trade facilitation, transport and logistics. Review conflicting functions and interests within government (including port operations and regulation) and amend unreasonable or outdated laws. Rationalize fees, rates, and/or charges of international and domestic shipping lines. Sustain investments in transport and logistics infrastructure.

Support the development of high-value services sectors. Promote innovation and technological improvement to enable the seamless shift towards knowledge-based and higher value-added services. Increased protection for intellectual property rights and enforcement of competition laws are also needed to support the growth of these high-value services.

Intensify the implementation of the roadmap for a future-ready information technology and business process management (IT-BPM) sector. Increase talent development programs, especially future skills for contact center and the BPO sub-sector, information technology services, health information management, animation and game development, and global in-house center (GIC) subsector.¹ Improve telecommunication infrastructure to establish a robust remote working environment for the sector.

¹ Accelerate PH: Future Ready Roadmap 2022 of the Philippine IT-BPM

Accelerate the recovery of the tourism and travel industry by implementing the Reformulated National Tourism Development Plan (RNTDP) 2021-2022. Maintain the promotion of domestic tourism and support the safe return of international tourism. To restore traveler confidence, ensure the application of uniform safe travel protocols to facilitate domestic and international mobility and promote the adoption of Safe Travels Stamp to Department of Tourism (DOT)-accredited establishments and destinations.

Implement the Philippine Skills Framework (PSF) Initiative. Hasten the development of sector-specific skills frameworks, particularly in the services sector, to develop a competitive and future-ready workforce. Priorities will include construction, creatives, food (agriculture and fishery), health and wellness, IT-BPM, logistics and supply chain, manufacturing, and tourism sectors. *(Cross-refer to [Chapters 9A, 10](#))*

TO ENSURE CONSUMER ACCESS TO SAFE AND QUALITY GOODS AND SERVICES

Establish digital and cybersecurity frameworks. Ensure security and integrity of online transactions by promoting and investing in state-of-the-art digital and cybersecurity systems, including skills development training of cybersecurity professionals in the country. Build financial institutions' capacity to implement better cybersecurity measures and develop regulations for online transactions.

Continue expansion and improvement of E-government payment facilities. Expand acceptance of digital payments to include all income-generating government agencies to promote easier and faster payment schemes that could maximize revenues and adapt to the increasing preference of Filipinos for online transactions. *(Cross-refer to [Chapter 15](#))*

RESULTS MATRIX

Table 9.2 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Economic opportunities in services across regions including the digital economy expanded							
GVA growth rate in the services sector improved (%) ^a	8.2 ^b (2016)	6.3-7.3	5.8-6.8	7.3-8.3	7.2	-9.2	5.4
Tourism GVA as proportion of GDP increased (%)	10.7 ^g (2016)	9.5	9.9	10.1	12.8	5.4	TBD ^c
Employment generated from the services sector increased ('000s) ^d	578 (2015)	499	1,400-1,600	600-700	1305.8 ^e	-2,103	2,815 ^f
Tourism employment as a proportion to total employment (%)	12.8 (2016)	13.8	14.1	14.4	13.6	11.9	TBD ^c
Subsector Outcome 1: Competitiveness, innovativeness, and resilience increased							
Number of inbound visitors increased (millions)	5.4 (2015)	9.2	10.4	12.0	8.3	1.5	0.16
Tourism inbound revenue increased (PHP billion)	314.6 ^g (2016)	661.1	776.4	921.9	600.1	132.6	TBD ^c

^a GVA at constant 2018 prices. GVA growth rate target for 2020 is based on the original DBCC target last July 2019. Meanwhile, GVA growth rate targets for 2021-2022 are in line with the revised DBCC-approved GDP estimates last 28 July 2020.

^b National Income Accounts as of August 2020.

^c Data will be available by June 2022.

^d Employment generated refers to additional employment generated from the preceding year. Revision of target employment generation in services for 2021 and 2022 is consistent with the revision of target total employment generation (see Chapter 4) and revision of labor productivity in Services (see Chapter 10) in the same period.

^e Based on the 2010 Census of Population and Housing population projections (comparable with 2018 LFS)

^f Preliminary data from NPPS.

^g Updated baseline figure is based on the revision in the Philippine Tourism Satellite Accounts (PTSA). For the Tourism GVA as proportion of GDP indicator, revision is mainly from revised indicators from the 2018-based Philippine System of National Accounts (PSNA).

CHAPTER 9C

Expanding Access to Economic Opportunities in Industry and Services (I&S) for Startups, MSMEs, and Cooperatives

The global pandemic has exposed the lack of resiliency of startups, micro, small and medium enterprises (MSMEs), and cooperatives. Micro and small-scale enterprises were the most vulnerable given their limited asset size, lack of economies of scale, and structural inefficiencies. With the government's support programs and measures to curb the infection rate, 69 percent of the MSMEs were able to resume operations in May 2021.¹ The digital transformation of enterprises during this period has been a silver lining as both consumers and businesses shifted to purchasing goods and services online. However, there remains a need to tap technological opportunities to digitally empower enterprises in this fast-changing market environment.

ASSESSMENT

The pandemic disrupted the operations of MSMEs, startups, and cooperatives as it dampened consumer demands and constrained production networks and supply chains. Targets of all core indicators were unmet as the Philippine economy recorded its worst annual economic contraction in 2020 at -9.5 percent. The 34.2 percent contraction of investments during the same year also reflected the pessimism of businesses. To support economic recovery, the government prioritized assistance to affected enterprises, particularly MSMEs, by providing access to low-cost loans and debt restructuring schemes, facilitating market access, and supporting business-repurposing activities, among others.

¹ World Bank data – 60 percent open and operating at below capacity; 9 percent open and operating at full capacity

EXPANDING ACCESS TO ECONOMIC OPPORTUNITIES IN I&S FOR STARTUPS, MSMES, AND COOPERATIVES ACROSS REGIONS INCLUDING THE DIGITAL ECONOMY

Total approved investments reached PHP756.6 billion in 2021, falling short of the PHP1.02 trillion target. Investment pledges in 2021 declined by 33.6 percent from the same period last year. Specifically, investment pledges for the industry sector significantly increased by 675.7 percent while investment pledges for the services sector dropped by 53.8 percent. Information and communication received the highest increase in investment commitments recording a 459.9 growth from the previous year. Meanwhile, public administration and defense, compulsory social security and water supply, sewerage, waste management and remediation activities suffered the biggest drop, declining by more than 99 percent from the previous year.

Foreign direct investment (FDI) net inflows reached USD10.5 billion in 2021, surpassing the previous high of USD10.3 billion in 2017. Investment inflows were directed mainly to manufacturing, electricity, gas, steam and air conditioning supply, and financial and insurance activities. However, net equity and reinvestment of earnings in the industry sector dropped by 26.7 percent and 20.6 percent respectively. Net equity placements in the services sector also registered a decline of 28.6 percent from USD885.5 million in 2020 to USD632 million in 2021.

Loan allocation of banks for micro and small enterprises declined further to 2.1 percent of the total loans as of end-December 2021. Bank lending activities contracted compared to the pre-pandemic period amid the deterioration of borrowers' credit profiles, less favorable economic outlook, and reduced tolerance for risk. The Philippine banking system's total loan portfolio declined by 0.7 percent year-on-year (y-o-y) to PHP33.9 trillion, while the loans to MSMEs decreased by 8.0 percent y-o-y to PHP1.81 trillion.

Likewise, loan allocation of banks for medium enterprises dropped further to 3.3 percent of the total loans. Pursuant to the Magna Carta for Small Enterprises (RA 6977), the mandatory credit allocation for MSMEs lapsed on June 16, 2018. Nevertheless, the Bangko Sentral ng Pilipinas (BSP) continues to monitor the exposures of the banking industry to MSMEs through the issuance of Memorandum No. M-2018-022.² The BSP has also undertaken other relief measures to help channel liquidity directly to the MSME sector while ensuring a robust industry.³

² Memorandum No. M-2018-022 apprised the extension of banks' submission of compliance reports and encouraged the continued submission of their quarterly exposures to MSMEs.

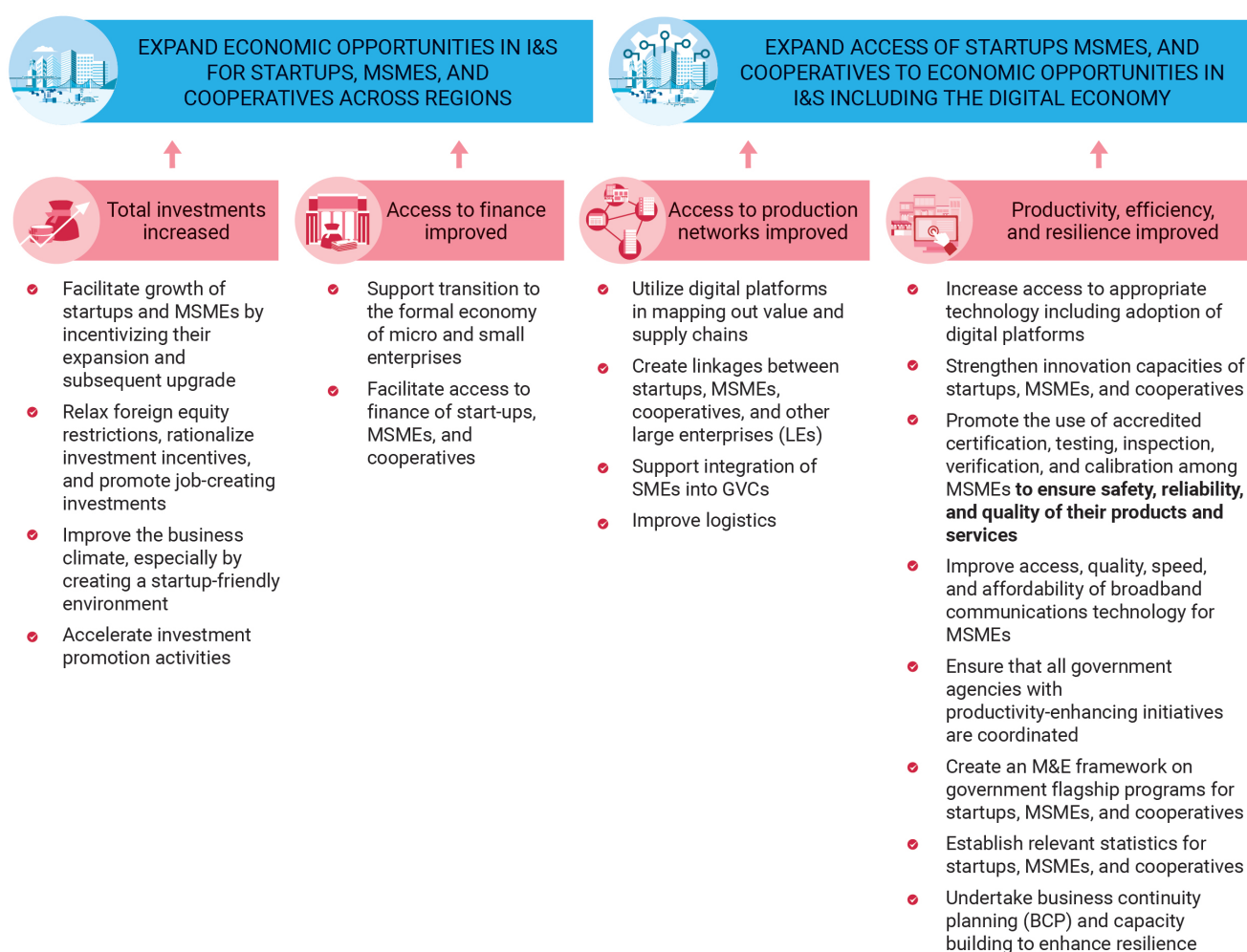
³ Among the relief measures implemented to support the MSME sector's recovery from the COVID-19 pandemic are: 1) reduced credit risk weights to performing MSME loans; 2) flexibility in liquidity-related standards; 3) adoption of credit-related relief measures, and 4) recognition of peso-denominated loans to MSMEs as eligible instruments for compliance with the BSP reserve requirement.

STRATEGIC FRAMEWORK

Nico's condition represents similar hardships faced by small business owners during the pandemic. To aid in their recovery, the recommended strategies will help address small business owners' constraints such as: (a) limited access to finance; (b) lack of business-to-business (B2B) and consumer-to-consumer (C2C) policies; (c) lack of access to production network/supply chain; (d) low innovation and technology adoption; (e) inadequate ICT connectivity, and (f) high occurrence of production supply chain disruptions.

Figure 9.3

Strategic Framework to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO IMPROVE ACCESS TO FINANCE

Improve access to finance. Promotion of and access to hybrid instruments,⁴ Credit Surety Fund (CSF), and value chain financing (VCF) will be further enhanced. For instance, MSMEs that are linked to the supply chain of a fast-moving consumer goods (FMCG) company will have access to working capital and funding for other business needs through the Sustaining Trade Access to Primary Food and Link to Enterprises (STAPLES) Program under the Small Business Corporation (SBCorp). The Credit Risk Database (CRD) project of BSP will be accelerated to lessen banks' dependence on collaterals during credit evaluation. Similarly, the growth of fintech companies will be supported to provide alternative financing solutions for consumers and businesses (see [Chapter 15](#)).

TO INCREASE TOTAL INVESTMENTS

Protect the rights of consumers and businesses through effective B2B and C2C policies. A policy framework that will effectively govern B2B and C2C transactions will be established and implemented to protect stakeholders against fraud, unfair trade, and anti-competitive business practices. This will benefit single proprietors subscribed to franchising agreements, enterprises and customers engaged in digital platforms, and small manufacturers that were constrained by the conditions set by large-scale retailers and consolidators, among others.

Facilitate strategic high-value investments through an effective incentive system and well-coordinated investment-friendly policies. The implementation of the Strategic Investment Priority Plan (SIPP) under the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act will target high-value investments, especially in innovation-driven fields of construction, manufacturing, and information and technology (IT), among others (see [Chapter 9A](#)). Incentives for cleaner production technologies/processes will also be prioritized (see [Chapters 14 and 20](#)). Moreover, the amendments to the Foreign Investments Act (FIA) will establish a unified marketing and promotion plan⁵ for the country to attract investments with high potential for job creation (Tier 1 under SIPP), address gaps in the domestic supply and value chain (Tier 2), or include R&D activities that will yield significant high-value added and increased productivity (Tier 3). In addition, implementing investment-friendly policies such as allowing startups or startup enablers to be fully foreign-owned and reducing the direct employment required by foreign investors from 50 to 15 Filipinos, are expected to encourage smaller foreign enterprises to locate in the country.⁶

⁴ Hybrid instruments combine debt and equity features into a single financing vehicle. It serves SMEs that are in need of capital injection, but have limited or no access to debt financing or equity, or the owners do not want the dilution of control that would accompany equity finance.

⁵ The enactment of the Amendments to the Foreign Investments Act will create the Inter-agency Investment Promotion Coordination Committee (IIPCC) that will draft and implement the Foreign Investment Promotion and Marketing Plan (FIPMP). This will institutionalize the current Philippine Investment Promotion Plan (PIPP) Steering Committee and Technical Working Group to harmonize efforts to position the country as among prime destinations for investments in the world.

⁶ This exempts retail trade scope as provided under amendments to the RTLA. Amendments to the FIA stipulates that, "...micro and small domestic market enterprises with paid-in equity capital less than the equivalent of Two hundred thousand US dollars (US\$200,000.00), are reserved to Philippine nationals: Provided, That if: (1) they involve advanced technology as determined by the Department of Science and Technology, or (2) they are

TO IMPROVE ACCESS TO PRODUCTION NETWORKS

Enhance access to production networks to improve the sector's production supply chain. The Innovation for Regional Inclusive Innovation Centers (RIICs), Industry and Startups (IRIS) Program will strengthen and expand the RIICs; assist local firms in assessing their readiness for digital transformation; and support the startups to grow, scale up and become sustainable (see [Chapter 14](#)).

TO IMPROVE PRODUCTIVITY, EFFICIENCY, AND RESILIENCE

Accelerate digital transformation by implementing the Connect, Harness, Innovate, and Protect (CHIP) Framework. CHIP aims to establish the IT connectivity of the government with other governments, local government units (LGU), consumers, and businesses. Its key thrusts include the following:

Improve the quality of the country's ICT infrastructure through the rollout of the National Broadband Program, the Free Wi-Fi for All, and deployment of fiber optics and wireless technology, in partnership with the private sector and LGUs. (see [Chapter 19](#)).

Strengthen digital readiness of cities and provinces, including through investments in digital education, with special focus on countryside interventions to take advantage of opportunities in e-commerce and the gig economy (see [Chapter 19](#)).

Fast-track e-governance processes, such as processes for business name registration, business permit and licensing system, and tax payments, among others, to reduce the cost of doing business (see [Chapter 5](#)).

Strengthen cybersecurity measures and mitigating risks, including those resulting from digital monopoly, and opportunity disparities (see [Chapters 5 and 19](#)).

Enhance innovation and technology adoption of MSMEs, startups, and cooperatives. This is through the implementation of a comprehensive MSME digitalization program among government agencies nationwide. Programs designed to provide innovative solutions to small enterprises will be scaled up, including the establishment of incubation hubs, shared service facilities (SSFs), and the Small Enterprise Technology Upgrading Program (SETUP) 2.0, among others. The formation of Knowledge, Innovation, and Science Technology (KIST) Parks in state universities and colleges and the creation of a Silicon Valley-like ecosystem will raise productivity, increase regional economic growth and enhance Industry 4.0 adoption. Moreover, digital skills training programs will equip entrepreneurs with tools⁷ to improve business productivity.

endorsed as startup or startup enablers by the lead host agencies pursuant to Republic Act No. 11337, otherwise known as the Innovative Startup Act; or (3) a majority of their direct employees are Filipinos, but in no case shall the number of Filipino employees be less than fifteen (15), then a minimum paid-in capital of One hundred thousand US dollars (US\$100,000.00) shall be allowed to non-Philippine nationals..."

⁷ Online business registration, scaling-up and automating business operations, e-payment/e-banking, online marketing, etc.

Promote an alternative digital marketplace for entrepreneurs to sell and promote local products.

E-markets may replace or complement brick-and-mortar shops to ensure continuous operations of businesses. This will complement the Department of Trade and Industry's *Go Lokal!* and the DOST's OneStore.ph platforms.

Enhance consumer protection. Alongside implementing pro-competitive policies, efficient consumer policies and effective redress mechanisms on e-commerce, digital financial payments, and internet services will be prioritized towards ensuring accountability and improving delivery of service providers. The use of automated chatbots and AI-enabled tools to be complemented by digitally skilled human resources will help in resolving simple to complex consumer complaints.

Strengthen coordination of risk management strategies to avoid supply chain disruptions and ensure business resiliency. Agreed policies and enhanced coordination of the national government with LGUs in crafting and implementing risk management strategies will be strengthened to ensure unhampered supply chains in the event of unprecedented natural calamities (see [Chapters 8 and 20](#)). Additionally, the scaling-up of mentorship programs including the development and customization of business continuity plans will help small enterprises expand operations and develop resiliency.

RESULTS MATRIX

Table 9.3 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Total investments increased							
Total approved investments increased (in PHP million) ^a	729,000 (2016)	1,067,000	1,022,000	1,094,000	1,309,009.4	1,139,369.8	756,627.4
Net FDI increased (in USD million) ^b	8,280 (2016)	N/A	N/A	N/A	8,671.4	6,822.1	10,518 ^c
Subsector Outcome: Access to finance improved							
Percent of allocation for micro and small enterprises to total bank loan portfolio (%) ^d	3.81 (2016) ^f	8	Increased ^{d, f}	Increased ^{e, f}	2.8	2.2	2.1
Percent of loan allocation for medium enterprises to total bank loan portfolio (%) ^e	5.44 (2016) ^f	2	Increased ^{d, f}	Increased ^{e, f}	4.3	3.5	3.3

^a Baseline figure used to compute for the plan targets reflects total approved investments submitted by investment promotion agencies to the Board of Investments and the PSA. Members of the Philippine Investment Promotion Plan (PIPP) Steering Committee approved the downward revised target of 7 percent annual increase in IPA-approved investments (from the original 10%) for 2021 and 2022, considering the DBCC revised growth forecasts due to the COVID-19 pandemic. Note that the revised 7 percent annual g.r. was computed starting from the baseline figure (2016).

^b While there were no targets set, the indicator was included in the RM for monitoring purposes. Net foreign direct investment baseline figure for 2016 was recorded at USD8.28 billion. Gross domestic product in current prices for the same year was recorded at USD318.6 billion.

^c Preliminary data from BSP

^d In accordance with the Magna Carta for MSMEs (RA 6977 as amended by RA 8289 and RA 9501). Used as proxy indicator for “Proportion of small-scale industries with loan or line of credit” (SDG indicator 9.3.2 [Tier 3]) to measure improvement of access to finance. The Planning Committee on Economic Development and the PSC approved revision of targets last March 2020 (pre-pandemic) to “increased” given that the ten-year mandatory credit allocation for micro, small and medium enterprises has already lapsed in June 2018, as stipulated under the law.

^e Baseline updated as of March 31, 2017.

^f Relative to actual accomplishment in the previous year.

CHAPTER 10

Transforming Human Capital Development towards Greater Agility

The country continues to respond to and recover from the COVID-19 pandemic. The downward trend of COVID-19 cases and positivity rate towards the end of 2021 is attributed to the government's successes in implementing the Prevent, Detect, Isolate, Treat, Reintegrate, and Vaccinate (PDITR-V) strategy, particularly the accelerated COVID-19 vaccination program. These key interventions for pandemic response, the increasing budget and expenditure for health and nutrition, and expanded Philippine Health Insurance Corporation (PhilHealth) coverage and benefits show how the country values the health of its people. Flexible learning modalities in education and training as well as the preparations to return to in-person schooling also seek to lower the learning and productivity losses brought about by the closure of schools since 2020. The labor market also continued to recover through better management of risks.

For the rest of the Plan period, the government will continue to address challenges that hinder the realization of the Filipino's full potential. The efforts will focus on transforming human capital development towards greater agility through promoting quality health and nutrition and health interventions at all life stages, ensuring a responsive and resilient health system, instituting catch-up programs to offset learning losses, developing lifelong learning programs, and advancing skills development and retooling, among others.

NUTRITION AND HEALTH OUTCOMES FOR ALL IMPROVED

ASSESSMENT

Various data sources with different frequencies of reporting are being used to monitor nutrition and health outcomes. Some are reported through program or administrative data that can be generated annually while some are through surveys that are conducted every five years, such as the National Demographic and Health Survey (NDHS) with the most recent report published in 2017.

Most of the available data on accomplishments are before the pandemic. Nevertheless, the sector must continue to augment its capacity and innovate its service delivery to effectively implement programs and services while continuing COVID-19-response efforts, such as the vaccination program. These will further improve outcomes and mitigate the possible reversal of gains in the sector.

As policy shifts from eliminating COVID-19 to living with the virus, the sector must adapt to the changing environment and manage health risks towards recovery.¹ Moreover, it is important to ensure efficient spending to secure enough funds for the full implementation of key legislations—such as the Universal Health Care Law (RA 11223), also known as the UHC Law—and to sustain national and local government cooperation to guarantee smooth transition in the full/re-devolution of basic services in line with the Mandanas-Garcia ruling.

IMPROVING NUTRITION AND HEALTH OUTCOMES FOR ALL

Child and maternal health outcomes improved pre-pandemic. Mortality among infants slightly decreased from 23 per 1,000 live births (LB) in 2013 to 21 in 2017. Meanwhile, mortality among children under five also decreased from 31 to 27 per 1,000 LB during the same period. Antenatal care and safe delivery practices, and enhanced surveillance made the Philippines the 44th country to eliminate maternal and neonatal tetanus in November 2017.² Family planning services were also strengthened, resulting in the increase in the percentage of women who use modern contraception [see [Chapter 13](#)].

There have been varying degrees of success in addressing malnutrition. Reduction in the prevalence of malnutrition among children under five showed significant improvements. From 2015 to 2018-2019, prevalence of stunting among this age group (in percentage) decreased from 33.4 to 29.6; wasting from 7.1 to 5.7; and overweight from 3.9 to 3.5. However, the targets for the reduction of stunting and wasting were not met. Meanwhile, the proportion of households meeting the 100 percent recommended energy intake (in percentage) worsened from 31.0 to 21.8 during the same period. Disruptions in the delivery of nutrition services at the beginning of the COVID-19 pandemic threatened to exacerbate the prevalence of malnutrition in the country. The quarantine restrictions also affected the mobility and livelihood of households, resulting in increased food insecurity³ [see [Chapter 11](#)]. To mitigate the pandemic's impact, the Nutrition Cluster⁴ issued guidelines on the provision of nutrition programs during emergencies like the pandemic. This resulted in the continuation of nutrition service delivery in the country.

The triple burden of diseases⁵ remains a priority public health concern. Mortality rate attributed to lifestyle-related diseases increased from 462.5 deaths per 100,000 population (aged 30 to 70 years old) in 2016 to 467.0 deaths per 100,000 population in 2019. Cardiovascular diseases, specifically ischemic heart diseases as the leading cause of death in the country in 2015, can be attributed to unhealthy lifestyle and the prevalence of several risk factors (metabolic and behavioral) such as alcohol consumption, tobacco use, and sedentary lifestyle.⁶ The involuntary shifts in lifestyle and behavior due to the pandemic have also resulted in a rise in mental health issues.⁷

¹ NEDA presentation entitled “Living with the virus, Recovering to Pre-pandemic Levels in 2022”. Retrieved from <https://neda.gov.ph/living-with-the-virus-recovering-to-pre-pandemic-levels-in-2022-brewing-aim-december-1-2021/>

² UNICEF Article on maternal and neonatal tetanus elimination. Accessed from: <https://www.unicefusa.org/stories/good-news-moms-and-babies-philippines-has-eliminated-mnt/33733>

³ DOST-FNRI. (2020). “Rapid Nutrition Assessment Survey on Food Security, Coping Mechanisms, and Nutrition Services Aailed during COVID-19 Pandemic in Selected Areas in the Philippines”

⁴ Sub-cluster of Health at the national level composed of partner agencies from government, the United Nations, and non-government organizations, guides the implementation and monitoring of programmatic measures to reduce nutrition-related mortality and morbidity as a result of emergencies (like COVID-19) and disasters impact on public health, economy and social aspects.

⁵ Communicable, non-communicable, and urbanization- and industrialization-related diseases

⁶ Prevention and Control of NCDs in the Philippines: The Case for Investment (UNDP, WHO 2019)

⁷ Mental health in a time of pandemic: The invisible suffering. Retrieved from <https://newsinfo.inquirer.net/1544354/mental-health-in-a-time-of->

In terms of communicable diseases, active case-finding and mandatory notification resulted in the increased incidence of tuberculosis (TB) from 434 per 100,000 population in 2016 to 539 in 2020.⁸ For HIV/AIDS, the number of newly diagnosed cases decreased from 9,624 in 2016 to 8,058 in 2020.⁹ With pandemic-related disruption in service delivery, HIV testing decreased by 61 percent from 2019 to 2020.¹⁰ The emergence of COVID-19 also affected the delivery of services under the Department of Health's (DOH) Malaria Control and Elimination Program. Thus, the 2020 and 2021 targets for malaria indicators were not met.¹¹

COVID-19 cases declined in the 4th quarter of 2021 while the vaccination program is in full swing. Since the first confirmed case on January 31, 2020, the country has recorded over 2.84 million COVID-19 cases, with 51,000 deaths as of December 31, 2021. COVID-19 has been reported as the third leading cause of mortality in 2021.¹² It continued to proliferate until September 2021 with the emergence of the highly transmissible Delta variant in the country. New confirmed cases started to decrease from a daily average of about 11,145 cases in the last week of September 2021 to 1,286 cases in December 2021. This decline occurred at the same period when COVID-19 vaccination program gained momentum, with about 109 million doses administered.¹³ The government also conducted National Vaccination Days in November and December 2021 to ramp up COVID-19 vaccination nationwide.¹⁴ With continuous efforts from the national government to secure the steady supply of vaccines, the country received a total of 210.63 million COVID-19 vaccines as of December 31, 2021. The increased supply of vaccines, particularly in the fourth quarter of 2021, led to the increased vaccination rate in the country and protected as many Filipinos as possible. As of December 31, 2021, 106.9 million doses have been administered, 49.77 million Filipinos were fully vaccinated, and about 1.81 million received booster shots. Nevertheless, the vaccination program still needs to be fast-tracked given the emergence of more transmissible COVID-19 variants such as Omicron.

Continuous construction and upgrading of health facilities. During the onset of the COVID-19 pandemic in 2020, the country had a very limited number of COVID-19 testing laboratories. But as of the end of 2021, all regions in the country have at least one Biosafety Laboratory Level 2 (BSL2) (with RT-PCR) for the diagnosis of the COVID-19 virus. Moreover, under the DOH Health Facilities and Enhancement Program (HFEP), 32 COVID-19 referral hospitals were identified, and 8,557 Temporary Treatment and Monitoring Facilities (TTMFs) were established, 21 of which are Mega TTMFs.¹⁵

Inequitable and inadequate supply of health and nutrition workers. A number of provinces did not have adequate human resources for health (HRH) - only 30 percent, 77 percent, and 95 percent of the provinces have adequate physicians, midwives, and nurses to population ratio,¹⁶ respectively, in 2021. The factors affecting the misdistribution of health workers include: (a) disparities in pay

pandemic-the-invisible-suffering#ixzz7SqfNqa8h

⁸ National TB Prevalence Survey

⁹ HIV/AIDS and ART Registry of the Philippines (HARP)

¹⁰ 2020 Annual HIV Report

¹¹ <https://doh.gov.ph/press-release/DOH-PARTNERS-FIRM-ON-ITS-TARGET-TO-REACH-ZERO-MALARIA-CASE-BY-2030>

¹² PSA Press Release No. 2022-11: Causes of Death, in the Philippines, Preliminary: January to December 2021

¹³ National Taskforce against COVID-19 on Vaccine Doses Administered during April 2022 Presidential Communications Operations Office Talk to the People Program.

¹⁴ DOH. Updates on COVID-19 Vaccines. Retrieved from <https://doh.gov.ph/vaccines>

¹⁵ 2020 and 2021 DOH Annual Report

¹⁶ Recommended numbers of HRH in primary health care facilities - 1 physician per 20,000 population; 1 nurse per 10,000 population; and 1 midwife per 5,000 population (Source: National Objectives for Health 2017-2022)

between private and public sectors, within the public sector, and between national and local levels; (b) limited capacity of local government units (LGUs) to hire health and nutrition workers; and (c) poor working conditions in the place of assignment.¹⁷

Immunization outcome improved slightly, and a polio outbreak was ended. Based on the NDHS, the proportion of fully immunized children (FIC) slightly increased from 68.5 percent in 2013 to 70 percent in 2017. However, it is still far from the PDP end-of-plan target of 95 percent. Meanwhile, data from the Field Health Service Information System (FHSIS) reported a lower percentage of FIC in 2020 at 65.2 percent. In 2019, a polio outbreak in the country was recorded after 19 years of being polio-free. The government intensified its immunization and surveillance activities, including various campaigns and risk communication on polio prevention, that have ended the polio outbreak in June 2021.¹⁸

Budget and expenditure for health and nutrition have been increasing. The budget of DOH, including its attached agencies and corporations,¹⁹ increased by 20 percent from PHP176 billion in 2020 to PHP212 billion in 2021. The increase in the allocation was observed in the Public Health, Human Resources for Health Deployment, and Medical Assistance to Indigent Patients Programs. In the 2021 Government Appropriations Act (GAA), an additional PHP75.5 billion was allocated for the COVID-19 Vaccination Program and for the construction, upgrading, and rehabilitation of health facilities, particularly in the geographically isolated and disadvantaged areas (GIDAs) and UHC Integration Sites. Among the DOH's attached agencies and corporations, PhilHealth has the highest budget appropriation of PHP71.3 billion for the health insurance premium of indirect contributors of the National Health Insurance Program (NHIP).²⁰

Based on the 2020 Philippine National Health Accounts, the total health expenditure grew by 10.4 percent in 2020, with an increase in Gross Domestic Product (GDP) share of 5.6 percent in 2020 from 4.7 percent in 2019. Government health spending also increased by 23.8 percent share from 2019 to 2020 and has the largest share of the total health expenditure of 40.8 percent. It was followed by the household out-of-pocket (OOP) spending that contributed PHP400.10 billion or 39.9 percent share in 2020, from 42 percent share in 2019.

Expanded PhilHealth coverage and benefits. With the passage of the UHC Law in 2019, all Filipinos are automatically covered by the NHIP, making the coverage rate 100 percent. However, in terms of registered PhilHealth members, only 98.0 million of the 110.2 million²¹ Filipinos (89%) are listed in the PhilHealth database in 2021.²²

¹⁷ Human Resources for Health Master Plan 2020-2040 (Draft)

¹⁸ WHO and UNICEF Joint News Release (11 June 2021): WHO, UNICEF laud end of polio outbreak in the Philippines

¹⁹ Attached agency – National Nutrition Council; Attached Corporations – Philippine Health Insurance Corporation (PhilHealth), Lung Center of the Philippines, National Kidney and Transplant Institute, Philippine Children's Medical Center, Philippine Heart Center, and Philippine Institute for Traditional and Alternative Health Care

²⁰ 2021 DOH Budget Brochure

²¹ 2021 Projected Population is 110,198,654 updated estimation from the 2015 PopCen by PSA (<https://psa.gov.ph/content/updated-projected-mid-year-population-philippines-2020-2025>).

²² 2021 PhilHealth Stats and Charts. Retrieved from https://www.philhealth.gov.ph/about_us/statsncharts/snc2021.pdf

New and expanded benefit packages were developed and are currently being provided by PhilHealth. Most of the packages are COVID-19 benefit packages such as Testing Packages (RT-PCR and Cartridge-based PCR), Home Isolation Benefit Package, Community Isolation Benefit Package, In-Patient Care Packages, and Vaccine Injury Compensation. However, there has been an issue with PhilHealth's delayed payment/reimbursement of COVID-19 claims to government and private hospitals. According to the Anti-Red Tape Authority (ARTA), causes of delay include issues on PhilHealth's Information and Communication Technology (ICT), wrong diagnoses and faulty documentation in its Return-to-Hospital applications, and lack of human resources.²³

Aside from COVID-19-related benefits, PhilHealth also enhanced the primary care benefit package, also known as the *Konsultasyong Sulit at Tama (Konsulta)* Package, that covers initial and follow-up consultations with primary care providers, targeted health risk screening and assessment, 13 diagnostics/laboratory services (e.g., urinalysis, CBC, X-ray, ECG, etc.), and 21 drugs and medicines (e.g., anti-diabetic, anti-hypertensive, anti-dyslipidemia, etc.). However, as of December 2021, only 6.8 percent of the expected *Konsulta* providers have been accredited to offer this package.

Digitalization of health and nutrition sector has started. Telehealth/teleconsultation services were utilized during the pandemic, given the mobility restrictions and to lessen the foot traffic in hospitals. As such, health care providers had to adapt and provide these services to cater to non-COVID-19 patients. Relatedly, there was a need to develop facilities' information and data management systems for an almost real-time reporting of COVID-19-related data and information to the DOH. The same had to be done by LGUs as they are in charge of the vaccination roll-out in their respective areas.

²³ <https://arta.gov.ph/press-releases/arta-sec-belgica-bares-agencys-initial-findings-on-philhealths-unpaid-hospital-claims/>

IN FOCUS: MICA ALVAREZ, MOTHER-TO-BE



Mica Alvarez is a 15-year-old junior high school student experiencing an unplanned pregnancy.

She is the second of four children in the Alvarez family. Her father is a tricycle driver, and her mother is a housewife. Mica wants to have access to quality and appropriate healthcare for herself and her child, such as maternal and child health services, reproductive health services, and nutrition services. She wants to have access to sufficient, nutritious, and diverse food for the whole family. She also wishes to live a long, healthy, and happy life and ensure a safe future for her child.

However, Mica is very frustrated with her current situation and condition. She is in her second trimester of pregnancy, and she and her partner, Ronald, also a 15-year-old, still do not know what, how, and where to access prenatal and postnatal health services. Mica realized that if both of them knew more about reproductive health, her unintended pregnancy could have been prevented. Moreover, with her father's income not enough for daily needs, she is worried for her family and her child's nutrition during and after her pregnancy.

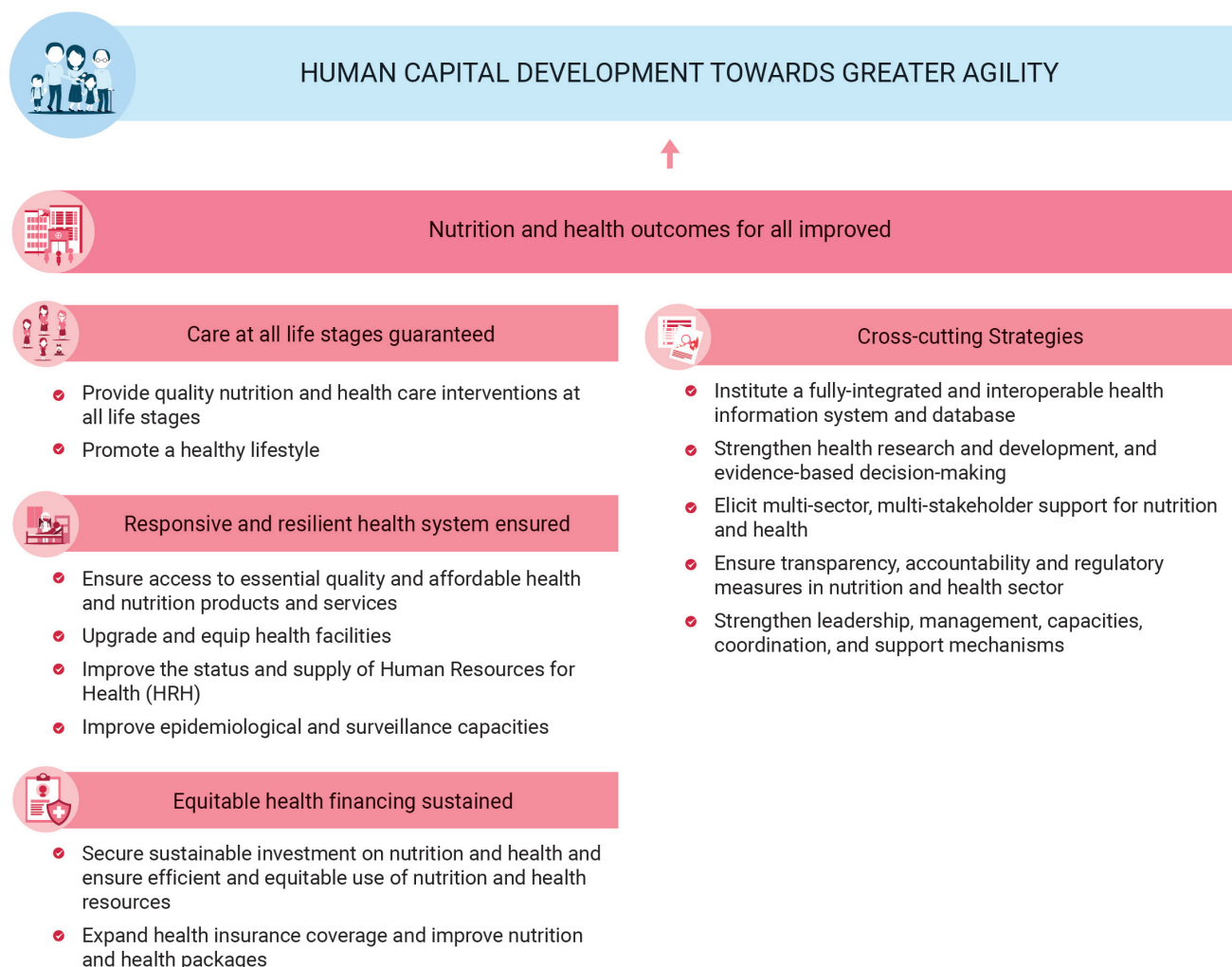
STRATEGIC FRAMEWORK

This unprecedented public health crisis highlighted the importance of the health and well-being of every Filipino. Young mothers and would-be-mothers especially like Mica face daunting challenges in accessing appropriate health and nutrition services for herself and her child amidst the pandemic, which may hamper them from reaching their full potential as adults and productive citizens. Thus, it is paramount that the government ensures availability, affordability, and accessibility of quality health and nutrition services and interventions for all to reverse health losses and produce healthy and resilient Filipinos.

To improve nutrition and health outcomes for all, the government, in collaboration with the private sector and other stakeholders, will continue to pursue strategies to: (a) guarantee care at all life stages; (b) ensure responsive and resilient health system; and (c) sustain equitable health financing.

Aside from the strategies stipulated in the Updated PDP 2017-2022, additional specific strategies discussed below will also be pursued. With this, we can help and support every Filipino, like Mica, to address concerns regarding health and nutrition and attain the goal of living a long, healthy, and happy life.

Figure 10.1 Strategic Framework to Improve Nutrition and Health Outcomes for All



STRATEGIES

IMPROVING NUTRITION AND HEALTH OUTCOMES FOR ALL

Guaranteeing care at all life stages

Provide quality nutrition and health care interventions at all life stages. To quickly recover the pre-pandemic gains in maternal and child health outcomes, the DOH, National Nutrition Council (NNC), and other relevant agencies must ensure that comprehensive, converged, and continuous nutrition and health-related interventions and services will be given, especially during the first 1,000 days of life (covering pregnancy and the first two years of life) for the mother and the child.²⁴ Aside from this, sexual and reproductive health services for women-of-reproductive age will also be intensified to prevent adolescent or early pregnancy, which will be spearheaded by the DOH and Commission on Population and Development (POPCOM) [see [Chapter 13](#)]. Moreover, the Department of Education (DepEd) will ensure that comprehensive sexuality education, including an adolescent-friendly health service package, will be properly taught in schools. It is also important that all these services are provided continuously even during the pandemic and other emergencies.

The NNC, as the highest policy-making body for nutrition, will ensure a multisector approach to nutrition and monitor the implementation of nutrition-specific and nutrition-sensitive interventions. Nutrition-specific interventions include supplementary feeding programs; mandatory food fortification; obesity/overweight management; and prevention of and nutrition in emergencies, among others. Nutrition-sensitive interventions include food production; community/school food gardens; water, sanitation, and hygiene services; and farm-to-market roads. Innovative approaches in the delivery of nutrition programs and services will be sustained, such as the distribution of food packs in lieu of facility-based feeding, and utilization of mid-upper arm circumference (MUAC) tapes in growth monitoring to reduce exposure of children in public setting. The *Tutok Kainan* program, a supplementary feeding program covering 6- to 23-month-old children and nutritionally-at-risk pregnant/lactating mothers needs to undergo comprehensive evaluation before being institutionalized, together with the Supplementary and School-based feeding programs of the Department of Social Welfare and Development (DSWD) and DepEd. Ultimately, food security must be ensured especially among the most vulnerable (see [Chapter 11](#)).

Programs will be developed and strengthened to address emerging and re-emerging infectious diseases such as COVID-19, dengue, HIV/AIDS, and TB, among others. The Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) will continue to determine and recommend to the President policies, strategies, and guidelines to be followed during health emergencies. The government will continue to implement the PDITR-V strategy. Minimum public health standards and social distancing measures will also remain. As experts expect the virus to become an endemic disease, the country has begun and will continue to shift its strategies from eliminating COVID-19 to managing or learning how to live with the virus. This may entail yearly vaccination against COVID-19 similar to a flu shot, to further

²⁴ PIDS Discussion Paper Series No. 2021-41 (December 2021). Breaking the Curse: Addressing Chronic Malnutrition in the Philippines Using a Health System Lens

minimize the impact of the virus to the population. With the 80 to 90 percent herd immunity target for 2022, the DOH, with the economic agencies such as the Department of Finance (DOF), Department of Budget and Management (DBM), NEDA, and other concerned agencies will continuously work together to secure resources for additional vaccines and booster shots, if needed.

For HIV/AIDS and TB, active case-finding and treatment will be intensified, coupled with education and promotion programs to increase public awareness and reduce stigma. Moreover, to fully eliminate malaria in the country by 2030, the DOH will continue implementing the malaria control and elimination program. This includes diagnosis and treatment of malaria cases, vector control and surveillance, as well as advocacy and social mobilization.

Promote a healthy lifestyle. The COVID-19 pandemic emphasized the importance of health and having a healthy lifestyle. Social and Behavior Change Communication (SBCC) campaigns and interventions will be developed and implemented continuously to encourage the public to live healthily and make good choices for their health (e.g., decrease the intake of unhealthy food, exercise and be active, have regular check-ups and avail of vaccination, and adhere to minimum public health standards) to prevent risks in acquiring non-communicable diseases or lifestyle-related diseases. The SBCC will also be used to increase COVID-19 vaccine acceptance/uptake. Culture-sensitive content will be used in improving health and nutrition promotion (e.g., development of health and nutrition promotion playbooks and modules, and use of short message service [SMS] and other digital platforms, among others). Concerned agencies and LGUs will also utilize various community groups (e.g., “*Nanay*” organization) in different online and physical platforms to provide information on health and nutrition to their target population.

Ensuring a responsive and resilient health system

Ensure access to essential quality and affordable health and nutrition products and services. Pursuant to the UHC Law, the DOH, PhilHealth, and LGUs will facilitate the registration of Filipinos to a public or private primary care provider of their choice. Likewise, the conduct of Health Technology Assessment (HTA) will ensure that government-provided health and nutrition products and services are safe, effective, and affordable.

In living with the COVID-19 virus, the government will need to secure enough and adequate vaccines doses (i.e., primary, additional, and booster doses) for the eligible population. To improve access to affordable COVID-19 testing, the use of over-the-counter antigen testing kits will also be explored and introduced.

Upgrade and equip health facilities. The government will continue to construct, rehabilitate, and upgrade health facilities, especially primary health care facilities—such as barangay health stations (BHS) to achieve the recommended 1 BHS:1 barangay ratio—and the rural health units (RHUs). The DOH will also upgrade its hospitals to become training hospitals. Health facilities will also be equipped with digital infrastructure needed for telehealth services and an electronic medical record system. This will be guided by the Philippine Health Facilities Development Plan 2020-2040, which outlines the requirements and needed investments in strengthening the country’s health system to meet the future needs of every Filipino.

Improve the status and supply of Human Resources for Health (HRH). The HRH Master Plan 2020-2040 will be implemented both at the national and local levels to serve as a guide for appropriate generation, recruitment, retraining, regulation, retention, and reassessment of the health workforce based on population health needs. The Master Plan also covers strategies that will ensure the welfare, protection, and career development of public and private HRH. The government will continue to provide pre-service scholarship programs with return service agreements to create a pool of competent health workforce in the country. DOH will also prioritize the deployment of physicians in Level I and II hospitals to address the need for specialized medical care, particularly in the unserved and underserved areas in the country. Moreover, training and deployment of infectious diseases and public health experts will be prioritized.

To fully implement the programs and activities under the Philippine Plan of Action for Nutrition (PPAN) at the local level, LGUs will ensure the deployment of adequate and competent nutrition workers. The NNC recommends deploying at least one Barangay Nutrition Scholar (BNS) per barangay to facilitate the referral system for nutrition services in a timely manner.

Improve epidemiological and surveillance capacities. The DOH and LGUs will ensure the strict implementation of the revised implementing rules and regulations (IRR) of the Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act (RA 11332), through official public health information, and disease surveillance and response systems such as the Field Health Services Information System (FHSIS). The DOH will also ensure that the data collected from various local units can be collated in a central database for future analysis and decision-making processes [see [Cross-cutting strategies](#)]. Further, the DOH will conduct functionality assessment and monitoring and evaluation of the Epidemiology and Surveillance Units (ESUs) for the identification of needs and gap analysis. Capacity building and training of trainers on Basic Epidemiology, Disease Surveillance, and Event-based Surveillance for the Regional ESUs will also be conducted.

Sustaining equitable health financing

Secure sustainable investment in nutrition and health and ensure the efficient and equitable use of nutrition and health resources. The following strategies will be pursued to ensure the efficient and equitable use of nutrition and health resources: (a) focus on financial resources for nutrition and health with high-impact interventions; (b) improve HTA processes and methods to serve as an evidence-informed, priority-setting mechanism in financing, procurement, and coverage decision on health and nutrition products and benefit packages; and (c) ensure funding for nutrition and health sector recovery activities and programs, especially at the local/community level. In addition, a health crisis fund will be established, which will be a shared responsibility of the national and local government to ensure funding in cases of public health emergencies such as a pandemic.

Expand health insurance coverage and improve nutrition and health packages. PhilHealth will continue to expand its benefit packages, as recommended by the Health Technology Assessment Council, including the full implementation of the Philippine Integrated Management of Acute Malnutrition package, outpatient benefits under the *Konsulta* package, and telemedicine services. PhilHealth will also review and improve its existing benefit packages such as in-patient and COVID-19-related packages, to meet the needs of its members.

Moreover, PhilHealth will revisit the policies and requirements for accreditation of health care providers, including telemedicine providers, to cover small private clinics, and policies on the reimbursement/ payment of claims. PhilHealth will also consult public and private health care providers before the issuance of guidelines or policies regarding its benefit packages, accreditation, and reimbursement of claims, among others. Further, PhilHealth's data management, IT system, and human resources will be strengthened to improve the efficiency of claims processing.

CROSS-CUTTING STRATEGIES

Institute a fully integrated and interoperable health information system and database.

Digitalization of health and nutrition information and management systems will be improved by concerned agencies and entities. This includes (a) strengthening the functionality of hospital information systems (e.g., electronic medical records) for interoperability with other facilities and easier data generation for the processing of PhilHealth claims; (b) developing a unified health information system where all health data, including data from private health care providers, will be consolidated to have seamless navigation and referral mechanisms between health care providers; (c) fully implementing the National Nutrition Information System to harmonize existing health, nutrition, and social protection databases; and (d) utilizing artificial intelligence and big data analytics to understand the spread of diseases, improve treatment methods, and streamline medical care, among others. Data sharing agreements among relevant agencies adhering to data privacy guidelines will also be pursued.

Strengthen health research and development, and evidence-based decision-making. Increase investments in and support for: (a) researches on health and nutrition-related technologies, and research translation activities by health and nutrition research institutes (e.g., DOH, RITM, NNC, DOST-FNRI, and DOST-Philippine Council for Health and Research Development, among others) to support evidence-based decision-making; (b) adoption/diffusion of quality, sustainable, and affordable health and nutrition innovations [see [Chapter 14](#)]; and (c) researches on vaccine and drug discovery and development (e.g., COVID-19 vaccine and medicines) and on zoonotic diseases and its risk factors. Moreover, there is a need to document and analyze the country's COVID-19 pandemic response through a pandemic playbook, to prepare for possible public health emergencies in the future. The conduct of the Health Impact Assessment, where applicable, will also be implemented in accordance with the UHC Law.

Elicit multi-sector and multi-stakeholder support for nutrition and health. Similar to the country's COVID-19 response, stakeholders will be involved through regular consultations and briefings for the health and nutrition sector. Local-level participatory governance will be pursued through private sector or civil society organization representation in local development councils and bodies. Moreover, the IATF on Zero Hunger, which aims to address hunger, nutrition, and food security in the Philippines, will continue to collaborate with the private sector in pursuing zero hunger in the country [see [Chapter 11](#)].

Ensure transparency, accountability, and regulatory measures in nutrition and health sector.

National government agencies will continue to be transparent in the implementation of programs and services, while the Department of the Interior and Local Government (DILG) will endeavor and encourage the LGUs to exercise the same, especially since basic services will be fully devolved with the implementation of the Mandanas-Garcia ruling. Monitoring and evaluation of nutrition and health programs will be improved to make the programs more effective. Adopting a responsive organizational structure, staffing

patterns, and skill mix at all levels of the health system will also be pursued. For PhilHealth claims, gaps or avenues for corruption of health systems data will be identified through forensic data analysis to ensure transparency and accountability on dubious claims.

Moreover, concerned agencies and NEDA will advocate for the passage of priority legislations for health and nutrition in the Updated PDP 2017-2022.

Strengthen leadership, management, capacities, coordination, and support mechanisms. Coordination and collaboration between the national government and LGUs will be further strengthened. The national government will continue to provide technical assistance and support to LGUs in the implementation of the devolution transition plans of the sector. DOH will support LGUs through the Centers for Health Development (CHDs) in the integration of local health systems pursuant to the UHC Law. The national government will also help LGUs to strengthen their capacity on health emergency preparedness and response, and the functionality of multisectoral health and nutrition platforms at the local level.

FLEXIBLE AND CONTINUOUS LIFELONG LEARNING OPPORTUNITIES FOR ALL ENSURED

ASSESSMENT

The COVID-19 pandemic severely impacted the education sector. School closures led to a shift of classes towards distance learning modalities, both online and print, since March 2020. The Department of Education rapidly formulated and rolled out the Basic Education Learning Continuity Plan (BE-LCP), and more recently, began the gradual return to in-person learning, starting with pilot face-to-face classes in November 2021.

Basic education enrollment already surpassed the target of 80 percent of 27,790,114 learners in school year (SY) 2019-2020, with 26,799,736²⁵ learners in SY 2020-2021 representing 96.44 percent of the previous year's enrollment. The net enrollment rate (NER) for elementary and junior high school (JHS) decreased from 94 to 89 percent and 83 to 81 percent, respectively, for the years 2019 and 2020. JHS is the only grade level with NER that is better than the targets. Further, quality indicators are not available due to the inability to conduct the National Achievement Test (NAT) for the two previous school years.

At the tertiary education level, the Technical Education and Skills Development Authority (TESDA) launched "OPLAN TESDA *Abot Lahat*: TVET Towards the New Normal" to ensure continuity of training and skills development programs amid the pandemic. Technical-Vocational Institutions (TVIs) implemented flexible learning modalities which may have contributed to the attainment of Plan targets of

²⁵ DepEd Learner Information System data as of January 15, 2021.

92 percent certification rate in 2021. Likewise, the Commission on Higher Education (CHED) adopted flexible learning arrangements in delivering education services and continued to support projects geared towards the internationalization of higher education institutions (HEIs), such as the development of institutional capacity, participation in the ASEAN University Network, and research, among others.

ACHIEVING QUALITY, ACCESSIBLE, RELEVANT, AND LIBERATING BASIC EDUCATION FOR ALL

Functional literacy improved. The functional literacy rate improved from 90.3 percent in 2013 to 91.6 in 2019 based on the results of the Functional Literacy and Mass Media Survey (FLEMMS).

