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The Comprehensive Agrarian Reform Program after 30 Years: Accomplishments and Forward Options

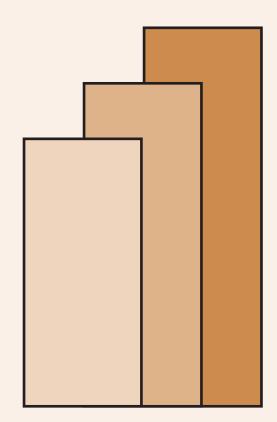
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THE COMPREHENSIVE AGRARIAN REFORM PROGRAM (CARP) AFTER 30 YEARS:

ACCOMPLISHMENTS AND FORWARD OPTIONS



11 DECEMBER 2017 MARIFE M BALLESTEROS, JENICA ANCHETA AND TATUM RAMOS Philippine Institute for Development Studies (PIDS)

List of Acronyms

AGP	Average Gross of Production
AOP	Administrative Order
ARB	Agrarian Reform Beneficiary
ARC	Agrarian Reform Community
ARF	Agrarian Reform Fund
ASP	Approved Survey Plan
BARC	Barangay Agrarian Reform Council
BIR	Bureau of Internal Revenue
CA	Compulsory Acquisition
CARL	Comprehensive Agrarian Reform Law
CARP	Comprehensive Agrarian Reform Program
CARPER	Comprehensive Agrarian Reform Program Extension with Reforms
CENRO	Community Environment and Natural Resources Office
CF	Claim Folder
CLOA	Certificate of Land Ownership Award
DA	Department of Agriculture
DAR	Department of Agrarian Reform
DENR	Department of Environment and Natural Resources
ERUL	Estimated Remaining Useful Life
FGD	Focus Group Discussion
GAA	General Appropriations Act
GFI	Government Financial Institution
GOL	Government-Owned Land
KAMMPhil	Kapunungan sa Mamumuong Mag-uuma sa Philippine Greenhills
КШ	Key Informant Interview
LBP	Land Bank of the Philippines
LDIS	Land Distribution and Information Schedule
LES	Landed Estates
LH	Landholding
LMS	Land Management Sector
MARO	Municipal Agrarian Reform Officer
MC	Memorandum Circular
NOC	Notice of Coverage
OCT	Original Certificate of Title
ODC	Owner's Duplicate Copy
OLT	Operation Land Transfer
PARO	Provincial Agrarian Reform Officer
PD	Presidential Decree
RA	Republic Act
ROD	Register of Deeds

RP	Republic of the Philippines
RSS	Requisition of Survey Services
SETT	Settlement Area
SMARBEFA	San Miguel Agrarian Reform Beneficiaries Farmers' Association
ТСТ	Transfer Certificate of Title
VLT	Voluntary Land Transfer
VOS	Voluntary Offer to Sell

Abstract

This study evaluates the performance of CARP in the last 30 years using the program's theory of change. A results chain framework was constructed and the program processes examined drawing from several studies that assessed the implementation and impact of CARP. The study notes that the accomplishments of CARP in terms of land reformed area and number of beneficiaries for the past 30 years have been substantial. However, there is evidence that the program has been poorly targeted in terms of areas covered and beneficiaries. DAR experienced difficulty in constructing the land inventory and masterlist of beneficiaries due to the absence of parcel based information on land use and ownership and the poor land record system in the country. There is also no inventory of farmers or tenants in the country. Targeting thus has been largely influenced by landowners, local officials including DAR officials at the local level so as to expedite the process of land tenure improvement. The agrarian justice system had to deal with conflicts between landowner and ARBS and among ARBs. It also has to deal with cases on cancellation of titles creating instability in property rights of CARP generated titles. The study also notes that there is weak evidence of overpricing of the land acquired by the government. The bulk of subsidy to farmers comes from the amortization subsidy in terms of regular subsidy, and implicit subsidies such as below market interest rates and non-imposition of penalties for delayed payment. Impact studies of CARP reported some welfare effects but these are muted and are generally observed among areas where lands covered have higher productivity. It is also not clear through what channels CARP improved welfare since welfare effects were similar between land owning agricultural households that acquired land through CARP and those through purchase or inheritance. There is also no clear evidence whether the objectives of CARP to increase investments in agriculture, increase access to formal credit of farmers and equity have been achieved. While the implementation of the program may have been flawed, redoing land reform by revising the law towards a "genuine" program is unnecessary. Only a few big-sized agriculture lands (greater than 50 hectares). The objectives of poverty and equity can also be achieved through alternative programs that is of lower cost to the government. The agrarian sector should instead focus on support programs to modernize agriculture that will benefit all small farmers (whether ARB or non-ARB). DAR should consider developing organizations or mechanisms to improve productivity and address economies of scale. The indefeasibility of CARP issued titles should be established by facilitating the resolution of issues on conflicts, title cancellation, default on land payments by ARBs, and transfers of awarded lands. The issue on landownership concentration can be dealt with through a progressive land taxation that can be supported by the ongoing improvements and digitization in land administration at the LRA and the DENR.

CARP After 30 years: Accomplishments and Forward Options

I. Background of the Study

The Comprehensive Agrarian Reform Program (CARP) was introduced almost three decades ago with the approval of Republic Act No. 6657 (RA 6657), also known as the Comprehensive Agrarian Reform Law (CARL) of 1988.¹ The program is an expanded version of previous land reform programs in the country beginning the mid-1930s. Similar to the early land reform initiatives, CARP included both developmental and redistributive programs. The developmental program provides for the disposal of public alienable and disposable (A&D) lands with the intent to open up frontier lands while the redistributive program involves the redistribution of property or rights on private agricultural lands and the abolition of agricultural (or share) tenancy.

However, while post war land reform was largely a developmental program; CARL is centered on the redistributive program. In particular, the focus on redistributive land reform started in the 1960s, with the enactment of the Agriculture Land Reform Code of 1963 (RA 3844), which was further strengthened by the Agrarian Code of 1972 (or PD27). RA3844 and PD27 decreed the abolition of share tenancy; instituted a leasehold system; lowered the ceiling on agricultural landownership to 75 hectares (RA3844) and further to 7 hectares under PD27. The lower retention limits on ownership of agricultural lands effectively increased the scope of private farms or landholdings that can be subject to land redistribution.² The disposal of public alienable and disposable agricultural lands continued but as an adjunct component under CARP.

Following both RA3844 and PD27, the Comprehensive Agrarian Reform Law (or CARL) adopted similar mechanisms for leasehold and land transfers. However, while RA3844 and PD27 were operationalized based on the basic principle of land to the tiller, the CARL has broader objectives. It adopted the UN definition of land reform which considers "an integrated program of measures designed to eliminate obstacles to economic and social development due to defects in the agrarian structure" (UN Progress in Land Reform, 1990). This means CARL has the triple objectives of equity/ social justice, improvement of farming efficiency and poverty reduction. Moreover, the coverage of CARP was expanded from primarily rice and corn lands to all agricultural lands; target beneficiaries include both tenants and farmworkers; and the retention limits on landownership of agricultural lands was set at 5 hectares. Furthermore, support services to agrarian reform beneficiaries were made an integral component of CARP.

¹ Republic Act No. 6657: Comprehensive Agrarian Reform Law of 1988. An Act Instituting a Comprehensive Agrarian Reform Program to Promote Social Justice and Industrialization, Providing the Mechanism for its Implementation, and for Other Purposes.

² In early land reform programs, the retention limits for ownership of private agricultural lands were set at very high levels – 300 hectares of contiguous lands planted to rice; 600 hectares for corporate farms and 1,024 hectares for private farms other than rice (RA 1400 Land Reform Act of 1955).

To date, CARP has been implemented for almost 30 years claiming land distribution accomplishment of over 4.8 million hectares of private and non-private agricultural³; benefitting about 2.8 million agrarian reform beneficiaries or ARBs. The reformed area covers 70 percent of estimated total non-owner cultivated agriculture land in the Philippines;⁴ benefitting about 54 percent of agriculture households in the country.⁵ Moreover, it has supported the distribution of about 2.5 million hectares of public A&D lands and issuance of stewardship rights to forest lands and leasehold rights to agricultural lands not covered by land reform.

Many sectors opined that the land acquisition and distribution accomplishments of CARP have been noteworthy. However, the "quality" of land distribution accomplishments especially of private lands is questioned with regard to the type of agriculture lands that have been distributed; the legitimacy of the land reform beneficiaries; and the indefeasibility of the titles of awarded lands. Moreover, the implementation of land reform has been significantly delayed. The original phasing of the program required land distribution to be completed in 1998 or 10 years after the CARP law was signed but the program suffered from backlogs. CARP implementation was extended to another 10 years. An amendatory law was again passed in 2009, which extends yet again the deadline for the completion of land distribution to another five years or by 2014.

The objective of this paper is to review CARP implementation and accomplishments using secondary sources. Several studies have examined different aspects of CARP. The findings of these studies are brought together by developing the results chain framework based on the program's theory of change. The framework draws together the program inputs, activities and processes so that the outputs/outcomes of CARP can be better understood. It also lays the groundwork for the recommendation of program policies to move the agrarian/agriculture sectors forward.

The discussion is divided into seven sections. Section II presents an overview of the land reform programs in the Philippines focusing on the CARP. Section III discusses the theory of change and develops the results chain framework for the analysis. Section IV examines CARP implementation and outputs. Section V discusses the impact of CARP based on the intended effects of the program. Section VI presents resources provided for CARP implementation. The last section concludes the discussion and provides forward options for the program.

II. Overview of the Land Reform in the Philippines

Land and tenancy relations are central issues in Philippine agriculture. It is widely viewed that the historical distortions in the allocation of land resources in the country has caused unfairness in land

³ Non-private lands are government held lands that includes foreclosed properties of government financial institutions that were turned over to CARP, landed estates or haciendas acquired by government from earlier land reform programs; public agricultural lands in settlement areas, public A&D previously Proclaimed for agriculture and resettlement purposes

⁴Estimated total agriculture land is assumed 70% of A&D. Non-owner cultivated agriculture lands (31%) based on benchmark survey on potential CARP beneficiaries in the 1990s (IARDS 1990).

⁵ Household population estimates based on 2010 census of estimated number of rural households engaged in agriculture.

ownership and tenancy relations in agriculture areas and led to the underperformance of the rural economy. Land reform has been the main strategy of government to address these distortions as shown in the reform laws dating back from the early 1900s to the present.

The land reform measures were both developmental and redistributive. Developmental reform involves the distribution of alienable and disposable public agricultural lands while redistributive refers to the redistribution of private agricultural lands and regulation of tenancy in private lands. The first of these land reforms was the Friars Land Act of 1902, which was implemented in response to the growing insurgency problems caused by the excesses of the friars, who controlled most agricultural estates.⁶ This Act was followed by the land reform measures that dealt mainly with regulation of tenancy.⁷ Alongside these redistributive measures, the distribution of public A&D lands were likewise drummed up. This was started through the Public Land Act 1936 which was operationalized through Commonwealth Act 691 and later by RA 1160 or the NARRA Law of 1954.⁸

During the early years until the early 1960s, the developmental reform gained prominence. In 1955, although government restarted land reform on private lands through the redistribution of the private landed estates or "haciendas (Land Reform Act of 1955 (RA 1400), the acquisition of landed estates was not confiscatory but voluntary on the part of the landowner or as requested by a majority of the tenants (i.e., at least 1/3 of tenants). Also, the retention limit on land ownership for agricultural lands was set at a very high level, that is, 300 contiguous hectares for private lands planted to rice; 600 contiguous hectares for corporate farms and 1,024 hectares for private farms other than rice.

The subsequent land reforms that followed were considered revolutionary. The Land Reform Code of 1963 or RA 3844 has been cited as the turning point in land reform legislation. The law instituted both redistribution of property and rights under the following components: (1) "Operation Leasehold (OLH)," which was to convert share tenancy to leasehold with the fixed rent at 25 percent of the average harvest in the three normal years preceding the Operation; and (2) "Operation Land Transfer (OLT)," which provided for the compulsory acquisition of private lands (individual and corporate farms). The OLT component lowered the retention limit of ownership of agricultural lands to 75 hectares way below the limits set under the Land Reform Act of 1955. The Code also reorganized and strengthened land settlement, legal assistance to tenants and small farmers, created the Land Reform Authority to take over the activities of the Land tenure Agency (LTA) and the Land Bank to handle the financial aspect of land acquisition. The 1963 Agrarian Code though has limited impact on the sector due to the insignificant funding provided by the government for land redistribution. Government budget on land redistribution under the program was less than P1.0 M for four years (Putzel 1990 p 122).

⁶ Access by the farmers have been limited because the American government at that time chose not to subsidize the program. The interested farmer or purchaser have to pay land based on prevailing market prices and pay for the cost of surveys and titling. Government supported the farmers mainly through the provision of credit for land purchase at subsidized interest rate (lyer and Maurer 2009).

⁷ Rice Tenancy Act of 1933 amended by Republic Act 34 in 1946 and by Agricultural Tenancy Act of 1954 (RA 1199).

⁸ National Resettlement and Rehabilitation Administration (NARRA)

In 1972, another land reform law was passed, this time providing for confiscatory and nationwide implementation of the law. While the program covered only rice and corn farmlands, these farms make up the bulk of agricultural production at that time. PD27 has increased smallholder family rice and corn farms. It was intended to address the design limitations of the Land Reform Code of 1963. Presidential Decree No 2 was first enacted to declare the entire country to land reform in 1971. Thereafter, Presidential Decree 27 (or PD27) followed adopting the two-step land distribution scheme of the 1963 Code - the Operation Land Transfer (OLT) and Operation Leasehold or Leasehold Operation (LHO)-- but with significant changes in retention limits and expropriation procedures. Under OLT, lands above the retention limit of 7 hectares were transferred to tenants through compulsory and confiscatory acquisition converting tenants into owners of the land they cultivated. Land valuation was based solely on agricultural production fixed at 2.5 times the annual yield valued at 1972 government support price.⁹ Eligible tenant farmers received a Certificate of Land Transfer (CLT) issued by the Secretary of Agrarian Reform, for the land they occupy and cultivate, up to a maximum three hectares if irrigated or five hectares if unirrigated. For private agricultural lands, the beneficiary pays the land in equal amortization to the Land Bank at 6% interest within 15 years. Upon completion of amortization, the tenant is deemed owner and issued a land title called Emancipation Patent (or EP). Land reform under PD 27 was provided annual budgetary support that allowed the program to have a nationwide coverage.

For the OLH scheme, tenanted rice and corn lands under the 7-hectare retention limit were to be tilled under fixed rent lease contract with a rental ceiling of 25% of average production for three normal years (net of the costs of seed, harvesting, threshing, loading, hauling and processing).

The CARP land distribution strategy draws heavily from two earlier laws, RA 3844 and PD27. In particular, these laws have set in place a reform system that included a combination of land tenancy regulation, redistribution of private lands and disposal of public lands. The similarities, however end there. CARP unlike the previous programs has a comprehensive coverage; it has provided support services to beneficiaries and considered the principle of "just compensation" and other incentives to landowners to facilitate the land reform process.

