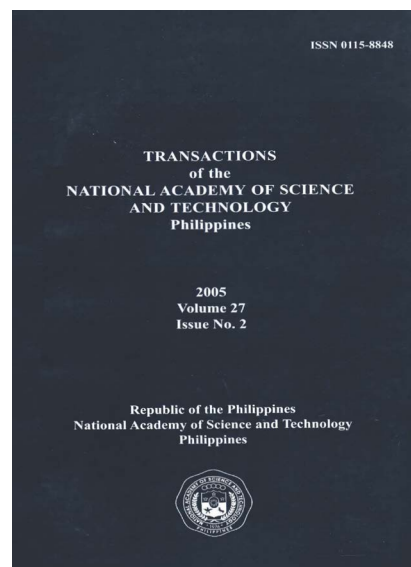


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## Linking the Production System to the Market

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## **Infrastructure and Support Services for Philippine Agriculture 2020**

### **LINKING THE PRODUCTION SYSTEM TO THE MARKET**

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The topic that has been assigned to me is to link the production system to the market. This is a very big order. I will just try to go over some major points that have been discussed by the previous speakers and add my own findings and observations.

First: On the infrastructure and support system, hard infrastructure includes the transport network, including land, water and air transport. I think we all know that the quality of our transport system in the country is very poor. According to the survey of the International Management Development, based in Geneva, the Philippines is ranked number 30 out of 30 countries based on the basic infrastructure index and competitive index. This is an indication of the poor state of our basic infrastructure which is found not only in rural areas but also in the cities like Makati, a first-class city where some of the roads are dilapidated and continue to be unrepaired.

What is the impact of poor road conditions on transport logistics cost? There are 4.2 million vehicles in the Philippines excluding those that are "colorum". Around 300,000 of these or 6.7% are used primarily for freight and for the farming sector. The increasing vehicle population is exacting a toll on the roads. Studies indicate that the number of vehicles increase by 9% or 3.7% times faster than the expansion of the road system.

Are you still wondering why we are so congested all over the Philippines, especially in major cities? It is because the road network is not increasing at a rate that is commensurate to the increase in vehicle number and human population. Due to poor road conditions, operating cost of vehicles has increased at an average of 12% per annum.

Let me summarize a few observations of local productivity levels from the production to the market. First, the productivity of our farms is very low compared to other countries. For example, coffee production in the

Philippines is only about 500 kg/ha; in Vietnam, it is 2000 kg/ha. The national productivity level of rice is only 3 metric tons per ha. For corn, we are getting 3 metric tons compared to 12 metric tons/ha in the United States and other European countries. These could be due to more sunlight, bigger mechanized farms, and advantages in their system— from farm to market.

Second: The price of vegetables from Mt. Kitanlad in Bukidnon is only PhP 15 sold by the farmers; this rises to PhP 75 when they sell it to SM, and when you buy it in the market or in the grocery, it is already PhP 125 per kg. This represents an 800% increase from the farmer's price to the consumer, with a total of seven layers of marketing!

Third: Transport of corn from Iowa to Manila is only one-third of the cost of transport from Mindanao to Manila. We have to take note of these weaknesses as we study the clustering system. Fourth: The price of rice is only PhP 5 per kg in Thailand and landed rice in Manila is PhP 12. The price in the market is about P17 to P22. Fifth: Almost all of our agricultural commodities are not competitive in the global market, with the exception of banana, pineapple, mango, seaweed, and maybe a few others. All the rest are not competitive, such as rice, corn, sugar, coconut, etc. Cotton, fiber, machinery and others are uncompetitive in the global market, as analyzed by many in the business sector.

What is common between uncompetitive and competitive sectors?

All those which are not competitive have government agencies dedicated to the development of the particular commodity. Therefore, how did I arrive at this conclusion? You just go over all the agencies of the government and will conclude that the commodities they focus are not globally competitive. Therefore, this is a cause for concern because in other countries those with dedicated agencies are mostly successful in having competitive commodities.

Our total exports to the ASEAN countries are another indicator whether we are globally competitive. Indeed, Philippine exports are very low at about 3%, even with the electronic sector, whose value-added is only about 20%. But Singapore, Thailand, and Malaysia, although much smaller countries, are way ahead of us.

How can we improve our competitiveness?

