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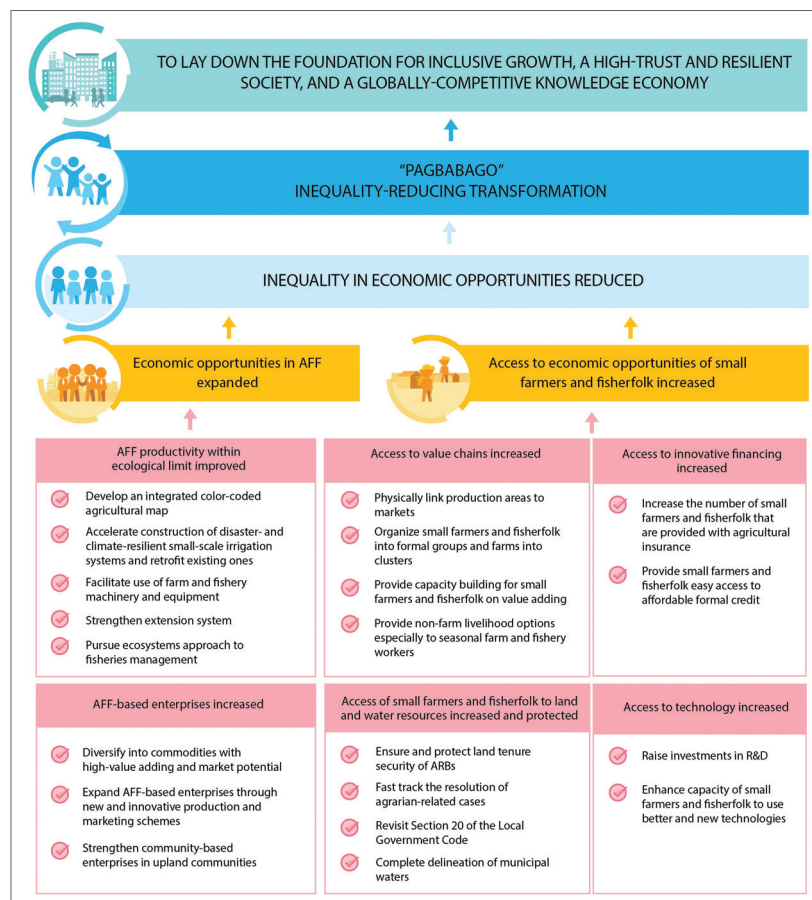
Expanding
Economic
Opportunities in
Agriculture, Forestry,
and Fisheries

Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries

The Philippines is stepping up its efforts in boosting the potential of the agriculture, forestry, and fisheries (AFF) sector to promote more inclusive development and meet the country's food security needs. At the same time, the country intends to strengthen its participation in international trade to capture markets for high-value AFF products. All these will be done while ensuring the sustainability of the resource base.

Anchored on the overarching goal of inequality-reducing transformation or “Pagbabago”, strategic activities were undertaken to meet the sector outcomes on expanding economic opportunities in AFF and increasing access to economic opportunities by small farmers and fisherfolk. Sustaining the gains from such initiatives, however, entails the right blend of innovations, science and technology, and policy reforms supported by partnerships with and cooperation by various stakeholders. These activities are graphically depicted in Figure 8.1.

Figure 8.1 Strategic Framework to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries



Accomplishments

Expanding economic opportunities in AFF

In 2017, the implementation of activities to expand economic opportunities in AFF translated to the achievement of most of the sector outcome indicators and targets.

AFF sector posted its highest growth rate in a decade and exceeded the Philippine Development Plan (PDP) 2017-2022 target. The overall sector gross value added (GVA) grew by 3.9 percent in 2017, overcoming its sluggish growth in the last 10 years and exceeding the target of 2.5 to 3.5 percent.

Vibrant performance of the crops subsector fueled the overall AFF growth. The GVA of crops, which accounts for the bulk of the total output of the sector at 51.2 percent, grew at an average of 6.5 percent in 2017, which is higher than the target of 2 to 3 percent. This growth is mainly attributed to production increases in palay, corn, coconut, sugarcane, banana, pineapple, cassava, and rubber,¹ resulting from favorable weather condition. In addition, these commodities benefitted from the government's support services such as the provision of inputs like high-yielding seed varieties, fertilizers, and irrigation (especially for palay).