In particular, RA 6657 or CARL provided for mechanisms/policies to support the comprehensive nature of the program and to speed up its implementation thus, achieving CARP's intended impact. The key policies/programs are:

- *Coverage:* CARL provided for the coverage of *all agricultural lands* and natural resources and included both tenants *and regular farm workers* (who had been excluded as beneficiaries in the previous reform Codes).
- *Exemption:* Excluded under the coverage of CARP are military reservations, penal colonies, educational and research fields, "timberlands", undeveloped hills with 18 degrees slope and church areas. Permanent exclusions have been granted on private farms directly, permanently

⁹ This valuation was similar to Taiwan's compensation formula in the 1950s. South Korean and Japanese land reform used a compensation factor of 1.25 times and 7 times the annual yield, respectively (Iyer and Maurer 2008). However, PD 27 fixed prices at 1972 government support price of P35/cavan for rice and P31/cavan for corn.

and exclusively used for prawn farming or fishponds and for commercial livestock and poultry raising. 10

- *Retention limit*: CARL further lowered the ceiling on land ownership of agriculture lands to 5 hectares and allowed additional 3 hectares for each heir (of at least age 15 and actually tilling the land or directly managing it).
- Land valuation and owner compensation: CARL required just compensation on land, which based land valuation on the following: (1) capitalized net income; (2) comparable sales; and (3) market or zonal value. Land valuation is primarily the responsibility of the Land Bank which appraises the property based on the land valuation formula provided by the Department of Agrarian Reform. Landowners may appeal valuation to the special agrarian court or in the judiciary court, which is the final arbiter in the determination of just compensation.
- *Beneficiary repayments and subsidy*: Lands that have been paid by government through Land Bank (i.e., compensable lands) are amortized by beneficiaries over 30 years with 6% annual interest. Public A&D lands are non-compensable based on the Public Lands Act. Also, non-public lands except those foreclosed properties of GFIs and the land estates.
- Modes to Acquisition of Private Lands: CARL provides for various acquisition modes that includes:

 operation land transfer (OLT), the mechanism used for rice and corn lands under PD 27; (2) compulsory acquisition, a mechanism where government expropriate private lands whether or not landowner cooperates; (3) voluntary offer to sell (VOS), a mechanism providing incentive for the landowners to voluntarily offer their land for coverage by raising the cash portion of landowners' compensation by five percent and corresponding 5% decrease in the bonds portion; and (4) voluntary land transfer (VLT), also a voluntary scheme that allows landowners to directly transfer their lands to tenants and workers under mutually agreed terms between peasants and landowners on land value and payment terms. The responsibility of DAR under this arrangement is to ensure that the terms of contract are not less favorable to peasants than if it were the government purchasing the land.
- Non-land transfers: These are land transfers that do not involve actual transfer of land ownership but changes or improvement of property rights over land assets. The mechanisms include: (1) Leasehold Operation (LHO), which is a lease agreement between landowner and tenant applied to agriculture lands not covered by CARP (e.g. below 5 hectares or on retained agriculture lands

¹⁰ The land must have been actually, directly and exclusively used for prawn farms and fishponds. In cases were the fishponds or prawn farms have been subjected to CARP, by voluntary offer to sell, commercial farms deferment or notice of compulsory acquisition, they can be exempt from CARP if a simple and absolute majority of the actual regular workers or tenants consent to the exemption within one (1) year from the effectivity of <u>RA 7881</u> or on 12 March 1995. In cases where the fishponds or prawn ponds have not been subjected to CARP, the consent of the farm workers shall no longer be necessary. In the case of fishponds, while exempted for land distribution, are required to provide profit sharing incentive plan whereby 7.5% of net profit over compensation to workers (DAR AO 3 series of 1995).

of owners); and (2) Stock Distribution Option (SDO), whereby corporate landowners give their farm workers the right to purchase a proportion of the capital stock of the corporation in relation to the value of the agricultural land actually devoted to agricultural activities and in relation to the company's total assets (Sec.31 CARL).

- *Land reform developmental programs*. CARP supported the disposition of public agricultural lands through the DENR.
- Agribusiness venture arrangements (AVAs) = CARP encouraged consolidated ownership or management of agriculture farms/landholdings especially for commercial or export crops through agribusiness venture arrangements such as lease back, growership, production and profit Sharing (PPS), etc., as well as block farming. Under AVAs and block farming, lands are transferred to cooperatives or farmers association or are individually integrated with or without investors to enable a production system for economies of scale.
- Special Agrarian Reform Fund (ARF): ARF is a special fund created for financing the activities of CARP. The previous land reform programs were funded mainly through budget appropriations. ARF is funded from the proceeds of the privatization of government assets by the Asset Privatization Trust (APT) and receipts from sale of assets recovered by the Presidential Commission on Good Governance (PCGG) from ill-gotten wealth of the Marcos family. The fund is augmented by general appropriations.
- *Support Services*: Refers to an integrated package of support services to beneficiaries of land reform. Beneficiaries are assisted in terms of credit, roads, irrigation, post-harvest facilities, technology transfer and organization to guide them to be farm entrepreneurs.
- Agrarian Justice Delivery: CARL includes in the CARP organization agrarian legal assistance and adjudication of agrarian cases. Legal assistance involves the resolution of agrarian law implementation (ALI) cases, representation of ARBs by DAR lawyers before judicial and quasijudicial bodies and provision of alternative dispute resolution services such as mediation and conciliation. Adjudication of cases involves the resolution of cases by the DAR Adjudication Board (DARAB).

III. CARP Theory of Change: Assumptions, Activities, Outputs and Outcomes

It has been widely held that the rural economy's underperformance especially in terms of investment, productivity, income growth, poverty is engrained in the long-standing unfairness in land ownership and tenancy relation in the country. Addressing these inequities is considered necessary to improve the prospects of agrarian households to have access to and control of agricultural land thus enabling them to construct viable livelihoods and overcome rural poverty. Private property rights to land

also provides the incentives to improve farm productivity and to transform small farmers/tenants into efficient agricultural producers or entrepreneurs.

Figure 1 shows the results chain matrix for CARP that illustrates how the different inputs and activities of CARP are linked together to achieve the intended impact of increase productivity, household incomes and investments and reduction in rural poverty.

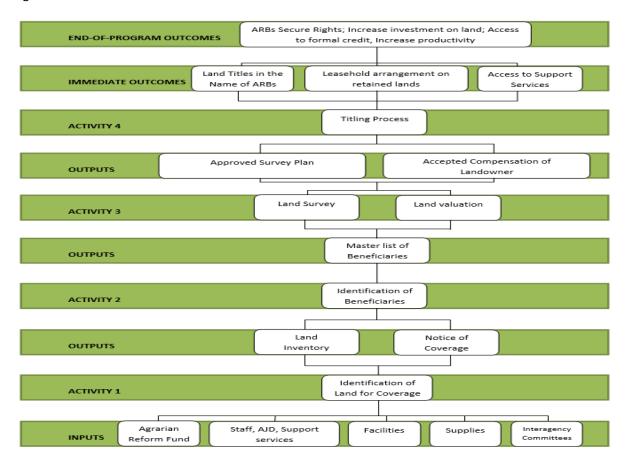


Figure 1: CARP Results Chain Framework

The inputs of the CARP program include the fund, agrarian reform staff, adjudicator, valuator for privately-owned lands (Land Bank of the Philippines), and facilities. The Agrarian Reform Fund (ARF) is the pooled fund allocated for the implementation of the CARP. Under RA 9700, the sources of funding or appropriations may come from: (1) proceeds of the sales of the Privatization and Management Office; (2) receipts from the assets recovered and sales of ill-gotten wealth recovered through the Presidential Commission on Good Government; (3) proceeds of the disposition and development of the government's properties in foreign countries; (4) income and collections from agrarian reform operations, projects, and programs; (5) official foreign aid grants and concessional financing from all countries; (6) yearly appropriations of at least P5.0 Billion from the General Appropriations Act (GAA); gratuitous financial assistance from legitimate sources; and (7) other government funds not otherwise appropriated.

In addition to funding, one of the other CARP-related inputs is the power of DAR to determine and adjudicate all agrarian reform matters involving the implementation of agrarian reform (e.g. agrarian disputes between farmers or between landowners and farmers) except those cases falling under the exclusive original jurisdiction of the Department of Agriculture (DA) and the Department of Environment and Natural Resources (DENR).

The CARP consists of four main activities. The first set of CARP activities involves the identification of privately-owned or publicly-owned agricultural landholdings for CARP coverage. CARP has been implemented on the assumption that landownership information can readily be obtained from the land agencies such as the Land Registration Authority (LRA), Land Management Bureau (LMB) and DENR. However, because of the absence of good and complete parcel based land information system in the country, the identification of land for CARP coverage has become a tedious process. The activity requires DAR to conduct research, ocular inspections, barangay mapping. The CARP covers alienable and disposable (A&D) public lands intended for and suited to agriculture, other government-owned lands devoted or suited to agriculture, and private lands purposely for and suited to agriculture.

According to various studies such as Adriano (2008), Ballesteros & Tiamzon (2013) and De los Reyes (2016), the lack of a central database on land and land ownership information has made the identification and creation of the inventory of lands for CARP coverage difficult. Former DAR Secretary Virgilio de los Reyes (2016) notes that the Land Registration Authority (LRA) and the Registers of Deeds do not have information on which titled properties are used for agricultural purposes. He further points out that some old land laws have residual powers over new ones. He relays that there may be multiple claims on the classification of land (e.g. agricultural/agrarian land, indigenous peoples' land, and protected site at the same time) and that some lands classified as non-agricultural are actually being used for agricultural purposes. There are also cases wherein owners have already successfully reclassified their lands as non-agricultural such that the lands would be excluded from CARP coverage. Castaneda (2008) reports of a number of such cases in various parts of the country. It must be noted that the issues on conversion, lack of information, and misclassification could have understated the number of identified lands for distribution.

Issues also arise in the listing of private and public landowners, which requires the following steps: securing and evaluating ownership documents; plotting the technical description of the landholding; and for public lands, projecting the landholding on the DENR map in order to assess if the landholding is within alienable and disposable areas. There are many cases where private landowners oppose the coverage of their lands under CARP. The landowners make it difficult for DAR to secure and evaluate ownership documents and sometimes file legal cases to delay and prevent the inclusion of their lands in the program. Some cases are concerned with undocumented land transactions. In such cases, the DAR would have to track even the undocumented current landowner in order to inform the owner that the land would be covered under CARP. Additionally, erroneous technical descriptions on land titles are a problem as they had to be corrected, and destroyed titles had to be reissued necessitating a court process (Presidential Communications Development and Strategic Planning Office & DAR, 2014). Aside from the erroneous or non-availability of records, access to land records even among government agencies is very difficult due to decentralized land records (Ballesteros & Cortez 2008). Land records and information are created and maintained by different agencies. Also, different agencies often have overlapping jurisdictions on public agricultural lands often causing conflict (Adriano 2013). These gaps

and inconsistencies in land information and land records not only makes the identification of the actual scope of agrarian reform difficult but also prevents realistic planning due to constant changes in scope.

Considering this situation, the inventory of lands for CARP coverage is based on the A&D public agriculture lands and non-public government lands that are pre-identified for listing under CARP. This includes landed estates, proclaimed lands, resettlement lands, and lands foreclosed by government financial institutions (GFI land). For the identification of private agriculture lands for coverage, DAR relied primarily on its provincial and municipal agrarian reform officials (e.g. MARO, PARO) for land inventory at the local levels. DAR also provided incentives to landowners to voluntarily offer their lands for the redistribution under the program through the Voluntary Offer to Sell (VOS) and Voluntary Land Transfer (VLT) schemes.

The second set of CARP activities pertain to the identification of CARP beneficiaries. Similar to the state of land information in the country, there is also no Registry of farmers, agricultural workers and tenants in the country. Beneficiaries are either pre-identified by landowner or identified through listing method and validation with landowners.

As stated in DAR AO 09 (series of 2011), the basic qualifications of farmers/tillers in order to be qualified are as follows: (1) landless as defined by RA 6657; (2) Filipino citizen; (3) permanent resident of the barangay and/or municipality where the landholding; (4) at least fifteen (15) years of age at the time of identification, screening and selection; and (5) willing, able, and equipped with the aptitude to cultivate and make the land productive. RA 6657 lists down qualified CARP beneficiaries in order of priority: (1) agricultural lessees and share tenants; (2) regular farmworkers; (3) seasonal farmworkers; (4) other farmworkers; (5) actual tillers/occupants of public lands; (6) collectives/cooperatives of the above beneficiaries; and (7) others directly working on the land. RA 6657 also provides that the BARC¹¹ and the DAR should assist the potential CARP beneficiaries in listing or registration as potential beneficiaries.

However, the identification and screening of potential beneficiaries is not void of issues. Preidentification of beneficiaries are common in voluntary land transfer (VLT) scheme. As mentioned earlier this scheme is a contract agreement between the landowner and tenant. It is assumed that the contracting beneficiary is the legitimate beneficiary. However, it might happen that the contract is between the landowner and persons (e.g. relatives, friends) that act as dummies of the landowner. The DAR audit report showed patterns in the VLT accomplishments that suggest land reform evasion. It is estimated that about 70% of VLT beneficiaries are relatives, heirs that are non-tillers or have no interest in farming (DAR PSRC 2000; Borras 2005).

De los Reyes (2016) noted that conflicts do arise among farmworkers claiming to be the beneficiaries of lands. Olano (2002) presented a case study of the Guingona Estate, a 609-hectare piece of land in Bukidnon, which was placed under CARP. There were three groups of farm workers claiming to be the rightful beneficiaries of the land: San Miguel Agrarian Reform Beneficiaries Farmers' Association (SMARBEFA), Kapunungan sa Mamumuong Mag-uuma sa Philippine Greenhills (KAMMPhil), and PhilTreed. Olano (2002) relayed that the conflict among the three groups caused tension, and there were many violent incidents in which members of the groups were involved. Also, according to De Los Reyes

¹¹ Under RA 6657, the Barangay Agrarian Reform Committee (BARC) is mandated to assist in the registration of ARBs, assist in the initial determination of the value of the land, act as a mediator and conciliator in agrarian disputes, etc.

(2016), clear identification tenants only works in tenanted farms such as rice, corn, coconut farms but not for haciendas/plantation where there are several types of workers e.g. permanent, seasonal, and temporary farm workers. The law qualifies all types but does not specify guidelines on the qualification process. This can also lead to farmworker-to-farmworker conflict.