Firstly, (1) increase crop yields; (2) reduce postharvest losses; (3) repair and construction of various types of irrigation system; (4) improved productivity and quality.

After 50 years as a farmer, an industrialist, a businessman in multinationals and with UN agencies and as a government administrator, I thought that this concept of clustering should be adopted in the country and that we should have our own clustering model, considering the various conditions, and social-cultural aspects in the localities.

I would just like to point out that under the Medium Term Development Plan which started in year 2001, the definition of the clustering approach was adopted by the Philippine Export Development Program. This model is that of total collaboration. It is a total concept that we are following. The agro-industrial cluster Philippine model could be developed as a systems approach considering different conditions, competitive edge, location, climate, and others. For example, let us look at the coconut industry. Value-added products of the coconut lead to a higher value chain. This is the only way we can make the coconut industry competitive because we are no longer the leader in Asia on output or productivity. What is not included here is agricultural diversification. Because the farmer is not making enough money as a coconut farmer, he is advised to plant other crops under the coconut tree. Such crops used with coconut should be carefully chosen since they should be able to grow well under shade.

In the process stream for corn leading towards the production of cattle. Here we need to consider transport cost. The first study I made on this was four years ago which I gave to the Philippine Port Authority, MARINA, Department of Transportation, DBP and others. Unfortunately, nothing has been done about the report. But what we really wanted was to improve the port and shipping sectors. Presently bulk handling is not used in our ports. I have proposed the establishment of a cluster to avoid very high transport costs, starting in Bukidnon and Isabela for the last three years, since the time of DA Secretary Montemayor.

Another example is the milkfish cluster. Only two months ago, I had a four-hour meeting with the milkfish producers in Panay and Iloilo regarding proper clustering of the milkfish industry. As a result of this meeting, the stakeholders in this area will now cluster by themselves. Thus, the value chain will be improved. Before they would ship only fresh refrigerated milkfish, unlike in Sarangani and Dagupan which have been processing milkfish into various products and thus have improved the value chain of milkfish. Traditionally, the producer sells milkfish PhP 50 per kilo and the merchant then sells it at about PhP75, with about seven distribution layers. This is the characteristic of almost every commodity in the Philippines.

About the vegetable industry under the Normin Veggies Cluster in Mindanao, we started to cluster them three years ago but the first cluster was really about ten years ago which we did for the whole region. Here you can see that the market in the farm was P15; this goes up to about P75 when they sell to SM. This is indicated in the cluster value chain that they have been doing by themselves.

I have developed a firm-level model which will really be for businessmen. The segmentation of the various clusters can be undertaken as independent businesses. I would like to point out that we should shy away from too much government support because there is not enough government funds. The business approach should be done as discussed earlier, since we lack product development for various sectors in the Philippines, from the furniture to GTH that makes toys and housewares. In fact, two weeks from now we will have a workshop for various sectors of the economy. Research is done by the UP system in many areas but the development and design portions are not generally pursued. Many researches stay in laboratories and not commercialized. The supply chain, and marketing and distribution can be an area you can decide to do because many of these modules can be profitable enterprises. You can operate on a network basis and start business on various segments of the chain.

Regarding financing and credit, we have divided this into: finance, credit, and collection as independent systems. The other specialized services are accounting, administration and legal. For example, in the outsourcing business, about 300 lawyers were hired by a firm in Manila to do contract review in the United States by the BPOs. We can develop many of these even for agriculture because many of these are really very weak as of now.

The abovementioned segmentation is not exhaustive and can be compressed or expanded depending on the situation. In some cases, product development is part of the supply chain. Supply chain has already emerged. We are using it now to increase the productivity of the supply system. However, I am not using the supply chain alone because I use the so-called cluster approach which includes product development and all the institutional development needed. There are some support and activities that we can enhance especially for farm mechanization, information, common service, common training, common promotions, common distributions, and common business services. Support services, transport services, agricultural services, industrial services, environmental services, science parks, technology

incubators and all of these are models that are working not only in many parts of the Philippines but all over the world. Each of the foregoing cluster segments can be outsourced to achieve economies of scale. The challenge for agricultural engineers, industrial engineers, agribusiness managers is how to manage effectively the whole cluster and its segments that include you, government, research agencies, academe, private sector, and other stakeholders.

