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Banana Production and Cooperatives in the Philippines

by

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Banana Production and Cooperatives in the Philippines

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Abstract

The socio-economic situation of small banana growers generated a lot of issues among researchers. However, the situation drastically changed because land distribution became possible through the Collective Certificate of Land Ownership (CLOA) issuance under the CARP. CLOA is issued to cooperatives composed of agrarian reform beneficiaries (ARBs). The contract growing scheme was simultaneously introduced as one of the schemes in the Agribusiness Venture Arrangement (AVA) to support CARP's implementation. Under this framework, the Individual Farming System (IFS) is introduced wherein the grower owns all bananas he produced in his assigned lot giving him high incentives in his lot's production. Thus, the IFS is the initial step in generating self-reliant growers. The paper concludes that strengthening the cooperative's governability is essential in attaining the sustainability of the IFS.

Key words

banana production, cooperative, agrarian reform beneficiaries, Agribusiness Venture Arrangement, contract growing, Collective Certificate of Land Ownership Award, Individual Farming System

Banana Production and Cooperatives in the Philippines

Katsumi Nozawa

I. Introduction

The fundamental issues in Philippine agriculture are the slow growth of productivity and low level of farm income. Given these policy concerns, the promotion of agribusiness is recognized to be important. The Agriculture and Fisheries Modernization Act of 1997 (AFMA, RA 8435) was enacted during the Ramos Administration to help promote agribusinesses in the Philippines. The Arroyo Administration complemented it by issuing the Philippine Agriculture and Modernization Plan 2001-2004 (AFMP). The AFMP has sought to realize the modernization of the agriculture and fisheries industries by defining the role of entrepreneurship and private investments, and encouraging private sector participation. Special emphasis was given to the regions in Mindanao to develop high value commercial crops (HVCC).

Following the footsteps of its predecessors, the Aquino Administration plans to strengthen the revealed comparative advantage of the country in tropical foods, such as bananas. This is articulated in the current Philippine Development Plan 2011-2016. Recently, the production of exportable bananas has received increasing attention as a promising agribusiness sector as the demand for the Philippine bananas increases especially in the Middle East.

A common view about the production of bananas for export is that many small-scale growers remain impoverished due to exploitation by multinational corporations (MNCs). Poverty is exacerbated by high prices of inputs and low buying prices of bananas, causing the growers to borrow and to get buried in debt¹.

This paper, however, illustrates how banana farmers can become self-reliant within the framework of the Agribusiness Venture Arrangement (AVA) contract growing scheme as formulated in the Department of Agrarian Reform (DAR) Administrative Order². It shows how land distribution under the on-going land reform program and the participation of Agrarian Reform Beneficiaries (ARBs) in cooperatives had made these farmers self-reliant. It also describes the operational changes made in a banana plantation affected by land reform from the viewpoint of the cooperative's management, as well as highlight the cooperative's role as a community that nurtures essential social norms among the members. This empirical study conducted interviews of cooperatives in Mindanao that produce bananas for export.

The remainder of this paper is organized as follows. Section II gives an overview of the

¹ David, Temario and Abnarles (1981) described the relations between the banana growers and multinational Corporation.

² Department of Agrarian Reform Administrative Order No. 9, Series of 1998 and No. 2, Series of 1999: Rules and Regulations on the Acquisition, Valuation, Compensation and Distribution of Deferred Commercial Farms.

current status of the bananas as a major export product. It then relates the salient features of the product, such as its perishability, to the management styles of MNCs in trading bananas. Furthermore, it describes how their oligopolistic structure and vertical operations have provided MNCs the advantage over small traders.

Section III reviews the earlier literature on the economies of scale in commercial crops. Tree crops are regarded to have no economies of scale is clear. In contrast, sugar clearly displays economies of scale, while bananas have economies of scale however not as deep as in sugar. It then follows the advantages of contract growing and decentralized farm management by the cooperative.

Section IV reports on Agrarian Reform during the Corazon Aquino Administration focusing on commercial farming. It also explains AVA in detail in order to describe the relationship between the Comprehensive Agrarian Reform Program (CARP) and Agribusiness. It then describes land acquisition through the AVA.

Section V presents the analysis of the data and information obtained from the interviews conducted of four banana producing cooperatives in Mindanao. It relates the types of AVA schemes to the management styles of the cooperatives. It further takes up the Individual Farming System as a consequence of the decentralized production management adapted by the said cooperatives.

Lastly, the concluding section points out the role played of the land reform, AVA and the contract growing in making farmers self-reliant. It stresses the important contribution of contract growing within the Individual Farming System framework to encouraging cooperative members achieve self-reliance within their assigned lots provisioned by the cooperative's consensus.

II. Banana Production in the Philippines

II-1. Current Status of Banana Production

Of the 273 species of bananas, it is the Cavendish variety that gets exported. Total production of cavendish banana in 2010 was 4,600,617 mt and total area harvested was 79,642 has. Compared to 2002, production increased by 154.2 %. Yield also increased from 41.69 mt/ha in 2002 to 57.44 mt/ha in 2010 (Table 1).

Table 1. Banana Production (Cavendish) (2003-2010)

Year	Volume (mt)*	Area (has.)	Yield (mt/ha)
2002	1,810,085	44,051	41.69
2003	1,900,223	46,142	41.23
2004	2,127,619	50,059	42.50
2005	2,490,271	51,567	48.20
2006	2,810,985	67,803	41.46
2007	3,323,072	74,013	44.90
2008	4,328,989	75,151	57.00
2009	4,479,722	77,598	57.96
2010	4,600,617	79,642	57.44

* Note: Production data of Cavendish banana are inconsistent to export data in Table 4 considering most of production are exported.

Source: Bureau of Agricultural Statistics

Table 2. Cavendish Banana Production in Mindanao in 2010

Regions (Province)	Volume (mt)	Share to Total (%)	Area (ha)	Share to Total (%)
Philippines	4,560,61	100.0	79,642	100.0
Mindanao	4,597,56	99.9	79,315	99.6
Zamboanga Peninsula	169	0.0	29	0.0
Northern Mindanao	1,117,12	24.2	16,707	20.9
Bukidnon	1,116,10	24.2	16,600	20.8
Misamis Occidental	741	0.0	40	0.0
Misamis Oriental	280	0.0	67	0.0
Davao Region	2,927,24	63.6	48,153	60.4
Davao del Norte	1,478,69	32.1	28,664	36.0
Davao de Sur	173,859	3.8	3,500	4.3
Davao Oriental	715	0.0	58	0.0
Compostela Valley	1,100,15	23.9	13,333	16.7
Davao City	173,828	3.8	2,598	3.2
SOCCSKSARGEN	432,473	9.4	9,219	11.5
CARAGA	14,739	0.3	842	0.1
ARMM	105,823	2.3	4,365	5.4

Source. Bureau of Agricultural Statistics

The total contribution of banana exports in foreign currency earnings for the year 2011 was 319 million dollars, making up 14.4 % of agro-based products, and 0.6 % of country's total export (Table 3).

Table 3. Philippine Export of Bananas and Agro-based Products (2005-2010)

Year	Bananas	Agro-Based Products	Total Exports
2005	363	1,562	41,250
2006	405	1,574	47,410
2007	401	1,781	50,466
2008	406	2,162	49,078
2009	360	1,612	38,436
2010	319	2,212	51,498

Source: National Statistical Coordination Office (2011) *Philippine Statistical Yearbook 2011*.

Japan was the biggest importer of Philippine bananas with a 49.8 % share, followed by China with 10.4% share of total export in 2010. is also an increasing trend of exports to the Middle East, such as Iran (13.8 %), and the United Arab Emirates (4.9 %). (Table 4)

Table 4. Destination of Philippine Exports of Cavendish Bananas, 2000, 2010

Country	2000		2010	
	Quantity (mt)	Share to Total	Quantity (mt)	Share to Total
Total	1,599,352	100.0	1,590,065	100.0
Japan	951,108	59.4	792,738	49.8
China	283,313	17.7	165,798	10.4
South Korea	140,785	8.8	113,280	7.1
Taiwan	87,345	0.5	11,246	0.7
Hong Kong	7,524	5.4	11,840	0.7
Singapore	9,500	0.6	96,166	6.0
New Zealand	7,143	0.4	34,157	2.1
Iran	0	0.0	219,569	13.8
Saudi Arabia	6,226	0.0	9,542	0.6
Kuwait	7	0.3	1,049	0.1
Egypt	0	0.0	4,813	0.3
United Arab Emirates	98,019	6.1	78,861	4.9
Liberia	0	0.0	3,915	0.2
Cyprus	0	0.0	11,489	0.7
Others	8,382	0.5	35,602	2.2

Source: Bureau of Agricultural Statistics

II-2. The Salient Features of the Philippine Banana industry

II-2-1. MNCs Controlled Market

An important characteristic of the Philippine export banana industry is the domination of the multi-national corporations (MNCs) in banana trading. These include companies such as Dole Food Company (USA), Chiquita Brands International (USA) and Del Monte Fresh Produce (United Arab Emirates/Mexico). Dole Foods, now the world largest fresh fruit trading company, has overtaken Chiquita in banana trade and is considered to have control over 25 to 26 % of all traded bananas. Chiquita Brands, the world's largest banana producer and distributor for decades with 34 % market share before the 1990s, has recently been estimated to have a share of only 24 to 25 % of world trade. Del Monte Fresh Produce, the world's largest producer and exporter of pineapples, controls about

16 % of the banana trade. These MNCs account for 65 to 67 % of the world banana market³.

Chiquita appears to have the most conservative business strategy and the highest risk in banana production. It deals with only one grower, which is the Tagum Development Corporation (TADECO), but it has access to about 5,500 ha of continuous land area by leasing the adjacent public land from the Davao Penal Colony. Del Monte is less conservative and takes less risks by offering growing and marketing arrangements with several agro-corporations, which had a minimum area of 200 hectares. Dole-Stanfilco, a subsidiary of Castle & Cooks (C&C), is the most aggressive and has the most complicated operation. It uses four varied strategies. While openly adopting a contract growing scheme for small farmers, C&C puts up a joint venture company, which co-organized the formation of three corporate growers. It likewise leased two banana farms and it also arranged with another plantation the direct marketing of its fruits to its Hong Kong subsidiary⁴. (Table 5)

Table 5. Philippine Banana Production Scheme of Multi-national Corporations, 1968-81

MNC	Chiquita	Del Monte International	Castle & Cook (C&)
MNC in the Philippines	Mindanao Fruits Corporation	Philippine Packing Corporation	Stanfilco (now a division of Dole Philippines)
MNC managed plantations	None	none	- DAPCO (leased) - Sarangani
Filipino corporations	One corporate grower: TADECO (leased Davao Penal Colony)	Corporate growers with at least 200 has.: - Hijo - Marsman - AMS Farming - Lapanday - F.S. Dizon - Evergreen - Delta Farms - Farmingtown - Nova Vista	Co-owned Corporate Growers: - Checkered Farm - Golden Farms - Diamond Farms*
Small growers	None	none	Growers (less than 0.5 to 115 has.

* Note: In 1979, Diamond Farms in Misamis Oriental leased 300 has. and became a grower of Del Monte when C&C did not want to expand its supply due to poor market conditions but had to use its government allocation to prevent its reversion.

Source: De Leon and Escobido (2004) p. 21

³ De Leon and Escobido (2004) p.5.

⁴ De Leon and Escobido (2004) p.22.

II-2-2. Salient Features of Philippine Banana Production

Bananas are highly perishable. It is because of this that a central management system in the hierarchical organization is considered essential to control the schedule of production and therefore ensure the quality of the freshness required in the foreign market. This includes tight control from the initial stage of production down to shipping as well. Overproduction in the farms must also be avoided. Thus, perishability affects how the owners manage the plantation corporations.

The oligopolistic structure of the banana production is largely connected with the vertically integrated operations of MNCs. These companies control all aspects of production and management from seed development/cultivation up to the delivery of bananas to the consumer. They own or lease vast tracts of land or contract out banana growing to numerous growers. They also have possession of refrigerated vessels, including storage and ripening facilities, and employ a worldwide distribution network. Vertical integration enables MNCs to achieve comparative advantage over small producers and traders, thereby setting the rules of game such as pricing, standard setting, etc. Thus, the MNCs can continuously supply consumers anywhere in the world at relatively lower prices and yet maintain high levels of profitability⁵.

III. Economies of Scale and Production of Commercial Crops

III - 1. Economies of Scale

III-1-1. Economies of Scale and Land Reform

In any production activity, efficiency in production varies with the quantity of the output. When the activity displays increasing returns to scale, the volume of its output expands proportionately more than the increase of all inputs. In the case of the commercial crops production for export, as the size of the plantation increases, unit production cost will be decrease. Thus, it is traditionally understood that the economies of scale exist in plantation agriculture. This hypothesis was supported by the demonstration that agricultural production in a large scale plantation is more efficient compared to the production in a small scale farm. To sustain a certain level of production in the unit area, dividing the land into small parcels (e.g. by land reform) will lose the efficiency expected for the production of commercial crops, especially those for export such as coconuts and sugar. These crops are important since they earn money from foreign exchange, which is essential for the modernization of the country.

Utilizing the logic of the economies of scale, plantations for commercial crops in the Philippines have been exempted from agrarian reform by the successive administrations. In addition, there is an argument that agrarian reform is inefficient and useless. This is most evident especially in the field of coconut and sugar production where the strong political powers dominate.

Hayami et al. have previously made an extensive field survey on the issues of the economies of scale in Philippine plantations of the commercial crops in order to promote and to implement the

⁵ De Leon and Escobido (2004) p. 5.

land reform program⁶. If the economies of scale are absent, they posited that social reform is usually necessary in those areas. Thus, even if economies of scale still exists, Hayami and his group scrutinized the alternative ways to overcome the productivity bottleneck that has trapped many small farmers.