It is important to note that conflicts in coverage and beneficiaries create instability in property rights. There were observations of cancellation of awards or CARP-issued titles due to conflicts that emanated from coverage and beneficiary identification. De los Reyes (2016) provided specific details for cancellation cases filed with DAR Secretary's Office since 2010.¹² From 1 July 2010 until 30 April 2016, there were 405 cancellation cases decided involving 1,532 CARP issued titles. Of the 1,532 Titles 1,025 (66.91%) were ordered cancelled. Of the 1,025, 827 (80.68%) Titles were cancelled in favor of the former landowners, while 111 (10.83%) were cancelled in favor of another ARB (De los Reyes 2016 p 35-36). The balance reverted back to the State. These cancellation cases cover issues on titles issued on retained lands of owners, land zoned as non-agriculture, and the proper identification of beneficiary.

The third set of activities under CARP includes preparing and approval of land surveys for subdivision and titling. While DAR provides for the costs and manpower for land surveys and subdivisions, the inspection, verification and approval of survey plans are the responsibility of the LRA or the DENR. Delays and problems at this stage are still plausible because of unavailability of land documents and the absence of a single projection map among land agencies. The absence of single projection map implies that land boundaries can be erroneous. It requires gathering, securing, collating land information from DENR and LRA and in some cases reconstruction of documents that cannot be found in both agencies. There are also issues in the actual conduct of land-use and segregation survey of the landholding. Land surveys could be improperly conducted in some areas. In fact, there have been reports of CARP-covered areas that are not really suitable for agriculture. These issues again point to gaps and errors in land information and the lack of a central database of land information and records.

Another component of land survey activities is land valuation. The land valuation process is undertaken only on private lands. Private lands include private lands of individuals or corporations; lands foreclosed by GFIs and landed estates acquired by the government from private individuals or corporations (LES). On the other hand, non-private agricultural lands and private lands under VLT are not compensable.¹³ The government has not or does not acquire them thus these lands do not go through the valuation process.

In particular, the Land Bank has been tasked to determine land values based on a formula provided for under the law. Note that CARP adopted programs of PD 27 of 1972 and the land reform Code of 1963. Lands identified under these lands for redistribution under CARP used the same formula for land valuation as stated in the previous laws. For instance, land planted to rice and corn can have different valuation formula based on when the land was considered acquired by government. PD27 has the simplest valuation- it is based solely on average gross production valued at government support price

¹² Before June 2010, the resolution of these cases was diffused to adjudicators in the provincial level. RA9700 revised the process such that all cases filed on cancellation from 2009 onwards are to be filed to the DAR Secretary's Office, who was given the sole authority to decide on these cases.

¹³ Voluntary land transfer (VLT) which is a direct payment scheme between the landowner and beneficiary on terms mutually agreed upon by them.

for rice and corn in 1972.¹⁴ The valuation guideline in PD 27 is usually challenged by the landowners on the basis of violation to the Bill of Rights. ¹⁵

On the other hand, land valuation under RA6657 is based on "just compensation" as determined by (1) capitalized net income from the land; (2) comparable sales; and (3) market or zonal value. However, the valuation formula was subject to different interpretation because there is no common land valuation standard (Adriano 2013). Government agencies had different standards on real property valuation. The just compensation formula was only clarified under RA 9700 of 2009. RA9700 identified specific information as basis for land valuation such as: (1) the cost of acquisition of the land; (2) the value of the standing crop; (3) the current value of similar properties, its nature, actual use and income; (4) the sworn valuation by the landowner; (5) the tax declarations; (6) the assessment made by government assessors; and (7) 70% of the BIR zonal valuation (translated into a basic formula by DAR). It also provided for the adoption of the "just compensation" formula for all private agricultural lands for CARP coverage regardless of program thus doing away with the valuation formula of PD27.

Land valuation activities starts from a joint field investigation of DAR and the Land Bank of the Philippines (LBP); the preparation of the Land Distribution and Information Schedule (LDIS); the evaluation of the completeness of the Claim Folders (CFs); the preparation and depositing of the landowner compensation; and the cancellation of the landowner title and preparation of the title of the Republic of the Philippines (RP) for each lot/parcel to be issued with a Certificate of Land Ownership Award (CLOA).

The DAR and the LBP conduct a joint field investigation, and they produce a Field Investigation Report which contain information on the landowner's profile; the landholding's topography, present physical status, accessibility to roads; the availability of transportation and irrigation; the land use; crops planted, average gross production, etc. (DAR, n.d.).¹⁶ The valuation is then estimated from the information obtained from the field investigation report.

The fourth set of activities pertains to land titling. Land titling follows after the approval of land subdivision and survey plans and/or determination of land valuation. As mentioned earlier, land valuation applies only for compensable lands. However, land titling is not affected by the decision of the landowner to accept or reject Land Bank valuation of the property. Landowners, who have accepted the amount offered by the LBP, execute and deliver a deed of transfer to the Republic of the Philippines, and surrender the Certificate of Title and other muniments of title. Within 30 days, the LBP pays the owner with the purchase price of the land.¹⁷ On the other hand, in case of rejection or the absence of response

¹⁴ See footnote 10.

¹⁵ Section 9, Article III of the 1987 Philippine Constitution states that -- "Private property shall not be taken for public use without just compensation".

¹⁶ There are cases wherein the DAR and the LBP only discover at this stage that the lands are no longer appropriate for agriculture or that the lands are already devoted to non-agricultural use (2016). Delays can also be caused by objection of the landowners, preventing entry of DAR and LBP officials into the property. DAR Administrative Order No. 09 (AO 09), Series of 2011 seeks to address this constrain by providing DAR (after 15th day notice) the authority to: (1) choose the retention area for the landowner; (2) there will be an initial temporary valuation of the land, treating it as if it were classified as an idle land (DAR AO 09, Series of 2011).

¹⁷ RA 6657 provides that the landowner may choose among the following modes of compensation: (1) cash payment (some percentage in cash while the rest would be paid in government financial instruments); (2) shares of stock in government-owned or controlled corporations, LBP preferred shares, physical assets or

from the landowner on the value offered by the LBP, Land Bank creates a trust account in the name of the landowner. The landowner may bring the matter to the appropriate courts for final determination of just compensation. The trust account remains until such time that the landowner accepts or the case filed in court has been resolved. Thus, land transfer and titling can proceed upon the deposit of the compensation. The DAR takes immediate possession of the land and requests the appropriate Register of Deeds for the issuance of a Transfer Certificate of Title (TCT) in the name of the Republic of the Philippines and to the beneficiaries.

The issues that prevents land titling and transfer are the problems on the approval of land subdivision surveys and the land registration regulations that are too rigid and formalistic. A substantial number of land parcels remained outside of the formal system. The existing legal framework to enable the government agencies to complete the registration of all land parcels is inadequate and the conditions and the process to complete registration of land for the first time are rigid (Ballesteros and Tiamzon 2016). Constraints caused by judicial control over titles in the registry make the seemingly routine registry processes like corrections of clerical mistakes, issuance of lost owner's certificate of titles and weeding out of fake and spurious certificates, difficult as these requires court processes. There is no adequate mechanism to ensure consistency of information between the land agencies. Process becomes tedious and creates uncertainties. These issues not only delays the process but renders land transfers under the current institutional arrangements unlikely.

A key objective of CARP is to convert tenants, farmworkers, lessees, etc to be owners. This is completed through the issuance of a land title called Certificate of Land Ownership Award (CLOA) or emancipation Patent (EP) to the identified beneficiary, which in effect recognizes the title holder as a registered owner of property in the Philippines.¹⁸ In general, the beneficiaries prefer titles issued individually in their names. However, there are cases when a collective title is preferred by beneficiaries who are part of a cooperative, an association or a family.¹⁹ In past years though, collective CLOAs(CLOA-C) have been issued to speed up the process of title transfer to beneficiaries that are delayed due to problems in the approval of land subdivisions and title transfers. The collective CLOA thus becomes a "mother title" with the names of the individual beneficiaries listed on the title.

IV. Assessment of CARP Implementation and Accomplishments

4.1 Redistributive Land Reform Program (DAR)

4.1.1 Scope Analysis

The DAR scope for redistributive land reform was originally estimated at 3.82 million hectares and projected to benefit some 1.56 Million farmers and agricultural workers (e.g., share tenants, farm

other qualified investments in accordance with Presidential Agrarian Reform Council (PARC) guidelines; (3) tax credits; and (4) LBP bonds. Prompt payment in the compensation would encourage other landowners in offering the sale of their agricultural land for distribution.

¹⁸ Emancipation Patents are titles issued to beneficiaries of the land reform under PD 27 or Operation Land transfer (OLT).

¹⁹ For instance, beneficiaries who are a couple or are related as parent and child or siblings.

workers, and agricultural lessees). This estimate was issued by the Presidential Agrarian Reform Council (PARC) using the 1980 Census of Agriculture as basis. The program was to be implemented in three Phases (Table 1). Phase I, which represents 28% of the total area is the priority areas of reform consisting of rice and corn lands covered under PD 27, idle and abandoned lands, foreclosed and sequestered lands and government lands foreclosed by government financial institutions, and lands acquired by the Presidential Commission on Good Government. Phase II covers landed estates and settlement areas disposed through the early land reform programs and private agricultural farmlands above 50 hectares. These lands represent 30% of the scope. Phase III consists of a total area of 1.58 million hectares or 41% of the scope covering private agricultural farms between 5 and 50 hectares.

Among private farms, it is shown that at the beginning of CARP implementation the largest scope comprised of farms between 5 and 24 hectares; representing 46% of total area of private agricultural lands. Farms above 50 hectares represent 31% of private lands. This indicates that prior to CARP (that is around 1988), there are probably few large-scale farms or *haciendas*. Hayami 1990 and Balisacan 2007 reported a significant reduction in the proportion of operational farm size above 25 hectares around the 1980s. The authors, however, attributed the decline to rapid population growth and the slow expansion of productive employment in agriculture rather than the earlier land redistribution programs (e.g. RA3488 and PD27).

In 1992, the incoming DAR administration realized the difficulty of doing realistic planning and programming without a reliable and comprehensive landholding database. Thus, DAR launched the CARP Scope Validation Project. The initial results in 1994 indicated that DAR's CARP Scope increased to 4.29 million hectares and DENR's share was 3.77 million hectares. DAR also identified the scope using mode of acquisition as target criteria. Adjustments were again made and in 2006 DAR conducted its Inventory of the CARP Scope but the inventory by mode was discontinued partly due to difficulty of achieving targets by mode and that voluntary modes (VOS and VLT) have always exceeded the scope. Similarly, scope by crop was not given much attention since the "carpet approach" to establish the land inventory was designed to identify landholdings size regardless of crops planted.²⁰ Crop identification becomes relevant only for lands that are compensable, which are private lands acquired through OLT, CA, and VOS and those foreclosed by government financial institutions.

Currently, the DAR CARP Scope is around 5.423 million hectares. Based on DENR-NAMRIA 2013 estimates of the area of private domain, the existing CARP scope of 5.4 million hectares covers already 48% of the total A&D lands privately owned, which includes land for residential, commercial and industrial uses. This suggests that the DAR land inventory for LAD component has been more or less completed.

Of the current scope, DAR has already distributed 4,823,027 hectares of land to 2,807,108 agrarian reform beneficiaries (Table 2). The total land reformed area has covered 89% of the total DAR scope. In most regions accomplishments surpassed the national average. The remaining balance for land reform are in regions with peace and order concerns (Region V- Bicol and ARRM) and Region 7 or the

²⁰ In the absence of a systematic landownership information in the country, the "Barangay Carpet Approach" was devised to capture this data. The strategy is undertaken at the level of Municipal Agrarian Reform Office (MARO) who supervises Agrarian Reform Program Technologist (ARPT) or enumerators. The ARPTs create a list of landholdings with their corresponding beneficiaries to provide a basis for determining the areas to be covered (Ballesteros and Cortez, 2008).

Negros Island regions, which are known for its sugar estates. Overall, DAR CARP accomplishments are substantial covering about 83% of the estimated total titled agricultural lands and untitled agricultural lands.²¹

However, in terms of CARP target areas or provinces, CARP fell short of its prioritization objective. In the initial years of CARP, DAR identified 24 Strategic Operation Provinces (EO 406 of 1990) which account for 70 percent of the land distribution workload, as the priority provinces. The intent is to channel and use resources efficiently and effectively where coverage for land distribution is highest. The SOPs included the provinces of: Pangasinan, Kalinga Apayao, Ifugao, Isabela, Nueva Ecija, Pampanga, Batangas, Quezon, Mindoro Occidental, Sorsogon, Camarines Sur, Antique, Negros Occidental, Bohol, Negros Oriental, Leyte, Western Samar, Zamboanga del Sur, Bukidnon, Agusan del Sur, Lanao del Norte, South Cotabato, North Cotabato and Maguindanao.

Table 3 shows that the prioritization of provinces was not followed. Total land reformed area in SOP represents only 67% of the target. In non-SOPs coverage was over 100% of scope. The accomplishment in non-priority areas exceeded the scope by 37 percentage points.²²

It was also noted that the overall targets of DAR across provinces were not particularly consistent with key indicators like the landholding Gini and number of landless farmers (World Bank 2009). Ideally, CARP coverage should be in areas or provinces with large numbers of tenants/landless workers and in provinces with high number of big landholdings. Correlation analysis show that this was not the case (Table 4). In general, CARP scope was inversely correlated to the Gini for agricultural landholding. This means that the CARP scope is not in provinces where there is high concentration of agriculture landholding. This holds true for both private and non-private lands except for private lands that are earmarked for compulsory acquisition. On the other hand, while there is a positive correlation between CARP scope and the extent of landless workers (measured as the ratio of tenants/landless workers to total farmers) in the province, this is observed only for specific modalities; that is those identified for compulsory acquisition; those covered under the previous land reform program (Operation land transfer or OLT) and government lands that are former agricultural estates (e.g. landed estates). For the voluntary scheme specifically VLT, the relationship is inverse, which means that accomplishments under this mode are not necessarily happening in provinces or areas where there is high concentration of tenants or landless workers.

4.1.2 Coverage of Private and Non-Private Agricultural Lands

Around 54% (2,625,547 has.) of the total hectares of land distributed are private agricultural lands, while around 45% (2,116,033 has.) are of non-private agricultural lands (Table 5). More than half (about 57%) of the distributed private lands, were voluntarily and/or directly transferred by landowners to the tenants under the VOS or VLT arrangement. Around 36% of private lands were transferred

²¹ According to the Land Management Bureau, it is estimated that of the 14.19 million hectares of A&D lands, 4.42 million hectares are titled agricultural lands. Of the 4.56 million hectares of untitled A&D lands, about 30% (or 1.36 million hectares) are classified as agricultural lands.

²² DAR argues that from a legal perspective, the provision of phasing and strategic provinces is only considered as directional rather than mandatory in character. It has been held that the difference between a mandatory and a directory provision is often determined on grounds of expediency (DOJ Opinion No. 9 (1997).

through compulsory acquisition and confiscatory scheme under PD 27 while 7% are the private lands foreclosed by government banks and dispensed to DAR for distributed under CARP. It is shown that voluntary transfers by landowners have been the main mode that facilitated the distribution of private lands.

