

Looking Back, Looking Forward: What to do with Philippine Agriculture

Emil Q. Javier

National Academy of Science and Technology Philippines

ABSTRACT

Compared with our ASEAN neighbors against whom we usually benchmark ourselves, the Philippines is making the least progress in providing a better life for its people. While they have significantly brought their poverty rates down, poverty among Filipinos has persisted at a painfully embarrassing rate of 26%, most of that poverty is found in the countryside, among farmers and fisherfolk. The 1.7% rate of growth of agriculture, which does not even match our population growth during the last five years (2011-2015), is symptomatic of this malaise, yet the ingredients to make agriculture move forward and be more productive, competitive, sustainable, and economically rewarding to our millions of small farmers and fisherfolk are largely in place. Our moderate tropical environment and rainfall with irrigation make year-round growing possible. Our vast and carefully-managed fisheries resources should provide a sustainable supply of affordable and quality animal proteins in our diets. We have a fairly educated workforce and a modest but working higher education and scientific research infrastructure in agriculture. We have an established and increasingly competitive food and beverage manufacturing subsector. Progressive legislations are in place with the Agriculture and Fisheries Modernization Act (AFMA) of 1997 and the Fisheries Code of 1998, and a palpable improving political will to support agriculture is established, as manifested by the expanding congressional appropriations for the Department of Agriculture (DA). What should we do with agriculture in 2016 and beyond to move it forward? Beyond generalities, what do we specifically want to see done by the government and those with a stake in agriculture to help farmers and fisherfolk attain a better standard of living for themselves, for all of us, now and in the future? There is no single magic bullet that will cure all the ills of Philippine agriculture. We need to come together, marshal, and direct our resources along four major platforms of reform, namely (a) reform the bureaucracy of the Department of Agriculture; (b) meaningful participation of stakeholders in the governance of agriculture; (c) continuing investments in rural institutions and infrastructure; and (d) closure on a few important but contentious issues such as a rice-centric agriculture.

Keywords:

AFMA,
agricultural
governance,
rural
institutions,
Philippine
agriculture

Citation:

Javier EQ. 2016.
Looking back,
looking forward:
What to do with
Philippine
agriculture.
Transactions NAST
PHL 38(2):
doi.org/10.57043/
transnastphl.2016
.752

Email: eqjavier@yahoo.com; eqjavier@up.edu.ph

Plenary paper presented during the 38th Annual Scientific Meeting (July 2016) of the National Academy of Science and Technology Philippines.

INTRODUCTION

Our slow progress in the attainment of our national economic and social development goals traces their roots to a large extent to the relative lack of productivity in agriculture. Pervasive poverty, underemployment, high food prices, and malnutrition can be attributed to the failure of the agriculture sector to contribute significantly to the growth of our economy. Looking back, if there is any single statement that will capture our state of agriculture, this statement will go like this: **“All is not well with Philippine Agriculture.”**

This paper has three parts: (a) past and present state of Philippine agriculture; (b) specific recommendations on how we are going to manage the institutions responsible for agriculture; and (c) closure on some important but very contentious issues in agriculture.

LOOKING BACK

Our national poverty figures remain at 26%, which is worst among the ASEAN-5, the other countries against which we usually benchmark ourselves (Table 1). The greater part of this poverty in the Philippines is accounted for by poverty among farmers and fisherfolk in the countryside.

Unfortunately, this lack of productivity and underperformance has been going on for almost 50 years. The numbers show that consistently, the growth of agriculture had been less than that of our gross domestic product and has barely matched that of population growth since the 1980s.

Table 1 shows that we have the dubious distinction of being the poorest in the ASEAN. Our poverty incidence remains at 26% but our neighbors have poverty numbers that are much less, almost half of our poverty rate, except Malaysia, which has gone very far in terms of reducing poverty.

The bigger part of that poverty is accounted for by the rural population. Our rural poverty is 40%, which is triple that of our neighbors. However, that lack of performance has been going on for some time. Since the 1960s, the growth in agriculture has been consistently less than that of the gross domestic product (GDP) (Table 2). This means that agriculture is not contributing its share in economic development. In fact, it is dragging down or slowing down our economic growth. Table 2 shows that since the 1980s, agricultural growth is barely matching that of the population growth.

Table 1. Poverty incidence and rural poverty in ASEAN countries.

Country	Poverty Incidence (%)		Rural Poverty (%)
	2009	2014	
Indonesia	14.2	11.3	13.8 (in 2006)
Malaysia	3.8	0.6	8.4 (in 2009)
Philippines	26.3	25.8	40.0 (in 2014)
Thailand	17.9	10.5	13.9 (in 2013)
Vietnam	17.2 (2012)	13.5	17.4 (in 2010)

Table 2. Philippine GDP and agriculture and population growth rates (%) (1960-2015).