Poultry subsector already surpassed its growth target while livestock subsector grew, albeit at a slower rate. The GVA of poultry subsector grew by 4.5 percent in 2017, exceeding the 3 to 4 percent target. This could be attributed to the emergence of new and expansion of existing broiler farms in the Cordillera Administrative Region, Central Luzon, Eastern Visayas, Zamboanga Peninsula, and Davao Region. The expansion of commercial layer farms in Ilocos Region, CALABARZON, Central Visayas, and SOCCSKSARGEN also contributed to the subsector's good performance. The outbreak of avian influenza that affected Pampanga and Nueva Ecija in August 2017 had a negligible impact on the subsector's growth.

On the other hand, the GVA of livestock increased by 1.1 percent in 2017, still below the 3 to 4 percent target. The full-year growth was slowed down by the drop in the number of slaughtered carabao, cattle, hog, and goat in the second quarter of 2017. This can be traced to limited marketable stocks for disposal. During this time, commercial farms carried out stocking of reserves for breeding purposes as the current inventory needed replenishment in order to meet future demand.² Further, there was an incidence of Porcine Reproductive and Respiratory Syndrome (PRRS) during the third quarter of 2017 in Central Luzon which contributed to slower growth of hogs.

Measures to combat pests and diseases in livestock and poultry shall be undertaken even though the recent outbreaks of avian influenza and PRRS had negligible impact on the subsectors' growth. These measures include: (a) adopting of good agricultural practices including integrated pest management and ensuring that farmhouses are not overcrowded; and (b) strengthening of quarantine and monitoring services.

Forestry contraction decelerated as forest plantations in areas not covered by the moratorium on cutting and harvesting of timber posted increases in output. The growth of forestry GVA remained negative with the ongoing implementation of a moratorium³ on the cutting and harvesting of timber in natural and residual forests. However, the contraction slowed down to -5.9 percent in 2017 from -10.1 percent in 2016.

¹ These commodities account for 82 percent of the total crops GVA, with the share of palay accounts for about 39.0 percent.

² As of July 1, 2017, (a) cattle inventory in commercial farms decreased by 5.46 percent compared with previous year's level; (b) carabao inventory in commercial stocks went down by 5.50 percent; (c) hog inventory in commercial farmers decreased by 0.67 percent; and (d) goat inventory in commercial farms decreased by 6.26 percent.

³ Executive Order No. 23, s. 2011 declared a national moratorium on the cutting and harvesting of timber in natural and residual forest in the short term to protect the remaining forest cover areas, preserve various ecological services, and encourage sustainable use of resources.

The forestry output will likely remain low in the short term but is seen to pick up in the medium term, owing to the commencement of the delineation of production and protection forests, as well as the timber harvest from National Greening Program.

Aquaculture maintained positive growth, but commercial and municipal fisheries remained sluggish. The growth in the value of aquaculture production reached 1.9 percent in 2017 – higher than the 0.5 percent growth in 2016 – mainly due to the increase in the volume of production in brackish water fishponds and seaweeds. For municipal and commercial fisheries, the value of production (in constant prices) continue to contract, at -0.9 percent and -5.3 percent, respectively, despite government efforts to implement closed seasons and distribute fishing boats and gears. Thus, such interventions need revisiting and should be properly guided by information from the National Stock Assessment Program (NSAP).⁴ The Philippine Statistics Authority's (PSA) Census of Agriculture and Fisheries 2012, once released, could likewise further complement the NSAP data.