III-1-2 The Case of Coconut and Sugar Production

As aforementioned, Hayami et al. concluded that the economies of scale are absent in the production of tree crops such as coconut, coffee, cacao, and rubber⁷. The production and marketing of the output of these tree crops require neither large-scale machinery nor central management, both of which could be possible sources of economies of scale. On the other hand, other crops like sugar displays increasing returns to scale.

In the case of the coconut industry, it is well known that coconuts are grown mostly by small growers and tenants, with farms averaging from 2 to 5 hectares located in the Bicol Region. There was no significant difference in the yield found between large and small farms⁸. However, intercropping is more commonly and intensively practiced in small rather than large farms. Also, aggregated agricultural output per value and labor employment per hectare of coconut land is higher in small farms.

As noted above, production of sugar is subject to economies of scale. The sugarcane yield is positively associated with farm size. The average yield per hectare of small farms below 10 hectares was lower than that of large farms above 50 hectares. However, according to a World Bank study, the average production cost of large farms tends to be higher despite their higher yield. Especially in Negros, a major sugarcane producing region, large farms of more than 50 hectares in size produce sugarcane at the highest unit cost despite high average yield⁹. Estimated domestic resource cost (DRC) in Negros is larger than one, while in Luzon DRC is less than one. This suggests that large farms tend to apply yield increasing and modern inputs above a socially optimal level, because of available access to low interest institutional credit. This means that large sugar plantations waste resources with high opportunity cost such as modern machinery, fertilizers and chemicals. On the other hand, small farms are relatively efficient in substituting low opportunity cost resources such as local labor and indigenous equipment for higher opportunity cost resources.

Thus, Hayami et al. concluded¹⁰ that the subdivision of large sugar plantations into small size family farms will result in an increase in income and eventually, greater equality. The inability of small farm owners in using expensive machinery, such as large tractors, could be resolved through renting the tractor or trucks for transportation. Likewise, economies of scale in the coordination of sugarcane harvesting and its delivery to mills can be overcome with collective coordination in sugarcane delivery.

⁶ Hayami, Quisumbing and Adriano (1990)

⁷ Hayami, Quisumbing and Adriano (1990) pp.116-119.

⁸ Hayami, Quisumbing and Adriano (1990) p. 118.

⁹ Hayami, Quisumbing and Adriano (1990) p. 119.

¹⁰ Hayami, Quisumbing and Adriano (1990) pp.119-121.

III-1-3. The Case of Banana Production

Traditionally, there is strong assertion that the economies of scale exist in the production of bananas for export. This claim is based on the special characteristic of banana production, which requires the most stringent quality standards for overseas market in the following reasons. These characteristics usually require a centralized vertically integrated management system within the hierarchical organization.

1. **Perishability.** The harvested banana must be packed, sent to the wharf, and loaded to a refrigerated boat within a day. So a boatful of bananas that can meet the quality standards of foreign buyers must be collected within a few days. Therefore, the whole production process from planting to harvesting must be precisely scheduled and controlled so as to meet export quality requirements and to avoid over-production during the season of low demand.
2. **Need for Strict Pest and Disease Control.** The incidence of pest outbreaks and contagious diseases inevitably increases if the plant species is grown over a wide contiguous area. Strict pest and disease control measures must be applied over the entire area to maintain the quantity and quality of bananas.
3. **Construction and Maintenance of the on -farm Infrastructure.** On-farm infrastructures, such as the Over Head Cable Propping (OHCP) system used to transport the harvested bananas from the field to the packing plant, should be provided and maintained in operational condition. A constant irrigation system in the farm must also be maintained. In addition, the construction and maintenance of the packing plants also require care in their operations from the viewpoints of food safety and other quality assurance required by the foreign buyers.
4. **Employment of the Casual Workers.** The banana plantation usually employs the bulk of regular workers. Casual workers are hired only during peak seasons. These situations always cause labor conflicts when a plantation corporation reduces the number of casual workers.

Finally, Hayami and his group summarized that the most important source of economies of scale lies in the centralized management system of a banana plantation and marketing of a highly perishable crop to ensure bulk shipment and address the need for unified pest and disease control. The disadvantage of a small farm in this regard may be overcome. The above researchers proposed that one possible form of organization which can be sustained is contract growing wherein multinational corporations and their corporate growers can maintain or even expand their processing and marketing activities, while leaving the production process to small independent growers. Another related development would be the organization of prospective contract growers into growers associations, which will increase not only productivity but also the bargaining power of small growers with their agribusiness partners¹¹.

Available data on banana production have shown that no significant difference in yield exists

¹¹ Hayami, Quisumbin and Adriano (1987) p.39, preliminary report to Hayami, Quisumbin and Adriano (1990)

between plantation growers and small growers¹². For banana yields in 1986 and 1987, small contract growers are not inferior to large corporate growers for Dole and other multinationals in terms of per ha yield (Table 6). Contract growing by small growers shows a positive impact to the volume of production per hectare.

Table 6. A Comparison of Banana yield per hectare between Small Contact Growers and Plantation (1986,1987)

Corporation	Boxes per hectare	
	1986	1987
Stanfilco (Dole)		
DAPCP	4,050	3,980
Corporate Contract Growers	3,430	3,268
Small Contract Growers	3,385	3,315
Delmonte		
Marsman	3,591	3,389
Sumitomo		
Hijo	2,555	2,376
Twin Rivers	2,350	2,523
United Brands		
Tadeco	3,649	3,159

Source: Hayami, Quisumbing and Adriano (1999) p.143, citing the Pilipino Banana Growers and Exporters Association.

III - 2. The Contract Growing and Decentralized Farm Management.

III-2-1. Advantages of the Contract Growing

One of the main purposes of the agribusiness is to increase the income of individual farmers. Contract growing has an important role in increasing banana production, consequently increasing the incomes of contract growers. The biggest advantage of the contract growing scheme is the access of the farmers to financial assistance and agricultural technology from plantation corporations. Contract growing with plantation corporations is one way how banana farmers may overcome the bondage of their current circumstances. This is important because plantation workers often demand to be self-reliant farmers, not mere agricultural laborers. They frequently desire owning the land, which gives them the ability to produce and sell the fresh fruits with their own effort.

Contract growing was pioneered in the Philippines in 1967 when Dole Philippines-Stanfilco (Dole-Stanfilco) created contracts for small-scale growers¹³. To plantation corporations, contract growing offers several advantages as follows¹⁴:

¹² Hayami, Quisumbin and Adriano (1990) pp.137-143.

¹³ IBON (1998) p.13.

¹⁴ Borras (1991) p.91.

1. Risk mitigation. Contract growing tends to be more profitable and less risky to multi-national corporations, such as Dole-Stanfilco. Under this arrangement, foreign companies can better managed the risk associated with minimum wage, demands for wage increase, fringe benefits, autonomous union, lease rental issues (especially if the land is privately owned and land owners demand higher lease rentals), and international risks, natural or otherwise.
2. Optimal Profit Aailed. In contractual growing, optimal profits are squeezed from small producers, especially when there is virtually a monopoly in the marketing and processing of products by one multinational corporation of a few big ones.
3. Coping with Agrarian Reform. Contract growing allows plantation corporations to be shielded from the adjustment costs associated with implementing land reform.
4. Divestment at any Time. Through contract growing, plantation corporations can divest at any time. In fact, many companies worldwide are beginning to shift to contractualization for this reason. By sub-contracting labor, companies are free from labor obligations.

III-2-2. Critique of the Contract Growing

As a matter of course, the negative aspects of contract growing emanate from the perceived exploitation of small banana growers by multinational corporations¹⁵.

According to IBON research, these disadvantages are as follows:¹⁶.

1. Profits from Expensive Technology. In contract growing, the corporation is immediately assured of profits regardless of the status of the harvest, because the provision of the input is actually a sale made by the agribusiness in advance. However, new technologies of intensive farming of vegetables, fruits, seafood and livestock are more easily promoted, distributed and sold through contract growing.
2. Profits from Cheap Contract Price. A contract usually has an open pricing scheme, which often entitles the company to unilaterally decide on the price. What the farmers get is the prevailing market price at that time of delivery. The price depends on the quality of the product, which is determined with the use of a classification table. The case of how price competition between companies allows small growers to renege on the latter's obligation to sell the product to the company in favor selling the same to third parties (known in the Philippines as pole vaulting) illustrates the importance of these differences.
3. Contract for Indebtedness. While exploitation is realized through the sale of expensive inputs and seeds, and by lowering the prices of the farmers' output, it is consummated

¹⁵ The poverty situation among the small growers of the Dole-Stanfilco plantation is described in Anano and Hipolito (1999).

¹⁶ IBON (1998) pp.125-142.

through a cycle of “debt bondage”, where in every harvest season the price difference between the expensive inputs and cheapened product gets added to a grower’s debt.

4. Direct Control. Contract growing is a pre-mediated scheme by big local agribusiness and multi-national corporations’ to extract profits from tracts of land, which they do not own. By merely controlling technology, capital and market, merchants can realize profits from agriculture and become part of the global system of bondage.

III-2-3. Cooperatives and the Decentralized Farming System

The most important issue is how the small growers can become self-reliant. Currently, there is on-going improvement in the agrarian reform policy for farms of commercial crops as will also be tackled in Section IV of this paper,

The cooperatives are composed of Agrarian Reform Beneficiaries (ARBs), who were issued a Collective Certificate of Land Ownership Award (CLOA). Most cooperatives are registered as multi-purpose cooperatives, which produce commercial crops by contract growing with plantation corporations. A typical case for contract growing by the ARBs appears in banana production.

The main stakeholder in banana production is the cooperative. A key purpose of this study is to look for an effective way to make the banana growers become self-reliant farmers. Presently, these farmers collectively hold the CLOA, and as such are conditional ARBs and members of a cooperative.

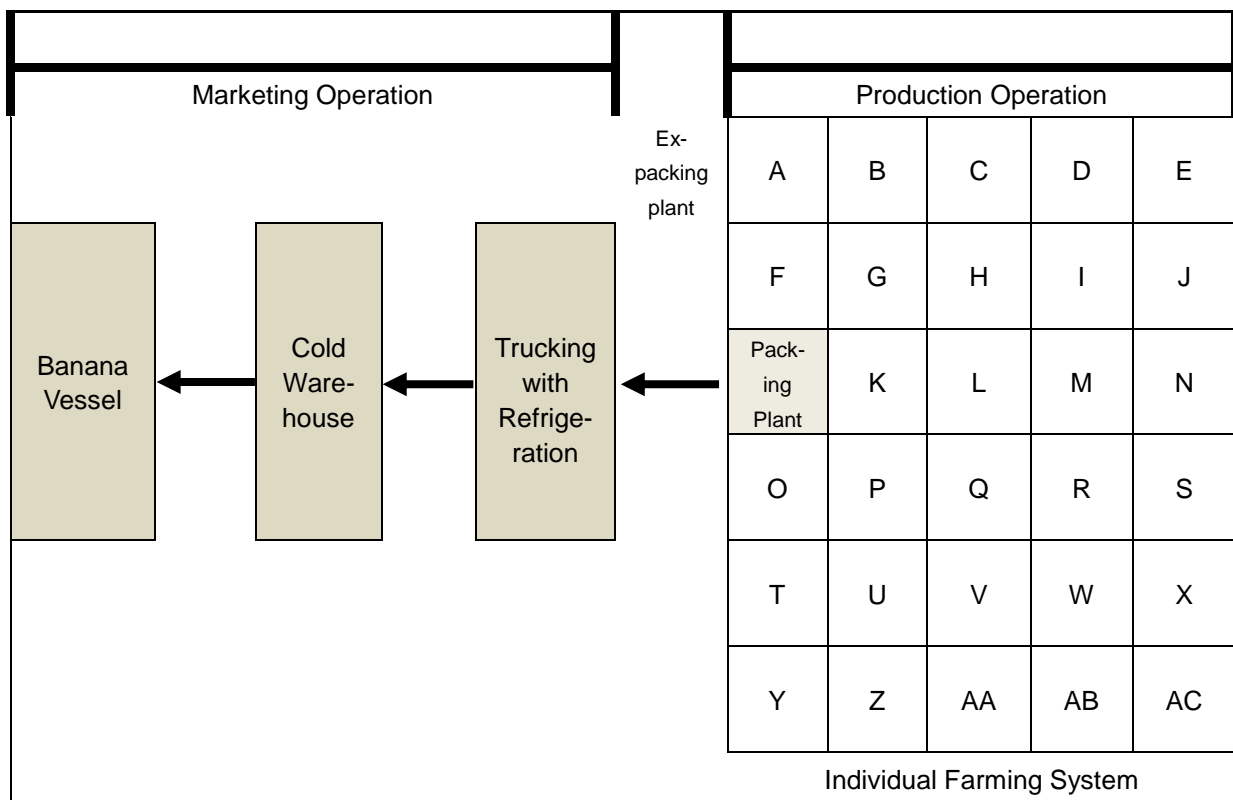
The most appropriate management of the plantation is the decentralized management system rather than the centralized management type. The latter is vertically integrated within the hierarchical organization especially for the banana plantation. In order to implement a decentralized management system in banana farms, the following arrangements for the cooperative’s institutional development are important. They play a vital role in encouraging the member ARBs to become self-reliant growers.

1. Demarcation of Production and Marketing. Production and marketing operations were previously vertically integrated within the framework of the hierarchical organization of plantation corporations. Under the decentralized management system, the operation of production in the field, including packing plant operations, should be separated from marketing operations. Production may be managed by the cooperative composed of the ARBs. On the other hand, the plantation corporation is better able to undertake the marketing operations of the business, that is, after the ex-packing plant (or ex-patio (Figure 1). Obviously, closer coordination between production and marketing operations will be necessary.
2. Establishment of Cooperatives. The management of production after the demarcation would be transferred to the cooperative of small growers. The main task of the cooperative is to integrate the views and demands of the members through the General Assembly of the cooperative in order to come to a consensus on important issues. The institutional development of cooperatives will not only increase productivity in the farm, but will also provide bargaining power to the cooperative representing the demands of the member ARBs when negotiating with their counterpart corporations.

