UP School of Economics
Discussion Papers

Discussion Paper No. 2011-13 December 2011

Oil Palm Production and Cooperatives in the Philippines

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Abstract

The promotion of oil palm production as an agribusiness development policy is a major issue in response to the increasing demand of palm oil in the Philippines. This paper focused on oil palm production cooperatives composed of agrarian reform beneficiaries (ARBs) as members who were granted the Certificate of Land Ownership Award (CLOA). The paper scrutinized the difference of farm incomes with the land titles between the Individual CLOA and the Collective CLOA under the Agribusiness Venture Arrangement (AVA) mode through the field survey of the cooperatives in the provinces in Mindanao. In conclusion, the proposal was made with the emphasis on the necessity to provide production technology and management skill to the cooperatives and its ARBs members with the special emphasis given to those granted the Collective CLOA through the various kinds of agricultural assistance.

Key words

oil palm production, agribusiness, cooperative, agrarian reform beneficiaries, Agribusiness Venture Arrangement, contract growing, lease arrangement, Certificate of Land Ownership Award

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I. Introduction

The fundamental issues in Philippine agriculture are the increase of agricultural productivity and the increase of farm income. Given these fundamental issues, the promotion of agribusiness is recognized as an essential consideration in the industry. In line with the objective of agribusiness promotion, the Agriculture and Fisheries Modernization Act of 1997 (AFMA, RA 8435) was enacted under the Ramos Administration, which was then complemented by the Philippine Agriculture and Modernization Plan 2001-2004 (AFMP) under the Arroyo Administration. The AFMP, as a strategy to realize agriculture and fisheries modernization, defined the role of entrepreneurship, private investment, and mobilization of private participation. As an additional component of the plan, special emphasis was given to the regions in Mindanao as a foothold of High Value Commercial Crop (HVCC) development.

Recently, Philippine oil palm has been given attention as a promising commodity for agribusiness industry. As a background to the Philippine oil palm industry, there exists increasing domestic demand and increasing investor interest for this commodity. This is true especially in Mindanao, where historically and geographically, plantation agriculture dominates not only in the private sector, but also in the government sector, since local governments are Enthusiastic when it comes to developing the oil palm plantation and to encourage private investment.

In the meantime, agrarian reform became the key issue to adjust in the Philippine agricultural situation, as plantation development requires huge areas of land. Since it was prohibited to change the rice and/or corn lands to land used for other commodities, the use of the newly developed area and devastated lands was subject to some conditionality. One of the issues was how expansion of the land for oil palm plantation is to be realized within the frame work of agrarian reform program in Mindanao.

Given the issues stated above, this paper describes how the oil palm plantation in Mindanao developed in its production in the midst of agrarian reform policy, with emphasis given to the management of cooperatives which are organized with the agrarian reform beneficiaries (ARBs) workers in the plantation. The main method of this paper uses the methodology of case studies of the oil palm cooperatives in Mindanao using interviews as a survey method to the chosen representatives of the study.

This paper is organized as follows: Section II describes the current status of the palm oil production with special mention of the salient features of oil palm production. This paper points out the fact that the salient features of oil palm production affects the location of the plantation and provides organizational structure to the cooperatives. The history of oil palm production is described as follows: palm plantations were started as nucleus farms with the milling factory as its center. The recent trend of decreasing production is explained as a result of aging trees. Meanwhile, government policy to promote agribusiness is introduced as conceptualized as the HVCC, which was described as the reason for the strong demand for the palm oil in domestic market.

Section III clarifies how agrarian reform for the plantation was tackled after the Aquino Administration with emphasis on commercial farming. Much of the attention was given to the relation between the Comprehensive Agrarian Reform Program (CARP) and Agribusiness. In order to describe this relationship and the framework of the new approach within the CARP, the Agribusiness Venture Arrangement (AVA) was explained in detail. Most importantly, this paper also states that the titles of land acquisition were closely related to the schemes of the AVA.

Section IV presents the analysis through the detailed interview survey of three cooperatives in Mindanao, regarding how the types of AVA schemes were related to the management of the cooperatives, which are composed of the members of the agrarian reform beneficiaries (ARBs). This paper states that management of the cooperatives was obviously related to the farmer's income.

Lastly, for the conclusion of this paper, this paper makes the proposal for agribusiness development with the special emphasis on the necessity to provide the production technology and management skill to the cooperatives and its ARBs members with the special reference to those granted the Collective CLOA through the various kinds of agricultural assistance which will be most effectively support to the operations of the cooperatives in the oil palm production.

II. Oil Palm Production in the Philippines

II-1. Salient Features of Oil Palm Production

Oil palm is the raw material for palm oil which experiences strong demand in the worldwide market. Palm oil is used traditionally as edible oil (instant noodles, fried oil, margarine, and snack confectionery) and as non-edible oil (materials for detergent, paint, cosmetics). In addition to this, oil palm is affected by the increase in price of mineral energy due to the worldwide use of bio energy. Since 2005, palm oil has risen to leadership among vegetable oils, getting ahead of soybean oil. Historically, oil palm production was concentrated in Malaysia, and then Indonesia. In 2006, the production of palm oil in Indonesia was raised to 16.83 million metric tons (mt) in Malaysia to 15.70 million mt. This means that both countries produced 89.3 % of the world production for that year.

In terms of salient features of oil palm production, the following three points must be noted. First, oil palm trees can be harvested throughout the year regardless of the weather conditions, for 25 years once planted. As a comparison, vegetable oil plants, as represented by the soy bean, need sowing every year.

Secondly, the annual yield of the extracted oil, by oil palm per unit area, is 12.5 ~18.5 times that of soybean, as it is not affected by the timing of harvest and the condition of the weather.

Lastly and most importantly, the Fresh Fruit Bunch (FFB) of the fruits of palm oil trees contains strong lipase which hydrolyzes the oil. Once the flesh of fruit is damaged, it destroys the cell membrane and the hydrolyzation will begin by the lipase. As a result, harvest and transportation of the FFB should be conducted with the utmost care and caution. Additionally, the FFB needs to be heated with steam immediately after the harvest in order to avoid the lipase of the FFB. That is the reason why milling centers for oil palm are located mostly near the palm oil plantation. As for transportation equipment, large-size trucking vehicles are prepared for the distributors of oil palm. For the milling corporation side, they are needed to collect the stable amount of the FFB from the farmers. For that purpose the milling corporations encourage the producing farmers to organize their cooperatives, in order to enter the growing contract with them. Consequently, oil palm production through cooperatives is expected to eliminate the brokerage in the nearby areas.

II – 2 History of Oil Palm Production

Oil palm production started in the Philippines in 1966, as 280 ha of the first plantation from the Menzi Agricultural Corporation was opened in Basilan. However, this plantation was later turned over to farmers' cooperatives. In 1966, Kenram Industry, Inc. in Sultan Kudarat converted their ramie plantation land to oil palm, and then established 1,100 ha of nucleus farm and 3,000 ha of out grower farm to collect the FFBs with the initial Operating 20 mt/h capacity crude palm oil (CPO) mill. However in 2002,Kenram plantation land was transferred to the cooperative composed of ARBs under the Comprehensive Agrarian Reform Program[1].

On the other hand, the National Development Corporation (NDC) started to develop 4,000 ha of oil palm plantation in Agusan del Sur with the Gurthrie Corporation. For this purpose, NDC-Gurthrie Plantations Inc. (NGPI) was established. In 1981, the Gurthrie Corporation was acquired by the Malaysian government. However, NDC developed additional 4,000 ha of oil palm plantation with the new corporation, Kempulan Sendiran Betrhad (NSB) and established a new company, NDC-Gurthrie Estates Inc (NGEI).

Gurthrie Malaysia and NDC, established Filipinas Palm Oil Plantation Inc. (FPPI), which started the operation of a 40 mt/h CPO and refinery. Under the Corazon Aquino Administration, 7266 ha of the land of Filipinas Palm Oil Plantation was distributed to the 1,368 ARBs, and Certificate of Land Award (CLOA) was granted. In accordance with the privatization program of the government, all the shares of NGPI and NGCE owned by NDC were sold to FPPI, a joint venture of Filipino and Indonesian corporations[2].

Agusan Plantation Inc. (API), a relatively recent entry into the oil palm plantation development, is a joint venture between Filipino and Singaporean corporations, which established 1,800 ha of plantation in Agusan del Sur[3]. In 1996 API started the Outgrowing Program for the oil palm plantation, which was initiated by the cooperatives in the targeted area by the CARP and Land Use program of Department of Energy and Natural Resource. In addition to this, Agumill Philippines, Inc., (AGPI), a subsidiary of API started in 1998 its operation of capacity of CPO 20 mt/h mill. To improve the net working rate of the AGPI the along the Outgrowing Program in 2001-2005, the plantation was expanded to 5,000 ha in the Northern Mindanao Region and 4,200 ha in the Central Mindanao Regions, while the AGPI's own plantation of 1,800 ha produced the FBB to be extracted at AGPI mill. In 2007, AGPI also constructed a capacity of CPO 40mt/h oil mill in Maguindanao, ARMM, to process the oil palm produced in the same area[4].