Both VOS and VLT are designed to reduce landowners' resistance to land reform coverage. In VOS, the landowners voluntarily sell land to the government in return for a higher cash portion of landowners' compensation. The VOS scheme caused major controversy in the initial phase of CARP when the scandal involving coverage of a large tract of land paid at a hefty amount but of little productive value was exposed (see Garchitorena scandal as cited in Putzel). The scandal opened possibility of marginal private lands being distributed and of marginal lands paid beyond its market value because of the scheme's potential susceptible to abuses.²³

The VLT is a different case altogether. Lands covered under VLT provides for a direct payment of land to beneficiaries on terms mutually agreed between the beneficiaries and landlord with DAR's role confined to information provision and contract enforcement. The VLT scheme is convenient specifically when the issue is insufficient funds. However, audit reports on the VLT transactions reveal the nonredistributive nature of the scheme (DAR PSRC 2000; Borras 2005). The DAR audit report showed patterns in the VLT accomplishments that suggest land reform evasion. First, VLT declared children (including minors), relatives and other dummies as beneficiaries (they are usually non-tillers or have little desire to till).²⁴ This partitioning of landowner's property among heirs actually facilitated the inheritance transfers of private persons with government paying for the costs of subdivision survey and titling (DAR PSRC 2000 p. ix). Second, VLT accomplishments are sale transactions between non-legitimate ARB beneficiaries. This is reflected in the DAR accomplishment by size which included farm size below 5 hectares. Third, VLT declared beneficiaries that are beneficiaries only on paper. There is no effective transfer as the identified beneficiary remained as workers and the title is kept by the landlord on anticipation of resale after the ten- year rental or sale prohibition. Fourth, VLT beneficiaries were completely unaware of the transaction. The landlord simply submits land for coverage with list of beneficiaries who are not aware of the award, ignorant of the landowner and location of the landholding and not willing to till the land. DAR estimated that as much as 70% of VLT accomplishments are not transfers to legitimate ARBs (DAR 2000).

Among the distributed non-private agricultural lands, around 58% are constituted by government-owned lands (GOL). Settlements (SETT) and landed estates (LES) make up around 38% and 4%, respectively. Government-Owned Lands and Kilusang Kabuhayan at Kaunlaran (GOL/KKK) lands are those owned by government agencies and instrumentalities, including all lands or portions reserved by virtue of Presidential Proclamations for specific public uses by the government but are no longer actually, directly and exclusively used or necessary for the purposes for which they have been reserved. These

²³ To avoid similar abuses in the future, Executive Order 405 was issued in 1990, which vested upon the Land Bank the primary responsibility to determine land valuation and compensation for all lands covered under RA 6657.²³ The EO provided the safeguards in ensuring that lands distributed are not valued on the basis of speculation.

 $^{^{24}}$ If a landowner has children, three (3) hectares may be awarded to each subject to the following qualifications: (a) that he is at least fifteen (15) years old as of 15 June 1988; and (b) that he is actually tilling the land or directly managing it (<u>Rep. Act No. 6657</u> [1988], sec. 6).

lands were bestowed to DAR by different government agencies. Settlement and landed estates are mostly carried over from the post-war land reform initiatives.

Most of the settlement areas are the frontier lands provided to the landless that were bestowed to DAR for administration. Landed estates are the large privately owned agricultural landholdings (including haciendas) that were already expropriated or acquired by government under different laws prior to CARP for redistribution to farmers therein. At the time that the CARP was instituted, a substantial number of the allocated areas in settlements and landed estates had not yet been titled in the name of the beneficiaries.

Except for the landed estates, other non-PAL lands (e.g. GOL and SETT) are generally of low productivity or "poor quality" (WB 2009). A significant portion of the GOL/KKK lands were reservations mandated by Presidential Proclamations. These areas were not yet developed and might not be easily accessible. Settlement areas are quite similar to GOL/KKK lands since they were delineated from public domain lands through Presidential Proclamations. Landed Estate areas would represent relatively more productive lands since these were existing agricultural estates petitioned by the tenants and farmers to be expropriated or acquired by government and re-sold to them.

Based on the data from the recent survey of agrarian reform beneficiaries (Barrios et al 2015) the ecosystems of land acquired by through CARP showed that more than one-third of these lands are in upland areas and more than 40% are non-irrigated farms (Table 6). For GOL/KKK and GFI lands, there is a larger percentage of lands in upland areas. The crops mainly planted in lowland irrigated lands are palay. In the lowland non-irrigated land, there are still palay farms but some are also planted to other crops such as banana, corn, and coconut. In the uplands, the major crops are palay, coconut, corn, and sugarcane (Table 7).

4.1.3 Individual and Collective Ownership

Almost half of the total number of hectares (around 46% or 2,168,116 hectares) of land distributed by DAR were issued with collective CLOAs (Figure 3). About 42% of the CLOAs issued to beneficiaries of distributed private lands are collective in nature, and around 50% of those issued to beneficiaries of non-private agricultural lands are also collective. More than half of the beneficiaries of lands acquired through VOS, VLT, GOL, and GFI lands were issued with collective CLOAs. Of the collective CLOAs issued, GOL/KKK lands have the largest share with 32.7% (708,565 hectares), followed by VLT/DPS with 20% (432,929 hectares), VOS with 18.7% (405,893 hectares), and Settlement with 15.6% (339,036 hectares) (Table 8).

Most of these collective CLOAs were issued to individual ARBs that are not considered associations or cooperatives. As mentioned earlier this was the scheme to fast track LAD implementation mostly during the 1990's. Initially, this was supposed to be a temporary stage until the subdivision surveys are conducted and approved. But the subdivision was eventually neglected after the accomplishment had been reported.

As of January 1, 2016, the remaining balance for subdivision is 848,420 hectares out of the 2,168,116 hectares of lands issued with collective CLOAs. Lands under CA, VOS, OLT, GFI, LES, SETT and

KKK/GOL, which makes up 579,566 hectares out of the 848,420 hectares are considered priorities for subdivision (Table 9). While the remaining 268,854 hectares, which are VLT lands under Co-ownership lands awarded to farmers' association/cooperatives, are considered non-priorities. The VLT outputs were not considered priority because it was assumed that the arrangement was part of the agreement between the landowner and beneficiary. It is also believed that the high number of collective CLOAs under this scheme reflects the findings with regard to the legitimacy of some transfers (De los Reyes 2016).

4.1.4 Land Valuation and Price Subsidy to ARBs

All private agricultural lands have to be paid by the ARBs either through the Land Bank or directly to landowners. Beneficiaries of landed estates (LES), which were lands acquired by government prior to CARP are also under obligation to pay the purchase price of the land directly to the DAR. On the other hand, beneficiaries of GOL and SETT are in no obligation to pay the land.

Beneficiaries that pay directly to landowners are covered under the VLT mode. Land valuation of these properties are not the concern of the Land Bank or DAR. So far, the agreements between the landowner and beneficiary in terms of price and payment have been meritorious for both parties. Cases of landowner and beneficiary conflicts under this mode is nil.

On the other hand, ARBs under OLT, CA, VOS, GFI and LES are financed by the Land Bank. Land Bank advances payment to private landowners and the agrarian reform beneficiaries (ARBs) amortize the loan at 6% interest rate for a period of 30 years.

The Land Bank compensable CARP area covers an area of about 1.79 million hectares or 37.7% of the total LAD outputs (Table 10). Regions III and NIR have the largest LBP compensable areas and are also the regions with second and third largest number of ARBs, respectively. Region 12 has the largest non-compensable lands and also the highest number of ARBs.

Section 17 or RA6657 provides for the basis of land valuation or purchase price of land acquired by the government. DAR translated Section 17 into a basic formula as follows:

 $LV = (CNI \times 0.0) + (CS \times 0.3) + (MV \times 0.1)$

where LV = Land value

CNI = capitalized net income at 6% interest

CS= comparable sales

MV = market value based on tax declaration

Among these factors, the CNI is given greater weight since the productivity of land is of primary concern in the valuation. ARBs are also not expected to pay above the actual gross production of land, which implies that government provides land price subsidy based on the difference between the payment to the landowner and average gross production of the acquired land.

Comparatively, PD27 or lands covered by OLT applied confiscatory pricing. DAR has translated PD27 valuation into a formula whereby land is valued at 2.5 times the average gross production (AGP) multiplied by government support price.

LV = AGP * 2.5 *GSP

Where AGP = annual average gross production for three consecutive normal years

GSP = government support price fixed at 1972 prices; P50/cavan (or P1.0/kilo) for palay and P 35/cavan (or P0.70/kilo) for corn.

Since the prices for palay and corn are fixed at 1972 support price, valuation of lands under OLT is much lower than rice lands valued under RA6657 and RA 9700 provisions. This difference in valuation for rice and corn lands has partly caused delays in the completion of OLT lands since landowners contested the application of PD27 valuation formula given that a new land reform law, RA6657 is already in place. Based on several cases decided upon by the Court of Appeals and the Supreme Court that ruled on the application of valuation formula under RA 6657 even on OLT lands, DAR issued an administrative order implementing the decision of the higher courts. DAR AO 17 of 1989 qualified that the application of CARP valuation formula on OLT shall be defined by the date of taking, which was interpreted to either mean when Land Bank deposits payment to the landowner's trust account or when land acquisition process has commenced.

Under RA9700 or the CARPer law, the land valuation formula was further clarified to avoid different interpretations on the "date of taking". The revised CARP law provided that all valuation including those pending in courts are to completed based on RA6657. The law also included the value of standing crop and the BIR zonal values as factors for consideration in the valuation.

An examination of the land prices paid by the Land Bank shows different average prices per land and program type. Average land prices for all modes (except on government lands) show higher prices under RA9700. For instance, for OLT (rice and corn lands), there were three valuation formula applied. Under the PD27 valuation formula, average land price is only P5,227/hectare compared to P7,800/ha and P10,000/ha for RA6657 and RA9700, respectively (Table 11). It appears that the delay in the implementation of the land reform tend to increase the cost of land acquisition as expansion of development in rural areas is expected to put upward pressure on land/zonal values

Table 12 shows that the majority of LBP compensable lands are rice and corn farms (including combined rice and corn lands). These farms account for 57.5% of the total compensable area. Sugar lands account for 11%; coconut, 18% and commercial crops (rubber, banana, fruit tree) only 2.8%. Controlling for crop type and mode, the average land values for crops are not necessarily highest under RA9700. For instance, average land values of rice lands owned by government financial institutions (GFIs) is only about 1/6 the value of rice lands acquired under RA6657. Likewise, average land values of banana farms acquired under RA6657 is three times the value under RA9700. For sugar crops acquired through CA and VOS, average land values are higher under RA9700 compared to RA6657. The reverse is noted in the case of lands owned by government institution. These differences in prices could be explained by differences in land productivity.

We examined land quality in the case of rice farms by estimating the valuation formula on palay yields and gross revenue under different ecological environment, that is, irrigated, rainfed and upland. Table 13 shows that in 1993 and 1994, the land compensation values of palay landholdings acquired based on RA6657 formula are closest to the estimated capitalized income for rainfed areas. This indicates that rice lands acquired by government during these years are more or less in rainfed areas. In contrast, the rice lands acquired from 1995 to 1999, are possibly the irrigated areas since the compensation values are close to or higher than the estimated capitalized income from irrigated palay farms in the same period. However, from 2000 onwards, the palay farms acquired are possibly rainfed farms with land compensation less than the estimated CNI for average yield and irrigated rice. For the period 2010 and 2014, the compensation values are considerably lower than the rainfed values suggesting that the lands acquired could be lands with low productivity or in upland or remote areas.

The distribution of CARP acquired landholdings by crop shows that palay farms (excluding those under PD27 valuation), sugar farms and combined farms have the most number of landholdings acquired valued between P80, 000 and P200, 000 per hectare (Table 14). Overall, 57% of CARP landholdings (excluding those under PD27/EO228 formula) were acquired at less than P40,000 per hectare. The purchase of idle lands has gained some concerns. While idle lands are included in the scope of LAD, some sectors noted that these idle lands are probably non-agriculture lands. However, idle lands cover only 2,426 hectares or 2% of total and most landholdings (78%) acquired were valued at less than P20,000 per hectare. Moreover, the issue on idle lands can also arise from erroneous land use surveys. In such cases, Land Bank list the land as idle. The land valuation data does not show evidence of overpricing or "speculative land prices".

As of March 2015, of the total 1.54 million hectares acquired by government through Land Bank, landowners' compensation amounted to a total of Php69 Billion or an average price of P7,032 per hectare for claims under PD27; P43,760 per hectare for claims funded through RA6537 and P116,612 for claims under RA9700 (Table 15). Total land price subsidy including the increase revaluation based on court decisions amounted to P13.64 Billion or 20% of the amount paid to private landowners. As expected given the land valuation formula, land price subsidy is lowest for those acquired under PD27/EO28. Land subsidy per farmer amounts to P1,774 for PD27; P21,073 for RA6657 and P24,985 for RA9700.

The other portion of the subsidy amounting to P7.5 Billion comes from regular subsidy to farmers in terms of reduction in the payment of amortization. RA6657 provides that the farmer beneficiaries' amortization payments for the first five annual payments may not be more than 5% of the value of the annual gross production as established by DAR.²⁵ In the succeeding years the scheduled annual payments should not exceed 10% of annual gross production. In addition, in the event that the farmer beneficiary failed to produce due to fortuitous events not due to beneficiary's fault, the Land Bank may reduce the interest rate or reduce principal obligations. The rationale for the regular subsidy is to make repayments affordable to the beneficiary. An implicit subsidy which is not monitored by the Land Bank is

²⁵ ARBs are only required to pay amortizations as follows: first 5 years, 5% of AGP; after the first year, 10% of AGP. The difference between annual amortizations and the AGP value is the regular subsidy. Subsidy is also given to beneficiaries in fortuitous cases (e.g. typhoon) or when failure to produce accordingly is not due to the beneficiary's fault. The LBP may reduce the interest rate or reduce the principal obligation to make the repayment affordable.

the subsidy from reduce interest rate. Moreover, no penalty is imposed on delayed amortization payments.

On the average, the amount to be amortized by each farmer beneficiary is only P61,807. This amount is even lower for beneficiaries of PD27/EO228; only P10,690 per ARB which is expected since these properties were acquired under confiscatory pricing. The loan of beneficiaries funded under RA9700 is highest amounting to around P200,000 per beneficiary.

Despite the large subsidy given to ARBs in terms of amortization subsidies, the collection performance of ARBs is not encouraging even in the context of cost recovery. As of 2014, there are a total of 898,952 individual farmers account under the Land Bank ARR system categorize as follows: (1) PD27/EO228 consisting of 282,326 accounts; (2) RA6657 with 577,666 accounts; and (3) RA9700 with 38,960 accounts. Overall collection performance based on accounts due is 52% on principal and interest (Table 16).²⁶ About 11% of the accounts have been fully paid but there is also a considerable number of accounts in default. Accounts in default, which refer to accounts with no payment at all for at least three years amount to 267,216 accounts or 30% of the total ARR (Table 17). The top three agrarian operation centers (AOCs) with the highest number of accounts in default are AOCs II, III-2 and V. There is an apparent disregard of the land payment by some ARBs.