- Individual Farming System. An Individual Farming System (IFS) is the one of the production schemes a decentralized management system implement. The IFS allows individual growers specify their own production capacity. Thus, IFS provides the production incentive to participating members, quite different from a Centralized Management System (CMS), which was adapted previously under the corporate growership.

As a prerequisite to the adoption of the IFS, it is important to subdivide the plantation into small lots to allocate the land under the CLOA among the members of the cooperative. The subdivision of the plantation for land distribution may be performed by the assignment of the individual land by draw lot. This requires unanimous approval by the General Assembly of the cooperative.

Figure 1. Decentralized Management System



Source: Author.

- Collective Works. Because the farm is managed by the cooperative, some collective work may be implemented, such as harvesting, packing engineering operation, spraying pesticide, agri-service and administration and finance. For these collective works, direct control by the cooperative will effectively operate. The expense for the inputs such as fertilizer, pesticide, and labor, as well as the administration expense are at first shouldered by the cooperation and eventually shared by each member in accordance to

their quantities of the production.

5. Application of Indigenous Resources and Rental of Machinery. For the construction and rehabilitation of infrastructure in the farm, mobilization of local materials and indigenous technology is highly recommended. These include utilizing bamboo and trees for the cable network of OHCP and drainage of irrigation. For the big farm machinery, it is recommended to rent the use of such expensive equipment.
6. Decentralized Labor Management. Labor may be engaged using the “pakyaw” system or piece-work basis to carry out specific tasks in the specific fields such as maintenance of irrigation drainage, spraying of pesticide, and the harvesting, packing and processing of bananas.

III- 2 -4. The Unsolved Issues

In the case of the members of the cooperative with the Collective CLOA, a key concern is whether s cooperative can effectively regulate the unfavorable activities of a few individual growers, such as the following:

1. Sales to the Third Party within the Contract Period. Under the terms of the contract, the cooperative or any of its members cannot sell the products covered by the contract growing arrangement to a third party without the consent of the owners of the plantation corporation. These extra-contractual sales to independent traders or other plantation corporations occur due to better prices. This phenomenon is called “pole vaulting” or “warik warik”, and usually happens during the lean season in April¹⁷.
2. Change of Crops and Land Conversion. The use of the land, collectively owned by the member ARBs, cannot be converted to other purposes, such as for industrial estates or for other non-agricultural uses. The change to other crops, such as the High Valued Commercial Crops (HVCC), is not allowed until the land amortization is fully paid. In reality such kind of illegal transactions is quite common. After full payment of the amortization, the change of crops or land conversion for other purposes is allowed with the approval of the cooperative. In the case of the Individual CLOA, the change of crops or land conversion is allowed after the withdrawal of the member’s post-amortization.

IV. Agrarian Reform and Agribusiness

IV -1. Agribusiness Venture Arrangement (AVA)

IV- 1- 1 Commercial Farms Deferred for 10 Years

For plantations that need a large amount of agricultural land, the relevant details are

¹⁷ Quitariano, Dargantes, Moleta and Nartea (2008), p.43.

described in the Comprehensive Agrarian Reform Law (CARL, RA 6657,) which enables the implementation of the Comprehensive Agrarian Reform Program (CARP). The provisions describe the policies regarding the land of multinational corporations, commercial farms, and corporation lands.

Commercial farms are defined as private agricultural lands devoted to commercial livestock, poultry, swine raising, aquaculture, including salt-beds, fishponds and prawn ponds, fruits farms, orchards, vegetable and cut flowers, and cacao, coffee and rubber plantations (CARL Section 11). Commercial farmlands shall be subject to acquisition and distribution after 10 years from the effectivity of this act (CARL Section 11)¹⁸.

In this regard, the Pilipino Banana Growers and Exporters Association (PBGEA), an association of the banana plantation corporations, act as the critical link between production, processing and export. It undertakes tasks and coordinates the various activities of stakeholders to maintain the stability of supply. One such a task of the PBGEA influenced the CARP deferment for 10 years in the industry¹⁹.

The CARL has a specified duration of 10 years (1988-1998), which was extended for another 10 years (1999-2009) under the Ramos Administration in 1995 through an act to strengthen the implementation of CARP and other purposes (RA 7905). However, due to the strong requests by farmers unions, the law was extended again for another 5 years (2009-2014) through an act strengthening CARP (RA 9700), which was enacted under the Arroyo Administration in 2008.

IV-1-2 The AVA introduced

As mentioned above, CARL expired in 1998 after the 10 year deferment period for commercial farms. Administration Order (AO) No. 9 of the Department of Agrarian Reform was enacted in 1998 to promulgate the rules and regulations governing the acquisition, valuation, compensation and distribution of the farm land to the ARBs who were employed for the plantation as agricultural workers. To strengthen AO No. 9 of 1988, AO No. 2 of 1999 was prepared to establish the framework for joint economic enterprises, as agrarian reform means not only the distribution of lands to farmers and farm workers who are landless, but also includes the totality of factors and support service designed to lift the economic status of the ARBs.

In general, land shall be distributed directly to individual worker-beneficiaries. However, in case it is not economically feasible and sound to divide the lands, then it shall be owned collectively by worker-beneficiaries who shall form a worker cooperative or association which will deal with the corporation (Section 2(e), AO No. 9 of 1998).

AO No. 9 of 1998, introduced the concept of the Agribusiness Venture Arrangement (AVA) with the intention of developing cooperatives comprised of the plantation workers.

The salient features of the AVA are as follows:

¹⁸ Detail of the classification of plantations is mentioned in Nozawa (2011) 8-10.

¹⁹ Quintoriano, Dargantes, Moleta and Nartea (2008) p.35.

First, the AVA aimed to optimize the operating size of agricultural production and also to promote agricultural security of tenure and security of income to beneficiaries (Section 30(d)(1), AO No. 9 of 1988). This provision emphasizes the increase of productivity. This means that the economies of scale is carried within the framework of the CARP as it is also mentioned in AO No. 2 of 1999, thus ensuring the security of land possession and beneficiaries' income.

Second, domestic, as well as foreign investors, are attracted to the agribusiness sector. It is expressly understood that the ARBs and the investors enter into agreement for the AVA to achieve the success in that sector especially since the investor has the means and the capability to provide necessary financial, technical and managerial inputs towards improved production (Section 30 (d)(2), AO No. 9 of 1988). Thus, domestic and foreign investors are authorized to be participants of the agrarian reform policy. Besides, the AO also ruled that a former landowner may enter into an AVA, provided he has no outstanding obligation with the qualified ARBs (Section 30(a)(5), AO No. 9 of 1988).

The land for AVA may be applied to all the commercial farms. Types of commercial crops expressly included are banana, pineapple, and rubber (Section 2(f), AO No. 9 of 1988). It is understood that the aforementioned provisions are to be applied to the land owned or leased by multinational corporations.

Thus, agribusiness was introduced into the framework of the agrarian reform program. In addition to this, effective measures to promote and to attract foreign, as well as local investments to the agribusiness sector are also introduced into agrarian reform policy. This means that the goal of agrarian reform changed from the simple transfer of the land title to include the increase in productivity. This moment could be seen as the exact point of occurrence for “the paradigm shift of agrarian reform policy” in the Philippines.

The AVA has 7 modes²⁰. These are the joint venture agreement, lease arrangement, contract growing, management contract, build-operate-transfer (BOT) scheme, production, processing and marketing agreement, and service contract. (Table 7)

Table 7. Agribusiness Venture Arrangement (AVA) Modes

(1) Joint Venture Agreement
(2) Lease Arrangement
(3) Contract Growing/ Growership Arrangement
(4) Management Contract
(5) Build-Operate-Transfer (BOT) Scheme
(6) Production, Processing and Marketing Agreement
(7) Service Contract

²⁰ Detail of the AVA modes in mentioned in Nozawa (2011) pp.12,13.

Source: Department of Agrarian Reform Administrative Order No.9, Series of 1998 and No.2, Series of 1999 : Rules and Regulations on Acquisition, Valuation, Compensation and Distribution of Deferred Commercial Farms.

The choice of which mode to use under the AO No. 9 of 1998 depends upon the decision of the ARBs or cooperatives. In some cases, a compound contract with the plural schemes may be chosen. For instance, contract growing with management, production, processing and marketing agreement is a predominant system chosen.

IV- 2 Land Title and CLOA

IV - 2- 1. Types of the CLOA

According to the AVA, there are two types of CLOA. The first is the Individual CLOA in which the ARBs can identify their own land. In general, the land awarded to a farmer beneficiary should be in the form of individual title as provided in the CARL amended (Section 10, RA 9700).

The other type is the Collective CLOA in which the ARBs cannot identify their own land. In case of collective ownership, a title to the property shall be issued in the name of the co-owners or collective organization (Section 10, RA 9700). The commercial farm shall be initially distributed collectively or under co-ownership (Section 25, CARL, Section 17, AO No. 9 of 1988). However, it is defined that the DAR should immediately undertake the parcelization of the said certificates of land ownership award (Section 10, RA 9700).

As of 2011, the area under the Collective CLOA nationwide was 70.0 % of the total area of CLOAs, while the area under the Individual CLOAs was 30.0 %. The situation is different in the case of the CLOAs in Davao Region, a major banana producing region, as the area under Collective CLOAs was 78.0% while the area under Individual CLOA was 22.0% (Table 8). The data in the Davao Region means that the area covered by the Collective CLOA was 3.5 times larger than the area under the Individual CLOA. Furthermore, the area per title under the Collective CLOA was 10.16 ha, while for the Individual CLA0 the area per title was 1.25 ha, almost 8.2 times that of the latter. It can be inferred from the data that the Collective CLOA is a common arrangement in plantations.

Table 8. Classification of Certificate of Land Ownership Award (CLOA)

(as of December, 2011)

Regions, Provinces	Individual CLOA				Collective CLOA			
	Title (Number)	Share (%)	Area (has.)	Share (%)	Title (Number)	Share (%)	Area (has.)	Share (%)
Philippines	830,675	79.4	1,026,530	30	215,612	20.6	2,399,265	70
Northern Mindanao Region	54,936	77.7	99,526	38.9	15,768	22.3	156,593	61.1
Bukidnon	26,291	79.6	52,783	38.5	6,752	20.4	84,291	61.5
Davao Region	37,231	69.5	46,708	22	16,317	30.5	165,709	78

Davao del Norte	11,421	74.7	12,479	24.8	3,866	25.3	37,857	75.2
Compostela Valley	9,603	74.1	12,338	24.3	3,356	25.9	38,388	75.7

(Source) Data prepared by Department of Agrarian Reform.

IV-2-2. The Conditions to Issue the Collective CLOA

As described in the former Section, the CARP was extended again by an additional five years for the period from 2009 to 2014 under the Arroyo Administration. It is common understanding that the CARP is in its final stage of implementation. For that reason, the government issued the DAR Administrative Order (AO) No.7, Series of 2011 entitled Revised Rules and Procedures Governing the Acquisition and Distribution of Private Agricultural Lands under the RA 6657. The AO is the revised edition of the DAR Administrative Order No. 2, Series of 2009, which also included the acquisition and distribution of private agricultural lands.

The most important rules consider the acquisition and distribution of the collectively owned land. Thus, the AO affirms an important rule in CARP, which provides that in general, the land awarded to an ARB should be under the individual CLOA title covering contiguous tract or several parcels of land cumulated up to a maximum 3 hectares and then an ARB may opt for collective ownership, through a co-worker or farmers' cooperative of association for an issuance of the collective ownership title. The total area to be awarded shall not exceed the total number of co-owners or member of the cooperative multiplied by award limit of 3 hectares. Finally, the AO mentioned that under collective ownership, a CLOA to the property shall be issued in the names of the co-owners who, in turn, may form a farmers' cooperative or association

The AO also ruled that the Collective CLOA may be issued under the following conditions (AO No. 7, Series of 2011, Section 96):

1. Not appropriate for Individual farming. The current management system of the land covered by the CARP is not appropriate for either individual farming or division of the landholding into farm parcels.
2. Specialized farm labor system. The farm labor system is specialized, where the farm workers are organized by functions, such as spraying, weeding, packing, and other similar activities and not by special parcels.
3. Individual parcels of land are not farmed. The potential beneficiaries are currently not farming individual parcels but collectively working on large contiguous areas.
4. Integrated manner of multiple crop farming. The farm consists of multiple crops being farmed in an integrated manner, or includes non-crop production areas that are necessary for the viability of farm operations, such as a packing plant, storage area, dikes, and other similar facilities that cannot be subdivided or assigned to individual farmers.

IV - 2- 3 The Conditions to Issue the Individual CLOA

Pertaining to the conditions to issue the Individual CLOA, the AO ruled that after the ARBs

decided whether they wanted to be awarded an individual CLOA or collective one, the Municipal Agrarian Reform Officer (MARO) shall decide in accordance with the preference of the ARBs subject to the following factors in the following order. In other words, the Individual CLOA will be issued under these conditions:

1. Adjacent and contiguous area. The area of the individual ARBs sharing a collective CLOA shall be adjacent and contiguous with each other.
2. Tenanted area. The area tenanted by an ARB shall be that awarded to him.

V. The Cooperatives and Achievement of Self-reliance

Through a case study, this paper describes how the actual AVA was applied to banana plantation cooperatives and what kind of schemes were developed and implemented to overcome the challenges and bondages these cooperatives faced. This section shall clarify the tremendous effort exerted by the member ARBs in order to attain self-reliance as independent grower farmers of their community (Table 9).