Year	GDP Growth rate(%)	Agriculture growth rate (%)	Population growth rate (%)
1960s	4.9	4.3	3.1
1980s	1.8	1.1	2.7
2000s	2.8	2.9	1.8
2011-2014	4.2	1.6	1.6
2015	5.9	0.2	1.6

Source: Philippine Statistics Authority (<https://psa.gov.ph/>)

This lack of productivity and underperformance is starkly captured in our agriculture food trade and exports compared with the ASEAN-5 (Table 3). All our neighbors are enjoying double-digit exports in billion dollars. Our exports in 2014 were worth a measly USD 7B while Indonesia had USD 39B, Malaysia USD 26B, Thailand USD 38B, and Vietnam USD 25B worth of exports. Again, we have the lone distinction that in terms of trade balance, all these four neighbors of ours have positive trade balance, and we are the only one who is the lone net food importer.

This can be explained by our exports per hectare. On the average, we are exporting USD 340 of food and agricultural products

per hectare of agricultural land. Indonesia, our neighbor that is also archipelagic in geography, exports twice as much. Malaysia exports 10 times as much; Thailand five times; and Vietnam three times as much as we export per unit hectare of land (Table 3).

Man-made causes of lack of productivity and underperformance of PHL agriculture

Looking back, what are the circumstances that would explain our lack of productivity and underperformance? The politically correct explanation now is climate change— floods, typhoons, and drought. These are very serious drawbacks. But these are natural causes, which we do not have

Table 3. Agricultural food trade and exports in ASEAN countries.

Country	Agricultural food trade in ASEAN, 2014 (USD B)			ASEAN agricultural food exports		
	Exports	Imports	Trade balance	Export (USD B)	Farmland (M ha)	Export per ha (USD)
Indonesia	39	18	+21	31.4	48.1	650
Malaysia	26	18	+8	27.7	7.9	3520
Philippines	7	9	-2	4.0	11.8	340
Thailand	38	13	+26	34.5	19.7	1760
Vietnam	25	13	+11	11.0	10.1	1093

Source: ASEAN Secretariat

much control over. We can only anticipate and mitigate the consequences. Having been a student of agriculture for six decades starting in 1956 as a student in Los Baños up to now as a practicing farmer myself, I trace back our problems to **four essentially man-made causes or circumstances**. These are (1) small uneconomic-sized farms; (2) poor linkage of primary production with markets and rest of the value chain; (3) failure to diversify to other higher-value products; and (4) inability to capitalize on the country's fisheries and aquatic resources.

1. Small uneconomic-sized farms lack economies of scale at all stages of the enterprise. In his book "Small is beautiful: A study of economics as if people mattered," Schumacher (1973) is romanticizing smallness, and it is good to look at it from that perspective. But smallness hurts because in almost all stages of the agriculture enterprise, we do not have and we do not enjoy the economies of scale. We could raise productivity and reduce our costs by mechanization yet the farmers cannot afford to buy tractors nor maintain them because of the small sizes of their farms. The small farmers do not get credit since banks do not lend to them because risks are high. In fact, all of our government programs have been designed to cope with the reality of small-sized farms.

2. Poor linkage of primary production with markets and the rest of the value chain. The second major cause of our poverty and underperformance in the countryside is that we have not adequately linked primary production with the markets and the rest of the value chain. This divorce between physical farming with markets is played out every year, every season, where farmers

complain of very poor farm-gate prices even though the cost of food in the markets is the same. This is due to the failure to link primary production with markets and the rest of the value chain. the consequences.

3. Failure to diversify to other value products. We have kept faith with rice, corn, and coconut where the yields or income per hectare are much less while our ASEAN neighbors have wisely diversified into fruits, vegetables, industrial tree crops, and even ornamentals.

4. We have not exploited our vast resources for fisheries and aquatic resources to the fullest.

Finally, the poorest among the poor Filipinos are the fisherfolk and residents of coastal communities. Although we have more water resources than land resources, we have not fully exploited the former for societal benefits.

LOOKING FORWARD

Our strengths to build a more progressive agriculture

But lest we become despondent, there are several things with which to build a foundation of more progressive agriculture and reverse those numbers shown in this paper.

1. We have a moderate tropical environment. We do not have winter; therefore, we can grow crops all year round. The whole of agriculture depends on a regular supply of water and we are blessed with 2400 mm of rain every year. If we could save that water in lakes, ponds, and dams, and not let that water flow uselessly to the sea, we would have enough water in the future.

2. We have vast yet partially tapped fisheries and water resources. While we only have 10 million hectares of lands suitable for agriculture out of a total landmass of 30 million hectares, we have 220 million hectares of territorial waters including our exclusive economic zone (EEZ), 750,000 hectares of inland waters (lakes, rivers, reservoirs), and a coastline of 17,460 kilometers.