NER in junior high school were better than the target. However, kindergarten and senior high school (SHS) enrollment rates were below targets. The lower-than-target kindergarten NER of 66 percent in 2020 is attributed to the strict implementation of the age cut-off policy through DepEd Order (DO) No. 20, series of 2018.²⁶ The NER for elementary and junior high school decreased from 94 to 89 percent and 83 to 81 percent, respectively, for 2019 and 2020. Junior high school is the only grade level with NER that is better than the targets. The total enrollment for K to 12 in SY 2020-2021 was at 24.9 million, lower than the previous school year's 27 million. According to the DepEd, the suspension of face-to-face classes, difficulty in adjusting to new learning modalities, and the job and income losses of households are some of the factors that contributed to the low enrollment in all levels of basic education.

Completion rates in basic education are worse in 2020. The completion rates for kindergarten to grade 6 decreased from 97 percent in 2019 to 79 percent in 2020, while completion rates for grades 7 to 12 decreased from 77 percent to 69 percent in the same period. The low enrollment results and increase in the number of school leavers resulted in a decrease in the number of learners who completed a specific cycle of education.

IMPROVING QUALITY OF HIGHER AND TECHNICAL EDUCATION AND RESEARCH FOR EQUITY AND GLOBAL COMPETITIVENESS

Improvements were seen in the international ranking of a number of HEIs. The number of HEIs included in the Quacquarelli Symonds (QS) ranking doubled from seven in 2020 to 14 in 2021. High impact and research-intensive internationalization projects launched by CHED with the universities helped the Philippine HEIs to enter the said rankings and ratings.

Technical-vocational education and training (TVET) certification rate remained high. TVET certification rate in 2021 is at 92 percent but was slightly lower than the previous years due to the pandemic.

²⁶ DO No. 20, series of 2018 or the Omnibus Policy on Kindergarten Education specifies that the age qualification for kindergarten learners in both public and private schools shall be five years old by June 1 of every calendar year. The school may consider learners who will turn five years old by the end of August, provided that the Philippine Early Childhood Development (ECD) Checklist shall be administered to the learner prior to the start of the school year. For schools opening beyond June, July, and August, the learner must be five years old by the first day of said months and the extension period ending on the 31st of August, September, and October, respectively.

IN FOCUS: XANDER, SENIOR HIGH LEARNER



Xander Wendel Alvarez is a 16-year-old Grade 10 student and is the eldest of the Alvarez family's four children. Presently, his goals are to get good grades, finish Senior High School, and pursue higher levels of education to help the family earn additional income and support the educational needs of his siblings.

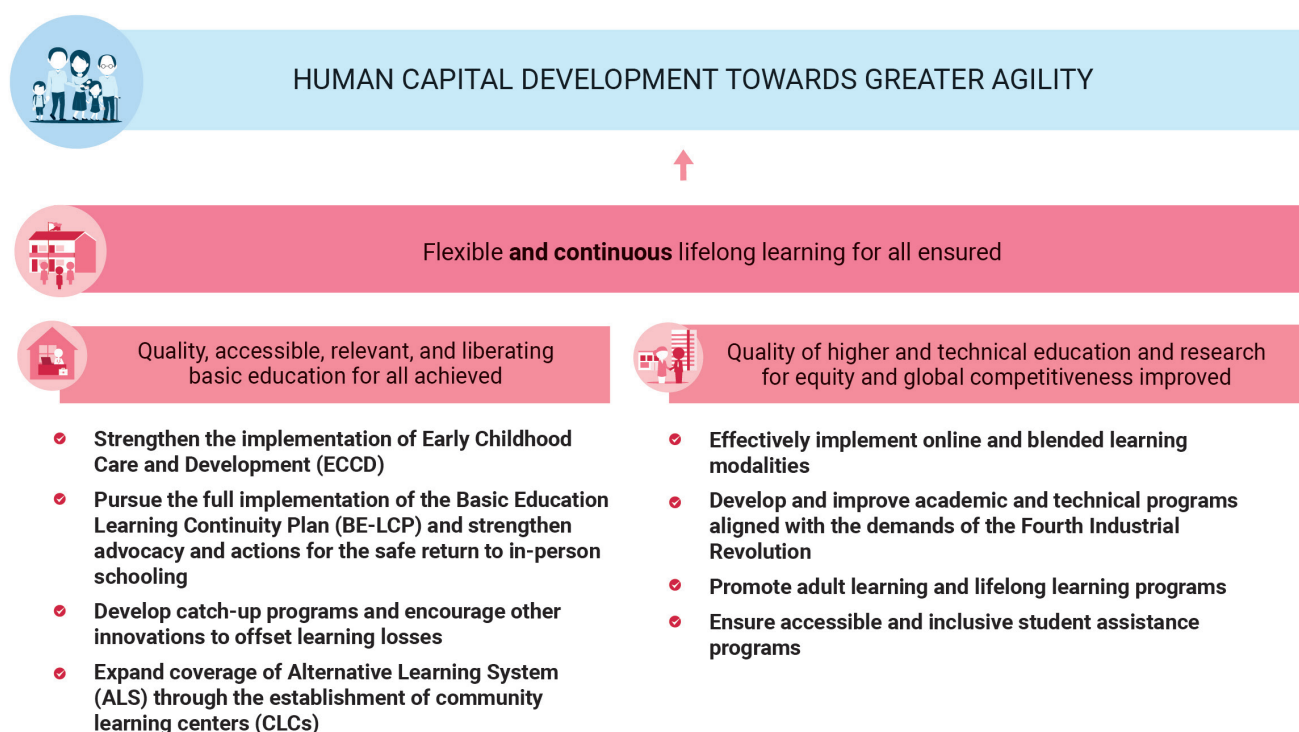
Xander Wendel is frustrated with the modes of education delivery during the pandemic. Given the lack of in-person learning and without sufficient guidance from his teachers, he finds accomplishing his printed take-home modules difficult. The available space at home is also not conducive for learning and he is expected to help take care of his siblings. He has trouble accessing online classes due to lack of e-learning devices and expensive and unstable internet connectivity. He also feels frustrated that he cannot meet, study, or play with his friends due to COVID-19 restrictions. Lastly, he is worried that he might not be able to pursue higher levels of education.

STRATEGIC FRAMEWORK

The pandemic has brought hardships and anxiety to learners who will form part of the country's workforce in the future. It is important to implement a comprehensive set of strategies to help young people like Xander overcome the challenges and hasten the process of making up for learning losses and transitioning into a new and better normal of learning and development.

To ensure flexible and continuous lifelong learning for all, the government will continue to pursue strategies that will ensure quality, accessible, relevant, and liberating basic education for all and improve the quality of higher and technical education and research for equity and global competitiveness. These will be pursued through adjusted strategies that respond to the needs of learners during and after the pandemic, such as addressing the digital divide in distance learning.

Figure 10.2 Strategic Framework to Ensure Flexible and Continuous Lifelong Learning for All



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO ACHIEVE QUALITY, ACCESSIBLE, RELEVANT, AND LIBERATING BASIC EDUCATION FOR ALL

Strengthen the implementation of Early Childhood Care and Development (ECCD). Government will continue to build a competent ECCD workforce in the country and ensure adherence to ECCD policies, guidelines, and standards. Health and nutrition concepts and good practices will also be emphasized to improve the physical resistance of learners to sickness and diseases and mainstream good personal hygiene practices. Emphasis on science and mathematics education is also needed for young learners in the long term.

Pursue the full implementation of the BE-LCP and strengthen advocacy and actions for the safe return to in-person schooling. While in-person classes are expected to resume, distance learning modalities remain as the widespread mode of delivery of education with current guidelines encouraging alternating physical presence of students in schools. During spikes in cases, schools and learners under granular lockdowns will need to implement distance learning. At the same time, advocacy and actions for the safe return to in-person schooling need to be strengthened and to be responsive to the needs of the new normal (i.e., well-ventilated classrooms, availability of water, sanitation, and hygiene [WASH] facilities). Behavioral changes responsive to the pandemic, such as frequent handwashing, physical distancing, and proper wearing of masks, must also be reinforced. The DepEd and the DOH need to pursue the full vaccination and provision of booster shots for teachers and school personnel, and the vaccination of learners pursuant to guidelines set by the DOH and the IATF.

Other actions that may be pursued include increasing the coverage of free public Wi-Fi access or free mobile data for education to ensure that learners can access lessons and learning materials, and implementing a gradual shift from printed modules towards digital learning materials that can be easily distributed and accessed online or through storage devices. Parents will also need to be constantly oriented and supported by the DepEd in providing their children an enabling environment for distance learning.

Develop catch-up programs and encourage other innovations to offset learning losses. Catch-up programs are needed to reduce, if not reverse, the negative impact of prolonged distance learning on the learning outcomes. These may include focused tutoring programs in language (including reading), mathematics, and science. Innovative ideas and approaches that can be pursued may be an area for the newly created National Innovation Council to focus on.

Expand coverage of Alternative Learning System (ALS) through the establishment of community learning centers (CLCs). The enactment of the ALS Act (RA 11510) provides that DepEd and/or the LGUs shall provide at least one ALS CLC in every municipality and city to facilitate the ALS K to 12 Basic Education Curriculum (BEC) and other ALS programs. Additional CLCs in municipalities and cities will help increase access for learners.

TO IMPROVE THE QUALITY OF HIGHER AND TECHNICAL EDUCATION AND RESEARCH FOR EQUITY AND GLOBAL COMPETITIVENESS

Effectively implement online and blended learning modalities. Higher education and technical-vocational institutions will continue to implement online and blended learning modalities. They will maximize technologies such as digital learning resources, learning management systems, and video-sharing sites in conducting learning sessions. Teacher training programs will continue to be conducted to build competencies of HEI faculty, TVET trainers, and would-be teachers in adopting new pedagogical practices such as the use of open educational resources and gamification of learning. Alternative assessment (i.e., online assessment) and certification methods (i.e., use of micro-credentials) will also be developed and institutionalized to evaluate student performance, determine skills gaps, and validate skills acquired. For in-person classes, courses and subjects that require hands-on/laboratory activities will be prioritized.

Develop and improve academic and technical programs aligned with the demands of the Fourth Industrial Revolution. The tertiary education sector will continue to develop and improve academic and technical programs to equip learners with the knowledge and skills needed in the labor market. At the higher education level, this will be done through institutionalizing data science subjects in cross-disciplinary programs, maximizing government-industry-academe collaborations, and building institutional capacity of education institutions in developing innovative curricular programs. For the TVET sector, enterprise-based training will be expanded and promoted. Moreover, the implementation of the *Tulong Trabaho* Act (RA 11230) will be strengthened. To facilitate seamless transition from TVET to higher education, the ladderized education program will be expanded and promoted.

Promote adult learning and lifelong learning programs. Short-term and massive open online courses (MOOC) will be offered by education agencies to promote adult learning and lifelong learning and meet the demands for retooling and upskilling.

Ensure accessible and inclusive student assistance programs. Harmonization of various scholarship and grants-in-aid programs and monitoring of tuition and other school fees being charged by HEIs and TVIs to the government will be pursued to enhance the implementation of student financial assistance programs. Ensuring the timely awarding of financial assistance is also crucial, especially among beneficiaries of the Universal Access to Quality Tertiary Education (UAQTE), as most students may need the allowances for online and/or blended learning. Other support services for students will also be offered to address school dropouts.

INCREASING INCOME-EARNING ABILITY AND ENHANCING ADAPTABILITY

ASSESSMENT

The labor market continued to recover as the country managed the risks brought about by the COVID-19 pandemic. However, the achievement of the intended outcomes for the labor sector may remain challenging given the uncertainties in pandemic evolution. The pandemic may have protracted impact on the economy. Support infrastructure needed for the labor sector's transformation also remains limited.

Despite the pandemic, the share of youth not in education, employment, or training (NEET) improved. The youth NEET declined to 16.8 percent in 2021, exceeding the target for the **year**. This may be attributed to the relaxation of community quarantine restrictions and the utilization of online/digital platforms in areas of training, education, and employment bridging.

The proportion of discouraged workers²⁷ significantly declined, as more individuals cited the recently incorporated option “ECQ/lockdown/COVID-19” as the reason for not looking for work.²⁸ However, it has slightly increased from 3.9 percent in FY 2020 to 4.9 percent in FY 2021, owing to the lingering effects of the pandemic on the economy, aggravated by the slowdown in global economic recovery.

The female labor force participation rate (LFPR) notably increased, exceeding its 2021 target. Recent data shows that female LFPR went up to 51.3 percent in 2021 from 45.8 percent in FY 2020 as a result of more online job and entrepreneurship opportunities and the wide implementation of flexible work arrangements. Both trends are expected to persist in the new normal labor market.

Growth in the industry and services sectors' labor productivity²⁹ remained negative for 2021. Given the faster rebound of employment compared to output, the industry and services sectors continued to post declines in labor productivity.

Reducing the share of precarious work³⁰ to total employment remains a challenge. Because of temporary business closures and reduced working hours that accompanied stringent community quarantines, the share of precarious work to total employment worsened from 22.2 percent in 2019 to 23.8 percent in 2020 and to 26.2 percent in 2021, as recovery remains subdued due to variant-induced surge in cases.

²⁷ Discouraged workers are defined as those those unemployed individuals who cited being tired or believed that there is no work available.

²⁸ FY 2020 and 2021 figures may not be comparable with the FY 2019 figure given that an additional valid reason (i.e., ECQ/COVID/lockdown) was incorporated in the LFS questionnaire.

²⁹ Labor productivity equation used is GVA (constant 2018 prices) divided by total employment in the sector.

³⁰ This refers to jobs that are short-term in nature and involve working for different employers. Figures for this indicator are available on a monthly basis from the LFS results.

IN FOCUS: ROWENA, FULL-TIME MOM WANTS TRAININGS TO INCREASE CHANCES OF GETTING EXTRA INCOME



Rowena, the matron of the Alvarez family, is a 37-year-old housewife who did not finish college due to childbirth and lack of money. Amidst the daily grind of combining household chores with childcare, including helping her children who are in blended learning, Rowena is one of the many housewives who want to be economically active.

She hopes to have decent work or start a business to augment the household income, provide the needs of the family, set aside enough savings to send all her children to school until they finish college, and own a house in a safe environment. To realize these aspirations, she wishes to participate in various training programs to improve her knowledge and skills.

However, she is constrained by the lack of internet connection and digital devices. They have no capital to start a small business and often resort to loans from neighbors during emergencies. She cannot look for work given her childcare and household duties. With her husband getting retrenched from his regular work due to the pandemic and her daughter giving birth soon, it is becoming increasingly difficult to meet the family's needs.

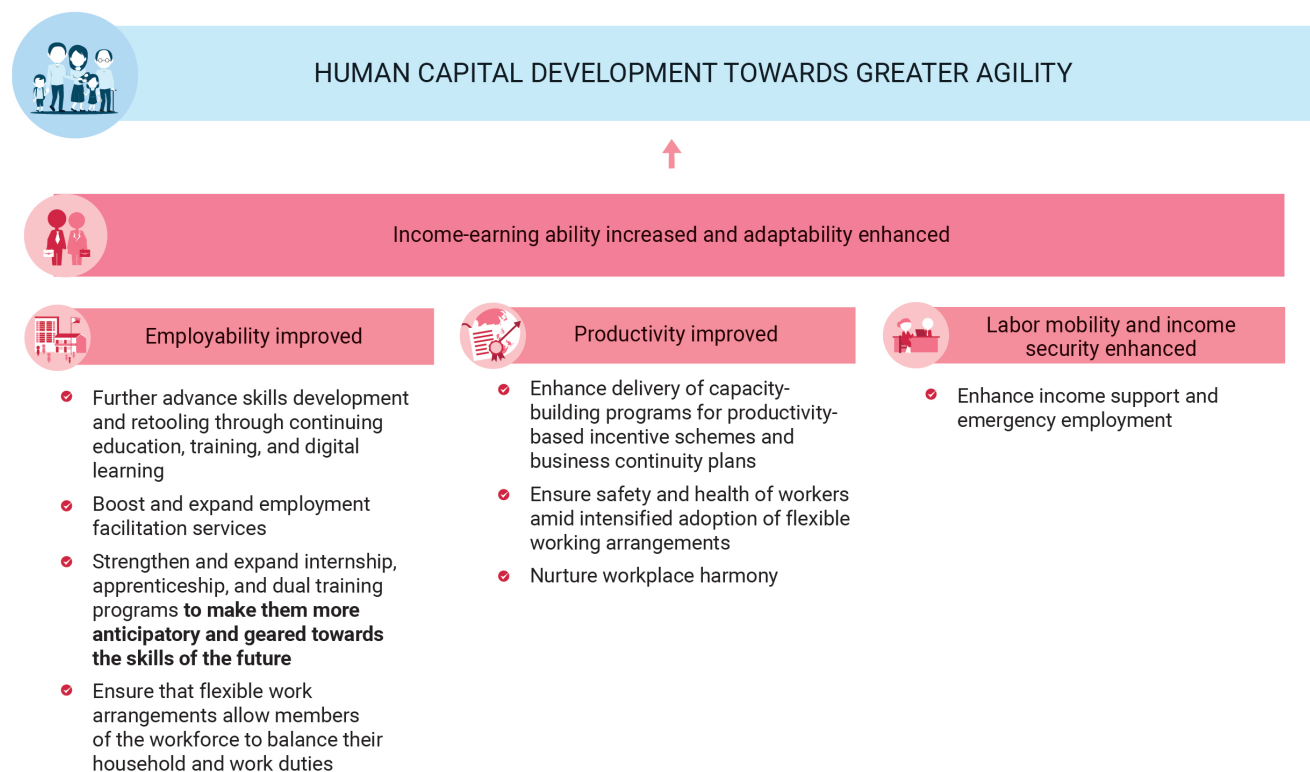
STRATEGIC FRAMEWORK

Rowena's situation resonates with the experiences of an ordinary Filipino in augmenting household income and providing for the needs of the family. In order to help achieve her aspirations, there is a need to accelerate labor market recovery, which is contingent on addressing the COVID-19 health crisis [see *Chapter 10: health subsector*] and on improving access to digital technology [see *Chapter 19*].

Amidst the uncertainties on the country's recovery and digitalization, the identified major strategies for the labor sector in the updated PDP 2017-2022 [see *Figure 10.3*] remain relevant in increasing the income-earning ability of Rowena and many other Filipinos. However, the focus must be oriented towards expanding the upskilling and retooling programs and employment facilitation services, primarily by leveraging digital technologies, to be able to transform human capital for greater agility.

The intensified and sustained implementation of the action points under the National Employment Recovery Strategy (NERS) 2021-2022 will also support the strategies under the labor subchapter [see *Figure 10.3*]. Among others, the government will continue current initiatives geared towards capacitating critical groups—such as those engaged in tourism, transport, agriculture, and information and technology, as well as overseas Filipino workers (OFWs), young entrepreneurs, and startups—to ensure a more resilient and adaptive workforce post pandemic.

Figure 10.3 Strategic Framework to Increase Income-earning Ability and Enhance Adaptability



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO IMPROVE EMPLOYABILITY

Further advance skills development and retooling through continuing education, training, and digital learning. The government will continue to digitalize education and training, roll out employment bridging modules, and provide subsidies through the issuance of training vouchers, in partnership with the private sector. Through these, there will be employment gains from expected job diversification and flexible movement of the labor force. We will also pursue the full implementation of the Philippine Skills and Qualifications Frameworks (PSF/PQF) towards building the skills and competencies of the country's human capital for the digital economy.³¹ Further, we will ensure access to digital learning and training in underserved areas by enhancing the information, education, and communication (IEC) initiatives of TVET through various platforms such as the TESDA's Mobile Training Laboratory Program.

Boost and expand employment facilitation services. Given the growth in e-commerce and increased demand for digitally competent workers, we will expand the Labor Market Information (LMI) platforms to focus on digital careers.³² Both traditional and new forms of LMI dissemination will be maximized along with current systems such as the PhilJobNet, PESO Employment Information System, and the recently established Careerinfo.ph (Career Information System).³³ Likewise, online employment facilitation mechanisms (i.e., virtual job and business fairs, *e-Trabaho*, *Negosyo*, *at Kabuhayan*) will be expanded to respond to the needs of job seekers and employers amidst the challenges of the pandemic. With these, we can provide timely, relevant, and accessible information towards informed career and education choices.

Strengthen and expand internship, apprenticeship, and dual training programs to make them more anticipatory and geared towards the skills of the future. Training programs, especially those that are enterprise-based, accelerate knowledge and skills transfer, thereby increasing the employability and agility of the workforce. To take advantage of advancements in technology, we will strengthen the collaboration with academe and industry associations to aid the government in policy and program design.³⁴ Meanwhile, we will continue the implementation of recently improved employment programs like: the (a) Government Internship Program (GIP); (b) JobStart Philippines Program; and (c) Special Program of the Employment of Students (SPES). For the SPES and GIP, the DOLE also introduced alternative work arrangements for their beneficiaries.³⁵

³¹ This is also identified as a strategy under Chapter 10: higher education subsector. Initially, the PSF will be formulated for the country's identified priority sectors such as Logistics, Construction, Manufacturing, Health and Wellness, Creative Industry, Information and Technology-Business Process Management (IT-BPM), Tourism, and Food Agriculture. Of the eight sectors, the PSF for Supply Chain and Logistics (SCL) has already been launched in June 2021, while another one is still in the pipeline.

³² LMI provides timely relevant and accurate signals on the current labor market such as in-demand jobs and skills shortages by developing client-specific LMI, Education and Communication materials (Retrieved from <https://www.dole.gov.ph/about-lmi/>).

³³ A Career Information System developed and maintained by the DOLE Bureau of Local Employment (BLE). It serves as a database of Career Information Pamphlets that provides valuable information such as nature of work, basic educational requirements, skills and competencies, attributes, employment opportunities, and cost of education training. (Retrieved from <https://careerinfo.ph/about-us/>)

³⁴ Notably, the National Employment Recovery Strategy (NERS) that was rolled out in response to the pandemic has fostered cooperation with the employers' and workers' sectors in generating and preserving jobs while supporting existing and emerging businesses amidst the crisis and may continue to serve as an avenue for key structural reforms in the medium-term. Further, the TESDA intends to establish industry boards to ensure cutting-edge training programs.

³⁵ The DOLE issued several advisories on the implementation of GIP for FY 2021, particularly on the performance of work arrangements during various community quarantines. GIP interns may perform a work-from-home/alternative work arrangement as monitored by the DOLE Regional Office. Further, to maximize the DOLE-GIP and address Post-COVID Recovery Activities given a more relaxed community quarantine status, a minimum of one-month period of engagement has been allowed until the end of December 2021.

Ensure that flexible working arrangements allow members of the workforce to balance household and work duties. Varied working arrangements allowed business continuity amidst quarantine measures and facilitated increased labor force participation, especially of women. Strategies to sustain this include: (a) improving access and affordability of child minding and elderly care services; (b) addressing gender bias and gender role stereotype in basic education curriculum materials; (c) promoting entrepreneurship and advancing economic opportunities for women through the use of digital technology; and (d) continuing the adoption of flexible work arrangements (e.g., flexible schedule, compressed work week, alternative worksite telecommuting).

TO IMPROVE PRODUCTIVITY

Enhance the delivery of capacity-building programs in productivity-based incentive schemes and business continuity plans. The Department of Trade and Industry (DTI) will continue to provide businesses, especially micro, small, and medium enterprises (MSMEs), with training and materials to build their capacity to create business continuity plans considering the latest technological developments. The National Wages and Productivity Commission (NWPC) will continue to provide technical assistance to workers and enterprises in designing and implementing productivity-based incentive schemes to increasingly link workers' compensation and labor productivity. The NWPC will also continue to conduct training for workers and MSMEs on various productivity concepts and technologies. To help MSMEs recover from the impact of the pandemic and resume business operations, the NWPC enhanced existing modules and developed new ones designed to build more resilient enterprises. These modules focus on business continuity and risk/disaster-proofing strategies. The deployment of productivity training programs has also transitioned from physical to online platforms.

The government will also seek to provide viable support for businesses to follow best practices such as the establishment of decent workers' quarters and shuttle services in high-risk areas. All these are seen to improve resiliency amidst shocks, especially among MSMEs and their workers.

Ensure safety and health of workers amid increased adoption of flexible working arrangements.³⁶ The pandemic forced many businesses to adopt various forms of alternative work arrangements, including telecommuting. The Telecommuting Act of 2018³⁷ (RA 11165) and its accompanying IRR have supported the transition during the pandemic. Concerns remain however, such as compliance with labor laws and social dialogue, as reported in the DOLE-Institute on Labor Studies (ILS) study.³⁸ Hence, the government will further evaluate the Telecommuting Act and related policies to address these challenges. Further, policies on alternative work arrangements in the public sector will be revisited to ensure flexibility and workers' protection under the law.

³⁶ This is also related to the Updated PDP 2017-2022 strategy, "Ensure that flexible work arrangements allow members of the workforce to balance their household and work duties" under Chapter 10: Labor Subsector

³⁷ Republic Act No. 11165 or An Act Institutionalizing Telecommuting as an Alternative Work Arrangement for Employees in the Private Sector

³⁸ Exploring Telecommuting as the New Normal Work Arrangement: A Rapid Assessment of Telecommuting Practices Prior and During The Covid-19 Pandemic (Retrieved from <https://ils.dole.gov.ph/exploring-telecommuting-as-the-new-normal-work-arrangement-a-rapid-assessment-of-telecommuting-practices-prior-and-during-the-covid-19-pandemic/>)

Nurture workplace harmony. The government will continuously intensify the on-going information dissemination of the recalibrated Labor and Employment Education Services (LEES) of the Department of Labor and Employment (DOLE), primarily by maximizing the use of wide-ranging platforms (e.g., radio and television broadcast, social media); and forging stronger partnership through memoranda of agreement between DOLE-Regional Offices and educational institutions on the use of the DOLE-LEES e-Learning Portal.

Enhance income support and emergency employment. While the Social Security System Act³⁹ (RA 11199) has a provision on unemployment insurance to give the private sector workers some financial cushion during episodes of involuntary separation from work, a more robust unemployment benefits system (e.g., unemployment insurance linked to labor market policies, and with optimal benefits, among others) needs to be designed following a rigorous study. The implementation of emergency employment programs (e.g., DOLE's *Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced Workers [TUPAD]*)⁴⁰ will also be evaluated and institutionalized.

³⁹ Republic Act No. 11199 or An Act Rationalizing and Expanding the Powers and Duties of the Social Security Commission to ensure the Long-Term Viability of the Social Security System, repealing for the purpose Republic Act No. 1161, as Amended by Republic Act 8282, otherwise known as the "Social Security Act of 1997 (Retrieved from <https://www.officialgazette.gov.ph/downloads/2019/02feb/20190207-RA-11199-RRD.pdf>)

⁴⁰ A Study on Public Work Programs for Better Labor Market Outcomes: The Cases of TUPAD and Cash-For-Work (Retrieved from <https://ils.dole.gov.ph/a-study-on-public-work-programs-for-better-labor-market-outcomes-the-cases-of-tupad-and-cash-for-work/>)

RESULTS MATRIX

Table 10.1 Results Matrix: Core Nutrition and Health Outcome Indicators

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	LATEST AVAILABLE DATA (YEAR)	2020	2021
Sector Outcome 1: Nutrition and health outcomes for all improved							
Life expectancy at birth increased (years)							
Male	69.63 (2015-2020)	-	-	71.3	-	69.63	-
Female	75.91 (2015-2020)	-	-	77.5	-	75.91	-
Subsector Outcome 1.1: Care at all life stages guaranteed							
Maternal mortality ratio decreased (per 100,000 live births)	95 (2016)	-	-	108	-	105	-
Neonatal mortality rate decreased (per 1,000 live births)	13 (2013)	-	-	10	14 (2017)	-	-
Infant mortality rate decreased (per 1,000 live births)	23 (2013)	-	-	15	21 (2017)	-	-
Under-5 mortality rate decreased (per 1,000 live births)	31 (2013)	-	-	22	27 (2017)	-	-
Mortality rate attributed to cardiovascular disease, cancer, diabetes, and chronic respiratory diseases decreased (number of deaths per 100,000 population aged 30-70 years old)	462.5 (2016)	397.7	382.4	367.1	467.0 (2019)	-	-
Proportion of households meeting 100% recommended energy intake increased (%)	31.0 (2015)	-	29.3	32.2	21.8 (2018-2019)	-	-
Prevalence of stunting among children under 5 decreased (%)	33.4 (2015)	-	29.8	28.8	29.6 (2018-2019)	-	-
Tuberculosis incidence decreased (per 100,000 population)	434 (2016)	537	526	510	-	539	-
Number of newly diagnosed HIV cases decreased	9,264 (2016)	-	17,900	18,900	-	8,058	-
Subsector Outcome 1.2: Responsive and resilient health system ensured							
Proportion of women who are using modern contraceptive methods increased (%)							
a) All women of reproductive age (15-49 years old) who are currently married or in union	37.6 (2013)	-	62.0	65.0	40.4 (2017)	-	-
b) All women of reproductive age (15-49 years old)	23.5 (2013)	28.0	29.0	30.0	25.0 (2017)	-	-
Proportion of fully immunized children increased (%)	68.5 (2013)	95.0	95.0	95.0	70.0 (2017)	-	-
Percentage of regions with at least 1 Biosafety Laboratory Level 2 (BSL2) (with RT PCR)	70.6 (Jun 2020)	100	100	100	70.6 (Jun 2020)	100	100
Subsector Outcome 1.3: Equitable health financing sustained							
Out-of-pocket health spending as percentage of total health expenditure (%)	45.0 (2016)	-	-	TBD	-	39.9	-

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	LATEST AVAILABLE DATA (YEAR)	2020	2021
National Health Insurance Program Availment Rate increased (%)	80.52 (2017)	-	-	100.0	80.52 (2017)	-	-
Percentage of population covered by social health insurance	91.0 (2016)	100.0	100.0	100.0	-	100.0	100.0

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.
Latest Available Data (Year) – were provided since the 2020 and 2021 actual data are not yet available. The next data for indicators based on the National Demographic and Health Survey will be available in 2022.

Table 10.2 Results Matrix: Core Education Outcome Indicators

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome 2: Quality, accessible, relevant, and liberating basic education for all achieved							
Mean years of schooling	10.0 (2018)	N/A	N/A	11.30	-	9.9	9.9 (Q1)
Functional literacy rate (%)	90.3 (2013)	N/A	N/A	TBD	91.6	-	-
Sub-chapter Outcome 2.1: Quality, accessible, relevant, and liberating basic education for all achieved							
Net Enrolment Rate (NER) (%)							
Kinder	63 (2019)	89.19	92	95	63	66	-
Elementary	94 (2019)	93.87	96	97	94	89	-
Junior High School	83 (2019)	73.36	89	92	83	81	-
Senior High School (SHS)	48 (2019)	64	68	80	48	49	-
Completion rate (%)							
Kinder to Grade 6	97 (2019)	97	97	98	97	79	-
Grade 7 to 12	77 (2019)	82	83	84	77	69	-
Proportion of learners achieving at least “nearly proficient” level in NAT increased (%)							
Grade 6	16 (2018)	26	34	44	N/A	N/A	-
Grade 10	34 (2018)	43	52	61	N/A	N/A	-
Grade 12	14 (2018)	13	19	28	N/A	N/A	-
Sub-chapter Outcome 2.2: Quality of higher education and technical education and research for equity and global competitiveness improved							
Number of higher education institutions (HEIs) in reputable international rankings increased	4 (2016)	8	7	8	8	7	14
Certification rate of Technical and Vocational Education Training (TVET) graduates increased (%)	91.9 (2016)	86	92	92	94.3	93.7	92

Table 10.3 Results Matrix: Core Labor Outcome Indicators

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021*
Sector Outcome 3: Income-earning ability increased and adaptability enhanced							
Percentage of youth not in education, employment, or training (NEET) decreased (cumulative)	23.0 (2015)	17.5-19.5	18.0- 20.0	17.0- 19.0	18.6	18.5	16.8
Subsector Outcome 3.1: Employability improved							
Duration of school-to-work transition of college graduates reduced (years)**	2 (2008)	None	N/A	0.75-1.0	N/A	N/A	N/A
Duration of school-to-work transition of high school graduates reduced (years)***	4 (2008)	None	N/A	0.75-1.0	N/A	N/A	N/A
Duration of school-to-work transition of TESDA graduates decreased (months)	3.0 (2015)	3.5	3.5	3.25	3.42	3.35	N/A**
Percentage of discouraged workers decreased (%)	12.50 (2014)	11.0	11.5	11.0	12.4	3.9	4.9
Unemployment rate of college graduates reduced	7.3 (2016)	7.2-7.5	10.0	8.0	6.7	12.4	9.6
Employment rate of TVET graduates increased	66.2 (2016)	72	68.9	69.4	84.2	70.5	N/A*
Percentage of females with advanced degrees employed increased (% cumulative)	79.4 (2016)	80.0	81.0	82.0	78.7	75.7	65.1
Labor force participation rate of women increased (%)	50.1 (2015)	50.5	48.5-50.5	48.5-50.5	47.6	45.8	51.3
Subsector Outcome 3.2: Productivity improved							
Labor productivity in industry sector increased (% growth) ⁴¹	2.0 (2015)	3.0-4.0	2.5 - 3.6	4.40 - 4.65	1.8	-2.1	-1.4
Labor productivity in service sector increased (% growth) ⁴²	2.8 (2015)	4.0-5.0	[1.02 -0.13]	5.35 - 5.61	2.4	-1.1	-3.4
Subsector Outcome 3.3: Labor mobility and income security enhanced							
Share of employees in precarious work to the total employed (%)	18.9 (2016)	18.1	18.0	17.9	22.2	23.8	26.2
Share of wage and salary workers in precarious work to the total wage and salary workers (%)	30.7 (2016)	28.5	28.4	28.3	26.3	27.4	29.8

Note: 2020 targets were set prior to the onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.* figures for FY 2021 are based on the average monthly results of the Labor Force Survey (LFS), except for the percentage share of youth NEET, and labor productivity in industry and service sector.

** no data yet since the indicator will still be measured through rider questions in the LFS in 2022. Prior to this, there was no official means of measuring STW transition.

*** no data yet since the 2021 Study on the Employment of TVET Graduates of TESDA is still ongoing.

⁴¹ Figures have been adjusted using 2018-based prices

⁴² Ibid.

CHAPTER 11

Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos

The government has been strengthening its efforts to reduce the vulnerability of Filipinos and ensure that they have the capacity to manage and respond to shocks. The proposed initiatives will improve the accessibility of social protection (SP) programs and address pressing challenges so that Filipinos can continue to pursue their aspirations.

ASSESSMENT

The SP system played a pivotal role in the country's pandemic management and economic recovery efforts. It allowed the gradual re-opening of the economy without compromising efforts to manage the spread of the virus. Recent key reforms helped Filipinos manage income shocks but many remain vulnerable.

The country's SP system is being strengthened to build the capacity of Filipinos to manage shocks and provide responsive and timely support when needed. Republic Act No. 11055 or the Philippine Identification System (PhilSys) Act established a national digital ID system that will help facilitate transactions and provide aggregate socioeconomic data for development planning and programming. Linked with bank accounts, the system will also allow for financial inclusion. As of December 31, 2021, more than 50 million individuals were registered with their biometrics captured in PhilSys. As of December 15, 2021, 7,066,476 PhilSys registrants applied for an account with the LANDBANK which co-locates in the registration centers to target the unbanked. The PhilSys will also be interoperable with the Community-Based Monitoring System (CBMS) as established by RA 11315 or the CMBS Act. Now in its pilot phase, the CBMS will be an important tool in identifying marginalized groups and developing responsive development interventions.

Other related legislations recently adopted and implemented include: (a) RA 11223 or the Universal Health Care Law, which mandated PhilHealth coverage of all Filipinos and helped lower out-of-pocket (OOP) spending from 42.0 percent in 2019 to 39.9 percent in 2020; (b) RA 11310 or the *Pantawid Pamilyang Pilipino Program* (4Ps) Act, which institutionalized and enhanced¹ the conditional cash transfer program, and increased its budget from PHP89.40 billion in 2018 to PHP106.80 billion in 2021; and (c) RA 11199 or

¹ It increased the cash transfer amount on health grants and educational grants to high school students.

the Social Security Act of 2018, which strengthened the Social Security System (SSS) and mandated the provision of unemployment benefits which benefitted 220,443 individuals from 2019 to 2021. These programs are crucial components of the Social Protection Floor (SPF), which is being finalized. When implemented, the SPF will ensure the availability of adequate support to all individuals across their lifecycle.

SP programs that address poverty and help manage risks to income shocks are implemented, but coverage remains low. The SP system has programs² that can address income shocks due to disasters, economic, and individual lifecycle risks. While these programs help reduce poverty, 5.12 percent of Filipinos still experienced severe food insecurity in 2019, and about 597,000 children engaged in child labor in 2020 to augment their family's income.

Concerns that prevent some Filipinos from accessing SP programs include lack of awareness, participation costs, and administrative challenges (including targeting and logistical issues). Only 84 percent of Filipino families have members with social insurance in 2020, and 32.56 percent of the economically active population have SSS coverage in 2021.

Disasters still result in deaths and missing persons. Policies and guidelines were issued to standardize community-based disaster risk reduction and management (DRRM), earthquake drills, and the establishment, operationalization, and management of the Emergency Operations Center, among others. Quarterly Nationwide Simultaneous Earthquake Drill and regular DRRM webinars were also conducted to promote proactive disaster preparedness among individuals. However, there are still pressing challenges that need to be addressed such as the socioeconomic factors that increase the vulnerability of individuals, the adaptive capacity of communities, and coordination and capacity limitations among stakeholders and multi-sectoral partners, among others.³

² Includes PhilHealth, SSS, GSIS, DSWD's Social Amelioration Program, Cash-for-Work, Emergency Shelter Assistance, 4Ps, Social Pension for Indigent Senior Citizens, DOLE's Integrated Livelihood Program and Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced Workers (TUPAD)

³ National Disaster Risk Reduction and Management Plan 2020-2030

IN FOCUS: BONEL ALVAREZ, FATHER AND PRIMARY PROVIDER



Bonel Alvarez is a 40-year-old tricycle driver from Isla Puting Bato, Tondo, Manila.

He is a household head with four children, and earns approximately PHP300 to PHP500 per day. One of his children has a disability. His father, a social pension beneficiary, is living with Bonel's family, and his pension is often spent for the entire household's needs.

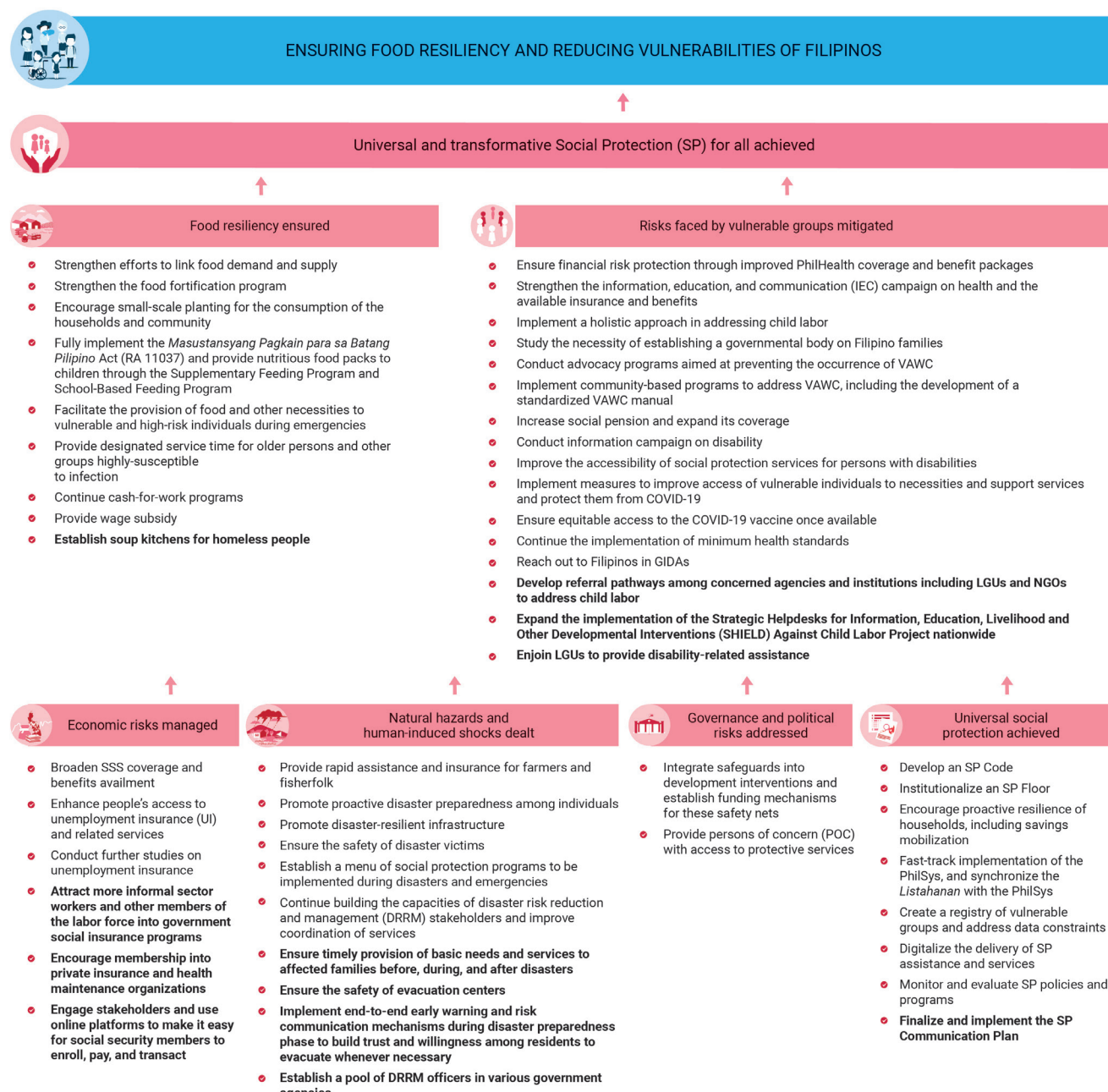
Bonel wants to enjoy life and see his children graduate from college. He dreams of having a small and sustainable business and sufficient savings for emergencies and education and health-related expenses.

However, his family often has to tighten their belts whenever they experience income shocks because of sickness and disruptions at work (e.g., natural disasters and frequent lockdowns due to the pandemic). Disability-related costs also place a significant burden on their resources. Moreover, his wife is not able to work since she is the one who takes care of their child with a disability. One of his children even engages in child labor to help their family earn income during difficult times. The occurrence of natural disasters also displaces their household now and then.

STRATEGIC FRAMEWORK

Many Filipinos face the challenges experienced by Bonel and his family. To address their vulnerabilities, and ensure their capacity to manage shocks, the government will continue to implement and adopt new food resiliency and social protection strategies at the national and local levels.

Figure 11.1. Strategic Framework to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

The government has already implemented many of the strategies identified in the Updated PDP 2017-2022. Highlighted below are the new strategies that enhance the accessibility of SP programs and address the pressing challenges faced by Filipinos.

TO ENSURE FOOD RESILIENCY

Establish community kitchens for vulnerable Filipinos. Local government units will establish community kitchens for nutritionally at-risk families and underprivileged individuals, particularly the homeless. Such establishments can help achieve the objectives of the Philippine Plan of Action for Nutrition (PPAN), especially during disasters and emergencies.⁴ Similar feeding initiatives from non-government and civil society organizations will also be encouraged. (See [Box Article 11.1](#))

TO MITIGATE RISKS FACED BY VULNERABLE GROUPS

Develop referral pathways among concerned agencies and institutions including local government units (LGU) and non-government organizations to address child labor. The National Council against Child Labor and its member agencies will formulate a referral mechanism and case management system to respond to child labor concerns. The referral pathway includes services and assistance to children in the worst forms of child labor.

Expand the implementation of the Strategic Helpdesks for Information, Education, Livelihood and Other Developmental Interventions (SHIELD) Against Child Labor Project nationwide. The Department of Social Welfare and Development (DSWD) will roll out the SHIELD project across all regions in the country. The project aims to strengthen efforts at the local level, including the establishment of a help desk and a local registry on child labor.

Enjoin LGUs to provide disability-related assistance. Disability entails direct (e.g., cost of assistive devices, rehabilitation services) and indirect costs (e.g., unemployment, carer's foregone earning) to persons with disabilities and their family. LGUs are encouraged to be more proactive in identifying and addressing varied contextual barriers faced by persons with disabilities. With this, it is important to provide disability-related assistance (e.g., personal support services, assistive devices) to facilitate the socioeconomic participation of individuals and address disability-related costs.

⁴ Nutrition Cluster Advisory Cluster No. 01 Series of 2020. Nutrition Cluster Guidelines on LGU Nutrition Actions Relative to COVID-19; and NNC Governing Board Resolution No.1, Series of 2009: Adopting the National Policy on Nutrition Management in Emergencies and Disasters identified community kitchens as a strategy in addressing hunger and malnutrition.

MANAGING ECONOMIC RISKS

To sustainably manage economic risks, there is a need to expand membership into social insurance programs of both public and private sectors to increase the number of premium-paying members. Strategies include the following:

Attract more informal sector workers and other members of the labor force into government social insurance programs. SSS may consider tailor-fitting its programs according to the needs of informal sector workers and offering lower and more flexible contribution payment schemes. SSS will also continue conducting information awareness campaigns on its various programs in order to broaden its coverage.

Encourage membership into private insurance and health maintenance organizations. The Insurance Commission will continue promoting microinsurance and encourage private insurance companies and health maintenance organizations to offer low membership premiums.

Engage stakeholders and use online platforms to make it easy for social security members to enroll, pay, and transact. The SSS will continuously improve its systems to ensure simple registration, accessible payment options, and a quick benefit application process. It will also collaborate with the gig economy platforms (e.g., courier and delivery service providers) to facilitate the membership of their partners and provide easier options for payment of premiums (e.g., through salary deduction scheme).

TO DEAL WITH NATURAL HAZARDS AND HUMAN-INDUCED SHOCKS

Ensure timely provision of basic needs and services to affected families before, during, and after disasters. The DSWD, in coordination with the LGUs, will continue to provide essential goods and social services to the affected population even after disasters and emergencies. LGUs must ensure sufficient prepositioned food packs to meet the daily calories and micronutrient needs of the communities, especially those in the evacuation centers. Further, the Department of Health will also make available appropriate and adequate mental health and psychosocial support services in times of disaster.

Ensure the safety of evacuation centers. The Department of the Interior and Local Government (DILG) must strictly monitor the LGUs' compliance to the DILG Memorandum Circular No. 122, series of 2018 to ensure durable, safe, and properly designed evacuation facilities with child-, women-, and persons with disability-friendly spaces. The process may be aided by integrating evacuation management as a criterion for awarding the Seal of Good Local Governance.

Implement end-to-end early warning and risk communication mechanisms during disaster preparedness phase to build trust and willingness among residents to evacuate whenever necessary. The National Disaster Risk Reduction and Management Council and its member agencies will continuously orient stakeholders on evacuation procedures, and provide timely, clear, and accessible early warning and risk communication to encourage families to do pre-emptive evacuation when needed. This also entails the development of clear operational guidelines for the implementation of pre-emptive and mandatory evacuation, including protocols to secure the assets and properties of evacuees.

Establish a pool of DRRM officers in various government agencies. Each government agency must have a pool of first responders to act quickly to extreme events. The concerned agencies will also ensure the availability of emergency response resources and trainings required to perform their functions effectively.

TO ACHIEVE UNIVERSAL SOCIAL PROTECTION

Ensure access to credit. The government will continue to develop and implement innovative and affordable financing facilities. (See [Chapters 9C and 15](#) for detailed strategies)

Finalize and implement the SP Communication Plan. To address the limited awareness and understanding of social protection among implementers, partner institutions, and beneficiaries, the Sub-Committee on Social Protection is spearheading the development of the SP Communication Plan, which is expected to be implemented in 2022. It intends to cover and engage relevant national and local government entities, non-state actors including civil society organizations, academe, media, businesses and other private entities, and community stakeholders.

RESULTS MATRIX

Table 11.1. Results Matrix

INDICATOR	BASELINE [YEAR]	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Chapter Outcome: Food security ensured and vulnerabilities of Filipinos reduced							
Subsector Outcome 1: Ensure food resiliency							
Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale							
Severely food insecure	5.12 (2019)	TBD	TBD	0.00	5.12	No data available	No data available
Moderately food insecure	39.06 (2019)	TBD	TBD	25.78	39.06	No data available	No data available
Subsector Outcome 2: Mitigate risks faced by vulnerable groups							
Out-of-pocket health spending as percentage of total health expenditure	45.0 (2016)	-	-	TBD	42.0	39.9	No data available
National Health Insurance Program availment rate increased (%)	80.52 (2017)	-	-	100	No data available	No data available	No data available
Percentage of population covered by social health insurance	91 (2016)	100	100	100	100	100	100
Number of eligible senior citizens who received social pension	1,412,598 (2016)	3,796,791	4,107,324	4,550,220	3,727,147	3,502,590	3,568,881
Number of child laborers ('000)**	1,066 (2017) ^a	0	0	0	664	597 ^b	Pending inputs from PSA
Proportion of Women in Especially Difficult Circumstances (WEDC) reported in DSWD served	100 (355,133) (2016)	N/A	100	100	100 (443,269 served)	100 (510,559 served)	100 (415,482 served)
Proportion of violence against women cases reported in DSWD served	100 (1,749) (2016)	N/A	100	100	100 (1,386 served)	100 (876 served)	Pending inputs from DSWD
Proportion of child abuse cases reported in DSWD served	100 (3,857) (2016)	N/A	100	100	100 (2,855 served)	100 (1,683 served)	100 (1,668 served)
Subsector Outcome 3: Manage economic risks							
Percentage of economically active population contributing to SSS	34.1 (2016)	41	42	44	41.48	38.96	32.56 ⁵
Percentage of families covered by social insurance***	68.1 (2016)	TBD	TBD	TBD	88.1	83.8	No data available
Subsector Outcome 4: Deal with natural hazards and human-induced shocks							
Number of deaths attributed to natural disasters per 100,000 population	0.09 (91 deaths) (2016)	0	0	0	0.055 (60 deaths)	0.131 (142 deaths)	0.474 (522 deaths)

⁵ <https://www.sss.gov.ph/sss/DownloadContent?fileName=Proof-of-Accomplishment-Fourth-Quarter.pdf>

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Number of deaths attributed to human-induced disasters per 100,000 population	0.2 (207 deaths) (2016)	0	0	0	1.075 (1,164 deaths)	0.060 (65 deaths)	0.182 (201 deaths)
Number of missing persons attributed to natural disasters per 100,000 population	0.03 (29 missing persons) (2016)	0	0	0	0.023 (25 missing persons)	0.024 (26 missing persons)	0.074 (82 missing persons)
Number of missing persons attributed to human-induced disasters per 100,000 population	0.017 (18 missing persons) (2016)	0	0	0	0.010 (11 missing persons)	0.017 (19 missing persons)	0.007 (8 missing persons)
Number of directly affected persons attributed to natural disasters per 100,000 population	7,144,557 (7,376,237 affected persons) (2016)	0	0	0	8,899,974 (9,636,381 affected persons)	9,454,984 (10,284,373 affected persons)	13,139,468 (14,479,517 affected persons)
Number of persons directly affected by human-induced disasters per 100,000 population	140.036 (144,577 affected persons) (2016)	0	0	0	76.475 (82,803 affected persons)	53.146 (57,808 affected persons)	244.384 (269,308 affected persons)
Percentage of families affected by natural and human-induced disasters provided with assistance	100 (969,470 families) (2016)	100	100	100	100 (909,300 families)	100 (785,388 families)	100 (658,074 families)
Percentage of households with damaged houses provided with emergency shelter assistance	100 (261,617 households) (2016)	100	100	100	100 (53,071 households)	100 (63,087 households)	100 (228,422 household)
Proportion of emergency loan applications by calamity-affected GSIS members and pensioners granted	100 (67,463 members and 1,296 pensioners) (2016)	100	100	100	100 (274,231 members; 7,747 pensioners)	100 (596,899 members; 39,277 pensioners)	100 (38,980 members; 4,415 pensioners)
Subsector Outcome 5: Achieve universal social protection							
Total government expenditures in Social Protection Programs as a percentage to GDP	1.7 (2016)	TBD	TBD	3.7	1.9	4.0	Data not yet available
Share of total government expenditures in SP to the national budget	9.4 (2016)	TBD	TBD	TBD	10.0	16.8	Data not yet available

* Note that the responsible agency (e.g., DOH, PhilHealth) did not provide annual targets for these indicators as data are not available for these years (or only end-of-plan target was provided by the concerned agencies).

** Data generated from the Labor Force Survey (LFS) October 2017 Survey Round. It was based on DOLE Department Order (DO) No. 149 Series of 2016 and DO No. 149-A Series of 2017 that enumerate the work that would render a person below 18 years of age to be engaged in child labor. As this data satisfies only a few of the criteria for child labor, it cannot be compared to the results (data) from the 2011 Survey on Children.

^{a/} Based on 2010-based population projections (to be updated once the estimate using 2015-based population projections is available)

^{b/} Based on 2015-based population projections.

*** This refers to the total number of families with at least one member covered by any (one or more) social insurance programs (i.e., SSS, GSIS, PhilHealth, private insurance, others) divided by the number of families covered and not covered by any social insurance

BOX ARTICLE 11.1. PHILIPPINES' INITIATIVES ON FOOD RESILIENCY

At the height of the COVID-19 crisis, some Filipinos were unable to afford a balanced and nutritious diet after losing their jobs and income. Results of the Rapid Nutrition Assessment Survey conducted by the Department of Science and Technology – Food and Nutrition Research Institute from November 3 to December 3, 2020 showed that among the 5,717 households surveyed, 62.1 percent experienced moderate to severe food insecurity, while 56.3 percent had difficulties accessing food during the community quarantine period.

To prevent hunger and secure food for every Filipino, the Inter-Agency Task Force on Zero Hunger (IATF-ZH) launched the National Food Policy (NFP) on January 11, 2021. This document includes priority programs and projects (e.g., Kadiwa ni Ani at Kita, Enhanced Partnership Against Hunger and Poverty Program, and feeding programs, among others) and a roadmap aimed to end hunger by 2030, achieve food security, improve nutrition, and promote sustainable agriculture.

Amid mobility restrictions during the pandemic, various innovative strategies have emerged to address the Filipinos' need to access food and basic commodities while minimizing physical contact with other people to reduce community transmission. One example is the “pasabuy” service, where consumers will contact someone to purchase essential items for them and have these delivered to their doorstep. Another is the curbside pick-up service, which allows all customers to easily place an order, pay online, and claim their order at a designated area. LGUs deployed community mobile palengkes, which sell meat, vegetables, and other commodities found in public markets at a similar price. Meanwhile, volunteers set up community pantries or food banks to aid the most vulnerable families and individuals in the community.