Table 9a. Profile of Cooperatives Interviewed

	Cooperative H	Cooperative C	Cooperative D	Cooperative L
Location	Madaum, Tagum City	Tibungol, Panabo City	DAPCO, Panabo City	Callaw, Buhangin, Davao City
History	HIJO Owend by Tuazon Family	Checkered Farm→Diamond Farm→Unifruitti	DAPCO→ALDA	Lorenzo Family →Lapandy
Established	1996, CDA Registered 1996,2009	1996, CDA Registered 1996	1999, CDA Registered 1998	1992, CDA Registered 2000
Members	343 ARBs	87 ARBs	21 ARBs	113 ARBs, 65 Associate Members
Area	274 has. (0.812 ha/ARB)	22 0has. (Net Area 113 ha) (1.298 ha/ARB)	23 has. (1.180ha/ARB)	100 has. (Banana 90.0 ha) (0.796 ha/ARB)
Agrarian Reform	1997 VOS	1996 VOS	1998 CA	2000 DLT (Banana) + VOS(Mango)
	Collective CLOA	Collective CLOA	Individual CLOA	Collective CLOA
Amortization	Assesed Val. PhP 350,000 /ha	Assesed Val. PhP 153,000/ha	Assesed Val. PhP 500,000 /ha	Assesed Val. PhP 39,000,000 /100ha
	PhP 95,900,000/274 ha	PhP 33,660,000/220 ha	PhP 115,000/23 ha	PhP 13,000/ha/year
	PhP 11,667/ha/year	PhP 5,100/ha/year	PhP 14,400 /ha/year	
	PhP 500/lot/month PhP 1200/lot/year		(Under Court Case)	
AVA Scheme	Contract Growing	Contract Growing	Contract Growing	Lease Arrangement with Lapandy
	BSMA with Lapanday	BSMA with Unifruitti	BSMA with Dole-Stanfilco	
	Buying Contract with Members	Buying with Pay slip	Buying Contract with Billing Slip	
	FOB ex-Packing House	FOB ex-Packing House	FOB ex-Patio	
	2 Quality Inspecters			

Source: Interview to Cooperative Manager.

Table 9b. Profile of Cooperatives Interviewed

	Cooperative H	Cooperative C	Cooperative D	Cooperative L
Production	Class A 3,147 box/ha, Class B 448box/ha,	Class A 4,789 box/ha, Class B 393 box/ha	Class A converted 4,300 box/ha	Class A converted 3,300 box/ha
	Class C 516 box/ha, Total 4,027 box/ha	Total 5,184 box/ha		
Gross Sales	PhP 129,750,911 (274 ha)	PhP 78,863,378 (113 ha)	PhP 12,332,830 (23 ha)	PhP 40,228,650 (90 ha)
Net Surplus	1. Main Ph P 511,024	1. Production PhP 1,825,625	not available	1. Projects PhP 2,744,478
	2. Assuncion PhP 1,644,704	2. Consumer PhP 438,323		2. Marketing PhP 266,892
	3. Compostela PhP 537,283	3. Lending PhP 1,167,685		3. Lending PhP 316,833
	Total PhP -1,618,445	Total PhP 3,431,634		Total PhP 3,327,654
Selling Price	\$2.95/Box, Class A	\$3.65/Box, Class A (Coop. Ret. \$0.50)	\$2.95/Box, Class A	\$2.95/Box, Class A
	(inclu.Coop. Retention \$0.85)	(Contract Price \$2.75)	(inclu.Coop. Retention \$0.75)	
Individual Farming System	Equally divided, Lot with Soil Fertility, Accessibility of OHCP	Equally divided by Raffle	with Lot divided	not arranged
Net Farm Income	Class A, soil type I 1. Individual 4,428box/hax\$2.10/box 30% x PhP 43.0/\$=119,954/ha	1. Individual (4,789box/ha x \$3.15/box + 393 box x \$1.10)x30% x PhP 43.0/\$=PhP 200,201/ha	1. Individual 4,300Box/hax2.90x40% x PhP 43.0/\$=214,484/ha	Wage PhP255.0 x26days x12 months=PhP 79,560/ARB

Table 9b. Profile of Cooperatives Interviewed

	Cooperative H	Cooperative C	Cooperative D	Cooperative L
	2. Dividend No surplus	2. Dividend PhP 3431,634x70%/113ha =PhP 21,257	2. Dividend No surplus	2. Dividend PhP 3,161,271 x 70%÷113 ARB=PhP 19,583/ARB
	3. Amortization PhP 7,389/ha	3. Amortization PhP 18,489/ha	3. Amortization PhP 12,203/ha/year	
	Total PhP 112,565/ha (PhP 91,402/ARB)	Total PhP 202,969/ha (PhP 263,452/ARB)	4. Administration Charge PhP 10,169/ha/year	Total PhP 99,143/ARB (PhP 124,551/ha)
			Total PhP 192,112/ha (PhP 226,692/ARB)	
Loan Obtained	1. LBP PhP 4.75 mil. (Working Capital)	1. Unifruitti PhP 4.0 mil. (Working Capital)	1. Pen Bank PhP 0.10 mil. (Working Capital)	Self Helped, No Loan
	2. LBP PhP16.0 mil.(Production Loan.)	2. Unifruitti PhP 4.2 mil.(Expansion Project)	2. Pen Bank PhP 0.10 mil. (Working Capital)	
		3. Unifruitti PhP 2.7 mil (Packing House W. System	3. Pen Bank PhP 0.10 mil. (Working Capital)	
Expansion Program	In Asuncion 27 ha, Conpostela 25.0 ha	In Carmen 13.4 ha		

Source: Interview to Cooperative Manager.

The perception of contract growing using AVA schemes was examined in terms of appropriateness as well as its contribution to the enhancement of self-reliance. The interview survey was performed through visits of four cooperatives out of which two were with contract growing under the Collective CLOA and one was also with contract growing under an Individual CLOA, adding one cooperative with lease arrangement under a Collective CLOA.

V-1. The Cooperative H by Contract Growing with the Collective CLOA

V-1-1. The Cooperative Introduced to the Individual Farming System

Cooperative H is located in Barangay Madaum, Tagum City, Davao del Norte in the Davao Region. Cooperative H was established in 1996, and was registered with the Cooperative Development Administration (CDA) in the same year. Currently, it has 343 farmer-members, all of them agrarian reform beneficiaries (ARBs) having been awarded the collective CLOA in 1997 under the CARP²¹. By 1997, the land in question was a plantation owned by Lapanday Fruits Corporation. The transfer was arranged under the VOS scheme to Cooperative H with PhP 350,000 as land compensation²². The amortization payment for 30 years is PhP 11,667/ha.

The area of the plantation is 274 ha and all of which was planted with banana. A salient feature of the cooperative is that although it was awarded the collective CLOA, it was decided at the General Assembly of the cooperatives to allocate the transferred land equally among all the members of the cooperative. The allocated land is equivalent to 0.812 ha per ARB.²³ The General Assembly of the cooperative decided to transfer the cooperative's management and operations from the Centralized Management System (CMS) to the Individual Farming System (IFS). In the IFS, farmers will manage and operate their distributed land on their own, while all bananas produced in their own land shall be sold exclusively to the Cooperative H. To prepare entry into the IFS scheme, the parcel map of Cooperative H was prepared with the approval of all the members and the lot of each member was confirmed²⁴. The procedures for the Individual Farming System are summarized in the figure (Figure 2).

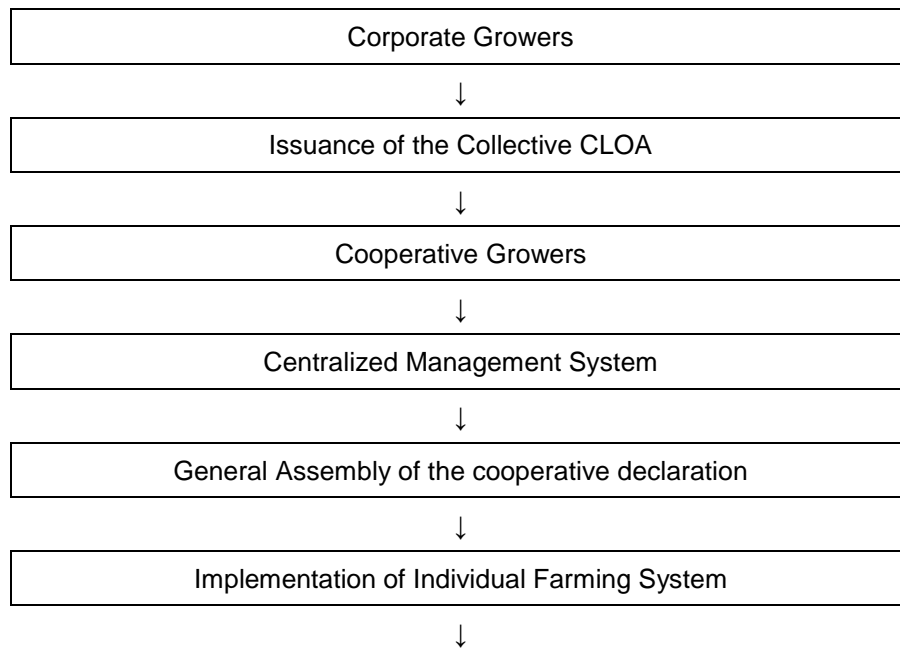
²¹ The more detailed history of the Cooperative H under the CARP is mentioned in Franco (1999).

²² Takeover process was described in Fernil (1998) pp.49-51.

²³ According to the Resolution Agreement (February 23, 2008) by the cooperative general assembly, the number of the members who is to receive the land is 101 farmers.

²⁴ Manual of Policies, Systems and Procedures for Cooperative H was prepared with the assistance by Foundation for Agrarian Reform Cooperatives in Mindanao, Inc. (FARMCOOP), a Mindanao based NGO.

Figure 2. Individual Farming System Procedures



Individual Farming System (IFS)

i. **Actual division of land for each member beneficiary.** The planted banana areas shall be equally divided by lottery. The assigned beneficiary undertakes the assigned individual operation; the coop supervises and oversees the said land.

ii. **Identification of collective and individual operation.** The ARBs' operation covers fruit care, plant care, pest and disease and engineering. Collective operation undertaken by the coop is harvesting, packing, engineering operation, agri-service, administration and finance

iii. **Streamlining of the coop structure.** A new structure shall be installed to suit the scheme of individual farming.

iv. **Installation on operation policy, systems and procedures.** Policies and certain procedures will be installed to serve a guide and basis for the implementation of IFS.

v. **Identification of cost per operation that would provide over all per box.** The coop management shall deduct a fixed amount from the selling price to cover the cost of collective tasks and other costs chargeable to the coop.

vi. **Appropriation of coop retention fee.** The coop appropriates a fee on a per box basis for administration expenses and other expenses undertaken by the cooperative including benefits as coop retention such as: honorarium & per diem of officer and administration cost

vii. **Exclusive sale.** The members exclusively sell their banana output to the counterpart corporation.

Source: Author.

V-1-2 The Agreement Between The Cooperative and its Members

The production of bananas for export comprises the main operation of Cooperative H. The organization produces bananas under a contract growing arrangement with HIJO Plantation, Inc. (HPI) in accordance with the Banana Sales and Marketing Agreement (BSMA) with the company. The agreement was subsequently assigned to Global Fruits Corporation now under Lapanday Fruits Corporation (LFC).

Following the terms of the BSMA, Cooperative H and its member ARBs have made the agreement (the Agreement) after the General Assembly held in 2008. In that agreement, it was clearly mentioned to allocate the awarded land equally among the members of the cooperative. Accordingly, each member was allotted net area of 0.812 ha to grow bananas and manage the farm. The General Assembly approved the parcel maps for the individual members

More importantly, the Agreement affirmed the resolution of the General Assembly, changing the operation and management system of the cooperative from the Centralized Management System (CMS) to the Individual Farming System (IFS). In the latter, each beneficiary will operate and manage the area allocated to the farmer and exclusively sell bananas to the cooperative, which in turn will sell the same to contract counterpart.

The Agreement also mentioned the terms which individual member is required to follow. Major points of the detailed requirement are as follows:

1. *Distribution and Assignment of the Land.* The Agreement categorized land into four types of soil based on its qualities such as fertility, location and proximity to the packing plant (Table 10). Accessibility to the Over Head Cable Propping (OHCP), which is used to transport the harvested bananas to the packing plant, is the decisive factor in classifying the quality of soil. Thus, although the land was distributed and assigned with equal area to each member, the land was categorized in accordance with the quality of land.

Table 10. Distribution of Cooperative H Members by Type of Soil Distributed

Types of Soil	Contents	Number of Members
Soil Type	Good Areas with Overhead Cable	101
Soil Type	Good Areas without Overhead Cable	189
Soil Type	Poor Areas	32
Soil Type	Mixed Areas considered as good area	21
Total		343

Source: Agreement between Cooperative H and its Members in Accordance with the Resolution of General Assembly by the Cooperative Members.

2. *The sale of bananas exclusively to the cooperative specified quality of bananas.* The members are mandated to produce at their own cost export quality bananas from the area allocated to them in accordance with the quality specifications provided under BSMA, and shall exclusively sell Class A and Class B bananas to the cooperative.
3. *Selling price of bananas to the cooperative.* The members agreed to abide by the provisions provided under the BSMA regarding the price of bananas (Table 11). The price of Class A

banana is \$2.95/box of 13.5kg. However the cooperative and the members also agreed to conduct an annual price review.

Table 11. Selling Price of Banana by the Cooperative H

Class of Banana	Specification	Price
	13.5kg— Regular	\$2.95/box of 13.5kg
	13.5kg— CP	\$3.15/box of 13.5kg
	7kg	\$1.57/box
	18kg-Regular	\$4.04/box
	18kg— CP	\$4.32/box
	4/5/6 Hands	\$1.50/box of 13.5kg
	Premium B	\$2.00/box of 13.5kg
	Cluster	\$0.86/box

Source: Agreement between Cooperative H and its Members in Accordance with the Resolution of the General Assembly of the Cooperative Members.

4. *The retention fee by the cooperative varies in accordance with the types of soil.* The retention fee by the cooperative is deducted from the price of banana to pay for administration costs and the expenses for the collective activities of all the members. The salient feature of this arrangement is that the members' share is directly related to the types of soil.