Agriculture and fishery exports recovered. Earnings from agricultural exports bounced back from a 0.1 percent contraction from January to September 2016 to a 19.5-percent increase in the same period of 2017.⁵ There was a significant increase in the volume of the top Philippine export commodities such as coconut, tuna, tobacco, centrifugal sugar, and rubber.⁶ This was due to an increase in demand by the country's major trading partners.⁷ Among these commodities, rubber had the highest increase in terms of volume of exports at 160 percent, which was mostly exported to Malaysia.⁸

Increasing access to economic opportunities by small farmers and fisherfolk

Efforts to empower small farmers and fisherfolk through increasing their access to economic opportunities were implemented throughout the year. Positive results in terms of labor productivity, financing, research and development (R&D), and access to land and water resources were achieved.

Growth in AFF labor productivity doubled against the low-end 2017 target of 5.0 percent. The strong AFF performance, i.e., high GVA output, accompanied by a drop in the number of employed in AFF translated to a labor productivity growth of 10 percent in 2017. However, there are indications that the drop in AFF employment was due to the following: (a) temporary disruption of economic activities due to weather disturbances (i.e., Typhoons Auring, Crising, Maring, Gorio), and (b) reduction of fishing activities due to strict implementation of fishery laws (i.e., implementing closed season and three-month fishing ban in Davao Gulf, and banning of commercial fishing at municipal waters in Bohol and Cebu,). The National Economic and Development Authority (NEDA) will undertake a study on the rural labor migration phenomenon which leads to the drop in AFF employment or the shift of labor from AFF to other sectors.

Intensified efforts to deliver productivity-enhancing support services were observed but need to be further strengthened. The Department of Agriculture (DA), through the Agricultural Credit Policy Council, developed and rolled out easy, fast, accessible, and affordable loan packages to small farmers and fisherfolk, particularly those unserved/underserved by banks during the first year of PDP implementation.

⁴ The NSAP published the Philippine Capture Fisheries Atlas that provides scientific data on the location, distribution and abundance, and size and species composition of the major capture fisheries resources in the fishing grounds.

⁵ The depreciation of the peso in 2017 may also played a role in export recovery, with an average US\$ to ₱ exchange rate of 50.40.

⁶ These commodities account about 64 percent of the total top agricultural exports for January to September 2017.

⁷ In terms of quantity, demand from major trading partners increased by 42.9 percent for coconut, 80.1 percent for tuna, 65.8 percent for tobacco, and 34.0 percent for centrifugal sugar.

⁸ Malaysia was the top country of destination for rubber, accounting for 90 percent of the total volume of rubber exported from January to September 2017.

These financing facilities, bundled with agricultural insurance, include the Production Loan Easy Access (PLEA) and the Survival and Recovery (SURE) Assistance Program. The PLEA provides non-collateral loans for agri-fishery production, including long-gestating crops, at 6 percent annual interest rate payable within two to ten years, depending on the project cycle. The SURE Program is a post-disaster support facility which provides emergency loans for immediate needs and recovery loans for the rehabilitation of agricultural and livelihood activities of small farmers and fisherfolk in areas declared under state of calamity. These programs should be coupled with enabling factors that would facilitate successful implementation, such as: (a) capacity building of cooperatives and farmers/fisherfolk organizations to perform microfinance operations, and (b) updating of the Registry System for Basic Sectors in Agriculture.

For AFF R&D, the share of budget appropriation to total AFF GVA increased to 0.36 percent (i.e., from ₱4.8 billion in 2016 to ₱5.5 billion in 2017), higher than the target of 0.33 percent. This increased the number of new technologies developed to 171, exceeding the target of 138. To facilitate the adoption of newly developed technologies, agricultural extension workers shall intensify technology promotion and information dissemination to farmers, as well as continue providing technical and business advisory services.

In terms of improving crop yield, targets for palay, yellow corn, and sugarcane were met in 2017. On the other hand, target yield for banana, coconut, mango, coffee, cacao, and rubber in the programmed areas will most likely not be attained due to delays in the procurement and delivery of seeds and planting materials.

Meanwhile, AFF remains unattractive to investments as approved investments declined by 29.3 percent in 2017. This should be carefully studied in order to design the proper policy response.