The Kadiwa ni Ani at Kita program of the Department of Agriculture also played a vital role in ensuring the availability and accessibility of essential food and products in high consumer demand areas, particularly among low-income families. With the implementation of home-based and blended learning approaches in schools, the ration of nutritious food products under the Department of Education's School-Based Feeding Program was adjusted from actual feeding in schools to food delivery at home. The Department of Social Welfare and Development also provided alternative meal/food commodity options and schemes for the implementation of the Supplementary Feeding Program for children, such as the distribution of nutri-pack, nutri-bun with fresh milk products, and easy to cook/prepare meals through delivery on a weekly or two-week interval basis.

CHAPTER 12

Building Safe, Resilient, and Sustainable Communities

The creation of the Department of Human Settlements and Urban Development (DHSUD) in 2019 strengthened partnerships between key shelter agencies (KSAs)¹ and relevant stakeholders. The newly crafted National Housing and Urban Development Sector Plan (NHUDSP) 2021-2040 will serve as the sector's roadmap in providing safe and adequate housing and in managing and sustaining housing, human settlements, and urban development initiatives. Climate change adaptation (CCA), disaster risk reduction and management (DRRM), and public health goals will be integrated across different housing and urban development-related plans, processes, and activities in preparation for scenarios where disease outbreaks occur simultaneously with natural hazards.

ASSESSMENT

The COVID-19 pandemic adversely affected the housing sector in 2020. The community quarantines and travel ban resulted in project delays owing to limited mobility of the workforce and delivery delays in the materials needed for housing construction. It also hampered the relocation of program beneficiaries to intended permanent housing resettlements and impeded the processing of housing-related permits and clearances from agencies and local government units (LGUs). Unstable sources or loss of income and livelihood of potential housing loan borrowers negatively affected access to housing loans, with those availing socialized housing loans being hit the hardest.

High and very high-density barangays have a higher number of COVID-19 cases (133.15) and deaths (3.05) compared to low and medium density barangays (19.03 cases and 1.84 deaths).² With difficulties in observing social distancing in congested spaces, along with inadequate access to household water and sanitation, the urban poor are highly vulnerable to COVID-19 infection.³

Furthermore, natural disasters persistently affect the housing sector. In 2020 alone, 308,072 houses were partially damaged and 60,476 were destroyed.⁴ These added up to the enormous housing need, which the sector has to address notwithstanding its limited resources.

¹ The KSAs are composed of the following agencies: Home Mutual Development Fund or Pag-IBIG Fund, National Housing Authority (NHA), Social Housing Finance Corporation (SHFC), National Home Mortgage and Finance Corporation (NHMFC), and the Human Settlements Adjudication Commission (HSAC).

² Based on the findings of the Assessing Demographic Vulnerabilities of Communities to COVID-19 Infection Report conducted by the Commission on Population and Development (POPCOM)

³ Of the 13.867 million NCR population, 27.2 percent, or 3.8 million, live in housing units under 20 sq.m. With an average household size of 4.7 persons, the aforementioned population in NCR has a living space of only 4.25 sq.m. per person.

⁴ Eduardo D. Del Rosario. "CLUP: A pro-active tool to mitigate disaster risks", Department of Human Settlements and Urban Development, <https://dhsud.gov.ph/news/clup-a-pro-active-tool-to-mitigate-disaster-risks/>

Shelter agencies adopted COVID-related measures in the design of housing units. For housing projects intended for informal settlers, the National Housing Authority (NHA) included a disinfection/wash area strategically located before the main entrance door in the design of the housing unit. For the single-attached model, easy access to the toilet and bath from the service area was provided for immediate sanitation. For the Government Employees Housing Program (GEHP), integration of workspace and study area in the housing design was considered to address the needs of work-from-home arrangement and online education during the pandemic.⁵

HOUSING NEEDS ARE STILL UNMET

The provision of socialized housing units remains a challenge. For 2021, around 50 percent or 84,472 out of the target 168,239 government socialized housing units were delivered. The COVID-19 restrictions limited the mobility of human resources and the transfer of beneficiaries to project sites in other localities, not to mention the LGUs focusing their time and resources responding to the pandemic. This resulted in prolonged project implementation and processing of housing-related permits. Further, the low-income homebuyers, who mostly avail of socialized housing, were hit the hardest because of loss of income or livelihood. These households prioritized sustaining their daily needs instead of purchasing a new house.

The proportion of homeownership declined. The proportion of families with owned or owner-like possession of housing units has decreased from 64.1 in 2019 to 59.8 in 2020. The majority of the government housing programs are focused on homeownership. However, these programs are challenged by delays in construction and high cost of homeownership. The average monthly income of the bottom 30 percent ranges from PHP9,416.67 to PHP13,750.00, while their actual expenditure for their house rent/rental value is 8.1 percent or around PHP762.75 to PHP1,113.75.⁶

The target for the provision of low-cost housing was exceeded, although demand remains high. In 2021, the sector delivered 148.32 percent or 94,471 units out of the target 63,694 low-cost housing units. However, this target set by agencies (i.e., Home Development Mutual Fund [HDMF], PHILGUARANTEE) only constituted 7.78 percent of the total projected housing needs in 2021. Consequently, the demand for low-cost housing remained high. The HDMF and other financial institutions continued to lend during the COVID-19 pandemic. Homebuyers and lenders were protected from credit risks that have risen during the pandemic.

The proportion of families with access to secure tenure increased. The proportion of families with secure housing tenure marginally increased from 96.4 in 2019 to 96.9 in 2020. This indicates a slight decrease in the number of families who are either living in a rent-free lot without the consent of the owner, or a rent-free house and lot without the consent of the owner.

⁵ NHA Housing Technology and Technical Research Department

⁶ Based on the Family Income and Expenditure Survey (FIES) 2018.

PUBLIC HEALTH GOALS AND DISASTER RESILIENCY NEED TO BE INTEGRATED

The proportion of LGUs with approved and updated Comprehensive Land Use Plan (CLUP) increased. The proportion of LGUs with reviewed climate change and DRRM-enhanced CLUPs increased from 27 (baseline) in 2019 to 38 in the third quarter of 2021. However, the majority of the LGUs still need to update and incorporate public health goals in their CLUPs. There is also a heightened need to develop well-planned urban and rural communities to accommodate hazards arising from natural and human-induced disasters.

IN FOCUS: THE ALVAREZ FAMILY OF ISLA PUTING BATO, TONDO, MANILA



The Alvarez Family members are informal settlers residing in Isla Puting Bato, Tondo, Manila. They are a family of eight. The head of the family, Bonel Alvarez, Jr., 40, is a tricycle driver, while his partner, Rowena Alvarez, 37, is a homemaker and community leader. They have four children; one has a disability while another one is pregnant. The family all live together with the patriarch, Bonel Alvarez, Sr., and a repatriated overseas worker relative, Kenneth Alvarez. Their current house is too small for their growing family. It has limited access to basic utilities, and is frequently damaged by natural disasters. The family cannot afford formal housing as they lack a sustainable source of income. To make matters worse, the cost of either homeownership or rental housing is high in urban areas. While the government plans to relocate their community, there has been little community consultation and feedback.

Despite these hardships, the Alvarez family looks forward to the day when they have adequate housing.⁷ They aspire to live in a safe, resilient, and sustainable community that provides each of them with economic and social opportunities to help alleviate their poverty.

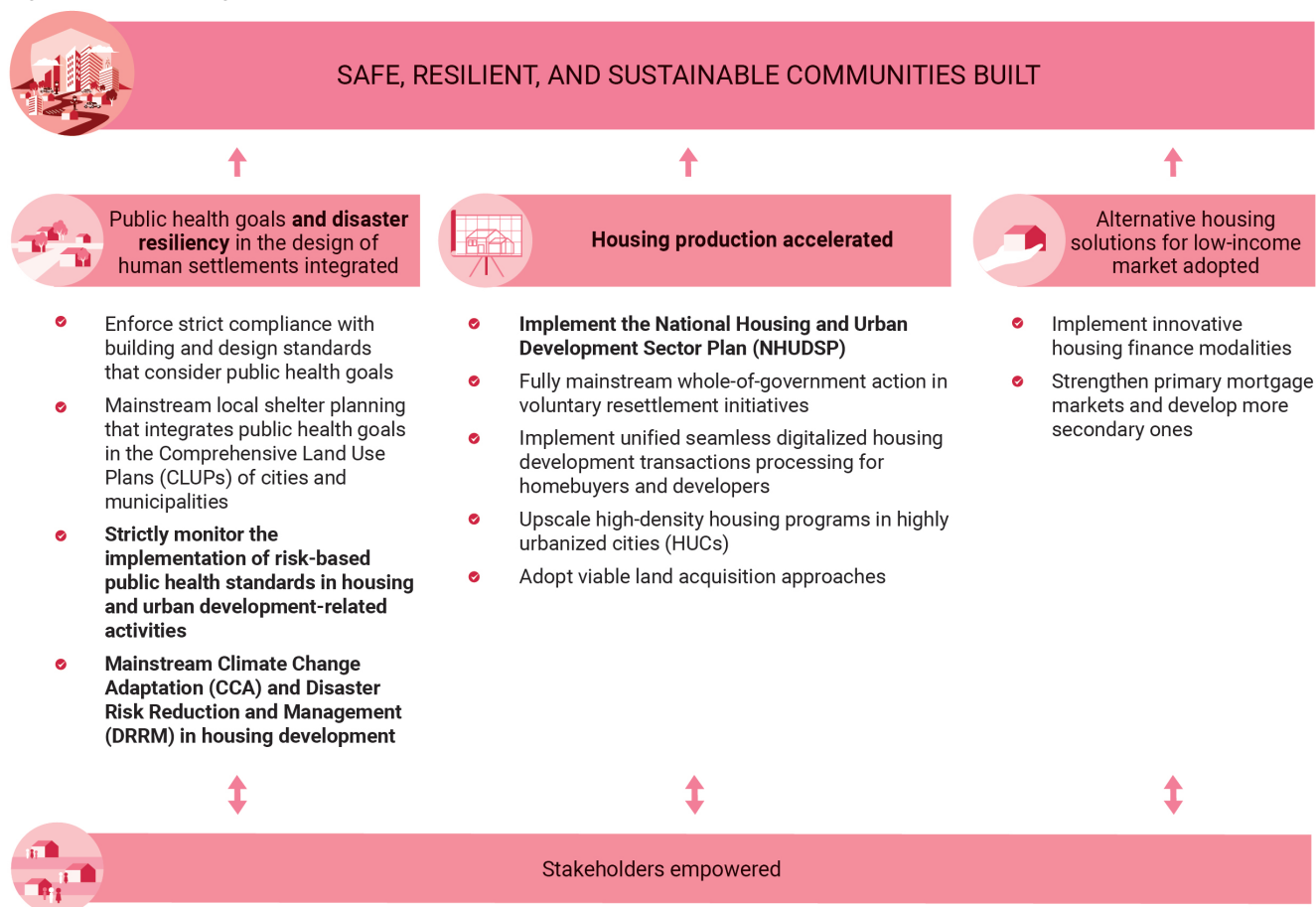
⁷ Adequate housing includes seven interrelated and essential features: legal security of tenure; availability of services, materials, facilities, and infrastructure; affordable; habitable; accessible; in a location that allows access to social services; and culturally adequate.

STRATEGIC FRAMEWORK

With lessons learned from the pandemic and other disasters, the housing sector will need to rise up to the challenge of meeting housing needs and building safe, resilient, and sustainable communities. This chapter focuses on the subsector outcomes of integrating public health goals and disaster resiliency in the design of human settlements, accelerating housing production, and adopting alternative housing solutions for the low-income market. In addition, empowering stakeholders (e.g., families and communities and LGUs, among others) will be strengthened towards achieving these three subsector outcomes.

Furthermore, the housing sector will build on the gains of the implementation of strategies in the Updated PDP 2017-2022. An opportunity for the sector is the implementation of the NHUDSP 2021-2040, which is aimed at building better, greener, and smarter human settlements, and urban systems in a more inclusive Philippines. It will consolidate existing and proposed strategies in the following areas: (a) shelter; (b) urban planning and design; (c) urban economy; (d) urban infrastructure; and (e) urban governance. The focus will be given to the most critical groups, such as the informal settler families (ISFs). Given the occurrence of hazards, mainstreaming CCA and DRRM in housing development will be pursued. Different measures will be prioritized and implemented to outweigh the negative impacts of the COVID-19 pandemic and natural disasters.

Figure 12.1 Strategic Framework to Build Safe, Resilient, and Sustainable Communities



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO INTEGRATE PUBLIC HEALTH GOALS AND DISASTER RESILIENCY IN THE DESIGN OF HUMAN SETTLEMENTS

Continue to enforce strict compliance with building and design standards that consider public health goals. DHSUD will be responsible for integrating resilient and COVID-proof housing in the building standards as well as for reviewing the design standards to incorporate public health goals. These will be prioritized in 2022. DHSUD will also lead the crafting of technical guidelines for the development and management of open, public, and green spaces, including safety and health protocols. The DHSUD will continue to enforce its powers to suspend license to sell, issue a cease-and-desist order, and impose administrative fines, sanctions, and penalties for developers that will not adhere to the building and design standards.

Mainstream local shelter planning that integrates public health goals in the CLUPs of cities and municipalities. Although DHSUD provides technical assistance to the LGUs in crafting the CLUPs and Local Shelter Plans (LSPs), public health goals have yet to be integrated in these plans. DHSUD will thus include increased public safety considerations in the CLUP and health risk assessments in spatial strategies and zoning. These plans also need to be anchored on a sound carrying capacity assessment of the LGU. There is a need for DHSUD to intensify its technical assistance in capacitating LGUs in crafting, updating, implementing, and monitoring CLUPs and LSPs. The DILG shall also provide incentives⁸ for compliance and impose administrative sanctions⁹ for non-compliance with the updating of CLUPs.

Strictly monitor the implementation of risk-based public health standards in housing and urban development-related activities. The production of safe, livable, and resilient housing forms part of the COVID-19 recovery and resiliency program. The DHSUD issued the following safety protocols to ensure the safe resumption of housing construction-related activities: (a) company/contractor-funded prior testing for COVID-19; (b) provision of hygienic on-site quarters or near-site quarters for workers; (c) provision of adequate assistance package for workers who contract COVID-19; (d) provision of health insurance coverage; and (e) mandatory wearing of face mask, temperature scanning, and periodic sanitation and disinfection of worksites and quarters. DHSUD regional offices monitor the compliance to these protocols and violators are issued a cease-and-desist order. In addition, the DHSUD is in the process of formulating the Resilient and Green Human Settlements framework that aims to protect vulnerable communities from climate change, pandemics, and natural disasters.

Mainstream CCA and DRRM in housing development. There is a need to strengthen the use of science-based disaster risk and vulnerability assessments in housing and urban development by capacitating the LGUs on Climate and Disaster Risk Assessment (CDRA), Urban Planning and Design Guide for Climate Resilience, and Land Use and Zoning Information System-Geographic Information System

⁸ The DILG issued Memorandum Circular (MC) No. 2022-026 which included approved CLUPs as one of the minimum requirements to qualify for the CY 2022 Seal of Good Local Governance.

⁹ DILG MC No. 2019-172, Compliance of LGUs on Preparation/Updating of CLUPs and CDPs

(LUZIS-GIS)-based monitoring system for CLUP. The implementation of the Post Disaster Shelter Recovery Framework will improve the country's capacity to ensure full and timely recovery of households and communities affected by natural disasters. The framework will also enable better coordination among the government and the private sector, optimize the use of resources, align various policies, and reduce the impact of future disasters. In addition, the LGUs can learn and adopt the best practices on DRRM of other local governments (i.e., Pasig City, City of Marikina, Albay Province) in using multi-hazard maps, developing a database of the population that may be possibly affected, and building additional evacuation sites that incorporates health standards in the community, among others.

TO ACCELERATE HOUSING PRODUCTION

Implement the NHUDSP. The 20-year roadmap aims to operationalize the National Urban Development and Housing Framework (NUDHF) 2017-2022. The NHUDSP reflects targets and deliverables for the short term (2021-2022), medium term (2022-2028), and long term (2028-2040). Banner programs identified under the short-term goals are already being implemented. These include programs that aim to create spaces, transform spaces into communities, make communities accessible and affordable, and empower communities. To enable a comprehensive assessment of the programs, the baseline values need to be specified as well.

Fully mainstream the whole-of-government action in voluntary resettlement initiatives. There will be a holistic approach in voluntary resettlement initiatives. At the national level, the following will be implemented: (a) operationalize the National Resettlement Policy Framework (NRPF); (b) allocate sufficient budget for the implementation of public housing by the LGUs in line with the devolution of provision of housing-related services (i.e., low-cost housing and other mass dwellings services, programs, and projects); (c) revisit and review the housing targets set by the DHSUD and KSAs; (d) ensure strict monitoring of compliance with the balanced housing requirement by the developers; (e) utilize Community-Based Monitoring System (CBMS) in identifying affected population and targeting those with immediate need for resettlement, transitory shelter, or housing materials assistance; and (f) institutionalize the crafting, implementation, and monitoring of resettlement action plans (RAPs).

At the local level, LGUs will need to expand the functions, institutionalize, and operationalize Local Housing Boards and address the housing requirements in the long term. To support and build the capacity of LGUs on this, planning and investment programming must be coordinated among concerned agencies and private utility concessionaires that provide basic social services. In addition, DHSUD shall strengthen its partnerships with the LGUs and private developers in providing families with housing and communities equipped with necessary infrastructure facilities including information technology, and accessible and sustainable livelihood opportunities. The NHA shall continue to strengthen its coordination for the implementation of the *Balik Probinsya, Bagong Pag-asa* (BP2) program, to include processing of applications, relocation of beneficiaries to receiving LGUs, and the provision of necessary transition support and incentives on transportation, livelihood, and education, among others.

At the community level, priority will be given to building the capacity of, and strong linkage between, program implementers and the community in developing RAPs and ensuring inclusive participation in the

critical stages of housing development (i.e., land acquisition, site selection and development, and housing design and construction). There is a need for the Presidential Commission for the Urban Poor and the receiving LGUs to implement a comprehensive advocacy and communication plan to increase the social acceptability of government resettlement programs among the targeted beneficiaries and the receiving community.

Unify digitalized systems for housing development transactions for homebuyers and developers to make the process seamless. One of the key strategies in the improvement of DHSUD's systems and processes is operationalizing the Housing One-stop Processing Centers (HOPCs). It consists of formulating guidelines for the operationalization of the digitalized HOPCs and streamlining land and housing-related processes in coordination with concerned agencies, such as the Department of Agriculture, Department of Agrarian Reform, Department of Environment and Natural Resources, and the Land Registration Authority, to address issues related to land conversion and reclassification (DHSUD 2021).

Upscale high-density housing (HDH) programs in highly urbanized cities (HUCs). To maximize housing production per unit of land in HUCs, the DHSUD, through the NHA and Social Housing Finance Corporation (SHFC) and partnerships with partner-developers across the country, will continue to implement HDH to provide resilient, safe, and affordable shelters to all Filipinos, especially the underprivileged. The HDH programs are included in the priority programs under the NHUDSP, targeted primarily for ISFs and other low-salaried segments of the population, especially those living in dangerous and high-risk areas in urban centers. The efficient densification will address the projected population increases and urban sprawl, sustain economic growth, and offer opportunities for on-site, near-site, and in-city resettlement in vertical housing facilities through a community-driven housing approach. Necessarily, these housing programs will need to be complemented with the programs needed to deliver social services like health care and education.

Adopt viable land acquisition approaches. As a policy, using escrow funds from balanced housing compliance to fund land acquisition is allowed for calamity-affected LGUs, within two years from the declaration of a state of calamity. There is also a need to unlock government idle lands to provide socialized housing and public rental housing. To pursue this, there is a need to develop a system capable of storing vital and updated data of all housing projects nationwide, housing needs of LGUs, available lots for housing and land zoning classification at the local level, and a list of existing beneficiaries of the government's housing programs. Furthermore, the enactment of the National Land Use Act shall be prioritized to address the competing uses of limited land resources, such as those for food security, settlements, and industry development, with due consideration for environmental and human protection.

TO ADOPT ALTERNATIVE HOUSING SOLUTIONS FOR THE LOW-INCOME MARKET

Implement innovative housing finance modalities. The DHSUD's BALAI Public Rental Housing, rental subsidy, and housing microfinance are some of the programs being instituted which aim to offer alternatives to homeownership for low-income households, particularly in HUCs where the cost of homeownership is high.

Strengthen primary mortgage markets and develop more secondary ones. KSAs imposed a moratorium on housing loans and fees to provide relief to their constituents who are having difficulty in meeting their basic needs during the pandemic. On the other hand, lending rates need to adapt to societal shocks and be responsive to economic growth while prioritizing borrowers' financial capacities. The National Home Mortgage Finance Corporation (NHMFC) will continue to implement the Housing Loan Receivable Purchase Program for socialized, economic, and low-cost housing originators. Through this program, home borrowers benefit from low and fixed interest rates without any membership requirement.

CROSS-CUTTING STRATEGIES

Empower stakeholders by institutionalizing community-led/driven development of human settlements. The DHSUD and its KSAs will institutionalize community-led/driven development of settlements through capacity-building programs for homeowners' associations and community organizations focusing on estate management, on-time payment of mortgages, creation of public utilities, access to training, and livelihood opportunities.

Moreover, the LGUs will continue to capacitate communities on CCA and DRRM, considering minimum public health standards (i.e., evacuation plan, information dissemination, emergency kits).

RESULTS MATRIX

Table 12.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Socialized housing units delivered as percentage of socialized housing targets (Annual)	54 (2016)	63	68	73	N/A	60.58	50.21
Low-cost housing units delivered as percentage of low-cost housing targets (Annual)	116.51 (2016)	100	100	100	N/A	114.35	148.32
Proportion of LGUs with approved/updated Comprehensive Land Use Plan (CLUP) increased	27 (2019)	28	30	31	31.88	34.39	38.00 ^a
Proportion of urban population living in informal settlements decreased (Sustainable Development Goal [SDG] 11.1.1)	3.2 (2015)	2.60	2.47	2.35	TBD	TBD	TBD
Proportion of families with owned or owner-like possession of housing units (SDG 1.4.1p9)	61.0 (2016)	72.12	74.90	77.68	64.10	59.8	TBD
Proportion of families with access to secure tenure (SDG 1.4.2p1)	97.0 (2016)	97.84	98.05	98.26	96.40	96.9	TBD

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update.

^{a/} As of third quarter of 2021.

CHAPTER 13

Reaching for Demographic Dividend across All Regions

The government has passed pertinent policies and strengthened the implementation of programs aimed at accelerating the demographic transition and maximizing the demographic dividend. With the full implementation of the Responsible Parenthood and Reproductive Health (RPRH) Law and strengthened advocacy and programs on family planning (FP), fertility rates have been slowly decreasing in recent years. However, the pandemic may reverse the gains in harnessing the demographic dividend, along with the continuing high incidence of stunting and poor education outcomes especially among children and youth, which will affect the quality of the country's human capital. The importance of demographic and socioeconomic data was also highlighted during the COVID-19 pandemic in light of the need to track vulnerabilities in localities and to provide aid to those in need.

ASSESSMENT

The disruptions caused by the COVID-19 pandemic hindered the accomplishments for the chapter, such as in the delivery of health services (e.g., FP and nutrition programs), education, and employment and livelihood, among others. However, progress in terms of the sub-outcomes of the chapter could not be assessed because of the unavailability of the latest data coming from official sources. These include the National Demographic and Health Survey (NDHS), which will be conducted in 2022, and the 2020 Census of Population and Housing, where age and sex disaggregation will only be available in mid-2022. In lieu of these, NEDA used other data sources, such as administrative data from concerned national government agencies. Results may vary compared to official sources due to differences in data scope or coverage.

ACCELERATING THE DEMOGRAPHIC TRANSITION

The country's population increased but population growth rate slowed down. Amid the pandemic, the government conducted the 2020 Census of Population and Housing following strict protocols and using computer-assisted web-based interviews. For 2020, the country's total population was 109,035,343, which was around 8 million higher than the 2015 level of 100,981,437. This represented a 1.6 percent population growth rate from 2015 to 2020, lower than the 1.7 percent growth from 2010 to 2015. Among the 17 regions in the Philippines, nine recorded faster population growth while the remaining eight posted deceleration. CALABARZON was the most populous region in 2020, where 16.2 million or 14.9 percent of the population was accounted.

There was a slight decrease in the ratio of dependents to working age population. The age-dependency ratio¹ was estimated to decline from 57.4 in 2016 to 55.7 in 2021². This indicates that there were about 56 dependents for every 100 working age population in 2021, which was a slight decrease from 57 dependents in 2016. The same decreasing trend was projected across the different regions in the country. However, 12 regions had higher dependency ratios compared to the national average.

Fertility rates and number of births have been declining, even among adolescents. The slowdown in population growth rate may be attributed to the decreasing fertility rates in the past few years. The latest data from the NDHS showed that fertility has decreased from 3.1 children per woman in 2013 to 2.7 in 2017. Registered live births also fell by 24 percent, from 1,731,289 births in 2016 to 1,528,684 in 2020. This declined further to 1,309,601 in 2021.³ Possible reasons for lower livebirths, particularly during the pandemic, include, country's economic situation affecting household income, financial constraints, perceived risks of childbearing, increased stress and less privacy at home, and change in taste and preference in children, among others.⁴ Moreover, use of modern contraceptives among all women of reproductive age (15-49 years old) slightly improved from 23.5 percent in 2013 to 24.9 percent in 2017. The same trend was also seen among women who are currently married or in union from 37.6 percent to 40.4 percent in the same period. Recent data from the Department of Health's (DOH) Field Health Services Information System (FHSIS) also showed an increasing trend in the use of modern contraceptive among women from 23 percent in 2016 to 27.4 percent in 2019.⁵ However, there was a slight decrease in 2020 to 26.3 percent⁶ which may be due to the difficulties in accessing family planning service and commodities amid mobility restrictions during the pandemic.⁷

The FP programs undertook a paradigm shift to support the reproductive health needs of all women of reproductive age rather than focusing on married women. This means that adolescents and sexually active unmarried women have been included in the FP investments of the government. Moreover, to mitigate the possible impact of the COVID-19 pandemic, the government implemented several programs and policies to ensure unhampered delivery of FP services during the pandemic. These include:

1. issuance of DOH Department Memorandum 2020-0222 on "Guidelines on the continuous provision of FP services during Enhanced Community Quarantine and allotment of funds for the procurement of FP commodities";
2. rollout of the National Family Planning Communication Strategy 2020-2022;

¹ Ratio of persons in "dependent" ages (generally under age 15 and over age 64) to those in "economically productive" ages (15-64 years). It is sometimes divided into the old-age dependency (the ratio of people aged 65 and older to those aged 15-64 years) and the child dependency (ratio of people under 15 to those aged 15-64 years) (<https://psa.gov.ph/content/age-dependency-ratio-1>)

² Based on the 2015 Census of Population projections, as age and sex disaggregation from the 2020 Census of Population and Housing will only be available by June 2022.

³ PSA, Civil Registry and Vital Statistics. (<https://psa.gov.ph/vital-statistics>)

⁴ Lagasca, K. (2022). The Influence of COVID-19 on Filipinos Couples' Decision to Have Babies: Insights Using Rational Choice Theory. Presented during the 2022 Philippine Population Association Virtual Conference 30-31 March 2022.

⁵ Modern Contraceptive Prevalence rate generated by the Field Health Service Information System (FHSIS) is not considered a "true" prevalence but FP service statistics provided by public health facilities only, hence cannot be used as a stand-alone source for mCPR (2020 Responsible Parenthood and Reproductive Health Law Annual Report)

⁶ Based on the Family Planning Estimation Tool (FPET), a statistical modeling tool used by the United Nations Population Fund and was adopted through DOH Department Memorandum 2020-0336 (2020 Responsible Parenthood and Reproductive Health Law Annual Report)

⁷ DOH. 2020 Responsible Parenthood and Reproductive Health Law Accomplishment Report.

3. maximization of social media presence to continue discussion on FP; and
4. conduct of house-to-house visits to deliver FP commodities.

In June 2021, the President issued Executive Order No. 141 on “Adopting as a National Priority the Implementation of Measures to Address the Root Causes of the Rising Number of Teenage Pregnancies, and Mobilizing Government Agencies for the Purpose.” The measure will support initiatives to further decrease the number of births among women 15 to 19 years old. The Department of Education (DEPED), DOH, and the Commission on Population and Development (POPCOM) also launched the Convergence of the CSE and Adolescent Reproductive Health Program in 2021, which is part of the whole-of-government response to address the high level of adolescent pregnancies and other reproductive health issues among young people. Based on the NDHS, adolescent birth rate has decreased from 57.1 births per 1,000 women aged 15-19 years old in 2013 to 47.1 in 2017. More recent data showed that actual live births among the same age group have decreased by 23 percent from 2016 to 2020 (201,182 to 154,947).⁸

In the past few years before the pandemic, mortality rates had been decreasing, but these have since increased when the health crisis struck. Crude Death Rate⁹ (CDR) slightly increased from 5.6 in 2016 to 5.8 in 2019 per 1,000 population. During the pandemic in 2020, preliminary results from the PSA’s Civil Registry and Vital Statistics (CRVS) recorded a decrease in CDR, reverting to the 2016 rate of 5.6. While the number of registered deaths declined from 620,414 in 2019 to 613,936 in 2020, it increased by 39 percent the following year to 853,074 in 2021.¹⁰ Main causes of death for 2021 were ischemic heart disease, cerebrovascular diseases, and COVID-19 virus.¹¹ The number of maternal deaths increased from 1,483 in 2016 to 1,975 deaths in 2020.¹² On the other hand, mortality rates among under five years old decreased from 31,004 in 2016 to 21,833 in 2020.¹³

MAXIMIZING THE GAINS FROM DEMOGRAPHIC DIVIDEND

Accelerating the demographic transition is paired with maximizing the gains from the demographic dividend. As the country is already shifting its age structure, it is also important to look at the accomplishments in improving the quality of human capital, increasing youth and female labor force participation, and integrating population and development (POPDEV) data in development planning and programming.

The quality of future human capital is threatened. The pandemic may have reversed the gains already achieved in improving health and nutrition, and education outcomes. Prevalence of stunting among children remain high. The proportion of learners completing levels of education among Kinder, Grade 6,

⁸ PSA Civil Registry and Vital Statistics (<https://psa.gov.ph/vital-statistics>)

⁹ Crude death rate is the ratio of the number of deaths occurring within one year to the mid-year population expressed per 1,000 population. It is “crude” in the sense that all ages are represented in the rate and does not take into account the variations in risks of dying at particular ages. (<https://psa.gov.ph/content/crude-death-rate-cdr-2>)

¹⁰ PSA Civil Registry and Vital Statistics (<https://psa.gov.ph/vital-statistics>)

¹¹ PSA Press Release No. 2022-112 (29 March 2022): Causes of Death in the Philippines (Preliminary) January to December 2021. <https://psa.gov.ph/vital-statistics/id/166466>

¹² PSA Civil Registry and Vital Statistics (<https://psa.gov.ph/vital-statistics>)

¹³ Ibid

and Grades 7 to 12 drastically declined from 2018 to 2020 [See [Chapter 10](#)]. Female drop-out rate also increased from 4.4 in 2016 to 4.7 in 2020. Additionally, Technical-Vocational Education and Training (TVET) certification among the youth (15-24 years old) in 2021 was at 91.4 percent, slightly lower than the 92 percent target for that year.¹⁴ The decline in education outcomes is due to limitations in face-to-face interactions, as well as guidelines issued by the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) restricting the movement of those below 21 years old and seniors 60 years old and above.

Youth not in education, employment or training decreased and female labor force participation improved, indicating that more youth and women were engaging in learning or productive activities. The share of youth not in education, employment, or training declined from 2020 to 2021 (January to October), while the female labor force participation rate notably increased in the same period as a result of more online jobs and entrepreneurship opportunities, and the wide implementation of flexible work arrangements [See [Chapter 10](#)]. Both indicators are expected to remain within target for 2021 given the resumption of classes in September and as COVID-19 restrictions are further eased across the country, prompting more opportunities for employment.

Integration of POPDEV in local development planning. POPCOM conducted several activities to guide some local government units (LGUs) in developing their socioeconomic profiles. The agency helped some LGUs maintain a migration information system using the Registry of Barangay Inhabitants and Migrants (RBIM) to track population movement patterns in their localities. Moreover, POPCOM developed a Demographic Vulnerability Tool (DVT) that uses population density, household size, type of housing unit, and number of the most vulnerable population, particularly the older persons to ascertain communities' vulnerability to COVID-19. The DOH, the Department of the Interior and Local Government (DILG), NEDA and POPCOM also issued Joint Memorandum Circular 2020-01 to encourage local chief executives to use the DVT Tables in planning, implementing, and monitoring pandemic response at the community level. The DVT was cascaded to Regions I (Ilocos Region), II (Cagayan Valley), III (Central Luzon), IV-A (CALABARZON), IV-B (MIMAROPA), V (Bicol Region), VI (Western Visayas), VII (Central Visayas), NCR, and CAR.

¹⁴ Technical Education and Skills Development Authority Planning Office

IN FOCUS: MICA ALVAREZ, TEENAGE MOM-TO-BE AND ASPIRING ONLINE ENTREPRENEUR



Mica Alvarez is a pregnant 15-year-old junior high school student. She is the second of the four children in the Alvarez family. Her father is a tricycle driver, and her mother is a homemaker.

Mica wants access to quality and appropriate healthcare for herself and her child. She also wants to learn about family planning to be able to space possible future pregnancies. To support her child, Mica seeks to continue her education through the Alternative Learning System after giving birth and be an IT professional in the future. In addition, she is also an aspiring online “mompreneur” with a small business to support her baby and her family’s needs.

However, she has several frustrations. For instance, she is not able to visit health facilities for regular prenatal check-ups, which can affect the infant’s health. Mica also wants to return to school, but distance learning is hard, as they do not have enough resources like gadgets and internet connection. She is also helping her mother take care of her other siblings. In addition, they do not have enough savings or capital to start a small business.

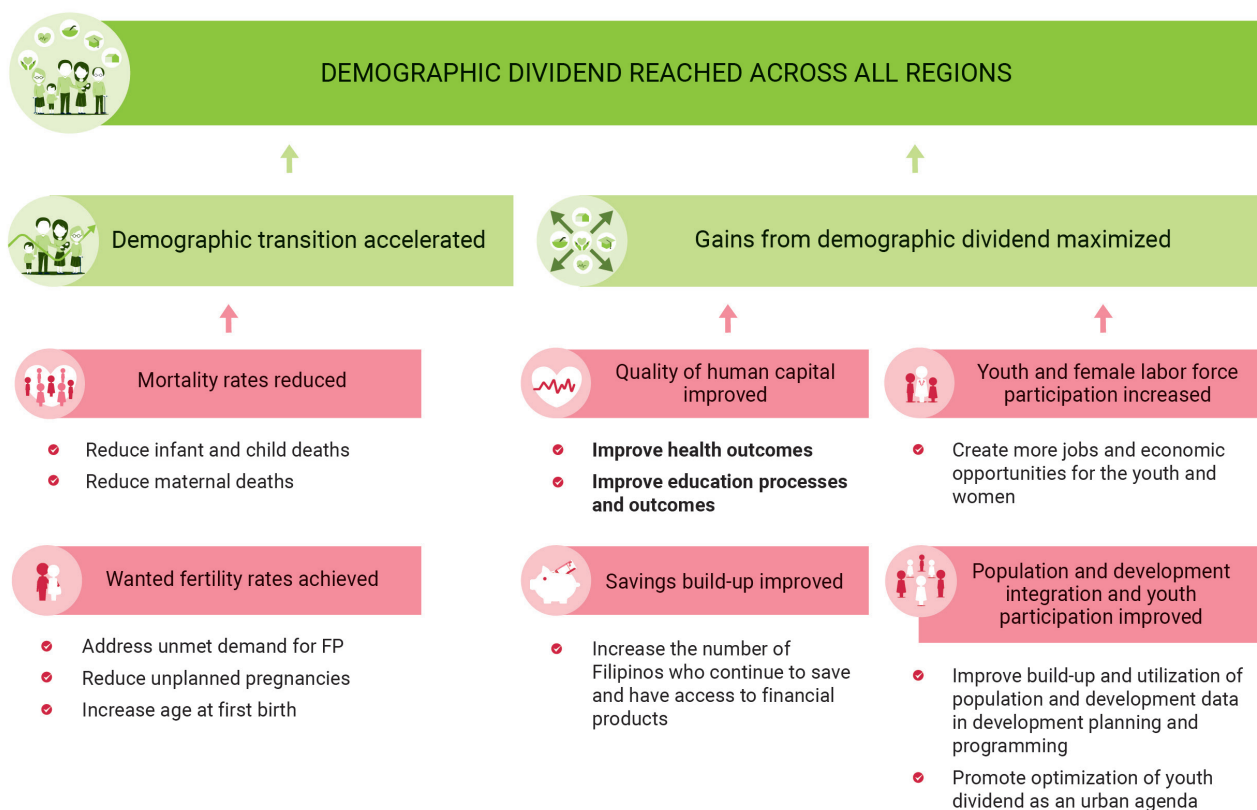
STRATEGIC FRAMEWORK

Early pregnancy puts young girls like Mica in a very disadvantageous situation compromising her opportunity to continue education, find decent employment, and achieve her full potential. Adolescents like her represent the country's future workforce. Thus, it is imperative that the government implement supportive strategies adapted to the new normal to enable them to overcome their situation and contribute to the country's pursuit of reaching the demographic dividend.

The overall goal for the Chapter is to reach the demographic dividend across all regions. This supports the *Patuloy na Pag-unlad* or Increasing Growth Potential pillar of the Philippine Development Plan's (PDP) overall framework.

To achieve this, the demographic transition will be accelerated through reducing mortality rates and achieving wanted fertility rates. Moreover, the government will maximize gains from the demographic dividend by improving the quality of our human capital and increasing labor force participation especially among the youth like Mica. Further, savings build-up will be improved, including POPDEV integration in development planning and programming and youth participation. The Updated PDP 2017-2022 has identified the broad strategies to achieve the Chapter's outcome. Additional strategies will be pursued to sustain the gains and recover from the impact of the pandemic.

Figure 13.1 Strategic Framework to Reach for Demographic Dividend across All Regions



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO ACCELERATE THE DEMOGRAPHIC TRANSITION ACROSS ALL REGIONS

Achievement of wanted fertility rates

The implementation of the RPRH Law, specifically, the provisions on FP and adolescent health, will be strengthened. This includes the development of a Multi-sectoral Strategic Plan for RPRH.¹⁵ Other specific strategies include the following:

Intensify demand generation and advocacy activities including those for adolescents. Market-segmented demand-generation strategies at the national and subnational levels will be strengthened. These include post-partum FP counseling, comprehensive community engagement, and use of mass and social media campaigns with youth-focused interventions and messages. The DOH, POPCOM, and DEPED will also develop a policy on Comprehensive Sexuality Education and Adolescent Reproductive Health (CSE-ARH).

Strengthen provision of FP services, adolescent sexual and reproductive health (ASRH) commodities and services. The increase in demand for FP and ASRH services will be complemented by expanding FP service delivery through: (a) scaling-up of FP in hospitals, expanding post-partum FP use; (b) scaling-up of FP outreach missions; (c) engaging civil society organizations and private FP/reproductive health (RH) program providers; and (d) integrating FP in other RH programs (e.g., maternal and adolescent health programs).

Create a supportive environment and enable leadership for FP programs. The implementation of FP demand generation and service delivery activities will not be possible without the necessary supportive environment and proper leadership. As such, the DOH, together with partner agencies and other stakeholders, will:

1. fully implement the collaborative framework between DOH and POPCOM on the implementation of the National Program on Population and Family Planning¹⁶;
2. formulate a comprehensive action plan towards the prevention of adolescent pregnancies¹⁷;
3. augment human resources for health to deliver services;
4. institute appropriate monitoring and evaluation mechanisms to measure the progress of program implementation;

¹⁵ As recommended by the PIDS Discussion Paper Series No. 2021-09 (February 2021). An Assessment of National-Level Governance of the Philippines' Responsible Parenthood and Reproductive Health Law: Trends and Ways Forward.

¹⁶ Including strengthening the delineation of roles and complementation in implementing the National Program on Population and Family Planning as identified in the. DOH 2020 Responsible Parenthood and Reproductive Health Law Accomplishment Report. (<https://doh.gov.ph/sites/default/files/publications/7th%20Annual%20Report%20on%20the%20Implementation%20of%20Responsible%20Parenting%20and%20Reproductive%20Health%20Act%20of%202012%20%282020%29%2007052021.pdf>)

¹⁷ Pursuant to Executive Order No. 141 s. 2021 "Adopting as a National Priority the Implementation of Measures to Address the Root Causes of the Rising Number of Teenage Pregnancies, and Mobilizing Government Agencies for the Purpose" <https://www.officialgazette.gov.ph/2021/06/25/executive-order-no-141-s-2021/>

5. build capacity of public and private sector providers (i.e., Family Planning Competency-Based Training); and
6. improve FP commodity security and supply chain management.

As we move towards COVID-19 being endemic to the country, new strategies, such as the adoption of digital platforms, will be implemented. There will be continuous provision of FP/RH services through the issuance of necessary policies (i.e., DOH Department Memorandum 2020-0222),¹⁸ maximization of telemedicine platforms, and expansion of client-centered approach to service delivery through FP on Wheels, FP *Ayuda* Express (e.g., door-to-door/home-based, courier, transport network services)¹⁹. Digital platforms will also be used for information and education campaigns on FP and teenage pregnancy prevention. The use of FP Estimation Tool will also be institutionalized to lessen data biases and challenges with data quality,²⁰ among others.

Reduction in mortality rates

Fully implement the Universal Health Care (UHC) Act. To maintain the downward trend in mortality rates, including COVID-19 deaths, full implementation of the UHC Act will be pursued. Survival of the youngest segment of the population, neonates, infants, and under-five children, must be ensured through the provision of appropriate nutrition and health services for the first 1,000 days of life. There will be appropriate care for mothers during pregnancy, labor, and childbirth; essential care for the newborn; optimal infant and young childcare and nutrition; immunization; and vitamin supplementation for children, among others. Local health systems will continue to be strengthened, specifically the primary care provider networks.

With the implementation of the Mandanas ruling, there will be adequate local investment to improve access to quality health services and resilience to any threats and health emergencies. Continuous development and implementation of Social and Behavior Change Communication campaigns to increase vaccine acceptance, along with adherence to Minimum Public Health Standards and social distancing measures, will help prevent COVID-19 deaths. The LGUs will also be capacitated to increase COVID-19 vaccination coverage (e.g., vaccination of eligible children and additional shots for eligible population) [See [Chapter 10](#)].

¹⁸ DOH Guidelines on the Continuous Provision of Family Planning Services during the Enhanced Community Quarantine following the COVID-19 Pandemic

¹⁹ Identified as best practice in the DOH 2020 Responsible Parenthood and Reproductive Health Law Accomplishment Report

²⁰ As identified in the DOH 2020 Responsible Parenthood and Reproductive Health Law Accomplishment Report

TO MAXIMIZE GAINS FROM THE DEMOGRAPHIC DIVIDEND

As the demographic transition is not enough to reap the rewards of the dividend, the following strategies that will maximize its gains need to be implemented:

Improvement of the quality of human capital

Intensify implementation of health programs and widen access to education [See *Chapter 10*].

Increase in youth and female labor force participation

Provide supportive mechanisms to decrease economically unproductive youth and increase female participation in the labor force [See *Chapter 10*].

POPDEV integration in development planning and programming

Identify and sustain new methods of collecting POPDEV data and related research. The PSA, through the Philippine Statistical Development Program 2018-2023, identified several new programs and activities.²¹ These include: (a) developing a handbook or manual to guide the operationalization of a unified migration data system to support evidence-based government programs and policy formulations; and (b) studying the establishment of population registers at the LGU level (e.g., Local Migration Information System). Moreover, POPDEV-related studies will be designed, conducted, and disseminated both nationally and regionally to serve as additional resource for planning and programming.

Capacitate national government agencies (NGAs) and LGUs in setting-up, processing, analyzing, and utilizing demographic and socioeconomic database for planning and policy development.²²

Capacity building activities may cover topics such as demographic data appreciation and analysis, and establishment and utilization of Registry of Barangay Inhabitants and Migrants, among others. Additional planning information will also be provided to national and local planners on population projections and the consequent level of social and economic services needed in different areas. This will include early-warning systems on expected dysfunctions following population increases, decreases, or age structure changes²³ due to changes in mortality and fertility patterns or migration. Coordination and collaboration between the LGUs and the NGAs will also be intensified upon implementation of the devolution transition plans of the sector.

²¹ <https://psa.gov.ph/philippine-statistical-system/psdp>

²² As included in the Commission on Population and Development's, Devolution Transition Plan 2022-2024

²³ Commission on Population and Development, Devolution Transition Plan 2022-2024, 2021. Matrix on the Unbundling of PPAs of the NGAs to Different Levels of Government

RESULTS MATRIX

Table 13.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL			
		2020	2021	2022	LATEST AVAILABLE DATA (Year)	2019	2020	2021
Chapter Outcome: Demographic dividend across all regions reached								
Age-dependency ratio decreased	57.4 (2016)	Decreasing	Decreasing	Decreasing	-	56.4	-	55.7
Sub-chapter Outcome 1: Demographic transition accelerated								
Crude death rate decreased (per 1,000 population)	5.6 (2016)	Decreasing	Decreasing	Decreasing	-	5.8	5.6	-
Maternal mortality ratio (per 100,000 live births) decreased [See Chapter 10]*	95 (2016)	None	None	108	-	-	105	-
Under-five mortality rate (per 1,000 live births) decreased [See Chapter 10]*	31.0 (2013)	None	None	22.0	27.0 (2017)	-	-	-
Adolescent birth rate (aged 15-19 years) (per 1,000 women in that age group) decreased	57.1 (2013)	None	None	37.0	47.0 (2017)	-	-	-
Proportion of women who are using modern contraceptive methods increased (%) [See Chapter 10]*								
a) All women of reproductive age (15-49 years old)	23.5 (2013)	28.0	29.0	30.0	25.0 (2017)	-	-	-
b) All women of reproductive age (15-49 years old) who are currently married or in union	37.6 (2013)	None	62.0	65.0	40.4 (2017)	-	-	-
Proportion of currently married women of reproductive age (15-49 years old) who have unmet need for modern FP (%) decreased	35.0 (2013)	None	None	5.0	30.6 (2017)	-	-	-
Sub-chapter Outcome 2: Gains from the demographic dividend maximized								
Life expectancy at birth increased (years) [See Chapter 10]*								
Male	69.6 (2015-2022)	None	None	71.3	-	-	69.6	69.6
Female	75.9 (2015-2022)	None	None	77.5	-	-	75.9	75.9

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL			
		2020	2021	2022	LATEST AVAILABLE DATA (Year)	2019	2020	2021
Prevalence of stunting among children under 5 decreased (%) [See Chapter 10]*	33.4 (2015)	None	29.8	28.8	-	29.6 (2018-2019)	-	-
Mean years of schooling [See Chapter 10]*	10.0 (2018)	None	None	11.3	-	-	9.9	9.9 (Q1)
Proportion of learners achieving at least nearly proficient level in National Achievement Test increased (%) [See Chapter 10]*								
Grade 6	16.0 (2018)	26.0	34.0	44.0	-	-	-	-
Grade 10	34.0 (2018)	43.0	52.0	61.0	-	-	-	-
Grade 12	14.0 (2018)	13.0	19.0	28.0	-	-	-	-
Proportion of learners completing levels of education (completion rate) increased (%) [See Chapter 10]*								
Kinder to Grade 6	97.0 (2019)	97.0	97.0	98.0	-	97.0	79.0	-
Grade 7 to 12	77.0 (2019)	82.0	83.0	84.0	-	77.0	69.0	-
Female drop-out rate (school leaver) (%)								
Junior High	4.43 (2016)	Decreasing	Decreasing	Decreasing	-	-	4.7	-
Senior High	2.89 (2018)	Decreasing	Decreasing	Decreasing	-	-	-	-
Certification rate of TVET (ages 15-24)	91.3 (2017)	92.0	92.0	92.0	-	92.8	91.3	-
Percentage of youth not in employment or education (%) decreased [See Chapter 10]*	23.0 (2015)	17.5-19.5	18.0 – 20.0	17.0 – 19.0	-	18.6	18.5	16.8 (Jan-Oct)
Labor force participation rate of women increased (%) [See Chapter 10]*	50.1 (2015)	50.5	48.0 – 50.5	48.0 – 50.5	-	47.6	45.8	51.3

Note: 2020 targets were set prior to the onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

CHAPTER 14

Vigorously Advancing Science, Technology, and Innovation

The COVID-19 pandemic has made leaders, policy makers, and various stakeholders think carefully about what makes healthy and resilient communities. The government carried out calibrated policies to respond to the current health crisis while balancing fiscal priorities to address the existing challenges of poverty, social inequality, food insecurity and climate change, among others. On the Science, Technology, and Innovation (STI) front, setbacks were further aggravated by the unequal effects of the crisis on research and development, innovation (R&DI) across sectors largely dictated by the degree of openness and agility of the R&DI ecosystems to respond to the changes. The postponement of professional licensure examinations—particularly in the fields of Science, Technology, Engineering, Arts and Mathematics (STEAM)—created delays in hiring additional workforce to the sector. Despite these challenges, the reforms that were initiated before the pandemic served as a solid foundation for strengthened collaboration of STI actors.

On the upside, the crisis prompted the accelerated adoption of digital tools and techniques, which enabled government, businesses and schools to continue their operations. However, the “digital gap” remains. Thus, there is a need to accelerate infrastructure investments and improve digital connectivity to serve the unserved and the underserved in peripheral areas. There is also an urgent need to formulate innovative solutions and deploy the roll-out of existing technologies that will help reduce the negative effects of the pandemic.

ASSESSMENT

In general, the country’s performance in achieving the desired outcomes for the STI sector slightly improved. The latest report shows that 13 out of 30 targets with available data have been surpassed, while 6 out of 30 targets with available data are expected to be achieved.

SCALE-UP TECHNOLOGY ADOPTION

Intellectual property products expenditure has been increasing. The intellectual property products expenditure as a percentage of Gross Domestic Product (GDP) stood at 0.8 percent in 2021, which is higher than the previous year’s 0.7 percent. This indicates that the country is placing more investments in activities that increase the stock of knowledge or lead to the creation of new products, processes, services, among others.

There is an improvement in terms of creating new technologies but there is a lag in terms of improving existing ones. In 2021, there were 44 new patents granted, a number that is higher than the

target of 30 in the said year. On the other hand, there were 4 patents filed under the patent cooperation treaty (PCT) in 2021, which is higher than the target of 3 for 2021. In the same year, there were 815 new utility models (UMs) registered, which surpassed the target of 584 for 2021. Meanwhile, only 211 new industrial designs (IDs) have been registered in 2021, which is below the target of 494 for that year.

STI-related investments remained low despite some improvements. The country's percentile rank in the Global Innovation Index (GII) – Investment Index in 2021 was 23, slightly behind the target of 24 for the said year. In the same year, there were 81 new Technology Business Incubators (TBI) established which was below the target of 230 for the said year as resources were channeled towards pandemic response. On the upside, there were 126 innovation hubs instituted for the period 2017 to 2021, which exceeded the target of 108 for the same period. As targeted, investments in STI-based startups and spin-offs significantly increased. The Department of Science and Technology's (DOST) funding and investments for STI-based startups and spin-offs grew from PHP43.4 million in 2020 to PHP185.5 million in 2021.

ACCELERATE INNOVATION

The Philippine's GII ranking improved though still below target. The country progressed in terms of GII – Knowledge and Technology Outputs, placing itself on the top 18 percentile rank in 2021 and performing above the target of top 33 percent in the said year. On the other hand, the country recorded being on the top 38 in Overall GII and top 49 percentile ranks in GII – Creative Outputs, both below the set targets of top 35 and top 42 percentile ranks, respectively.

STEM enrollees and Balik Scientists were below set targets. On human capital, there were 194,499 graduates from Science, Technology, Engineering and Mathematics (STEM) fields in 2020, higher than the set target of 50,000 for 2020. However, the country underperformed in terms of STEM enrollees as there were only 1.3 million recorded in 2020, below the 1.7 million target for the same year. Amid travel and mobility restrictions, the government has engaged 33 Balik Scientists as of September 2021, which fell short of the 101 target for the said year.

The research and development (R&D) expenditure as a percentage of GDP also improved to 0.3 percent in 2018, above the target of 0.2 percent for the same year. In addition, the number of researchers per million population is 356 in 2018, which is higher than the target of 280 for the said year.¹

Collaboration among STI actors improved. With its percentile ranking of top 47 in the 2021 GII – University and Industry, the country surpassed its target of top 49 percentile rank for the said year. Moreover, there were 100 multi-stakeholder partnerships among Higher Education Institutions (HEIs), government, and/or private sector firms developed through Regional Inclusive Innovation Centers (RIICs) in 2021, which was in line with the target for the year.

¹ Data is from DOST S&T Compendium, which is published every 3 years. The latest 2018 report was released in November 2021. The 2021 edition will likely be released in 2024.

IN FOCUS: JOSEPH BRYAN SANTOS, ASPIRING MECHANICAL ENGINEER, INNOVATOR, AND EXPORTER



Joseph Bryan Santos is a 23-year-old graduate of BS Mechanical Engineering working as a factory maintenance personnel in a private company. He dreams of becoming a licensed mechanical engineer, but the professional licensure exam was postponed due to pandemic-related restrictions implemented by the government.