The members' share is increased as the quality of soil is lowered. In the case of Class A, 13.5 kg. Regular bananas, the members' share for soil type I (Good Areas with OHCP) is \$2.100/box (13.5 kg.) and increases to \$2.200/box(13.5 kg) for soil type II (Good Areas without OHCP), further increases to \$2.300/ box (13.5kg) for soil type III (Poor Areas) (Table 12). The pricing innovation is in accordance with the lowering of the corporate retention fees as the quality of soil decreases in order to equalize the value of the production by the members. This indicates that the social norm of the cooperative is to equalize the incomes from the banana production.

5. *Obligation of the cooperative.* The Agreement also specified the functions to be undertaken by the cooperative. The cooperative shall deduct from the banana production proceeds of a member the corresponding amount needed in order for the cooperative to perform the following functions:
- a. To handle the packing, sigatoka control, and quality assurance operations, and administration matters.
 - b. to pay the land amortization²⁵, taxes and government fees.
 - c. to provide technical services.

²⁵ In the case of the land under a collective CLOA, amortization payment shall be shouldered by the cooperative. However, in some cases the cooperative collects the amount of payment divided by the area of individual member later when it is ruled that this should be shouldered by all the members.

- d. to represent members in transactions with government agencies, banking/funding Institutions and other entities.

Table 12. Buying Price of Banana by the Cooperative H

Soil Type I (Good Areas with OHCP)				
Class of Banana	Specification	Cooperative's Retention	Members' Share	Total
Class A	13.5kg—Regular	\$0.850	\$2.100	\$2.950
	13.5kg—CP	\$1.014	\$2.136	\$3.150
	7	\$0.515	\$1.085	\$1.600
	18kg-Regular	\$1.324	\$2.786	\$4.110
	18kg—CP	\$1.411	\$2.969	\$4.380
Class B	4/5/6 Hands	\$0.283	\$2.217	\$1.500
	Premium B	\$0.378	\$1.622	\$2.000
	Cluster	-	\$0.860	\$0.860
Soil Type II (Good Areas without OHCP)				
Class A	13.5kg—Regular	\$0.750	\$2.200	\$2.950
	13.5kg—CP	\$0.908	\$2.242	\$3.150
	7	\$0.461	\$1.139	\$1.600
	18kg-Regular	\$1.184	\$2.926	\$4.110
	18kg—CP	\$1.262	\$3.118	\$4.380
Class B	4/5/6 Hands	\$0.283	\$1.217	\$1.500
	Premium B	\$0.378	\$1.622	\$2.000
	Cluster	-	\$0.860	\$0.860
Soil Type III (Poor Areas)				
Class A	13.5kg—Regular	\$0.650	\$2.300	\$2.950
	13.5kg—CP	\$0.801	\$2.349	\$3.150
	7	\$0.407	\$1.193	\$1.600
	18kg-Regular	\$1.045	\$3.065	\$4.110
	18kg—CP	\$1.114	\$3.266	\$4.380
Class B	4/5/6 Hands	\$0.206	\$1.294	\$1.500
	Premium B	\$0.274	\$1.726	\$2.000
	Cluster	-	\$0.860	\$0.860

Source: Agreement between Cooperative H and its Members in Accordance with the Resolution of General Assembly by the Cooperative Members.

6. *Obligation of members.* The Agreement also spelled out the responsibility of the members.
- to abide by IFS Policies and other rules that the General Assembly.
 - to give full authority to the cooperative to negotiate a contract for renewal.
7. *Duration of the Agreement.* The Agreement shall remain in force for as long as amortization is not fully paid. This means that the member cannot change the production to other crops on his assigned land and he cannot sell his product to other

buyers (or prohibited pole vaulting).

V-1-3. Accomplishment of the Cooperative H

The operations of Cooperative H consisted of three, namely Main Operation, Asuncion Branch Operation and Compostela Branch Operation.

1. Main Operation.

The biggest portion of the Main Operation is banana production. In 2010, the production of Class A bananas was 856,682 boxes (76.4% of total production), Class B was 122,813 boxes (11.0%), and Class C was 141,551 boxes (12.6%). Total production was 1,121,186 boxes (100.0%), which was 83,672 boxes lower than the initial forecast of 1,204,807 boxes. For the average was 4,027 boxes/ha out of which class A was 3,127 boxes/ha while class B was 448 boxes and class C 516 boxes. The volume was decreased compared to 4,600 boxes/ha during the time of Centralized Management System, and 4,600 boxes/ha under the Corporate Growership²⁶. The initial forecast for 2010 was 4,397 boxes/ha. However the target was not attained due to the embargo of Iranian imports²⁷.

In terms of value of production, total sales of bananas reached PhP 129,750,911. Adding PhP 2,324,983 of the other incomes like miscellaneous, and after deducting PhP 96,791,258 of direct cost, gross profit became to the amount of PhP 35,284,636. There was a net loss of PhP 511,024 after deducting PhP 35,795,661 worth of administration cost. According to the financial manager of the cooperative, the net loss was due to the embargo.

As terms of external institutions' assistance, the cooperative availed of a production loan twice from the Land Bank of the Philippines (LBP) amounting to PhP 4,750,000 and PhP 16,000,000.

2. Asuncion Branch Operation.

Asuncion Branch Operation in Municipality Asuncion was developed as an expansion operation of the Cooperative H like the Compostela Branch Operation with the intention of providing Cooperative H an investment for the next phase of the activity. An area of 27 hectares was rented for the contract growing of bananas at the municipality of Asuncion in the province of Compostela Valley. Production of bananas depended by hired external labor. Annual rental payment for the land is PhP 15,000/ha. However, PhP 1,644,704 of net loss was recorded.

3. Compostela Branch Operation.

This is another expanded operation of the Cooperative H with a total rented area of 25 ha, Compostela Branch in Municipality Bataan. The operation produces bananas by contract growing with employment of the hired labor. Rental payment was PhP 20,000/ha. In 2010, the net surplus amounted to PhP 537,283, which is higher compared to that of the Main Operation and Asuncion Branch Operation.

²⁶ Interview to the manager of the Cooperative H.

²⁷ According to interview to the manager of the Cooperative H.

V-1-4. *Net Income of Individual Members of Cooperative H*

Looking at the net income of individual members of the cooperative, who are ARB's there is no income from the distribution of the net surplus, like the dividend of patronage fund and interest from share, since the main operation yielded net loss.

Only wages paid to the hired labors were indicated as direct cost in production and were recorded in the income statement.

Net income of individual members was indicated in the pay slip issued every 15th day of the month. Gross income for each member is the production quantity of bananas multiplied by the unit price in US dollar depending on the quality and current exchange rate. The net income of each member was calculated after the production amount was deducted by the collective operation cost, such as cost of harvesting and packing labor, material cost of box, identification ribbon, payments for inputs such as fertilizer and pesticide, and individual fringe benefits payment like health insurance and so on.

Net income amount includes the farm labor cost within a member's assigned area.

To illustrate the computation of the net individual income, Class A banana (13.5kg-regular) shall be used as a standard banana quality. Computation is as follows²⁸.

a. For Soil Type I

Given the Class A banana production volume of 4,428 boxes/ha, gross income is PhP 399,848/ha (4,428 boxes/ha x \$2.10/box x PhP 43.00/\$). Net income is computed as PhP 114,954/ha (PhP 399,848/ha x 0.30). For each ARB, the distributed amount is PhP 97,402/ARB (PhP 119,954/ha x 0.812ha/ARB)

b. In case of Soil Type II

Given the Class A banana production volume of 3,674 boxes/ha, gross income is PhP 347,560/ha (3,674 boxes/ha x \$2.20/box x PhP 43.00/\$). Net income is computed as PhP 104,260/ha (PhP 374,560/ha x 0.30). For each ARB, the distributed amount is PhP 84,665/ARB (PhP 104,268/ha x 0.812ha/ARB)

c. In case of Soil Type III

Given the Class A banana production volume of 3,000 boxes/ha, gross income is PhP 296,700/ha (3,000 boxes/ha x \$2.30/box x PhP 43.00/\$). Net income is computed as PhP 89,010/ha (PhP 296,700/ha x 0.30). For each ARB, the distributed amount is PhP 72,276/ARB (PhP 89,010/ha x 0.812ha/ARB)

d. For each case PhP 7,389/ha (PhP 6,000 /ARB x 0.812 ha/ARB) is to be deducted as land amortization

²⁸ Number of the box of Class A bananas produced in the different soil type was availed through interview to the operation manager of Cooperative H.

V-2. The Cooperative C by Contract Growing with the Collective CLOA

V-2-1 The Cooperative C introduced “FOB” Scheme for its Advantage.

Cooperative C is located in Barangay Tibungcol, Panabo City, in the province of Davao del Norte. It was established and registered with the CDA in 1996 after 170 agricultural workers were granted the collective CLOA through VOS scheme. They were employed for a plantation operated by the Checkered Farm, Inc. (CFI) which was the subsidiary of the House of Investment, Inc.

After its registration with the CDA, the Cooperative C entered into a ten year growing contract with Diamond Farm, Inc. (DFI), which is under the Dole Philippines, Inc.-Stanfilco (Dole-Stanfilco). However, Cooperative C had a huge amount of debt during that time. It was unhappy of the contract terms because it was considered to be onerous to the cooperative. Although the buying price of bananas was PhP 24.68 per box, the cooperative auditing report showed that production cost was actually PhP 11.0 higher than the contract price. The cooperative started hard negotiation with the DFI, demanding for a higher contract price. Then, the cooperative decided to to change contracts than to ask for a price increase. They demanded for a shift to a Fright on Board (FOB) contract where they have free reign over the production process. Under contract growing, members would grow bananas under Dole-Stanfilco’s terms and conditions, while the company would provide input, technical expertise and market the commodity. Under an “FOB” scheme, Dole-Stanfilco’s role will be reduced to being a mere buyer, meaning that the quality requirements for individually packed bananas produced by Cooperative C are lowered and bought by Stanfilco at a higher price. Buying price increased from PhP 24.68 (US\$0.60) to PhP106.60 (US\$2.60) per box²⁹ “FOB” pertains to the free on board to the Free on Packing Plant as the arrangement to reduce transportation cost to the wharf of the bananas’ vessel and the documentation charge for shipping³⁰. This is also a good time for Cooperative C to shift their management system from a Centralized Management System (CMS) to an Individual Farming System (IFS) to increase their productivity.

After 83 of their members withdrew, Cooperative C was reorganized as an independent association. It had 87 remaining members and a total area of 113 ha. Upon the expiration of the contract with DFI, Cooperative C entered a growing contract with the Unifruitti Corporation (Unifruitti) following the terms and conditions of its previous FOB contract with DFI. All production costs, under the FOB ex-packing plant, are shouldered by the cooperative, while all transportation and shipping costs are to be shared by the Unifruitti.

Annual amortization payment is PhP 153,000/ha. However, the initial payment for 14 years out of 30 years was condensed to 9 years because they had enough working capital to spare.

A particular characteristic of Cooperative C is that the parcel map indicating individual lots of the members was already approved through the consensus of all the members. The members of the cooperative are expecting to divide the land in the near future upon the conversion of the land title from a collective CLOA to an individual CLOA.

²⁹ Regarding the process of the negotiation indicated in Homeres, Mendoza and Yumol (2000) pp.9-19.

³⁰ As explained by the operation manager of the Cooperative C.

V-2-2. *The Operations of the Cooperative C*

The operations of Cooperative C consists of three operations, namely contract growing of bananas, consumer operation and lending operation. These kinds of operations are common in other commercial crop production cooperatives.

1. Contract of Banana Growership

The major operation of cooperative C is the contract growing of bananas with Unifruitti. Of the total export quality fresh bananas, 80 % was for Japan, while the remaining 20% was for Middle East countries. The Banana Sales and Management Agreement (BSMA) entered into force in 2008.

The BSMA contained eight items, with six major components as follows:

a. *Specified buyer of the bananas.* The seller and buyer of harvested bananas is specified in the contract.

b. *The selling price and the quality of the bananas.*

Class A (4/5/6 hand pack, regular) Bananas: \$2.75 /box (13.5 kg) ex-packing plant.

Class B Bananas: \$1.10 /box (13.5 kg) ex-packing plant.

Cluster/Special Pack (16, 17, 18, 20): \$3.55/box (13.5 kg) ex-packing plant

c. *The boxes and packing materials at the packing plant are given to Cooperative C at no cost.*

d. *Issuance of cutting order.* Cooperative C shall provide the buyer with a report indicating the estimated cut-cleared and boxed bananas over the next nine weeks. The Buyer shall give at least a 24-hour notice to Cooperative C regarding of the required quantity of bananas to be harvested and boxed, as well as the market destination. Cooperative C shall pack the bananas according to the buyer's instruction of buyer in the cutting order. The cutting order shall indicate the time of cutting, harvesting, packing, delivering and loading of the bananas, the grade and age of bananas, and the export carrier and loading port in Davao, or cold storage if applicable.

e. *Representation.* A Representative of the buyer may enter the banana plantation at any time to observe all operations involved in planting, growing, fruits care, harvesting and delivery of fruits to packing plant and to give advice and assistance if necessary.

f. *Term of agreement.* Term of agreement is five (5) years, with a renewal of another five (5) years.