4.1.5 Remaining DAR CARP Balance for Land Distribution

As with RA6657, CARP extension (RA9700) also provided priorities for implementation and directed DAR to "plan and program the final acquisition and distribution of all remaining unacquired and undistributed agricultural lands from the effectivity of this Act until June 30, 2014" (RA9700 Sec 7). The law has indicated possible phasing as follows:

Phase 1: (a) Completion of land distribution on all private agricultural lands with aggregate landholdings in excess of fifty (50) hectares which have already been subjected to a notice of coverage issued on or before December 10, 2008; (b) rice and corn lands under Presidential Decree No. 27; (c) all idle or abandoned lands; all private lands voluntarily offered by the owners for agrarian reform provided that for voluntary land transfer only those submitted by June 30, 2009 shall be allowed; and (d) Completion of transfer of all previously acquired lands wherein valuation is subject to challenge by landowners through the application of Republic Act No. 6657 valuation formula as amended

Phase 2:a) Lands twenty-four (24) hectares up to fifty (50) hectares; (b) all alienable and disposable public agricultural lands; (c) all arable public agricultural lands under agro-forest, pasture and agricultural leases already cultivated and planted to crops; (d) all public agricultural lands which are to be opened for new development and resettlement: and (e) all private agricultural lands of landowners with aggregate landholdings above twenty-four (24) hectares up to fifty (50) hectares which have already been subjected to a notice of coverage issued on or before December 10, 2008.

²⁶ This does not include the advance payments made by farmers with no existing land information schedules yet (LDIS). Accounts with no LDIS occur due to incomplete documentation which is part of the redocumentation activities currently being undertaken by the DAR

Phase 3: All other private agricultural lands commencing with large landholdings and proceeding to medium and small landholdings under the following schedule: (a) Lands of landowners with aggregate landholdings above ten (10) hectares up to twenty- four (24) hectares; (b) Lands of landowners with aggregate landholdings from the retention limit up to ten (10) hectares.

As of end 2016, which is the expected completion of the land distribution component of CARP under RA9700, DAR has yet to distribute a gross area of 603,206 hectares (Table 18). The regions with the highest percentage of balance to scope are Region V, NIR, and ARMM with 20.9%, 29.3%, and 33.4% respectively as these contain contentious lands. One-third of this balance are problematic landholdings, which are landholdings that cannot be process for acquisition and transfer due to several problems such as succession and land transfer issues, land title and survey issues, coverage and land use issues, peace and order issues, ARB conflicts and others.

Problematic landholdings cover an area of 148,168 hectares (Table 19). Of the problematic landholdings, 17% have land survey issues; 56% involve landholdings with problems on land titling – e.g. succession/land transfer issues; basic document flaws and infirmities; lost titles; titles with no tech description, etc.

There is no recent information on the details of the LAD balances. However, from earlier data (as of end 2014) it was reported that the bulk or 85% of the remaining landholdings are planted to three major crops which are: rice and corn (36%); coconut (30%) and sugar (19%) (Table 20). Sugar farms specifically will be subject to land distribution in lieu of the repeal on stock distribution (or SDO) as an option for land reform. Commercial crops, which were deferred for 10 years from 1988, have only a remaining balance of 22,000 hectares or 3% of the total LAD balance by the end of 2014.

Moreover, from the earlier data, about one-third of the LAD balance comprise of farms above 50 hectares primarily in Regions VI and ARMM (Table 21) shows that DAR has yet to complete the distribution of landholdings above 50 hectares as of the start of 2015. Only about 10% of the LAD balance are landholdings with sizes greater than 24 hectares to 50 hectares. The remaining areas accounting for 60% of the LAD balance consist mainly of medium to small-sized landholdings (i.e, 24 hectares and below). Excluding the areas from 10 and below, total LAD balance on private agricultural lands would amount to a gross area of 465,447 hectares. About 61% of this area is found in Regions VI, V and ARMM.

4.1.6 Non-Land Transfer Accomplishments: Leasehold and Stock Distribution Options

a. Leasehold Arrangement

The abolition of share tenancy and installation of LHA began much earlier than the implementation of CARP. Specifically, RA 3844, Sec. 4, declared share tenancy to be contrary to public policy and was abolished except in the case of fishponds, saltbeds, and lands principally planted to citrus, coconuts, cacao, coffee, durian and other similar permanent trees at the time of the approval of said Act (Section 35). When RA 6389 (1971) was enacted, agricultural share tenancy has been automatically converted to leasehold but the exemptions remained. CARP supported the abolition of share tenancy

and the exemptions provided under the earlier laws were expressly repealed under RA6657. The Leasehold Agreement (LHA) was thus established for all agricultural production activities.

A leasehold arrangement exists when "a person who, either personally or with the aid of labor available from members of his immediate farm household undertakes to cultivate a piece of agricultural land, which is subject of cultivation by a single person together with members of his immediate farm household, belonging to or legally possessed by, another in consideration of a fixed amount in money or in produce or in both" (RA 1199 [1954]. The LHA is intended to protect the tenurial status of tenant farmers in landowners' retained areas and to establish tenants as entrepreneurs through the execution of leasehold contract with a fixed sharing arrangement.²⁷ Unlike share tenancy, LHA is not a joint undertaking between the landowner and tenant farmers but the tenant himself has control over farm management.

Leasehold Operations cover retained lands (or tenanted small farms) whereby DAR is expected to regulate and monitor in terms of lease rental and other lease arrangments. However, DAR does not have a database of leasehold contracts. Its merely a listing with no details of contracts. As explained by DAR, it is possible that cases of renewed or recurring LH contracts which has already been accounted for in their previous accomplishment reports are again posted as part of new accomplishments resulting into double counting. DAR has yet to start the process of reviewing LHA accomplishments to enable an accurate and systematic recording of accomplishment.

Data from the 1991 Census of Agriculture and Forestry (CAF) shows that the largest share (44%) of the total parcels cultivated which is nearly 2.1 million parcels were fully owned (Table 22). With CARP being implemented for only three years in 1991, it is not surprising that a relatively big proportion (20%) were tenanted parcels. Parcels under leasehold arrangements comprised nearly 6% only although the incidence of rent free lots was high at 14%. The low share of parcels under lease contradicts the DAR data which showed that in 1991, DAR exceeded targets by four times. This could be attributed to the double counting of accomplishments which was discussed earlier.

The 2002 CAF data, which covers only the first 10 parcels cultivated/managed by the farmers/farm owners, shows that of the total 3,451,767 parcels, the proportion of fully owned parcels remained to be the same at 44%. The share of tenanted parcels also hardly changed at all, from 20% to 19%. Similarly, the percentage of leased parcels practically remained the same.

Results of socio-economic surveys conducted in several areas in the country and among different crops revealed that sharecropping is still being practiced and in some cases dominant (Urbis, 2003; UPLBFI, 2007; UPLBFI, 2010). Moreover, old sharing agreements are applied particularly for coconut. Tenants agree to stick to the old share tenancy arrangements because it addresses the risks involved in farming. Some farmers prefer share tenancy because in the event of force majeure such as typhoons and droughts, the landowner provides credit and financing for production in the following season.

²⁷ The lease arrangement is based on a 75-25 sharing of net harvest in favor of the farmer.

b. Stock Distribution Option

The Stock Distribution Option (SDO) is a scheme started under CARP. This scheme of non-land transfer was applied primarily on sugar farms wherein the farmworkers become stock owners and are given the rights to purchase capital stocks, equities or shares from the corporate landowners and association. With the shares of stocks, they are entitled to dividends and other financial benefits and representation in the seat of the board of directors. They also acquire management rights in the corporate farm concerned.

As of June 10, 1993, a total of 88 applications have been filed under the SDO. However, when the Supreme Court exempted livestock and poultry, the number of coverable cases decreased and out of those left as coverable, 13 applications had been approved covering 7,703 hectares (Table 23). HLI's area comprise around 64% (or 4,916 hectares) of the total area of the 13 corporations and its FWBs is nearly three-fourths (75%) of total beneficiaries.

In 1994, the then Institute of Agrarian Studies conducted a study that aimed to make an initial assessment of the SDO in selected corporations, namely the Hacienda Luisita, Inc. (HLI); Arsenio Al. Acuna Agricultural Corporation (AAAC) which is a merger of corporations; Ledesma Hermanos Agricultural Corporations (LHAC); and Sycip Plantation, Inc. (SPI) (Penalba, Bravo, Reynoso, Cuarteros, Lopez and Sanchez, 1994). The study noted that the corporations were given flexibility in implementing the SDO. For instance, in the distribution of stocks, HLI provided for a 30-year period of stock distribution, one-thirtieth of which will be distributed to farm-worker beneficiaries (FWBs) yearly. Meanwhile, the three other corporations provided for the immediate distribution of stocks with the option of buying additional stocks of about 7-10 percent of the shares of stocks. All the corporations provided the share of stocks to the FWBs which were valued proportional to the value of agriculture land. However, in the case of HLI, the land assets were excessively undervalued thus reducing the value of stock to the beneficiaries (Putzel 1992). With regard to the number and qualifications of FWBs, all corporations, except SPI, considered all workers, regardless of whether they are regular, seasonal and migratory, including supervisory workers.

The study further revealed that benefits to the FWBs also varied. Benefits received by the FWBs include the provision of cash dividends, free homelots/housing, guaranteed production shares or incentives, and continuation of the provision of existing benefits. All the corporations with the exception of HLI extended alternative provisions (e.g., guaranteed bonus/dividends) in case of non-payment of dividends as planned. Moreover, the findings showed that the major difference in the income and benefits received by the FWBs lies only on the receipt of dividends accruing to the shares of stocks of FWBs and the provision of guaranteed bonus in case of the inability to issue dividends due to financial constraints. Hence, only the dividends make the FWBs different from other ordinary farm workers since the provision of the other benefits is actually contained in the CBA and reiterated in the stock option plan.

It was also pointed out that unlike in the land transfer scheme, ARB or FWBs under the SDO do not participate in the decision-making process. This tend to create factions among FWBs often those oppose to management as against those who favor the management eventually leading to decisions to nullify the SDO and revert to a land transfer scheme. FWBs in ten of 13 the SDO corporations, 10 corporations have already filed a Petition for Cancellation. Of those corporations with Petition for cancellation, the petition on the HLI has been already granted, which revoked the Stock Distribution Plan (SDP) that Tarlac Development Corporation (TADECO) executed with its spin-off corporation HLI and its 6,296 qualified farmworkers-beneficiaries (FWBs). The DAR approval was made in 2005 but was contested by HLI. Finally, on July 5, 2011, the Supreme Court upheld the decision of PARC (G.R. No. 171101). As a result, the DAR issued the Notice of Coverage (NOC) to the 4,916 hectares of HLI lands under the Compulsory Acquisition coverage of the CARP and land distribution is currently being undertaken.

Meanwhile, DAR is also reviewing the conditions of the FWBs in all SDOs considering that provisions of the contracts between FWBs and corporations were not examined thoroughly. Moreover, the concerned DAR Provincial Offices were not required to monitor the FWBs and the corporations to ensure that terms stipulated in the contract are followed.

The AA Acuña Agricultural Corp is also another major case for SDO cancellation. The Corporation is a merger of six companies (Archie Fishpond, Inc.; Arsenio Al Acuña Agricultural Corp.; Elenita Agricultural Development Corporation; Ma. Clara Marine Ventures, Inc.; Palma Kabankalan Agricultural Corporation; and Tabigue Marine Ventures, Inc.). The FWBs petitioned for the revocation of the SDO from the corporation but instead of doing so, the Task Force on SDO of DAR Region VI was ordered to initiate negotiation between representatives of AA Acuña Agricultural Corp. and the FWBs to improve the terms stipulated in the Memorandum of Agreement (MOA) between the two parties. Meanwhile, the revocation petitions of FWBs of three companies (Calatrava Negros Occ., Inc., SVJ Farms, Inc., and Asia Agro-Industrial Enterprises) had been favorably endorsed by the PARC Technical Committee and had been elevated for action of the PARC Executive Committee. It is worth noting that Asia Agro-Industrial Enterprises produces coconut instead of sugarcane.

Decisions on the application of two corporations, the 14 Colored Corporation and Garcona Agro-Industrial Enterprises, for SDO coverage are not yet final. Field visits and site validation for 14 Colored Corporation was done in February 2014 only and the results were presented to PARC Executive Committee on June 2, 2014. Meanwhile, The PARC ExeCom has recommended for the second time the denial of the application of GARCONA to be covered under the SDO.

4.2 Developmental Land Reform Program (DENR)

Added to the DAR CARP activities is the continuing disposal of public lands for the expansion of cultivated lands. This scheme was an integral part of early government land reform initiatives to encourage frontier settlements and expand cultivation. Under the current environment however, most public agricultural lands are already being cultivated and the CARP mainly facilitates the titling of the land to current occupants or provide stewardship, "whenever applicable", in accordance with law in the disposition or utilization of lands of the public domain.

Lands with 18% slope or over are exempt from CARP coverage unless these are found to be agriculturally developed as of 15 June 1988. These lands are allocated as follows: (a) If land is classified as forest land, and therefore is inalienable and indisposable, this shall be allocated by the DENR under its Integrated Social Forestry Program; (b) if classified as alienable and disposable, this shall be allocated by

the Land Management Bureau-DENR and DAR based on the provisions of <u>CA 141</u> (homestead and free patent) and the <u>Joint DAR-DENR AO 2 (1988</u>); and (c) If private agricultural land, this shall be acquired in accordance with the provisions of <u>RA 6657</u>²⁸

The DENR disposal program has remained a strategy to disperse population in cities. The disposition of public A&D lands for ownership is administered by DENR through homestead and free patent based on the Public Land Act and Free Patent Law (Commonwealth Act No. 141 as amended; Republic Act No. 730; Republic Act No. 10023).²⁹ Disposition through Free Patent is based on occupation or cultivation of land for at least 30 years. On the other hand, homestead application is based on the desire of Philippine citizens of legal age to cultivate land. In both cases, DENR issues Patents, which represent the legal title of ownership to the disposed land. Public A&D that is utilized for agriculture production are non-compensable while those for commercial and industrial uses are disposed of through sale. Other conditions of disposition of public agricultural A&D lands under Free Patent and Homestead are summarized in Box 1.

The Public Land laws remain to date the basis for DENR disposition of public A&D lands. DENR has simply committed an area to be funded under the CARP program but it also receives funds under its regular budget for disposition of public A&D lands not committed to CARP. The main legislative policies of the CARL that have affected DENR's disposition policy are the limits of ownership and sale of awarded lands. These policy changes are specifically applied to disposition by homestead which now follows the 5-hectare ceiling on landholdings and the restrictions on sale of awarded land within a period of 10 years.³⁰

Qualifications	Free Patent	Homestead
Age	None	18 years or head of family
Citizenship	Natural-born Filipino	Filipino
	Not the owner of more than 24 hectares per CA 141, RA 782, RA 3872, and PD 1073	
	Not the owner of more than 12 hectares per RA 6490	Not the owner of more than 12 hectares as provided in the 1987 Constitution, reduced to 5

²⁸(DAR Adm. O. No. 13 [1990], item E, part II

²⁹The Philippines classifies its land resources as either public domain (State-owned) or alienable and disposable (A&D). Publicly owned lands (e.g. classified forest lands, mineral lands, national parks) are subject only to usufruct and resource utilization rights under certain conditions while public A&D can be disposed through ownership. Ancestral domains are carved out of the public domain and are issued certificates of ancestral domain (or CADTs). It is possible that ancestral domain areas include privately titled lands.