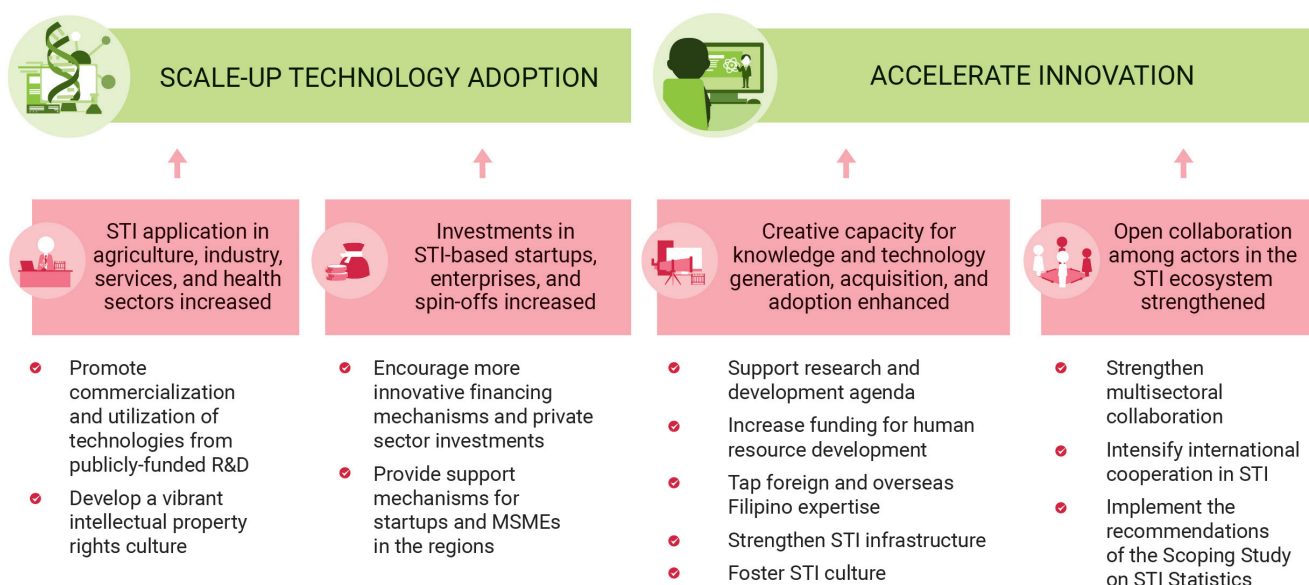
Since he was a young boy, Joseph has been innovating products that he thought would respond to emerging market demands. He hopes to sell his products domestically and overseas and secure patents for his original designs. Joseph also aspires to establish his own innovation company someday. However, he faces funding constraints. He has limited awareness of any government support that he may avail of to finance and develop new products. Joseph also has low trust in the country's intellectual property laws, which makes him fear the disclosure of his concepts and past inventions. Consequently, he plans to secure his patents overseas. Further, poor internet connectivity affects his ability to contact and collaborate with potential partners and limits his access to information. For now, Joseph continues to work part-time to support his family while also reviewing for the licensure examination.

STRATEGIC FRAMEWORK

Joseph's situation and aspirations reflect the lives of many similar individuals who need the enabling environment to increase their opportunities, reach their full potential, and contribute productively to the betterment of society. To help him, it is imperative that there should be a boost in investments inflows, improvement in the educational system, advancement in the ease of doing business, upgrade in good governance, and additions to infrastructure projects.

Specifically, the strategies for the STI sector address the following challenges and constraints that likely Joseph experiences: 1) limited access to finance for budding inventors and entrepreneurs; 2) delays or lags in achieving human capital outcomes and targets; 3) lack of support or low awareness of government interventions to help generate new research and creative outputs; 4) low trust as well as low awareness on the country's Intellectual Property (IP) laws; and 5) the digital divide.

Figure 14.1 Strategic Framework to Vigorously Advance Science, Technology, and Innovation



STRATEGIES

TO INCREASE STI APPLICATION IN AGRICULTURE, INDUSTRY, SERVICES, AND HEALTH SECTORS

Scale-up deployment of public-funded technologies that are ready for use or viable for commercialization to help cope with the pandemic. Given the demand for innovative solutions, existing public-funded technologies must be further utilized. In addition, the Shared Service Facilities (SSFs) and innovation hubs will be used for mass production of essential goods such as facemasks, medicines and patients monitoring systems. The identification of high-risk areas for COVID-19 with the aid of digital technologies will be further deployed for national and local government use. [See [Chapter 10](#) for further details]

Continue expansion of the network of Innovation and Technology Support Offices (ITSOs) or patent libraries. Moreover, the Intellectual Property Office of the Philippines (IPOPHL) will establish more satellite offices in the regions to help increase intellectual property rights (IPR) applications throughout the country.

Intensify the IP awareness, education and information initiative campaign for MSMEs in the region. This will be done through basic orientation seminars, one-on-one consultations/IP clinics, patent drafting seminars, and capability building seminar/workshops, among others. Furthermore, the government will maximize the use of Information and Communications Technology (ICT) and online platforms in the conduct of IPR awareness campaigns.

Streamline processes for IPR applications/registrations. In addition, IPOPHL will strengthen its partnership with appropriate government agencies and units that are offering innovation support programs to ensure that many of the innovation outputs will have intellectual property protection and to reduce IPR application costs and turn-around-time. [See [Chapters 5 and 9](#)]

TO INCREASE INVESTMENTS IN STI-BASED STARTUPS, ENTERPRISES, AND SPIN-OFFS

Scale-up the implementation of the Philippine Startup Development Program. This is to provide a comprehensive support to startups and startup enablers from capacity building to helping them conduct their product launch, commercialization, and scaling-up of operations, among others.

Create a conducive environment for the proliferation of private ventures such as those in the space programs of the country. The existence of more private ventures will help R&DI activities to expand in unfamiliar areas, particularly in novel and emerging ones, where government expertise and/or resources are diminished.

Expand the innovation/business support mechanisms for existing and budding entrepreneurs.

This will be done through the establishment of more innovation centers and business incubators (e.g., TBIs, innovation centers, Niche Centers in the Regions or NICERs) across the country, particularly where there is demand. Some services of these innovation support mechanisms will also be offered online to reach more intended beneficiaries. Further, the integration of these services is encouraged through the establishment of one-stop shops, or utilization of a fully-online, no-stop shop service delivery using the Central Business Portal. [See [Chapter 9](#)]

Support the expansion of the Regional Inclusive Innovation Centers (RIIC) and strengthen their linkages with other innovation support mechanisms.

Moreover, the progress of the RIICs will be monitored and its linkage with existing TBIs, innovation centers and NICERs will be expanded to ensure accomplishment of industry targets. [See [Chapter 9](#)]

Operationalize the Filipinnovation e-community portal, which will serve as the repository of government and academic research and innovation outputs.

Through the National Innovation Council (NIC), a one portal system will be deployed to regularly monitor various innovation projects and activities in the country, including sharing of success stories and best practices for public-funded STI outputs. Succeeding iterations of the portal will offer online services with interactive features that will allow the public to access services or file applications for scholarships or other services and programs online, including grants, and financial assistance.

Implement the Strategic Investment Priority Plan (SIPP) to encourage the establishment of highly-innovative industries.

Incentives corresponding to the SIPP framework will be provided to highly-innovative industries that will generate positive spill-over effects to the economy. In particular, Tier 3 of the SIPP may avail of incentives under the Corporate Recovery and Tax Incentives for Enterprises (CREATE) law, consisting of R&D, generation of new knowledge and IP, commercialization of patents, industrial designs, copyrights, utility models, highly technical manufacturing, and others. (See [Chapter 9](#))

Implement and monitor outputs of the Science for Change Program (S4CP).

The program will be implemented and monitored throughout the country covering the 4 sub-program components, namely: (a) Niche Centers in the Regions for R&D (NICER) Program; (b) R&D Leadership (RDLead) Program; (c) Collaborative R&D to Leverage PH Economy (CRADLE) for RDIs and Industry Program; and (d) Business Innovation through S&T (BIST) for Industry Program. These programs are designed to be demand-driven, and responsive to the needs of the technology-users, businesses, and communities. The S4CP also encourages government-academe-industry collaboration that will lead to the generation of significant value added through improved processes and/or enhanced products.

Strengthen implementation of government interventions to facilitate digitalization and innovation of MSMEs.

These programs include the Small Enterprise Technology Upgrading Program (SET-UP 4.0), OneExpert, OneLab, Shared Services Facilities (SSFs), and Technology Business Incubation—all designed to help MSMEs to improve their processes through automation and adoption of other appropriate technologies. [See [Chapter 9](#)]

TO ENHANCE CREATIVE CAPACITY FOR KNOWLEDGE AND TECHNOLOGY GENERATION, ACQUISITION, AND ADOPTION

Fast-track the formulation of the National Innovation Agenda and Strategy Document (NIASD).

The NIASD will establish the country's vision and long-term goals for innovation, consistent with global and regional commitments and with AmBisyon Natin 2040 and the PDP. The said document will consist of strategies and action plans to improve innovation governance, such as identifying and addressing the internal processes of government agencies involved in the generation of R&D outputs, among others.

Conduct studies and collaborate on the use of hydrogen fuel for the power and transport sectors.

The Department of Energy (DOE) and the DOST, in collaboration with relevant stakeholders, will study the potential application of hydrogen fuel for the power generation and transportation sectors. In addition, the government will pursue collaborations and partnerships to bring in or incentivize the use of renewable technologies under the CREATE law, particularly in carbon-intensive industries (e.g., energy, transportation, tourism, etc.) to reduce carbon footprint. [See [Chapters 9 and 20](#)]

Strengthen coordination with Research and Development Institutes (RDIs) and HEIs in implementing the Agri-Aqua Technology Business Incubation (ATBI) Program. The program serves as a convergence zone of the DOST-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development's (DOST-PCAARRD) efforts and bridge support to realize the agribusiness potential of its many R&D outputs.

Support the implementation of the Artificial Intelligence (AI) Roadmap. Applications of advanced technologies, such as AI on electronics, communication, smart cities, transport, infrastructure, disaster risk reduction, agriculture, health, and data analytics, among others, will be supported. Continuous investments on national infrastructure, capacity building, research and data, and policies and stakeholders on AI will be prioritized to reduce economic costs and improve service delivery of both the public and private sector. [See [Chapters 9 and 10](#)]

Utilize space-based technologies in pandemic planning, monitoring, and operation. The use of satellite imagery, geographic information system, global positioning system, etc., will be utilized in risk mapping and forecasting, digital contract tracing, and vaccine deployment, among others. Consequently, data warehousing and data protection infrastructure must also be improved.

Continue the conduct of professional licensure examinations through alternative modes of delivery. For this purpose, the Professional Regulation Commission (PRC) and the Department of Information and Communications Technology (DICT) will endeavor to ensure the successful conduct of various professional licensure exams, taking off from best practices of other countries in offering digital modes while ensuring utmost security and minimizing risks (e.g., e-exams with remote proctoring). In addition, the government will encourage digitalization of review center operations and provision of online review platforms to serve the new graduates as well as potential examinees who were affected by the delays caused by the pandemic. [See [Chapter 10](#)]

Intensify promotion of the Accelerate the Science and Technology Human Resource Development Program (ASTHRDP) to encourage more scholars to pursue Master's and Doctoral programs in priority S&T areas, such as in agriculture, biological science, biotechnology, environmental science, fisheries and marine, health and pharmaceutical, ICT, materials science, among others. Furthermore, the government will employ and promote “citizen science”² as a strategy to encourage the public participation and collaboration in scientific research to increase scientific knowledge, intensify data generation, sharing of technologies, and nurture the public's interest in STI, among others.

Promote the online application and remote working arrangement for short-term engagements under the Balik Scientist Program to increase the participation of Balik Scientists despite the challenges brought by the pandemic. [See [Chapter 21](#) for further details]

Promote ICT-literacy and build a wider base of data science, futures thinking, and other related expertise in the country. Data science subjects in the education curriculum and cross-disciplinary programs will be institutionalized. Furthermore, innovation skills will be integrated in the basic curriculum, including futures thinking, design thinking, and systems thinking to address the current generation's challenges (e.g., poverty, climate change, etc.). The training on DepEd personnel on how to manage and use AI, machine learning and analytics for creating predictive models to measure student readiness, achievement, literacy level, and work readiness under different Senior High School (SHS) tracks will be expanded. [See [Chapters 9 and 10](#)]

Enable technology transfer and attract productive investments in R&DI. Exchange programs for Filipino students will be carried out for better appreciation on how innovation is being done in other countries and address societal problems from a global perspective. Initiatives to relax foreign equity restrictions/regulations in critical sectors of the economy will also be pursued to attract productive investments in R&DI. [See [Chapters 9 and 15](#)]

TO STRENGTHEN OPEN COLLABORATION AMONG ACTORS IN THE STI ECOSYSTEM

Fully operationalize the NIC and ensure that its policies are cascaded to stakeholders, especially the Regional Research, Development and Innovation Committees (RRDICs) of the various Regional Development Councils (RDCs). The NIC will steer the whole-of-government efforts to address existing STI challenges. In turn, the RRDICs and RDCs will help ensure a whole-of-society involvement in addressing these challenges.

² Citizen science is a growing global movement fostering the participation of volunteers without formal scientific training in scientific research. Examples range from volunteer flood monitoring to participatory digital humanities to Do-it-Yourself biology research or participatory health research. Across these, citizen science is notable for enabling participation throughout various stages in research and innovation processes that are possible in virtually all scientific disciplines. As such, citizen science is an essential building block for advancing science, society, and policy. (Written input by the CSGP Citizen Science & Open Science Community of Practice to the UNESCO Recommendation on Open Science, Global Citizen Science perspectives on Open Science, 2020).

Employ a whole-of-government approach in building the Regional Inclusive Innovation Centers (RIIC) as the regional platform for collaborative programs to generate product, improve processes, or provide innovative services that are deemed important to achieve the goal of inclusive growth and development across regions.³

Continue the collaboration between the DOST and the Department of National Defense (DND) to generate new technologies on mechatronics and robotics to further mount the existing and future naval assets of the Philippine Navy.

Sustain the conduct of hackathons for different areas of applications. The government will continue to support the conduct of hackathons that intend to create new products and solutions to specific issues (e.g., health emergency applications, mobile apps, maritime applications, public transport solutions, education, and disaster response).

Pursue international cooperation particularly on areas that are deemed relevant to the needs of the country, which include vaccine development, climate change research, satellite technology application and AI adoption, among others.

Strengthen monitoring of STI outputs and outcomes. The Philippine Statistics Authority (PSA) Board Resolution No. 10 s. 2021 which endorsed the adoption of the Statistical Framework for the STI Sector will be aggressively implemented. The said framework systematizes the development of STI statistics in the country. It will undergo continuous process improvement in response to future and emerging developments.

³ In relation to this, a single uniform, interoperable, and systematic record or directory of all available innovations, accelerators, and incubators nationwide will be created to allow various entrepreneurs, angel investors, innovators to have an open and collaborative partnership platform for communication. All RIICs and end-users are encouraged to have access to the information and can be updated by the users on a timely and relevant basis. This will also encourage more consultations among stakeholders and allow open and more inclusive innovation communities (e.g., grassroots, social enterprises, etc.) to flourish.

RESULTS MATRIX

Table 14.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome 1: Scale-up technology adoption							
Proportion of intellectual property products expenditures to GDP increased (%)	0.46 (2016)	Increasing	Increasing	Increasing	0.729%	0.728%	0.779%
Subsector Outcome 1.1: STI application in agriculture, industry, services, and health sectors increased							
Number of Filipino patents granted increased	30 (2016)	38	30	38	30	23	44
Number of Filipino utility models registered increased	552 (2016)	727	584	750	763	942	815
Number of Filipino industrial designs registered increased	508 (2016)	627	494	622	636	337	211
Number of Filipino patents filed increased	245 (2016)	348	353	394	336	411	452
Number of Filipino utility models filed increased	1,100 (2016)	1,862	1,380	1,848	1,861	1,221	1,536
Number of Filipino industrial designs filed increased	959 (2016)	910	675	873	828	583	619
Number of Filipino patents filed under Patent Cooperation Treaty (PCT) increased	2 (2018)	3	3	4	3	7	4
Subsector Outcome 1.2: Investments in STI-based startups, enterprises, and spin-offs increased							
Global Innovation Index (GII) – Investment Index percentile rank improved	17 (2016)	22	24	25	8	35	23
Number of TBI graduates increased (i.e., enterprises and spin-offs) (cumulative)	41 (2016)	Increasing	230	270	72	80	81
Number of innovation hubs increased (e.g., TBIs, innovation centers, niche centers, etc.)	23 (2016)	63	108	128	84	99	126
Sector Outcome 2: Accelerate Innovation							
Overall Global Innovation Index (GII) rank improved	Top 58% (2016)	Top 38%	Top 35%	Top 33%	N/A	Top 38%	Top 38%
GII – Knowledge and Technology Outputs percentile rank improved	66 (2016)	Top 33%	Top 33%	Top 33%	Top 24%	Top 19%	Top 18%

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Subsector Outcome 2.1: Creative capacity for knowledge and technology generation, acquisition, and adoption enhanced							
R&D expenditure as a proportion of GDP increased (in percent, incremental)	0.16 (2015)	0.35	0.40	0.50	Awaiting Results of R&D Survey	Awaiting Results of R&D Survey	Awaiting Results of R&D Survey
Number of researchers per million population increased	200 (2015)	290	295	300	Yet to be provided	Yet to be provided	Yet to be provided
Number of STEM enrollees in HEIs increased	1.29 (AY 2015-2016)	1.7	1.59	2.03	1.13	1.3	Yet to be provided
Number of STEM graduates in HEIs increased	183,000 (AY 2015-2016)	50,000	113,000	318,000	Yet to be provided	194,499	Yet to be provided
Number of Balik Scientists engaged increased	25 (2016)	46	101	151	45	34	33
Subsector Outcome 2.2: Open collaboration among actors in the STI ecosystem strengthened							
GII University-Industry Collaboration percentile rank improved	52.5 (2016)	Top 49%	Top 49%	Top 49%	Top 20%	Top 79%	Top 47%
Number of collaborations between HEIs and industries increased	70 (2014)	120	130	150	Yet to be provided	214	Yet to be provided
Number of collaborations between HEIs and government increased (National Government Agencies [NGAs] and LGUs)	300 (2015)	450	480	500	Yet to be provided	301	Yet to be provided
Number of STI-related international cooperation of HEIs increased	40 (2015)	80	95	100	Yet to be provided	151	Yet to be provided

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

CHAPTER 15

Ensuring Sound Macroeconomic Policy

The Philippine economy partially recovered in 2021 from the 9.5 percent contraction induced by the COVID-19 pandemic in 2020. The national government (NG) deficit and debt ratios remained manageable despite elevated levels. Meanwhile, headline inflation picked up in 2021 due to the African Swine Fever (ASF), rising global oil prices, and pandemic-induced supply disruptions. In contrast, the financial system remained resilient, and financial inclusion improved amidst the digital divide. The external sector is also expected to recover with the resumption of economic activities and resurgence of demand from trade partners.

To support economic recovery and manage emerging risks, fiscal policy will be made more responsive, resilient and flexible during emergencies. Financial inclusion will also be enhanced by fostering use cases of the national ID program in the financial sector, and strengthening microfinance institutions (MFI). Meanwhile, the country is poised to take full advantage of the global recovery by harnessing existing and new trade agreements to expand market access opportunities. Micro, small, and medium enterprises (MSME) engaged in trade will be supported through streamlined trade processes, trade promotion, and capacity building programs to market Filipino products.

FISCAL SECTOR

ASSESSMENT

The government's fiscal position remained manageable despite the challenges brought about by the COVID-19 pandemic. The budget deficit and debt ratios significantly increased in 2020, amid lower revenues and increased spending on pandemic response and recovery measures to mitigate its impact on the economy. These continued to expand in 2021, as growth in expenditures outpaced the rebound in revenues. Nevertheless, the gradual recovery of the economy allowed revenue collection to exceed the targets in 2021.

RESPONSIVE, STRATEGIC, SUPPORTIVE, AND SUSTAINABLE FISCAL SECTOR

Revenue and tax effort exceeded targets in 2021. While revenue effort declined to 15.5 percent of Gross Domestic Product (GDP) (from 15.9% in 2020), as non-tax revenues normalized, it settled above the 2021 target. Meanwhile, tax effort marginally increased to 14.1 percent of GDP (from 14.0%) and exceeded the 2021 target.

Expenditures increased in 2021, due to the recovery in infrastructure spending and continued implementation of COVID-19 related programs. Primary expenditure grew to 21.9 percent of GDP (from 21.4% in 2020) and settled higher than the target. The expansion in primary expenditure was mainly buoyed by the combined impact of the rebound in infrastructure, higher personnel services expenditure and transfers to local government units (LGUs), equity releases for lending assistance programs under the *Bayanihan* II law, and lower-than-programmed interest payments. Expenditures on economic and social services also exceeded the 2020 targets and are projected to hover above the 2021 targets. Likewise, the share of health expenditures in the 2021 budget increased and exceeded the target.

NG deficit and debt remained manageable despite elevated levels. The budget deficit widened to 8.6 percent in 2021 (from 7.6% in 2020), slightly above the 8.5 percent target for 2021. Meanwhile, debt-to-GDP ratio settled within the target range for 2021, despite increasing year-on-year to 60.4 percent (from 54.6%). The government's credit rating was also sustained, with only one credit rating agency reducing its outlook to negative.

Fiscal performance of LGUs was broadly stable in 2021. As a share of total current operating income, locally-sourced LGU income marginally declined to 29.4 percent in 2021 (from 30.3% in 2020), but remained above its 2021 target. In levels, it slightly improved year-on-year and exceeded its 2021 target due to the increase in real property tax collections. In contrast, the Local Development Fund (LDF) remains underutilized despite improvements in 2021 (70.8% from 69.0% in 2020).

IN FOCUS: JUAN DELA CRUZ, HOPEFUL AGRI-ENTREPRENEUR



Juan dela Cruz is a 20-year-old middle child of a third-generation tenant farmer. His frustrations—limited delivery of health, education, and transport services and the lack of economic opportunities—represent those of the least developed provinces. Nevertheless, the implementation of the Mandanas Ruling in 2022 gives hope to people like Juan.

The COVID-19 pandemic worsened the economic and social problems faced by Juan and his family. Juan had to drop out of school as the shift to blended learning made access to education more difficult. His father's health also worsened due to a shortage of medicines and the overcapacity of healthcare facilities. Moreover, Juan's eldest brother temporarily moved back to the province as he lost his job in Metro Manila. Because of these circumstances, Juan has decided to help his mother, Manang Gina, by working as a tenant farmer.

Nevertheless, Juan still dreams of returning to school to earn a college degree related to agribusiness. Unlike his older siblings, he plans to stay in the province and be a successful agri-entrepreneur. Ultimately, he dreams of having his father treated in a hospital and lifting his family out of poverty.

STRATEGIC FRAMEWORK

The frustrations of Juan represent those of the least developed provinces who are likely to be affected by the implementation of the Mandanas Ruling in 2022. To address Juan's frustrations and help him achieve his aspirations, the national government will pursue reforms that will enhance the capacity of the LGUs to implement devolved functions, especially in agriculture, education, and health sectors.

Furthermore, to minimize the impact of uncertainties arising from the COVID-19 pandemic on Filipinos like Juan, fiscal policy will be made more responsive, resilient, and flexible during emergencies through enabling budget and policies, and improved private sector participation (see box).

Figure 15.1 Strategic Framework to Ensure a Responsive, Strategic, Supportive, and Sustainable Fiscal Sector



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

RESPONSIVE, STRATEGIC, SUPPORTIVE, AND SUSTAINABLE FISCAL SECTOR

Strategically reprioritize expenditures. To manage fiscal risks and economic shocks arising from lingering disruptions due to the pandemic, the government will continue to reprioritize its expenditures over the near-term. Priority will be given to health-related expenditures, disaster- risk management, social security, digital economy/government, local government support, and growth-inducing expenditures such as crucial and shovel-ready infrastructure projects, among others. Moving forward, the government will ensure that the budget remains responsive to the emerging needs and immediate concerns of the country.

Institute mechanisms that will increase resilience and flexibility of the fiscal sector against future pandemics, disasters, and shocks. Amid increasing uncertainties over the next disasters and shocks, the government will explore the establishment of an emergency standby fund, mechanisms that will allow the quick reallocation of funds, and the lifting of the 30 percent cap on Quick Response Funds during national public health emergencies. The government will also strengthen the existing National Disaster Risk Reduction and Management Fund mechanism. Programs to promote increased household savings in the medium-term (*see Monetary and Financial Sectors*) and improve social safety nets [*see Chapter 11*] should also be pursued.

Pursue institutional reforms to ensure timely execution of projects. To complement administrative improvements in budget execution, institutional reforms will be introduced to address persistent bottlenecks. The passage of the Budget Modernization Bill (BMB)¹ will institutionalize the Cash Budgeting System (CBS) and other key public financial management (PFM) reforms, while taking into account the lessons from the pandemic, including the need for flexibility.

Intensify and fast-track the finalization and implementation of Devolution Transition Plans (DTP), including information campaign and capacity development of LGUs. In line with Executive Order No. 138, s. 2021, the government should fast-track and closely monitor the finalization and implementation of the DTPs and the capacity development of LGUs, especially in the agriculture, education and health sectors. Strategic communications and strong engagement of stakeholders will also be crucial in increasing LGU accountability. The effective implementation of the DTPs will help ease pressure on the NG's fiscal space due to the implementation of the Supreme Court Ruling on the *Mandanas* Case and ensure standards for the delivery of devolved services. [*See Chapter 5*]

Provide additional resources for capacity development and ensure effective implementation of the Growth Equity Fund (GEF). Starting 2022, the GEF will be provided to financially and technically challenged LGUs to level the playing field in the implementation of devolved services. Implementation during the initial year will be evaluated and the guidelines and budget will be adjusted accordingly. [*See Chapter 5*]

¹ House Bill Nos. 2807, 8308, 9214, and 9239 are pending for deliberations in the House Committee on Appropriations while no bill has been filed in the Senate.

Fast-track the implementation of priority tax reform measures. This should include the establishment and institutionalization of a comprehensive digital taxation framework,² which will help the government manage the challenges and reap the benefits of the digital economy. The full implementation of tax administration measures, particularly the fuel marking, Electronic Receipt and Invoice System, and the digitalization of tax-collecting agencies will also enable the government to regain needed revenues.

Boost local resource mobilization. With the anticipated decline in National Tax Allotment (NTA) of LGUs in 2023 considering the lower NG revenue collections in 2020, close monitoring and collaboration with stakeholders will be needed to ensure the implementation of local resource mobilization measures.³ The passage of the Real Property Valuation Reform bill⁴ can also significantly improve real property tax collections of LGUs. In addition, continued capacity-building activities will enable LGUs to tap other sources of financing, such as official development grants.

Diversify funding sources. The NG will explore various financing schemes and sustain a financing mix in favor of domestic sources, especially in the light of an expected increase in global interest rates. The development of the government's sustainable finance framework, as well as efforts to further enhance its capacity to comply with international Green, Social and Sustainable (GSS) finance principles, will be important to diversify its funding sources. Overall, further developing domestic capital markets (*see Monetary and Financial Sectors*) and building safeguards against external risks (*see External Sector*) will complement the strategies mentioned above.

Encourage greater private sector involvement while recalibrating contingent liability management. Private sector participation through various public-private partnership (PPP) modalities will be tapped to ease pressure on the national government's fiscal position and supplement the limited capacities in project implementation at the LGU level. At the same time, the design of PPP contracts, including in terms of risk allocation, will have to be revisited to reduce risks of contingent liabilities unnecessarily materializing during public health emergencies.

Balance fiscal consolidation and the need to support the recovery. Even as the government takes proactive steps to rebuild fiscal space and manage public debt, the pace of consolidation must not endanger the economic recovery. To complement NG's fiscal and monetary interventions, the government will pursue a 10-point agenda for economic recovery covering the following areas: 1) metrics; 2) vaccination; 3) healthcare capacity; 4) economy and mobility; 5) schooling; 6) domestic travel; 7) international travel; 8) digital transformation; 9) pandemic flexibility bill; and 10) medium-term preparation for pandemic resilience.

² House Bill No. 7425, which proposes to impose Value-Added Tax on digital transactions, was approved on third and final reading in the House of Representatives on 21 September 2021 and is currently being deliberated at the Senate Committee on Ways and Means.

³ Department of Interior and Local Government (DILG). Guidelines on the Preparation of Devolution Transition Plans of Local Government Units in Support of Full Devolution under Executive Order No. 138, Dated 01 June 2021. August 11, 2021. Retrieved from: https://dilg.gov.ph/PDF_File/issuances/joint_circulars/dilg-joincircular-2021818_8aa022e204.pdf

⁴ House Bill No. 4664, which proposes instituting reforms in the valuation and assessment of real property, was approved on third and final reading in the House of Representatives on 25 November 2019. Meanwhile, alternate bills have been filed and are pending for deliberations in the Senate Committee on Ways and Means.

MONETARY AND FINANCIAL SECTOR

ASSESSMENT

RESILIENT AND INCLUSIVE MONETARY AND FINANCIAL SECTOR ACHIEVED

The government adopted various measures to curb the elevated inflation in 2021. The government's inflation target was nearly exceeded amid the impact of ASF on meat prices, rising global oil prices, and pandemic-induced supply disruptions. In response, the government eased meat import restrictions and temporarily reduced tariffs. Cash grants were also provided to public utility vehicle (PUV) drivers. The shift from community quarantines to the new COVID-19 alert level system has also allowed the economy to gradually reopen.

The financial sector remained broadly stable, while inclusion improved. The banking and insurance sectors remained strong, although asset growth eased, with monetary and financial sector policies remaining supportive. The bond market was boosted by increased government borrowings, while the equity market rebounded following a dip in market sentiment in 2020. Moreover, financial inclusion indicators showed positive gains. The microfinance sector seems to be gradually recovering, while accessibility and use of digital payments expanded strongly (i.e., Instapay transactions increased ten-fold over two years⁵). Moreover, as of December 31, 2021, more than 7 million Filipinos have opened transaction accounts via LandBank kiosks co-located in Philippine Identification System (PhilSys) registration centers.

Digital technology helps in fostering broad-based financial inclusion, but cybersecurity risks threaten consumer protection. To support the expansion of the adoption and use of digital financial services throughout the country, the Bangko Sentral ng Pilipinas (BSP) issued the digital banking framework in December 2020 to encourage responsible innovation and promote a level playing field for all digital financial ecosystem participants. However, access to financial products and services is limited, especially for the low-income and less educated, while provision of government financial support through cash remains inefficient. Further, low levels of financial literacy as well as increased cases of frauds and scams could undermine public confidence and trust in digital financial services.

⁵ As of end-November 2021, InstaPay transactions expanded 11 times in terms of volume and nine times in terms of value relative to 2019.

IN FOCUS: MANANG GINA DELA CRUZ, A TENANT FARMER NEEDING ACCESS TO FINANCIAL ASSISTANCE



Manang Gina dela Cruz,⁶ Juan's mother is a 50-year-old tenant farmer who hopes to increase their farm earnings and eventually lift their family from poverty.

However, a massive flood damaged their farm last year. She has been requesting credit from lending institutions to rebuild the farm, but she was repeatedly denied due to lack of bank account and collateral.

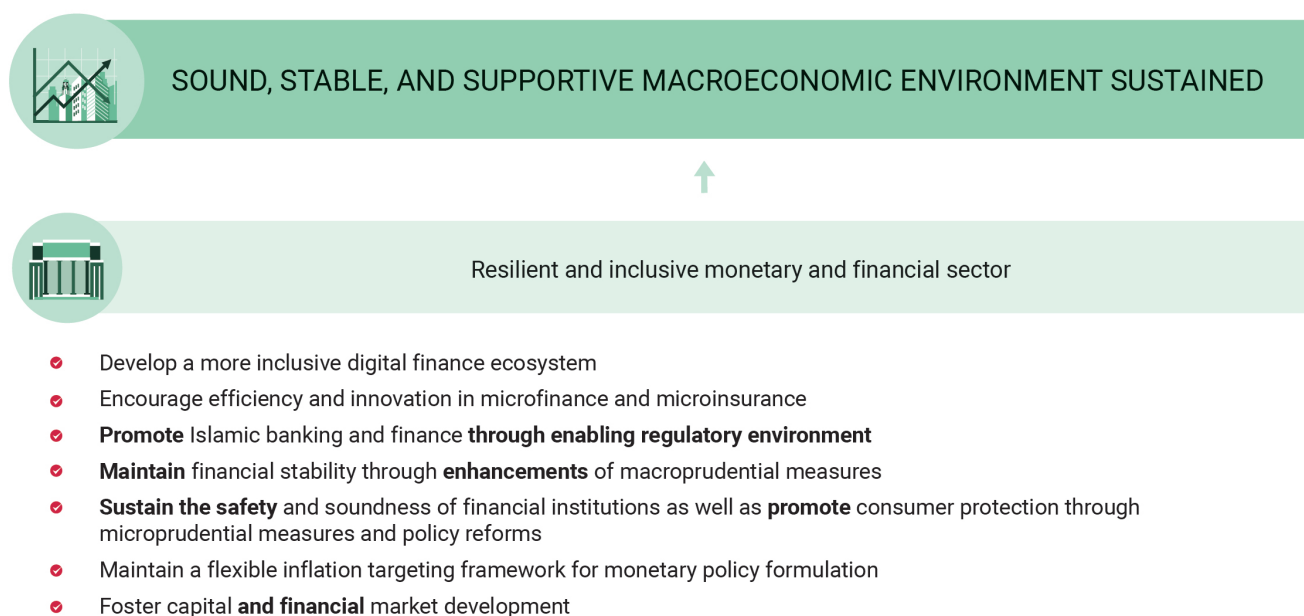
Manang Gina used to sell her meager harvests to a rural cooperative which sells to a small Manila-based exporter of manufactured agricultural products. Before the pandemic, her eldest son worked in an export firm and sent money monthly through a single remittance center in the town center which is often offline and charges high fees. With the pandemic, the export firm laid off workers, including Manang Gina's son, and reduced its purchase from the rural cooperative. Manang Gina had no choice but to sell her harvests to middlemen at steep discounts. Meanwhile, financial support from the government took several weeks because of logistical challenges in physically distributing cash assistance.

⁶ Not a real person but a persona adopted by NEDA for the purpose of illustrating the Filipinos' aspirations and challenges faced with respect to the topic

STRATEGIC FRAMEWORK

New sub-strategies were included in the sub-sector outcome under the monetary and finance sector, especially to manage the threats and uncertainties arising from the COVID-19 pandemic and the digital divide, taking into account the aspirations and frustration of disadvantaged stakeholders like Manang Gina (see box).

Figure 15.2 Strategic Framework to Achieve a Resilient and Inclusive Monetary and Financial Sector



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

RESILIENT AND INCLUSIVE MONETARY AND FINANCIAL SECTOR ACHIEVED

Develop a more inclusive digital finance ecosystem

Expand the availability of innovative and responsive financial products and access to financial services. The three-year Digital Payments Transformation Roadmap (DPTR)—which aims to create an efficient, inclusive, safe and secure digital payments ecosystem—intends to convert at least 50 percent of retail transactions into digital form, and have 70 percent of Filipino adults own a transaction account by 2023. In addition, the inclusion of “digital banks” as a distinct classification of banks has been approved.⁷ The Open Finance Framework has also been established to facilitate digital transformation and financial inclusion by promoting consent-driven data portability, interoperability, and collaborative partnership between financial institutions and financial technology (fintech) players.⁸ The proposed Agent Registry of BSP will further expand and effectively regulate the agent network. The government will continue to promote the use of QR Ph-enabled digital payments, including in public markets and transportation. The government will also issue supporting policies and guidelines to promote the adoption of movable collateral by banks in line with the Personal Property Security Act (RA 11057). The Securities and Exchange Commission’s (SEC) PhiloFintech Innovation Office, which was launched in July 2021, will further foster innovation and effective regulation of fintech in pursuit of financial inclusion and investor protection. Moreover, the National Strategy for Financial Inclusion (NSFI) 2022-2028, launched on January 28, 2022, will serve as a guiding framework to accelerate financial inclusion in the Philippines.

Foster use cases of the national ID in the financial sector. Apart from the use of Know-Your-Customer (KYC) compliance, the government will explore additional use cases of the national ID in the financial sector, such as the enhancement of the Personal Property Security Registry and establishment of credit history.

Strengthen consumer protection to manage the risks of adopting digital financial technology. The government should develop a consumer protection collaboration framework to avoid overlaps or gaps with respect to e-commerce and digital finance transactions. This should involve all relevant regulatory and law enforcement agencies.⁹ The recently passed Financial Products and Services Consumer Protection (FCP) Act will institutionalize consumer protection amid the growing complexity of financial products and services.¹⁰ To further address cybersecurity risks, the BSP’s IT risk management standards and Cybersecurity RoadMap for financial institutions will be implemented.

Fast track affordable and convenient digital payments. The DPTR aims to convert half of the total volume of retail payments into digital form by offering customers faster, more convenient and more affordable payment options. The government should continue to champion and support the development and use of

⁷ BSP Circular No. 1105 dated 2 December 2020.

⁸ BSP Circular No. 1122 dated 17 June 2021.

⁹ Regulatory and law enforcement agencies may include the DTI, BSP, National Bureau of Investigation, Philippine National Police, National Telecommunications Commission, Department of Information and Communications Technology and National Privacy Commission.

¹⁰ Passed by the Senate of the Philippines as Senate Bill No. 2488 on 02 February 2022 and adopted by the House of Representatives as an amendment to House Bill No. 6768 on 02 February 2022.

digital payments streams that are responsive to the needs of consumers and aim to expand participation in QR Ph, particularly of major payment providers, in order to facilitate interoperability of digital financial and payment transactions across various financial service providers.

Expand the financial literacy program in partnership with other stakeholders, covering digital financial services. Following the issuance of the Department of Education's (DEPED) Financial Education Policy that mandates the intensified integration of financial literacy lessons in the K to 12 curriculum, competency and capability building activities for teaching and non-teaching personnel shall be carried out. The BSP will continue to work with the Commission on Higher Education (CHED) to embed personal finance classes in tertiary education and continue customer awareness campaigns through various delivery channels such as social media platforms. The SEC will further expand its investor education campaign on capital markets in terms of partners and beneficiaries.

Encourage efficiency and innovation in microfinance and microinsurance

Address liquidity issues of microfinance institutions (MFI) and support their digitalization. The government is exploring further interventions in terms of loan guarantees/surety for MFIs. The government should expand the capacity building of MFIs to support their transition to digital platforms as well as their efforts in capitalizing on financial technology.

Strengthen monitoring of insurance sector and expand information campaigns on available products and services. Monitoring the insurance sector to ensure stability, resiliency, and consumer protection should be enhanced, including the conduct of stress testing.

Promote Islamic banking and finance through an enabling regulatory environment. The guidelines on Shari'ah Governance Framework and the establishment of Islamic Banks (IBs) and Islamic Banking Units (IBUs), as well as guidelines on the management of liquidity risks by IBs and IBUs¹¹ will be enforced to create an enabling environment that will allow Islamic banks to operate alongside the conventional banks under the same regulatory approach, taking into consideration the unique features of Islamic financial activities/transactions. The Shari'ah Supervisory Board in Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) will be created and operationalized in line with the Bangsamoro Organic Law.

Maintain financial stability through enhancements of macroprudential measures. Monetary authorities will regularly conduct macroprudential stress testing for banks. The conduct of stress tests is also being refined in terms of quality and extent of granularity of data, including the integration of macro-related scenarios. A Systemic Risk Crisis Management (SRCM) Framework is also being formulated. The government will ensure effective communication of systemic risks and government policies to guide stakeholders in making well-informed financial decisions. Moving forward, authorities will revisit the design of forbearance measures to mitigate the potential buildup of financial stability risks.

¹¹ BSP Circular No. 1116 dated 25 May 2021.

Sustain the safety and soundness of financial institutions as well as promote consumer protection through microprudential measures and policy reforms. The BSP has made significant progress in complying with the Basel Core Principles of Effective Banking Supervision, particularly in improving risk management and corporate governance of banks. Reforms to promote the safety and soundness of the financial system, including strengthening corporate and risk governance, promoting responsible innovation, and upholding of financial integrity will continue to be pursued.

Maintain a flexible inflation targeting framework for monetary policy formulation. Close coordination of monetary and fiscal policies will continue to ensure that the economy's recovery from the pandemic is sustained.

Foster capital and financial market development

Foster capital market development to secure a well-functioning financial market. Operational and capitalization requirements will be reviewed to improve capital market participation. Efforts to streamline the registration processes for small- and medium-sized enterprises (SME) will be pursued.

Foster growth of green and sustainable finance market. The BSP has put in place enabling regulations to support sustainable finance through the issuance of Sustainable Finance Framework and Environmental and Social Risk Management Framework.¹² Subsequent to this, the BSP will issue guidelines covering the investment management activities of banks, conduct of climate stress testing, enhancement to prudential reports, and potential regulatory incentives for banks.

The financial sector regulators under the auspices of the Financial Sector Forum will also harmonize existing guidelines on governance, risk management and disclosure requirements to operationalize the policy pillar of the Philippine Sustainable Finance Roadmap and develop specific guidelines to implement the Sustainable Finance Guiding Principles (i.e., principles-based taxonomy). The latter will facilitate identification of green or sustainable economic activities or projects and accelerate mobilization of funds to such activities or projects.

EXTERNAL SECTOR ASSESSMENT

The country's external sector has shown signs of recovery with the resurgence of trade flows across the globe. Merchandise exports in 2021 reached USD 54.2 billion, 12.4 percent higher than the same period in 2020 and 1.3 percent higher than in 2019. Exporters were able to adapt to changes in demand and shifted or regain markets as well as explored digital platforms to expand their presence. Demand for goods recovered particularly for the country's top export products. Service exports were slower to recover, but the pace is expected to pick up as more sectors of the economy reopen and mobility restrictions begin to loosen.

¹² BSP Circular No. 1085 dated 29 April 2020 and BSP Circular No. 1128 issued in October 2021.

To further take advantage of the global recovery, the government implemented measures to support Filipino exporters, especially MSMEs, to ensure continued production and unhampered movement of trade.¹³ These were complemented with trade promotion, including activities held virtually, and capacity building activities, training, and information sessions.

The country also continued to work towards broadening and expanding market access and enhancing relations with major trade partners. The signing of the Regional Comprehensive Economic Partnership (RCEP) Agreement in November 2020 and the conclusion of negotiations for the Philippines – Republic of Korea FTA in October 2021 coupled with export promotion activities will be crucial in improving export performance and investments that support the export sector.

The pandemic is expected to continue to be the most significant challenge for the external sector. Services such as travel are highly dependent on the state of the pandemic and restrictions, while orders for goods are also dependent on the sustained recovery of trading partners. The lingering effects of the pandemic can also be exacerbated by trade restrictive policies of trading partners.

SUSTAINABLE AND RESILIENT EXTERNAL SECTOR

Exports of goods exceeded the target in 2021. Merchandise exports in 2021 increased by 12.4 percent to USD 54.2 billion, exceeding the target for the year.¹⁴ The quick resurgence of global demand has helped the recovery of goods exports despite pandemic-driven supply chain issues. Following the decline in 2020, exports recovered for most of the country's major exports. Based on data from the Philippine Statistics Authority, outward shipments of semiconductors (4.57%), electronic data processing (12.46%), copper metal (66.10%), chemical products (28.49%), and coconut oil (54.88%) have exceeded pre-pandemic levels. Exports to the Philippines' two largest markets, the United States (US) and China, grew by 2.5 percent and 17.7 percent, respectively, from pre-pandemic levels.

Services exports fell behind target due to slower recovery. Services exports increased by 6.7 percent to USD 33.6 billion in 2021. This was supported by strong growth in information services (727%); other personal, cultural, and recreational services (207.7%); financial intermediation services (137.5%); and charges for the use of intellectual property (118.3%). However, the 2021 target was not reached. In part, the Philippines benefitted from improved economic conditions of major trading partners like the US, China, and Japan with more relaxed restrictions on travel and export-oriented industries. Moving forward, services exports will post modest growth with the gradual reopening of the economy. Receipts from the Information Technology-Business Process Management (IT-BPM) segment will pick up to compensate for the likely subdued revenues from travel.

The current account reversed to a deficit of 1.8 percent of GDP in 2021 from a surplus of 3.2 percent in 2020. The merchandise trade deficit widened due to the sustained growth in imports, mostly capital and intermediate goods, following the gradual resumption of domestic economic activities. For 2022, the current account deficit is expected to settle at -3.8 percent of GDP.¹⁵

¹³ These include policy issuances to ensure export-related manufactures and other products for exports remain in operation, facilitating the provision of access IDs for workers, coordination with various LGUs and government instrumentalities to ensure unhampered transport of goods, and access to credit for exporters.

¹⁴ Source: BOP data, BSP

¹⁵ Based on the Monetary Board's Balance of Payments outlook as of 18 March 2022.

IN FOCUS: EDGAR GUERRERO, A FUTURE EXPORTER OF LOCALLY MADE PRODUCTS



Mr. Edgar Guerrero¹⁶ is a father of three and an owner of a small manufacturing and exporting plant. There exists a positive relationship between the success of his business and that of cooperative farmers like Manang Gina who supplies him with raw materials.

He dreams of cementing the success of his business through its expansion to foreign markets and becoming a champion of Filipino products abroad. To reach this goal, he plans to streamline and reduce the costs of his business with green and modern technologies that can enhance competitiveness, productivity, and overall standards. He also acknowledges that in order for his business to be sustainable, providing a decent job to his employees should be among his priorities.

He is currently facing multiple threats to his business. Among these are rising costs from electricity, shipping, and taxes, and the pandemic situation has made him lay off some of his employees. Diversifying to other markets is difficult since he lacks information about trade agreements he can use or product standards and regulations he needs to comply with. Digitalization is becoming more important and he needs further training to keep up with the trends.

¹⁶ Not a real person but a persona adopted by NEDA for the purpose of illustrating the Filipinos' aspirations and challenges faced with respect to the topic of the chapter.

STRATEGIC FRAMEWORK

Mr. Guerrero's passion and aspiration to bring Filipino products to the international market sets the bar and drives focus on how government will fuel this ambition by providing the environment that will nurture and support this enterprise. Laying the groundwork for his entry into the global market with engagements that will maximize competitiveness of his products is a key ingredient to helping him and entrepreneurs he represents gain a foothold in new and exciting markets. Equally necessary are the continuation of reform efforts in trade facilitation and logistics that will help reduce cost of production and create a favorable climate for the entry of investments as well as the provision of support measures that will strengthen his capacity and ability to innovate and create high value products that will cater and adopt to market demand. The government will also be at the forefront of providing infrastructure and digital solutions that will help enterprises like Mr. Guerrero harness and take advantage of the shift in platforms brought on by the world in a post pandemic stage (*see box*).

Figure 15.3 Strategic Framework to Ensure a Sustainable and Resilient External Sector



STRATEGIES

SUSTAINABLE AND RESILIENT EXTERNAL SECTOR

Maintain adequate foreign exchange reserves and market-determined exchange rate. The country's flexible exchange rate policy will continue to support macroeconomic stability despite external headwinds. To cushion the negative impact of sharp peso movements, the BSP will ensure a healthy level of foreign exchange or forex reserves as a buffer, implement appropriate macro-prudential measures, and adopt liquidity enhancing and management tools as necessary. Further, the BSP will continue to provide operational relief measures to facilitate the public's access to forex resources of the banking system amid the pandemic.

Scale up and diversify products and markets.

Capitalize benefits from existing trade arrangements and lay the groundwork to maximize prospective opportunities from new free trade agreements (FTA). Utilization of FTAs can be enhanced through intensified information and advocacy campaigns, enhanced assistance in meeting regulatory requirements, and the development of a freely accessible and user-friendly platform containing relevant trade information. Likewise, general reviews of existing FTAs will be prioritized to provide opportunities to secure better commitments from trading partners. The government will also work towards retaining access under key Generalized System of Preference (GSP)¹⁷ regimes as well as initiate discussions to institutionalize these trade preferences through FTAs. In light of the ongoing domestic ratification of the RCEP Agreement and the conclusion of negotiations under the Philippines – Republic of Korea FTA, measures will be undertaken to prepare stakeholders and increase export competitiveness in these markets.

Strengthen online presence of Philippine exports and intensify targeted marketing efforts for international leads. The government must provide capacity building and technical assistance to strengthen exporters' online presence, reach more markets, and be more attuned to shifts in consumer preferences. The mounting of virtual trade fairs, partnerships with the private sector, mentoring sessions, and marketing efforts consistent with national branding strategies will likewise be pursued. The government must encourage exporters to capitalize on rising global demand and consumer trends toward more sustainable and ethical consumption of products through the promotion of green certification¹⁸ for industries.

Enhance economic and technical cooperation with trading partners. The government will intensify economic and technical cooperation initiatives at multiple levels,¹⁹ particularly those that improve competitiveness and pandemic preparedness, foster innovation, and encourage investments. Cooperation activities will be focused on joint efforts on value creation or addition (e.g., upskilling or retooling of talent pool, other technology or knowledge transfer activities), improving product quality, obtaining certifications, supply chain innovations, and addressing trade-restrictive measures.

¹⁷ These include Generalized System of Preferences (United States), the Special incentive arrangement for Sustainable Development and Good Governance or GSP+ (European Union), and the UK Generalised Scheme of Preferences, among others.

¹⁸ Green certifications include labels provided by third-party certification organizations that attest to a product being healthy, eco-friendly, sustainable, or ethical.

¹⁹ Multilateral (e.g., APEC, UN, World Bank), regional (e.g., ASEAN), and bilateral (e.g., Joint Economic Commissions, JICA) levels.

Pursue strategic partnerships with other non-traditional trading partners. Assistance will be given to exporters looking to explore opportunities in less traditional markets in Europe, South and Central Asia, Africa, and the Americas. Focused market research, targeted trade promotion activities, and enhanced assistance with meeting trade and product requirements must be provided to Filipino businesses. As a starting point, the Philippines-European Free Trade Association (EFTA) FTA can serve as a gateway to non-traditional markets in Europe. The Philippines may further strengthen its relationship with regional partners where there is potential to further increase market presence such as India.

Improve overall climate for export development.

Strengthen supply side interventions to improve the quality of Philippine exports. The government will prioritize logistics reforms that will rationalize the freight system and establish strategic warehousing, as well as cold chain systems. Enterprises will be encouraged to rethink and adjust production and storage facilities to ensure optimum access with the least disruptions. Development of partnerships with local suppliers to reduce vulnerabilities will be supported. Mechanisms to track and align regulations with other countries and identify necessary capacity building initiatives and norm-setting will be developed. The enforcement of science-based sanitary and phytosanitary (SPS) measures will be strengthened to guard against various diseases that may be brought in through imports. Relevant regulatory agencies will be provided with appropriate equipment and properly trained personnel.

Implement and review laws and regulations to promote a competitive business landscape conducive for trade. The onboarding of all trade-related government agencies onto the TradeNet platform will be prioritized to reduce trade costs for domestic enterprises. The strict implementation and continued streamlining of processes and regulations under the Ease of Doing Business (EODB) Law²⁰ will also cut processing times for trade documents. The creation of the Philippine Trade Facilitation Committee (PTFC)²¹ will further boost initiatives in expediting the movement, release, and clearance of trade in goods. This will likewise strengthen implementation of existing trade facilitation measures available under existing preferential trade arrangements, such as the EU Registered Exporter System (REX) and the self-declaration scheme under the PH-EFTA FTA.

Recent amendments to the Foreign Investments Act (FIA) will encourage competition and facilitate investments. Similarly, recent amendments to the Public Service Act (PSA) will allow 100 percent foreign investment in areas such as transport and telecommunications to help address logistical challenges and facilitate digitalization efforts, respectively. Amendments to the Customs Modernization and Tariff Act (CMTA) will also be pursued, including regulations that hinder free flow of trade. These will facilitate timely processing of tariff modifications particularly during national emergencies.

Accelerate provision of targeted, focused and comprehensive packages of support for specific products and services sectors.

²⁰ Republic Act 11032 or the Ease of Doing Business and Efficient Government Service Delivery Act of 2018.

²¹ The PTFC, which is part of the country's commitment to the World Trade Organization (WTO) Trade Facilitation Agreement, was created through Executive Order No. 136, s. 2021.

Target support to specific sectors that have great potential to improve the country's external position. The disruption brought by the pandemic highlights the need for business continuity plans for export-oriented and priority industries, as well as support industries. The government must enable the reconfiguration of the participation of key industries in global value chains through capacity-building programs, such as education and training activities for exporters, investment promotion of new and existing sectors, policy formulation, and other business-enabling initiatives (including commercial intelligence). The effective implementation of key post-pandemic economic strategies such as RECHARGE PH, REBUILD PH, and the National Employment Recovery Strategy²² will also be prioritized to prepare key stakeholders and upgrade their technology and skills for further expansion. The government will prioritize attracting investments that build on existing competencies and address supply chain gaps to strengthen and upgrade existing sectors, and enable the development of critical sectors (i.e., health and life sciences).

Further details on the plans and strategies to provide the necessary targeted support to exporters will likewise be detailed in the successor Philippine Export Development Plan (PEDP) 2022-2027. The PEDP will seek to address the disruptions in global value chains brought about by the pandemic by recommending strategic interventions for developing export sectors, especially agricultural exports. These proposed activities will cover industry development, innovation, and marketing and promotion including the matching of key products with easy-access and high-demand markets.

Upgrade internet infrastructure and institutionalize skills development for high-value services exports. Internet infrastructure needs to be continuously upgraded to support the growth of services exports, particularly for digitally enabled and digitally deliverable services. In addition, reforms to further establish and develop digital careers through upskilling and providing innovative training for workers will also be prioritized in order to facilitate the transition to higher value services and cope with the advancements in digital technologies and increasing competition. [See [Chapter 9B](#)]

²² RECHARGE refers to the broad strategies for reopening the economy while mitigating the spread of the virus. REBUILD refers to the strategies related to revitalizing consumption and helping businesses capture the demand created. The NERS refers to the strategies related to the recovery of the labor market.