2. The Cooperative C Introduced Individual Farming System (IFS)

As aforementioned, Cooperative C changed its production system in 2002 from the Centralized Management System (CMS) to the Individual Farming System (IFS) for the purpose of

increasing productivity. In order to transition into the IFS, Cooperative C created guidelines describing the basic policy³¹. The guidelines state that Cooperative C must adhere to good agricultural practices and standard operating procedures to ensure an annual production of 4,500 boxes/ha. Four items are mentioned in the guidelines in order to achieve the target as follows:

- a. *Individual Farming System.* The plantation is being divided equally among the member ARBs.
- b. *Empowerment of the member ARBs.* The members are empowered to manage and operate their assigned lots under the supervision of the cooperative to ensure that all farm practices and standard operation procedures are followed.
- c. *Assurance of the incomes of the members.* The income of the individual areas will go to the member ARBs. Only a certain amount is retained by the cooperative in order to shoulder the cooperative and administrative expenses.
- d. *Expansion program.* The cooperative is encouraged to continuously deliver relevant services to its members and community. It aims to enhance the living condition of the members through its expansion program starting at 13.40 ha in Barangay Mangalca, Municipality of Carmen, Davao del Norte.

V-2-3. *Accomplishment of the Cooperative C*

1. **Banana production.**

Total banana production by Cooperative C in 2010 was 587,056 boxes, out of which class A was 542,341 boxes while class B 44,715 boxes. The average yield was 5,184 boxes/ha out of which class A was 4,789 boxes/ha while class B was 395 boxes/ha. The volume was increased compared to 3,989 boxes/ha during the time of Centralized Management System under the cooperative grower, and to 3,500 boxes/ha under the Corporate Grower³².

Gross sales in 2010 was PhP 91,032,043 including the cost of materials. The amount includes PhP 77,327,258 of the Class A bananas and PhP 1,5341,122 of the Class B bananas. Gross profit was PhP 17,750,328 after deducting the cost of sales worth PhP 73,281,758. Cost of sales was 80.5% of gross sales, while gross profit was equivalent to 19.5 % of gross sales. Total revenues for 2010 amounted to PhP 24,586,106, which was added to PhP 6,934,778 total of other income required for the production. On the other hand, total expenses for the collective works was PhP 22,859,480 wherein direct labor and fringe benefit from packing, harvesting, maintenance and engineering workings amounted to PhP 8,777,627. The workers' daily wage was PhP 255 (labor PhP 240 and COLA PhP 15), while their monthly wages amounted to PhP 6,630 (PhP 255/day x26days), thus direct labor is equivalent to 7.6 % of gross sales. Finally, net surplus was PhP 1,825,625 which is equivalent to 2.0% of gross sales.

2. **Consumer operation**

The consumer operation, or sarisari-store operation, is typical for cooperatives. This is also

³¹ Manual of Polies, Systems and Procedures prepared for Cooperative C assisted by Foundation for Agrarian Reform Cooperatives in Mindanao, Inc. (FARMCOOP), a Mindanao based NGO.

³² Interview to the manager of the Cooperative C.

true for lending operations. In 2010, gross sales reached PhP 1,127,819. After deducting PhP 1,065,265 of cost of sales, and adding PhP 440,104 worth of other income, total revenue amounted to PhP 502,657. Net surplus was PhP 438,323 after deducting PhP 64,334 worth of total expenses. Net surplus is equivalent to 38.8 % of gross sales. This high rate of surplus was attained because PhP 422,290 of commission income was included.

3. Lending operation

The lending operation by the cooperative uses PhP 2,000,000 of the working capital fund. The interest rate is 16.0% per annum. Total revenues amounted to PhP 1,345,957 including interest income for loan, service charge and interest on bank deposit. Thus, net surplus was PhP 1,167,685 after deducting PhP 178,271 of total expenses. The lending operation was a relatively profitable for Cooperative C.

V-2-4. Net Income of the Individual Member of The Cooperative C

There are two sources of the income for each member of the cooperative as follows:

1. Production.

The labor cost of each the member is included in their monthly payments. Thus, it was not mentioned in the income statement of the cooperative. The computation is reflected accordingly on their pay slips, which are issued every 15th day and last day of the month called the “kinsena”. Their pay slips indicate their individual banana production volume, quality of bananas (regular or special), price, and the current foreign exchange rate. From the amount of production, deductions are made for the fixed expenses, which include savings, One Net Bank (ONB, rural bank) loan, amortization, outsourcing labor cost, for packing plant and harvesting, and for current expenses which include management and service cost, medicine, sigatoka control, and the hospital fund. Other deductions include, private cost such as purchase of consumer goods and social insurance premium. After deduction, the resulting net income is paid to the members individually. The labor of the each member is included in the income paid.

An interview with the manager of the cooperative provided an illustration of computing the above using a standardized model of the Class A banana producing member. Given that the quantity of production was 4,789 boxes/ha (13.5 kg) , price was \$3.65/box (as contracted \$2.75/box, however actual price increased), and cooperative’s retention worth \$0.50/box was deducted, leaving the members a gross income of \$3.15/box. In addition class B is 395 boxes /ha with price of \$ 1.10. Then 70 % of the gross income is attributed to the collective works, cost of fertilizer, and pesticide, while the remaining 30 % is the net income for individual member. The average income for an ARB member is PhP 200,201/ha annually $((4,789 \text{ boxes/ha} \times \$3.15/\text{box} + 395 \text{ boxes/ha} \times \$1.10/\text{box}) \times 30\% \times \text{PhP } 43.00/\$)$ which includes labor.

2. Dividend and Interest

The total amount of net surplus of the banana production operation, consumer operation and lending operation was PhP 3,431,634. Of Cooperative C’s net surplus, 10% was distributed to the General Reserve Fund, 7% to the Land and Building Fund, 3% to the Community Development Fund, 10% to the Cooperative Education and Training Fund, and then the remaining 70% was distributed to cooperative members as dividends of the Patronage Fund and interest on Share Capital.

In 2010, dividend of the Patronage Fund and interest on Share Capital was PhP 21,257/ha (PhP 3,431,634 x 70% ÷ 113ha). Thus, annual net income of individual member ARBs was PhP 221,458/ha (PhP 200,201/ha + PhP 21,257/ha). For each ARB, the distributed amount was PhP 287,452 /ARB (PhP 221,463/ha x 1.298ha/ARB).

For the land amortization each member pays PhP 18,489/ha (PhP 24,000/ARB x 1.298ha/ARB).

V-2-5. Financial Assistance to The Cooperative C.

Unifruitti made two financial assistances to the Cooperative C. The first loan amounted to PhP 4,200,000 with null interest as working capital for two weeks. The amount serves as an advance payment for future sales of banana. The second loan was also PhP 4,200,000 payable for 3 years with an annual interest rate of 3%. This was used to rehabilitate the water supply system's infrastructure in the packing plant.

V-3. The Cooperative D by Contract Growing with the Individual CLOA

V -3- 1. Prolonged Negotiation for the Contract Growing.

Cooperative D is located in Barangay Dapco, Panabo City, in the province of Davao del Norte. It was established and registered in 1998, and is composed of 21 member ARBs with an area of 23 ha or 1.18ha per member. The size of the cooperative is relatively small in terms of members and area. The member ARBs were awarded the Individual CLOA in 1999 under the Compulsory Acquisition (CA) scheme of the CARP scheme.

After the issuance of the Collective CLOA, Cooperative D entered a growing contract with Dole Philippines Inc., Stanfilco Division (Dole-Stanfilco) in 2005. However, the seven-year grace period for land distribution already passed due to the prolonged contract negotiation.

In 1965, the Javallana family's Davao Abaca Plantation Corporation (DAPCO) leased out 1004 hectares of land to Dole Stanfilco which started banana production in the plantation. Plantation workers then organized the Stanfilco Employees Agrarian Reform Beneficiaries Association Inc. (SEARBAI) and claimed access and control of the DAPCO estate. The land was put under Compulsory Acquisition (CA). The first CLOA was issued in 1993, while the second CLOA was issued in 1994. Both were in favor of SEARBAI. The division occurred when SEARBAI entered a Memorandum of Understanding (MOU) with Dole-Stanfilco, The MOU was a 25-year growership agreement with an additional transitory period of four years (1995-1998) during which Dole-Stanfilco would operate and manage the plantation. The MOU pegged the buying price to be \$1.95/box on the fifth year., and specified that the ARBs would receive wages and higher separation fees³³.

During the transition period, Dole-Stanfilco reduced daily wages from PhP 162.0 to PhP 92.0. The SEARBAI=Dole-Stanfilco MOU and reduction of daily wages created tension within SEARBAI, which led to a three-way split: ALDA (145 ARBs), Cooperative X1 (421 ARBs) and

³³ Detailed story of the MOU is described in Borrás (1999) pp.91-99.

Cooperative X2 (330 ARBc). In 1996, the three groups conducted a series of negotiations with Dole-Stanfilco, and by 1998, forced Dole-Stanfilco to agree to a buying price of \$ 2.60.

In 1999, ALDA won the negotiation for individual titling but would be split into four smaller groups before the individual titles could be issued: Cooperative D, Cooperative Y1, Cooperative Y2 and Cooperative Y3.

In early 2000, Cooperative X1 split again into two groups over the issuance of farming system ownership of the land's fruits³⁴. One group opted to adopt the Individual Farming System (IFS). Thus, they would be known as the ISF group. The other group retained collective production with some modification or the Modified Farming Scheme (MFS)³⁵

It is important to note the uniqueness of ALDA and Cooperative X1 's split because it did not originate from a conflict between ARBs and former land owner. Rather, it was induced by a mutual desire to improve productivity and maximum gains for each member. However, Cooperative D aimed to create an Individual Farming System that provides direct incentives to individual member ARBs.

V-3-2. Started with Individual Farming System

Cooperative D is a small banana growers cooperative composed of 21 member ARBs with the area of 23 ha, 1.18ha per member. The size of cooperative is relatively small in terms of member ARBs and area. The member ARBs were awarded the Individual CLOA in 1999 under the CARP scheme.

It was earlier mentioned that Cooperative D, which split from ALDA and all of 21 members are under Individual farming System with Individual CLOA.

The land survey of the farming was completed by the Department of Agrarian Reform and was recognized as a model area for IFS introduction. According to the cooperative's manager, individual lots were distributed and assigned through a raffle.

A problem, which Cooperative D faced, is an unresolved issue regarding the land value. The former landowner claimed that the land was worth 500,000/ha, and brought the case to the Supreme Court. However, Cooperative D applied for a claim from the Land Bank of the Philippines (LBP), which was later approved. In 2011, the cooperative paid LBP PhP 2000/ha/month, which adds up to an annual payment of PhP 331,200 (PhP 1200/ha/month x 12 months x 23ha).

V-3-3. Contract of the Banana Growership

The 2005 Banana Sales and Management Agreement (BSMA) between the Cooperative D and Dole-Stanfilco is an amendment of the 2003 agreement. A major amendment in the new BSMA is the shifting of the buying scheme from ex-Vessel to "ex-FOB" in order to respond to the demand of Cooperative D. The basic provisions of the BSMA are as follows:

³⁴ Detailed story of the split of the cooperative groups is described in Quitariano (2008)p.49,57.

³⁵ The MDF group later adopted the ISF scheme after seeing the production efficiency of the IFS group. Quitariano (2008)p.49.

1. Selling price of Class A bananas
 - a. \$2.30 “ex-patio” for every box /13.0kg of export quality “Dole Hands”.
 - b. \$1.35 “ex-patio” for every box /13.0 kg of export quality “Doritas” and “Ordinary Clusters”.
 - c. The selling prices are full costing, that is, all production costs and delivery of fruits to the packing plant are exclusively accounted to Cooperative D.
2. Selling price of Class B bananas

Selling prices for Class B bananas are “ex-wharf”. During processing, buyer will include single and loose fingers in Class B based on actual boxes produced .

3. Cost of the packing plant operation.

The expenses from labor, materials, electricity and processing shall be shouldered by buyer.

4. Payment for the use of packing plant.

Cooperative D shall construct its own packing plant for the processing and packing of he bananas. Buyer shall pay \$0.06/box (13.0 kg) for products it processes at Cooperative D’s packing plant.

V-3-4. Accomplishment of Cooperative D

The Cooperative did not make any financial statements for the year 2010. According to an interview with the Chairman of Cooperative D, bananas average production was 4,300 boxes/ha. Given a buying price of \$2.90/box (the price is higher than the price in the contract), the volume of sales totaled PhP 12,332,830 (4,300 boxes/ha x23ha x\$2.90 x PhP43.00/\$).

In Cooperative D’s case, cost of production was 60 %. Gross income amounted to PhP 4,933,132 (PhP 12,332,830 x 40%). The production cost included expenses of the packing plant PhP 340,216 (\$0.08/box x 4300 boxes x PhP 43.0/\$)³⁶. No other deduction from production costs was made resulting in a gross income of PhP 4,933,132, equal to the net surplus.

Cooperative D has lending operations. Maximum loan amount for individual member is

PhP5,000 with an interest rate of 3 % per annum, which is regarded as convenient.

V-3-5. Net Income of the Individual Member of the Cooperative D

The net surplus of Cooperative D amounted to PhP 4,933,132 or PhP 214,484/ha. Net income of the member ARB will result after deducting administration costs and land amortization payment. Administration costs was PhP12,203/ha (PhP 1200/month x12 month ÷ 1.18 has) which includes personnel expenses for 5 persons (two office clerks, one advisors in the field and two in

³⁶ Packing plant fee was increase from \$0.06/box of the contracted to \$0.08 of the actual rate)

packing plant), and office rental. The amortization payment of the land was PhP 10,169/ha (PhP 1,000/month x 12 month ÷ 1.18 has). Deducting the mentioned amounts, net income of the member ARBs was PhP 192,112 (PhP 214,484/ha – PhP 12,203/ha – PhP 10,169/ha).

The distributed amount for each ARB was PhP 226,692/ARB (PhP 192,112/ha x 1.180ha/ARB)

V-3-6. Assistance to The Cooperative D.

Dole-Stanfilco provided constant assistance to Cooperative D through technical advice on bananas production and sigatoka control. It also provided the packing materials and paid fees to use the packing plant.

In addition, Cooperative D availed of loans thrice for working capital from the local bank of Pen Bank worth PhP 100,000, PhP 200,000 and PhP 200,000 respectively. The whole loan amount is paid back in the form of bananas.