3. Our livestock and poultry industries are technically competitive with our neighbors, as shown by surveys on technical coefficients of feed conversion, egg production, etc. Our livestock and poultry industries are also quite modern. Likewise, we are free from very serious poultry and livestock diseases, which gives us much potential for exports.

4. We are one of the countries which possess megadiversity. There are still so much genetic resources — both flora and fauna, which have not been fully utilized.

These are the things that are going for us as far as natural resources are concerned, but these are taken for granted.

5. We have a fairly educated workforce, a modest but working higher education, and scientific infrastructure in agriculture. In fact, years back, all our neighbors had been sending students to our country for training in higher education and agriculture.

6. We have a relatively small but increasingly competitive food and beverage industry. Internationally known companies include: Liwayway Marketing Corp., Universal Robina Corp., San Miguel Group, Del Monte Pacific, Emperador Alliance Group. Products of these Philippine companies make waves in regional trade.

7. We have progressive legislation policies and government appropriations largely in place. It is interesting and ironic that this could be one of our strengths because the Congress, despite all its weaknesses, has really done its job. Over the years, policymakers have passed comprehensive laws like the “Agriculture and Fisheries Modernization Act”, the “Fisheries Code”, the “Forestry Code”, the “Agrarian Reform”, and the “Local Government Code”. These are very important policies and legislations that are in place at least on paper. In fact, in 2008, the DA’s budget was around PHP 20B, while the latest figure shows that the DA has PHP 90B general appropriation. Thus, for the most part, the legislation, law, and appropriations are there.

What is missing all these years is an intelligent program planning and implementation among agencies of government, particularly the Department of Agriculture.

STRATEGIC DIRECTIONS

1. Operating farms as larger management units

Setting aside natural causes, which we have no control over, poverty in the countryside and underperformance can be associated to the **four man-made** causes mentioned. The most serious liability, as far as I am concerned, is our **small economic-sized farms.**

We should **operate the farms as larger management units**, as cooperatives, irrigators associations, and agrarian reform communities. We have to keep on and persevere in developing our coops as a way of getting around the smallness of our farms.

However, since most of the thousands of cooperatives and farmers' associations that we have organized are not really working, then we have to reconsider how we are delivering services to those farmers' associations. I propose that we consider privatizing the provision of management and financial control expertise to the farmers' association, non-governmental organizations (NGOs), and private consulting firms, rather than relying exclusively on the regular agencies, which unfortunately, are not doing enough. Likewise, we can privatize, as an additional mode, the organization and management of farmers' associations. These service providers should also be paid based on performance.

2. Declaring victory in agrarian reform

The next strategic directions, which are quite contentious, are **declaring victory in agrarian reform, granting the land titles free to the beneficiaries, and lifting the limits to land ownership to free the land markets.**

Agrarian reform has two objectives—political and economic. In almost all agrarian reforms in history starting from the days of Solon in Greece, Tiberius in Rome, and the French, Mexican, and Bolshevik Revolution, the reformers succeeded in their political objectives of retaining or grabbing power but almost all of them failed in the economic objectives. I think this is true as well with our agrarian reform. Since we have distributed 8.3 million out of 9 million hectares, or 93%, let us declare victory and move on to address the issues of economic productivity. Part of our recommendation is to give the lands free to the farmers, including the titles, because they are not capable of paying anyway. Besides this will put to rest the inequity

between the reform beneficiaries who get their lands free because they happen to be public lands versus those who are supposed to pay as the lands were compulsorily acquired from private sources.

3. Concentrating rice production in favorable areas and diversifying to other crops

In terms of rice self-sufficiency, this national policy has not really worked for us except for a year or two during the early Marcos years. We have failed to attain self-sufficiency in rice. Likewise, the other problem is that the resources we have devoted to rice could have been more profitably devoted to other crops by way of diversification. The problem also is that through the ASEAN liberalization, cheap rice will come from Vietnam and Thailand. Thus, we can see that the real problem is not producing more rice but producing rice that is competitive with the cheap imports. The only way to do this is to **concentrate our rice production in favorable areas with better water control, hybrids, fertilizers, and mechanization to further drive down the cost to become competitive with imported rice.**

Conversely, this means that less productive rainfed lowland and upland rice areas should be diverted to higher-value fruits, vegetables, industrial tree crops, and ornamentals.

4. More processing and value-adding

Primary agriculture accounts only for 12% of our GDP but the food and beverage sector, which depends on the raw material of agriculture accounts for 28%. Somehow, we do not make that connection because agriculture develops its roadmaps for primary production but the Department of Trade and Industry takes care of food and

beverage manufacturing. We should bring these two agencies together because they are in the same value chain. We should develop integrated agri-industry roadmaps to move forward.