³⁰ There is a possibility that OCT titled under Handong Titulo of DENR has been covered by DAR for distribution specifically previously issued OCTs whereby maximum land size for disposition (24 hectares) are still based on the provisions of Commonwealth Act 141 as amended.

		hectares in DENR Memo Circular No. 22, S-1989 in line with the legislative policy expressed in RA 6657
Occupation	Sec. 44, CA 141- on or prior to July 4, 1926 or payment of the real estate tax on the land since then	
	Sec. 1, RA 782- on or prior to July 4, 1945	
	RA 3872- on or prior to July 4, 1955	
	PD 1073- on or prior to June 12, 1945	
	RA 6940- Continuous occupation for at least 30 years prior to the effectivity of the law on April 16, 1990 and payment of the real estate tax since then	
Cultivation	Fully cultivated	Cultivation of 1/5 of the area applied for within 5 years but in no case earlier than 1 year after the date of approval of the application
Tilting	Application	Cultivation of 1/5 but not earlier than 1 year
Date/Transfer	None	Covered by CARP

Source: DENR manual of Land Disposition, 2013

The DENR scope was originally 4.5 million hectares but was reduced to only 2.5 million hectares. The original scope of 4.5 million was reduced after consideration of the following:³¹ (a) lands under Presidential Proclamations for use of government agencies such as DND , NHA, etc. (1.067 million hectares); (b) lands under Proclamations as resettlement and KKK areas that were transferred to DAR

³¹ Based on DENR documentation and interview with Engr. Henry Pacis, DENR- CARP National Office; Feb 26, 2015.

(0.597 million hectares); (c) judicially titled lands from 1987 to 1994 per records of the Land Registration Authority (0.034 million hectares); (d) unclassified forest lands earlier projected to be released as A&D but have remained forest lands. Moreover, the ISF area under DENR scope covering 1.8 million hectares³² was not included in the scope since these lands cannot be distributed and titled and have remained part of forest lands. ISF areas are only subject to lease agreements renewable every 25 years. Its inclusion in the CARP scope is mainly for support services.

Of the total area committed by DENR to CARP, 99% of area has been distributed to a total of 2.34 million ARBs with an average area per beneficiary of 1.1 hectares (Table 24). DENR expects to complete the distribution of the remaining 24,000 hectares by end 2015. But it is possible that "new lands" will be added to the DENR land inventory with the completion of the Cadastral survey. These lands can be disposed of under DENR regular budgets. So far, studies on the effects of public A&D disposition have been scarce.

DENR has also committed under CARP funding, Integrated Social forestry (ISF) which are disposed of only by use through a 25-year lease agreement. ISF areas cover an area of 1.2 million hectares, which have been fully disposed by lease. Leases were mostly given to People's Organizations (POs). Members of the POs are benefited through CARP via support services. As of 2014, support services to ISF have covered 1.04 million hectares or 87% or target area and benefited 338,808 PO members. Average land size per ARB is 3.08 hectares.

Public forest lands under lease agreements are also contentious issues because of deeply entrenched private interest on these lands. For instance, cattle ranches on government land leased by private firms and timberlands planted to coconuts. Exploitative tenurial relations are occurring in these types of lands. Pasture lands are part of forest area; once leases expire, these lands are reverted back to timberland.

DENR has estimated that land for CARP has already been expended and the remaining large landholdings would likely come from lands held by religious and academic institutions and government lands such as military reservations.

4.3 CARP Program of Support Services

The DAR CARP program involving land ownership transfer has benefited about 2.8 million agriculture households mostly in Regions III, NIR and XII (Table 25). The average area per ARB is 1.7 hectares, which is below the target of 3.0 hectares per ARB. ARBs in Regions XII, XIII and VIII received larger plots, an average land area of 2.0 hectares, compared to other regions.

a. Agrarian Reform Communities (ARCs) and Agrarian Reform Beneficiary Organizations (ARBOs)

A key feature of the CARP is the incorporation of a program of support services for beneficiary development. The DAR has adopted the Agrarian Reform Community (ARC) concept as the strategy in the provision of interventions in agrarian reform areas and to ARBs. ARCs are formed through clustering

³² The 1.8 million hectares ISF area was also reduced to 1.2 million hectares since the original estimate committed to CARP included the area of other community based forestry programs that are being supported by other funding administered by the DENR.

of contiguous agrarian reform barangays. Since ARCs are area-based both ARBs and non-ARBs in the barangay are benefited from support services that usually includes infrastructure such as farm to market roads, irrigation and farm facilities. DAR continues to launch new ARCs or expand existing ones to widen outreach for support services.

As of end 2016, 1.5 million ARBs are already covered by ARCs, with around 1.3 million still to outside of ARCs (Table 26). Among the regions, the CAR has the highest percentage of ARBs in ARCs; 86% of the ARBs in the region are already in ARCs. Regions I, VII and XIII have more than 70% of ARBs in ARCs. On the other hand, ARRM and Regions VI and XII are the regions with the lowest percentage of ARBs are in ARCs.

DAR has also institutionalized farmers organizations or agrarian reform beneficiary organizations (ARBOs) in both ARC and non-ARC areas. Support services are also channeled to these organizations. This strategy provided ARBs in non-ARC communities to also have access to support services from the DAR or the DA. As of end 2016, there are 5,216 ARBOs created wherein 4,402 (84%) are in ARCs (Table 27). The members include both ARBs and non-ARBs.

The DAR strategy on support services is not focused on ARBs alone but is area-based. This strategy responds to the need for integrated development in agriculture area and support for farmers in general and not just ARBs or non-ARBs. The division between program for ARBs and non-ARBs with the increasing focus on support services by the DAR and DA will eventually disappear in the medium-term.

b. Agribusiness Ventures (AVAs)³³

Another DAR strategy that is gaining support for agriculture development under an agrarian reform setting is the development of agribusiness venture agreements or AVAs. The AVAs, which were recognized through DAR Administrative Order No. 9, Series of 1998, resulted from the need to optimize the operating size of commercial farms for agricultural production efficiency and to promote security of tenure and income of the ARBs.

The various types of AVAs are: (a) Joint Venture Arrangement (JVA); (b) Lease Arrangement; (c) Contract Growing/Growership Arrangement; (d) Management Contract; (e) Production, Processing, and Marketing Agreements; and (f) Build-Operate-Transfer-Scheme.

Joint Venture Agreement (JVA) is an AVA scheme wherein the ARBs and investors form a joint venture corporation (JVC) to manage farm operations. The beneficiaries contribute the use of the land held individually or in common and the facilities and improvements, if any. On the other hand, the investor furnishes capital and technology for production, processing and marketing of agricultural goods, or construction, rehabilitation, upgrading and operation of agricultural capital assets, infrastructure and facilities.

Lease Agreement is an AVA scheme wherein the beneficiaries bind themselves to give the former landowner or any other investor general control over the use and management of the land for a certain amount and for a definite period.

³³ This section draws some discussions from Pantoja, et al (2017).

Contract Growing/Growership/Production Arrangement is an AVA scheme wherein the ARBs commit to produce certain crops which the investor buys at pre-arranged terms (e.g., volume, quality standard, selling price). This may come in the form of production and processing agreements.

Management Contract is an AVA scheme wherein the ARBs hire the services of a contractor who may be an individual, partnership or corporation to assist in the management and operation of the farm for the purpose of producing high value crops or other agricultural crops in exchange for a fixed wage and/or commission.

Marketing Agreement is an AVA scheme wherein the investor explores possible markets/buyers for the ARB's produce and in turn receives commission for actual sales. It is distinct from the direct marketing arrangement/contracts of ARBs or their cooperative/association wherein the regional/provincial marketing assistance officer of DAR helps or assists in the sale and marketing of ARBs produce to a regular market, e, g., institutional buyers such as Cargill Philippines or San Miguel Corporation (SMC) for yellow/hybrid corn. This arrangement is under the DAR marketing assistance program (MAP) and not considered as an AVA scheme.

Build-Operate-Transfer (BOT) is an AVA scheme wherein the investor builds, rehabilitates or upgrades, at his own cost, capital assets, infrastructure and facilities applied to the production, processing and marketing of agricultural products and operates the same at his expense for an agreed period after which the ownership thereof is conveyed to the ARBs who own the land where such improvements and facilities are located.

Under the different AVAs, the corporations which serve as investors are encouraged to enter into an agreement with individual ARBs or farmer cooperatives and organizations. To reinforce AO No.9, Series of 1998, DAR AO No. 2, Series of 1999 was issued which provided for the rules and regulations governing joint economic enterprises in agrarian reform areas.

As of March 4, 2015, DAR has recorded a total of 452 AVAs nationwide, 44% of which are in CARAGA Region (Table 28). Nearly 92% of these AVAs are located in Mindanao where commercial crop such as banana are prevalently grown. Congruently, majority (76%) of area involved in these agreements which total to about 71,330 hectares are in Mindanao with Region XI having the highest share of area covered at 29%. A total of 59, 195 ARBs are involved in the AVAs, more than a third of whom (34%) are in Region XI. Region XI is only third in terms of the number of AVAs but due to the large expanse of plantations particularly on banana and fruit trees, it is not surprising that it ranked first in terms of area involved and number of ARBs.

Table 29 shows the distribution of the AVAs by crops planted. About 28% of the total area covered by the AVAs are planted with banana followed by pineapple (27%) and oil palm (24%). These three crops cover almost 79% of the total area under AVA. However, in terms of number of ARBs benefited, pineapple ranked first with 19,864 (43.8%) followed by banana with 14,866 (32.7%). Palm oil on the other hand only benefited 4,019 (9%) ARBs despite covering a large amount of area. Among the different types of AVAs, around 77% adopted the lease agreement or Land Use Production Agreement (LUPA). This arrangement covered areas that were planted to sugarcane, banana, pineapple, ube and palm oil. A relatively large proportion (20%) had contract growing/growership agreements in farms planted to banana, pineapple, oil palm and tobacco (Table 30).

c. Sugar Block Farms

Aside from AVAs, Sugarcane Block Farming has been implemented starting in 2012-2013 in sugarcane areas. The Sugarcane Block Farming was conceptualized as part of the National Convergence Initiative of the DA, DAR and Sugar Regulatory Authority (SRA). Its main goal is to increase productivity of sugarcane farms of members of Agrarian Reform Beneficiaries Organizations (ARBOs) such as cooperatives and farmers' associations under the Agrarian Reform Community Connectivity Economic and Support Services (ARCCESS) project that is currently being implemented by the DAR. It also aims to enhance the skills of the ARBOs in managing agribusiness enterprises. Sugarcane Block Farming have three expected result which are: (1) reduce cost of production; (2) increase farm productivity from 60 to 75 tons cane per hectare; and (3) establish at least one agribusiness activity per block farm.

The block farming scheme entails consolidation of small farms into 30-50 hectares to take advantage of plantation-scale production or economies of scale. Farmers, mostly ARBs, with landholdings of less than two hectares, are encouraged to group their production areas into integrated farm blocks with small farms being at least 2 kilometers apart. The ARBs retain ownership of the lands and depending on the arrangement entered into with the ARBOs, they may even be hired as farm hands. DAR through the ARBOs is tasked to provide the operating expenses in implementing the project as well as monitor its implementation and fund utilization. It is also expected to extend at least one farm equipment or common service facility (CSF) to the ARBO which will help increase sugarcane productivity as well as provide the ARBO with opportunity of having an enterprise by renting out the CSF

For at least two cropping seasons, the farmers will undergo coaching and will be provided guidance on farm management practices. The profit-sharing arrangement will depend on the agreement of the officers and members of the ARBO, block farm enrollees or farmers and financiers, if any. The financing scheme, which may be through partnership, joint venture, contract growing, foreign funding, loans, etc., will depend on the decision of ARBO officers and members.

Meanwhile, the DA is expected to provide necessary irrigation systems and farm to market roads. It is also tasked to give starter inputs for the diversification of agricultural production facilities.

The SRA, which is an attached agency of DA, will assist DAR in identifying and validating the block farm enrollees. It will also provide technical assistance and extension and capacity building programs. It is likewise expected to provide financing for farm operations, production facilities. Processing technologies and market linkage in the case of *muscovado*. Part of the role of the SRA is to manage the fund released by DAR for operationalizing and monitoring the block farms. Based on the agreement among the agencies, SRA should prepare the block farm operations manual/business plan and CSF operations manual. However, most often, DAR had been hiring Business Development Service Providers to handle these functions.

In 2012, Phase I of the Sugarcane Block Farms had been identified and implemented in 16 farms, eight of which are in the Visayas and seven, Luzon (Table 31). Phase II was implemented in 2013, covering 29 farms, 18 of which are in the Visayas while eight are in Mindanao. Being sugarcane producing areas, most of the block farms are in the Visayas particularly in the provinces of Negros Occidental and Negros Oriental. Participants in the second phase of the block farming scheme had been

given access to credit from the Agrarian Production Credit Program (APCP), a credit program implemented by the DA, DAR and state-owned Land Bank of the Philippines for CARP beneficiaries. Studies are currently being conducted to assess the effects of support services (e.g. credit) provided to ARBs under this system.

V. CARP Impact Assessment

The studies that examined the impact of CARP fall into two categories: one, studies that assessed welfare effects of an integrated package of land tenure improvement and support services and two, welfare effects of the ownership of land through CARP. The impact methodology used both non-experimental (e.g., before and after or participant vs nonparticipant analysis) and quasi-experimental methods that construct counterfactuals.

Recent analysis of CARP impact using non-experimental methods that provided comparison between ARBs and non-ARBs show positive correlation between ARBs and household income. Barrios, et al (2015) using 2015 survey of ARBs and non-ARBs noted that being an ARB has positive effects on total household incomes. ³⁴ He attributed this to better access to various factors of production that lead to increased total household income. Similar results were reported for ARC and non-ARCs and for ARBs in non-ARCs. This means that the benefits earned from various interventions in ARC areas could help raise their total household income. Furthermore, an ARB in ARC areas can generate higher income than non-ARB in an ARC area. The results however cannot solely be attributed to CARP or to being ARB since there is no information about the level of incomes and of welfare of the surveyed ARBs and non-ARBs prior to the intervention.

Similar results were reported by Monsod, et al. (2016) using the non-experimental method. They also noted the positive association of landownership and household welfare – that is, households who own land and who, moreover, own land through agrarian reform, have higher predicted welfare and less probability of being poor. As mentioned by the authors themselves the causality effects between CARP and welfare improvement cannot be established from this methodology. Thus, both analysis mainly confirmed that owning land is welfare-enhancing whether the land is obtained through CARP or not.

