

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.

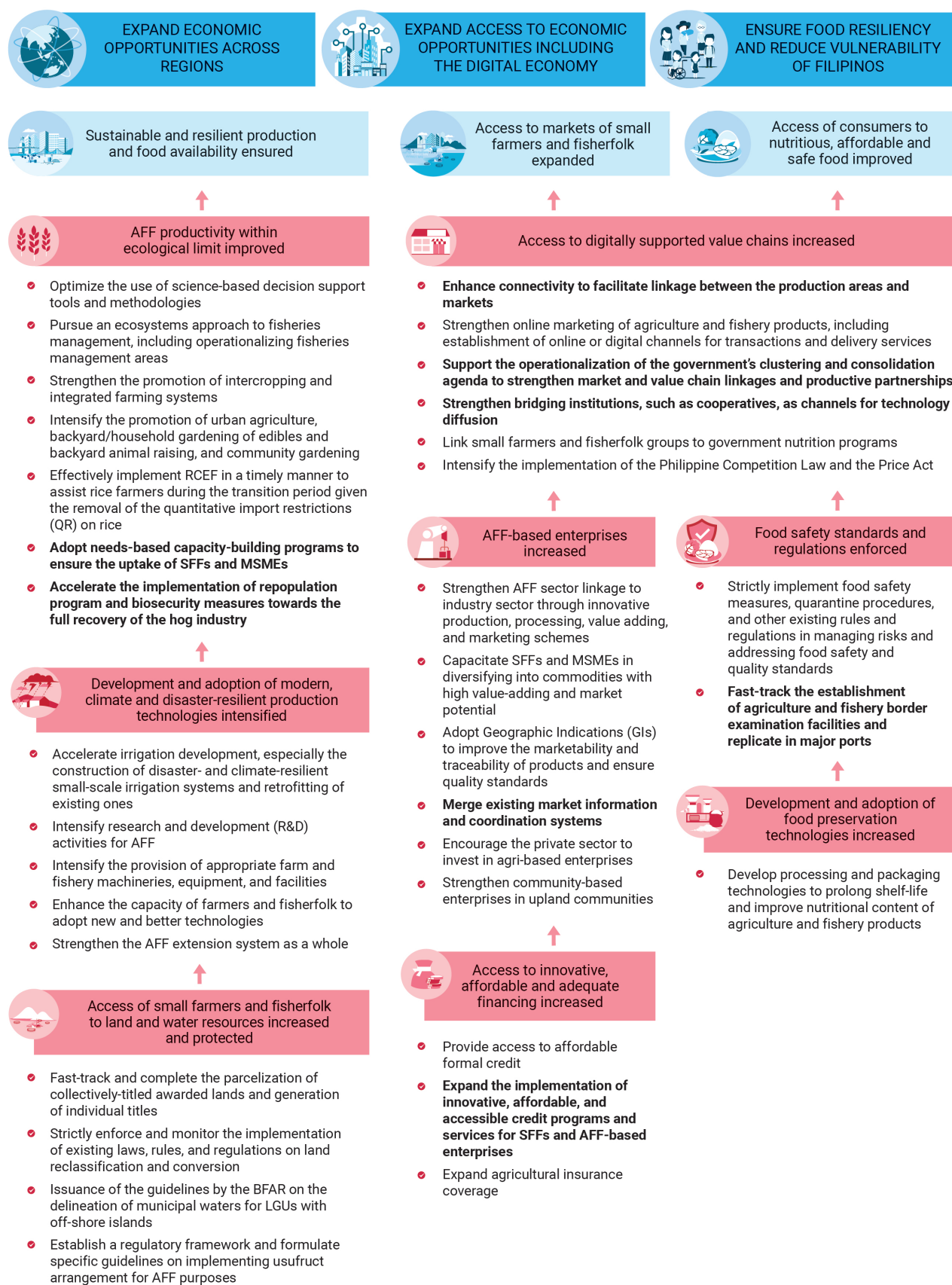
Despite these long-standing problems, Mang Jose remains hopeful that the much-needed government assistance will soon reach farmers in far-flung areas to help realize a better future for their families.

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