Therefore, oil palm plantations were developed as nucleus plantations in which the extraction oil mills are located as nucleus centers.

As of 2008, there are five oil milling factories, the FFB processing capacity was at 142 mt/h. and they require 42,268 ha of oil palm plantations. (Table 1)

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[1] Cabilo （2003） p.6.
[2] Cabilo （2003） p.6.
[3] Philippine Coconut Authority, *The Philippine Oil Palm Industry -2009*, (Power Point Material).
[4] *AGPI Company History 2008*, (mimeograph)

Table 1. Palm Oil Mills in the Philippines, 2008

Name of Company (Ownership/Yr. established)	Location	Harvesting of FFB (ha)	Capacity (mt FFB/h)
Filipinas Palmoil Plantations, Inc.(Filipino-60%,Indonesian-40% /1981)	San Francisco, Agusan del Sur	9,747	40
Agusan Plantations Inc. (Agumil Phil.),(Singaporean- 60%, Filipino-40% /1983)	Manato, Torento, Agusan del Sur	23,281	20
KENRAM Industries (Filipino-100%/1967)	Isulan, SultanKudarat	7,600	20
Buluan Palm Oil Mill (2008)	Buruan, Maguindanao	—	40
Phili. Aric. Land Dev. & Mill, Inc. (PALM Inc. /2005)	Carmen, Bohol	800	20
ABERDI	Bukidnon	—	2
Total		40,268	142

(Source) Philippine Coconuts Authority (2009), *The Philippine Oil Palm Industry-2009 (Powerpoint presentation material).*

II - 3 Strong Demand, Insufficient Production

The increase of production has not occurred, as palm oil production in 2006 was 42 thousand mt, which is only 0.4 % of that by Indonesia. On the contrary, domestic demand of palm oil was five times of production, which implies that the domestic production has not responded to the increase in demand. That is the reason why oil palm production has drawn considerable attention since the early 2000s, because the price of palm oil is relatively cheap and the extent of the utilization is broad.

According to the forecast of domestic demand for palm oil, using the private survey conducted by the Philippine Palm Oil Development Council, Inc. (PPDCI)[5], domestic demand for palm oil increases annually by 10%, and in 2010 it reached 293,000 mt, which is 2.6 times the 2006 figure. While the forecast by the Department of Agriculture states that the production has decreased annually by 2000mt and down to 34,000 mt in 2010, a 37.1% decrease compared to the figures in the year 2000. The supply and demand gap became 259,000mt in 2010. (Table 2)

[5] Interview to Mr. Chan Chee Kong, Vice Chairman of PPDCI.

The reason for the decrease of production is the ageing of raw trees. To respond to the situation, the PPDCI made three proposals. First, the development of new land for oil palm production with the target of reaching 16,000ha to 20,000 ha annually. Second is the replanting 70 % of existing old trees. Third, import of the shortage volume of palm oil.

Table 2. Palm Oil Production, Demand and Import in the Philippines, 2000-2010

(Unit : mt)

Year	Production	Demand	Import
2000	54,000	113,000	59,000
2001	52,000	124,000	72,000
2002	50,000	136,000	86,000
2003	48,000	150,000	102,000
2004	44,000	165,400	121,400
2005	46,000	182,000	136,000
2006	42,000	200,000	158,000
2007	40,000	220,200	180,200
2008	38,000	242,200	204,200
2009	36,000	266,400	230,400
20010	34,000	293,000	259,000

(Source) (1) Department of Agriculture (2009), *Prospects for Philippine Agriculture (Powerpoint presentation).*

On the other hand, looking into the harvesting area of the oil palm trees, it can be seen that there is an increasing trend as harvesting was 25,237 ha in 2003, 29,000 ha in 2007, and 46,398 ha in 2008 (Table 3). The harvesting area of 46,398 ha is almost equal to the above-mentioned area of 40,268 ha responding to the capacity of mill, considering three years of time lag from planting to harvesting.

Then, the Palm Oil Industry Development Plan 2004-2010[6], which was prepared by the PPDCI, declared that the potential harvesting area in the Philippines was expected to reach 304,350 ha. With this optimistic forecast, harvesting area will expand to 6.5 times of the present area.

Looking into the harvested areas of oil palm in the Regions, in 2008 the Mindanao regions shared 36,300 ha, 78.2 % of total area, the Central Visayas region, including Bohol Island, shared 6,500 ha, 14.0% and Luzon, including Palawan Island, shared only 3,592 ha,7.7 % (Table 4).

[6] Philippine Palm Oil Development Council Inc. (2004), *Palm Oil Industry Developing Plan (2004-2010)* (Mimeograph).

II – 4 Agribusiness and AFMA

The Agriculture and Fishery Modernization Act (AFMA, RA8435) was enacted in 1997 under the Ramos Administration. By the succeeding administrations, Agriculture and Fisheries Modernization Program (AFMP) was established with the emphasis on promotion of the production of commodities within the framework of agribusiness development. Then, as agribusiness development is closely related to the development of Mindanao, the private sector focused on the oil palm production in Mindanao.

Table 3. Oil Palm Harvest Area in the Philippines, 2003, 2005 and 2008

Region	2003	2005	2008
(Luzon)	(-)	(-)	(3,592)
I-VI-B Luzon - Palawan	-	-	3,592
(Visayas)	(3,994)	(5,300)	(6,506)
VII – Central Visayas	3,994	5,300	6,506
(Mindanao)	(21,243)	(27,703)	(36,300)
ＩＸ- Weastern Mindanao	0	0	62
X -Northern Mindanao	190	413	1,128
XI -Davao	217	244	1,217
XII-SOCSARGEN	6,777	6,906	13,961
ＸIII-CARAGA	13,462	15,404	17,252
ＡＲＭＭ	597	736	2,680
Total	25,237	29,004	46,608

(Source） Philippine Coconuts Authority (2009), *The Philippine Oil Palm Industry-2009, (Powerpoint presentation material).*

With regard to the government policy to develop oil palm production, the Medium-Term Philippine Development Plan (2004-2010[7] prepared under the Arroyo Administration described that the Goal 1is to develop at least 2 million hectares of new land for agribusiness in order to contribute 2 million out of the 10 million jobs targeted as a legacy by 2010, and this goal makes Mindanao the main agro-fishery export zone, because Mindanao hosts a very wide variety of economic activity and investment opportunities. Some of these are focused in the agribusiness and fishery sectors including industrial tree plantation of oil palm and rubber[8]. And Goal 2 makes food plentiful at competitive prices, where cost of priority "wage goods" such as rice, sugar, vegetables and

[7] RP-NEDA (2004) *Medium Term Philippine Development Plan 2004-2010*. p.30.
[8] RP-NEDA (2004) *Medium Term Philippine Development Plan 2004-2010*. p.34.

so on must be reduced[9]. This means that the government will continue to fight for self-sufficiency in rice production.

Additionally, the Arroyo Administration prepared the Agriculture and Fisheries Modernization Plan (2001-2004) in which the Ginintuang Masaganang Ani (GMA) Program for High-Value Commercial Crops (HVCC) began with the aim to increase the production of banana, mango, garlic, onions, cut flowers, and legumes[10]. For the details of the priority crops under GMA-HVCC program, the Department of Agriculture prepared the guidelines in which the priority crops per region were explained with attention given to the regions in Mindanao[11]. Oil palm is prioritized in region 13 (Caraga Region), because region 13 requires the oil palm production by every municipality.

Nevertheless, given the above mentioned policies to promote agribusiness, there are no specialists on oil palm production in the government agency in charge of it, the nursery of oil palm trees was left operated by the milling factories. In other words, there is no agency in charge of the palm oil industry directly; the Philippine Coconut Authority is tentatively responsible for palm oil. As a background, the price of coconut oil is higher than the price of palm oil in the international market. Besides, it is considered that there might be the political decision to prioritize to protect the coconut related farmers[12].

III. Agrarian Reform and Agribusiness

III - 1 CARP in the Plantation Agriculture

For plantations that need a large scale of agricultural land, the relevant details are described in the Comprehensive Agrarian Reform Law (CARL, RA 6657) which legalizes the Comprehensive Agrarian Reform Program (CARP). Under the CARP, the provisions are described regarding land of multinational corporations, the commercial farm, and the corporation lands.