RESULTS MATRIX

Table 15.1 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Sound, stable and supportive macroeconomic environment sustained							
Sub-sector Outcome 1.1: Responsive, strategic, supportive, and sustainable fiscal sector							
Government revenue-to-Gross Domestic Product GDP ratio improved (%) ^{3/}	15.2 (2016)	17.0	13.2	13.3	16.1	15.9	15.5
Tax revenue to GDP ratio improved (%) ^{3/}	13.7 (2016)	16.2	12.3	12.5	14.5	14.0	14.1
Primary expenditure to GDP ratio maintained above baseline (%) ^{3/}	15.5 (2016)	18.1	19.1	17.9	17.6	21.4	21.9
Share of interest payments in total disbursements managed (%)	11.9 (2016)	9.7	11.0 - 14.0	12.0 - 15.0	9.5	9.0	9.2
Ratio of discretionary expenditure to total budget maintained above 30.0 percent (%)	42.7 (2016)	48.6 (obligation-based)	40.1 (cash-based)	32.4 (cash-based)	40.7 (cash-based)	41.2 (cash-based)	40.5 (cash-based)
Economic service sector expenditure to GDP maintained above 5.0 percent (%) ^{3/}	5.7 (2016)	5.7	6.5	5.7	5.2	6.3	Not yet available
Social service sector expenditure to GDP maintained above 7.0 percent (%) ^{3/}	6.7 (2016)	7.3	8.1	7.9	6.9	9.8	Not yet available
Ratio of Health Sector expenditure to total budget increased (%)	4.4 (2016)	4.5	4.6	4.1	4.9 (GAA)	4.5 (GAA)	4.9 (GAA)
Utilization of current year's budget increasing	92.6 (2018)	Increasing	Increasing	Increasing	93.0	94.8	67.7 (Q1-Q3) ^{4/}
Manageable National Government (NG) fiscal deficit to GDP ratio maintained (%) ^{3/}	2.4 (2016)	3.0	8.5	7.2	3.4	7.6	8.6
Manageable outstanding NG debt stock to GDP ratio maintained (%) ^{3/}	42.1 (2016)	36.8	58.0-61.0	60.0-63.0	39.6	54.6	60.4
Manageable consolidated public sector balance as a share of GDP maintained (%) ^{3/}	-0.1 (2016)	-1.0	-5.8	n.a.	-0.9	-5.5	-4.2 (as of end-Sept)
Investment grade credit rating sustained/improved	Stable/ Positive (2016)	At least Stable/ Positive	Sustained investment grade credit rating	Sustained investment grade credit rating	Stable/ One rating upgrade	Stable	Sustained with Negative to Stable Outlook
Ratio of locally-sourced Local Government Unit (LGU) income to total current operating income maintained at or above 15.0 percent (%)	33.0 (2016)	36.2	21.0	15.0	34.4	30.3	29.4

Locally-sourced LGU income increased (PHP, billions)	179.8 (2016)	256.5	144.9	159.4	253.8	252.6	256.2
Utilization of local development fund improved (%)	80.0 (2016)	100.0	100.0	100.0	71.0	69.0	70.8
Subsector Outcome 1.2: Resilient and inclusive monetary and financial sector achieved							
Low and stable inflation rate achieved (%)	1.2 (2018=100)	2.0 – 4.0	2.0 – 4.0	2.0 – 4.0	2.4 (2018=100)	2.4 (2018=100)	3.9 (2018=100)
Ratio of Financial System's Total Assets to GDP maintained (%)	123.4 (2016)	146.3	120.0	125.0	127.4	147.4	144.6 (ao Q2)
Equity market capitalization relative to GDP (%)	95.4 (2016)	107.0	73.3	78.5	85.6	88.39	103.28 (ao Sep) ⁵
Size of local currency bond market in % of GDP	32.2 (2016)	45.0	39.2	43.6	34.1	47.8	50.5
Annual value of microfinance loans increased (PHP billion) ⁶	52.7 (2016)	>65.4	>95.0	>104.7	78.2	80	81.4 (ao Q2)
Number of access points per 10,000 adults increased (cumulative) ⁷	10.1 (2016)	>10.0	>13.0	>14	12.3	29.1	28.7 (ao Q3)
Proportion of adults (15 years and older) with an account at a bank or other financial institutions or with a mobile-money-service provider	22 (2015)	Not a Survey Year	>40	Not a Survey Year	28.6	Not a Survey Year	53.0 (est. ao Q3)
Volume of retail e-payments in the country (% of total payments) ⁸	10.0 (2018)	-	-	40.0	-	20.0	Not yet available
Microinsurance penetration (% of total population) ⁹	27.2 (2016)	34.0	40.8	44.8	44.6	46.2	Not yet available
Subsector Outcome 1.3: Sustainable and resilient external sector							
Exports of goods (USD billion) ^{10/}	42.7	54.8 – 56.9	46.1 – 47.1	47.9 – 49.4	53.5	48.2	54.2
Exports of services (USD billion) ^{10/}	31.2	47.2 – 49.0	37.0 – 37.8	40.0 – 41.2	41.3	31.8	33.6
Current account balance to GDP ratio	-0.4	.01	0.8 ^{11/}	NA	-0.8	3.2	-1.8

Notes:

^{1/} 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

^{2/} Targets for 2021-2022 are based on the macroeconomic assumptions and fiscal program approved by the DBCC on July 28, 2020 via Ad Referendum.

^{3/} 2000-based nominal GDP was used for 2016 baseline and 2020 targets, while 2018-based nominal GDP was utilized for 2021 and 2022 targets, and 2019, 2020 and 2021 actual figures.

^{4/} Actual obligations vs current year available appropriations as of December 1, 2021

^{5/} Microfinance figures include banks and microfinance NGOs. Data from the Securities and Exchange Commission refers to Microfinance NGOs accredited by the MicroFinance NGO Regulatory Council.

^{6/} Access points are the regulated entities where both cash-in and cash-out transactions can be performed. These include banks, non-stock savings and loan associations, cooperatives with financial services, microfinance NGOs, pawnshops, money service businesses, e-money agents, cash agents, and other non-bank financial institutions.

^{7/} Share of retail e-payments to the total number of retail payments.

^{8/} Number of people with microinsurance coverage consists of insured principal members and dependents.

^{9/} Based on Bangko Sentral ng Pilipinas (BSP) balance of payment

^{10/} Figures are BSP projections approved by the Monetary Board on October 08, 2020

CHAPTER 16

Promoting Competition

As the country reels from the economic consequences of the pandemic, the need for competition policy to guide decisions and strategies in boosting market efficiency becomes more crucial. The issuance of Administrative Order No. 44, s. 2021 indicates an important development in the government's efforts to foster a culture of competition as it supports and targets a whole-of-government approach. AO 44 directs the adoption and implementation of the National Competition Policy (NCP) and gives more teeth to the Joint Memorandum Circular (JMC) No. 01-2020 issued by the National Economic and Development Authority (NEDA) and the Philippine Competition Commission (PCC). The JMC prescribes the guidelines for all national government agencies (NGAs), government-owned and -controlled corporations (GOCCs), and local government units (LGUs) in reviewing and formulating their respective regulations and policies towards the promotion of free and fair competition in all commercial economic activities.

The NCP complements the Philippine Competition Act (PCA) by providing a guiding framework for the government in the design of interventions to facilitate the entry of players into the market and ensure economic recovery of businesses in the post-pandemic new normal. With AO 44 in place, the NCP is expected to contribute more to making markets work better and improving consumer welfare. It is expected to address the remaining challenges confronting the implementation of market competition in the country.

ASSESSMENT

The Philippines made significant gains in competition-related indicators in the Global Competitiveness Index (GCI) despite missing the target for the overall GCI ranking. The country ranked 44th (Top 31%) among 141 countries covered in the 2019¹ GCI ranking on business dynamism,² achieving the 2020 target ahead of time. Likewise, the country ranked 52nd (Top 37%) on product market efficiency,³ reaching the target for 2020 a year earlier. These accomplishments signal the country's progress in enacting policy reforms that improved market competition in the last five years, which were perceived favorably by the business sector.⁴

Reforms to improve competition include the enactment of the Ease of Doing Business and Efficient

¹ Latest available data published by the World Economic Forum (WEF) is for the year 2019. The WEF paused its release of GCI rankings in 2020 due to the COVID-19 pandemic.

² GCI Business Dynamism measures the administrative requirements (i.e., cost and time to start a business) undertaken by businesses as well as the attitude and growth of entrepreneurs in an economy.

³ GCI Product Market Efficiency calculates the effect of taxes and subsidies on competition, competitiveness of different sectors, and trade openness of an economy.

⁴ The WEF conducts an Executive Opinion Survey as part of the calculation of the GCI. The survey captures the perception of business leaders on various aspects of the business environment in the country where they operate.

Government Service Delivery Act (RA 11032), the Philippine Innovation Act (RA 11293), the Tax Reform for Acceleration and Inclusion or TRAIN Law (RA 10963), and the Rice Tariffication Law or RTL (RA 11203). The recent enactment of the Corporate Recovery and Tax Incentives for Enterprises or CREATE Act (RA 11534), which progressively reduces corporate income tax for local and foreign enterprises, will further lend support to the country's achievement of end-of-plan targets in competition-related indicators.

Despite the positive developments on these fronts, the country's performance missed the 2019 targets for the overall GCI ranking (top 45% vs. target of top 38%) and GCI market size (top 22% vs. target of top 20%), and the 2020 target for the World Bank's starting a business (score of 71.3 vs. target score of 83).

DIMINISHING ANTI-COMPETITIVE PRACTICES

The NCP was issued. In July 2020, NEDA and PCC issued JMC No. 01-2020 on the NCP. Recognizing the need for a whole-of-government effort, the President subsequently issued AO 44, directing all NGAs, GOCCs, and LGUs to adopt and implement the NCP. These linked issuances will be instrumental in ensuring the support of the entire government in fostering market competition by anchoring their respective policies and interventions on these key elements: 1) pro-competitive policies and government interventions; 2) competitive neutrality; and 3) enforcement of competition-related laws and policies.

Accessibility of competition authorities improved. The PCC has started operating an investigation station (i-Station) in Baguio City in the last quarter of 2021, while groundwork has been initiated for setting up similar extension offices in Legazpi City, Cebu City, and Davao City. The i-Stations are expected to improve access to regional government offices and localities in the hopes of expanding coordination and reporting mechanisms in competition-related matters within the region.

Advocacy efforts to increase awareness on competition laws and institutions were ramped up. The result of the 2020 national survey conducted by the Philippine Statistics Authority (PSA) showed that only 32 percent of the surveyed government entities were aware of the PCC, and 24 percent were aware of the PCA. Meanwhile, only around 9.6 percent of sample households were aware of the PCC and only about 2.1 percent were aware of the PCA. An Online Learning Hub on Competition Law and Policy, which provides basic information on competition law and economics to the public, was launched. Online orientation forums on the PCA and on the functions of the PCC were mounted for select NGAs, LGUs, and law schools.

There were no criminal competition cases investigated in 2020 and 2021. While this may be due to effective enforcement of competition-related laws and policies, this may also indicate the public's low awareness.

Efforts to strengthen competition policy enforcement and enhance competencies of competition-related agencies continued. The PCC entered into memoranda of agreement with financial regulators,⁵ the Department of Agriculture, and the Department of Energy, among others, to simplify competition-related procedures (i.e., mergers and acquisitions), establish reporting channels (e.g., notification, investigation), and create other avenues for cooperation (e.g., joint task forces).

Bilateral cooperation was strengthened with more experienced competition authorities from other jurisdictions such as Hong Kong and Singapore. Collaboration continued with local and international learning institutions to support capacity-building activities on competition policy development, research, and enforcement.

REDUCING BARRIERS TO ENTRY AND RE-ENTRY

Barriers to entry in certain sectors were reduced. In 2020, the Supreme Court voided the nationality requirement in contractor licensing rules. Prior to the said ruling, regular licenses for multiple construction projects per year were reserved only for local firms, while foreign contractors were granted a special license per project only.

In October 2021, a JMC,⁶ was issued to streamline processes and requirements for the application of permits and clearances for the construction of telecommunications infrastructure.⁷ The JMC also prescribes the sharing of essential telecommunications infrastructure to reduce barriers to entry in the sector.

REDUCING LIMITS TO ENTREPRENEURSHIP

Efforts to further create a conducive business environment were initiated. Following the World Bank's discontinuation of its flagship Doing Business report, the pilot implementation of a localized version of the reporting and ranking system is being explored⁸ to promote efficiency of government services, improve regulatory quality, and streamline administrative processes.

⁵ Bangko Sentral ng Pilipinas, Philippine Deposit Insurance Corporation, Securities and Exchange Commission, and Cooperative Development Authority.

⁶ Issued by the Anti Red-Tape Authority (ARTA), Department of Information and Communications Technology, Department of the Interior and Local Government (DILG), Department of Public Works and Highways, Department of Human Settlements and Urban Development, Energy Regulatory Commission, National Electrification Administration, Civil Aviation Authority of the Philippines, National Telecommunications Commission, and Philippine Competition Commission.

⁷ Inter-Agency JMC on the Streamlined Guidelines for the Issuance of Permits and Clearances for the Erection of Poles, Construction of Underground Fiber Ducts and Installation of Aerial and Underground Cables and Facilities to Accelerate the Roll Out of Telecommunications and Internet Infrastructure.

⁸ A technical working group tasked to design and establish the "Philippine EODB Reporting System" was created in 20 September 2021. It is composed of the following members: EODB-ART Advisory Council, Department of Budget and Management, Development Academy of the Philippines, NEDA, UP Public Administration Research and Extension Services, Inc.-Regulatory Reform Support Program for National Development, and World Bank Group consultants.

IN FOCUS: JOBERT, ASPIRING ONLINE ENTREPRENEUR



Jobert lives with his wife and three children in a 5th class municipality, where he also runs a “tiangge” stall. Jobert aspires to scale up his small business by catering to new customers beyond his local community and establishing an online presence to earn more income for his family. He also intends to provide high-quality and innovative goods to distinguish himself from other players in the market.

However, Jobert is still reeling from negative cash flow and restricted mobility caused by the pandemic. His product offering is limited by the expensive items available from the sole supplier in his area.

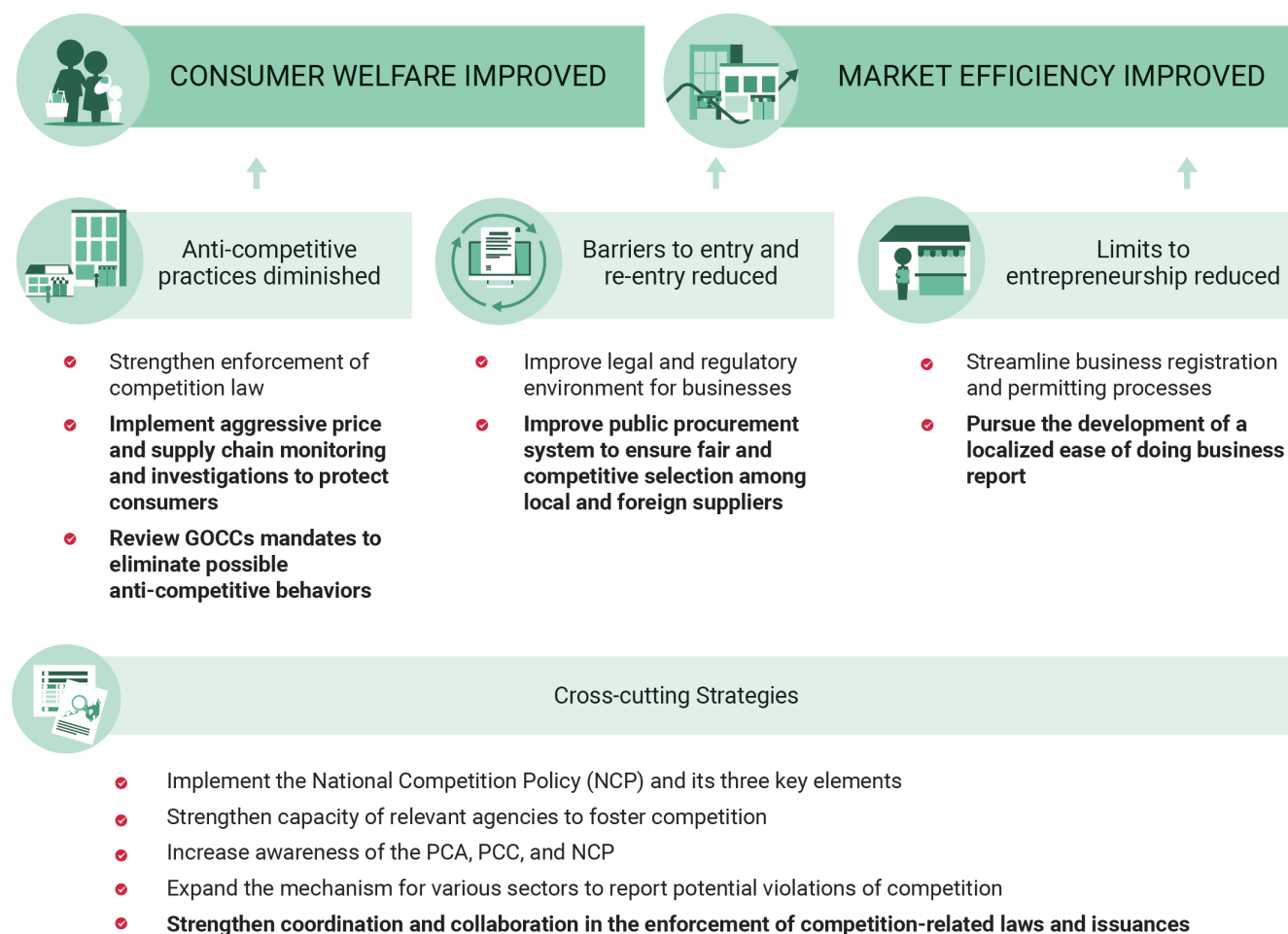
Jobert also faces costly and lengthy processes when registering and renewing his business permits. His area has poor access to the internet as well.

STRATEGIC FRAMEWORK

The challenges Jobert faces are shared by many Filipino entrepreneurs who work to expand their businesses in order to provide for their families. To support entrepreneurs in reaching their businesses' full potential even amidst the pandemic, it is important to foster an economic environment where businesses of any scale can easily and fairly participate and compete in the market. An economic environment that promotes innovation is likewise important to ensure high-quality goods and services are made available at the best price.

To sustain recovery efforts from the economic consequences of the pandemic and to address the remaining challenges that hinder improvement in market efficiency and consumer welfare, the government will anchor its strategies on the following outcomes: 1) anti-competitive practices diminished; 2) barriers to entry and re-entry reduced; and 3) limits to entrepreneurship reduced. Given the issuance of AO 44, the government will also consider the NCP and its three key elements in the design of government interventions.

Figure 16.1 Strategic Framework to Promote Competition



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

TO IMPLEMENT CROSS-CUTTING STRATEGIES

Implement the key elements of the NCP. With the issuance of AO 44, the government will ensure that all its policies, rules, regulations, and interventions support the objectives of the NCP and its three key elements. To ensure compliance, AO 44 directs the integration, as far as practicable, of the NCP in the good governance criteria for the grant of performance-based bonus to government personnel and in the conferment of the Seal of Good Local Governance to local governments.

Strengthen coordination and collaboration in the enforcement of competition-related laws and issuances. Cooperation between the PCC and various government agencies and regulators will be strengthened to streamline competition-related procedures (e.g., investigation, notification) and clarify their respective roles and responsibilities. The government will also continue to strengthen bilateral cooperation with competition authorities of other jurisdictions, as regards transfer of expertise, data sharing, enforcement, capacity building, and market research.

Strengthen capacity of relevant government agencies to foster competition. Through the linkages with foreign and local partners, the government will continue to build the institutional capacity of its agencies and the competence of key personnel in the field of competition. The PCC, NEDA, the Department of Justice-Office for Competition (DOJ-OFC), the Office of the Solicitor General, and other beneficiary agencies will maximize the opportunities provided under the Capacity Building to Foster Competition Project.⁹

Increase awareness on competition laws, policies, and institutions. The PCC and NEDA will expand advocacy activities to create more awareness and understanding of the advantages of market competition. Advocacy activities will include the conduct of briefings and roadshows, and the use of social and digital media.

TO DIMINISH ANTI-COMPETITIVE PRACTICES

Strengthen enforcement of competition law. The government will strengthen the enforcement of the PCA, including its criminal provisions.¹⁰ The PCC will strengthen its presence in the provinces by scaling up the operations of established i-Stations and creating similar satellite offices in Legaspi City, Cebu City, and Davao City. These i-Stations will serve as temporary stations until permanent regional offices are created through an Executive Order or an amendment to the PCA.

⁹ The Capacity Building to Foster Competition Project or Loan 3878-PHI is a long-term capacity building project that aims to support strengthening institutional and individual capacities of PCC and other agencies with competition-related mandates in order to create strong knowledge base for the effective enforcement of the Philippine Competition Act.

¹⁰ DOJ Circular No. 016 was issued in 17 June 2021. It prescribes the framework in implementing the criminal provisions of the PCA, including rules on the conduct of preliminary investigation and prosecution of competition cases, and the grant of immunity to witnesses under the Leniency Program administered by the DOJ-OFC.

Implement aggressive price and supply chain monitoring and investigations to protect consumers. The PCC will strengthen monitoring and prevention of overpricing and intentional supply chain disruptions. It will sustain the conduct of investigation on possible cartels or collusions that control prices of major commodities, including pork. It will also ensure that big and small business players are given equal opportunities in the issuance of import permits.

Relatedly, the Department of Trade and Industry (DTI) will pursue the amendment of the Price Act (RA 7581) to ensure that consumers can avail basic commodities at reasonable prices even during emergencies, including tea, cereal, ready mixed coffee, alcohol, hand sanitizers, disinfectants, infrared body thermometers, and personal protective equipment such as face masks, gloves, coveralls, hair caps, shoe covers, face shields, and goggles.

Review mandates of GOCCs to eliminate possible anti-competitive behaviors. The government will review the mandates of GOCCs and interventions such as grants, subsidies, tax and tariff exemptions, exclusive purchase privileges, and debt guarantees. These measures will ensure that GOCCs do not have undue advantages over the private sector.

In addition, a Public Enterprise Reform Agenda will be formulated to develop policy mechanisms to decouple conflicting commercial and regulatory functions of GOCCs, including the Philippine Ports Authority and the Civil Aviation Authority of the Philippines.

TO REDUCE BARRIERS TO ENTRY AND RE-ENTRY

Improve legal and regulatory environment for businesses. The government will pursue the amendment of the Magna Carta for MSMEs (RA 9501) to address limitations and challenges confronting MSMEs especially during periods of heightened economic uncertainty. It will also ensure that adequate government support (e.g., interest-free loans, tax incentives) and technical support (e.g., trainings) are available to help MSMEs thrive even during emergencies.

To reduce barriers to entry, the review of policies and regulations using the Regulatory Impact Assessment Manual, which was launched in October 2021, will be advanced. Initiatives to mainstream and implement the National Policy on Regulatory Management System, the Philippine Good Regulatory Principles, and the Philippine Business Regulations Information System will also be pursued. Meanwhile, amendments to the Consumer Act of the Philippines (RA 7394) will be proposed to enhance consumer protection, particularly in e-commerce transactions.

Improve public procurement system to ensure fair and competitive selection among local and foreign suppliers. The government will work towards the elimination of procurement rules giving preference to local over foreign bidders. This will ensure that the government will procure at the least cost the relevant level of quality through competitive public bidding. On the other hand, mechanisms to detect, prevent, and report anti-competitive conduct in public procurement (such as collusion through bid-rigging) will be put in place.

TO REDUCE LIMITS TO ENTREPRENEURSHIP

Streamline business registration and permitting processes in key sector industries. Regulatory agencies will continue to review relevant policies, rules, and regulations to eliminate burdensome administrative procedures. They will promote standardization and harmonization of varying rules and procedures in the issuance of business permits and licenses. In the telecommunications sector, for instance, the Common Towers and Pole Policy will eliminate multiple permit requirements.

Pursue the development of a localized ease of doing business report. The government will pursue the development of a localized version of the Doing Business report to improve service efficiency and regulatory quality, which includes addressing barriers to entry. A third-party evaluator will be engaged to ensure the integrity of data and rankings in the localized report.

RESULTS MATRIX

Table 16.1 Results Matrix

INDICATOR	BASELINE VALUE (2016)	TARGETS				ACTUAL		
		2019	2020	2021	2022	2019	2020	2021
Chapter Outcome 1: Consumer Welfare Improved Chapter Outcome 2: Market Efficiency Improved								
Global Competitiveness Index (GCI) score/ranking improved	59 (Top 41%)	62 (Top 38%)	63 (Top 37%)	63 (Top 37%)	64 (Top 36%)	55 (Top 45%)	N/A	N/A
Sub-chapter Outcome 1: Diminishing anti-competitive practices								
GCI Business Dynamism improved	62 (Top 38%)	50 (Top 50%)	69 (Top 31%)	70 (Top 30%)	71 (Top 29%)	69 (Top 31%)	N/A	N/A
GCI Product Market Efficiency improved	28 (Top 72%)	31 (Top 69%)	63 (Top 37%)	62 (Top 38%)	65 (Top 35%)	63 (Top 37%)	N/A	N/A
GCI Extent of Market Dominance improved	17 (Top 83%)	N/A	20 (Top 80%)	21 (Top 79%)	22 (Top 78%)	19 (Top 81%)	N/A	N/A
Sub-chapter Outcome 2: Reducing barriers to entry and re-entry								
GCI Market Size improved	78 (Top 22%)	80 (Top 20%)	80 (Top 20%)	78 (Top 22%)	80 (Top 20%)	78 (Top 22%)	N/A	N/A
GCI Burden of Government Regulation improved	15 (Top 85%)	N/A	29 (Top 71%)	32 (Top 68%)	35 (Top 65%)	27 (Top 73%)	N/A	N/A
Sub-chapter Outcome 3: Reducing limits to entrepreneurship								
Doing Business Starting a Business score improved	68.56	N/A	83	100	100	69.3	71.3	N/A ^a

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effect (Schwab 2019)s of the COVID-19 pandemic.

^a On September 16, 2021, the World Bank announced its discontinuation of the Doing Business Report due to data irregularities.

CHAPTER 17

Attaining Just and Lasting Peace

Peace and development initiatives were sustained in 2021 despite the ongoing pandemic. In particular, the implementation of the components of signed peace agreements and the conduct of local peace engagements (LPE) are being pursued with the goal of completing and finalizing them by the end of the Plan period. Complementary development interventions are also continuously being carried out in conflict-affected and conflict-vulnerable communities to avoid the recurrence of violence and reap the gains of the peace processes towards inclusive development. In the final year of the Plan period, the government is resolved to further improve the peace and development situation in the country as a strong foundation in achieving the country's development objectives.

ASSESSMENT

Despite the challenges posed by the ongoing pandemic, the peace and development environment in the country has improved with the support and commitment of national and local governments, regional bodies, parties to the signed peace agreements, international partners, communities, and other stakeholders. The challenge for the succeeding administration is to build on these gains and pursue strategic interventions to mainstream peace and conflict-sensitivity in government policies and processes, towards inclusive and sustainable peace.

IMPLEMENTING PEACE AGREEMENTS THAT HAVE BEEN SUCCESSFULLY NEGOTIATED WITH ALL INTERNAL ARMED GROUPS

Various intergovernmental relations (IGR) mechanisms have been organized. As provided in RA 11054, also known as the Bangsamoro Organic Law (BOL), these IGR mechanisms are created to coordinate and resolve issues on intergovernmental relations through regular consultation and continuing negotiation in a non-adversarial manner. Significant issues concerning budget, financial management, resource development, energy, governance, and funding from development partners were resolved through IGR mechanisms. Currently, the following IGR mechanisms have already been organized: (a) Intergovernmental Fiscal Policy Board; (b) Intergovernmental Energy Board; (c) Intergovernmental Infrastructure Board; (d) Joint Body for the Zones of Joint Cooperation; and (e) the Council of Leaders. The Philippine Congress-Bangsamoro Parliament (PC-BP) Forum and the Bangsamoro Sustainable Development Board (BSDB) are yet to be organized.

Implementation of the normalization program for the Bangsamoro remains on track. More than 12,000 combatants and 2,100 weapons were already decommissioned after the completion of the second phase of the decommissioning process in 2021 for the Moro Islamic Liberation Front (MILF). The third

phase is ongoing, with 5,250 of the 14,000 targeted combatants already decommissioned. The Transitional Justice and Reconciliation (TJR) Roadmap is being finalized by the Government of the Philippines-Moro Islamic Liberation Front (GPH-MILF) TJR Technical Working Group.

Transition period in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) has been extended. The pandemic situation hampered the Bangsamoro Transition Authority (BTA), BARMM's interim government, from undertaking and completing its mandated functions under the BOL. To this end, RA 11593, signed on October 28, 2021, resets the first general elections for the BARMM from 2022 to 2025, thereby extending the transition period from ARMM to BARMM. The extension is expected to enable the BTA to complete its remaining commitments and deliverables [See box article].

Completion of the remaining agreements under the 1996 Final Peace Agreement (FPA) with the Moro National Liberation Front (MNLF) is actively pursued. Preparatory activities for the implementation of the MNLF Transformation Program, which aims to transition the armed elements of the MNLF into productive and peaceful citizens of the country, were completed. These include the approval of the Implementing Guidelines and Mechanisms on the Security Component of the Program with the Sema Group in October 2021 to implement the validation, verification, and profiling of 1,000 MNLF combatants in Sulu, and the establishment of four security mechanisms tasked to implement the guidelines.

Various initiatives to end local communist armed conflict are being implemented. The National and Regional Task Forces to End Local Communist Armed Conflict (NTF/RTFs-ELCAC) are actively pursuing both military and socioeconomic interventions to clear communist-terrorist group (CTG)-affected barangays, reintegrate former rebels, and spur socioeconomic development in these areas. The mainstreaming of LPE by the regional and local task forces is purposively carried out with local chief executives through community consultations and problem-solving sessions. Local peace dialogues with former CTG members have also been undertaken to facilitate the integration of former rebels as productive members of society. The BARMM Government has also implemented activities in support of the NTF-ELCAC objectives, including the creation of the Bangsamoro Task Force on ELCAC (BTF-ELCAC) and the conduct of the Bangsamoro Peace and Security Summit. This summit serves as a venue for the immediate resolution of conflicts in certain areas of the region and the formulation of a rehabilitation and development program for conflict-affected communities in Maguindanao.

The peace agreements with the Rebolusyonaryong Partido ng Manggagawa ng Pilipinas/ Revolutionary Proletarian Army/Alex Boncayao Brigade (RPMP-RPA-ABB) and the Cordillera Bodong Administration-Cordillera People's Liberation Army (CBA-CPLA) are already underway. In support of the finalization of these peace agreements, the decommissioning program for both groups have been completed and finalized. The demilitarization and disposal of firearms, explosives, and ammunitions for both peace tables were completed in 2021.

Socioeconomic interventions were also provided to beneficiary-members and their families for both groups. For the RPMP-RPA-ABB peace process, social enterprise trainings, social protection packages (i.e., renewal of PhilHealth membership and endorsement to local government unit (LGU) scholarship programs for qualified next-of-kin) to 727 beneficiary RPA members and their families, and housing units for qualified families. For the CBA-CPLA peace process, interventions were also undertaken, such as

agri-based livelihood opportunities, various infrastructure projects, programs for healing and reconciliation particularly in recognition of martyrs and old guards, installation of memorabilia for the preservation of the Cordillera identity, and social protection packages and organizational development support for peoples' organizations. Employment of more than 600 individuals from both groups as *Bantay Gubat members* was also renewed, in line with the Office of the Presidential Adviser on the Peace Process - Department of Environmental and Natural Resources (OPAPP-DENR) Joint Memorandum Circular 2013-02 (Implementing Guidelines on Providing Employment Opportunities to Beneficiaries in Support of the Peace Process through National Greening Program, Forest Protection, and Other Forestry-Related Activities).

A National Amnesty Commission was created to complement the efforts towards the successful implementation of the various peace agreements. Executive Order No. 125, s. 2021¹ mandates the National Amnesty Commission to receive and process applications for amnesty, an important step towards reintegration, social healing, and reconciliation among former rebels and the affected families and communities. Applicants entitled to amnesty are provided under the following proclamations, also issued in February 2021: Proclamation No. 1090 (MILF members); Proclamation 1091 (MNLF members); Proclamation No. 1092 (RPMP-RPA-ABB members); and Proclamation No. 1093 (CTG members).

PROTECTING AND DEVELOPING COMMUNITIES IN CONFLICT-AFFECTED AND CONFLICT-VULNERABLE AREAS

Various socioeconomic interventions continue to complement the implementation of peace agreements towards community development. These include:

- *Payapa at Masaganang Pamayanan (PAMANA) Program.* The PAMANA Program has implemented various peace-promoting socioeconomic interventions in peace agreement, conflict-affected, and conflict-vulnerable areas in 16 regions, 50 provinces, and over 500 municipalities and cities. For the period 2017 to 2021, the program continued to allocate funds for more than 92,000 beneficiaries composed of former combatants and/or their next of kin for scholarships, health insurance coverage, educational assistance to indigenous peoples, jobs and livelihood support, and other programs. The program has also strengthened the resilience of communities to conflict by improving their socioeconomic capacity, particularly their personal, social, entrepreneurial, and technical skills. In addition, the program has brought economic development to communities through infrastructure support, economic integration, and employment generation projects.
- *Enhanced Comprehensive Local Integration Program (E-CLIP).* In 2021, more than 5,000 former rebels have surrendered to the government. They, together with their families and communities, were given financial, livelihood and employment, housing, education, and psychosocial assistance to facilitate their reintegration into society. At least 70 rebels were also qualified and admitted to the Armed Forces of the Philippines (AFP) as part of regular force or civilian armed forces.

¹ Executive Order No. 125, s. 2021, Creation of the National Amnesty Commission, February 5, 2021.

- *Barangay Development Program (BDP) of the NTF-ELCAC.* More than 800 former conflict-ridden communities benefited from more than 2,000 projects, including farm-to-market roads, health facilities, school buildings, and other livelihood and social assistance. The BDP contains sustainable rehabilitation and development projects for barangays that were former guerilla fronts of the Communist Party of the Philippines-New People's Army-National Democratic Front (CPP-NPA-NDF).
- *Social Healing and Peacebuilding Program.* The program aims to sustain the gains of different peace tables through the implementation of different plans and programs. This includes the National Action Plan on Women, Peace, and Security (NAP-WPS), which has already been localized in six different regions to further engage women at the grassroots. Youth participation, meanwhile, continues to be strengthened through various multi-stakeholder consultations towards the formulation of a NAP on Youth, Peace, and Security. Basic courses for various regional bodies and LGUs were carried out to mainstream conflict-sensitive and peace-promoting (CSPP) approaches in the comprehensive development plans (CDP) in conflict-affected and conflict- vulnerable LGUs, as part of the implementation of the Joint Memorandum Circular No. 1, s. 2020 issued by OPAPP and the Department of the Interior and Local Government (DILG). Finally, the program has also supported Marawi rehabilitation and recovery through the conduct of peace conversations and solidarity gatherings, community training sessions on CSPP, and various livelihood and enterprise projects particularly for internally displaced persons (IDPs). Mainstreaming peace education also continues to remain part of the core deliverables of the program geared towards building a culture of peace.

IN FOCUS: ALI, ASPIRING RICE TRADER FROM MARAWI CITY

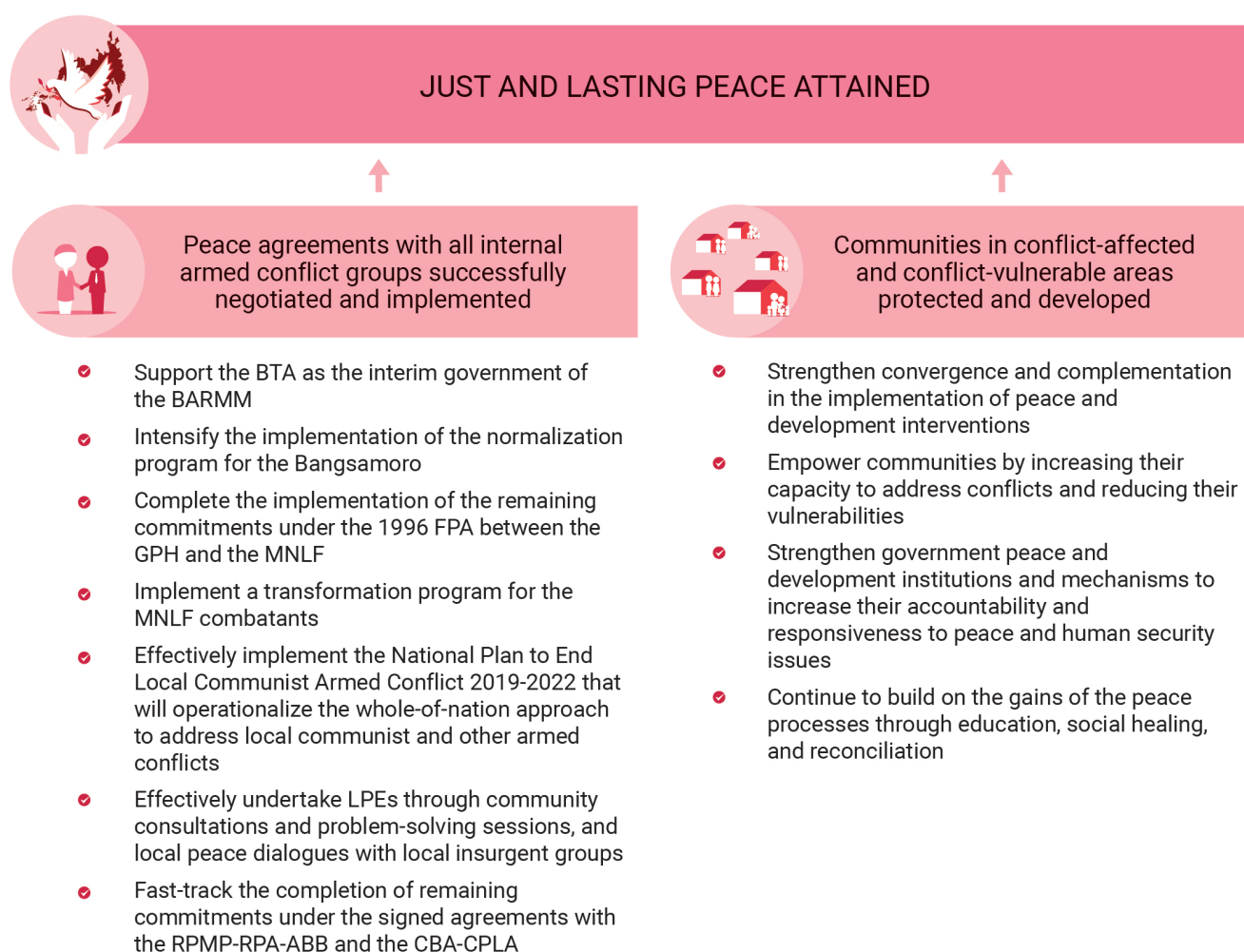


Ali, 17 years old, is the eldest of five children and resides in Marawi City. Born to Maguindanaoan parents, his family migrated to Marawi to escape the incessant violence plaguing their village. His younger brother, aged 15, was almost recruited by a local armed insurgency group, taking advantage of his frustrations over their hardships. Reflecting on his and his family's experiences, Ali's goals are simple but profound: to live in a city with a peaceful environment, where he can fulfill his dream of becoming a successful rice trader. He also wants his siblings to finish school and for his parents to age comfortably, with all their needs adequately provided. However, he still feels uncertain, not knowing whether a violent incident will occur at any time. He fears for his and his family's safety and what the future holds for them.

STRATEGIC FRAMEWORK

The priority strategies towards attaining just and lasting peace, as provided in the Updated PDP 2017-2022, will still be pursued to accelerate peace and development and uplift living conditions for similarly-situated individuals as Ali and his family. Certain strategies, however, will require a more focused approach given recent developments in the peace processes. In addition, these strategies also aim to address the lingering effects of the COVID-19 pandemic in the implementation of peace agreements and the delivery of socioeconomic interventions for individuals, families, and communities in conflict-affected and conflict-vulnerable areas.

Figure 17.1. Strategic Framework to Attain Just and Lasting Peace



TO SUCCESSFULLY NEGOTIATE AND IMPLEMENT PEACE AGREEMENTS WITH ALL INTERNAL ARMED CONFLICT GROUPS

Support the BTA as the interim government of the BARMM

Address potential issues and challenges that may arise during the extended transition period in the BARMM.

The National Government remains steadfast in its commitment to support the BTA in fulfilling its mandate and functions within the extended transition period up to 2025. This will be undertaken through various intergovernmental relations bodies, most of which have already been organized. To this end, the creation of the remaining IGR mechanisms (i.e., PC-BP Forum and the BSDB) needs to be fast-tracked in order to institutionalize all avenues for greater intergovernmental cooperation.

Intensify the implementation of the normalization program for the Bangsamoro

Guarantee the completion of the components under the normalization program for the Bangsamoro. Among the major concerns that need to be addressed are the timely implementation of the third phase of the decommissioning process for MILF forces and weapons, disbandment of private armed groups and implementation of the program for small arms and light weapons, and the finalization of policing arrangements in the BARMM and the procedures on the entry of MILF and MNLF members into the regular police force. Complementary interventions towards the socioeconomic development of conflict-affected areas, confidence-building, and transitional justice and reconciliation will still be undertaken as critical components of the normalization process.

Implement a transformation program for the MNLF combatants

Finalize the formulation of the transformation program for the MNLF. The program mirrors the normalization program for the MILF. It will serve as a take-off point for the implementation of projects to be funded under the Bangsamoro Development Assistance Fund and the monitoring of the Tripartite Implementation and Monitoring Committee, which is expected to be completed in 2025 when the transformation program is successfully implemented.

Effectively implement the National Plan to End Local Communist Armed Conflict 2019-2022 that will operationalize the whole-of-nation approach to address local communist and other armed conflicts and effectively undertake localized peace engagements through community consultations and problem-solving sessions, and local peace dialogues with local insurgent groups

Strengthen the capacities of regional institutions and local governments to sustain efforts towards ending local communist armed conflict. To further institutionalize the whole-of-nation approach in attaining inclusive and sustainable peace, engagement and partnership between and among the Regional Development Councils, Regional Peace and Order Councils, the Bangsamoro Economic and Development Council, and local governments will be continued. Through this, a bottom-up approach will be institutionalized for planning and programming of peace and development interventions, with conflict-sensitivity, peace promotion, and local development as the overarching principles for inclusive peace.

Fast-track the completion of remaining commitments under the signed agreements with the RPMP-RPA-ABB and the CBA-CPLA

Ensure continuous operationalization of mechanisms for the completion of remaining commitments under the peace processes with the RPMP-RPA-ABB and CBA-CPLA. The current initiatives of the Joint Enforcement and Monitoring Committee (JEMC) for RPMP-RPA-ABB and the JEMC for CBA-CPLA will be sustained to provide inclusive and participatory interventions to both peace tables. This will also help propel the completion of the various interventions under the normalization programs for both groups.

TO PROTECT AND DEVELOP COMMUNITIES IN CONFLICT-AFFECTED AND CONFLICT-VULNERABLE AREAS

Strengthen convergence and complementation in the implementation of peace and development interventions and strengthen government peace and development institutions and mechanisms to increase their accountability and responsiveness to peace and human security issues

Continue the implementation and enhance the monitoring of peace and development programs and projects, including those under the various national and local action plans. Program implementation will be sustained in the remainder of the Plan period, with emphasis on providing key assessments to inform the succeeding year's peace and development agenda. Among these programs and projects include: (a) the PAMANA Program; (b) E-CLIP; (c) the various BDP projects in CTG-cleared barangays; (d) the activities under the National Action Plan on Preventing and Countering Violent Extremism and NAP-WPS; and (e) the work plan for the implementation of the Special Protection of Children in Situations of Armed Conflict Act (RA 11188). Information, education, and communications campaigns and strategic communication programs will also be pursued to strengthen public trust and confidence in the government's peace and development agenda.

Empower communities by increasing their capacity to address conflicts and reducing their vulnerabilities

Pursue active and continuing engagements with various groups affected by and are vulnerable to armed conflicts. In order to build on and sustain the gains of the peace processes beyond the Plan period, individuals and communities at the grassroots level which experienced the impacts of armed conflicts must be engaged and consulted as critical stakeholders, in pursuit of lasting peace. Women, indigenous peoples, the elderly, and internally displaced persons will be at the center of peace and development efforts. To this end, various physical and digital platforms for engagements will be utilized. Digital support infrastructure will also be strengthened to improve peace education and advocacy and attune to the new normal environment. Capacity development support among government and non-government peace partners for mainstreaming peace education and CSPP approaches will also be continued.

Continue to build on the gains of the peace processes through education, social healing, and reconciliation

Expedite the rehabilitation and recovery of Marawi City and other localities affected by the Marawi Conflict.

The *Bangon Marawi* Comprehensive Rehabilitation and Recovery Program (BMCRRP) crafted in March 2019 aims to guide the rebuilding of the Marawi City (including the Most Affected Area), and the Municipalities of Butig and Piagapo in Lanao del Sur. The Task Force *Bangon Marawi* will oversee the implementation of the programs and projects in the BMCRRP geared towards social healing, reconciliation, and inclusive development for the residents of Marawi City and nearby communities. The Bangsamoro Government will also continue to participate actively in the rehabilitation efforts through the creation of the Marawi Rehabilitation Project Management Office.

EXTENSION OF THE TRANSITION PERIOD IN THE BARMM

The BOL calls for a three-year transition period (2019-2022) from the ARMM to the BARMM. During this period, the BTA serves as the interim government mandated to undertake relevant functions necessary for the establishment of a fully-functioning BARMM Government. Among these are the enactment of priority legislations, determination of parliamentary districts, organization of the bureaucracy, full transfer of powers and properties to the Bangsamoro Government, and disposition of personnel of the ARMM.

As provided in the BOL, the first regular elections for the Bangsamoro Government must be synchronized with the 2022 national elections, after which the BTA would have been dissolved. However, the BTA has encountered several challenges, particularly in instituting the necessary reforms and complying with the expectations set in the BOL, aggravated by the impacts of the COVID-19 pandemic. To address this, the President signed RA 11593 on 28 October 2021, resetting the first regular elections in the BARMM from 2022 to 2025. During this extension, the BTA will remain as the BARMM's interim government.

CHAPTER 18

Ensuring Security, Public Order, and Safety

Building safe, secure, and orderly communities is one of the bedrock strategies towards the PDP's goal of a healthy and resilient Philippines. While significant progress has been made in addressing all forms of external and internal security threats, the national security sector still faces a number of challenges. Thus, it is important to sustain the government's substantive investments in the previous years to further strengthen the capabilities of the military and law enforcement agencies to respond to disasters and prevent fires, protect public and private individuals from cyber threats, and prevent and counter the rise of radicalization leading to violent extremism. The programs that will be implemented in the remainder of the Plan period will also improve the environment for economic investments to flourish.

ASSESSMENT

Reports from the Philippine National Police (PNP) and the Philippine Drug Enforcement Agency (PDEA) indicate that intensified efforts in law enforcement and the campaign against illegal drugs have significantly improved crime solution efficiency and reduced the crime rate in the country. Furthermore, the enactment of policies and implementation mechanisms have enhanced the capacity of the security sector to ensure public order and safety and respond to disasters, fire incidents, and other crises and emergencies, especially the ongoing pandemic. The Armed Forces of the Philippines (AFP) has recently concluded phase 1 of the AFP Modernization Program which strengthened its capability to protect the country from internal security threats. The government, however, needs to sustain its efforts to further address the challenges of the security sector to achieve a safe and secure environment within this planning period.

ENSURING PUBLIC SAFETY

Improved public safety through partnerships among law enforcement, local government units (LGU), and communities. To protect and ensure public safety, the government continued to increase police presence by hiring more police personnel and establishing police stations in strategic areas. These were complemented by nationwide orientations on the Community and Service-Oriented Policing System (CSOPS) for LGUs, police, and the community. The Barangay Peacekeeping Action Teams and accredited non-government organizations (NGO) augmented the PNP's crime prevention and public safety efforts. Moreover, reformation and internal cleansing within the PNP was intensified to protect the integrity of its personnel and the PNP as an institution.

Enhanced public awareness on cybersecurity through various engagements with the public and the private sector. With the increasing dependence on digital and online transactions, an annual public cyber security drill is being conducted to assess the public's perspective on cybersecurity and their capacity to protect themselves from such threats and attacks. Cybersecurity Policy and Computer Emergency Response Team (CERT) Trainings for critical information infrastructure are also conducted to capacitate both the public and private sectors on cybersecurity policies and in setting up CERTs as well as incident response life cycles. However, the increasing dependence on the internet for digital transactions and the more sophisticated and advanced cybersecurity risks and threats must be countered by continuous technical upgrading by the security sector.

Strengthened efforts on disaster resiliency. The country's geography and susceptibility to hazard events require strong disaster mitigation and preparedness and well-coordinated humanitarian assistance and disaster relief (HADR) efforts. The Updated National Disaster Risk Reduction and Management Plan (NDRRMP) 2020-2030 was approved by the National Disaster Risk Reduction and Management Council (NDRRMC) in October 2020. The NDRRMP ensures coherence with international and national frameworks and agenda on disaster risk reduction, climate change adaptation, sustainable development, and human security that share a common vision of reducing risks and enhancing resilience. Disaster preparedness and resiliency was also strengthened through simulation exercises on various disaster events such as typhoons, volcanic eruption, and earthquakes; improved information dissemination by translating disaster information materials to various languages; and reinforced logistics and warehousing capacity of response agencies and LGUs.

SIGNIFICANTLY REDUCING ALL FORMS OF CRIMINALITY AND ILLEGAL DRUGS

Intensified law enforcement significantly reduced incidence of criminality and illegal drugs. The intensified efforts of the police, with the support of other law enforcement agencies, enabled the government to reduce criminality and incidence of crime even amidst the pandemic. The Philippine Anti-Illegal Drugs Strategy (PADS) institutionalized a holistic approach to control the proliferation of illegal drugs and the abuse of dangerous drugs. The PADS guided the neutralization of drug activities and key drug personalities, while ensuring the provision of rehabilitation support for drug users and surrenderees.

The government has gained substantial ground in the fight against radicalization and extremism leading to terrorism. The National Action Plan on Preventing and Countering Violent Extremism (NAP PCVE) was rolled out to implement its key strategies following a whole-of-nation approach. Parallel to this is the cascading of the action plan, training modules, and information and education materials to the concerned regional and field offices, which capacitated targeted LGUs and communities. This is to ensure that national and local efforts are aligned and complementary.

TERRITORIAL INTEGRITY AND SOVEREIGNTY UPHELD AND PROTECTED

The Department of Foreign Affairs (DFA) remains relentless in pursuing our national interest through diplomatic engagement utilizing alternative platforms amidst the pandemic. However, the pandemic has delayed the negotiations for the ASEAN-China Code of Conduct (COC) for the South China Sea (SCS). The onset of the pandemic in 2020 has delayed the efforts of the Philippines to serve as coordinator for the negotiations for an effective and transparent COC. Indonesia has offered to serve as coordinator for 2021. However, the spikes in COVID-19 cases have again delayed the proposed meetings and negotiations. Despite this, the Philippines remains committed to push for the COC as a mechanism to guide future actions of claimant states in the region. Furthermore, the Philippines shall still endeavor to explore new, and strengthen existing, bilateral and multilateral diplomatic arrangements.

The security sector strongly pursued the AFP Modernization Program, laying down the basic elements for a credible defense posture. The first two phases of implementation were pursued under the Revised AFP Modernization Program. The first phase has concluded and focused on building the capability of the AFP for internal security operations. Meanwhile, the second phase will focus on territorial security. The implementation of the Program was highlighted by the acquisition of a number of critical defense capability equipment and materiel, including close-air support aircraft, helicopters, and missile frigates. Other projects still in the pipeline are expected to further boost the capability of the country in patrolling our exclusive economic zone (EEZ), defending our national territory, and addressing the country's internal security concerns.

IN FOCUS: BUBOY, ASPIRING FISH TRADER AND COMMUNITY LEADER



Fourteen-year-old Buboy is the second son of a fisherman living in Pag-asa Island. Unfortunately, his father was involved in an accident with a foreign fishing vessel in the West Philippine Sea. His older brother, who had been residing in Manila, was also arrested recently during an illegal drug operation. To help his mother provide for the family, Buboy was forced to work in a fishing vessel until his father fully recovers.

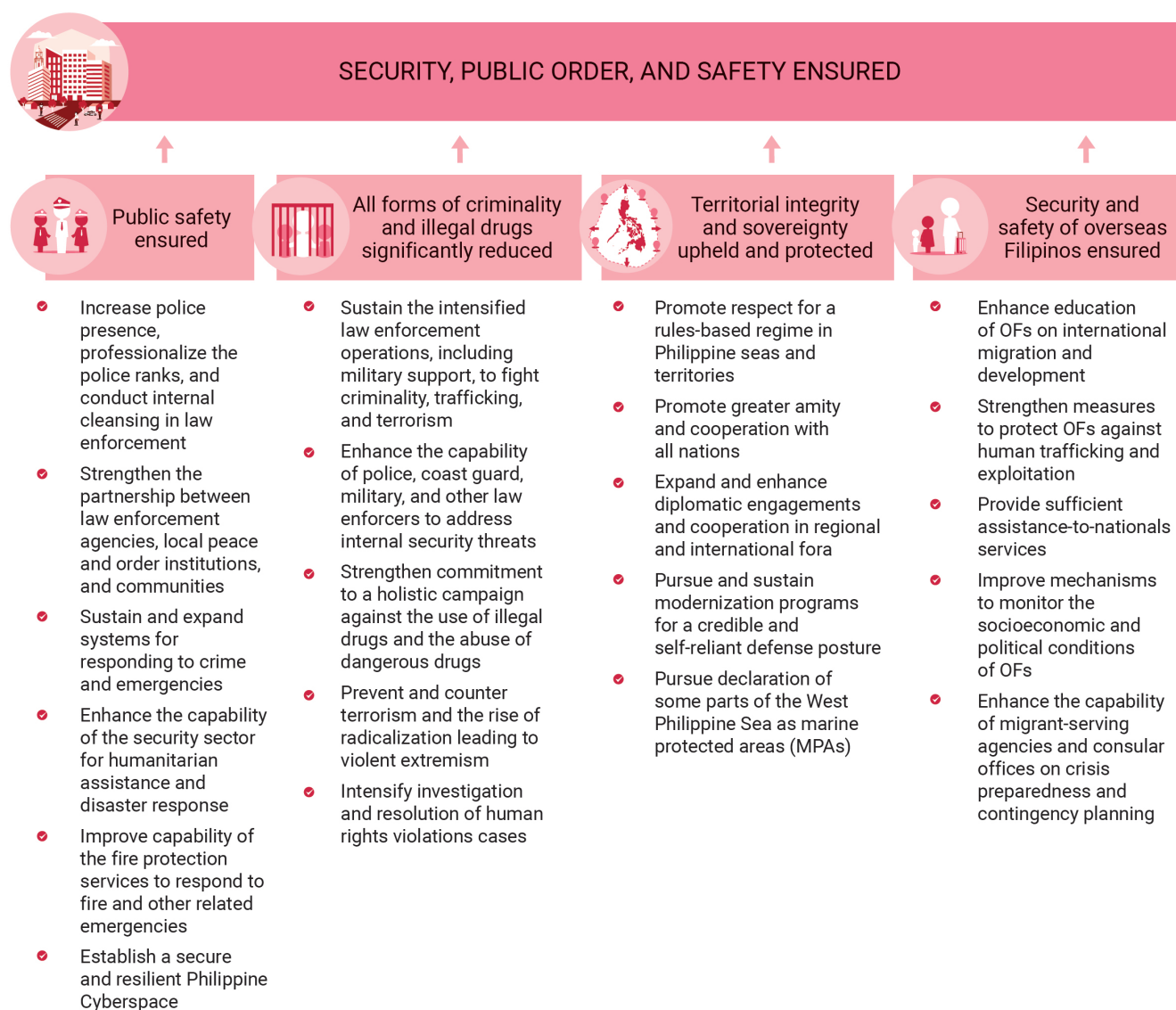
Buboy dreams of finishing high school and obtaining a college diploma. He wants to become a fish trader with his own fishing vessel to be able to support his family. Hardworking and bright, he has the potential to become a community leader. However, his father's injury and his brother's arrest have become obstacles to his dreams. On top of this, the damage to the marine environment due to reclamation activities and illicit fishing in the region has reduced fish catch, affecting the income opportunities of their fishing community. The increasingly aggressive foreign fishers have also made him fear for his and his family's safety.