The results of studies using more rigorous impact methods, whereby counterfactuals are constructed so that attribution is possible are presented below.

Hayami and Kikuchi, 1982, 2000; Otsuka 1990, Umehara 1997, Deininger 2000 are studies that assessed the impact of the land reform program during the period 1980 to 1990. These studies cover the period of implementation of PD27 or the Operation Land Transfer (OLT) scheme which was started in 1972 and continued up to the early years of CARP. The results of the studies showed significantly positive gains in household incomes and welfare due to OLT. The positive impact was influenced by the timing in which the land reform program was undertaken. In particular, PD 27 beneficiaries profited hugely from the reform due to the rapid increase in rice yield made possible by 'green revolution' technology (i.e. high yielding varieties).

³⁴ "total income is the sum of annual income from various components including farm, off-farm, non-farm, remittances, poultry and livestock, AVA, and microenterprise activities (Barrios et al 2015 p 166)."

APPC (2007) evaluated the impact of CARP covering the period 1990-2000. This study investigated CARP as an integrated package of interventions covering both land distribution and support services delivery. In particular, it sought to assess the welfare effects of Agrarian Reform Community (ARC) strategy, by comparing households in ARC and non-ARC barangays. Methodologically, this involved identifying a "matched panel" of ARC and non-ARC barangays and, by "double-differencing", comparing indicators of average welfare among households in these barangays before and after ARC implementation. The key findings were: (1) Poverty incidence in Agrarian Reform Community (ARC) barangays went down slightly more than in non-ARC barangays between 1990 and 2000 (1.4 percentage point difference); (2) Per capita expenditure increased for both ARC and non-ARC barangays between 1990 and 2000 with per capita expenditure higher in ARC by Php134 at 2003 prices; (3) Households in ARC barangays enjoyed slightly greater welfare improvements in terms of housing (higher proportion of houses with strong roofs and strong walls) and educational attainment of members 6 to 24 years old.

In the same study, APPC also analyzed whether land ownership, land ownership through agrarian reform, and/or residing in an ARC were significant in explaining variations in household level per capita income, per capita expenditure, and poverty status. The data set was created by merging the 2004 Annual Poverty Indicators Survey (APIS) dataset, the 2000 Census of Population and Housing (CPH) and the 2006 ARC master list of the DAR. The study reported that the *per capita* household consumption expenditures of landowning households are 15% to 17% higher, on average, than those of landless households who did not benefit from either LTI or ARC components. Having access to land has the same magnitude of welfare impact, whether it is obtained through CARP or through other means (through inheritance or through purchase). Comparing ARBs in an ARC and a land-owning non-ARBs in ARC show that ARBs have higher per capita incomes, higher per capita *income* between ARBs and land-owning non-ARBs both of which reside in ARCs was 7.5%. The increase implies the combined effects of land tenure improvement (ARB status) and ARC interventions.

In 2009, the World Bank further examined the performance of CARP by reviewing existing evidence and extending the earlier impact analysis done by APPC and UPLB-IARDS using updated data.³⁵ Using the UPLB-IARDS 1990-2000 panel dataset, the study found that average real per capita income among CARP beneficiaries increased from Php14,625 in 1990 to Php21,903 in 2000. The corresponding increase for non-CARP beneficiaries was from Php18,025 in 1990 to Php21,575 in 2000. This represented a 15% difference but was only marginally significant (pvalue 0.15). In terms of poverty dynamics, the new analysis found that 52% of CARP beneficiaries who were poor in 1990 became non-poor in 2000.

³⁵ The UPLB-IARDS data set was from a micro study conducted by the University of the Philippines Los Baños Foundation and the Institute of Agrarian and Rurban Development Studies (IARDS). It attempted to measure changes in household welfare and productivity from 2000 to 2006 and from 1990 to 2006 due to CARP using household panel data. The initial results of the impact assessment from the dataset was considered flawed. Several researchers (Habito et al., 2003; APPC, 2007; World Bank, 2009) pointed out that IARDS panel dataset is not a true panel due to; (1) the consumption expenditure modules were not consistent across rounds and the items were not sufficiently disaggregated as to provide reliable measures of living standards; (2) income modules, though considerably more detailed, also varied across time. These changes across survey rounds could have resulted in systematic over- or under-estimations of expenditures or income although it is not clear exactly how. The World Bank study utilized the data by limiting the definition of ARB strictly to CARP beneficiaries.

Meanwhile, 15% of CARP beneficiaries and 22% of non-CARP beneficiaries who were not poor in 1990 fell into poverty by 2000. These results indicated a positive but modest impact.

The World Bank study also extended the Balisacan and Fuwa (2004) study on the impact of CARP on poverty by using more recent data on poverty and provincial level disaggregation of CARP implementation as opposed to regional level in the 2004 Balisacan and Fuwa study. The analytical framework was retained, which is that growth and poverty reduction was determined by initial conditions (e.g. income and income inequality, and infrastructure such as road density, electricity, and irrigation) and policy variables (such as CARP, change in agricultural terms of trade, among others). Two periods were examined – 1991 to 1997 and 1991 to 2006.

The extension study found that total land distribution performance (CARP accomplishment vis-àvis scope) had a significant negative relationship to the rate of change in poverty incidence for the period 1991 to 2006. For the 1991 to 1997 period, it was private land redistribution that had a positive significant effect on poverty reduction. Specifically, estimates showed that a 10% increase in CARP performance (for the 1991 to 2006 period) or in private land redistribution (for the 1991 to 1997 period) increased the rate of poverty reduction by 3 or 2 percentage points. The report noted that CARP could account for 8% of the average rate of poverty reduction for the period 1991-2006.

In addition, the WB extension study tried to disaggregate the impact of CARP on the rate of poverty reduction by mode of acquisition. It found that for the period 1991 to 1997, most of the CARP subcomponents had positive significant impact on poverty reduction, and the estimates were quantitatively large for Operation Land Transfer (OLT)³⁶ and Compulsory Acquisition (CA). This was not observed for the period 1991 to 2006 on any of the subcomponents however.

Based on its review of evidence and its own analysis, the WB report concluded that CARP implementation had "some significantly positive welfare impacts on its beneficiaries". It stressed the difficulty of reliably estimating the magnitude of this impact due to data limitations.

Another recent study on CARP impact was done by Monsod, et al. (2016), who constructed a "matched panel" of ARC and non-ARC barangays, with the barangay as unit of observation. In particular, the study investigated the effect of the integrated package of interventions from CARP (LTI + ARC).³⁷ The assessment covers the period 1990-2010, which corresponds to at least two decades of CARP. The matched panel and required data points were obtained from: the Census of Population and Housing (CPH) 1990, 2000 and 2010; the Census of Agriculture (CA), 1991 and 2002, which covers agricultural barangays; and ARC Master List of the Department of Agrarian Reform.³⁸ The key findings of the study were: (1) the drop in poverty incidence was greater in ARC barangays than in non-ARC barangays in the overall by 1.2 percentage points. Poverty reduction among ARC households moved faster than among non-ARC households over the period 2000 to 2010 (by 2.1 percentage points); (2) Per capita expenditure

³⁶ OLT is the distribution of rice and corn lands while CA is the equivalent for non-rice and -corn areas. Both modalities are expropriatory in nature.

³⁷ Since the unit of observation is the barangay, it is possible that the results also capture other support programs by DA, DTI or private sector on households in the area. It is not clear whether the matching of ARCs and non-ARC barangays also controlled for other interventions.

³⁸ The CPH is the official source of information on the size, composition and distribution of the population, the geographic location and characteristics of housing units, and the physical characteristics of the barangays (presence of service facilities, social infrastructures and street patterns)

increased in both ARC and non-ARC barangays. The improvement was slightly higher in non-ARCs; (3) in ARC areas, housing and land ownership improved at a faster rate. In non-ARC areas, education attainment improved at a faster rate; (4) barangay level non-monetary outcomes in ARC and non-ARC areas moved in the same direction between 1990 and 2010 and changes were not statistically different. That is, over the 20 years, the absolute percentage point or level change with respect to access to basic economic and public facilities evens out across the two types of barangays.

Overall, the impact studies show some positive effects of CARP but modest. It is possible that the effects are muted but until better data can be provided, the magnitude of the impact is debatable. Also, as reported by Monsod, et al (2016), "there is still a lack of clarity on how or through what *channels* agrarian reform interventions may be working" (p.23). It is possible that the welfare effects are indeed similar whether land is acquired through CARP or inherited or purchased. Moreover, there is no convincing evidence on whether CARP has achieved its intended outcomes of equity, increase access to formal credit, increase productivity and investments in agriculture.

VI. CARP Implementing Agencies and Resource Utilization

The CARL provided for the creation of Presidential Agrarian Reform Council (PARC) at the national level, Provincial Agrarian Reform Coordinating Committee (PARCCOM) at the provincial level and the Barangay Agrarian Reform Committee (BARC) at the barangay level.

Presidential Agrarian Reform Council. The PARC is the highest policy making body for the CARP. It is chaired by the President of the Philippines and Vice Chairman is the DAR Secretary. Members of the PARC include the secretaries of the DENR, Department of Trade and Industry (DTI), Department of Public Works and Highways (DPWH), Department of Budget and Management (DBM), Department of Interior and Local Government (DILG), Department of Finance (DOF) and Department of Labor and Employment (DOLE); the Director General of National Economic Development and Authority (NEDA); president of the LBP; administrator of the National Irrigation Administration (NIA); three landowner representatives with one each coming from Luzon, Visayas and Mindanao; and six ARBs representatives (two each from Luzon, Visayas and Mindanao, with one of the two representatives belonging to cultural minorities).

Executive Committee. An Executive Committee was also created and it is in charge of matters occurring at PARC. It is composed of heads of DA, DENR, DPWH, DTI, DBM, DOF, LBP, NEDA and Executive Secretary of the PARC Secretariat. The PARC Secretariat provides general support and coordinating services, program and project appraisal, evaluation and monitoring of CARP.

Provincial Agrarian Reform Coordinating Committee. The Chairman of the PARCCOM is appointed by the President of the Philippines, upon recommendation of PARC. Its members include the DAR Provincial Agrarian Reform Officer (PARO), who acts as executive officer; one representative each from the DA, DENR and LBP.

Barangay Agrarian Reform Committee. The BARC acts as mediator and conciliator in agrarian disputes and assists in the identification of qualified beneficiaries and landowners. It also attests to the accuracy of the parcellary mapping of CARP lands and helps in the initial determination of land values. The BARC is supposed to coordinate support services delivery and assist farmers in obtaining credit.

Roles of the CARP implementing agencies (CIAs). The DAR serves as the lead implementing agency and is in charge of land acquisition and distribution including implementation of non-land transfer or alternative schemes. It also provides support services such as credit assistance and extension services (e.g. institutional development, technical assistance to ARBs) and delivery of agrarian justice. In the delivery of agrarian justice, units of the DAR such as the Provincial Agrarian Reform Adjudication Division (PARAD) and Regional Agrarian Reform Adjudication Division (RARAD) are involved.

The DENR takes charge of the land survey plan verification & approval and the distribution of public A&D lands. The LBP is tasked to determine land valuation and landowners' compensation and extend credit assistance to ARBs and ARBOs. Provision of agricultural extension services such production and postharvest technology training, supply of quality farm inputs, market information, production and post-production facilities are expected from the DA. This government entity also provides agricultural financing.

The DOLE provides extension services particularly in terms of community organizing for farmworkers. It also extends infrastructure support (e.g., common service facilities/agro-industrial prototype projects) and livelihood project services. Just like the DOLE, the DTI also provides livelihood or enterprise opportunities for ARBs. Meanwhile, the NIA and the DPWH are in charge of constructing infrastructure projects, i.e. communal irrigation projects and rural roads/bridges, respectively. The Land Registration Authority (LRA) is mandated to issue decrees of registration and certificates of titles and register documents, patents and other land transactions for the benefit of ARBs.

The implementation of CARP required a budgetary allocation of P286 Billion for the period 1988 to 2016 or an annual budget of P9.87 Billion (Table 32). Among the CIAs, DAR and LBP got the biggest chunk of the allocation of the budget. The combined expenditure of both agencies amounted to 89 percent. DAR budget, which accounted for 61 percent of total budget during the period, was used mainly for program administration of both land tenure improvement and support services component of CARP. On the other hand, LBP budget which accounted for 28 percent of total budget was mainly utilized for landowners' compensation.

The share of LBP is estimated to increase overtime as the remaining lands for land acquisition and distribution are the lands planted to high value crops especially sugar lands.³⁹ These lands are also areas where infrastructure investments have been made (e.g. roads). It is estimated (using average crop values) that the budget requirement to cover the remaining CARP compensable area is about P73 Billion. LBP estimates a higher figure of P123 Billion (Table 33).

VII. Conclusions and Forward Options

The accomplishments of CARP in terms of area covered and number of beneficiaries have been significant. CARP accomplishments represent 70 percent of estimated total non-owner cultivated agriculture land and 54 percent of total farming households in the country. However, there is evidence that the program has been poorly targeted in terms of areas covered and beneficiaries. DAR experienced

³⁹ Rejection rate of LOs on LBP compensation recommendation was highest in Negros Occidental.

difficulty in constructing the land inventory and Masterlist of beneficiaries due to the absence of parcel based information on land use and ownership and the poor land record system in the country. There is also no inventory of farmers or tenants in the country. Targeting thus has been largely influenced by landowners, local officials including DAR officials at the local level. There is lack of priority setting and coverage was not consistent with areas or provinces where there is concentration of landownership holdings or where tenancy arrangements are highest. The land tenure improvement was instead carried out based on expediency. Almost 60% of CARP accomplishments were achieved through voluntary modes of acquisition, i.e. through VOS and VLT arrangements, whereby the landowner offers the land to be covered for land reform and usually also identifies beneficiaries of the land. On the other hand, land distribution was slowest in areas of compulsory acquisition, which usually are the more productive areas.

The cases that were brought to the DAR agrarian justice system reveals the problems that results from poor targeting and the lack of efficient land record system. First, DAR has to deal with conflicts between landowner and ARBS due to delays in the implementation of land reform in identified strategic areas. Second, it has to deal with conflict among ARBs on who is the rightful beneficiary. Third, it has to deal with cases on cancellation of titles due to coverage of exempt or excluded properties and issuance of titles to unlawful beneficiaries. These conditions raise doubts on the indefeasibility of titles generated through the CARP program.

In terms of land valuation, although there were cases where land was paid at prices beyond the market values; these were isolated cases and was placed under control when Land Bank took the lead in determining the land valuation based on an agreed valuation formula with the DAR. Overall, there is weak evidence of overpricing of the land acquired by the government. Total price subsidy to farmers, which is estimated as the price paid by the government above the capitalized net income of land amount to about P 13 Billion or 20% of total landowners' compensation. The difference is largely explained by changes in zonal values and market value of land overtime. A substantial amount of subsidy comes from the amortization subsidy to farmers and implicit subsidies such as below market interest rates and the non-imposition of penalties for delayed payment. The rationale of amortization subsidy is to make payment affordable to ARBs but even then, collection performance is only about 52%. About 13% of the accounts have been fully paid but there is also a considerable number of accounts (30%) which are in arrears (i.e. no payment made for at least three years).