In the case of the land of multinational corporations, all land of public domain leased or possessed by, and other government land operated by multinational corporations shall be programmed for acquisition and distribution within 3 years (CARL Section 8). And the private land leased and possessed by multinational corporations

9 RP-NEDA (2004) *Medium Term Philippine Development Plan 2004-2010*. p.35.

10 RP-DA (2001) *The Philippine Agriculture and Fisheries Modernization Plan (2001-2004)*, p.58-59.

11 Department of Agriculture, *Priority Crops Under GMA-HVCC Program 2009* (Power Point material).

12 Price of crude palm oil was US$880/mt (FOB Malaysia) in 2008, while coconut oil was US$1,170/mt (FOB Philippines) according to the data provided by Philippine Coconuts Authority.

shall be subject to compulsory acquisition and distribution upon expiration of the contract in effect August 29, 1987, or upon its valid termination whichever comes first but not later than the 10 year period following the implementation of the act. However, during the said period, the government shall take steps to acquire this land. In general, land shall be distributed directly to the individual worker-beneficiaries. In case it is not economically feasible and sound to divide the land, then, they shall form a worker's cooperative which shall deal with the corporation for the purpose of entering into a lease or growers agreement (CARL Section 8).

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

Corporation farms recently tackled the controversial issues regarding the agrarian reform of their lands[13]. In general, lands shall be distributed directly to the individual worker beneficiaries. In case it is not economically feasible and sound to divide the land, it shall be owned collectively by the worker beneficiaries who shall form workers cooperative or business associations (CARL Section 29). And as a very special clause, corporations owning the agricultural lands may give their qualified beneficiaries the right to purchase such proportion of the capital stock of the corporation (CARL Section 31). And if within 2 years from the approval of the act, the land or stock transfer is not realized, the land shall be subject to the compulsory coverage of the act (CARL Section 31). In addition to this, pending the final land transfer, agricultural lands of mandated corporations are mandated to execute a production sharing plan with their farm workers or their organization. In the event that corporation realizes gross sales in excess of 5 million pesos per annum, 3 % of gross sales are distributed to farm workers above the wages they currently received. And in the event that corporation realized profit additional 10 % of the net profit after tax shall be distributed to the farm workers (CARL Section 32). These provisions with regard to production and income-sharing shall apply to farms operated by multinational corporations (CARL Section 8) and by commercial farms (CARL Section 11).

CARL has a specified duration of 10 years, and then CARL was extended another

[13] Especially the issue on the Luisita Hacienda owned by the Cojuangco family in August 2010.

10 years under the Ramos Administration in 1995through an act to strengthen the implementation of the CARP and other purposes (RA 7905). However due to the strong requests by farmers unions, the law was extended 5 years again through an act strengthening CARP (RA 9700) which was enacted under the Arroyo Administration in 2008.

III – 2CARP and Agribusiness

Looking at the results of CARP as of 2000, the accomplishment rate of private land is 50.2%, out of which tenanted farms for rice and corn or OLT is 88.9% and other private land is 40.9%. Out of the portion for other private land compulsory acquisition has been delayed, as only 9.8 %, especially for land under 50 ha was obviously delayed as it was only 3.7 %.While land over the 50 ha. marked 23.9 % on which the agrarian reform of plantation raised the important and as it was closely related with the agribusiness plantations.

Table 4. Accomplishment of Land Reform in the Philippines（1972-2000）・(Private Land, Jurisdiction in DAR)

Land Titles	Program (ha)	Accomplishment (ha)	Percentage
Operation Land Transfer （OLT）	579,920	515,434	88.9
Other Private Land	2,416,585	987,819	40.9
Voluntary Offer to Sell （VOS）	396,684	329,619	83.1
Voluntary Land Transfer （VLT）	287,742	370,048	130.0
Government Financial Institution（GFI)	229,796	140,342	61.1
Compulsory Acquisition （CA）	1,505,363	147,810	9.8
50ha over	456,588	109,345	23.9
24ha over～50ha	312,355	11,516	3.7
5ha over～24ha	736,420	26,949	3.7
Total	2,996,105	1,503,243	50.2

（Source）Department of Agrarian Reform (DAR).

III - 3 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. And 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).

For the basic concept for AO No.9 of 1998, the Agribusiness Venture Arrangement (AVA) was introduced with the intention to develop the cooperatives composed of the plantation workers.

The salient features of the AVA are as follows. 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). In this section, it emphasizes the increase of productivity. This means that economies of scale is carried within the framework of the CARP as it is also mentioned in AO No.2 of 1999, and it ensures security of the 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 objective. Especially since the investor has the means and the capability to provide the 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 is applied to all the commercial farms. Types of commercial crops included banana, pineapple, rubber (Section 2(f), AO No.9 of 1988). It is understood that the above mentioned 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, the effective measures to promote and to attract foreign, as well as local investments to the agribusiness sector entered into the front of agrarian reform policy. This means that the goal of agrarian reform changed from the simple transfer of the land title to the inclusion of the increase in productivity. This exact moment could be placed as "the paradigm shift of agrarian reform policy in the

Philippines".

The contents of the AVA were composed of 7 modes. 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 5)

Table 5. Agribusiness Venture Agreement (AVA) Modes

(1) Joint Venture Agreement
Joint Venture Agreement is an agribusiness venture whereby a company is organized and co-owned by an investor and the agrarian reform beneficiaries through their cooperatives of associations. The investor may provide the management and marketing skills, technology infrastructure, and capital while the ARB's contribution/participation in the joint includes labor, the usufructuary rights to land, and capital, infusion, if available. （DAR AO No.9 Series of 1998, Sec.3.(i)）
(2) Lease Arrangement
Lease Arrangement in an agribusiness scheme whereby the ARBs', through their cooperative or farmworkers' association, enter into a contract of lease with the landowners/investor. The Lessee shall have farm control and operations within an agreed period of time but not to exceed ten (10) years, subject to extension upon mutual agreement of both parties. The lease rental shall not be less than the amortization to be paid by the ARBs to the Land Bank pf he Philippines. （DAR AO No.9 Series of 1998, Sec.3.(j)）
(3) Contract Growing/Growership Arrangement
Contract Growing/Growership Arrangement is an agribusiness arrangement whereby the ARBs own the land and commit, either collectedly through their cooperative or individually, to produce certain crops for an investor or agribusiness firm that contracts to buy the produce at at pre-arranged terms. （DAR AO No.9 Series of 1998, Sec.3.(e)）
(4) Management Contract
Management Contract is an agribusiness agreement whereby the ARB's or their cooperative/organization, hire the service of the landowner or an investor to manage and operate the farm in exchange for fixed wages or commission. （DAR AO No.9 Series of 1998, Sec.3. (k)）
(5) Build-Operate-Transfer (BOT) Scheme
Build-Operate-Transfer (BOT) scheme refer to a contractual arrangement enter into pursuant to RA 6957, as amended, whereby the project proponent undertakes the construction, including financing, of a given infrastructure facility and the operation and maintenance thereof for an agreed period of time not to exceed twenty five (25) years subject to extension. （DAR AO No.9 Series of 1998, Sec.3. (b)）

(6) Production, Processing and Marketing Agreement

Production, Processing and Marketing Agreement whereby the beneficiaries engage in the production and processing of agricultural products and directly sell the same to the investor who provides loans and technology. （DAR AO No.2 Series of 1999, Sec.5. (c)(ii)）

(7) Service Contract

Service Contract whereby the beneficiaries engage for a fee the service of a contractor for mechanized land preparation, cultivation, harvesting, processing, post harvest operations, and other farm activities. （DAR AO No.2 Series of 1999, Sec.5. (c) (v)）

（Source） Department of Agrarian Reform Administrative Order No.9, Series of 1998: Rules and Regulations on the Acquisition, Valuation, Compensation and Distribution of Deferred Commercial Farms. Department of Agrarian Reform Administrative Order No2, Series of 1999: Rules and Regulations Governing Joint Economic Enterprises in Agrarian Reform Areas.

The choice of the modes under the AO No.9 of 1998 depends upon the decision of the ARBs or cooperatives. In some cases, the compound contract with the plural schemes was chosen.

III - 4.Land Acquisition, Distribution and Types of the CLOA

One of the provisions which attracted attention in the CARP was the procedure of land acquisition and distribution. In these procedures, five means were categorized in the CARP. They are Voluntary Land Transfer (VLT), Voluntary Offer for Sale (VOS), Compulsory Acquisition (CA), Operation Land Transfer (OLT), and Governmental Financial Institutions (GFI) (Table 6). Out of all of these, the VLT, VOS and CA are the main procedures. For the detailed breakdown in Mindanao in 2001, VLT was the biggest at 35.5%, followed by VOS at 30.2 %, by CA at 10.6 % in all of Mindanao. However, in the Davao Region VOS was the biggest at 45.9 %, followed by VLT at 20.4 % (Table 7). Thus, in the Davao Region ARBs chose the VOS because land owners prefer the cash portion of amortization payment.