Distribution of land and subdivision of lands under collective ownership continued. As of September 2017, the Department of Agrarian Reform (DAR) has distributed about 4,840,728 hectares (ha) out of the 2017 cumulative target of 4,871,625 ha. However, the DAR may fall short of the PDP land distribution target (i.e., a backlog of around 30,897 ha), due to the strong resistance of landowners, as these remaining areas for distribution are already private agricultural lands. Also causing delay are discrepancies between the technical descriptions of landholdings in the title vis-à-vis those in the survey, which would entail correction process. Collective certificates of land ownership award (CLOA) covering 1,149,851 ha have also been subdivided (99 percent accomplishment rate vis-à-vis the 2017 PDP target) as of September 2017. However, DAR is unlikely to achieve the 2017 full-year target due to missing titles and tedious process of validating the qualified agrarian reform beneficiaries (ARBs) for inclusion or exclusion in the title.

Share of registered small fisherfolk within municipal waters increased. Registered fisherfolk were given preference in the provision of livelihood interventions including training on aquaculture such as seaweed farming, aquasilviculture, and oyster farming, among others. The Bureau of Fisheries and Aquatic Resources (BFAR) reported that based on their latest data, the ratio of registered boats⁹ in coastal areas to the total number of registered municipal fisherfolk¹⁰ increased by 28 percent, which is above the 12.8 percent target for 2017. The increase in number of registered small fisherfolk was due to BFAR's intensified campaign for fisherfolk to register in the FishR. Nonetheless, more fisherfolk need to register to facilitate proper planning and provision of interventions.

⁹ The number of registered boats is based on the Municipal Fishing Vessel and Gear Registration System (BoatR), the centralized database system of BFAR for the registration of fishing boats three (3) gross tonnage and below conducted by municipal and city local government units.

¹⁰ The number of registered municipal fisherfolk is based on the Municipal Fisherfolk Registration System (FishR) of the BFAR, which was implemented in compliance with the mandate of Republic Act No. 8550 (The Philippine Fisheries Code) to enhance, fast-track, and complete the Municipal Fisherfolk Registry of coastal local government units (LGUs) nationwide.

Moving Forward

To realize the potential of the AFF sector in accelerating economic development and reducing poverty, key policy reforms and programs and projects (PAPs) need to be pushed harder.

Amend the Agricultural Tariffication Act of 1996 to replace the quantitative restriction (QR) on rice with tariff. Replacing the QR on rice with tariff removes market uncertainties. This is in relation to the unpredictability of import decisions by the government that hinder greater private sector participation. This is a move towards creating more transparent and competitive rice market that will make rice more available and cheaper to benefit the general public, especially the poor who spend about 29 percent of their total food expenditure on rice¹¹ and farmers themselves who become net consumers when harvests are sold to cover other basic necessities. Apprehension on rice tariffication among rice farmers, especially the small uncompetitive ones,¹² could be allayed by the expected enhanced technical assistance and other support which can be funded out of the tariff revenues in order to increase farmers' incomes. The government will formulate and implement the Rice Roadmap to enhance competitiveness and increase the incomes of farmers through the following: (a) increase productivity of rice areas deemed to be competitive through the provision of irrigation systems (*Refer to Chapter 19*), use of high-yielding seed varieties, and more efficient use of other inputs such as fertilizer; (b) reduce the unit cost of production primarily through the adoption of farm machinery and equipment; and (c) encourage livelihood diversification to high-value crops to promote more efficient use of land and/or to non-farm activities. The use of the National Color-Coded Agriculture Guidemap¹³ shall be further promoted by cascading down to the LGUs and farmers to guide them in their production investment decisions.

Institute reforms in the function and structure of the National Food Authority (NFA). This entails the decoupling of NFA's proprietary and regulatory functions by amending Presidential Decree No. 4 of 1972 which created the NFA. This reform is necessary for NFA to focus on its function of maintaining a national buffer stock for food security and refrain from rice trading to avoid distorting the market and incurring huge debts. The pending Restructuring Plan of the NFA in the Governance Commission for GOCCs should also be finalized.

Diversify DA's budget by eliminating commodity bias and promoting commodity diversification. Instead of too much focus on rice, the budget of DA shall be reallocated to activities (e.g., R&D) that promote non-traditional and high-value commodities. Likewise, investments in small-scale irrigation systems for crops other than rice shall be increased.

