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 (Delpan 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, tsunami, 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 Heath (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.