The compensation of the landowner is arranged through the just compensation as provided in the CARL (Section 17, RA 6657).The valuation of the compensation for the land shall be determined finally by the landowner, the DAR and the LBP. The compensation shall be paid by the LBP, with the option of balance of cash and financial instruments in accordance of the area (Section 18, RA 6657). The compensation shall be paid to the LBP in a 30 year amortization period at 6% interest per annum (Section 26, RA 6657).

With regard to the AVA, the important provisions are the types of the Certificate of Land Ownership Award (CLOA). 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, RA9700).

The other is the Collective CLOA in which the ARBs cannot identify their own land. In case of collective ownership, 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).

Table 6. Modes of Acquisition and Distribution under CARP

(1) Voluntary Land Transfer (VLT)
Is the Direct Payment Scheme, through which the land transfer is directly made between landowner and beneficiary farmers (Section 20, CARL). The farmer beneficiary directly makes the payment, in cash or in kind, to the landowner under the terms mutually agreed upon by both parties and with the approval of the DAR. (Section 21, CARL)
(2) Voluntary Offer to Sell (VOS)
is a scheme that seeks to encourage landowner cooperation to the program by providing a financial incentive amounting to 5% of the payment for the land (with corresponding decrease of 5% in bonds). (Section 19, CARL)
(3) Compulsory Acquisition (CA)
refers to the transfer where the government expropriates the landholding whether or not the landowner cooperates with the program. Settlement is made in staggered bonds-cash payment as follows: landholdings exceeding 50ha, the cash portion is 25% of total payment; 24 ha over, up to 50ha, 30 %; and [illegible]
(4) Operation Land Transfer (OLT)
Is the land transfer scheme involving rice and corn farms to tenant farmers ordered by President Marcos under a decree the Emancipation of Tenant-Farmers in 1972. The operation followed by the succeeding administrations. (Presidential Decree No.27)
(5) Government Financial Institutions (GFI)
Land transfer under this category involves the Governmental Financial Institution acquiring the lands as the mortgage of landowner.

(Source) Author.

The data for issuance of the CLOA as of 2008 indicated that the number of titles issued under the Collective CLOA nationwide was 21.1 % of total CLOA, while the area under the Collective CLOA was is71.1 %. The situation is different in the case of Collective CLOA in CARAGA as the number was 17.5% while the area was 82.5% (Table 8). The data means that for the Collected CLOA the area per one title was 11.38 ha nationwide, while for the Individual CLAO the area per one title was 1.24 ha, almost 10 times of the Individual CLOA. So it is understood that the Collective CLOA is common arrangement in the large scale of the plantation.

Table 7. Accomplishment of Acquisition, Distribution of Land (as of December, 2001)

Region	VLT		VOS		CA		OLT		GFI		Total	
	Area (ha)	Share (%)	Area (ha)	Share (%)	Area (ha)	Share (%)	Area (ha)	Share (%)	Area (ha)	Share (%)	Area (ha)	Share (%)
Mindanao (all Regions)	195,082	35.5	166,094	30.2	53,281	9.7	77,197	14.0	58,430	10.6	550,084	100.0
Davao Region (1)	37,671	20.4	84,631	45.9	21,990	11.9	21,787	11.8	18,490	10.0	184,569	100.0
Compostela Valley	17,349	29.7	20,905	35.7	9,076	15.5	5,019	8.6	6,141	10.5	58,490	100.0
CARAGA Region	21,746	37.2	18,740	32.0	4,124	7.0	6,494	11.1	7,409	12.7	58,513	100.0
Agusan del Sur	13,640	48.5	4,563	16.2	2,017	7.2	2,444	8.7	5,439	19.4	28,103	100.0

(Note)（1）includes Provinces of Sarangani、South Cotabato.

（Source）（Borras, Saturnino M., 2002) "Problem and Prospects of Redistributive Land Reform in Mindanao, 1972/1988-2001", *Mindanao Focus*, No.2. AFRIM.

Table 8. Classification of Certificate of Land Ownership Award (CLOA) (as of June, 2008)

Regions, Provinces	Individual CLOA				Collective CLOA				Total			
	Title (Number)	Share (%)	Area (ha)	Share(%)	Title (Number)	Share (%)	Area (ha)	Share(%)	Title (Number)	Share (%)	Area (ha)	Share(%)
The Philippines	736,196	78.9	914,015	29.0	196,670	21.1	2,238,728	71.0	932,866	100.0	3,152,743	100.0
South Mindanao Region	32,786	69.9	42,148	21.4	14,107	30.1	154,922	78.6	46,893	100.0	197,070	100.0
Compostela Valley	8,398	75.0	11,231	24.0	2,725	25.0	35,569	76.0	11,193	100.0	46,800	100.0
CARAGA Region	20,238	63.0	34,178	17.5	11,883	37.0	161,655	82.5	32,121	100.0	195,833	100.0
Agusan del Sur	11,139	65.9	7,507	8.1	5,753	34.1	84,877	91.9	16,892	100.0	92,384	100.0

(Source) Data prepared by the Department of Agrarian Reform.

IV. AVA and Cooperatives

In this section, this paper describes through the use of case study, how the actual AVA was applied to the cooperatives in the plantation for the oil palm production and what kind of problems cooperatives faced.

To analyze these problems, the most attention was paid to what kind of scheme of the AVA was selected by the cooperative. In terms of the actual selection of the AVA schemes by the cooperative, the most decisive factor was the kind of land title which was issued to the cooperative members. They are two types, namely the individual Certificate of Land Ownership Award (CLOA) and the collective CLOA. In the case of the individual CLOA, the members can identify their own land. However, in the case of collective CLOA the members cannot identify their own land.

IV -1 Cooperative N by Contract Growing with the Individual CLOA

IV -1 -1 The Cooperative with the ODA Support

In the case of the Cooperative N located in Poblacion, Municipality of Nabunturan, Province of Compostela Valley, Mindanao. Cooperative N was established by the emergence of four multi-purpose cooperatives in Nabunturan, and registered to Cooperative Development Authority (CAD) in 1990. Cooperative N was authorized as the major component within the Agrarian Reform Community (ARC) which was the framework introduced under the Ramos Administration in 1993 to accelerate the Comprehensive Agrarian Reform Program (CARP)[14]. Thus Cooperative N was authorized as the ARC supported by the Agrarian Reform Infrastructure Support Project Phase I (ARISP-I) which was assisted by the Japan Bank for International Cooperation (JABIC). The number of members of Cooperative N is 987 farmers. The area of the cooperative is measured at 3,273 ha, of which 1150 ha is for rice production utilized with the facilities supported by the ARISP-I,100ha was under the Communal Irrigation System constructed by the ARISP-I ,110 ha was benefited under the Small Impound Project and 420 ha was prepared for coconut harvesting. The other part of the area remained as undeveloped area planting the root crops, banana, and other fruit trees. This undeveloped land was

[14] ARC is the policy concept authorized under the Ramos Administration in 1993 to constitute the framework in which the land distribution is defined as the main purpose and is to provide the agrarian reform support project through the area development approach supported by the foreign and/or international aid program including ARISP of Japan. Scale of unit of targeted ARC is average 2,000 ha in one barangay (village) with the 2,000 farmers who are ARBs granted 2.0 ha. As of June 2009, 2105 of ARCs were organized in the entire Philippines.

prepared for oil palm plantation.

The land subject for ARISP-I was initially held by the local bank, Rural Bank of Montevista, as the mortgage, and acquired by Land Bank of the Philippines under the CARP. Finally, the land was distributed to the ARBs through the Voluntary Offer to Sell (VOS) scheme. The price of the land was 8,000 pesos/ha with amortization for 30 years at interest rate of 6.0% per annum. And most importantly, Individual Certificates of Land Ownership (CLOA) were issued to ARBs which identify each area of the awardees.

In terms of strengthening the operation of the Cooperative N through the ARISP-I, three points should be considered. First, the role of economic infrastructure, as one of the hard infrastructure in irrigation construction is obviously helpful with the rapid increase of agricultural production. In the case of rice production, it enabled 4.3 mt/ha per annum[15]. In addition to this, the Post Harvest Facility (PHF), such as warehouses and solar dryer, made it possible to control quality of the crops after harvest. Furthermore, preparation of Farm Market Roads (FMR) saved the time and cost to transport the crops to the market. Second, the soft infrastructure for institutional development, such as strengthening system, financial management, operational plan building played a vital role in management of agricultural production and operation and maintenance of the hard infrastructure. Third, through the integration of four multi-purpose cooperatives in the Cooperative N as recommended by ARISP-I, economies of scale were realized to cope with the problems they faced.