V-4. The Cooperative L by Lease Arrangement with the Collective CLOA

V-4-1. Lease Back of the Distributed Land.

Cooperative L is located in Barangay Callawa, Buhangin District, Davao City. It was established in 1992, and got registered with CDA in 2000. It has 178 members, out of which 114 are regular member ARBs awarded a Collective CLOA under CARP in 2000. The remaining 65 are associate members and only participate in consumer operations (sari-sari store operations).

Cooperative L, composed of plantation workers, was given 50 ha in 2000, 41 ha in 2005, later got an additional 9 ha. Thus, the cooperative's total plantation was 100 ha.

Looking into the plantation's history, Lapanday Foods Corporation(LFC) was owned by Aboitez family, Havallana family and Ybanes family in 1978. It started to produce cavendish bananas with their 90 has. of plantation and exported mainly to Japan. In 1982, ownership of the plantation was acquired by the Lorenzo family of the Lapanday group. However, the plantation land is formally owned by Lapanday Agricultural and Development Corporation (LADC). As of 2010, LADC owns 24 plantations in the Philippines.

The 91 ha of land was distributed through the Direct Land Transfer (DLT) scheme under CARP, in which plantation workers entered tough negotiation with the LADC. The compensation of the land was PhP 390,000/ha, and annual amortization payment was PhP 13,000/ha. After the land transfer, Cooperative L selected Agribusiness Venture Agreement (AVA)'s lease arrangement that allows them to lease the land and use service contracts to provide the plantation operation's labor. According to Cooperative L's managers, the cooperative's operations and would face difficulty if they entered other alternatives such as the contract growing arrangement. For instance, contract growing necessitates a certain amount of initial investment and requires the acquisition of the latest production technology. Additionally, the regular paid workers are assured their works in the plantation, and also

assured land amortization payment by the cooperative³⁷.

V-4-2. Accomplishment of the Cooperative L

The activities of Cooperative L consist of three operations, namely, projects operations, consumer operations and credit operations. The accomplishment of three operations was explicated as follows:

1. Projects Operations

Projects operation is composed of land leasing operations and servicing operations. Land leasing operations depend on land rental specified in the lease contract signed by Cooperative L and LADC in 2005. The annual rental amount for first five years is set at PhP 18,000/ha, from which PhP 13,000/ha annual amortization payment to the LADC is deducted. As a result, net income from the operation was PhP 5,000/ha. For the next five years starting 2010, yearly rental amount increased to PhP 30,000/ha. After deducting PhP 13,000/ha amortization, net income increased to PhP 17,000/ha. However, since the amortization was paid directly to the LADC and is regarded as debt payment, the PhP 13,000 was not recorded as income in the Financial Statement which reflected PhP 30,000/ha net profit. Consequently, rental amount for 2010 was PhP 2,730,000 (PhP 30,000 x 91ha) but the actual amount recorded in the Financial Statement was PhP 3,621,884. According to the manager, the PhP 891,884 difference was the rental for the years before 2004³⁸.

The LADC and Lapanday foods Corporation (LFC) utilized outside labor services to handle packing plant operation and management. According Cooperative L, the Services Outside Labor Contract (OLC) between Cooperative L, LADC and LFC, described 24 items of outside labor services, namely, 8 items for Fruits Care Operations, 6 items for Plant Care Operations, 3 items for Crop Protection Operations, 3 items for P.H. Sanitation Operations, 2 items for Harvesting Operations, and 2 items for Packing operations. It also described a wide range of operations in the plantation fields. Outside Labor Service Operation is registered to the Department of Labor and Employment (DOLE).

Unit price of outside labor was P339.0/day. The price was approved by DOLE as the minimum wage rate. Therefore, the PhP 84.0 difference between the contracted price of PhP 339.0 and actual payment of PhP 255.0 to the participated member ARBs is considered as profit from outside labor service. The gross income of outside labor service operation for 2010 was PhP 7,087,676 making it biggest income operation for Cooperative L. For other outside labor operations, drainage income was PhP 932,685, which was included in the OLC. After the drainage was finished, stalk disposal income was PhP 5,089.

Total revenue of projects operation amounted to PhP11,703,269 after adding interest and other incomes. After deducting financial and administration costs, the net surplus was recorded at PhP 2,744,478.

2. Consumer Operations

³⁷ Interview to the chairman of the Cooperative L.

³⁸ Interview to the manager of the Cooperative L.

Consumer operations, like the sari-sari store, is a very common for cooperatives in the rural area. Cooperative L is also active in consumer operations. In 2010, they generated sales amount to PhP 564,804. After deducting expenses worth PhP 297,911 the resulting net surplus was PhP 266,892.

3. Lending Operations

Lending is also a typical operation of cooperatives in the rural area. Lending operations arranged by Cooperative L has an interest of 3% per annum, and a charge of 2.0 %.

However, the operation is faced with a temporary constraint in expanding funds to increase the lendable amount for the member ARBs because there is no nearby banking institution to issue a new loan. In 2010, Cooperative L generated gross revenues of PhP 529,637, and after the deduction of expenses worth PhP 213,354, net surplus amounted to PhP 316,283.

Integrating the three operations, the total net surplus was PhP 3,327,654, 82.4% of which came from plantation operation.

V-4-3. Net Income of the Individual Members of Cooperative L

The net income of the member ARBs of Cooperative L is composed of wages paid from participating in the outside labor service, and the dividend and interest distributed from net surplus.

1. The wage from outside labor service.

Annual income for the 2010 was PhP 79,560 (PhP 255.0/day x 26days x 12 month). The difference of the contracted unit price of PhP 339.0/day is considered income of Cooperative L.

An important note is that rental income from the land leased to the plantation corporation is recorded as revenues of the cooperative. It is not considered as individual net income, but as the dividend and interest paid individually.

2. The dividend and interest.

For the distribution of the Cooperative L's net surplus, the dividend of patronage fund and interest of share capital consists of 70% of total net surplus. Thus, the member ARBs receive net income from the net surplus amounting to PhP 19,583 /ARB (PhP 3,161,271 x 70% ÷ 113 ARB)³⁹.

Thus, each member ARB receives a net income of PhP 99,143/ARB (PhP 79,560 + PhP 19,583) (PhP 124,551/ha).

V- 4- 4. The Cooperative L awarded as the Most Progressive Cooperative.

The most salient feature of Cooperative L is that it is the only cooperative that did not enter into production operations. Instead, it engaged outside labor service operations to provide plantation labor to which the land was leased for banana production. In effect, Cooperative L was awarded as 2010's most outstanding cooperative in agriculture in Davao City because all its members are ARBs. It was also recognized as the most self-reliant cooperative because it operated with no financial

³⁹ Total net surplus for distribution was PhP 3,161,271 after deducting PhP 166,682 for retirement provision.

assistance from other organizations or institutions.

The average yearly banana production in the plantation is 3,300 boxes/ha. If the price of a Class A banana is \$3.15/box, then the potential income of Cooperative L is PhP 40,228,650 (3300 boxes/ha x 90ha x \$3.15/box x PhP 43.0/\$1.0). The Cooperative L lost the opportunity to achieve self-reliance with all its members being agrarian reform beneficiaries.

V-5. Summary of the Survey of the Four Cooperatives

This section summarizes the survey of the four cooperatives (Table 9). All four cooperatives were awarded land titles by CA or VOS under CARP, and were issued the Individual CLOA or the Collective CLOA. Members of the cooperatives are Agrarian Reform Beneficiaries (ARBs). In their cases, basic management of the cooperatives is dependent on the kind of Agribusiness Venture Agreement (AVA) mode selected. Three of the cooperatives namely, Cooperative H, Cooperative C, and Cooperative D selected the contract growing arrangement. Only Cooperative L used the lease arrangement.

It wasn't simple for Cooperative H, Cooperative C and Cooperative D to decide on using the contract growing arrangement. Their decision came after prolonged and patient negotiation with the plantation corporation during the protest movement against wage cut and the dismissal of plantation laborers.

Under contract growing, there is not much difference between Cooperative H, C and D's banana productions at 4,027 boxes/ha (decreased from the initial forecast of 4,397 boxes/ha), 5,184 boxes/ha and 4,300 boxes/ha respectively, while the average data for the year 2011 was 3,848 boxes/ha, provided by Pilino Banana Growers and Exporters Association (PBGEA). In case of the Cooperative C, it is obvious the increase of the production under the Individual Farming System (Table 13).

Table 13. Bananas Yield per Hectare by Cooperative (2010) ^a

	(unit: boxes/ha)			
	Cooperative	Cooperative	Cooperative	Cooperative L
Individual Farming System	4,027 ^b	5,184	4,300	n.a.
Centralized management System	4,600	3,989	n.a.	n.a.
Corporate Farming	4,600	3,500	n.a.	3,300

^a Average production was 3,847 ha, according to data (For the year 2011) provided by Pilipino Banana Growers and Exporters Association (PBGEA)

^b The Initial forecast of the production was 4,397 boxes/ha however cannot achieved due to the embargo of Iranian imports.

Source. Interview with the managers of four cooperatives.

An important reminder is that the three cooperatives entered the Banana Sales and Management Agreement (BSMA) with the plantation corporation in which production management are under the control of the cooperatives. Up to that time, plantation corporation adapted the integrated management system which gave them control over production, sales, transportation and shipping. After the introduction of the decentralized management system for production operations, the harvesting, processing and packing of bananas are all controlled by the cooperative. For example, a packed box of bananas is delivered to the packing corporation at an ex-packing plant.

The decentralized management system was also applied in farm operations. The Individual Farm System (IFS) was also introduced in which all individually produced bananas belong to the producing ARB. This is a paradigm shift from the previously implemented Centralized Management System in which workers receive wage for their farm labor.

After getting the consensus of all the members, the cooperatives decided to adopt the IFS create guidelines for the new system. Cooperative H and Cooperative C presented the guidelines to all its members. One of IFS' salient features is the division of plantation land into individual lots under the rule of equitable distribution and assignment. Cooperative H and Cooperative C, both awardees of the Collective CLOA, created parcel maps to identify individual lots. Thus, the members assigned lots are provided incentive to increase their productivity.

In the case of Cooperative H, the equitable distribution, and assignment of the land involved adjustments depending on the soil's quality. If the quality of land is inferior, a lower amount is deducted from the selling price for cooperative's retention to cover administrative fees, such as accounting machine's cost, office space, and the clerk's salary. Cooperative H's retention is \$ 0.75/box (Class A Banana standard), while retention is increased to \$ 0.85 in good quality of soil.

Thus, the equitable distribution of the land ensures the equitable value of production amount.

Cooperative D, however, was already issued the Individual CLOA which meant each member ARB had to adopt the IFS. Since the number of members is relatively small, cooperative's retention is not deducted, and only the actual cost is deducted from the sales amount.

In 2010, net income per hectare of the member ARBs is PhP 112,565/ha (PhP 91,402/ARB) for Cooperative H, PhP 202,969/ha (PhP 263,452/ARB) for Cooperative C, and PhP 192,112/ha (PhP 226,692/ARB) for Cooperative D. Cooperative D had the highest income because it succeeded in minimizing overhead cost. Meanwhile, Cooperative H has relatively lower income because of the low selling price of bananas at \$2.95/box and higher cooperative's retention at \$0.95/box when compared to \$3.15/box of selling price and \$ 0.50 retention of Cooperative C.

The loans to the three cooperatives were provided by the plantation corporation, Land Bank of the Philippines and private banks.

In contrast to the aforementioned cooperatives, Cooperative L selected the lease arrangement and utilized outside services of workers for the plantation corporation. The net incomes of the members consist of wages from farm work and dividends resulting from the difference between the actual wage and contracted wage. Net income of individual members of Cooperative L was PhP 99,143/ARB (PhP 124,551/ha). The biggest accomplishment of Cooperative L was achieving positive net surplus. As a result, Cooperative L was awarded 2010's most outstanding cooperative in Davao

because they did not receive any kind of loan from banks or other organizations. On other hand, Cooperative L lost the opportunity to generate potential gain from production of bananas through contract growing. That is the reason why they should reconsider their choice of lease agreement. The Chairman of Cooperative L explains that assistance is needed in order to upgrade computer facilities. This need is quite understandable since computers and other office appliances are essential in computing for the distributive amount of individual overhead cost in contract growing's farm operations.

For the two cooperatives with collective CLOA in contract growing, the next issue will be how to respond to the growers strong demand to realize subdivision of land by de jure not de facto. In that case, the provision of a special regulation is needed to protect the cooperative from the land conversion for other purposes, change of crops and any other irregular-activities in the farm.

In the long run, contract growing will lead to the expansion of the operations and building up of self-reliant growers. Cooperative H opened an additional two branches in Asuncion with 27 ha and Compostela with 25 ha to extend main operations as well as Cooperative C expanded 13.4 ha of cooperative land. These expansions were achieved only by the learning from past experience and utilizing knowhow taken from contract growing for banana production. If fact, the accumulation and dissemination of information on good practices, based on Cooperative L's success story will play a vital role in producing self-reliant growers in banana production.

V. Conclusion

As mentioned in the beginning, this paper illustrated different aspect to the common view that small growers' poverty is exacerbated by multi-national corporations' exploitation, the high price of input and low buying price of products. It presents the researcher's own understanding by describing how growers are on the way to becoming self-reliant banana farmers within the framework of AVA's contract growing scheme formulated through the DAR Administrative Order. It also showed how the policy to generate self-reliant growers improved with the participation of the cooperatives.

The economies of scale can be seen in commercial crops such as the sugar production. This is why productivity decreases as a result of the division of the plantation by land reform. But in the case of contract growing in banana production, the productivity difference brought about by the size of land was small. However, plantation corporations always postpone the land reform. Because of the high perishability of bananas, a hierarchical organization's central management system becomes indispensable in controlling the schedule of production from the initial stage of transportation up to shipping. This is to ensure that the banana's quality of the freshness meets foreign market's standards as well as to avoid the overproduction in the farm. This causes plantation corporations' management to defer subdividing the plantation by land reform.