STRATEGIC FRAMEWORK

Persistent challenges confronting the security sector have deprived Buboy and his family of the opportunities to reach their aspirations. Hence, law enforcement, military, government, and the whole of society must work together to pave a safe and secure path for Buboy and every other Filipino to realize a strongly rooted, comfortable, and secure life. Poor and vulnerable people like Buboy – as well as every Filipino, for that matter – must be provided with a safe environment where they can go about their lives and pursue their aspirations without constantly fearing for their lives and feeling under threat.

For this reason, peace and order has been the primary focus of the Duterte administration and is the “zero” in the administration’s zero-to-ten-point socioeconomic agenda. A secure, orderly, and safe Philippines remains to be the foundation for the success of both the Updated PDP, and its successor Plan. The dreams and aspirations of Buboy and many other Filipinos will be easier to reach if they feel secure. Thus, it is to be accorded high priority through the end of the Plan period and beyond to ensure that the gains in the security sector are sustained. Achieving this goal relies on the government’s ability to effectively implement the following strategies under the new normal, as shown in the Figure below.

Figure 18.1 Strategic Framework to Ensure Security, Public Order, and Safety



Note: Refer to Migration on Chapter 21 for strategies relating to overseas Filipinos (OFs)

STRATEGIES

TO ENSURE PUBLIC SAFETY

Increase police presence, professionalize the police ranks, and conduct internal cleansing law enforcement

Prioritize the professionalization and internal cleansing of police ranks. In its efforts to expand and intensify police presence, the PNP shall ensure that newly-hired and active duty police personnel exhibit professionalism and incorruptible integrity. Towards this end, it shall intensify its internal cleansing through restorative approaches such as focused reformation and reorientation as well as moral enrichment of police officers. Weekly squad interactive meetings will also be conducted to ensure that police personnel who remain in active duty are morally and mentally fit. The PNP shall also develop mandatory trainings for their personnel on pandemic containment including isolation, reduction, and prevention of the spread of the COVID-19 virus.

Strengthen the partnership between law enforcement agencies, local peace and order institutions, and communities

Place Community and Service-Oriented Policing (CSOPS) at the core of all efforts of the police, local governments, and communities in ensuring public safety. The Department of the Interior and Local Government and the National Police Commission shall strive to institutionalize CSOPS by including it in the PNP scorecards, awarding best practices and CSOP champions in the PNP, and incorporating it as one of the criteria for the LGU “Seal of Good Local Governance” award.

Enhance the capability of the security sector for humanitarian assistance and disaster response

Prioritize programs to enhance capacity for HADR. National government and LGUs will collaborate to build the capacities of LGUs and communities in HADR. This must be supported by the use of science-based methods in hazard assessment and its incorporation in planning.

Update the National Action Plan on Chemical, Biological, Radiological, and Nuclear (NAP CBRN). The NAP CBRN seeks to mitigate risks of CBRN threats by building the capacities and preparedness of communities, LGUs, and other frontliners. The national government is in the process of developing a response framework and disaster response plan to be implemented nationwide and localized to ensure interoperability of relevant stakeholders in such events.

TO SIGNIFICANTLY REDUCE ALL FORMS OF CRIMINALITY AND ILLEGAL DRUGS

Sustain the intensified law enforcement operations, including military support to fight criminality, trafficking, and terrorism and enhance the capability of police, coast guard, military and other law enforces to address internal security threats

Sustain intensified law enforcement operations against all forms of criminality and illegal drugs by building

the critical skills and competencies of law enforcement agencies. The fight against criminality shall remain a top priority of the administration which will be sustained through the end of the Plan period and beyond with a revitalized and strengthened PNP. The Core Competency-Based Training Program shall capacitate police officers in case recording and tracking, case filing and arrest, and operational readiness to ensure that cases are solved efficiently and with finality. Data sharing and coordination within the criminal justice system shall be pursued to ensure harmony across its pillars. The adoption of secured, mobile, artificial intelligence-driven and real-time policing will enable the PNP to adjust to the new normal, including the increasing practice of online transactions.

Strengthen commitment to a holistic campaign against the use of illegal drugs and the abuse of dangerous drugs

Continue to implement the Philippine Anti-illegal Drugs Strategy (PADS) together with other government agencies and stakeholders. The Drug-Free Workplace Policy and Programs under PADS will be implemented in all relevant agencies and by stakeholders, to include their external clients. Likewise, PADS Communication Plan will focus on youth, families, and other stakeholders as principal actors in keeping communities safe, peaceful, healthy, and drug-free.

The Dangerous Drugs Board (DDB) will ensure accessibility and availability of treatment, rehabilitation, and reintegration services with emphasis on strengthening policies and implementing community-based interventions. The DDB will continue to implement the Client Flow for Wellness and Recovery from Substance-Related Issues to guide drug users seeking treatment and rehabilitation as well as assist duty bearers in providing services and care. Furthermore, the national government will provide financial support for the construction of LGU-owned and community-based treatment and rehabilitation facilities.

Prevent and counter terrorism and the rise of radicalization leading to violent extremism

Implement a whole-of-nation approach to preventing and countering violent extremism. The enhancement of the NAP PCVE implementation aims to establish a common results framework between government and non-government stakeholders. It will focus on localized implementation in priority areas nationwide. One critical objective is to capacitate LGUs to identify vulnerabilities that cause violent extremism and the corresponding programs to address these vulnerabilities, while, in the process becoming ready to receive assistance from the national government and partner civil society organizations (CSOs). The successor plan will be pivotal in institutionalizing NAP and strengthening local PCVE teams and mechanisms to ensure the sustainability of interventions.

Likewise, the PNP, in partnership with Muslim communities, is establishing the Salaam Police Centers to build the latter's capability against violent extremism. It will monitor and liaise with Muslim communities to address terrorism and violence in their areas and thwart discrimination and oppression against Muslims. In support of this, various activities are also being conducted such as community dialogues with religious leaders, engagement with Muslim scholars and elders, and Masjid and Madrasah visitations centering on PCVE and peacebuilding in communities.

TO UPHOLD AND PROTECT TERRITORIAL INTEGRITY AND SOVEREIGNTY

Pursue and sustain modernization programs for a credible and self-reliant defense posture

External defense shall be the focus of the Department of National Defense's (DND) efforts in establishing a credible and self-reliant defense posture. In the remaining Plan period, the DND shall push for the continued modernization and improvement of personnel management of the armed forces. With the conclusion of the AFP Modernization Program Phase 1, the AFP shall transition to Phase 2 particularly on the acquisition of defense material to build its capacity to address external threats. The DND shall also strengthen defense cooperation with allies and partners, and improve inter-agency collaboration on maritime security and territorial defense.

CHAPTER 19

Accelerating Infrastructure Development

Infrastructure projects continued to be implemented even during the COVID-19 pandemic. It will remain an important strategy to accelerate economic recovery and build resiliency going forward.

ASSESSMENT

The sector aims to continue investing in infrastructure and increase public infrastructure spending as a percentage share of the gross domestic product (GDP) and as a foundation for sustainable and inclusive growth.

Table 19.1 summarizes the medium-term fiscal program for infrastructure, showing actual disbursements from 2016 to 2021 and the targets for 2022 until 2024. Buoyed by significant increase in infrastructure investments, the country had robust economic performance, particularly for fiscal years prior to the pandemic. For the years 2023-2024, the Development Budget Coordination Committee (DBCC) target for the infrastructure program is set at more than 5 percent of the GDP. This affirms the important role of infrastructure in the country's economic recovery and resiliency program.

Table 19.1 Medium-Term Fiscal Program for Infrastructure, in PHP billion

Particulars	2016	2017	2018	2019	2020	2021	2022	2023	2024
	Actual Disbursements						Targets		
Infrastructure Disbursements	590.5	690.8	886.2	1,049.9	869.9	1,123.6	1,271.1	1,294.9	1,377.1
% of GDP	3.9%	4.2%	4.9%	5.4%	4.8%	5.8%	5.9%	5.5%	5.4%

Source: Department of Budget and Management (DBM)/(DBCC)

Note: Disbursements include estimated NG infrastructure disbursements, and infrastructure components of subsidy and equity to Government Owned and Controlled Corporation (GOCC) and transfers to local government units (LGU).

FY 2022-2024 figures consistent with the macroeconomic assumptions and fiscal targets approved during the 180th DBCC Meeting on December 14, 2021.¹

At the onset of the pandemic, the government shifted its infrastructure investment priorities to respond better to the new priorities. These include: (a) provision of basic services such as adequate access to electricity; (b) water supply and sanitation, and health infrastructures; (c) upgrading and expansion of transportation facilities to address mobility requirements; and (d) expansion of the country's digital infrastructure to facilitate digital transformation.

¹ DBM: 180th DBCC Meeting (dbm.gov.ph)

The government has long recognized the role of the private sector in infrastructure development, especially given the fiscal situation brought about by the pandemic. Thus, amendments to the Build-Operate-Transfer (BOT) law (RA 6957) Implementing Rules and Regulations (IRR) were pursued to enhance the effectiveness of Public-Private Partnerships (PPP) in infrastructure development. While the bill amending RA 6957 as amended by RA 7718 was not listed as a legislative priority, both houses of Congress have deliberated on the bill.

NEDA also initiated a study looking into the distribution of infrastructure funds across the country. Regional level data on infrastructure statistics show huge disparities across regions. While this may partly be attributed to the unique needs of each region, social infrastructure indicators show that not all regions are provided adequate facilities and services. Infrastructure data at sub-regional levels is sparse, making it difficult to plan for equitable distribution of infrastructure interventions.

PURSuing NECESSARY INFRASTRUCTURE UNDER THE NEW NORMAL

Transport

One of the biggest impacts of the COVID-19 pandemic on the transportation sector is the reduced demand for passenger transport services. This is due to the combination of community quarantine and mobility restrictions imposed by the government given the high risk of contracting and spreading COVID-19 when using public transportation.

Nonetheless, with the need to re-open the economy while managing health risks, it was important to address the mobility requirements of the riding public, including, among others, the expansion of operations of public transportation, promotion of active/non-motorized transport, and the use of information and communication technology (ICT) for contactless transactions.

Land-based Transport

Land-based transport infrastructure and services were improved to reduce travel time and improve mobility. The Metro Manila Skyway Stage 3 (MMSS3) opened to traffic, and helped decongest EDSA and other major roads along the alignment, reducing travel time from Buendia to Balintawak from two hours to 15-20 minutes.² The Kalayaan Bridge was also opened to traffic and helped shorten travel time from Bonifacio Global City to Ortigas from one hour to 12 minutes.^{3,4}

EDSA was identified as a main thoroughfare for public transport in the National Capital Region (NCR). The interim operations of the EDSA Busway system started on June 1, 2020, complementing MRT-3 operations and the Bus Augmentation Program in transporting commuters.⁵ The Busway features the use of a dedicated lane with 13 stations at the median island to avoid conflict with connecting streets, driveways, commercial centers, and curbside drop-off points, allowing for safer and more efficient travel.

² Metro Manila skyway stage 3 (MMSS-3). METRO MANILA SKYWAY STAGE 3 (MMSS-3) | Department of Public Works and Highways. (n.d.). Retrieved December 15, 2021, from <https://www.dpwh.gov.ph/DPWH/PPP/projs/MMSS-3>

³ #BuildBuildBuild. (2021, March 23). DPWH to partially open bridge connecting BGC-Ortigas in May. DPWH to Partially Open Bridge Connecting BGC-Ortigas in May | Department of Public Works and Highways. Retrieved December 15, 2021, from <https://www.dpwh.gov.ph/DPWH/news/22022>

⁴ #BuildBuildBuild. (2021, June 12). DPWH opens Kalayaan Bridge on Independence Day. DPWH Opens Kalayaan Bridge on Independence Day | Department of Public Works and Highways. Retrieved December 15, 2021, from <https://www.dpwh.gov.ph/DPWH/news/22680>

⁵ Comms, D. O. T. M. (n.d.). Govph. DOTr. Retrieved December 15, 2021, from <https://dotr.gov.ph/55-dotrnews/1790-interim-operations-of-edsa-busway-starts-today.html>

Travel time from Monumento to the Parañaque Integrated Terminal Exchange (PITX) was shortened from three to four hours to 45 minutes.

As a response to the COVID-19 pandemic and community quarantine in 2020, the Land Transportation Franchising and Regulatory Board (LTFRB) issued the guidelines⁶ for the operations of public utility buses (PUBs) during the general community quarantine (GCQ) period in Metro Manila.

As a precautionary measure against COVID-19, the Department of Transportation (DOTr) and the Toll Regulatory Board (TRB) intensified the use of cashless and contactless transactions through the Radio Frequency Identification (RFID) system in tollways beginning December 2020.⁷

In line with the primary purpose of the *Bayanihan* to Recover as One Act (RA 11494, *Bayanihan* 2), the Metropolitan Bike Lane Networks Project covers areas where economic activities are the highest—Metro Cebu, Davao, and Manila. The total length of bike lanes completed as of June 2021 for the three metropolitan areas is 497 kilometers (km). The Metro Cebu bike lanes have an overall network length of 19.66 km, traversing four LGUs: Lapu-Lapu, Mandaue, Cebu City, and Talisay. The Metro Davao bike lanes have an overall network length of 54.74 km and traverses 14 road sections within the city. The Metro Manila bike lanes have an overall network length of 313.12 km, traversing major thoroughfares (R-1 to R-7, R-3, R-4, R-6, R-8, C-4, and C-5) and 12 cities (Pasig, Marikina, Quezon City, Caloocan, Manila, San Juan, Mandaluyong, Makati, Pasay, Las Piñas, Parañaque, and Taguig).

To augment the existing bike lane network in Metro Manila, bike lane expansion work is being completed in South Metro Manila (with a target length of 49.36 km covering Parañaque, Muntinlupa, and Las Piñas) and in East Metro Manila (with a target length of 16.38 km covering Marikina City).

As part of the COVID-19 response and recovery interventions under *Bayanihan* 2, the Public Utility Vehicle (PUV) Service Contracting Program (SCP) was implemented as a performance-based subsidy to assist transport workers and ensure availability and sustainability of operations of efficient and safe public transportation. Under the SCP, the Free Ride or *Libreng Sakay* program was also implemented to help healthcare workers and authorized persons outside residence (APORs) to safely travel amid the pandemic. By June 30, 2021, the SCP recorded 70,303 registered drivers and an estimated 30,588,969 riders.⁸ On September 10, 2021, the SCP Phase II was launched. By December 22, 2021, the SCP Phase II recorded an estimated 42,730,456 riders.

Strategic corridors are still being expanded and enhanced. The government continued the upgrading, expansion, and adequate maintenance of the Philippine road network to facilitate efficient movement of people and goods. From October 2020 to October 2021, the total length of national roads increased by 93.05 km (i.e., from 33,119.57 km to 33,212.62 km). Moreover, the total length of paved roads increased by 240.42 km (i.e., from 32,527.04 km to 32,767.46 km) in the same period. Meanwhile, the number of permanent bridges constructed from October 2020 to November 2021 likewise increased by

⁶ Google. (n.d.). MC-2020-019-W-ANNEXES-2.PDF. Google Drive. Retrieved December 15, 2021, from https://drive.google.com/file/d/1m8dQLUgWjgnE9SYCcJ7RTLoEbKeoS_Wr/view

⁷ Google. (n.d.). Dept. order no. 2020-012 requiring cashless or contactless on tollways.pdf. Google Drive. Retrieved December 15, 2021, from <https://drive.google.com/file/d/1NL6GNc0-2uCOe1R6p5TaTjgLUBywA-s/view>

⁸ Comms, D. O. T. M. (n.d.). Govph. DOTr. Retrieved December 15, 2021, from <https://dotr.gov.ph/55-dotrnews/3804-service-contracting-program-released-p-1-5-billion-to-beneficiary-drivers-nationwide-under-the-bayanihan-funds.html>

4,311 linear meters (lm) from 382,616 lm to 386,927 lm. Additionally, the length of national bridges increased by 3,836 lm from 384,221 lm to 388,057 lm over the same period.

Rail Transport

The national government endeavored to expand the railway network and develop new lines as a safe and fast mode of travel in high-density corridors, and efficient means of transporting goods. The rail sector was severely affected by the enforcement of 20-30 percent maximum capacity for all public transportation to curb the spread of COVID-19. As restrictions began to ease, a steady increase in ridership was observed in Light Rail Transit (LRT) Line 1, LRT Line 2, and Metro Rail Transit Line (MRT-3). From a total ridership of 4.72 million during the period of enhanced community quarantine (ECQ) in April 2021, it has increased to a total ridership of 12.73 million during the easing of quarantine restrictions to Alert Level 2 in December 2021.

On July 5, 2021, the LRT Line 2 East Extension Project began partial operations, adding 3.79 km to the present 13.8 km operational line. Meanwhile, as of December 2021, the overall status of completion of the MRT-7 Project is at 62.10 percent.

The arrival of the first two tunnel boring machines (TBMs) in February 2021 signaled the start of the implementation of the Metro Manila Subway Project (MMSP) Phase I.

Project preparation for additional rail projects continued with the completion of the feasibility studies of the revival of the Tarlac-San Jose Spur Line and Balagtas-Cabanatuan Spur Line (Northeast Commuter Line) and the North Philippine Dry Port Container Rail Transport Service. These projects support the country's goal to establish rail-based connection for faster movement of freight and the decongestion of truck traffic in the road network.

Air Transport

As of the third quarter of 2021, 9.11 million total passengers were transported via air. Around 2.29 million of whom were via international flights and 6.83 million were through domestic flights. In terms of cargo, a total of 133.74 million metric tons (MMT) was handled, with international cargo at 18.54 MMT and domestic cargo at 115.20 MMT. Both passenger and cargo throughputs at 32.65 million and 277.92 million, respectively, were significantly below the 2021 targets.

To help reduce interruptions in airport operations amidst the pandemic, the Civil Aviation Authority of the Philippines (CAAP) issued various memoranda extending the validity of: (a) licenses and certificates for airmen;⁹ (b) certificates for flight operators, which include air operators, and validation of foreign air operator certificates, certificates for handling dangerous goods, Remotely Piloted Aircraft System (RPAS) operators, and agricultural aircraft operators, among others;¹⁰ and (c) aircraft material distributors and maintenance organizations.¹¹

⁹ CAAP Memorandum Circular (MC) No. 08-2021 dated 26 March 2021 informing that the validity of airmen licenses and certificates, which were extended pursuant to MC No. 10-2020 dated 13 March 2020, remains valid until 30 June 2021.

¹⁰ CAAP MC No. 09-2020 dated 29 March 2021 informing that the validity of certificates emanating from CAAP-Flight Operations Department, which were extended pursuant to MC Nos. 10-, and 14-2020 dated 13 and 16 March 2020, respectively, remains valid until 30 September 2021.

¹¹ CAAP MC No. 07-2020 dated 22 March 2021 informing that the validity of certificates emanating from CAAP-Airworthiness Department, which were extended pursuant to MC No. 10-2020 dated 13 March 2020, remains valid until 30 September 2021.

To enable safe and reliable air transportation, stakeholders were directed to adopt the Safety Seal Certification (SSC) Program implemented under the directives of the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID). Among the measures incorporated in the SSC Program is the mandatory adoption of the Stay Safe Application (Staysafe.ph) which aids the contact tracing initiatives of the government to help control the spread of COVID-19.

Moreover, the Civil Aeronautics Board (CAB) Resolution No. 69 dated October 4, 2021 and IATF-EID Resolution No. 141, s. 2021 provided for the operation of triangulated international flights as a measure to maximize the arrival capacity of flights, accommodate more returning Filipinos to the country, and utilize the available quarantine facilities at other gateways. Conditions to allow airlines to operate include but are not limited to: (a) regular commercial flights operation requirements; (b) IATF health protocols and LGU-imposed regulations; (c) international arrival passenger capacity by airport authorities or local one-stop shop (OSS); (d) health declaration submission and One Health Pass registration; and (e) informing all its passengers of the required protocols and/or other necessary information in a timely manner.

In parallel, DOTr continued to expand the capacities of airports to accommodate increasing demand. Airport projects that have been completed/upgraded to accommodate more passengers include Bicol International Airport, General Santos Airport, Camiguin Airport, Zamboanga Airport, and Siquijor Airport.

Maritime Transport

The COVID-19 pandemic has significantly affected the movement of people and cargo in the maritime sector. As of December 2021, 26.60 million passengers have been transported by sea.¹² In terms of cargo throughput, a total of 336.56 million metric tons of cargo was handled.¹³ This remains significantly below pre-pandemic levels and behind the targets for 2021. Operations of passenger ships have been more affected than cargo carriers due to travel restrictions and decrease in the maximum allowable passenger capacity. As the country shifted to a more relaxed alert level status, the Maritime Industry Authority (MARINA) increased the allowable capacity of passenger ships, provided that all necessary safety protocols are implemented.

There have been efficiency improvements and capacity expansion in the maritime transport sector. Amid the challenges brought by the pandemic, the upgrading and expansion of the Port of General Santos (Makar Wharf) was completed. It can now accommodate at least 1,300 large ships calling every year. The Makar Wharf was also identified as one of the Brunei Darussalam, Indonesia, Malaysia, and the Philippines-East ASEAN Growth Area (BIMP-EAGA) gateway ports in the country.¹⁴ In line with enhancing inter-island connectivity and mobility, a total of 579 seaport projects focusing on port development, expansion, rehabilitation, and modernization have been completed since 2016.

¹² Source of data: Philippine Ports Authority (PPA) and Cebu Ports Authority (CPA)

¹³ Source of data: PPA, CPA, Subic Bay Metropolitan Authority (SBMA), Authority of the Freeport Area of Bataan (AFAB), and Cagayan Economic Zone Authority (CEZA).

¹⁴ Based on the 2007 Memorandum of Understanding (MOU) between the Governments of Brunei Darussalam, Indonesia, Malaysia, and the Philippines on establishing and promoting efficient and integrated sea linkages.

To further strengthen the country's roll-on/roll-off (RORO) network, a new route from Matnog, Sorsogon to Bogu City, Cebu was opened to provide a direct link between Luzon and Visayas islands. MARINA also issued the revised rules in the grant of missionary route¹⁵ status for RORO passenger (RoPax) ships.

An automated passenger ticketing system was implemented in passenger terminals of Philippine Ports Authority (PPA) to limit face-to-face interactions. Aside from the passenger ticketing system, an electronic-payment portal (EPP) was implemented to digitize the collection and payment of port fees and other related charges. The EPP is integrated with PPA's online systems such as the Electronic Accreditation System (eAS), Electronic Permit Management System (ePMS), and Internet-based Port Operations and Receipting for Terminals System (iPORTS).

Safety and Security

Death rate due to road traffic accidents has significantly decreased. As of second quarter of 2021, there was a decrease in death rate due to road traffic accidents from 10.9 deaths per 100,000 population in 2016 to 7.97 deaths per 100,000 population in 2020¹⁶ and 3.85 deaths per 100,000 in 2021.¹⁷ Both were lower than the annual target of 10 deaths per 100,000 population. The decreasing trend in road traffic accidents is reflective of the impact of travel and movement restrictions due to the pandemic.

Overall compliance of transport facilities with their respective security plans, programs, rules, and regulations was recorded at 64 percent¹⁸ in 2020 and at 47 percent in the 3rd quarter of 2021. Both are lower than the target of 90 percent. This is due to the non-submission of corrective action reports by transport facilities, internal issues on the endorsement of compliance certificates, and postponement or cancellation of field visits and inspections. Note that the latter was due to the imposition of community quarantine and mobility restrictions during the pandemic.

Water Resources

COVID-19 further emphasized the continuing need to develop and improve water supply and sanitation in the country. It also brought to the fore the issue of food security, which is linked to the current situation of the country's agriculture and irrigation requiring efficient management of water resources (*see Chapters 8 and 20*). Meanwhile, considering the need for resilience against severe flooding as experienced in certain regions—such as that in Cagayan Valley brought about by Typhoon Ulysses and the catastrophic effects of Typhoon Odette on the Visayas Region—flood control and risk management will have to be given due attention.

Water Supply and Sanitation (WSS)

WSS policies, plans, and programs in accordance with the Philippine Water Supply and Sanitation Master Plan (PWSSMP) key reform agenda continue to be pursued. With the launch of the PWSSMP on September 16, 2021, several initiatives aligned with the overarching goal of universal access to safe, sufficient, affordable, and sustainable water supply and sanitation have progressed.

¹⁵ Missionary route refers to a route involving one or more direct links covering one RORO capable, available, and suitable ports that have no existing shipping service due to geographic limitation or absence of economic and market viability; MARINA MC No. DS-2021-01.

¹⁶ Source of data: PSA 2020 census and number of registered deaths associated with road transport accidents.

¹⁷ Source of data: PSA number of registered deaths associated with road transport accidents from January 2021 to June 2021

¹⁸ Source: Office for Transportation Security (OTS)

House Bill (HB) 9948, which provides for the establishment of the Department of Water Resources (DWR) and the Water Regulatory Commission (WRC), was filed at the House of Representatives on August 9, 2021, and is up for plenary deliberation. As for the National Water Management Council (NWMC), a draft executive order is under review by the Office of the Executive Secretary (OES).

The table below provides a summary of and updates on the Key Reform Agenda (KRA) under the PWSSMP.

Key Reform Agenda	Focus	Updates
1. Establishing effective WSS sector institutions	Addressing the fragmented WSS sector	Provincial and municipal WSS master plans to align with the PWSSMP are being updated.
2. Strengthening the regulatory environment	Regulating and managing water resources and water service providers (WSP), including water tariffs	Amendments are being made to streamline issuance of water permits and certificates of public convenience (CPCs) to WSPs.
3. Creating and ensuring effective WSS services	Ensuring appropriate and sustainable operations of WSS service providers	The Local Water Utilities Administration (LWUA) issued Memorandum Circular 011-18 to establish key performance indicators (KPIs) to monitor water district (WD) performance.
4. Balancing water supply and demand	Managing and maximizing finite water resources with end-users	Groundwater management plans are being developed for constrained areas. Comprehensive water resource assessments are ongoing in 18 major river basins. There are also ongoing non-revenue water reduction programs for identified WDs care of the LWUA
5. Building climate resiliency	Adapting to climate change	The DPWH has adopted new provisions in their Design Guidelines, Criteria and Standards, and Standard Specifications for climate-resilient hydraulic structures to complete the revised Green Building Code, with inclusion of provision on standards for water efficiency in building design and construction.
6. Enabling access to funding and financing	Improving availability and acquisition of funds/ financing for WSS	The adoption of a common and unified framework for resource allocation for WSS was submitted to the NEDA Board Committee on Infrastructure (INFRACOM) for approval.
7. Managing data and information	Ensuring availability and accessibility of reliable WSS data	Coordination meetings with the safe water project of the United States Agency for International Development (USAID) have been conducted regarding the development/enhancement of tools related to water utility governance, local water security planning, and support to peer review sessions.
8. Driving research and development	Investing in research and innovations	Regular webinars and various learning sessions through the WSS Virtual Network Sessions were also held, one of which showcased the various research and technologies developed in partnership with the Department of Science and Technology (DOST).

Accomplishments are below WSS targets. According to the Annual Poverty Indicators Survey (APIS), the number of households with access to water supply stood at 91.60 percent in 2020, falling short of the target of 93.11 percent for the year. Coverage of improved sanitation was at 93.90 percent, also below the target of 94.60 percent. To expedite delivery of WSS services in areas where such services are highly needed, a NEDA Board issuance on a common and unified framework for resource allocation for WSS is being proposed.

In the case of Metro Manila, which had been hounded by water interruptions, the completion of the Angat Water Transmission Improvement Project (AWTIP) Tunnel No. 4 in 2020 jumpstarted the rehabilitation of the other aqueducts and tunnels within the Umiray-Angat-Ipo System. This will contribute to improved water security for Metro Manila. On September 7, 2021, the construction of the AWTIP's Aqueduct No. 7 commenced. Meanwhile, preconstruction activities for Tunnel No. 5 began in December 2021.

Meanwhile, in line with the Mandanas-Garcia ruling and the agency's mandate to capacitate LGUs, the Department of the Interior and Local Government (DILG) commenced its profiling of LGU-run water service providers using KPIs. As of December 2021, around 470 LGU-run water utilities have been profiled. Outputs of the profiling activity will be used for the agency's capacity development interventions.

Irrigation

Irrigation development is on track at 64.12 percent in 2020. The National Irrigation Administration (NIA) implemented 170 infrastructure projects for CY 2020, of which 38 projects are in Luzon, 32 in Visayas, 20 in Mindanao, and 80 in selected provinces nationwide. Collectively, these projects resulted in the generation of 26,839 hectares (ha.) of irrigated area and the restoration of 10,895 ha. of irrigation service areas. NIA operated and maintained 247 national irrigation systems (NIS) with an aggregate service area of 901,406 ha. and a firmed-up service area (FUSA) of 801,899 ha. A cropping intensity of 157.93 percent was achieved based on the service area or 177.53 percent based on the FUSA. As of December 31, 2020, feasibility studies for 141 projects and detailed engineering designs for 83 projects were completed.

Flood Control and Management

Flood management plans for several priority river basins were formulated, particularly for Abra, Apayao-Abulug, Jalaur, Buayan-Malungon, Tagum-Libuganon, Ranao (Agus), and Davao. Feasibility studies of proposed priority measures for these major river basins commenced in 2021. The completion of these master plans marked the completion of the flood management master plans for the 18 major river basins in the country.

One of the notable large-scale flood control projects is the Flood Risk Management Project-Cagayan, Tagoloan, and Imus River (FRIMP-CTI), with the Tagoloan River and the Cagayan River subprojects completed in 2019.

Lack of data on flood control remains a constraint in objectively measuring achievements in the sector. The Department of Public Works and Highways (DPWH) is developing an asset management information system for flood risk management (AMIS-FRM) to assist in strategic planning of integrated flood risk management (IFRM) infrastructure development as well as improve monitoring and maintenance works.

Energy

Critical policy reforms to increase competition and encourage investments in the energy sector were implemented. Energy Virtual One-Stop Shop (EVOSS) Act (RA 11234) streamlined the permitting process for all new power generation, transmission, and distribution projects. The establishment of the EVOSS System, a web-based monitoring system for energy applications and a repository of project-related information and permits issued, allowed coordinated submission and synchronous processing of data and information relative to applications for energy projects. The Competitive Selection Process (CSP) introduced in 2015 was enhanced, ensuring competitive, transparent, and least-cost procurement of power supply by distribution utilities for the captive market.

Changes were made to the design of the Wholesale Electricity Spot Market (WESM) to improve its efficiency. The electricity dispatch interval was shortened from one hour to five minutes, allowing a more competitive pricing strategy. Changes in the WESM Market Manual and Retail Rules were made to promote participation in Retail Competition. The establishment of the reserve market also allowed least-cost scheduling of reserves, making WESM more competitive and transparent. However, full commercial operation of the WESM Mindanao has not been realized since its launch in 2017 due to delayed completion in the registration of participants. Based on the November 15, 2021 monitoring report of the Independent Electricity Market Operator of the Philippines (IEMOP), only 41 out of 100 expected participants are fully registered in the WESM Mindanao. Notwithstanding, the System Operator and Generators in Mindanao have transitioned to WESM Central Scheduling on June 26, 2021.

Policies/framework to increase the utilization and competitiveness of renewable energy (RE) were adopted. Rules and guidelines governing the establishment of renewable portfolio standards (RPS) for on-grid and off-grid areas were promulgated. These policies require Distribution Utilities (DUs) to source a portion of the annual power requirement from renewable sources. The rules governing the establishment of the Green Energy Option Program (GEOP) and Green Energy Auction Program (GEAP) were also established. The GEOP gave qualified electricity end-users the power of choice by allowing them to source power from RE suppliers. On the other hand, the GEAP provided RE suppliers with a venue to sell their power capacity at a price that allows them to recover their investments. The rules for operationalization of the RE market, enabling market participants to trade RE Certificates, were also issued.

Reduction of electricity cost. The *Murang Kuryente* Act (RA 11371) allowed the use of PHP208 billion proceeds of the net national government share from the Malampaya Fund for the payment of Stranded Contract Cost (SCC) and Stranded Debt (SD) of the National Power Corporation (NPC) that were assumed by the Power Sector Assets and Liabilities Management Corporation (PSALM).

Transition to a low-carbon energy future poses significant challenges particularly in ensuring the reliability of energy supply. The push for the reduction of greenhouse gas (GHG) emissions has seen many countries transition to low-carbon development. For the energy sector, this meant less reliance on coal and oil-based power plants and increased utilization of RE. However, increasing the share of RE, such as solar and wind, will reduce grid reliability due to their intermittence. Moreover, the commissioning of new power plants takes time.

In terms of installed and dependable capacities, coal-fired power plants contributed 42.5 and 44.9 percent to the 2021 power capacity mix, respectively. While the Department of Energy (DOE) began imposing the moratorium of endorsement for greenfield coal-fired power projects on October 27, 2020, there are still about 4,353.4 megawatts (MW) committed and 1,520 MW indicative coal-fired power projects in the pipeline with target commercial operations from 2022 to 2032.

Meanwhile, the concession for the Malampaya Gas resource is set to expire by 2024 with expected reduction in supply starting in 2022. This is currently the country's only source of natural gas and provides approximately 429 million standard cubic feet per day (MMSCFD) to several natural gas-fired power plants in Luzon with a total capacity of 3,453 MW. The expiration of the concession will affect the country's energy self-sufficiency. In preparation for the eventual depletion of the indigenous Malampaya resource, the DOE issued several permits to private sector companies interested in developing imported Liquefied Natural Gas (LNG)-receiving terminals. These companies are expected to commercially operate the LNG-receiving terminals by mid-2022. As of December 2021, DOE has already issued six active permits to interested proponents to set up LNG terminal projects amounting to about PHP51.21 billion with an aggregate capacity of 21.7 million tons per annum (MTPA). To provide transparent guidelines for prospective investors, the DOE issued the Rules and Regulations Governing the Philippine Downstream Natural Gas Industry. However, there is still a need for a unified law/policy for the natural gas industry to ensure the proposed projects will proceed as planned and propel the growth of the emerging natural gas industry into a mature industry status.

Alternative and cleaner sources of energy. Considering that hydrogen fuel is also considered a viable alternative and cleaner source of energy, the DOE also conducted a study on hydrogen and fusion energy. The completed study showed the potential benefits of hydrogen as an alternative energy source, subject to non-fossil fuel as feedstock.

Meanwhile, through the issuance of Executive Order (EO) No. 116 on July 24, 2020, the DOE-Nuclear Energy Program Implementing Organization (NEPIO) and the Nuclear Energy Program Inter-Agency Committee (NEP-IAC) were established to formulate a national strategy and roadmap addressing the challenges to implementing a Nuclear Power Program (NPP).

Ancillary services are needed to minimize power outages. The issuance of red and yellow alerts by the DOE on May 31, 2021 to June 2, 2021, and the power interruptions experienced in some areas of the Luzon Grid were caused by an insufficient level of ancillary services. These incidents emphasized the role of ancillary services in maintaining the reliability of the supply of electricity in the grid especially as the country transitions to clean energy. The intermittence of variable renewable energies (VREs) greatly affects grid reliability.

While there may be enough installed capacity, the reliability of power plants remains a concern. The “yellow” and “red” alerts recorded in Luzon and Visayas mid-2021 were due to a variety of factors such as unplanned and extended power plant outages, Malampaya gas restrictions (Luzon), decrease in output of solar facilities (Visayas), and insufficient operational reserves. Delays in the commercial operation of new power projects also affect the availability of supply as its capacity is anticipated and considered in the scheduling of planned outage of power plants for maintenance and repair purposes.

To ensure the stability of the power grid, the DOE is strictly enforcing the implementation of the Ancillary Services Policy for the NGCP to fulfill its obligation of providing sufficient levels of ancillary services or power reserves. On June 21, 2021, DOE directed the NGCP to fully comply with the Ancillary Services Policy by procuring the required levels of ancillary services (AS) through firm-contracted arrangements. Likewise, the DOE continues to work closely with enforcement agencies such as the Energy Regulatory Commission (ERC), Philippine Competition Commission (PCC), and Department of Justice (DOJ) to ensure that unplanned, prolonged, and alleged malicious activities of power industry players are scrutinized, investigated, and penalized.

Household electrification. As of December 2021, 95.41 percent of the country or 25.02 million households¹⁹ were provided access to electricity services of DUs, while a total of 1.10 million households remained without access.

To complement the government's ongoing efforts to increase electricity access, the President signed EO 156²⁰ on December 12, 2021, directing the DOE to identify and take the necessary actions in ensuring that total electrification is realized in inadequately served areas.²¹ It also mandates all DUs to submit a comprehensive electrification master plan (CEMP) and allows the DOE to modify or reject the CEMPs if they are not in accordance with the total electrification objective or do not ensure the highest quality and least-cost of service for providing electricity.

Energy efficiency as a way of life. The passage of the Energy Efficiency and Conservation Act of 2019 (RA 11285) and the issuance of its IRR in 2019 ended the country's almost 30 years of voluntary energy efficiency market. In line with this, priority programs have been put in place to include: (a) the Government Energy Management Program (GEMP); (b) Demand Side Management, Philippine Energy Labeling Program (PELP); (c) mainstreaming of energy efficiency and conservation in LGUs; (d) performance improvement of government buildings/facilities; and (e) development of the National Energy Efficiency and Conservation Plan (NEECP).

Resiliency of energy infrastructure. The Energy Resiliency Policy was issued on January 17, 2018 to strengthen existing infrastructure facilities, incorporate mitigation improvements into their reconstruction and rehabilitation plans, improve operational and maintenance standards and practices, and develop resiliency standards. This policy stipulates that all energy industry players are expected to formulate and submit their respective Resiliency Compliance Plans (RCP), which contain an inventory of all plans, programs, and activities pertaining to improvement of infrastructure and systems, stockpiling, and response and recovery measures. As of December 2021, 161 industry players have already submitted their respective RCPs.

The energy sector likewise activated its Task Force on Energy Resiliency (TFER) during calamities/disasters for quick response and rehabilitation. The TFER is called upon to address power supply disruptions brought about by typhoons and other natural disasters.

¹⁹ The potential households based on PSA's 2015 Census is 22,984,271.

²⁰ "Instituting Measures to Ensure Consistent and Reliable Electricity Service in Inadequately Served Areas, Improve Performance of Ineffective Distribution Utilities, and Achieve Total Electrification of the Country" signed by the President on 12 December 2021.

²¹ Collective term for unviable, unserved, underserved, and poorly served areas.

ICT Infrastructure

The country's digital connectivity improved, mainly through industry players' efforts. According to Speedtest Global Index, the country's Internet speed improved significantly since the end of 2020. As of December 2021,²² average download speed of 82.61 megabits per second (Mbps) was recorded for fixed broadband, a significant increase from 31.07 Mbps in December 2020. Moreover, mobile broadband speed was estimated at 42.22 Mbps, almost double from 22.50 Mbps in the same period. Despite these improvements, the country's digital infrastructure remains inadequate with current Internet speeds below the global average²³ of 123.91 Mbps and 71.11 Mbps for fixed and mobile broadband, respectively.

Rural-urban disparity in terms of digital connectivity is still persistent.²⁴ The substantial digital divide still persists with urban areas remaining better-connected in both fixed and mobile broadband access compared to rural areas. Lack of digital connectivity in the rural areas affects the delivery of basic public services. The Philippines has not satisfactorily achieved economic efficiency and social equity that could have been maximized with universal broadband access.

The natural monopoly characteristics—high investment requirements, economies of scale, and presence of network externalities—of broadband services and other infostructures make it difficult to ensure adequate coverage and acceptable quality. Various structural changes and new technologies, such as unbundling of vertical services and infrastructure sharing, among others, will address barriers to entry in different segments of the broadband market with reduced capital investment requirements. For instance, a bill proposing an Open Access on Data Transmission Law—which will lower barriers in establishing needed infostructures to improve coverage and quality by allowing interested parties the unimpeded use of infostructures at transparent and fair rates—is still pending in the legislative branch.

The Department of Information and Communications Technology's (DICT) Department Circular (DC) No. 08, or the common tower policy, is an interim measure while awaiting a full open access law. The DC provides guidelines on the use of towers built by independent tower companies (ITC). These towers could be leased out under similar terms envisioned in the open access policy. To implement this DC, DICT and DepEd entered into a cooperation agreement²⁵ where common towers built by ITCs on DepEd land could be leased out while being used in the Philippine Education Network (PEN). A total of 23 ITPs²⁶ are currently registered according to the common tower policy. Guidelines were issued to streamline the processes for the issuance of permits, licenses, and clearances with respect to the rollout and construction of ICT infrastructure and also pursuant to RA 11032 ("Ease of Doing Business and Efficient Government Service Delivery Act of 2018").²⁷ DILG also directed²⁸ LGUs to strictly observe the provisions of the guidelines to facilitate the accelerated rollout of ICT infrastructure and services.

²² Speedtest Global Index (Philippines). <https://www.speedtest.net/global-index/philippines>

²³ Speedtest Global Index. <https://www.speedtest.net/global-index>

²⁴ Regional distribution of households with or without internet access. National ICT Household Survey 2019. <https://dict.gov.ph/ictstatistics/wp-content/uploads/2021/01/HH-012.pdf>

²⁵ <https://www.deped.gov.ph/2021/04/19/joint-statement-of-deped-and-dict/>

²⁶ Source: <https://dict.gov.ph/dict-accelerates-tower-build-with-issuance-of-provisional-certificates-to-itcs/>

²⁷ Joint Memorandum Circular (JMC) No. 01 (s. of 2021) signed by the Anti-Red Tape Authority (ARTA), Department of Information and Communications Technology (DICT), Department of the Interior and Local Government (DILG), Department of Human Settlements and Urban Development (DHSUD), Department of Public Works and Highways (DPWH), Civil Aviation Authority of the Philippines (CAAP), National Telecommunications Commission (NTC), National Electrification Administration (NEA), Energy Regulatory Commission (ERC) and the Philippine Competition Commission (PCC)

²⁸ DILG Memorandum Circular No. 2021-135 (dated 1 December 2021)

Social Infrastructure

Education

In December 2019, DepEd launched *Sulong Edukalidad* which includes Improving the Learning Environment as one of four key reform areas. However, its implementation was hampered by the pandemic. Thus, DepEd formulated the Basic Education Learning Continuity Plan (BE-LCP) to address the new challenges posed by the pandemic.

Implementation rate of basic education facilities remains low. Based on 2020 data, classroom to pupil ratios for Primary, Junior High, and Senior High Schools are at 1:29, 1:39, and 1:35, respectively. A total of 7,233 classrooms were constructed under the Basic Education Facilities Fund (BEFF) for FY 2018 to 2020. Construction is underway for 12,464 classrooms and 859 Technical Vocational Laboratories (TVL), respectively, as of December 2021. For the Last Mile Schools Program (LMSP), which involves construction and rehabilitation projects for 9,225 identified LMS, only 170 (1.8%) of these projects have been completed as of 2020. For the LMS Fund from 2020 to 2021, 51 sites are ongoing construction while 30 sites are under procurement. Overall, disbursement for the construction of facilities remains to be an issue based on second quarter 2021 data. Of the FY 2021 allocated budget, only PHP1.02 billion has been disbursed and PHP2.30 billion obligated, while PHP7.15 billion remains unobligated.

The proportion of public schools with connection to electricity and with adequate water and sanitation facilities remain within target in 2020. On the other hand, the percentage of public schools with internet access is below target at only 64.2 percent for Primary School, 72.2 percent for Junior High School, and 67.3 percent for Senior High School. A total of 102,362 ICT packages have been procured under the FY 2021 and FY 2020 Funds.

Health

Health facilities remain inadequate. Based on the National Health Facility Registry (NHFR), there are a total of 1,318 licensed hospitals in the country. Private hospital bed spaces increased over the years from 4,000 in 1990 to 22,773 in 2020, but the country's bed-to-population ratio declined due to slow growth of public beds and rapid population growth. In terms of hospital level care, about six and 33 of the 114 highly urbanized cities/independent component cities (HUC/ICCs) did not have enough Level 1 and 2 hospital beds, respectively.

The Philippine Health Facilities Development Plan (PHFDP) 2020-2040 formulated by the Department of Health (DOH) estimates that only 50 percent of the population can access frontline health facilities²⁹ within 30 minutes of travel. These facilities serve as entry point of patients into the health system where simple cases are handled while more complex cases are referred to higher-level or specialized health facilities. This lack of frontline facilities forces patients to higher-level facilities or specialized units and take up capacities of these healthcare facilities despite their cases warranting only the attention of frontline units.

As of October 2021,³⁰ only 68 percent of barangays have access to a rural health unit and health center (RHU/HC) as opposed to DOH's target of 80 percent. The deficiency is due to the shift in priority facilities

²⁹ Barangay Health Stations (BHS), Rural Health Units, and Health Centers (RHU/HC)

³⁰ 27 October 2021 DOH letter/submission

identified in the Universal Health Care (UHC) Act, i.e., from barangay health station (BHS) to primary care facility. Temporary treatment and monitoring facilities (TTMF) and other COVID-related health facilities (e.g., isolation and quarantine facilities) were also prioritized over frontline facilities due to the pandemic.

The DOH's response to the COVID-19 pandemic is anchored on the Prevent, Detect, Isolate, Treat and Reintegrate (PDITR) strategy. DOH provided the resources needed by the “isolate” and “treat” pillars of this strategy through the Health Facilities Enhancement Program (HFEP), a banner program that aims to improve public health facilities by constructing new and upgrading and rehabilitating existing public health facilities across the country, which identified a total of 32 COVID-19 referral hospitals (with 19 catering to moderate to severe COVID-19 patients) and established COVID-19 isolation facilities. In implementing the “detect” component of the strategy, the Food and Drug Authority (FDA), in collaboration with the Research Institute for Tropical Medicine (RITM), licensed 199 COVID-19 testing laboratories nationwide, composed of 154 licensed RT-PCR laboratories and 45 GeneXpert laboratories.

The HFEP is poorly implemented. Under the HFEP, 78 newly-constructed BHS, six LGU hospitals, and two other health care facilities (HCFs) were completed, while 183 BHS, 24 RHU, one polyclinic, 31 LGU hospitals, 23 DOH hospitals, and four other HCFs were repaired and renovated in 2019. Notwithstanding, based on the 2020 Annual Audit Report of the Commission on Audit (COA), several HFEP infrastructure projects were either idle/unutilized or with substantial delays in implementation. Some of the challenges encountered in the management of HFEP infrastructure projects include: (a) failure to secure all the necessary documents; (b) lapses in the conduct of the Detailed Engineering Design (DED); (c) leniency of the agency in granting extensions/suspension of work to the contractors; (d) failure to adhere to the prescribed procurement timeline under the Government Procurement Reform Act (GPRA) or RA 9184; (e) delayed release of the sub-allotment advice (SAA); (f) inability to closely monitor project implementation; and (g) delayed release of funds from the DOH-Central Office. Realization of benefits from these assets were deferred because the properties are at risk of deterioration, loss, and lapse of warranty period.

Solid Waste Management

Compliance with the Ecological Solid Waste Management Act of 2000 (RA 9003) improved but still below target. Solid waste management (SWM) remains a major challenge because waste disposal facilities remain inadequate to cope with the increasing rate of waste generation especially in urbanized areas. A large proportion of the population remain unserved by basic SWM facilities. In 2020, an additional 824 material recovery facilities (MRFs) were established, bringing the total to 11,546 MRFs, providing services to 14,450 barangays nationwide. This represents 34.37 percent of the total number of barangays, which is still below the 50 percent target for 2020. As of 2021, barangays with access to MRFs increased from 34.37 percent in 2020 to 35.27 percent or 14,828 barangays. On the other hand, there is some improvement in terms of the provision of sanitary landfills (SLF). As of 2021, around 28.52 percent of the barangays have access to SLFs, surpassing the Department of Environment and Natural Resources' (DENR) target of 27.91 percent for the year.

To address the solid waste management problem in the country, the government has been promoting the adoption of waste-to-energy (WTE) technologies. The DENR established guidelines³¹ on the evaluation,

³¹ DENR Administrative Order No. 2019-21 “Guidelines Governing Waste-To-Energy (WTE) Facilities for the Integrated Management of Municipal Solid

establishment, operation, and decommissioning of WTE facilities for the integrated management of municipal solid wastes. Relatedly, the DOE issued policies and implemented programs³² that aim to promote WTE facilities as baseload RE and prescribed policies and programs to enhance the participation of the electric power industry players in the development of WTE facilities.

IN FOCUS: RM, YOUNG PROFESSIONAL IN THE CAPITAL



RM, 25 years old, is the eldest of three children in a family hailing from the countryside. He comes from a family of farmers that tilled the land where they have lived for multiple generations. His siblings are studying at the local public high school and local state college in their hometown.

RM is a college graduate and works in the country's capital, Metro Manila. His parents and siblings mostly rely on his earnings for their daily needs and school expenses. At night, he attends classes for his post-graduate degree.

RM is a digital native who is well-versed in media and technology. He dreads the daily traffic of the commute from his residence in Metro Manila to his workplace in a bustling central business district (CBD) because of the time wasted in traffic. He feels that his work and his classes can be conducted virtually.

He bemoans the scorching tropical heat of the Philippines but does not dare to buy an air-conditioning unit (ACU) because of expensive electricity prices. As he lives in Metro Manila, RM has access to a decent supply of water which he considers a luxury compared to conditions in his hometown.

Wastes". <<https://emb.gov.ph/wp-content/uploads/2020/01/Guidelines-Governing-Waste-To-Energy-WtE-Facilities-for-the-Integrated-Management-of-Municipal-Solid-Wastes.pdf>>

³² DOE Department Circular No. DC2022-02-002 "Prescribing the Policies and Programs to Promote and Enhance the Development of Biomass Waste-to-Energy (WtE) Facilities". <<https://www.doe.gov.ph/sites/default/files/pdf/issuances/dc2022-02-0002.PDF?withshield=1>>

STRATEGIC FRAMEWORK

Nearly every aspect of RM's day-to-day experience depends on infrastructure in its various forms, which is similarly felt by many other Filipinos who need improved and reliable infrastructure facilities and services for better living and well-being. Thus, with the infrastructure's critical role in achieving the goals and aspirations of Filipinos, there is an urgent need to accelerate infrastructure development.

As stated in the Updated PDP 2017-2022, the strategic framework for the infrastructure sector remains relevant in support of the recovery efforts of the country.

The goal of the sector remains the same: ensure adequate infrastructure to satisfactorily support the activities of the socioeconomic system. Even as the country has yet to fully address infrastructure backlogs, the pandemic has posed new challenges in terms of the type of infrastructure to prioritize given limited resources. Healthcare, water resources, logistics, and ICT infrastructure have become even more urgent. The demand for efficient public transportation and safe and modern educational facilities has been gaining traction. At the same time, the country also has to invest in infrastructure projects that create jobs and spur more economic activities that are crucial for economic recovery and inclusive and sustainable growth.

Figure 19.1 Strategic Framework to Accelerate Infrastructure Development



STRATEGIES

IMPLEMENTING STRATEGIC INFRASTRUCTURE FOR CONTINUOUS ECONOMIC RECOVERY AND RESILIENCY BUILDING

Adopt smart technologies to enhance sustainability in different infrastructure sub-sectors.

Smart technologies can be applied over a wide spectrum of infrastructure sub-sectors to enhance sustainability and promote people-centered development. The Philippine government can make use of areas of cooperation available under regional initiatives (APEC, ASEAN, etc.) to aid the diffusion of smart technologies. This is a more inclusive and proactive approach for the development and use of smart technology by national government, local governments, and the private sector.

Wider adoption of smart infrastructure has strong synergies with the following aspirations in infrastructure development and services:

1. Integrated infrastructure development planning,
2. Intelligent transport and logistics systems, and
3. Integrated health data management system.

There are different use cases for Smart Technologies which would allow for better insight and control of the area of application. If competently managed, data generated from smart facilities can be aggregated and used for policymaking and planning purposes. A serviceable data management system would also increase the efficiency of the proposed national policy on master plans.

NEDA's proposed policy on master plans is geared towards integrated infrastructure development planning. Once adopted, the policy will harmonize master plan formulation and facilitate the discussion and implementation of the country's infrastructure development program. Importantly, the use of ICT tools to generate data will allow for proper and timely analysis and evidence-based planning to equitably distribute infrastructure investments.

Transport

The transportation system plays a critical part in the country's economic recovery. It is important for transport infrastructure to be climate- and pandemic-resilient to provide unhampered movement of people and goods as well as support economic activities and humanitarian logistics.

Support the consolidation and passage of various measures for priority road users. The legislative measures will: (a) lay down the rights of the priority road users (such as commuters, pedestrians, active transport, and light mobility vehicle/personal mobility device users); (b) strengthen the directives of the National Transport Policy (NTP) and its IRR to increase trust in, and preference for, public transportation; and (c) establish infrastructure for active and low-carbon emitting mobility.

The COVID-19 pandemic has highlighted the importance of expanding public transportation capacity and the need for participative and data-driven policymaking. The NTP-IRR reiterates the government's

responsibility to formulate programs and projects based on public need and to seek social acceptance through the active involvement of stakeholders, including the LGUs. DOTr shall continue to be the primary policy, planning, programming, coordinating, implementing and administrative entity of the executive branch of the government on the promotion, development, and regulation of a dependable and coordinated network of transportation systems, as well as in the fast, safe, efficient, and reliable transportation services.

Pursue the development of a unified database and transport model. The use of data will allow better utilization and integration of the country's transportation system to drive economic growth and build sustainable communities. Mobility data³³ shall also be made available to the public as open data. This will encourage the participation of the private sector in the development of applications and other ICT-based services that can enhance the mobility of people, goods, and services.

Land-based Transport

Ensure efficient and safe operations of public transportation. Implementation of the SCP shall continue to provide transport workers a reliable source of income with the enforcement of health measures in public transportation to prevent the spread of COVID-19 while also providing efficient and reliable transportation services to the public. Systems supporting cashless and contactless transactions shall likewise be improved and expanded to be interoperable among various modes of transportation through the automatic fare collection system (AFCS).