Given the above mentioned results, Cooperative N could succeed in improving the operation of oil palm production which started in 1996 with the support of the Rural Farmers Agrarian Reform Support Credit Program (RASCP) of Japan's official development assistance. RASCP is the fund through which the Land Bank of the Philippines (LBP) uses to financially support the agricultural operation. With this fund, the Cooperative N started palm oil production, and after the purchase of the seedling, entered the growing contract with Agumill Philippines, Inc. (AGPI), a subsidiary of Agsan Plantations Inc. (API). Under the technological assistance of AGPI, the size of the oil palm operation expanded from 100 ha to 254 ha.

IV - 1 - 2 Contract Growing with the Plantation Corporation

Cooperative N has an area of 279 ha and 131 member farmers, all of the members are land owners as they are ARBs, and basically the tenanted farmers are excluded from the membership. However, it is available if the farmer has enough funds to

[15] Field survey data provided by the Japan International Cooperation Agency (JICA).

participate in the operation of the cooperative.

Oil palm production by Cooperative N was conducted through the contract growing with the AGPI which provides the technological assistance for the production, marketing, and seed. And all of the FFB was to be sold exclusively to the AGPI. The tripartite agreement on production, technical and marketing by the Cooperative N, API and LBP is for a period of 25 years which includes attached two schedules on minimum quality standard, and the FFB pricing formula. That means this contract is the compound contract with plural modes of the AVA, namely contact growing, production, processing and marketing agreement.

For the schedule on minimum quality standard, a lot of attention was paid to the ripeness and the freshness. Regarding the freshness, the FFB should be delivered to the mill on the same day as it was harvested and FFB which was more than 2 days old will be rejected (Table 9).

Table 9. Minimum Quality Standard of FFB

(1) Ripeness

①Under ripe: any bunch with less than 10 detached fruitlet

②Over ripe : any bunch with more than 50% detached fruitlet

③Each delivery should not contain more than 15% under ripe and/or 30% over ripe bunches.

(2)Freshness

①Crops should be delivered to the Mill on the same days as it is harvested.

②Crops which is more than 2 days old will be rejected or subject for quality control.

(3)Contamination

①Crops should be not be contaminated with any extraneous matter.

②Badly contaminated crop will be rejected.

(4)Length of stalks

①Maximum stalk length should be 5 cm. From the base of bunch.

(Source) *Production, Technical and Marketing Agreement* (tripartite agreement signed by Cooperative N, AGUMIL Philippines and Land Bank of the Philippines on November 22, 2000)

For the schedule of the pricing, the formula and the guidelines for extraction are presented as follows. According to the formula for pricing, the selling price of FFB/mt is computed by the data of actual extraction ratio of Crude Palm Oil (CPO) and selling price of CPO in international market, and the exchange rate. Thus the pricing system of the FBB is transparent and effective in order to exclude the advantage of buyers' strong position to beat down the price. At the same time, it becomes apparent that the surplus by the AGPI is 15% of the amount of the international price of CPO deducted mill's processing cost (Table 10).

Table 10. Pricing Formula for FFB

(1) Price of FFB/mt

[(A x B x C) + (D x E) −600 pesos/mt] x 85%

A = Mill's Actual Oil Extraction Ratio (OER) of the crop delivered

B= Mill's Recent Palm Oil (CPO) Selling Price in US Dollars

C= Prevailing Exchange Rate (Pesos/US Dollar)

D= Mill's Actual Kernel Extraction Ratio (KER)

E= Mill's Recent Palm Kernel Price in pesos

Pesos 600/mt= Mill's Processing Cost (Current)

FFB=Fresh Fruit Bunch

CPO= Crude Palm Oil

OER=Ratio of CPO extracted from FFB

KER=Ratio Palm Kemels extracted from FFB

Note: This is subject to change dependent on the variations or the cost of operations (e.g. Labor wages, spare parts, etc. which will be subject for discussion by the pesos)

(2) Guideline for OER and KER

Years from Field Planting	OER（%）	KER（%）
３～４	15.0	3.0
４～５	17.0	3.4
５～６	19.0	4.0
６～７	20.0	4.0
７～１１	20.5	4.0
１２～１４	20.0	4.0
１５以上	18.0	4.0

Note: OER and KER shown above are for reference. Actual extraction ratio will be furnished Cooperative N, AGUMIL Philippines and Land Bank of the Philippines on November 22, 2000)

(Source) *Production, Technical and Marketing Agreement* (tripartite agreement signed by Cooperative N, AGUMIL Philippines and Land Bank of the Philippines on November 22, 2000)

With regard to the financial loan, LDB provided to the Cooperative N the fund from Technical Assistance/ Credit Assistance Program-Beneficiary Development (TACAP-BD, the system under the above mentioned RASCP). The fund provided by the TACAP-BD is 4.92 million pesos which was availed 70 % by LBP, 25 % by DAR, and 5 % by the Cooperative's own fund. Under the AGPI program, the schedule for the oil palm production is 12 years of the harvesting cycle with the first 5 years acting as a grace period. Phase I of the program is from the year 2001 to 2011 (grace period year 2001 to 2005) and phase II for the year 2009 to 2019 (grace period for the year 2007 to 2012) The available loan for Phase I is limited to 4.90 million pesos (49,000 pesos/ha x 100 ha) and in the case of Phase II, 6.0 million pesos is expected.

The condition for the availed loan is an interest rate of 12% plus a service fee of 2% by LBP, and 2 % of service fee by the Cooperative N. Loan amount is delivered directly to the user farmer, and repayment will be done by the user himself.

Currently, the loan for Phase II started in 2007, the amount of 60,000 pesos has been delivered for 3 years. However, the actual need of each member is 100,000 pesos. LBP made a recommendation to the Cooperative N to make use of its own working capital.

Out of the total area for the palm oil plantation, 200 ha were subject for loan by LBP. Out of which for Cooperative N invested in 11 ha through the availed loan by the local bank, First Consolidated Bank, and for the remaining portion of 68 ha the cooperative N is to make use of own fund.

IV - 1 -3 The Net Surplus by the Oil Palm Operation

Sales from the operation of Cooperative N in 2008 were 14.8 million pesos, for the oil palm operation I and II, then gross sales were 1.54 million pesos after deducted the cost of sales. In addition to this, interest income, and after deducting administration cost, net surplus for the oil palm operation was 31,425 pesos (Table 11).

As for the cost of sales, this included fertilizer cost, service charge (2 % of loan amount), management charge (0.10 pesos/kg of CPO), and trucking fee (0.60 pesos/kg). These costs were included to the revenue of the independent operations, together with the administration cost. One of the salient features of the activities by the Cooperative N was the diversification of its activities. The diversified activities were extended over to eleven operations. They were administration fund, consumer, catering, oil palm, water system, ARC lot, post harvest facilities, small water impound, rice trading, lending and livestock, and trucking service, thus total incomes by these operations were amounted to 1.74 million pesos in 2008. In the case of the trucking service, it generated 1.26 million pesos by itself with the 14 tons of transportation vehicles[16]. Net savings for the period, after deducting the statutory fund, was distributed to the members as dividends of the members' capital share and the patronage fund. Total amount of the members' equity as of the end of 2008 was 1,829 million pesos including capital share and statutory fund

[16] Interview to the manager of the Cooperative N.

and it means 20,023pesos for each member[17].

Ⅳ - 1 - 4 Income of the Oil Palm Farmer

Looking into the income of the oil palm farmer for 2008, according to the interview survey, the average production of the FFB is 24.62 mt /ha, the average area of the farm land is 2.12 ha (279 ha/131 ARBs), and the average price of the FFB is 5447 pesos. The annual revenue for each member farmer is 284,302 pesos (5447 pesos x 24.62mt/ha x2.12 ha). The average cost of the production is 35% of the revenue, so net income is 184,796 pesos. Out of which the repayment of development loan to LBP, 103,880pesos (Phase I loan 49,000 pesos/ha x 2.12 ha) was deducted[18]. The retained by each farmer was 80,916 pesos of net income. This was the average oil palm income for the farmer of Cooperative N. The farmer's income was indicated on the pay-slip which is issued during the weight measuring of the FFB which the farmer brought to the milling center, after deducting the production cost from sales amount. During this time, the repayment of the loan amount to the LBP was confirmed.

Aside from the income availed from the sale of the FFB, each member farmer received the dividends of the capital shares and the patronage fund. For the year 2008, the total amount of distributive fund for all the members was 70% of net surplus which is equivalent to 121,551 pesos. For each member the amount was 123 pesos (173,645 x 70% ÷987 farmers). In the end, the total amount for each member was 81,039 pesos annually（Table 11）.