Reinforce implementation of sustainable fisheries management. While ecosystem approach to fishery management (e.g., closed fishing season and upscaling of community-based coastal resource management) continues to be implemented to protect and conserve fishery resources and to balance environmental concerns with socioeconomic needs, there is a need to reinforce the implementation of the following: (a) complete the delineation, delimitation, and zoning of municipal waters to ensure that municipal fisherfolk are given preferential use and exclusive access to resources (mapped and zoned accordingly into production and protection areas to ensure fisheries sustainability); (b) strengthen law enforcement and management of coastal and marine areas particularly against illegal, unreported, and unregulated fishing activities;

¹¹ Based on the Family Income and Expenditure Survey for 2015

¹² Based on the study of the Philippine Rice Research Institute entitled Competitiveness of Philippine Rice in Asia in 2016, the domestic small rice farmers' average cost of palay production is about ₱12.41 per kilogram, which is higher than the average cost of palay production in Vietnam at around ₱6.53 per kilogram and Thailand at ₱8.85 per kilogram.

¹³ The color-coded map identifies the crops that are most suitable in agricultural parcels and overlays soil properties, elevation, rainfall pattern, temperature, and the projected climate-induced multihazards.

(c) rationalize the identification of marine protected areas and other networks to ensure the continued supply of seafood, underpin ecotourism, and enhance climate resilience; and (d) regulate fishery structures such as fish pens and cages in inland bodies of water (*Refer to Chapter 20*).

Ramp up land distribution and individual titling efforts. Cognizant of landowners' resistance to the agrarian reform program, the DAR should initiate dialogues between landowners and ARBs to resolve conflicts that could impede the land distribution process. For disputes that have matured into legal cases, the DAR should extend assistance to concerned ARBs such as counselling and representation in judicial and/or quasi-judicial bodies. The targets on land distribution and collective CLOA would also entail: (a) engaging contract of service personnel to complement the manpower of DAR in the conduct of field validation on the status of lands and ARBs, as well as verification of titles and survey documents; (b) adopting the latest land surveying technologies (e.g., geographic information system and global positioning system) to expedite subdivision process; and (c) streamlining of land titling procedures (e.g., survey, registration, and issuance of titles) in coordination with the Department of Environment and Natural Resources and Land Registration Authority.

Boost private sector involvement in AFF to promote technology transfer. Plans and programs that would entice the private sector to invest in technologies will be formulated to boost production and improve post-harvest processing. The government will also encourage public-private partnership in logistics facilities (e.g., warehouse, cold storage facilities). This will support value chain development and improve the competitiveness of small producers, millers, and processors. Additionally, joint ventures of local machine manufacturers and assemblers, producers, millers, and processors with foreign investors will be encouraged.

Easing of restriction on foreign investments on the culture, production, milling, processing, and trading (except retailing of rice and corn) has already been proposed in the 11th Regular Foreign Investment Negative List¹⁴. In addition, fair competition between foreign companies and local farmers/grains business players (especially the smaller ones) will always be upheld, in compliance with the provisions of the Philippine Competition Act of 2015.

Strengthen resilience to climate and disaster risks. The AFF sector remains vulnerable to climate and disaster risks which result in huge losses and damage. In 2017, agricultural losses and damage (excluding forestry) brought about by disasters amounted to ₱3.67 billion. Thus, the following key activities have to be strongly undertaken: (a) establishment of small water-impounding dams in strategic areas for irrigation purposes, especially during El Niño episodes; (b) adoption of improved farm management practices, particularly for effective and efficient management of inputs including water; (c) promotion of new technologies including water-saving and management technologies (e.g., broadcasting, drip irrigation, alternate wetting, and drying), stress-tolerant seed varieties, animal breeds, and fish stocks (*Refer to Chapter 20*); and (d) construction of more climate resilient farm structures.