The situation drastically changed because land distribution became possible through Collective CLOA issuance under CARP. This is issued to the cooperative or association, composed of the ARBs, it is not economically or physically feasible to divide the land into small lots. The contract growing scheme was simultaneously introduced as one of the scheme in the AVA's guidelines.

Through the synergies of agrarian reform, AVA and contract growing, the cooperative could

respond to the new circumstances in banana production. The decentralized production management scheme was introduced to the cooperative under this framework,. The framework is derived from contract growing wherein the cooperative can sell bananas bought from the member ARBs to the plantation corporation. Thus, the cooperative manages production which includes the harvesting, processing and packing of bananas. On the other hand, the plantation corporation manages, which includes the transportation of the boxed bananas to the cold refrigerator-equipped warehouse up to the special vessel. Most importantly, all the major rules of operations in farm's banana production are decided by the consensus of the member ARBs.

One of the decisions at made by member ARBs consensus is the implementation of the Individual Farming System (IFS). The basic concept of the IFS the grower owns all bananas he produces in his assigned lot. As a result, growers are provided a strong incentive to increase his lot's production. The land is subdivided equally among all member ARBs taking in to consideration the quality of soil. Overhead costs, or cooperative's retention, are deducted individually from buying price. It was arranged that as the quality of land decreases, the retention becomes smaller. Thus, member ARBs receive the equitable value of the amount of production harvested his own lot. The equally assigned and distributed lands ensure equal opportunity of production. The introduction of the IFS is the initial stage for the generating self-reliant growers. The equitable distribution reveals the social norm, which is inherent in the community.

Strengthening the governability of the cooperative is essential in maintaining the IFS. One way to do this is by preventing extra-contractual sales of the products to third parties. This phenomenon, also known as "warik warik", or "pole vaulting: is rampant during the lean season wherein middlemen offer better prices in order to cater to the increasing demand for bananas, especially for the Class B (middle class quality) in Middle East.

The real cause of these rule violations is the inability to respond buying price of bananas in this season. Both the cooperative and plantation corporation must be thoroughgoing in imposing preventive measures. An institutional price adjustment mechanism must be in place to ensure that the current selling price is closely related to the world banana price as was shown in the case of oil palm trading⁴⁰.

Efforts to demonstrate governability must be made by the cooperatives through the management and control of the plantation. In the other hand plantation corporations must be able to respond quickly to the volatility of the banana pricing. To further develop the sustainability of both cooperatives' and plantations' operations, a closer relationship is needed to establish credibility on both sides.

Regrettably, a number of the cooperatives are still in leasing agreements with plantation corporations. In order to encourage these cooperatives produce self-reliant growers by converting into AVA's contract growing scheme, technological and managerial assistance from the plantation corporation is urgently required. In this regard, the experiences of the four cooperatives in this paper will play a certain role.

⁴⁰ Nozawa (2011) pp.18-21

References

- Alano, Maria Lisa T. and Hipolito, Rommel Ab.(1999), "The Situation of Small Banana Growers of Stanfilco in Davao and Compostela Valley Provinces", *Mindanao Focus*, No. 4, Series of 1999.
- Ang, Suzanne (2000a), "Banana Split: The Stanfilco Banana Ezpansion in Tawantawan", *BANTAAN*, Vol.13, No.9-10., Alternative Forum for Research in Mindanao (AFRIM).
- Ang, Suzanne (2000b), "Agrarian Reform Implementation in the Banana Industry", *BANTAAN*, Vol.14, No.2-3., Alternative Forum for Research in Mindanao (AFRIM).
- Balangue, Glenis(2005), "Going Bananas: The Philippine Banana Industry", *IBON Facts & Figures*, Vol.28, No.3, IBON Foundation Inc..
- Borras Jr.,Sturnino M.,(1999), *The Bibingka Strategy in Land Reform Implementation: Autonomous Peasant Movements and Sate Reformist in the Philippines*, Institute for Popular Democracy.
- Borras, Jr., Saturnino M. (2002), "Problem and Prospects of Redistributive Land Reform in Mindanao, 1972/18988-2001." *Mindanao Focus*, No.1, Series of 2002, Alternative Forum for Research in Mindanao (AFRIM).
- Borras Jr.,Sturnino M. (2004), *Rethinking Redistributive Land Reform: Struggles for Land Reform and Power in the Philippines*,(dissertation for PhD, Institute of Social Studies, The Hague, The Netherland).
- Borras Jr., Saturnino (2008), *Competing Views and Strategies on Agrarian Reform, Volume I: International Perspective*, Ateneo de Manila University Press.
- Borras Jr., Saturnino (2008), *Competing Views and Strategies on Agrarian Reform, Volume II: Philippine Perspective*, Ateneo de Manila University Press.
- Cabilos, Minerva C. Cabungcal- (1997),"Operating a Rubber Farm as Landowners:The Experience of the SARPHILCARP Beneficiaries Multipurpose Cooperative in Implementation", *Making Agrarian Reform work – Achieving Sustainable Productivity*, Triparrd Series No.3, PhilDHRRA.
- Calderon, R.P. and Rola A.C.(2003), *Assessing Benefits and Costs of Commercial Banana Production in the Philippines*. Working Paper No.03-03, Institute of Strategic Planning and Policy Studies, College of Public Affair, University of the Philippines, Los Banos.
- Centro Saka (2008), *Philippine Small Farmers: Profile and Policy Implications*, Rural Development Review Vol.2. No.1., Centro Saka, Inc.
- David, Randolf S.,Rivera, Temario C., Abinales, Patricio C., Teves, Oliver G.,and Resabal Jr.,Procopio S. (1981), *Transnational Corporations and the Philippines Banana Export Industry*, The Third World Studies Center, College of Arts and Sciences, University of the Philippines

- De la Rosa, Nikki Philline C. and Ocampo, Jamir Nino P. (2009), "Cleaning 'Dirty Bananas'," *BANTAAN*, Vol.22, No.3, Alternative Forum for Research in Mindanao (AFRIM).
- De la Rosa, Romulo J. (2005), "Agrarian Reform Movement in Commercial Plantations in Mindanao: The Experience in the Banana Sector of Davao del Norte", in Chapter 2 of Franco, Jennifer C. and Borrás Jr., Saturnio edited *On Just Grounds: Struggling for Agrarian Justice and Citizenship Rights in the Rural Philippines*, Institute for Popular Democracy.
- De Leon O., Teresita, and Gema Maria O. Escobido (2004), *The Banana Export Industry and Agrarian Reform*, Mindanao Focus Special Edition, Alternative Forum for Research in Mindanao (AFRIM).
- Deriquito, Ferdinando (2005), "Palm Reading Taking the slick out of the oil palm sweet talk", *Mindanao Focus*, No.1. Series of 2005, Alternative Forum for Research in Mindanao (AFRIM).
- Deriquito, Tes Pacaba- (2004), "The AVA-mode of CARP in Banana Commercial Farms : BUSINESS AS USUAL", *Mindanao Focus*, No. 4. Series of 2004, Alternative Forum for Research in Mindanao (AFRIM)
- Escobido, Gema O. (2000), "BANANA SPLIT: The Stanfilco in Tawantawan", *BANTAAN*, Vol.13, No.9-10., Alternative Forum for Research in Mindanao (AFRIM).
- Fernil Jr., Salvador (1998), *The Philippine Banana Industry: Confronting the Challenge of Agrarian Reform*, Philippine Peasant Institute and Philippine Network of Rural Development Institute.
- Fernil Jr., Salvador (2008), "The Japanese ODA in Agrarian Reform: Where does Aid Go?" *Mindanao Focus*, No.1. Series of 2008, Alternative Forum for Research in Mindanao (AFRIM).
- Feranil, Mary Luz Menguita- (2006), "The ties that bind: Exploring the links of gender and labor in redistributed banana farms", *BANTAAN*, Vol.19, No.3-4., Alternative Forum for Research in Mindanao (AFRIM).
- Fernil, Mary Luz Menguita- (2007), "Gender, Land and Labor in a Redistributed Banana Plantation: The DAPCO Case," *Mindanao Focus*, No.1, Series of 2007. Alternative Forum for Research in Mindanao (AFRIM).
- Franco, Jennifer C.(2008), "Redistributive Land Reform In Agribusiness Plantations: Neither Desirable nor Possible", in Chapter 6 of Borrás Jr., Saturnino, *Competing Views and Strategies on Agrarian Reform, Volume II: Philippine Perspective*, Ateneo de Manila University Press.
- Franco, Jennifer C.(1999), "Post- CARP Banana Split Turns Deadly: What went wrong at HIJO Plantation ?", *Conjuncture*, Vol.11 No4 August, pp.1-7, Institute of Popular Democracy.
- Hayami, Yjiro, Adriano, Lourdes S. and Quisumbing, Ma. Agnes R.(1987), *Agribusiness and Agrarian Reform: A View from the Banana and Pineapple Plantations*, UPLB Center for Policy and Development Studies, Department of Agricultural Economics, and Department of Economics of the College of Economics and Management (CEM)
- Hayami, Yjiro, Quisumbing, Ma. Agnes R., and Adriano, Lourdes S.(1990), *Toward an Alternative*

- Land Reform Paradigm: A Philippine Perspective*, Ateneo de Manila University Press.
- Homeres, Gelah, Maria, Mendosa and Yumol, Marinel (2000), *The Struggle of Small Banana Growers: Hard Won Gains*, Philippine Peasant Institute.
- IBON Research Center (1998), *Contract Growing: Identifying TNC Control in the Philippines*, IBON Foundation, Inc.
- Jimbo, Nobuyuki (1962), *The Philippine Banana Industry*, The Jimboras Co.,Ltd. and Philippine Fruits Import Association.
- Nippon Koei Co. Ltd. (2007), *Study on Support Program for Agri-Enterprise Development (SPAED) of the Land Bank of the Philippines, Final Report* (dated October 17).
- Nozawa, Katsumi (2011), *Oil Palm Production and Cooperatives in the Philippines*, Discussion Paper 2011-13, University of the Philippines, School of Economics.
- Lara, Francisco J. and Morala Rachael O., with Lanuza-Reyes, Lelanee, Lacson-Paguio, Elizabeth, Lanahan Anna Ria B., and Acaba Jeffrey P., (2008) *Enhancing Taxation on Idle Agricultural Lands: A Policy Study in Aid of Legislation*, Development Academy of the Philippines and La Liga Policy Institute.
- Pioncio, Gilmor and Eco, Editha (2000), "Agrarian Reform and Corporate Farms: Case Studies on Selected Corporate Farms in Mindanao", *Mindanao Focus*, No.1, Series of 2000, Alternative Forum for Research in Mindanao (AFRIM).
- Quitoriano, Eddie L, Dargantes, Buenaventura, Moleta, Iino, and Nartea Paola (2008), *In the Hands of Farm Workers: Can Banana Commercial Farms Survive ?* Development Academy of the Philippines and La Liga Policy Institute.
- Republic of the Philippines (RP) , Department of Agriculture (DA) (2001), *The Philippine Agriculture and Fisheries Modernization Plan 2001-2004*.
- Republic of the Philippines (RP), Department of Agriculture (DA) (2009), *Prospects for Philippine Agribusiness* (Powerpoint presentation material).
- Republic of the Philippines (RP), Department of Agriculture (DA), Bureau of Agricultural Statistics (BAS) (2010a), *Agricultural Foreign Trade Development, 2010 Annual Report*.
- Republic of the Philippines (RP), Department of Agriculture (DA), Bureau of Agricultural Statistics (BAS) (2010b), *Producer Price Index for Agriculture 2007-2010 (2006=100)*
- Republic of the Philippines (RP), Department of Agriculture (DA), Bureau of Agricultural Statistics (BAS) (2010c), *Guide for Farmers: Production & Marketing Statistics 2007-2010 (2006=100) on Tomata, Ampalaya, Chayote, and Banana*.
- Republic of the Philippines (RP), National Economic Development Authority (NEDA) (2004), *Mid-Term Philippine Development Plan 2004-2010*.

- Republic of the Philippines(RP), National Economic Development Authority (NEDA) (2011), *Philippine Development Plan 2011-2016*.
- Republic of the Philippines(RP), National Statistical Coordination Board (NSCB) (2011), *2011 Philippine Statistical Yearbook*.
- Taya, Reine Kathryn D. (2004), "A Benighted: The Plight of Coconut Farmers in Davao Oriental", *Mindanao Focus*, No. 4 . Series of 2004, Alternative Forum for Research in Mindanao (AFRIM)
- Tecson,Eugene L. (2008), *Profile and Status: Philippine Farm Workers*, Rural Development Review Vol.3. No.1., Centro Saka, Inc.
- Third World Studies Center (1983), *Political Economies of Philippine Commodities*, University of the Philippines, The Third World Center
- Tadem, Eduardo, Reyes, Johnny and Magno Lindo Susan (1984), *Showcases of Underdevelopment in Mindanao: Fishes, Forest, and Fruits*, Alternate Resource Center.
- Not Availed (2008), "CARP Extension: Another Win –Win Solution ?", *BANTAAN*, Vol.21, No.2-3., Alternative Forum for Research in Mindanao (AFRIM).
- Not Availed (2009), "Agrofuel Crops: Promises of Uncertainty?", *BANTAAN*, Vol.22, No.1., Alternative Forum for Research in Mindanao (AFRIM).
- Not Availed (2009), "Global Land Deals," *IBON Facts & Figures*, Vol.32, No.5&6, IBON Foundation Inc..
- Not Availed (2009),"Corporate Agriculture, Solution to Food Crisis ?" *IBON Facts & Figures*, Vol.31, No.21, IBON Foundation Inc.
- Not Availed (), "Export Fruits Industry: When Farmers Settlers Turn Lesser to a Banana Corporation", *Mindanao Focus*, No. . Series of , Alternative Forum for Research in Mindanao (AFRIM)