Ⅳ - 1 - 5 Initial Investment for Self Reliant Cooperative

Cooperative N had invested during the period from 2007 to 2009to procure 11 ha of land for oil palm planting at the cost of 470,000 pesos with the longer perspective for the cooperative activity. The fund used for the land was availed by an outside loan. Up to now, Cooperative N was continuously assisted by the ARIP project as well as funding

[17] Interview to the manager of the Cooperative N.
[18] Interview to the manager of the Cooperative N

Table 11. List of Cooperatives Interviewed

Cooperative N	Cooperative S	Cooperative A
〔Cooperative〕	〔Cooperative〕	〔Cooperative〕
(Location) Poblacion, Nabuntran, Compostela Valley	(Location) TuiboTubo, Moncayo, Compostela Valley	(Location) Manat, Torento, Agusan del Sur
(Operations) Multipurpose Cooperative ①Oil Palm, ②Consumer, ③catering, ④Water- Supply, ⑤ARC Land, ⑥PHF, ⑦Irri.- I, ⑧Irri. -II, ⑨RicveTra., ⑩Livestock, ⑪Trucking	(Operations) Multipurpose Cooperative ①Oi l Palm, ②Rubber, ③Catering, ④Lending,⑤ Service	(Operations) Multipurpose Cooperative ① Oil Palm, ②Consumer, ③Lending
(Number of Members) 987 (of which ARBs 822)	(Number of Members) 145 (of which ARBs 93, Associate Members 52	(Number of Members) 475 (of which ARBs 362)
(Area) 3,273 ha (of which ARISP-1,150 ha)	(Area) 483 ha (of which oil palm 100ha, rubber 380 ha	(Area) 1,427 ha
(CDA Registration) 1999	(CDA Registration) 1994	(CDA Registration) 1991
(CARP Application) Individual CLOA, VOS, 2001	(CARP Application) Collective CLOA, VOS, 1991	(CARP Application) Collective CLOA, VOS, 1991
(Assessment of Land) 8,000 pesos/ha	(Assessment of Land) 43,735 pesos (3,000,000 pesos Loan by DBP to former landowner)	(Assessment of Land) 6,000 pesos/ha
〔Oil Palm Production〕	〔Oil Palm Production〕	〔Oil Palm Production〕
(AVA) Contract Growing (with AGPI)	(AVA) Contract Growing (with AGPI)	(AVA) Lease Agreement of 1,427 ha to API

Table 11. List of Cooperatives Interviewed

Cooperative N	Cooperative S	Cooperative A
		42years、Annual Rental 3,500pesos/ha
		Only 50 ha Grower Contract with API
（Number of Members）	（Number of Member）	（Number of Members）
131 （all ARBs）	30 （all ARBs）	475 （of which ARBs 362）
（Area）	（Area）	(Area)
279 （Phase-I, 100 ha）	100 ha （Phase Ⅰ 100 ha）	1,427 ha
(Production) (FFB, 2008)	（Production） (FFB, 2008)	(Production) (FFB, 2009 data by API)
2,462.87mt/100ha =24.62mt/ha	2,214.07m/100ha＝22.14mt/ha	18.0mt/ha x 1,427ha=25,686mt (all area)
(Phase I)		
（Loan Obtained）	（Loan Obtained）	（Loan Obtained）
4,929,340 pesos as RASPI (LBP 50%,	Production Loan 6,000,000 pesos by LBP	Production Loan 5,000,000 pesos by API
DAR 25%, Coop Fund 5%)		
（Transportation Vehicle）	（Transportation Vehicle）	（Transportation Vehicle）
1 unit, 13 tons of track	2 units, 14tons of NISSAN track	None
(Oil Palm Operation, Sales, 2008,PhaseI,II)	（Oil Palm & Rubber Operation, Sales） (200７)	
Gross Sales 14,803,283 pesos	Oil Palm Sales 8,948,561 pesos （89,485 pesos/ha）	
(58,290 pesos/ha)	Rubber Sales 7,713,174 pesos (20,297 pesos/ha）	
Surplus 1,545,556 pesos		
Net Surplus 31,425 pesos		
〔Oil Palm Farmer Income〕 (2008)	〔Oil Palm Farmer Income〕 (2007)	〔Farm Income by ARBs〕 (2008)
①Oil Palm Income 80,916 pesos/Farmer	①Dividend (Oil Palm) 73,515 pesos/Farmer	①Rental
②Dividend 123 pesos/Farmer	(Dividend Rubber Only 28,068 pesos/Farmer)	3,500pesos/ha x 3hax79%
Total 81,039 Pesos/Farmer	②Dividend(Other 3	②Agricultural Works

Table 11. List of Cooperatives Interviewed

Cooperative N	Cooperative S	Cooperative A
	Total 77,801	160pesos/Farmer・day/26dayx12months =49,920peos/Year/farmer ②Dividend 499 pesos/farmer Total 58,719
（Investment） (2008） Acquired 11 ha of Oil Palm Land (Financed 470,000 pesos, to be repaid by own reserve)		

（Source） By Interview Survey to the Cooperatives.

and technology through RASCP by the LBP. Cooperative N had started a new stage to strengthen its abilities to become a more self-reliant multi-purpose cooperative.

IV - 2CooperativeS by Contract Growing with the Collective CLOA

IV - 2 -1 The Cooperative with the Management of the Previous Plantation Corporation Supported by Local NGO

Cooperative S is located in Barangay Tubu Tubo,Municipality of Monkaya, Province of Compostela Valley. Cooperative S is organized mainly with the members of the rubber plantation workers who were employed by the Sarmiento Philippines, Inc. (STARPHIL) and registered to the Cooperative Development Authority (CDA) in 1994.Cooperative S is composed of 145 members and 52 associate members engaged in consumer operation, with a total area of 483 ha. Cooperative S was provided in 2001 with a two story building donated by the Grass Roots Assistance project of the Japan International Cooperation Agency (JICA). The building is used for administration office, assembly hall, and training center, and also day-care center.

STARPHIL was formerly owned by the 3 brothers of the Sarmiento family, one of the conglomerates in Mindanao. One of the rubber plantations owned by STARPHIL became the subject of the Comprehensive Agrarian Reform Program (CARP), and the negotiations continued for 5 years starting 1991. As a result, the land was finally transferred to the plantation workers with the Collective CLOA. After the tough negotiations, STARPHIL agreed that the amount of the compensation would be 20.15 million pesos with the condition of an interest rate at 6 % per annum and an amortization period of 30 years. The monthly amortization was 157,500 pesos, and the amortization payment was done by lump sum by Cooperative S. In relation to the negotiation, as mentioned above, Cooperative S was organized by the Agrarian Reform Beneficiaries (ARBs).

In this section, this paper points out two salient features of the Cooperative N. First, the management and high ranking staff of STARPHIL joined the managers and staff of the cooperative[19]. For example, the area supervisor of STARPHIL was assigned as the president of Cooperative N. This means that the management skill, as well as the information needed for the rubber plantation operation was all transferred to the Cooperative N as is. Second, it was the role of the local NGO, PhilDHRRA, which

[19] Interview to the manager of the Cooperative S.

extended its nationwide activities for the issues on agricultural and rural development[20]. The overall assistance given by PhilDHRRA made the Cooperative N succeed in the management of the operation through the scheme of contract growing under the AVA arrangement.

IV - 2 -2Conversion of the Rubber Plantation to the Oil Palm Plantation

As mentioned above, Cooperative S was engaged in rubber cultivation before it started its operation, and even after their operation began, Cooperative S still continued the rubber cultivation.

However, Cooperative S started oil palm planting in 2005. As of 2009, out of 483 ha, 156 ha continued the rubber plantation as before. Then out of the remaining 327 ha, 224 ha was used to extend the rubber plantation, for which LBP and DAR arranged the AGRISOLUTION project. AGRISOLUTION is a project financially supported by the World Bank. The remaining 100 ha was prepared for oil palm production. In 2004,LBP provided the production loan in the amount of 6 million pesos to the Cooperative S with the conditions of a 12% interest rate per annum, and service charge of 2%.

The five reasons Cooperative S entered oil palm production areas follows[21].

First, oil palm operation brings high productivity, as well as high profitability. Second, the expansion of the local market for palm oil is expected, as there is a forecasted increase in demand for palm oil. Third, although the land for the rubber plantation was inclined, the land was convertible for the purpose of oil palm planting. Fourth, in the case of the production of latex and high quality rubber, equipment of centrifugal separators was required. However, in the case of production of oil palm, there was no need of equipment. Fifth, as most of the rubber trees were already old, the quality of rubber was already inferior.

The Cooperative S entered the contract growing with Agumil Philippines, In. (AGPI). The conditions mentioned in the contract were exactly the same to that of Cooperative N and AGPI. Accordingly, all volumes of oil palm harvested were brought to AGPI using two units of NISSAN trucks with a capacity tonnage of 14 mt. Selling price of the FFB is linked to the international price of Crude Palm Oil (CPO). On the other hand, as the contract of the rubber production has already expired for the time being, Cooperative S brings the products directly to Pioneer Enterprise Inc. without the contract.

[20] Interview to the manager of the Cooperative S.
[21] Interview to the manager of the Cooperative S.