We should help the poultry and livestock industries by securing the source of raw materials for feed and strengthening quarantine services. Most importantly, the private sectors in poultry and livestock insist that the government should leave them alone. They could do better without the government. However, smuggling should be stopped.

5. Raise investments in aquaculture and fisheries

To arrest the progressive decline of fish catch in our inland waters and coastal waters and protect and rehabilitate our coral reefs, mangroves, seagrass and algae beds, and other soft-bottom communities, we need to establish more protected areas and sanctuaries where the fish may spawn and resolutely enforce close fishing seasons to allow immature juvenile fish to grow to marketable size. Incentives should also be provided to commercial fishers to acquire modern and fishing gear to enable them to go farther into deep waters of our EEZ and beyond. This can alleviate intense fishing pressure on nearshore stocks and minimize conflict between municipal and commercial fishers.

More investments are also needed in aquaculture to further expand fish pens, fish cages, and fish ponds in our lakes, rivers, reservoirs, in coastal, brackish water areas as well as sea-based aquaculture (mariculture). We need to scale up research and development (R&D) on biology, breeding, fry production, nutrition, culture, and fish health for new species like crabs,

seabass, groupers, abalone, and maybe, even the Pacific bluefin tuna. We need to develop more large-scale mariculture parks provided that certain areas are reserved for small fishermen and their cooperatives. Finally, we join the call of the fisheries stakeholders and the scientific community for a separate Department of Fisheries and Marine Resources (DFMR) whose immediate mandate is the realization of our fisheries potential.

FOUR MAJOR PLATFORMS OF REFORM

There is no single magic bullet that will cure all the ills of Philippine agriculture. We need to come together, marshal our resources along with four major platforms of reform: (a) reform of the bureaucracy of the Department of Agriculture; (b) meaningful participation of stakeholders in the governance of agriculture; (c) continuing investments in rural institutions and infrastructure; and (d) closure on a few important but contentious issues.

a. Reform of the bureaucracy of the Department of Agriculture

The following are recommended:

*Return the National Irrigation Administration, the National Food Authority, Philippine Coconut Authority, and Fertilizer and Pesticide Authority to DA and separate the Department of Fisheries and Marine Resources.

*Reconstitute the old Bureau of Agricultural Extension as apex coordinating agency for extension and reconfigure the Bureau of Plant Industry, Bureau of Animal Industry, and the Bureau of Soil and Water Management into research institutes like PhilRice.

*Further, uncouple R&D from finance and regulation. Reconstitute Philippine Coconut Research Institute (PHILCORIN), Philippine Sugar Institute (PHILSUGIN), and the National Tobacco Research Training Center as stand-alone research units. Massive staff recruitment and human resource development should also be done.

b. Meaningful participation of stakeholders in the governance of agriculture through the empowerment of the Agriculture and Fisheries Councils, integrated Agri-industry road maps, promotion of contract farming, and other inclusive agribusiness models.

c. Continuing investments in rural institutions and infrastructure by strengthening cooperatives, Irrigators' Associations, and Agrarian Reform Communities; providing all-weather farm-to-market roads, farm mechanization and postharvest facilities, irrigation, and drainage, and credit to the unbankable and underserved; establishment of dedicated research and extension units in strategically located state colleges and universities to provide technical support to DA Regional Offices and local government units (LGUs).

d. Closure on a few important but contentious issues including intelligently managing our obsession with rice; moving beyond agrarian reform; subsidizing interest rates and insurance for small farmers and fisherfolks; reconciling the conflicts between conventional agriculture and statutory organic agriculture and recognizing there are places for both; welcoming the advances of modern biology through genetic engineering and genome editing; and approving legislation to free the coconut levy funds.

CONCLUDING REMARKS

Philippine agriculture has had a dismal performance in the past, making the farmers and fishers as the poorest sectors of society, even though the Philippines has rich natural resources, highly educated populace, and supportive laws and regulations to modernize the sector. This paper has traced the ills of agriculture to be mainly due to the institutional setup within the bureaucracy, the non-integration of the value chain that supports the sector, the ill-defined planning, and the resource allocation such as the very rice-centric budgeting among others. Looking forward, there is a need — to reform the bureaucracy, for more participatory governance of the sector, more investments into the soft infrastructure such as agricultural extension, improvement of major physical infrastructure such as marketing facilities, and abandoning of age-old traditions that constrain agriculture in achieving its optimum goal of alleviating poverty in the countryside.

REFERENCES:

Philippine Statistics Authority (n.d.). Retrieved from <https://psa.gov.ph/>

ASEAN Secretariat. (n.d.). Retrieved from <https://asean.org/asean/asean-secretariat/>

Schumacher EF. 1973. *Small is beautiful: Small Is Beautiful: A Study of Economics As If People Mattered*. Harper and Row, New York, USA.