Expand coverage of public infrastructure catering to active and public transport. Active transport networks, such as bike lanes and pedestrian walkways, shall continue to be expanded in metropolitan areas to further promote sustainable mobility, reduce air pollution, and improve overall public health. Enhancement of high-capacity cost-effective public transport shall likewise be pursued to address traffic congestion in urban roads, including the development and operation of Integrated Transport Terminals. Policies and implementation of active and public transport shall be prioritized over private vehicle transport, in line with the NTP and its IRR.

Rail Transport

Sustain the expansion of rail network and other mass transit systems and ensure accessibility, affordability, convenience, and reliability. The rail network shall continuously be improved and expanded, consistent with the objective of moving more people and cargo rather than vehicles. Rail-based projects that facilitate interregional accessibility and faster movement of freight while decongesting traffic along road networks to and from cargo terminals shall likewise be prioritized.

Improve policies on procurement activities and capacity building for skilled workers in mass transit systems. To ensure the availability of highly specialized spare parts and supplies, the procurement policies, guidelines, and activities of the rail sector will be improved. In anticipation of the forecasted need for skilled workers in the sector, capacities and skills of mass transit workers will be upgraded. The Philippine Railway Training Center shall continue to provide comprehensive technical training for rail professionals.

³³ Mobility data are information related to the interactions and movement of people, goods, and vehicles in the transportation system

Air Transport

Sustain implementation of optimal airports system capacity to expand airport capacities at pace with growing demand. The government shall continue the expansion of runways and passenger terminal buildings, among others, to accommodate the increase in passengers as well as the rehabilitation and/or modernization of airport facilities and equipment to comply with the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) standards of existing regional, provincial, and community airports. Initiatives on enabling night-time operations such as installation of Aeronautical Lighting System and Instrument Landing System will still be pursued.

Explore the potential of airports as a catalyst for local tourism development and new growth centers. The government shall encourage initiatives on establishing a gateway airport to connect feeder airports and provide access to tourist destinations and cultural heritage sites. This strategy is strengthened with the recent accomplishments of the aviation sector in terms of upgrading/expanding regional/provincial airports to cater to more passengers.

Maritime Transport

Prioritize the implementation of sustainable and disaster-resilient port facilities. While continuing the expansion and development of ports to ensure inter-island mobility, “Green Port” initiatives shall be prioritized and focus shall be shifted towards sustainable port operations. Infrastructure facilities in ports shall be designed to be climate-resilient and focused on minimizing environmental externalities and mitigating the impacts of climate change. DOTr and its attached agencies shall use alternative fuels and give preference to energy-efficient port equipment. These measures are also in consonance with the efforts of the International Maritime Organization (IMO) and other global stakeholders in reducing GHGs emitted by ships and port equipment.

Continue to implement the Maritime Industry Development Plan (MIDP). To address the challenges in the maritime transport sector which were aggravated by the COVID-19 pandemic, the eight priority programs³⁴ of the MIDP shall continue to be implemented. Noting that the Philippines is the leading source of seafarers globally, the 2021 updating of the MIDP involves the inclusion of Program 9: Development and Provision of Qualified and Competent Seafarers Human Capital Requirement for the Global Maritime Industry. The MIDP shall likewise be updated annually to ensure that the plan is responsive to the needs of the maritime transport industry.

Coordination and convergence of government agencies and the academe shall be strengthened to bring science and technology (S&T) innovations to the Philippine maritime transport industry, particularly on the development of transportation technologies, intelligent transport systems (ITS), modernization of fleets, and alternative fuels.

Promote Coastal and Inland Waterways Transport System as an alternative sustainable transport mode. With the completion of the feasibility study on the Pasig River Ferry System (PRFS), the government shall continue supporting the development of Coastal and Inland Waterways Transport

³⁴ Eight priority programs: 1) Upgrading of Domestic Shipping in Support of the Nautical Highway Development; 2) Development of Shipping Services for Maritime Tourism; 3) Development of Coastal and Inland Waterways Transport (CIWT) System; 4) Strengthening of Safety Standards of Philippine-Registered Fishing Vessels; 5) Development of a Global Maritime Hub; 6) Enhancement of Maritime Safety in the Philippines; 7) Modernization of Maritime Security in the Philippines; and 8) Establishment of Maritime Innovation and Knowledge Center.

System, which can be an efficient, cost-effective, and environment-friendly alternative to move people and commodities over long distances. The expansion of the system to other metropolitan and HUCs will also be explored to increase regional connectivity and reduce traffic congestion.

Safety and Security

Transport safety and security remain top priorities in the sector. The transportation agencies shall continue to push for strict observance of health and safety measures as public transport capacity gradually increases in transitioning to the new normal, including strategic programs, projects, and activities contributing to the government's PDITR+Vaccinate (PDITR+V) strategy to combat the COVID-19 pandemic. On transport support and local travel, the government shall continue to enforce strict implementation of the "7 Commandments"³⁵ started in June 2020, for passengers, drivers, and operators while aboard public transportation.

Moreover, as part of the government's efforts to improve transport safety and security, ensure compliance with safety and environmental standards, and prepare the sector in transitioning to the new normal, the following policy reforms, programs, projects, and activities shall be pursued and continued:

1. Private Motor Vehicle Inspection Systems Program,
2. Amendment of the Transport and Traffic Code of the Philippines (RA 4136),
3. Vehicle Scrappage Program, and
4. Committee on the Harmonization of Vehicle Standards and Regulations (CHVSR) activities.

Continue to strictly implement road safety measures. Safety features shall be continuously incorporated in modernizing traditional PUVs and implementing new public mass transit systems. Infrastructure such as street crossing for school zones and other public spaces along national roads shall be replaced with pedestrian over/underpass, if applicable, and low-speed vehicles such as tricycles and pedicabs must be restricted from plying national highways to reduce road crash incidents. Road safety laws and ordinances shall also continuously be strictly implemented such as the use of dedicated bus lanes, motorcycle lanes, and loading/unloading areas; Land Transportation and Traffic Code (RA 4136); Anti-Distracted Driving Act (RA 10913); Children's Safety on Motorcycles Act (RA 10666); and Road Speed Limiter Act (RA 10916).

Water Resources

Moving forward, the water resources sector shall continue promoting Integrated Water Resources Management (IWRM). Efforts shall be expanded to cover Integrated Coastal Zone Management (ICZM). Local water-related master plans shall be harmonized with the relevant development plans (i.e.,

³⁵ 7 Commandments: 1. Magsuot ng face mask at face shield; 2. Bawal ang pagsasalita, pakikipag-usap o pagsagot ng telepono; 3. Bawal kumain; 4. Kailangang may sapat na ventilation; 5. Kailangang may frequent disinfection; 6. Bawal magsakay ng symptomatic passenger; 7. Kinakailangang sumunod sa appropriate physical distancing.

Comprehensive Land Use Plan [CLUP] and Comprehensive Development Plan [CDP]) particularly those related to the development of water resources programs, activities, and projects (PAPs) in a spatial context. Furthermore, the proposed PAPs shall also be aligned with priority projects reflected in the CDP and corresponding river basin master plans. Given the insufficiency of the allocated investments for water resources-related PAPs, projects shall continue to explore various arrangements, such as PPPs to aid in the funding and implementation of water resources PAPs.

Aside from funding, assistance shall be provided in terms of capacity development, particularly to regional areas, especially in light of the devolution of certain functions due to the Mandanas-Garcia ruling. DILG's capacity development program will cover five governance reform areas for LGUs: Information Management (e.g., WASH Sector Planning, geo-tagging), Project Planning and Design (e.g., Build Back Better, water source development, detailed engineering and design preparation), Construction and Maintenance (e.g., Contract Management and Construction Supervision, Safety, and Health in implementation of infrastructure projects), Operation and Maintenance/Asset Management (e.g., Non - Revenue Water management), and Procurement.

Water Supply and Sanitation

Continue pursuing WSS policies, plans, and programs in accordance with the PWSSMP KRAs. Monitoring of the progress of the PWSSMP in terms of the eight KRAs is crucial to ensure that the country's commitment to provide universal access to safe water supply and sanitation for all is on track.

The pursuit of WSS institutional reforms, which is one of the top priority actions under the PWSSMP, particularly in the creation of an apex body as well as independent economic regulatory body for the sub-sector would help address fragmentation. In the absence of an apex body for the water sector, several initiatives under the KRAs of the PWSSMP that require the coordination of various WSS-related agencies shall be continued.

There is a need to set up and maintain a comprehensive consolidated database (including geospatial data) not just for the water supply and sanitation sub-sector but for the whole water sector. This shall provide context, not only in terms of the spatial overlay of the existing and proposed water infrastructure within the country but also information on the interactions of different water sub-sectors over specific areas and regions, which could aid in the overall planning for the management of water resources.

Irrigation

Continue pursuing initiatives on attaining food security through irrigation and achieving water security. With the successful completion of the National Irrigation Master Plan (NIMP), its initiatives shall be implemented. These include the formulation of regional and provincial master plans aligned with the NIMP, integration of Value Engineering/Value Analysis in the appropriate stages of irrigation development, and implementation of the NIA Devolution Transition Plan (DTP) on communal irrigation system development, in line with the implementation of the Mandanas Ruling (*see Chapters 8 and 20*).

In line with this, policy and institutional reforms such as the enactment of the National Land Use Policy Act to protect agricultural lands, strengthened institutional coordination for watershed and aquifer protection and management, and the integration of emerging water-efficient technologies as well as climate change adaptation and disaster risk reduction and management (CCA/DRRM) in irrigation development, will be supported.

In terms of water security, the revisiting and updating of the water security framework/roadmap should be continued and expanded to a national scale to provide information on the current available water resources and assess how best to attain universal access to water supply, particularly for water scarce regions.

Flood Control and Management

Continue efforts on flood control and management. DPWH will continue to prepare master plans for high-risk principal river basins and update the existing river basin flood master plans where needed, including the master plans for five of the 18 major river basins, namely, Cagayan, Bicol, Agusan, Panay, and Pampanga River Basins.

The implementation of flood management and mitigation measures should also be accelerated to meet the plan targets to increase flood-protected areas, including the construction and maintenance of flood mitigating structures and drainage systems, along with flood mitigating facilities in major and principal river basins.

In general, with the absence of an overall national plan for the subsector, specific indicators under the subsector need to be determined to aid in identifying and prioritizing program, activities, and projects that would directly address the overall issue on riverine, urban, or coastal flooding.

The increased number of severe flooding that caused catastrophic damage to flood-prone regions proves the need not just for flood-resilient infrastructure facilities, but also the effective management of such facilities (such as in dam management and operational protocols).

Energy

Energy is among the drivers of economic growth. Thus, the government will implement strategies that will ensure the reliability, sustainability, and competitiveness of energy supply to support the country's economic recovery and transition to new normal.

Addressing power outages indicated by Yellow and Red Alerts. The DOE will strictly enforce existing policies that will ensure energy security: the Energy Resiliency Policy;³⁶ the adoption of the general framework governing the provision and utilization of Ancillary Services;³⁷ provision of guidelines for planned outage schedules of power plants and transmission facilities and the publication of the Grid Operating and Maintenance Program (GOMP);³⁸ and the policy for transparent procurement of ancillary

³⁶ DOE DC2018-01-001 Adoption of the Energy Resiliency in the Planning and Programming of the Energy Sector to Mitigate Potential Impacts of Disasters

³⁷ DOE DC2019-12-0018 Adopting a General Framework Governing the Provision and Utilization of Ancillary Services in the Grid

³⁸ DOE DC2020-02-004 Providing the Guidelines on the Planned Outage Schedules of Power Plants and Transmission Facilities and the Public Posting of

services by the system operator.³⁹ Strict and continued implementation of these policies will ensure adequate supply of electricity.

Full commercial operation of WESM in Mindanao. The full commercialization of the WESM in Mindanao will be pursued to provide a competitive market for buying and selling electricity that is not covered by bilateral contracts, while promoting efficiency in the scheduling and dispatch of generation capacities in the region.

Continue to implement strategies to attain household electrification targets. The energy sector aims to achieve 100 percent electrification of targeted and identified households based on the 2015 Census by 2022 and on the latest available Census by 2023 to 2040. The energy sector will continue to implement appropriate solutions and strategies for increasing electricity access and adopt more innovative solutions in bringing electricity to households and communities throughout the country. A congruent part of the electrification effort is for the DUs to execute and swiftly implement their Total Electrification Masterplans. These plans define the appropriate strategies, including the funding sources to be utilized, in the expansion of electricity access to unserved and underserved areas.

A policy that will support government's effort in achieving its electrification targets is being pursued through the proposed Microgrid Bill. Ratified by the Bicameral Committee and anticipated to be signed as a law in 2022, it seeks to promote the use of microgrid systems for total electrification. The bill stipulates that microgrid system providers are allowed to operate in any area with no electricity access or where the power connection does not provide 24/7 electricity supply. It also has the goal of clearly identifying the processes and reducing red tape to employ and encourage the private sector to come in, use private capital, and help the government roll out its total electrification plan.

Continuous development of downstream natural gas. The Philippine Energy Plan (PEP) 2020-2040 envisions "to establish a world-class, investment-driven and efficient natural gas industry that makes natural gas the preferred fuel by all end-use sectors." To support such an objective, the DOE, through its Downstream Natural Gas Roadmap, in the medium-term will: (a) formulate and implement industry operating standards and codes of practice for natural gas; and (b) issue regulatory frameworks to encourage private investment in developing natural gas infrastructures for receiving, storing, and transporting natural gas from source to demand centers.

In the long term, the focus of efforts will be on the continuous development of agenda in the medium term through further policy issuances and supplemental legislation for the advancement of the natural gas industry. In anticipation of the forthcoming depletion of the indigenous natural gas supply from the Malampaya Gas Field, the DOE shall continue making immediate efforts to augment the energy supply through the development of LNG terminals.

the Grid Operating and Maintenance Program.

³⁹ DOE DC2021-10-0031 Prescribing the Policy for the Transparent and Efficient Procurement of Ancillary Services by the System Operator

Transition to a low carbon energy future. The Clean Energy Scenario under the PEP 2020-2040 will be supported by further encouraging RE development. The government will pursue the development of Competitive Renewable Energy Zones (CREZ) and explore the potential of offshore wind energy. The full operationalization of the Renewable Energy Market (REM), the GEAP and GEOP will ensure the competitiveness and increased utilization of renewables. The Enhanced Net Metering Program will also be rolled out in off-grid areas. Further, the energy sector, as indicated in the power sector roadmap of the PEP 2020-2040, is set to study and draft guidelines for power plant decommissioning. The guidelines to be developed will define, clarify, and direct the industry on decommissioning and, in the long-term, assist in the entry of newer capacities that will provide greater security and reliability to the grid.

Collaborative efforts with interested stakeholders will also be pursued to further explore the inclusion of hydrogen in the country's energy mix and address the current gaps and challenges, particularly on infrastructure and regulatory framework. These collaborative efforts will include studies on hydrogen technologies for on-grid and off-grid applications.

The DOE-NEPIO and NEP-IAC will focus on the following major issues to ensure the successful implementation of NPP: (a) National Policy; (b) Legislative Framework; (c) Alignment with International Standards; and (d) Public Awareness. The government will also continue exploring the feasibility of nuclear energy for power generation to support the country's transition towards sustainable and lower emission development.

ICT Infrastructure

Recognizing the heightened importance of ICTs to cope with the challenges post-pandemic and to support the needs of the new normal, the government shall continue to push for the development of critical policy reforms and implement digital connectivity programs to address the digital divide and accelerate the country's digital transformation.

Pursue policy reforms to address barriers to entry and limited competition in the market. The proposed bill adopting the Open Access on Data Transmission Law still needs to be pursued as this shall liberalize the shared use of infostructures. However, as its passage lies with the legislative, implementation of the common tower policy shall be enhanced in the interim. More government agencies shall be involved in similar arrangements entered into by DepEd and DICT in support of the common tower policy. Likewise, the number of registered ITCs and the number of common towers built and their location shall be closely monitored to help promote equity and coverage. Other means of infrastructure and resource sharing of government agencies for deploying more common towers or other infostructures shall also be explored.

Continue digital connectivity program to allow access to the broadband services. The government's digital connectivity programs such as the National Broadband Program and Free Wi-Fi for All Program shall be continued to complete the industry players' initiatives at expanding the current digital infrastructures, allowing more citizens to access broadband services.

The government shall promote and model productive use of digital technologies. LGUs, being close to the people, can be catalysts in the wider use of ICT by modelling and promoting the use of digital technologies. However, LGUs first need to be capable to do so. DICT has programmed the Framework on ICT Strategic Roadmap (FISR) and Guidebook for LGUs for 2022. The Roadmap and Guidebook will aid LGUs in building their ICT capabilities moving forward.

The DICT plans to begin formulation of the National ICT Development Plan (NICTDP) by 2023. The NICTDP will promote the seamless operation of “one government” despite offices being located in different geographical locations. The successful implementation of the vision of the NICTDP will reduce the tedious coordination between government agencies and enable government to provide better services to the public.

Enhancing LGU and government capabilities in digital technologies will provide a good foothold towards implementing smart city concepts. Greater application of smart developments at the local level, with government acting as a model, will help in implementing similar concepts at different levels of society because smart development benefits from wider networks. Smart development is likewise an attractive development strategy because it can be applied to almost all development areas and is primarily focused on the application of ICT to improve the welfare of people. Government, both local and national, setting an example will build confidence and make it more acceptable to the rest of the country as a whole.

Reliability and security are other factors that will affect diffusion of ICT in various use cases. On the security front, the DICT will intensify implementation of the National Cybersecurity Plan 2022 and update it as necessary.

Social Infrastructure

Education

Sustain efforts to address backlogs in the provision of education facilities. DepEd shall continue to prioritize the construction and rehabilitation of education facilities under its Last Mile School Program to close the gaps between geographically isolated and disadvantaged and conflict-affected areas, including their counterparts in the urban areas. DepEd is also ensuring learning continuity by providing immediate response and support to schools through the construction and renovation of school facilities, health-related infrastructure, and other interventions. Further, DepEd shall also sustain the provision of other basic education facilities and ICT-related learning tools/equipment and infrastructure to address the broader needs in the education sector and continuously support the effective implementation of the alternative platforms for education under the BE-LCP.

Implement the BE-LCP. DepEd shall support and provide the pilot public schools with supplemental funds to ensure the safe return of students, faculty, and other personnel to schools, and to ensure the smooth implementation of the pilot face-to-face classes as embodied in DepEd-DOH Joint Memorandum Circular No. 1 s. 2021 “Operational Guidelines on the Implementation of Limited Face-to-Face Learning Modality.” This will be a shared responsibility among DepEd, DOH, DILG, and other relevant stakeholders (see [Chapter 10](#)).

Health

Sustain strategic implementation of health facilities. The DOH will sustain the implementation of the PHFDP 2020-2040, particularly towards ensuring the provision of at least one BHS in barangays, an additional 2,400 RHU/HC by 2025, an additional 400,000 beds (majority of which are Level 1 beds) to meet the projected hospital care by 2040 of around 2.7 beds per 1,000 population, and Specialty Centers for a total of 16 specialties.⁴⁰ To ensure accessibility of health facilities across the continuum of care, selected DOH hospitals will be upgraded to operate with Specialty Centers for one or more identified medical and/or surgical specialties and shall serve as apex or end referral hospitals of Health Care Provider Networks (HCPN). These selected DOH hospitals shall be designated as National Specialty Centers, Advanced Comprehensive Specialty Centers, and Basic Comprehensive Specialty Centers for each of the specialties. The DOH will also invest in the upgrading and establishment of Specialized Laboratories, Blood Service Facilities, and Drug Abuse Treatment and Rehabilitation Facilities at the national, subnational, and regional levels (see [Chapter 10](#)).

Solid Waste Management

Enhance technical capacities of LGUs in the implementation of SWM initiatives. The DENR- Environmental Management Bureau (EMB) shall capacitate LGUs on alternative waste management technologies, especially in the treatment and disposal of household healthcare wastes. The government shall continue to improve its knowledge management systems through increased investments in innovation as well as research and development. Guidelines on the Construction and Operation of Residual Containment Area (RCA), MRF, and Transfer Stations shall be developed, including that for the Clustering of LGUs for Common SLF. The regulatory framework for facilities utilizing WTE technologies shall be pursued to guide the implementation of WTE facilities in the country. All funded MRFs and dumpsite closure and rehabilitation activities shall be monitored (see [Chapter 20](#)).

⁴⁰ cancer care, cardiovascular care, lung care, renal care and kidney transplant, brain and spine care, trauma care, burn care, orthopedic care, physical rehabilitation medicine, infectious disease and tropical medicine, toxicology, mental health, geriatric care, neonatal care, dermatology care, and eye care

RESULTS MATRIX

Table 19.2 Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS				ACTUAL	
		2020	2021	2022	EOP	2020	2021
Public infrastructure spending increased (% share to Gross Domestic Product or GDP)	4.1 (2016)	4.2	5.4	4.5	4.5	4.8	5.8
Power/Energy							
Power requirements met (% available capacity over peak demand) ^a	144 (2016)	148	147	150	150	153	149
Luzon	140 (2016)	143	144	148	148	144	142
Visayas	149 (2016)	150	146	135	135	153	148
Mindanao	162 (2016)	172	161	177	177	204	186
Energy intensity (primary energy) reduced (tons of oil equivalent per million peso)	6.71 (2016)	5.82	5.66	5.56	5.56	6.44	6.65
Energy intensity (electricity consumption) reduced (kWh per million peso)	11.18 (2016)	10.93	10.83	10.84	10.84	11.54	12.63
Electricity consumption per capita increased (kWh per capita)	879.46 (2016)	1,043.52	1,095.91	1,163.54	1,163.54	933.24	904.80
Proportion of HHs with electricity to total number of HHs increased (% cumulative)	90.70 (2016)	96.00	98.00	100.00	100.00	94.49	95.41
Transport Infrastructure							
Road Transport							
Travel time (decreased) via land per key corridor (in hours)							
Metro Manila	2.97 (2016)	3.12	3.11	3.11	3.11	2.49	2.38
Quezon Avenue	0.23 (2016)	0.25	0.25	0.25	0.25	0.25	0.19
Commonwealth Avenue	0.26 (2016)	0.28	0.28	0.28	0.28	0.18	0.16
Radial Road 10 (R:10)	0.25 (2016)	0.26	0.26	0.26	0.26	0.19	0.18
Marcos Highway	0.19 (2016)	0.20	0.20	0.20	0.20	0.18	0.16
Circumferential Road 5 (C:5)	0.82 (2016)	0.86	0.85	0.85	0.85	0.64	0.59
Epifanio de los Santos Avenue (EDSA)	0.89 (2016)	0.94	0.93	0.93	0.93	0.77	0.83

INDICATOR	BASELINE (YEAR)	TARGETS				ACTUAL	
		2020	2021	2022	EOP	2020	2021
Roxas Boulevard	0.32 (2016)	0.34	0.34	0.34	0.34	0.33	0.33
National Route 1 (N1)/ Pan-Philippine Highway (Laoag - Zamboanga)	61.12 (2016)	50.94	48.39	45.84	45.84	-	-
Manila - Baguio	7.04 (2016)	5.86	5.57	5.28	5.28	-	-
Manila - Pagudpud	13.36 (2016)	11.13	10.58	10.02	10.02	-	-
Manila - Cagayan	12.11 (2016)	10.09	9.59	9.08	9.08	-	-
Manila - Clark	2.80 (2016)	2.34	2.22	2.10	2.10	-	-
Clark - Subic	2.09 (2016)	1.75	1.66	1.57	1.57	-	-
Manila - Batangas	3.46 (2016)	2.88	2.74	2.60	2.60	-	-
Iloilo - Capiz	2.62 (2016)	2.18	2.07	1.96	1.96	-	-
Surigao - Davao	7.10 (2016)	5.92	5.62	5.33	5.33	-	-
Butuan - Iligan City	5.80 (2016)	4.83	4.59	4.35	4.35	-	-
Cagayan De Oro - Davao City	5.70 (2016)	4.75	4.51	4.27	4.27	-	-
Bacolod - Dumaguete - Bayawan	8.46 (2016)	7.05	6.70	6.35	6.35	-	-
Danao - Cebu - Santander	4.61 (2016)	3.85	3.65	3.46	3.46	-	-
Air Transport							
Air passenger movement increased (in number of passengers, cumulative)	71.54M (2016)	29.42M	32.65M	38.33M	38.33M	21.51M	9.12M
Cargo shipped via air increased (international and domestic) (MT, cumulative)	285.86M (2016)	165.54M	277.92M	328.93M	328.93M	165.95M	133.74M
Water Transport							
Passengers transported by sea increased (in number of passengers, cumulative)	89.16M (2016)	90.11M	91.66M	93.27M	93.27M	31.16M	26.60M
Cargo shipped increased (international and domestic) (MT, cumulative)	302.68M (2016)	317.92M	325.12M	332.06M	332.06M	311.41	336.56M
Number of vehicles carried by Roll-on/Roll-off (RORO) vessels increased	5.50M (2016)	6.70M	6.77M	6.84M	6.84M	5.07	6.88M

INDICATOR	BASELINE [YEAR]	TARGETS				ACTUAL	
		2020	2021	2022	EOP	2020	2021
Rail Transport							
Passenger trips via rail in Metro Manila increased (in % share to total passenger trips, cumulative)	11 (2014)	16	17	19	19	1	-
Information and Communications Technology (ICT)							
Average broadband download speed increased (Mbps)	4.30 (2016)	25.00	30.00	35.00	35.00	31.44	82.61
Water Resources							
Water Supply and Sanitation							
Proportion of cities/municipalities served by water districts with 24/7 water supply increased (% cumulative)	84.00 (2016)	86.00	88.00	90.00	90.00	82.30	-
Proportion of cities/municipalities served by sewerage or septage management facilities to total number of cities/municipalities increased (% cumulative)	To be determined (TBD)	TBD	TBD	TBD	TBD	TBD	-
Water Resources							
Water Supply and Sanitation							
Proportion of households (HHs) with access to safe water supply to total number of HHs increased (% cumulative)	87.60 (2016)	93.11	94.49	95.87	95.87	91.60	-
Proportion of HHs with access to improved sanitation to total number of HHs increased (% cumulative)	91.90 (2016)	94.60	95.28	95.95	95.95	93.90	-
Social Infrastructure							
Classroom to pupil ratio improved							
Primary ^b	1:34 (2014)						
Kindergarten		1:25	1:25	1:25	1:25	1:29	-
Grades 1-3		1:30	1:30	1:30	1:30	1:29	-
Grades 4-6		1:40	1:40	1:40	1:40	1:29	-
Secondary ^c	1:48 (2014)						
Junior HS		1:42	1:40	1:40	1:40	1:39	-
Senior HS		1:42	1:40	1:40	1:40	1:35	-
Water and sanitation (WatSan) to pupil ratio improved							
Primary (K to 6) ^b	1:39 (2014)	1:31	1:30	1:30	1:30	1:29	-

INDICATOR	BASELINE (YEAR)	TARGETS				ACTUAL	
		2020	2021	2022	EOP	2020	2021
Junior HS	1:49 (2014)	1:41	1:40	1:40	1:40	1:42	-
Senior HS	1:49 (2014)	1:41	1:40	1:40	1:40	1:41	-
Proportion of public schools with connection to electricity to total number of public schools increased (% cumulative)							
Primary (K to 6)	86 (2015)	92	94	95	95	98	-
Junior HS	95 (2015)	98	99	100	100	99	-
Senior HS	95 (2015)	98	99	100	100	98	-
Proportion of public schools with adequate water and sanitation facilities to total number of public schools increased (% cumulative)							
Primary (K to 6)	91 (2014)	96	98	98	98	94	-
Junior HS	94 (2014)	100	100	100	100	96	-
Senior HS	94 (2014)	100	100	100	100	98	-
Barangays with access to Material Recovery Facilities (MRFs) (in % of total no. of barangays, cumulative)	31.28 (2016)	50	55	60	60	34.37	35.27
Number of barangays served by MRFs	13,149 (2016)	21,018	23,119	25,221	25,221	14,450	14,828
Barangays with access to Sanitary Land Fills (SLFs) (in % of total no. of barangays, cumulative)	15.17 (2016)	26.58	27.91	29.30	29.30	28.21	28.52
Number of LGUs served by SLFs (1,634 LGUs)	248 (2016)	434	456	479	479	461	466
Proportion of Barangays with Barangay Health Stations (BHS), Rural Health Units (RHU) or Urban Health Centers (UHC) to the total number of barangays ^d (42,036 as of 2016) increased (% cumulative)	57.00 (2017)	69.84	80.04	90.24	90.24	68.02	68.04
Regions with at least one (1) Biosafety Laboratory 2 (BSL2) with Real Time Polymerase Chain Reaction (RT-PCR) testing capacity	- (2020)	TBD	TBD	17	17	-	-
Regions with at least 1 dedicated referral hospital/facility/floor/wings to serve as primary referral center for severe or critical Corona Virus Disease 2019 (COVID-19) cases	- (2020)	TBD	TBD	17	17	-	-

INDICATOR	BASELINE (YEAR)	TARGETS				ACTUAL	
		2020	2021	2022	EOP	2020	2021
Information and Communications Technology							
Proportion of public schools with internet access to total number of public schools increased (% cumulative)							
Primary (K to 6)	20 (2015)	80	90	100	100	-	-
Junior HS	54 (2015)	90	95	100	100	-	-
Senior HS	54 (2015)	90	95	100	100	-	-
Transport Infrastructure							
Land Transport							
Road traffic accident rate reduced (in number of incidents per 100,000 population) - incidents of accidents	10.70 (2016)	10.00	10.00	10.00	10.00	7.97	3.85
Water Resources							
Irrigation							
Cropping intensity increased (% cumulative)	143 (2016)	164	166	166	166	166	-
Ratio of actual irrigated area to the total potential irrigable area increased (% cumulative)	59 (2016)	63	65	67	67	64.12	-
Flood Control and Management							
Ratio of flood-protected areas to the total flood-susceptible areas increased (% cumulative)	TBD	TBD	TBD	TBD	TBD	-	-

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

^a Power requirements including 25% reserves. The ratio must always be maintained above 100%.

^b Total number of primary schools as of 2015 is 38,657.

^c Total number of secondary schools as of 2015 is 8,082.

^d Total number of barangays as of 2016 is 42,036.

CHAPTER 20

Ensuring Ecological Integrity, Clean and Healthy Environment

The COVID-19 pandemic emphasized the importance of the environment and natural resources in providing our basic needs (food, clean water, and air) and even as a potential source of the cure for zoonotic diseases. The mobility restrictions imposed during the pandemic demonstrated how rapidly nature could recover and flourish. As a result, we saw temporary improvements in environmental quality and the overall condition of terrestrial and marine ecosystems, including ecotourism sites.

However, the improvements may be short-lived if not properly managed. The implementation of health protocols and rising digitalization have driven more resource use and waste generation. Mobility restrictions also hampered environmental monitoring, including site inspections, resource assessments, and wildlife and habitat patrolling activities. All these are threatening ecological integrity. Thus, the aim is to continue instituting reforms and implementing innovative actions and nature-based solutions to address these emerging issues under the new normal, along with the long-standing challenges on governance, monitoring, and evaluation that hamper the attainment of the sector's targets.

ASSESSMENT

SUSTAINING BIODIVERSITY AND ECOSYSTEM SERVICES

The ecosystem-based actions and area-based management measures implemented over the past years are starting to demonstrate improvements in our terrestrial and coastal and marine ecosystems. Policy reforms and the continued implementation of banner programs for the sector facilitated the achievement of majority of our targets to sustain biodiversity and ecosystem services. However, mobility restrictions and budget reprioritization due to the COVID-19 pandemic affected various management and monitoring activities, which led to underachievement of several sector targets.

Forest cover generally increased, but mobility restrictions and limited resources constrained watershed management and monitoring activities. Based on the latest land cover data reported by the National Mapping and Resource Information Authority (NAMRIA), the decade-long rehabilitation of degraded forest lands and strengthened protection activities for existing and rehabilitated forests continued to show positive results with the increase of forest cover from 7.0 million hectares (ha.) in 2015 to 7.2 million ha. in 2021. However, due to significant reduction in the budget for the implementation of forest rehabilitation and management activities, other related forestry targets were not achieved in 2021. In particular, denuded and degraded forest lands were reduced from 7.6 million ha. to only 7.1 million ha., falling short of the 6.8 million ha. target for 2021. Likewise, only 8.7 million ha. of forestlands were placed under effective management in 2021, which is still below the target of 9 million ha. On production and protection forests, a total of 3,523 kilometers (km) have been delineated in 2021, which is 4,142 kms lower than the target. Further, only 73 ha. have been planted with mangroves compared to the target of 329 ha. In addition, there were delays in completing the management plans and monitoring wells for the targeted groundwater critical areas (i.e., Masbate and Laguna) and the comprehensive water assessments of major river basins (e.g., Cagayan De Oro River Basin) in 2021. This is because the field surveys and data gathering activities were impeded by mobility restrictions prompted by the pandemic. Nonetheless, the National Water Resources Board (NWRB) is continuously coordinating with concerned local government units (LGU) and stakeholders to gather needed data and information to ensure that the targets will be achieved by the end of the plan period. Furthermore, the NWRB ensures that there will be available personnel and equipment, such as spare sensors, during fieldwork activities to acquire the needed information.

Land titling and related land management activities were slowed down by pandemic-related physical distancing and travel restrictions. A total of 34,478 free patents (residential and agricultural) have been issued in 2021, which is significantly below the 67,000 target. This was partly because the Department of Environment and Natural Resources (DENR) through the Land Management Bureau (LMB) stopped accepting applications for Agricultural Free Patent (AFP) following the period limit set under RA 9176¹ until December 31, 2020. However, DENR-LMB is expected to resume accepting applications for AFP with the effectivity of the Implementing Rules and Regulations of RA 11573² by 2022.

Similarly, only seven Certificate of Ancestral Domain Titles (CADTs) were issued, falling below the 2021 target of 12 CADTs. This is attributed to the limited movement of field personnel and observance of physical distancing and other health protocols, which hindered the conduct of surveys, inspections, and consultations with the community. On the other hand, 11 Ancestral Domain Sustainable Development and Protection Plans (ADSDPPs) have been formulated. This exceeded the 2021 target of six ADSDPPs prepared as it included those from the previous years but were only completed in 2021.

The implementation of responsible mining policies and programs yielded positive results. Mining application and approval processes have been streamlined. As a result, the declared *Minahang Bayan* increased to 94 percent, exceeding the 2021 target of 90 percent. Likewise, the 72.5 percent target of rehabilitating the abandoned Palawan Quicksilver Mine Phase 2 was met. Rehabilitation activities

¹ An Act Extending the Period Until December 31, 2020 for the Filing of Applications for Administrative Legalization (Free Patent) and Judicial Confirmation of Imperfect and Incomplete Titles to Alienable and Disposable Lands of the Public Domain, Amending

² An Act Improving the Confirmation Process for Imperfect Land Titles, Amending for the Purpose Commonwealth Act No. 141, as Amended, Otherwise Known as "The Public Land Act", and Presidential Decree No. 1529, as Amended, Otherwise Known As The "Property Registration Decree"

undertaken included the control and management of the mercury-contaminated pit lake through phytostabilization using forest tree species with high heavy metal accumulation potential, phytoremediation measures, and continuous maintenance of various organic filter media. The DENR issued new policies and instruments to revitalize the mining industry, including the guidelines on streamlining the approval processes for the issuance of permits for the cutting, removal, and relocation of naturally-growing trees,³ Safety and Health, Environment, and Social Development and Management (SHES) Manual,⁴ and additional measures and mechanisms for strict implementation and compliance with mine safety and health, environmental, and social development policies.⁵ However, only 64 percent of surface metallic mines were reported to be compliant with the SHES-approved work programs⁶ as some surface metallic mines are currently inactive or undergoing the Care and Maintenance Program (CMP).

The coverage of the country's terrestrial and marine protected areas increased, and their management has been strengthened. The Expanded National Integrated Protected Areas System (ENIPAS) Act (RA 11038, amending RA 7586) legislated an additional 94 national protected areas (PAs). As a result, the country now has 244 PAs covering an area of 7.8 million ha. These 244 PAs are equivalent to 15.4 percent (4.6 million ha.) of the Philippine land area and 1.4 percent (3.1 million ha.) of our territorial waters and exclusive economic zone (EEZ), contributing to the achievement of our commitments under the Sustainable Development Goals (SDG) and Convention on Biological Diversity (CBD).⁷

Aside from increasing the coverage of PAs, the ENIPAS Act also provided enabling mechanisms to manage these PAs effectively. Pursuant to this law, a total of 178 Protected Area Management Boards (PAMB) have been established and operationalized to administer PAs. Moreover, 87 clustered Protected Area Management Offices (PAMO) have been set up to manage the day-to-day activities in the PAs, with support from 3,133 staff. Protected Area Management Plans (PAMPs) have also been formulated in 199 PAs to serve as the long-term framework plans for managing these and guide in preparing annual operations plans and budgets.

There is an overall improvement in the management of our terrestrial protected areas covering 1,656,353 ha. Based on the Management Effectiveness Tracking Tool (METT),⁸ there are no more PAs with poor management status in 2021. On the other hand: (a) 73,776 ha. are under fair management; (b) 1,251,083 ha. are under good management; and (c) 331,493 ha. are under excellent management. Moreover, the METT indicates that of the 2,726,714.27 ha. of marine protected areas (MPA) being monitored: (a) none fell under poor management effectiveness category; (b) 460,680 ha. are under fair management; (c) 1,064,906 ha. are under good management; and (d) 1,201,129 hectares are assessed to be under excellent management.

³ DENR Administrative Order (DAO) No. 2021-11

⁴ MGB Memorandum Circular (MC) No. 2021-00

⁵ DAO No. 2021-25

⁶ DAO No. 2021-25

⁷ This will contribute to the achievement of SDG Target 14.5 and Aichi Target 11 under the CBD, and its forthcoming post-2020 biodiversity framework and corresponding targets

⁸ Pursuant to the DENR-BMB Technical Bulletin No. 2018-05, METT is used to assess and monitor the management effectiveness of protected areas, particularly those under the NIPAS. Management effectiveness reflects the design issues relating to protected areas, adequacy and appropriateness of management systems and processes, and delivery of protected area objectives including conservation values. The evaluation of management effectiveness involves the assessment of how well the protected area is being managed – primarily the extent to which it is protecting its ecosystem values and achieving goals and objectives. The METT is a tool accomplished by PAMB members, and based on their responses, the average score are computed and the rating denotes the following: a) 75-100% is excellent; b) 51-74% is good; c) 26-50% is fair; and d) <26% is poor.

The percentage of hard coral⁹ and seagrass cover in national MPAs and other priority coastal and marine conservation areas generally improved. Out of the 36 MPAs being monitored: (a) seven MPAs have poor hard coral cover (0-22% hard coral cover) in 2021, vis-a-vis the target of nine MPAs under poor hard coral cover category; (b) 10 have fair hard coral cover (>22-33% hard coral cover) which is the target number of MPAs under this category; (c) six MPAs are classified under good category (>33-44% hard coral cover), lower than the target of 10 MPAs; and (d) 13 MPAs are under the excellent category (>44% hard coral cover) exceeding the target of seven 7 MPAs. Despite the unachieved target number of MPAs under good hard coral cover, there was an overall improvement in the status of coral reefs across the MPAs monitored under this indicator. Baseline activities for all the MPAs covered have also been completed this year.

Similarly, seagrass cover improved in these MPAs. Based on data as of the 4th quarter of 2021: (a) there are only 10 MPAs under poor seagrass cover (0-25%), lower than the target of 17 MPAs under this category for 2021; (b) 12 MPAs have fair seagrass cover (26-50%), achieving its target for 2021; (c) 12 MPAs have good seagrass cover (51-75%), exceeding the target of five MPAs; and (d) two MPAs have excellent seagrass cover (76-100%).

These accomplishments may be attributed to the limited disturbance to our ecosystems due to mobility restrictions as well as the continuous implementation of relevant programs (i.e., Coastal and Marine Ecosystems Management Program [CMEMP], Protected Area Development and Management Program), which strategically focused on the national terrestrial and marine protected areas and other priority conservation areas in the country. Nonetheless, the remaining baselining activities need to be fast-tracked to better inform planning and programming for the sector.

Delineation of municipal waters and establishment of Community Fish Landing Centers (CFLCs) have been continuously pursued. However, operationalization is constrained by logistics and other concerns related to national government and LGU arrangements. NAMRIA provided technical assistance in the delineation of the municipal waters of 80 coastal municipalities/cities in 2021, which will contribute to ensuring the preferential access of municipal fisherfolk to their coastal and marine resources. However, certifying and adopting such delineation through a local ordinance remains a problem due to disagreements on technical descriptions and boundary conflicts, particularly between and among adjacent/neighboring LGUs. Moreover, we have yet to delineate the municipal waters of LGUs with offshore islands pending the issuance of guidelines from the Department of Agriculture (DA) on this matter.

To reduce post-harvest losses and sustain livelihood opportunities, the DA-Bureau of Fisheries and Aquatic Resources (DA-BFAR) established 686 CFLCs in 2021, which is slightly lower than the target of 725 units. The underachievement of the target can be attributed to the delays in the delivery of construction materials due to mobility restrictions arising from the COVID-19 pandemic. Only 61.7 percent of the new and existing CFLCs have been operationalized in 2021, falling short of the 95 percent operationalization

⁹ Hard corals, or scleractinian and stony coral are those that produce a rigid skeleton made of calcium carbonate (CaCO₃). Hard corals are the building blocks of coral reefs, as the skeletons left behind by these hard corals accumulate and are cemented by coralline algae to form coral reefs (Licuanan, 2020). In contrast, soft corals, or Alcyonacea and ahermatypic coral, do not produce a rigid calcium carbonate skeleton and do not form reefs. We monitor the percent of hard coral cover in our marine protected areas under the NIPAS following the DENR Technical Bulletin No. 2019-04 (Technical Guide on Biodiversity Assessment and Monitoring System for Coastal and Marine Ecosystems).

target. Some CFLCs are unable to operate because of lack of water and electricity connections, which is usually the LGUs' counterpart contribution. Most of the CFLCs established are also still finalizing their Manual of Operations and corresponding municipal ordinances.

IMPROVING ENVIRONMENTAL QUALITY

While the pandemic-related restrictions resulted in improvements in environmental quality, the challenge is to sustain such improvements. Hence, existing measures need to be scaled up to improve the capacities of LGUs to implement the devolved environment and natural resources (ENR) functions. Innovative solutions are also key to adapting to the new normal.

Air quality assessment could not be completed because of monitoring issues. The obsolescence and poor maintenance of monitoring instruments remain a significant bottleneck in delivering timely and accurate information. The imposition of mobility restrictions also compounded this problem by hampering regular maintenance of air quality monitoring stations. This resulted in huge data gaps, which explain the lower accomplishments in 2020 compared to 2021 (Table 20.1).

Nonetheless, the gradual reopening of the economy and easing of restrictions in 2021 allowed the DENR to accelerate the maintenance and monitoring operations for air and water quality. In 2021, only 11 of the 38 highly-urbanized cities (HUC) and major urban areas monitored for ambient air quality met the 75 percent data capture requirement for determining air pollution levels.¹⁰ All these 11 HUCs met the ambient air quality guidelines for PM10 and PM2.5. This can be attributed to the continuous enforcement of air quality standards through the Industrial Emission Management and Motor Vehicle Emission Management Programs.

Priority water bodies have yet to meet acceptable conditions for their intended use. All the monitored water bodies for public water supply and food production met the guideline values for all water quality parameters¹¹ except for fecal coliform.¹² High levels of fecal coliform can be attributed to inadequate wastewater treatment facilities for point sources (i.e., domestic)¹³ and insufficient measures to address pollution from non-point sources (i.e., agricultural runoff).¹⁴ In 2021, water quality in monitored recreational waters did not improve compared with the previous years. On a quarterly basis, improvements were observed due to the imposition of strict guidelines regulating tourism activities in island and beach destinations under community quarantine.¹⁵

Despite the effort to improve the compliance with the Ecological Solid Waste Management Act (RA 9003), achieving the solid waste management (SWM) targets remains difficult. The 2021 Solid Waste Diversion Rate (SWDR) accomplishment for LGUs within (54%) and outside Metro Manila (72%) increased but fell short of the target (75%) due to the lack of available waste diversion technologies and infrastructure and insufficient capacity to conduct compliance monitoring.¹⁶

¹⁰ Data capture only covers the January to June 2021 period

¹¹ Dissolved oxygen, biological oxygen demand, Phosphate, temperature, total suspended solids, acidity

¹² To be considered as "passed," water bodies must meet the guideline values for all parameters.

¹³ Point-source pollution refers to pollution originating from a single, identifiable source.

¹⁴ Nonpoint-source pollution refers to pollution that does not originate from a single source or point.

¹⁵ Declared under the IATF Omnibus Guidelines on the Implementation of Community Quarantine and reiterated by the Department of Tourism through Memorandum Circular No. 2020-007 or "The New Normal Health and Safety Guidelines for Island and Beach Destinations"

¹⁶ The SWDR accomplishment outside Metro Manila is based on the average SWDR targets of approved SWMPs for a given year, not the actual solid waste diversion.

Management of healthcare wastes has improved. This improvement can be attributed to the unhampered healthcare waste management operations amid the pandemic and increased number of Treatment, Storage, and Disposal (TSD) facilities that handle infectious wastes. The enabling factors include: (a) exempting infectious waste transporters from the travel ban imposed during the community quarantine period; (b) issuing the guidelines to simplify permitting requirements and procedures for waste transporters and TSD facilities; and (c) immediately shifting to online permitting system for continuous and contactless accreditation during the pandemic.

Land degradation hotspots decreased while targets for soil fertility assessment and mapping were unmet because of logistical challenges. In 2021, the area of land degradation hotspots decreased to 1,910,478 ha., exceeding the target reduction of 2,050,000 ha. This was facilitated through the close coordination of DA Central and Regional Field Offices as well as the continuous implementation of several policies and programs (e.g., Designation of Bureau of Soil and Water Management [BSWM] as Focal Office of Irrigation Network Services on Small Scale Irrigation Projects [SSIPS], Sustainable Corn Production in Sloping Areas [SCoPSA], Integrated Upland Conservation Guided Farm [IUCGF], National Organic Agriculture Program, and Watershed Rehabilitation/Restoration under the Manila Bay Clean-up, Rehabilitation, and Restoration under the Supreme Court Mandamus).

On the other hand, only 184,000 ha. were assessed and mapped for soil fertility status, which is lower than the 2021 target of 450,000 ha. This underachievement can be attributed to the delays in field survey and sampling activities due to inclement weather conditions, inaccessibility/lack of access roads, unstable peace and order situations, and the mobility restrictions due to the COVID-19 pandemic.

Shift to more sustainable consumption and production patterns has been demonstrated. According to the Philippine Center for Environmental Protection and Sustainable Development, Inc. (PCEPSDI), the number of eco-labeled products increased from 75 in 2020 to 79 in 2021 with the granting of Seals of Approval for Food Service Establishments to four restaurants. This was facilitated through consistent support from the food service industry. Consumers' increasing awareness and demand for eco-labeled products and services signify a shift to more sustainable consumption and production patterns.

INCREASING RESILIENCE OF COMMUNITIES AND THEIR LIVELIHOOD

The adaptive capacities of local governments to develop risk-informed plans are slowly building up. However, early warning systems (EWS) and disaster preparedness could not be wholly assessed due to insufficient data. Regarding employment from ecotourism and sustainable resource-based industries, the community quarantines and redirection of budgets due to the COVID-19 pandemic reduced employment and income opportunities of resource-dependent families and communities.

Local planning capacities to address climate change and disaster risks are improving. Continuing technical assistance by the Department of Human Settlements and Urban Development (DHSUD), Department of the Interior and Local Government (DILG), and Climate Change Commission (CCC) contributed to the increase in the number of LGUs with Local Climate Change Action Plans (LCCAP) and climate change (CC) and disaster risk reduction (DRR)-enhanced comprehensive Land Use Plans (CLUP) and Comprehensive Development Plans (CDP). An updated set of guidelines on the assessment of CDPs

was also adopted in March 2021¹⁷ includes parameters to determine if the CDPs address the climate and disaster risks present in the locality. The number of LGUs with updated Local Disaster Risk Reduction and Management Plans (LDRRMP) increased in 2021 but still fell short of the target with only 63 percent reviewed. This underachievement is attributed to the low submission rate of LGUs. This is an important issue that needs to be addressed, considering that the annual OCD review and certification of the LDRRMP is a requirement for utilizing the Local Disaster Risk Reduction and Management Fund (LDRRMF).

Improvements in local capacities for risk preparedness could not be entirely assessed. Due to the ongoing health crisis, the CY2021 Seal of Good Local Governance (SGLG) assessment activities have been suspended. With this comes the challenge of assessing the progress made by LGUs in adopting EWS and establishing functional DRRM operation centers as data on these indicators are sourced from the SGLG. The DILG is improving the SGLG assessment criteria to ensure that the indicators are comprehensive and inclusive. These improvements include developing and communicating standard operating procedures (SOP) on the end-to-end use of EWS, including feedback mechanisms, to residents in high-risk areas.¹⁸

Employment from ecotourism and sustainable resource-based industries decreased significantly. PAs provide the natural resource base for ecotourism. In fact, 95 out of the 244 national PAs have been developed for ecotourism. However, as many ecotourism activities have been discontinued, only 57 out of these 95 PAs are open for local visitors/tourists as of the third quarter of 2021. This downturn in ecotourism activities reduced the income generated from our PAs from PHP136,968,158 in 2019 to only PHP10,283,769 in 2021. Nevertheless, 3,272 people were employed in ecotourism/farm tourism sites in 2021, which is slightly higher than the 3,230 people employed in 2020.

In contrast, only 208,959 people were employed in reforestation and non-timber/agroforestry enterprises (i.e., National Greening Program [NGP], Community Based Forest Management [CBFM]) as of September 2021, which is lower compared to the 367,195 people employed in 2020. Aside from the pandemic restrictions, this decrease may be attributed to the budget cut for the Enhanced National Greening Program (ENGP), which reduced the target areas to be planted, thereby reducing the number of persons to be employed for the implementation of the program.

¹⁷ DILG Memorandum Circular 2021-037: Updated Guidelines on the Assessment of CDPs of Cities and Municipalities

¹⁸ DILG Memorandum Circular 2022-026. Source: https://www.dilg.gov.ph/PDF_File/issuances/memo_circulars/dilg-memocircular-202234_36cff3f3d4.pdf

IN FOCUS:

THE ORDINARIOS, FAMILY LIVING BY THE SEA'S GOOD GRACES



The Ordinarios are a family of six living along the coast of Loreto, Dinagat Islands. Mr. Ordinario is a deputized ‘Bantay Dagat’ and boat operator, while his wife is a fish vendor and gleaner who collects shells, sea cucumbers, urchins, seaweed, and fish along the shore.

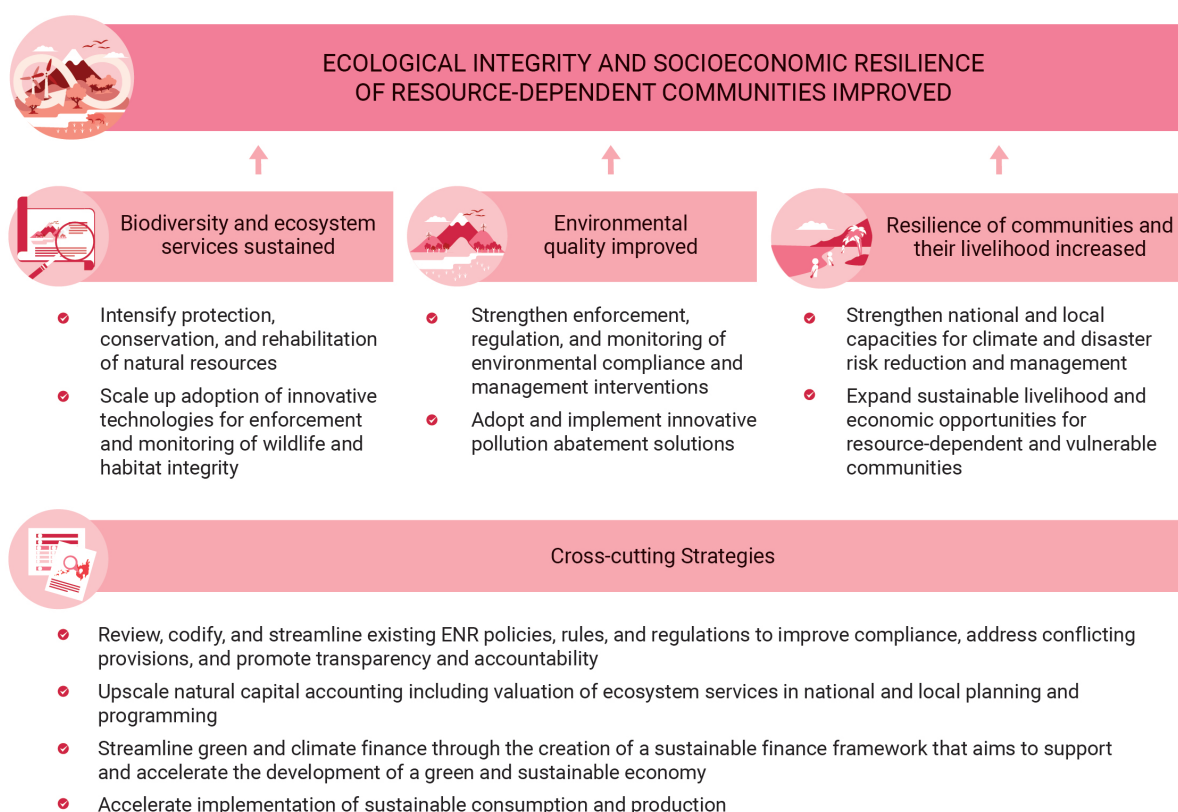
Like most parents, Mr. and Mrs. Ordinario aspire for a stable, comfortable, healthy, and secure life for their family. They strive to earn enough for their daily needs, unexpected expenses, and their children’s education. Furthermore, they hope that someday, their children can graduate from college and secure decent jobs. However, the Ordinario family faces challenges that prevent them from attaining their goals. Mr. Ordinario’s workdays as a boat operator have been reduced following the decline in tourism activities due to the pandemic. Similarly, Mrs. Ordinario’s working hours were further reduced by the need to attend to the schooling requirements of her children, given the shift to online and modular learning. These changes resulted in reduced income for the family. The Ordinario family also bears the brunt of the continuing degradation of the surrounding upland and coastal and marine ecosystems. Fish catch, in particular, has been declining because of habitat degradation. A nearby mining operation, illegal fishing, and warming ocean temperatures have been causing coastal pollution. Natural hazards, such as typhoons, have also been exacerbating the risk of flooding in low-lying areas due to the continuous destruction of upland forests. Environmental issues such as these pose a constant and ever-looming threat to the lives and livelihood of the Ordinario family and others like them.