IV - 2 – 3 Income of the Members Attained by Equal Distribution of Net Surplus

With regard to the statement of financial operation by the Cooperative S in 2007, gross sales of the FFB and oil palm products were 8.94 million pesos, while gross sales of rubber product were 7.71 million pesos[22].In terms of unit area, oil palm product was 89,485 pesos (8,948,561 pesos÷100 ha), and rubber product was 20,297 pesos (7,713,174 pesos÷380 ha). Therefore, it was obvious that productivity of oil palm was higher than that of rubber (Table 11).

In terms of computation of net surplus of palm oil, the formula used for net sales was gross sales of the FFB minus direct fertilizer cost, direct harvesting labor and direct spraying labor. Then net surplus was reached by adding interest income and other income to net sales and deducting administration cost from net sales. Therefore, it could be pointed out that fertilizer cost and direct labor cost were not covered as independent accounts of the operation.

Applying the above mentioned formula, net surplus for oil palm operation amounted to 3.15 million pesos and net surplus for rubber production at 2.52 million pesos[23]. In terms of the amount per unit area, oil palm operation amounted to 31,500 pesos (3,150,643 pesos÷100 ha) and 6,647 pesos (2,526,125 pesos÷380 ha) for rubber operation. The operation of oil palm was more profitable compared to that of the rubber operation.

Net income of each member of Cooperative S was reached by the equitable distribution of net surplus. In this case, income was the distribution of net surplus, while in the case of Cooperative N, it was the distribution of net sales. Therefore, the amount of the dividends was computed by the net surplus deducted 30% for the statutory reserve (15% for General Reserved Fund, 15% for Cooperative Training and Educational Fund). So in the case of Cooperative S, for profitable operation of oil palm, the dividend of member's capital shares and the patronage fund amounted to 73,515 pesos/farmer (3,150,643 pesos x 70%÷30 farmers). On the other hand, in the case of the rubber operation, the dividend of member's capital shares and patronage fund amounted to 28,068 pesos/member (2,526,125 pesos x 70%÷63 farmers).

For the additional dividends from the other 3 operations, which is the consumer store, micro lending and credit service for members, additional dividends amounted to

[22] Interview to the manager of the Cooperative S.
[23] Interview to the manager of the Cooperative S.

4,286 pesos/farmer (887,953 pesos x 70%÷145 farmers)[24].

In summary, the income for the each cooperative member amounted to 77,801 pesos for the year of 2007（Table 11）.

For the associate members of Cooperative S, no dividends were allocated for land related net surplus. Therefore, the associate members of the cooperative were given the wage for the plantation labor for harvesting and fertilizer spraying, which amounted to 7,540 pesos/month (290 pesos x 26 days). The payment of social insurance for the associate members was shouldered by the Cooperative S.

Ⅳ-3 Cooperative A by Lease Arrangement with the Collective CLOA

Ⅳ-3 – 1 The Cooperative with the Land of Lease Back to the Previous Plantation Corporation

Cooperative A is located in Barangay Manat, Municipality of Torento, Province of Agusan del Sur. In the Municipality of Torento, the milling factory of AGMILL Philippines Inc. (AGMI), a subsidiary of Agusan Plantations Inc.(API), operates for crude palm oil extraction. Near the milling factory, the nursery of oil palm seedling by the AGPI also operates.

Adjacent to the milling center lies Cooperative A which was organized in 1989, and registered at the Cooperative Development Authority (CDA) in 1991. Presently, the Cooperative has 475 members, out of which 362 members are agrarian reform beneficiaries (ARBs) who were granted the Collective Certificate of Land Ownership Award (CLOA) in 1991 under the Comprehensive Agrarian Reform Program (CARP). Their farm land is located in the Municipality of Torento with a total area of 1,982 ha, of which 1,427 ha, 70%, is covered by the CLOA. The farm land was previously owned 40% by API, and 60% by National Development Cooperation (NDC). The land was delivered to the plantation workers under CARP, as mentioned above, and Cooperative A was organized by the ARBs.

The most salient feature of Cooperative A is that 1,427 ha was leased back to API for a period of 42 years starting 1997 until 2039 with the rental amounted 3,500 pesos/ha. Since the average area of the ARB’s land is 3.0 ha, the rental amount equates to 10,500 pesos/beneficiary. Eventually, a total amount of 4.99 million pesos as rental for 142 ha was to be paid to API every year. At the initial stage, leasing period was for 35 years

[24] For the other 3 operations in 2007, net surplus of consumer operation was 322,071 pesos, small credit operation was 379,827 pesos and lending operation was 186,055 pesos by interview to the related persons of the Cooperative S.

until 2032. However, the period was extended by 7 years. The extension of the contract was arranged with the condition that the API provided 5 million pesos of the production loan with no interest, and Cooperative A provided 50 ha of its land for the use of API's oil palm development project.

The repayment of the loan amounted to 5 million pesos by the Cooperative A and was scheduled to be amortized for 7 years staring 2007, deducted from the yearly rental.

Therefore, the cooperative members were employed as plantation workers for API with daily wages of 160 pesos/farmer.

IV - 3 -2 Lending Operation as the Main Operation by the Cooperative A

The biggest problem for the management of Cooperative A is the amortization of land, even though it started as the organization of the ARBs. According to the interview with the selected sample, as of 1991, assessment of the land price was 6,000 pesos/ha, the total balance of amortization to payable to LBP was 8,562,000 pesos, with an interest rate of 6%, for the period of 30 years. Interestingly enough, Cooperative A had not enough financial capacity to amortize. Except for the first payment of970,000 pesos which is equivalent to the amortization for 7 years from 1989 to1996, there is no payment done yet.

It is certain that Cooperative A is expected to receive rent amounting to about 5 million pesos as annual rental of the land. However, it does not mean that the cooperative received that entire amount. Actually, the average amount for rent was 10,500 pesos/member, out of which 500 pesos was deducted as loan amortization. In addition to this, 1,700 pesos was deducted from the amount, as 1,000 pesos for administration, 500 pesos for capital reserve, 100 pesos for cooperative savings and 100 mortuary funds. In the end 3,004,600 pesos was distributed to the ARBs members (8,300pesos/member x 362 members).

The range of activities of Cooperative A is limited to two operations, the consumer operations and credit operations. According to the interviewee, sales of the consumer operations in 2008 amounted to 99,409 pesos and revenue from credit operations at 496,495 pesos. After deducting the operating cost, net income of consumer operations amounted 29,940 pesos, and for credit operations amounted 309,318 pesos[25]. It is quite obvious that main source of net income in Cooperative A is the credit operation.

On the other hand, oil palm production of the API project on oil palm

[25] Interview to the manager of the Cooperative A.

development by 50 ha was not yet recorded, as the harvest was expected to start on January 2010. So no FFB was transported with regard to the land of that project. On top of that, labor service by the cooperative members for harvesting was not recorded in the operations of Cooperative A.

In terms of the property of Cooperative A, agricultural land of 1,427 ha was 8.56 million pesos and oil palm development project land of 50 ha was 1.85 million pesos. The long-term debt of 4.59 million pesos was the remaining portion of loan availed by LBP with an interest rate of 6.0 % mortgaged the land of the Cooperative A[26].

In terms of the credit operation, the working capital was prepared by members' equity, and interest income by credit operation amounted 439.381 pesos and net income of 309,318 pesos were achieved. The portion of net income was included in cooperative training and education fund and so on. As a result, the statutory fund at the end of 2008 amounted to about 503,416 pesos at the end of 2008[27].

IV - 3 - 3 The Cooperative Prefers the Stable Income from Rent of the Land.

With regard to the income of individual member of the Cooperative A, as agrarian reform beneficiaries, it was computed by the following three formulas.

First, distribution of rent amounted to 8,300 pesos (10,500 pesos x 79 %) annually, and 692 pesos monthly.

Second, dividends of capital shares and patronage funds amounted to 237,481 pesos (net income 339,258 pesos x 70%), that is 499 pesos/member (237,481 pesos÷475 member) annually, 42pesos monthly.

Third, wages as a plantation worker, 4,160 pesos (160 pesos/day x 26day) monthly, and 49,920pesosannually.

All in all, each member received 4,894 pesos for monthly income, 58,791 pesos for annual income.

Basically the Cooperative A was composed of agricultural workers for oil palm plantation and do not take risks. Those who shoulder the risk are plantation owners, as it was clarified that API controls production technology, purchase of material, and marketing of FFB. A manager of API explained that although the API encouraged Cooperative A to promote the oil palm development project in 50 ha land providing loan amounted 5 million pesos with contract growing, the members of Cooperative A are still

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[26] Interview to the manager of the Cooperative A.
[27] Interview to the manager of the Cooperative A.

in the wait-and-see attitude and lack initiative to attain self-sustainability.