Support PAPs that are responsive to the needs of the sector. Chapter 8 of the Public Investment Program 2017-2022 shows the major PAPs that need to be pushed in order to contribute in achieving the sector outcomes on expanding economic opportunities in the AFF sector and increasing access to economic opportunities by small farmers and fisherfolk. A total of 18 ongoing PAPs (Tier 1) shall continue to be implemented by DA, DAR, Philippine Coconut Authority (PCA), and DOST-Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD). On the other hand, 24 new PAPs (Tier 2) are programmed to be implemented by DA, DAR, PCA, DOST-PCAARRD, Department of Trade and Industry, Bases Conversion and Development Authority, the Autonomous Region in Muslim Mindanao, and Landbank of the Philippines starting 2018.

¹⁴ Memorandum Order No. 16, s. 2017, directed to ease restriction on foreign investment (currently at 40% foreign equity) for the “culture, production, milling, processing, and trading except retailing of rice and corn”.

Recommendations

Apart from ensuring the implementation of the strategies identified in the PDP 2017-2022, the following newly-identified supplementary and complementary strategies need to be implemented.

Table 8.1 Supplemental Strategies to Expand Opportunities in Agriculture, Forestry, and Fisheries

CHALLENGES	RECOMMENDED STRATEGIES	IMPLEMENTING AGENCIES
<ul style="list-style-type: none"> AFF sector remains unattractive as an investment area or career path due the perception that the sector is antiquated and unprofitable. This may pose a threat to food security. 	<ul style="list-style-type: none"> Provide capacity building for non-agriculture workers, particularly the returning overseas Filipino workers (OFWs) and Senior High School Students to captivate their interest in the AFF-based enterprises (<i>Refer to Chapter 10</i>). <ul style="list-style-type: none"> » In collaboration with the Department of Labor and Employment-Overseas Workers Welfare Administration (DOLE-OWWA) and the CFO, build the capacity and provide business advisory on AFF-based enterprises for returning OFWs (e.g., under <i>Balik-Manggagawa</i> Program). » In collaboration with DepEd, immerse senior high school students on production and value-adding activities through established farm-field schools and demonstration farms. The students could be trained in production, processing, packaging, marketing, and complying with product standards and certification. 	DA, Commission on Filipinos Overseas (CFO) ¹⁵ , and Department of Education (DepEd)
<ul style="list-style-type: none"> Amplifying the AFF sector's contribution in meeting the sustainable development goals (SDGs), i.e., eradicating poverty (SDG 1), ending hunger (SDG 2), reducing inequality (SDG 10), and life under water (SDG 14).¹⁶ 	<ul style="list-style-type: none"> Ensure nutrition-sensitive agriculture¹⁷ in all aspects of the value chain, beginning in production and extending across the food system – encompassing food safety, processing, fortification, and proper preparation and consumption. In conjunction, this will be supported by strategies to promote healthy diet (e.g., increase consumption of vegetables and fruits), to diverse and healthy food choices, and to increase awareness of the risks of unhealthy food habits such as high sugar intake and alcoholism (<i>See also health and nutrition outcomes in Chapter 10</i>). 	DA, DOH-National Nutrition Council, DOST-Food and Nutrition Research Institute

¹⁵ The CFO recognized the need to establish *BaLinkBayan*. A quip on the Filipino word *balikbayan* (a returning overseas Filipino), *BaLinkBayan* is a means to connect Filipino individuals and communities to the Philippines through the Diaspora to Development (D2D) program of the CFO. *BaLinkbayan* focuses on the five of the D2D: diaspora investment and entrepreneurship, diaspora philanthropy, brain gain program, educational exchange, and medical mission coordination.

¹⁶ SDG 14. Fish is one of the cheapest source of protein. In the Philippines, close to 1.8M individuals are registered municipal fisherfolk and 39.6 percent of them lives below the poverty level. SDG 14 primarily focuses to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. Part of the SDG 14 targets is to provide access for small-scale artisanal fishers to marine resources and market (UNDP).

¹⁷ Food and Agriculture Organization defines this as “an approach that seeks to maximize agriculture’s contribution to nutrition. It stresses the multiple benefits derived from enjoying a variety of foods, recognizing the nutritional value of food for good nutrition, health and productivity, and the social significance of the food and agricultural sector for supporting rural livelihoods.”