STRATEGIC FRAMEWORK

The Ordinario family represents the many resource-dependent and vulnerable families in the country whose livelihoods are threatened by continued degradation of natural resources and declining quality of the environment further compounded by the negative impacts of climate change. With the COVID-19 pandemic, addressing these environmental problems became even more challenging because of the mobility restrictions and implementation of minimum health standards which resulted in: (a) limited patrolling, policing, and monitoring activities of wildlife habitats; (b) generation of more healthcare and household wastes; (c) elevated level of natural resource extraction; and (d) increased vulnerability of communities to economic and social impacts of the pandemic, among others.

To address the increasing challenges and threats faced by the Ordinario Family and many other communities depending on our natural resources, the government will continue to prioritize ensuring ecological integrity. This can be done by intensifying the protection, conservation, and rehabilitation of natural resources and accelerate the adoption of innovative technologies for enforcement and monitoring of wildlife and habitat. Enforcement of environmental laws will also be further strengthened, along with the adoption of innovative waste and pollution abatement measures to address the increasing waste and other pollutants generated by, among others, COVID-19 response measures. The capacities of resource-dependent communities to undertake climate change adaptation and mitigation and disaster risk reduction and management (CCAM)-DRRM actions will likewise be strengthened and economic opportunities from natural capital expanded. New strategies to address potential shocks and other uncertainties that may affect the attainment of the sectoral targets will also be pursued.

Figure 20.1. Strategic Framework to Ensure Ecological Integrity, Clean and Healthy Environment



STRATEGIES

TO SUSTAIN BIODIVERSITY AND ECOSYSTEM SERVICES

Intensify protection, conservation, and rehabilitation of natural resources. In view of the forthcoming implementation of the Mandanas-Garcia ruling by 2022 and pursuant to Executive Order No. 138,¹⁹ the National Government Agencies (NGAs) with devolved functions and services to the LGUs are directed to prepare their respective DTPs. These plans shall guide the LGUs in programming the increased financial resources arising from the ruling as they fully assume the devolved roles and responsibilities under the Local Government Code (RA 7160). The effective implementation of these DTPs is critical to ensure effective NG-LGU co-management of natural resources.

Under the DTP of the DENR, LGUs are expected to oversee the implementation of community-based forestry projects, manage and control communal forests (i.e., those with areas not exceeding 50 km²), and establish tree parks, greenbelts, and similar development projects. The LGUs will also manage community watersheds and undertake a joint assessment, profiling, evaluation, and formulation of management plans for these watersheds, explore payment for ecosystem services for the uses of water, and identify other related protection activities.

Meanwhile, under the DTP of the DA, LGUs are expected to fully oversee the management of their municipal waters and provide support services and assistance to the municipal fisherfolk (e.g., technology and research, credit, production and marketing, training for additional/supplementary livelihood). LGUs will also be assisted in managing the protected areas, refugia, and/or sanctuaries under their jurisdiction and ensuring effective implementation of ecosystem-based management approaches to sustain and optimize the benefits that can be derived from natural resources.

Scale up adoption of innovative technologies for enforcement and monitoring of wildlife. Relevant agencies (e.g., DENR, DILG, Department of Information and Communications Technology [DICT], Department of Science and Technology [DOST], and Philippine Space Agency [PhilSA]) will maximize the use of internet of things (IoT) or system of interrelated devices to monitor the state of ENR. Remote sensing technologies (e.g., RADAR, LiDAR, spectrometers, and radiometers) and *in-situ* monitoring devices will collect real-time data on wildlife and other ecosystem parameters, including illegal activities. These agencies will collect and process the data within the IoT ecosystem and use these to inform planning and policy towards the sustainable utilization of natural resources.

Strengthen enforcement and monitoring of compliance of mining operations with relevant laws and regulations. To enforce relevant laws, policies, and regulations on mining, the MGB will develop more stringent monitoring tools to assess the compliance of mines under exploration, production, and care and maintenance. The MGB shall also improve its policy enforcement by ensuring that mining companies are only allowed to operate once they have successfully satisfied the conditions provided in their respective mining permits and contracts.

¹⁹ Executive Order 138, s 2021 Full Devolution of Certain Function of the Executive Branch to Local Governments, Creation of a Committee on Devolution, and for Other Purposes

Further, the MGB shall strengthen regulatory enforcement by improving coordination with local governments. Moreover, transparency and accountability in the management of minerals shall be improved with more mining companies enjoined to participate and cooperate in the Philippine Extractive Industries Transparency Initiative (PH-EITI) process. This entails the submission and consolidation of required disclosures (e.g., data on production, tax collection, and revenue utilization) for public dissemination. The MGB will also develop and implement new policies and guidelines to ensure that mining-related plans and programs are aligned with local land use and development plans to maximize development impacts.

Continuously collect data by establishing surface water and groundwater monitoring stations and up-to-date water resources assessment to support decision and policy making. Water sustainability and security cannot be properly determined without updated and reliable data and information on water resources (e.g., supply and demand analysis, water balance). The DENR, through MGB and NWRB, and River Basin Control Office (RBCO) will update existing water information, establish additional groundwater and surface water monitoring stations, and enhance capacity on water resource assessment and on the use of new and innovative technologies that will enable the collection of real-time or up-to-date water data and information. These strategies will facilitate a more results- and science-based decision and policy making towards effective water resource management in the country.

TO IMPROVE ENVIRONMENTAL QUALITY

Upgrade monitoring systems and capacitate the government to enhance environmental regulatory enforcement and compliance. There shall be investments in advanced and state-of-the-art technologies (e.g., remote sensing and uncrewed aerial vehicles) and innovative systems and processes to heighten the enforcement of environmental laws and regulations and environmental quality monitoring. The DENR will explore the outsourcing of operation, maintenance, and calibration services for continuous ambient air quality monitoring stations using the Air Quality Management Fund. The DENR will also enjoin the participation of the private sector under its Adopt a Continuous Ambient Air Quality Monitoring Station (CAAQMS) Program to expand the air quality monitoring network. To bolster the regulation of point and non-point sources of water pollution, the DENR shall likewise upgrade and establish more ambient water quality stations and enhance existing capacities for environmental testing.

In anticipation of the full devolution of national government functions pursuant to EO 138, s. 2021, the DENR will enhance its support for LGUs in the formulation/updating and implementation of their 10-year solid waste management plans. Along with this, the DENR shall also prioritize improving its monitoring and enforcement capacities to ensure compliance of LGUs with the Ecological Solid Waste Management Act. With COVID-19 expected to persist, DENR shall also provide continuous support to LGUs to establish additional TSD facilities handling infectious wastes and expand service coverage to connect rural and remote areas.

Adopt and implement innovative pollution abatement solutions. The government shall invest in more environment-friendly transportation systems and technologies to facilitate the modal shift from private vehicles, which are the major sources of air pollution.²⁰ There will be more public investments in

²⁰ Based on the latest emission inventory conducted by DENR in 2018, mobile sources accounted for 73.69 percent of total emissions. Source: <https://air.>

green infrastructure, open urban spaces, and wastewater treatment facilities (see [Chapter 19](#)). Similarly, NGAs, particularly the DOST, Department of Trade and Industry (DTI), CCC, and Department of Labor and Employment (DOLE), will strengthen or create incentives for adopting cleaner production technologies and processes (see [Chapters 8 and 9](#)). These include fast-tracking the development and implementation of green jobs assessment and certification guidelines.

TO INCREASE THE RESILIENCE OF COMMUNITIES AND THEIR LIVELIHOOD

Strengthen national and local capacities for climate and disaster risk reduction and management.

The government shall secure funds for activities to build or strengthen local capabilities to: (a) formulate or update local development and land-use plans using up-to-date downscaled climate change projections;²¹ (b) scale up the adoption of probabilistic multi-hazard early warning systems; (c) implement ecosystem-based adaptation measures (e.g., use of drought-tolerant crops and climate-adjusted cropping patterns); (d) access risk financing and risk transfer mechanisms; and (e) develop bankable climate change adaptation projects. The government will also provide continuous support for livelihood diversification to resource-dependent upland and lowland communities to ensure their socioeconomic resilience against multidimensional risks. To complement these strategies, the support of Congress will be needed for the replenishment of the People's Survival Fund (PSF) to meet the expected increase in demand from LGUs and local communities. External sources will likewise be explored and mobilized to augment the PSF.

The RBCO will strengthen real-time hydro-meteorological monitoring and watershed instrumentation programs to support climate change adaptation actions and improve flood risk management. This will be further supported by the operationalization of the National Climate Risk Management Framework, which establishes a harmonized, science- and risk-based system that will improve the country's overall capacity to address the threats of climate change.

Implement the Philippines' Nationally Determined Contributions (NDC). The government will prioritize support for and will invest in operationalizing the policies and measures (PAM) under the country's NDC, particularly in the agriculture, wastes, industry, transport, and energy sectors.

Expand sustainable livelihood and economic opportunities for resource dependent and vulnerable communities. As travel and quarantine restrictions related to the COVID-19 pandemic are relaxed, actions to ensure the safe reopening of ecotourism sites to domestic and international tourists will be undertaken. These will be enabled by the new and updated plans and policies of the government that provide targeted support to resource-dependent communities and peoples' organizations toward sustainable livelihood opportunities as well as biodiversity-friendly enterprises. These include the Updated Tourism Response and Recovery Plan, Reformulated National Tourism Development Plan 2021-2022, Updated Farm Tourism Strategic Action Plan 2021-2023, National Ecotourism Strategy and Action Plan 2021-2022, New Normal/Updated Operational Guidelines and Health and Safety Protocols, Enhanced NGP, and Coastal and marine Ecosystems Management Program (CMEMP).

emb.gov.ph/emission-inventory-2018/

²¹ Based on the 6th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)

CROSS-CUTTING STRATEGIES

Promote sustainable and green finance in line with the Sustainable Finance Roadmap and Guiding Principles. This entails, among others, the development of: (a) innovative schemes to de-risk investments and capacity building for financial regulators and market participants on internalizing environmental and climate and disaster risks; (b) a database or pipeline of sustainable projects for the public and private sectors; and (c) a system to track sustainable finance flows and assess its contribution to the attainment of NDC targets, sustainable development commitments, and PDP outcomes.

Review, codify, and streamline existing ENR policies, rules, and regulations, to improve compliance, address conflicting provisions, and promote transparency and accountability. The DENR shall prioritize the codification and streamlining of existing ENR policies, including the conduct of assessment of the agency's mandates vis-a-vis its current institutional capacities (e.g., manpower complement, technical capabilities). These activities will address the overlaps in existing policies and improve service delivery with the end-view of strengthening overall ENR management.

Ensure just transition of workers affected by the structural change towards a greener, more sustainable, and low carbon economy. Support for the implementation of the green jobs human resource development plan will be prioritized. This includes the provision of support measures and training opportunities (e.g., retooling, upskilling, or reskilling on sustainable practices/processes) for workers and enterprises affected by the transition to a sustainable and green economy.

Accelerate implementation of sustainable consumption and production (SCP). To facilitate green recovery and drive resilient and inclusive economic growth, specific actions espoused in the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP) will be implemented along the nodes of: (a) policy and regulation; (b) Research and Development (R&D), innovation, and technology; (c) infrastructure; and (d) promotion and education. In particular, actions that will not only promote SCP but also contribute to the transition to a more circular economy will be pursued, such as through: (a) undertaking life cycle assessments (LCA) to evaluate the environmental impacts throughout a product's entire life cycle from cradle to cradle (i.e., from the extraction of resources to manufacture and use of the product until its recycling into a new product at end-of-life, resulting in zero waste); (b) developing and adopting innovative technologies that can minimize input requirements and utilize secondary raw materials or recycled materials for production; (c) pursuing *choice-editing* (e.g., addressing single-use plastics and unsustainable packaging) and *choice-influencing* (e.g., establishment of sustainable mobility solutions) strategies to steer behavioral change; and (d) strengthening the National Ecolabelling Program and other green certification schemes to increase preference for green/sustainable products and services. (e.g., establishment of sustainable mobility solutions) strategies to steer behavioral change.

The foregoing priorities will be complemented by actions that aim to ensure evidence-based management of ENR through: (a) institutionalization of natural capital accounting (NCA); (b) conduct of carrying capacity and assimilating capacity assessments; and determination of maximum sustainable yield/reference points and other parameters towards sustainable use of natural resources; and (c) adoption of spatial approach in development planning.

RESULTS MATRIX

Table 20.1 Ecological Integrity, Clean and Healthy Environment Ensured

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Chapter Outcome: Ecological integrity and socioeconomic resilience of resource-dependent communities improved							
Subsector Outcome 1: Biodiversity and ecosystem services sustained							
Forest cover increased (in million ha.)	7.01 (2015)	Increasing	Increasing	Increasing	7.04	7.16	7.18
Number of free patents issued	57,822 (2016)	62,000	67,000	72,000	51,939	48,802	34,478
Quality of coastal and marine habitats under NIPAS marine protected areas and other priority coastal and marine conservation areas improved							
Percentage of hard coral cover (HCC) in MPAs (number of MPAs)							
No baseline data	2 (2018)	0	0	0	2	1	0
Poor (0-22%)	12 (2018)	14	9	6	11	11	7
Fair (>22-33%)	11 (2018)	11	10	12	12	13	10
Good (>33-44%)	4 (2018)	4	10	10	4	3	6
Excellent (>44%)	7 (2018)	7	7	8	7	8	13
Percentage of seagrass cover in MPAs (number of MPAs)							
No baseline data	11 (2018)	0	0	0	6	6	0
Poor (0-25%)	11 (2018)	22	17	15	11	11	10
Fair (26-50%)	10 (2018)	10	12	11	12	12	12
Good (51-75%)	3 (2018)	3	5	7	6	6	12
Excellent (76-100%)	1 (2018)	1	2	3	1	1	2
Subsector Outcome 2: Environmental quality improved							
Percentage of priority water bodies within water quality guidelines increased (e.g., BOD, DO, pH, temperature, P, TSS, fecal coliform)							
Public water supply (%)	0 (2016)	Increasing	Increasing	Increasing	0	0	0
Food production (%)	20 (2016)	Increasing	Increasing	Increasing	10	0	0
Recreational (%)	87 (2016)	Increasing	Increasing	Increasing	53	33	33
Percentage of highly urbanized and other major urban centers within ambient air quality guideline value (i.e., PM10 and PM2.5) increased (%)	55 (2016)	Increasing	Increasing	Increasing	39	24	29
Solid waste diversion rate increased (%)							
Metro Manila	48 (2015)	70	75	80	44	47	54
Outside Metro Manila	46 (2015)				69	68	72

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Percentage of healthcare wastes managed (%)	66 (2016)	100	100	100	Not Applicable ^a	92	97
Area assessed and mapped for soil fertility status and soil fertility management increased (ha)	1,000,000 (2016)	450,000	450,000	450,000	138,520	56,610	184,030
Area of land degradation hotspots decreased (ha, cumulative)	2,300,000 (2016)	2,100,000	2,050,000	2,000,000	2,047,175	1,913,832	1,910,478
Subsector Outcome 3: Resilience of communities and their livelihood increased							
Percentage of LGUs with climate change and disaster risk-informed plans increased (%)							
CLUP (%)	34 (2016)	Increasing	Increasing	Increasing	52	55	59
CDP (%)	0 (2016)	Increasing	Increasing	Increasing	Data are unavailable ^b		16
LCCAP (%) ^c	0 (2016)	74	75	100	0	0	41
LDRRMP (%)	0 (2016)	100	100	100	65	55	63
Number of LGUs with operating early warning systems in place increased	1,180 (2016)	Increasing	Increasing	Increasing	1,368	Data are unavailable ^d	
Number of fully-functional DRRM operation centers increased							
Permanent	775 (2016)	Increasing	Increasing	Increasing	890	Data are unavailable ^d	
Temporary	810 (2016)	Increasing	Increasing	Increasing	789		
Employment from biodiversity-friendly enterprises and other sustainable resource-based industries increased (cumulative)							
From NIPAS-PAs and ecotourism sites	1,484 (2016)	Increasing	Increasing	Increasing	2,956	3,230	3,272
From reforestation and non-timber/agroforestry enterprises (i.e.,NGP, CBFM)	114,584 (2016)	Increasing	Increasing	Increasing	278,052	367,195	208,959

Note: Targets were set before the pandemic and revisited in the midterm update. The 2020, 2021, 2022, and end-of-plan targets for LCCAP and LDRRMP, in particular, were revised to consider changes in priorities due to COVID-19.

a The indicator was recently added in the updated PDP 2017-2022 to better measure outcomes of pandemic-related strategies. As a new indicator, targets were identified and accomplishments are being monitored only for the period 2020 to 2022, following the PDP 2017-2022 enhancement guidelines.

b The conduct of CDP compliance assessments using the enhanced assessment guidelines only started in 2021.

c The data were updated following the new monitoring, reporting and verification process established, pursuant to DILG Memorandum Circular No. 2021-068, which enjoins LGUs to submit soft-copies of their LCCAP to CCC for monitoring and verification. The verified submissions are forwarded to DILG as basis for the SGLG assessment. Prior to the issuance of the said MC, the data being reported were based from the unverified self-monitoring reports by LGUs to DILG.

d The data are sourced from SGLG Assessment. However, the CY2020 and CY2021 SGLG Assessment were canceled due to the COVID-19 pandemic.

CHAPTER 21

Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos

At least 10 million Filipinos, or about 10 percent of the population, reside or work overseas, making the Philippines one of the largest diasporas worldwide. Before the pandemic, two million Filipinos leave every year for temporary overseas work.

As the world continues to recover from the pandemic, changes in the global environment continue. The resurgence of COVID-19 cases, re-imposition of border closures, shifts in global supply chains, and a looming energy crisis may cause disruptions. Thus, the government will continue to ensure that returning OFs have available opportunities for their socioeconomic reintegration in the Philippines. This will be done synchronously with programs to enable their safe return to destination countries should they choose to. Changes in the global environment pose additional challenges in protecting the rights and promoting the welfare of OFs. As such, assistance to nationals and social protection services should be agile and fully adaptable to the needs of migrant workers and their families in the Philippines.

ASSESSMENT

OFs have been heavily affected by the economic downturn and border closures during the height of the pandemic. In 2020, efforts were focused on the repatriation and reintegration of affected OFs. In 2021, aside from continuing repatriation and reintegration efforts, the Philippine Government also prioritized the vaccination of outbound Overseas Filipino Workers (OFW) to strengthen their protection against COVID-19. As of end-2021, the Department of Foreign Affairs (DFA) facilitated the repatriation of 454,796 OFs. Demand for OFs, especially in the health sector, remains strong and remittances have started to exceed pre-pandemic levels. Given the volatility of overseas employment, migrant-serving agencies have focused on establishing strong bilateral ties, developing common and unified frameworks, and building capacities for greater agility.

During the pandemic, efforts were focused on ensuring that OFs are safely repatriated and reintegrated into the labor force. The Department of Foreign Affairs assists in providing repatriation assistance to returning OFs. In 2021,¹ at least 117 *Bayanihan* Flights (Special Commercial Flights) were chartered to facilitate the return of OFs affected by the pandemic. The Overseas Workers Welfare Administration (OWWA), Department of Labor and Employment (DOLE), Technical Education and Skills Development Authority (TESDA), Department of Trade and Industry (DTI), and other migrant-serving agencies provided training, livelihood assistance, and seed capital, among others, to assist and reintegrate OFWs and provide employment opportunities. Several programs were introduced as a result of the influx of repatriated OFWs, including the COVID-19 Adjustment Measures Program-*Abot Kamay ang Pagtulong sa OFWs* (CAMP-AKAP), Educational Assistance Scholarship in Emergencies (Project EASE), *Tabang* OFW Project, and TESDA *Abot Lahat ang OFWs*, among others. In 2021, there were around 540,876 OFWs provided with financial aid² and 26,989 Filipino migrant workers enrolled in TESDA online courses.³

Remittances rebounded as economies reopened and demand for health workers remained strong. At the height of the border closures due to the pandemic, remittances dipped from a monthly average of USD 2.5 billion in 2019 to its lowest during the pandemic at USD 2.0 billion in April 2020. For 2021, average cash remittances recovered to USD 2.6 billion.⁴ This was driven by economic recovery in host countries and increased deployment of OFWs.

Demand for OFWs rebounded from the pandemic in the Americas (from 71 percent decrease in 2020 to 54 percent increase in 2021) and Europe (from 65 percent decrease in 2020 to 27 percent increase in 2021). The pandemic has even strengthened the demand for human resources for health (deployment for newly hired health professionals from 66 percent decrease in 2020 to 84 percent increase in 2021), amid a decreasing trend for newly licensed nurses in the Philippines (from 11,269 in 2017 to 5,031 in 2021).

After declining to 3.8 percent in 2020, remittance costs reverted to 4.1 percent of the amount remitted in 2021 (same as 2019) but still remained below the global average of 6.0 percent.

Key reforms and programs were implemented to promote the welfare of OFs. Local legislation such as the Universal Health Care (UHC) Act, the Social Security Act of 2018, the Social Welfare Attaché Act, and the Handbook for OFWs contributed to protecting OFs' rights and improving their well-being.

¹ As of December 9, 2021

² CAMP-AKAP program

³ Abot Lahat ang OFWs program

⁴ In 2021, cash remittances totaled USD 31.4 billion for the year, from USD29.90 billion in 2020.

IN FOCUS: KENNETH, REPATRIATED OVERSEAS FILIPINO WORKER



Kenneth is a 28-year-old high school graduate from Sta. Maria, Laguna. He previously worked at a packaging company in Japan as a factory worker but was repatriated due to the pandemic. He is married with four kids, and his wife takes care of their children in the Philippines. He is also the second of five siblings.

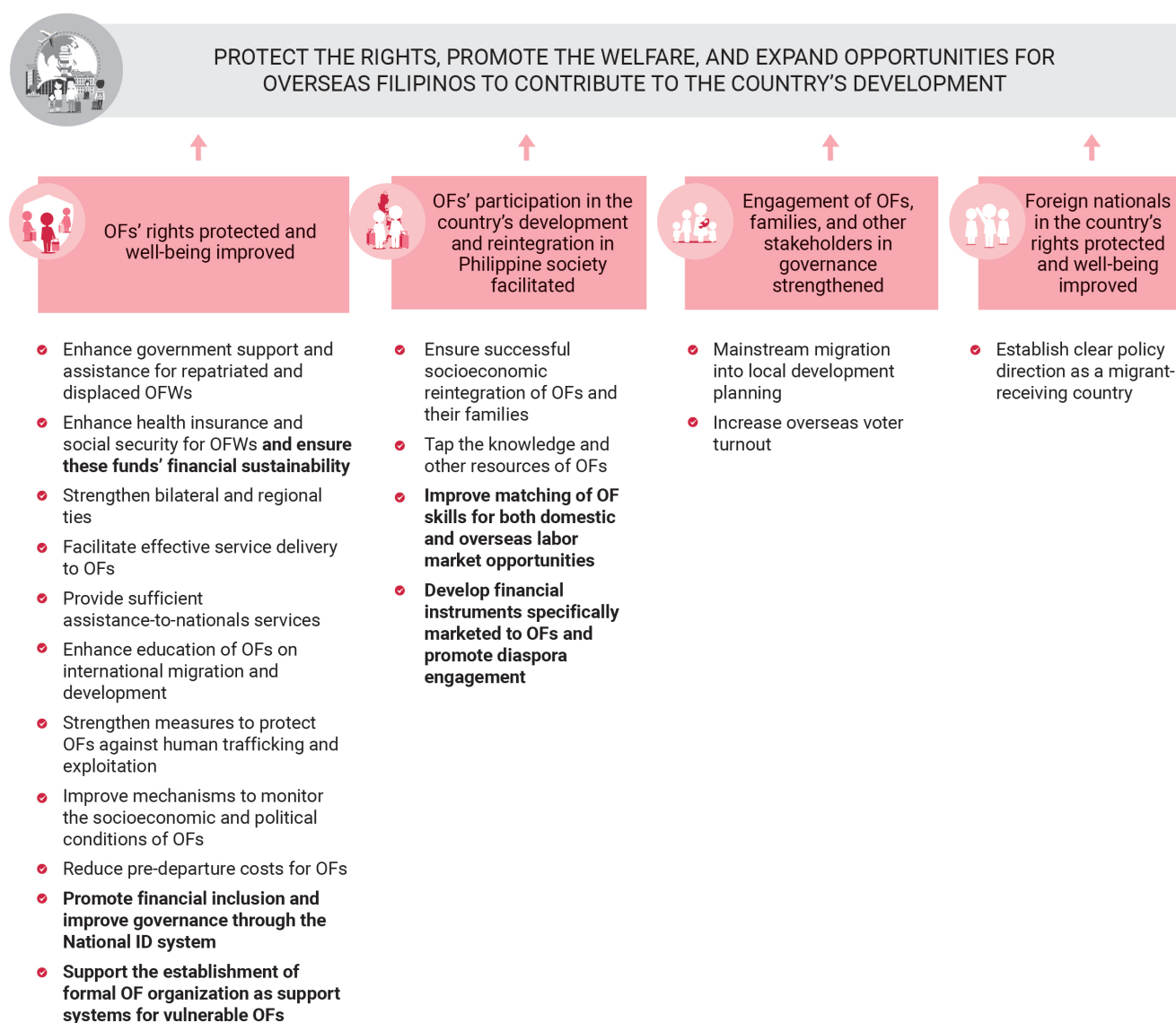
Kenneth has been looking for work in a factory in Manila, but he finds himself competing against local workers who have also been laid off. He is currently residing with his cousin's family at Isla Puting Bato in Tondo. He wants to return to his job abroad to be able to send all his children to school and have them finish college. Furthermore, he wants to save up for his own business in the future and to buy their own house.

When he was working abroad, his siblings constantly asked for money and financial assistance from him. Despite giving his family all of his income, it was still insufficient for their needs. Because of this, he has no savings at all. He prefers to work abroad because he fears there are no employment opportunities in the Philippines. Kenneth also believes that even if he finds a job, the income will not be enough for the daily expenses of his family.

STRATEGIC FRAMEWORK

The COVID-19 crisis brought socioeconomic uncertainties in the life of Kenneth as well as of other OFWs. In order to help them recover and still achieve their aspirations, immediate socioeconomic and development responses must be provided in line with strengthening efforts to protect their rights, promote their welfare, and expand opportunities for them to continually contribute to the country's development.

Figure 21.1. Strategic Framework to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country's Development



Note: Text in bold are revised/new strategies to address the challenges identified in the sector.

STRATEGIES

PROTECT OFs' RIGHTS AND IMPROVE THEIR WELL-BEING

Ensure financial sustainability of health and social insurance programs through information dissemination and provision of e-payment schemes. The OWWA's reintegration assistance does not discriminate between OWWA members and non-members. Expenditures for health care services must be accompanied by greater contributions from eligible members of PhilHealth; while OWWA would need continuous membership payments to be able to provide their services. To ensure the financial sustainability of health and social insurance, payment schemes must be made more accessible. Electronic payment systems would facilitate premium payments here and abroad.

Promote financial inclusion and improve governance through the National ID system. The National ID System will provide all Filipinos a digital identity which can facilitate financial inclusion by providing access to vital services that require a valid proof of identity, which many Filipinos lack. At the height of the global pandemic, the lack of a digital identity has delayed the distribution of assistance to many Filipinos. Should global shocks take place, services and assistance can easily be facilitated and delivered to OFs and their families through the distribution channels enabled by the PhilSys.

Support the establishment of formal OF organizations as support systems for vulnerable OFs. Irregular or undocumented migrants increasingly face barriers to access essential services and assistance from host countries due to fears of possible arrest, detention, and deportation.⁵ The OF organizations can facilitate better bridging for both registered and unregistered OFs with their respective embassies and consulates for better assistance-to-nationals services.

FACILITATE OFs' PARTICIPATION IN THE COUNTRY'S DEVELOPMENT AND REINTEGRATION IN THE PHILIPPINE SOCIETY

Improve matching of OF skills for both domestic and overseas labor market opportunities. Initiatives for the successful reintegration of OFs will be strengthened through DOLE's Assist WELL Program. The Assist WELL Program is a package of assistance/services to address the welfare, employment, legal, and livelihood needs of repatriated workers. The employment assistance covers job placement or referral for local and overseas employment, and competency assessment and certification for repatriated workers who wish to confirm if they possess the competencies required in their preferred workplace. Job classifications in the PhilJobNet will also be aligned with the International Standards Classification of Occupations to provide repatriated job seekers more information on the alignment of their work abroad and potential work in the Philippines.

⁵ International Federation of Red Cross and Red Crescent Societies. 2018. New Walled Order: How barriers to basic services turn migration into a humanitarian crises

Develop financial instruments specifically marketed to OFs and promote diaspora engagement.

Given the rebound in remittances, BSP will provide more channels where OFs can invest their earnings by introducing financial instruments specifically designed for OFs such as diaspora bonds and remittance bonds. The bonds will augment government resources needed for pandemic response while also providing investment opportunities for expatriates. The challenge is to channel these remittances into productive investments and development financing. This will be done by localizing the BaLinkBayan Portal that provides a platform to re-engage OFs through diaspora philanthropy and doing business in the Philippines, among others. The replication of the Overseas Filipino Remittances for Development (OF-Red) will also be explored to channel overseas remittances for local development and livelihood projects.

RESULTS MATRIX

Table 21.1. Results Matrix

INDICATOR	BASELINE (YEAR)	TARGETS			ACTUAL		
		2020	2021	2022	2019	2020	2021
Sector Outcome: Protect the rights, promote the welfare, and expand opportunities for OFs to contribute to the country's development							
Percent of documented OFs to Total OFs increased ^a	92.2 (2019)	Increasing ^b	Increasing ^b	Increasing ^b	92.3	92.7	88.9
Sub-chapter Outcome 1.1. OFs' rights protected and well-being improved							
Philippine ranking on the US index on Trafficking in Persons maintained	Tier 1 (2019)	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1	Tier 1
Percent share of active to total members of OWWA increased	28.9 (2016)	25.0 ^c	25.0 ^c	25.0 ^c	28.0	22.0	13.0
Sub-chapter Outcome 1.2. OFs' participation in the country's development and reintegration in Philippines society facilitated							
International remittance costs as a proportion of the amount remitted ^d	4.7 (2016)	<4.0	<3.5	<3.0	4.1	3.8	4.1
Percent of returnees successfully engaged in an income generating activity ^e	103.2 (2019)	100.0 ^f	100.0 ^f	100.0 ^f	103.2	83.8	92.6
Sub-chapter Outcome 1.3. Engagement of OFs families, and other stakeholders in governance strengthened							
Voter turnout increased (%)	18.4	N/A	N/A	40	18.4	N/A	N/A

Note: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. The 2021, 2022, and end-of-plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

^a Total OFs refer to the sum of documented, undocumented, and permanent; Documented refer to OFs with proper documentation as required by the host country; Undocumented are those with no document or with incomplete document, e.g., those with expired or inappropriate visas; Permanent means OFs with permanent residence status, including their descendants; also includes those with dual citizenship.

^b Increasing from previous year

^c Targets 2019 onwards are lower due to target reformulation based on realized assumptions and risks

^d The indicator uses the cost of sending USD 200 from the US to the Philippines as a proxy for the average cost of remittance.

^e Figures are computed as follows: number of returning OFs provided assistance by National Reintegration Center for OFWs (NRCO) who become successfully engaged in income generating activities divided by the number of NRCO target beneficiaries. The NRCO describes income generating activities (IGAs) as the initial stage of the entrepreneurship process, followed by self-employment as the second stage, and entrepreneurship as the final stage. IGAs determine how many OFW returnees became successful at generating profit or income for themselves and their family while progressing into entrepreneurship or formal employment.

^f Targets for 2020-2022 are based on a per beneficiary cash requirement and implementation of the programs.

LIST OF ACRONYMS

4Ps	Pantawid Pamilyang Pilipino Program
ABEMIS	Agricultural and Biosystems Engineering Management Information System
ACCESS	AgriCredit Client E-Signup System
ADP	Advanced digital production
ADR	Alternative dispute resolution
ADSDPP	Ancestral Domain Sustainable Development and Protection Plan
AFCS	Automatic Fare Collection System
AFF	Agriculture, forestry, and fisheries
AFP	Agricultural free patent
AFP	Armed Forces of the Philippines
AI	Artificial intelligence
AJP	ASEAN Judiciaries Portal
ALS	Alternative learning system
AMIS-FRM	Asset management information system for flood risk management
ANYO	Agri-Negosyo Loan Program
APOR	Authorized persons outside residence
ARTA	Anti-Red Tape Authority
AS	Ancillary services
ASEAN	Association of Southeast Asian Nations
ASF	African Swine Fever
ASRH	Adolescent sexual and reproductive health
ASTHRDP	Accelerate the Science and Technology Human Resource Development Program
ATBI	Agri-Aqua Technology Business Incubation
AWA	Alternative work arrangements
AWTIP	Angat Water Transmission Improvement Project
AY	Academic year
B2B	Business-to-business (B2B)
BaBay ASF	Bantay ASF sa Barangay
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
BBB	Build, Build, Build
BDP	Barangay Development Program
BEC	Basic education curriculum
BE-LCP	Basic Education Learning Continuity Plan
BHS	Barangay health station
BIMP-EAGA	Brunei Darussalam, Indonesia, Malaysia, and the Philippines-East ASEAN Growth Area
BIST	Business Innovation through Science and Technology

BMB	Budget Modernization Bill
BMCRPP	Bangon Marawi Comprehensive Rehabilitation and Recovery Program
BNS	Barangay nutrition scholar
BOL	Bangsamoro Organic Law
BOT	Build-Operate-Transfer
BP2	Balik Probinsya Bagong Pag-asa
BRT	Bus rapid transit
BSDB	Bangsamoro Sustainable Development Board
BSL2	Biosafety Laboratory Level 2
BSP	Bangko Sentral ng Pilipinas
BSWM	Bureau of Soil and Water Management
BTA	Bangsamoro Transition Authority
BTF-ELCAC	Bangsamoro Task Force on ELCAC
C2C	Consumer-to-consumer
CAAP	Civil Aviation Authority of the Philippines
CAAQMS	Continuous Ambient Air Quality Monitoring Station
CAB	Civil Aeronautics Board
CADT	Certificate of Ancestral Domain Title
CAMP-AKAP	COVID-19 Adjustment Measures Program - Abot Kamay ang Pagtulong sa OFWs
CBA-CPLA	Cordillera Bodong Administration - Cordillera People's Liberation Army
CBD	Convention on Biological Diversity
CBFM	Community-Based Forest Management
CBMS	Community-Based Monitoring System
CBP	Central business portal
CBS	Cash Budgeting System
CC	Climate change
CCA	Climate change adaptation
CCAM	Climate change adaptation and mitigation
CCC	Climate Change Commission
CCT	Conditional cash transfer
CDA	Cooperative Development Authority
CDP	Comprehensive Development Plan
CDR	Crude death rate
CDRA	Climate and Disaster Risk Assessment
CEFA	Cold Examination Facility in Agriculture
CEMP	Comprehensive Electrification Master Plan
CERT	Computer Emergency Response Team
CFIDP	Coconut Farmers and Industry Development Plan
CFLC	Community Fish Landing Centers

CHD	Centers for Health Development
CHED	Commission on Higher Education
CHIP	Connect, Harness, Innovate, and Protect
CHR	Commission on Human Rights
CHVSR	Committee on the Harmonization of Vehicle Standards and Regulations
CLC	Community learning centers
CLUP	Comprehensive Land Use Plan
CMEMP	Coastal and Marine Ecosystems Management Program
CMP	Care and Maintenance Program
CMTA	Customs Modernization and Tariff Act
COA	Commission on Audit
COC	Code of conduct
COVID-19	Coronavirus disease
CPP-NPA-NDF	Communist Party of the Philippines - New People's Army - National Democratic Front
CRADLE	Collaborative Research and Development to Leverage Philippine Economy
CRD	Credit risk database
CREATE	Corporate Recovery and Tax Incentives for Enterprises
CREZ	Competitive Renewable Energy Zones
CRVS	Civil Registry and Vital Statistics
CSE	Comprehensive Sexuality Education
CSE-ARH	Comprehensive Sexuality Education and Adolescent Reproductive Health
CSF	Credit Surety Fund
CSO	Civil society organizations
CSOPS	Community and Service-Oriented Policing System
CSP	Competitive selection process
CSPP	Conflict-sensitive and peace-promoting
CTG	Communist-terrorist group
DA	Department of Agriculture
DA-BFAR	Department of Agriculture - Bureau of Fisheries and Aquatic Resources
DAP	Development Academy of the Philippines
DAR	Department of Agrarian Reform
DBCC	Development Budget Coordination Committee
DBM	Department of Budget and Management
DC	Department Circular
DCP	Design Center of the Philippines
DDB	Dangerous Drugs Board
DED	Detailed engineering design
DENR	Department of Environment and Natural Resources
DepEd	Department of Education

DFA	Department of Foreign Affairs
DHSUD	Department of Human Settlements and Urban Development
DICT	Department of Information and Communications Technology
DILG	Department of the Interior and Local Government
DLP	Detailed lesson plans
DND	Department of National Defense
DO	DepEd Order
DOE	Department of Energy
DOF	Department of Finance
DOH	Department of Health
DOJ	Department of Justice
DOJ-OFC	Department of Justice-Office for Competition
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOST-PAGASA	Department of Science and Technology - Philippine Atmospheric, Geophysical, and Astronomical Services Administration
DOST-PCAARRD	Department of Science and Technology - Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development
DOT	Department of Tourism
DOTr	Department of Transportation
DPTR	Digital Payments Transformation Roadmap
DPWH	Department of Public Works and Highways
DRR	Disaster risk reduction
DRRM	Disaster risk reduction and management
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
DTP	Devolution Transition Plan
DU	Distribution utilities
DVT	Demographic vulnerability tool
DWR	Department of Water Resources
eAS	Electronic Accreditation System
EASE	Educational Assistance Scholarship in Emergencies
ECCD	Early childhood care and development
E-CLIP	Enhanced Comprehensive Local Integration Program
ECQ	Enhanced Community Quarantine
EEZ	Exclusive economic zone
EFTA	European Free Trade Association
EMB	Environmental Management Bureau
ENGP	Enhanced National Greening Program
ENIPAS	Expanded National Integrated Protected Areas System

ENR	Environment and natural resources
EO	Executive Order
EODB	Ease of Doing Business
EODB EGSD	Ease of Doing Business and Efficient Government Service Delivery
ePMS	Electronic Permit Management System
EPP	Electronic payment portal
ERC	Energy Regulatory Commission
ESU	Epidemiology and Surveillance Units
EVOS	Energy Virtual One-Stop Shop
EWS	Early warning systems
FCP	Financial Products and Services Consumer Protection
FDA	Food and Drug Authority
FDCP	Film Development Council of the Philippines
FDI	Foreign direct investment
FHSIS	Field Health Service Information System
FIA	Foreign Investments Act
FIC	Fully immunized children
FLEMMS	Functional Literacy and Mass Media Survey
FMCG	Fast-moving consumer goods
FP	Family planning
FPA	Final Peace Agreement
FRIMP-CTI	Flood Risk Management Project-Cagayan, Tagoloan, and Imus River
FTA	Free trade agreement
FUSA	Firmed-up service area
FWA	Flexible working arrangement
GAA	Government Appropriations Act
GCI	Global Competitiveness Index
GCQ	General community quarantine
GDP	Gross domestic product
GEAP	Green Energy Auction Program
GEF	Growth Equity Fund
GEHP	Government Employees Housing Program
GEMP	Government Energy Management Program
GEOP	Green Energy Option Program
GeoRiskPH	GeoRisk Philippines Project
GHG	Greenhouse gas
GIC	Global in-house center
GIDA	Geographically isolated and disadvantaged areas
GII	Global Innovation Index

GIP	Government Internship Program
GL	Granular lockdowns
GNI	Gross national income
GOCC	Government-owned and controlled corporation
GOJUST	Governance in Justice
GOMP	Grid Operating and Maintenance Program
GPH-MILF	Government of the Philippines - Moro Islamic Liberation Front
GSP	Generalized System of Preference
GSS	Green, social, and sustainable
GVA	Gross value-added
GVC	Global value chain
ha	Hectare
HADR	Humanitarian assistance and disaster relief
HB	House Bill
HC	Health center
HCF	Health care facility
HCPN	Health Care Provider Networks
HDH	High-density housing
HDI	Human development indices
HDMF	Home Development Mutual Fund
HEI	Higher education institution
HFEP	Health Facilities and Enhancement Program
HLS	Health and life science
HOPC	Housing One-stop Processing Center
HRH	Human resources for health
HTA	Health Technology Assessment
HUC	Highly-urbanized cities
I&S	Industry and services
i3s	Inclusive Innovation and Industrial Strategy
IATA	International Air Transport Association
IATF-EID	Inter-Agency Task Force for the Management of Emerging Infectious Diseases
IATF-ZH	Inter-Agency Task Force on Zero Hunger
IB	Islamic banks
iBPLS	Integrated Business Permits and Licensing System
IBU	Islamic Banking Units
ICAO	International Civil Aviation Organization
ICC	Independent component cities
ICT	Information and communication technology
ICZM	Integrated Coastal Zone Management

ID	Industrial design
IDP	Internally displaced person
IEC	Information, education, and communication
IEMOP	Independent Electricity Market Operator of the Philippines
IFP	Infrastructure Flagship Project
IFRM	Integrated flood risk management
IGR	Intergovernmental relations
ILO	International Labour Organization
ILS	Institute on Labor Studies
IMEMS	Integrated Marine Environment Monitoring System
IMF	International Monetary Fund
IMO	International Maritime Organization
IMT	Industrials, manufacturing, and transport
INSPIRE	Integrated National Swine Production Initiatives for Recovery and Expansion
IoT	Internet of things
IP	Intellectual property
IPCC	Intergovernmental Panel on Climate Change
IPOPHL	Intellectual Property Office of the Philippines
iPORTS	Internet-based Port Operations and Receipting for Terminals System
IPR	Intellectual property rights
IRIS	Industry and startups
IRR	Implementing Rules and Regulations
ISF	Informal settler families
IT	Information and technology
IT-BPM	Information technology – business process management
ITC	Independent tower companies
ITS	Intelligent transport systems
ITSO	Innovation and Technology Support Offices
IUCGF	Integrated Upland Conservation Guided Farm
IWRM	Integrated Water Resources Management
JEMC	Joint Enforcement and Monitoring Committee
JHS	Junior high school
JMC	Joint Memorandum Circular
JSCC	Justice Sector Coordinating Council
KAYA	Kapital Access for Young Agripreneurs
KIST	Knowledge, Innovation, and Science Technology
km	Kilometers
KRA	Key Reform Agenda
KSA	key shelter agency

KYC	Know-Your-Customer
LAMP	Leadership and Management Proficiency Program
LB	Live births
LCA	Life cycle assessments
LCAC	Local Culture and Arts Council
LCCAP	Local Climate Change Action Plan
LDF	Local Development Fund
LDRRMF	Local Disaster Risk Reduction and Management Fund
LDRRMP	Local Disaster Risk Reduction and Management Plans
LEES	Labor and Employment Education Services
LFPR	Labor force participation rate
LGIA	Local Grants-In-Aid
LGU	Local government unit
lm	linear meter
LMB	Land Management Bureau
LMI	Labor Market Information
LMSP	Last Mile Schools Program
LNG	Liquefied natural gas
LPE	Local peace engagements
LPI	Legatum Prosperity Index
LRT	Light Rail Transit
LSP	Local Shelter Plan
LTFRB	Land Transportation Franchising and Regulatory Board
LUZIS-GIS	Land Use and Zoning Information System-Geographic Information System
M&E	Monitoring and evaluation
MARINA	Maritime Industry Authority
Mbps	Megabits per second
METT	Management Effectiveness Tracking Tool
MFI	Microfinance institutions
MIDP	Maritime Industry Development Plan
MILF	Moro Islamic Liberation Front
MMSCFD	Million standard cubic feet per day
MMSP	Metro Manila Subway Project
MMSS3	Metro Manila Skyway Stage 3
MMT	million metric tons
MNLF	Moro National Liberation Front
MOOC	Massive open online courses
MOOE	Maintenance and Other Operating Expenses
MPA	Marine protected areas

MRF	Material recovery facility
mRNA	Messenger ribonucleic acid
MRT	Metro Rail Transit
MRT-3	Metro Rail Transit Line 3
MSME	Micro, small, and medium enterprises
MT	metric tons
MTPA	million tons per annum
MUAC	Mid-upper arm circumference
MW	megawatts
NAFMIP	National Agriculture and Fisheries Modernization and Industrialization Plan
NAMRIA	National Mapping and Resource Information Authority
NAP CBRN	National Action Plan on Chemical, Biological, Radiological, and Nuclear
NAP PCVE	National Action Plan on Preventing and Countering Violent Extremism
NAP-WPS	National Action Plan on Women, Peace, and Security
NASA	National Aeronautics and Space Administration
NAT	National Achievement Test
NBP	National Broadband Plan
NCA	Natural capital accounting
NCCA	National Commission on Culture and the Arts
NCIP	National Commission on Indigenous Peoples
NCMF	National Commission on Muslim Filipinos
NCP	National Competition Policy
NCR	National Capital Region
NDC	Nationally Determined Contributions
NDHS	National Demographic and Health Survey
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMP	National Disaster Risk Reduction and Management Plan
NEDA	National Economic and Development Authority
NEECP	National Energy Efficiency and Conservation Plan
NEET	Not in education, employment, or training
NEHEMIA	National Effort for the Harmonization of Efficient Measures of Interrelated Agencies
NEP-IAC	Nuclear Energy Program Inter-Agency Committee
NEPIO	Nuclear Energy Program Implementing Organization
NER	Net enrollment rate
NERS	National Employment Recovery Strategy
NFP	National Food Policy
NG	National government
NGA	National Government Agency
NGAC	National Government Administrative Center

NGI	National Governance Index
NGO	Non-government organizations
NGP	National Greening Program
NHA	National Housing Authority
NHFR	National Health Facility Registry
NHIP	National Health Insurance Program
NHMFC	National Home Mortgage Finance Corporation
NHUDSP	National Housing and Urban Development Sector Plan
NIA	National Irrigation Administration
NIASD	National Innovation Agenda and Strategy Document
NIC	National Innovation Council
NICER	Niche Centers in the Regions
NICTDP	National ICT Development Plan
NIMP	National Irrigation Master Plan
NIS	National irrigation system
NJIS	National Justice Information System
NLEX-SLEX	North Luzon Expressway-South Luzon Expressway
NNC	National Nutrition Council
NPC	National Power Corporation
NPC	National Privacy Commission
NPP	Nuclear Power Program
NRPF	National Resettlement Policy Framework
NSFI	National Strategy for Financial Inclusion
NSS	National Spatial Strategy
NTA	National Tax Allotment
NTF	National Task Force
NTF/RTFs-ELCAC	National and Regional Task Forces to End Local Communist Armed Conflict
NTP	National Transport Policy
NUDHF	National Urban Development and Housing Framework
NWMC	National Water Management Council
NWPC	National Wages and Productivity Commission
NWRB	National Water Resources Board
OADR	Office for Alternative Dispute Resolution
OES	Office of the Executive Secretary
OF-Red	Overseas Filipino Remittances for Development
OFW	Overseas Filipino workers
OOP	Out-of-pocket
OP	Office of the President
OPAPP-DENR	Office of the Presidential Adviser on the Peace Process - Department of Environmental and Natural Resources

OSS	One-stop shop
OWWA	Overseas Workers Welfare Administration
P/CWHS	Province- and city-wide health system
PA	Protected area
PADS	Philippine Anti-illegal Drugs Strategy
PAM	Policies and measures
PAMANA	Payapa at Masaganang Pamayanan
PAMB	Protected Area Management Boards
PAMO	Protected Area Management Offices
PAMP	Protected Area Management Plan
PAO	Public Attorney's Office
PAP	Programs, activities, and project
PAP4SCP	Philippine Action Plan for Sustainable Consumption and Production
PBRIS	Philippine Business Regulations Information System
PCA	Philippine Competition Act
PCC	Philippine Competition Commission
PCEPSDI	Philippine Center for Environmental Protection and Sustainable Development, Inc.
PCSF	Philippine Cultural Statistics Framework
PCT	Patent cooperation treaty
PDEA	Philippine Drug Enforcement Agency
PDITR	Prevent, Detect, Isolate, Treat and Reintegrate
PDITR+V	Prevent, Detect, Isolate, Treat, Reintegrate, and Vaccinate
PDL	Persons deprived of liberty
PDP	Philippine Development Plan
PEDP	Philippine Export Development Plan
PELP	Philippine Energy Labeling Program
PEN	Philippine Education Network
PEP	Philippine Energy Plan
PFM	Public financial management
PH-EITI	Philippine Extractive Industries Transparency Initiative
PHFDP	Philippine Health Facilities Development Plan
PhilHealth	Philippine Health Insurance Corporation
PhilID	Philippine Identification
PhilSA	Philippine Space Agency
PhilSys	Philippine Identification System
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PISA	Programme for International Student Assessment
PITX	Parañaque Integrated Terminal Exchange
PMDP	Public Management Development Program

PNP	Philippine National Police
PNR	Philippine National Railway
POPCOM	Commission on Population and Development
POPDEV	Population and development
PPA	Philippine Ports Authority
PPAN	Philippine Plan of Action for Nutrition
PPP	Public-private partnership
PQF	Philippine Qualifications Frameworks
PRC	Professional Regulation Commission
PRFS	Pasig River Ferry System
PRISM	Philippine Rice Information System
PS	Personal services
PSA	Philippine Statistics Authority
PSA	Public Service Act
PSALM	Power Sector Assets and Liabilities Management
PSF	People's Survival Fund
PSF	Philippine Skills Framework
PSN	PhilID and PhilSys Number
PSVP	Public Service Values Program
PTFC	Philippine Trade Facilitation Committee
PTTI	Passive Telecommunications Tower Infrastructure
PUB	Public utility bus
PUV	Public utility vehicle
PWSSMP	Philippine Water Supply and Sanitation Master Plan
QS	Quacquarelli Symonds
R&D	Research and development
R&DI	Research and development, innovation
RA	Republic Act
RAP	Resettlement action plan
RBCO	River Basin Control Office
RBIM	Registry of Barangay Inhabitants and Migrants
RCA	Residual Containment Area
RCEF	Rice Competitiveness Enhancement Fund
RCEP	Regional Comprehensive Economic Partnership
RCP	Resiliency Compliance Plans
RDC	Regional Development Councils
RDI	Research and Development Institutes
RE	Renewable energy
REM	Renewable Energy Market

REX	Registered Exporter System
RFID	Radio Frequency Identification
RH	Reproductive health
RHU	Rural health unit
RIA	Regulatory Impact Assessment
RIIC	Regional Inclusive Innovation Center
RITM	Research Institute for Tropical Medicine
RNTDP	Reformulated National Tourism Development Plan
RoPax	RORO passenger
RORO	Roll-on/roll-off
RPAS	Remotely Piloted Aircraft System
RPMP-RPA-ABB	Revolutionary Proletarian Army/Alex Boncayao Brigade
RPRH	Responsible Parenthood and Reproductive Health
RPS	Renewable portfolio standards
RRDIC	Regional Research, Development and Innovation Committee
RSBSA	Registry System for Basic Sectors in Agriculture
RTL	Rice Tariffication Law
RTLA	Retail Trade Liberalization Act
S&T	Science and technology
S4CP	Science for Change Program
SAA	Sub-allotment advice
SBCC	Social and Behavior Change Communication
SBCorp	Small Business Corporation
SBFZ	Subic Bay Freeport Zone
SCC	Stranded contract cost
SCoPSA	Sustainable Corn Production in Sloping Areas
SCP	Service contracting program
SCP	Sustainable consumption and production
SCS	South China Sea
SD	Stranded debt
SDG	Sustainable Development Goals
SEC	Securities and Exchange Commission
SER	Socioeconomic Report
SETUP	Small Enterprise Technology Upgrading Program
SFF	Small farmers and fisherfolk
SFF	Sustainable Finance Framework
SGLG	Seal of Good Local Governance
SHES	Safety and Health, Environment, and Social Development and Management
SHFC	Social Housing Finance Corporation

SHIELD	Strategic Helpdesks for Information, Education, Livelihood and Other Developmental Interventions
SHS	Senior high school
SIPP	Strategic Investment Priority Plan
SME	Small- and medium-sized enterprises
SMS	Short message service
SOP	Standard operating procedures
SP	Social protection
SPES	Special Program of the Employment of Students
SPS	Sanitary and phytosanitary
SRCM	Systemic Risk Crisis Management
SSC	Safety Seal Certification
SSF	Shared Service Facility
SSIPS	Services on Small Scale Irrigation Projects
SSS	Social Security System
STAPLES	Sustaining Trade Access to Primary Food and Link to Enterprises
Staysafe.ph	Stay Safe application
STEAM	Science, Technology, Engineering, Arts, and Mathematics
STEM	Science, Technology, Engineering, and Mathematics
STI	Science, Technology, and Innovation
SUC	State universities and colleges
SWDR	Solid Waste Diversion Rate
SWM	Solid waste management
SWM	Solid waste management
SY	School year
TB	Tuberculosis
TBI	Technology Business Incubators
TBM	Tunnel boring machine
TESDA	Technical Education and Skills Development Authority
TFER	Task Force on Energy Resiliency
TJR	Transitional Justice and Reconciliation
TMT	Technology, media, and telecommunication
TRAIN	Tax Reform for Acceleration and Inclusion
TRB	Toll Regulatory Board
TSD	Treatment, storage, and disposal
TTMF	Temporary treatment and monitoring facilities
TTMF	Temporary Treatment and Monitoring Facility
TUPAD	Tulong Panghanapbuhay sa Ating Disadvantaged/Displaced Workers
TVET	Technical-vocational education and training
TVI	Technical Vocational Institution

TVL	Technical Vocational Laboratory
TWG	Technical Working Group
UAQTE	Universal Access to Quality Tertiary Education Act
UHC	Universal Health Care
UHC-IS	UHC Integration Sites
UM	Utility model
UNCTAD	United Nations Conference on Trade and Development
UNICEF	United Nations Children's Fund
US	United States
VCF	Value chain financing
VRE	Variable renewable energy
VUCA	Volatile, uncertain, complex, and ambiguous
WASH	Well-ventilated classrooms, availability of water, sanitation, and hygiene
WB	World Bank
WEF	World Economic Forum
WESM	Wholesale Electricity Spot Market
WRC	Water Regulatory Commission
WTE	Waste-to-energy
y-o-y	Year-on-year

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Telephone: (+632) 8631 0945 to 56

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