IV - 4 Summary of the Survey of the Three Cooperatives

In this section, this paper concludes with the summary of the interviews of the three cooperatives. First to be pointed out is the fact that agrarian reform beneficiary farmers must amortize to LBP with an interest rate of 6 % per annum, for 30 years. In this case, the beneficiaries cannot avail of the loan for that purpose from LBP. The farmers have not enough financial capability to negotiate with the land owner on Voluntary Land Transfer (VLT) or Direct Payment System (DPS) as the means of land acquisition and distribution. Actually the three cooperatives under the survey preferred to select Voluntary Offer to Sell (VOS). Nevertheless, there was one like Cooperative A, which could not pay the amortization due the lack of financial capability. The other two cooperatives were also in the same situation, in dealing with the difficult problems of the financing schedule. Cooperative S requested the LBP to reschedule the repayment when it was faced with the low price of palm oil, while the Cooperative N examined the timing of rescheduling in the same business environment. Basically, the schedule of amortization depends on the volumes of production and price of palm oil.

The next important issue is regarding the types of the modes from the AVA selected by the cooperatives engaged in oil palm plantation. The range of the AVA is decided by whether the certificate of land ownership granted to the beneficiary farmers is the Individual CLOA, by which the farmers can identify their land, or the Collective CLOA, by which the farmers cannot identify their land. In the case of Cooperative N, it was the Individual CLOA that the cooperative selected contract growing scheme. As the farmers identify their land, all the oil palm harvested from the land belonged to them. Thus the type of the scheme under the AVA gave the farmers incentive to work harder. The technological assistance by the ARISP-I and RASCP also contributed to its success. In addition to this, revenues from oil palm production were computed by deducting the production cost according to the weight on the occasion of delivery to the mill. Eventually, this process reflected the effective management of Cooperative N, as it succeeded in diversifying the operation through setting up separate accounts for each operation and diversifying its activities.

However, in the case of Cooperative S, although it was granted the Collective CLOA it still entered the contract growing. Then its operations were put on the right track because Cooperative S was provided the management know-how through the accurate guidance by the managers of the previous plantation owner, STARPHI, as well as the assistance by the local NGO. Since the farmers could not identify their own land, beneficiary members decided on the equitable distribution of the products among its members by means of equal distribution of net surplus of the cooperative. It was shown here that it was possible to select the growing contract even though it was granted the Collective CLOA.

According to the conditions mentioned in the contract, the FFB should be brought within 24 hours to the mill. That is the reason why both Cooperative N and Cooperative S were equipped with their own trucking vehicles.

Quite on the contrary, Cooperative A, who was granted the Collective CLOA in which members could not identify their own land, selected lease arrangement as AVA contract to lease back the land to the former plantation owner. As a result, there was a lack of enthusiasm to increase production from Cooperative A by means of the growing contract, but instead depend on the revenue from rent.

These differences in the AVA modes reflected the volumes of the per unit oil palm production. The production of Cooperative N was 24.62 mt/ha, and for Cooperative S was 22.14 mt/ha, while for Cooperative A was only 18.00mt/ha according to the data released by the mill.

In summary, comparing the annual income of the member farmers of three cooperatives, the Cooperative N was 81,039 pesos, the Cooperative S was 77,801 pesos and then the Cooperative A was 58, 719pesos the lowest among three. The farmers of the Cooperative A received only a small amount as they were hired only as plantation workers.

Thus, it was established that the most important is how the cooperatives engaged in the oil palm production can demonstrate their entrepreneurship through the AVA contract or make its members demonstrate entrepreneurship by themselves. In the case of Cooperative A, the plantation corporation, the previous land owner arranged the loan for 50 ha of oil palm development project to give financial assistance to encourage the cooperative to enter the grower contract of oil palm production with the intention of the constant and stable supply of the FFB to the milling factory. However it did not succeed as of now due to the lack of the capability of the cooperative.

On the other hand, in the case of Cooperative N, it invested using their own funds to acquire an additional 11 hectares for their new oil palm plantation to strengthen the Cooperative's sustainability[28].

[28] Interview to the manager of the Agusan Plantations Inc.

As the main players of the agribusiness development, the cooperatives, composed of agrarian reform beneficiaries, need to be incentivized to demonstrate their entrepreneurship. For that purpose, it is urgently requested to construct and institutionalize the supporting system for those cooperatives with the assistance of the related private and public agencies.

V. Conclusion

In this article five points are clarified as follows, after which, the proposal of the paper was presented.

First, oil palm production has the unique feature which other crops have, that is that the FFB should be delivered within 24 hours for the extraction at the milling factory. As a result, oil palm plantations are located close to the milling factory, and the system of transportation with big trucking vehicles is needed. Besides, the formation of cooperatives is important to construct the system of rotation in order to collect stable volumes of the products. Thus, the system to produce oil palm through cooperatives succeeds in eliminating the intermediate brokerage.

Second, oil palm production in the Philippines started in the 1960s, which was the same period as Malaysia, which is presently a big producing country, started producing. Nevertheless the production of oil palm did not proceed and was delayed after that. The reason for the delay was the fact that the government prioritized coconut oil production and used very mild measures to improve oil palm production. This trend still continues until now, for instance, there is no government agency in charge of the oil palm production and is tentatively covered by the Philippine Coconuts Authority.

Third, oil palm production has experienced considerable attention since the early 2000s, because the price of palm oil was relatively low and due to its wide range of utilization. The domestic demand for palm oil increased rapidly under these circumstances. At the same time, the Agriculture and Fisheries Modernization Act (AFMA) was enacted in 1997 under the Ramos Administration. In succeeding administrations, the Agriculture and Fisheries Modernization Program (AFMP) was established with the emphasis on the promotion of the production of commodities within the framework of agribusiness development. Then, as agribusiness development is closely related to the development of Mindanao regions, the private sector focused on the oil palm production in Mindanao.

Fourth, at the same time of the enactment of the AFMA, the issue on the extension of the Comprehensive Agrarian Reform Law (CARL) was discussed, as the CARL deferred agrarian reform of commercial farms. As a result of the process of CARL, the Administrative Order by the DAR issued to distribute land to the ARBs who work for the commercial farms. Included in the details of the contents of CARL, economies of scale and increase of productivity, as well as securing the land possession and guarantee of the agricultural income were proclaimed. For the basic scheme to realize the contents of the AO, the Agribusiness Venture Arrangement (AVA) was introduced with the intention of developing the cooperatives and their members. Besides, selection of the scheme mentioned in AVA was followed by the decision of the cooperative or ARBs. Thus agribusiness was introduced into the framework of agrarian reform. The goal of agrarian reform changed from the simple transfer of the land title, to the inclusion of the increase of productivity. This movement could be placed as the paradigm shift of agrarian reform policy in the Philippines.

Fifth, and the most important conclusion of this article, it was clarified what types of modes were arranged by the cooperatives and what kinds of problems they were faced in the actual contract of the AVA arrangements. In the case of the ARBs who were granted the Individual CLOA, as they selected the compound contract with contract growing accompanied with the management contract and production, processing and marketing agreement, they were provided with the incentives to increase production, and resulted in increase in farm income.

On the other hand, the case of the ARBs who were granted the Collective CLOA and selected the lease arrangement, the cooperative member ARBs contented themselves as workers for the plantation, the previous owner of the land. Their income takes the form of wages as agricultural laborer and rent. Naturally, they lacked incentive to increase production. On the other hand, even though the ARBs were granted the Collective CLOA, they selected the contract growing mode of the AVA, and the sales income was delivered as the dividends from the net surplus. Their incomes were more than those workers in the plantation. In the end, regardless of the type of the land granted, the compound contracts with the contract growing accompanied by management contract and production, processing and marketing agreements are preferable.

As was explained in the cases surveyed, it was clarified that the contract growing by the cooperative is one of the effective schemes for the promotion of agribusiness. In the case of Cooperative A, the plantation corporation which purchased the FFBs encouraged the contract growing for 50 ha providing the loan fund. This means that the plantation corporation has prioritized the stable supply of the FFB for milling. In the case of Cooperative N, it invested the amount equivalent of 11 ha of oil palm plantation by themselves. Thus, the introduction of AVA arrangement is expected to demonstrate and enhance the entrepreneurship.

From the view of the ARBs it can be said that they recognized the extended concept of the philosophy of agrarian reform from "the land belongs to those who cultivate" to "increase productivity leads to increase the income".

Under the circumstances mentioned above, the author made a proposal with the emphasis on what is needed for agribusiness development, which is to provide the production technology and management skill to the cooperatives and its ARB members with emphasis on to those granted the Collective CLOA through the various kinds of agricultural assistance.

As the main players of agribusiness development, the cooperatives composed of the ARBs are needed to be incentivized to exercise their entrepreneurship. For that purpose, it is urgently requested to construct and institutionalize the supporting system among the related private and public agencies.

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