In the case of non-land transfers, the Stock Distribution Option apparently did not benefit most beneficiaries. With the exception of three SDOs, ten of the 13 corporations with approved SDOs have petitions for cancellation filed by the beneficiaries.

For leasehold arrangements, there is no significant change in lease tenure between 1991 and 2001. Several studies have reported that share tenancy persist and that the old sharing arrangement specifically in coconut farms continues to be practiced. This means that the rental rate of 25% of net produce specified in RA6657 is not being followed.

Total expenditure of CARP from 1987 to 2016 amounted to P286 Billion or an annual average of P 9.87 Billion. DAR and Land Bank were allotted the biggest chunk of the CARP budget. The combined expenditure from both agencies amount to 89%. Actual expenses for landowners' compensation

amounted to P 64 Billion during the period. It is estimated that the budget needed to complete the distribution of the remaining LAD balance would be between P 73 billion and P123 billion.

Impact studies of CARP reported some welfare effects but these are muted and are generally observed among areas where lands covered have higher productivity. It is also not clear through what channels CARP improved welfare since welfare effects were similar between land owning agricultural households that acquired land through CARP and those through purchase or inheritance. There is also no clear evidence whether the objectives of CARP to increase investments in agriculture, increase access to formal credit of farmers and equity have been achieved.

While the implementation of the program may have been flawed, redoing land reform by revising the law towards a "genuine" program is unnecessary. Only a few big-sized agriculture lands are left and the program has been implemented for almost 30 years such that monitoring subsequent transfers of CARP awarded lands will be tedious and impractical. Land reform as a policy lever to address inequities and poverty in the agriculture sector has become obsolete. Agricultural households are investing in education, skills upgrading, overseas work, non-farm assets (e.g. housing). The objectives of poverty and equity can be achieved through alternative programs that is of lower cost to the government.

The agrarian sector should instead focus on support programs to modernize agriculture that will benefit all small farmers (whether ARB or non-ARB). DAR together with DA can support policies and programs to provide small farms access to value chain; consolidation of farm operations for economies of scale; and development of social enterprises.

The indefeasibility of CARP issued titles and the stability of property rights in agriculture should be established by facilitating the resolution of conflicts, title cancellation, default on land payments by ARBs, and transfers of awarded lands. The issue on landownership concentration can be dealt with through a progressive land taxation that can be supported by the ongoing improvements and digitization in land administration at the LRA and the DENR.

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Table 1. Initial Scope of CARP LAD Component by Land Type and Phase (as of 1991)

Land Type by Phase	Are	ea	Number of B	eneficiaries
Lanu Type by Phase	Ha ('000)	%	No. ('000)	%
Natonal	3,820.9	100.00	1,553.5	100.00
<u>Phase I</u>	1,054.8	27.61	631.6	40.66
1. Rice and corn lands	727.8	19.05	522.70	33.65
2. Idle and abandoned lands	250.0	6.54	83.30	5.36
3. Foreclosed, surrendered ^a and PCGG -sequestered lands	2.5	0.07	0.80	0.05
4. Government-owned agricultural lands	74.5	1.95	24.80	1.60
Phase II	1,184.8	31.01	394.9	25.42
1. Resettlements	478.5	12.52	159.50	10.27
2. Private agricultural lands exceeding 50 ha	706.3	18.49	235.40	15.15
Phase III	1,581.3	41.39	527.0	33.92
1. Private agricultural lands between 5 and 24 has	1,063.6	27.84	354.50	22.82
2. Private agricultural lands between 24 and 50 has	517.7	13.55	172.50	11.10

Source: data adapted from Table 2 in Adriano (1991)

^a Philippine Commission for Good Government

^b scope of commercial farms was estimated at 35,635 hectares.

CARP implementation on commercial farms was to be implemented starting 1998.

Table 2. LAD Accomplishment by Region

				Non- CARPable	Total Net Area	%
Region	Scope	PAL	Non-PAL	Portion	Distributed	Accomplished
National	5,425,343	2,625,547	2,116,033	81,457	4,823,037	88.9%
CAR	105,774	27,651	74,684	358	102,693	97.1%
1	144,516	118,190	24,855	137	143,182	99.1%
II	417,740	209,022	157,061	7,480	373,562	89.4%
III	449,788	326,464	102,929	8,424	437,817	97.3%
IV-A	218,503	142,763	46,512	9,026	198,302	90.8%
IV-B	190,936	101,573	78,417	7,257	187,247	98.1%
V	413,545	265,975	57,003	4,096	327,075	79.1%
VI	257,651	153,687	67,216	5,404	226,307	87.8%
VII	84,749	38,537	39,089	3,803	81,429	96.1%
NIR	427,656	221,598	70,701	10,077	302,376	70.7%
VIII	494,005	105,493	326,825	1,535	433,852	87.8%
IX	238,273	143,937	84,365	1,112	229,414	96.3%
Х	362,166	145,450	193,440	3,796	342,686	94.6%
XI	261,517	173,055	74,980	2,869	250,905	95.9%
XII	731,098	230,233	447,616	8,923	686,773	93.9%
CARAGA	294,654	82,776	187,886	7,131	277,793	94.3%
ARMM	332,773	139,141	82,453	30	221,624	66.6%

Source: Author's presentation of data from DAR PIMD (as of end of 2016)

	Scope (Gross	Total LAD Ac	complishme	ent	ARBs Benefited (head count)	LAD Ba	lance
Province	Area in	Gross Reformed Area	% to	% to	Number	% to ARBs	Gross	% to
	hectares)a/	(Ha)a/	Scope	Outputs	Number	10 ANDS	Area	Scope
National	5,423,541	4,823,037	88.9%	100.0%	2,807,108	100.0%	600,504	11.1%
SOP b/	3,796,479	2,568,009	67.6%	53.2%	1,474,033	52.5%	1,228,470	32.4%
Other Provinces	1,627,062	2,255,028	137.6%	46.8%	1,333,075	47.5%	-	-

Table 3. CARP LAD Accomplishment vs Scope (as of Dec 2016)

Source: Author's summary of data from DAR PIMD (as of end of 2016)

a/ Gross reformed area refers to total area covered including retained area of landowner. Retained area represents only about 1% of area covered

b/ Strategic Operation Provinces (SOPs) was estimated to represent 70% of scope. It includes: Pangasinan, Kalinga Apayao, Ifugao, Isabela, Nueva Ecija, Pampanga, Batangas, Quezon,

Mindoro Occidental, Sorsogon, Camarines Sur, Antique, Negros Occidental, Bohol, Negros Oriental, Leyte, Western Samar,

Zamboanga del Sur, Bukidnon, Agusan del Sur, Lanao del Norte, South Cotabato, North Cotabato and Maguindanao

Table 4. Pearson Correlation Estimates

Mode of Acquisition	Provincial CARP Accomplishment to Agricultural Landholding Gini	Provincial CARP Accomplishment to Ratio of Landless Farmers/Total Farmers
All	-0.0901	0.1066
OLT	-0.2519 **	0.3828 ***
GFI	-0.0095	0.1089
VOS	-0.2245 *	0.0520
СА	0.2795 **	0.4263 ***
VLT	0.0214	-0.4013 ***
Settlement	-0.2346 **	-0.0823
Landed Estates	-0.1101	0.3289 ***

GOL/KKK	0.0873	0.3004 ***
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Source: World Bank (2009) pp 82-83 Tables 3-6; 3-7

Table 5. Distribution of CARP Area by Mode and by Period (in hectares)

							Grand TOTAL
Land Type/Mode	(1953- 1986)	C. Aquino (1987-1992)	F.Ramos (1993-1998)	J.Estrada/G.Arroyo (1999-2004)	G.Arroyo (2005-2010)	B.Aquino Jr (2011-2016) a/	Total Area (1986-2016)
National	22,439	907,083	1,671,244	631,146	658,027	851,641	4,741,580
PAL (Private Agri Land)	14,955	544,338	839,600	437,385	384,340	404,929	2,625,547
СА		20,073	115,656	84,338	40,992	108,521	369,580
GFI		71,339	51,741	16,174	9,997	22,580	171,831
OLT	14,95 0	354,005	126,110	30,404	21,101	48,343	594,913
VLT	5	33,399	312,282	134,955	207,528	147,693	835,862
VOS		65,522	233,811	171,513	104,722	77,792	653,360
Non-PAL (non- private agri land)	7,484	362,744	831,643	193,761	273,687	446,714	2,116,033
GOL		145,295	497,156	116,010	177,419	283,724	1,219,604
LES		26,731	25,206	1,726	1,268	27,030	81,961
SETT	7,484	190,718	309,282	76,025	95,001	135,959	814,469
Percent Total	 Accomplishr	nent (%)					
National	100	100	100	100	100	100	100
PAL	67	60	50	69	58	48	55
Non-PAL	33	40	50	31	42	52	45
Percent PAL A	ccomplishm	nent (%)					
PAL	100	100	100	100	100	100	100

CA	-	4	14	19	11	27	14
GFI	-	13	6	4	3	6	7
OLT	100	65	15	7	5	12	22
VLT	0	6	37	31	54	36	32
VOS	-	12	28	39	27	19	25
Percent No	n-PAL Accompl	ishment					
Non-PAL	100	100	100	100	100	100	100
GOL	-	40	60	60	65	64	58
LES	-	7	3	1	0	6	4
SETT	100	53	37	39	35	30	38

Source: DAR MIS, DAR PIMD (as of end of 2016)

a/ period of the implementation of the CARPer Law (RA9700)

CA= compulsory acquisition

GFI = lands owned/foreclosed by government financial institutions

OLT= operation land transfer or lands covered by PD27

VLT = voluntarty land transfer, i.e. direct payment to landowner scheme

VOS= voluntary offer to sell

GOL= government owned landholdings

LES= landed estates

SETT= settlement lands

Table 6. Ecosystem of ARB Lands by Mode of Acquisition

Mode of Acquisition	Lowland irrigated	Lowland non- irrigated	Upland	Total	Lowland irrigated	Lowland non- irrigated	Upland
VLT/DPS	523	729	417	1669	31.3%	43.7%	25.0%
CA	83	202	174	459	18.1%	44.0%	37.9%
VOS	96	333	298	727	13.2%	45.8%	41.0%
OLT	184	214	242	640	28.8%	33.4%	37.8%
GFI	5	13	24	42	11.9%	31.0%	57.1%
KKK/GOL	1	14	11	26	3.8%	53.8%	42.3%

SETT	51	64	73	188	27.1%	34.0%	38.8%
LES	8	6	6	20	40.0%	30.0%	30.0%
All Parcels	951	1575	1245	3771	25.2%	41.8%	33.0%

Source of Raw Data: 2015 ARB Survey dataset

Table 7. Major Crops on ARB Lands by Ecosystem and Mode of Acquisition

Mode of Acquisition	Lowland Irrigated	Lowland Non-irrigated	Upland
VLT/DPS	Palay, Rice	Palay, Banana, Corn	Coconut, Palay, Corn
CA	Palay, Rice	Palay, Banana, Corn	Coconut, Corn, Banana
VOS	Rice, Sugarcane, Palay	Sugarcane, Banana, Rice	Corn, Coconut, Sugarcane
OLT	Palay, Rice	Rice, Corn, Palay	Corn, Coconut, Rice
GFI	Rice, Calamansi, Palay	Rice, Coconut	Corn, Coconut
KKK/GOL	Rice	Rice, Coconut, Banana	Sugarcane, Corn
SETT	Rice, Palay	Corn, Rice, Palay	Coconut, Corn, Rice
LES	Rice	Corn	Coconut

Source of Raw Data: 2015 ARB Survey dataset

Table 8. LAD Accomplishment by Mode (Collective vs Non-Collective)

Land Type/Mode of Acquisition	Total Accomplishment (in hectares)	Collective CLOA Issued (in hectares)	% to Total Collective CLOA Issued	Non-collective CLOA Issued (in hectares)	% to Total Collective CLOA Issued
CA	357,106	143,513	6.6	213,593	8.4
VOS	650,537	405,893	18.7	244,644	9.6
OLT/PD 27	594,175	546	0.0	593,629	23.3
GFI/EO 407/448	171,391	125,446	5.8	45,945	1.8
VLT/DPS	835,561	432,829	20.0	402,732	15.8
Landed Estate	81,494	12,287	0.6	69,207	2.7
SETT	811,242	339,036	15.6	472,206	18.5
KKK/GOL	1,217,339	708,565	32.7	508,774	19.9
Total	4,718,845	2,168,116	100.0	2,550,729	100.0

Source of Data: De los Reyes (2016), Field Operations Office, Department of Agrarian Reform

Table 9. Inventory of Collective CLOA as of January 1, 2016

Total A	rea of Collective CLOAs Issued (Total Scope)		2,168,116
Less:	Already Subdivided		1,064,746
	Not for Subdivision:		
	Timberlands, Forest, Road, Watershed, etc	115,816	
	Co-owners opt not to subdivide (prefer Collective Title)	139,134	254,950
Sub			
Total:			1,319,696
Balanc	e for Subdivision		848,420
Priority	r for Subdivision:		
	LBP Compensable Lands (CA, VOS, OLT, & GFI)	228,604	
	Non-LBP Comp. Lands (LES, SETT, & KKK/GOL)	350,962	579,566
Non-pr	iority for Subdivision:		
	Awarded to Farmers Association	22,295	
	Awarded to Farmers Cooperative	43,406	
	VLT under Co-ownership	203,153	268,854
TOTAL			848,420

Source of Table: De los Reyes (2016), Field Operations Office, Department of Agrarian Reform

 Table 10.
 Land Bank Compensable CARP Area by Region

		Lar	nd Bank Com	pensable La	nds		Non-LBP Com	pensable	Total LAD Outputs		
Region	OLT	GFI	VOS	CA	Sub-total	% to Total LAD Area	Total of VLT, SETT, LES and GOL/KKK	% to Total LAD Area	Total Net Distributed Area	Total Number of ARBs	
National	594,913	171,831	653,360	369,580	1,871,645	37.7	2,951,896	60.5	4,741,580	2,807,108	
CAR	1,299	1,239	1,155	370	4,063	0.1	98,273	2.1	27,652	102,336	
1	31,261	1,842	8,943	1,657	43,703	0.9	99,342	2.1	120,159	143,045	
Ш	79,603	9,730	51,109	12,852	153,294	3.2	212,790	4.5	254,871	366,084	
Ш	214,487	6,842	29,695	39,388	290,412	6.1	138,980	2.9	342,710	429,392	
IV-A	15,943	1,257	30,714	50,032	97,946	2.1	91,329	1.9	169,670	189,275	

I	1	1	1	I	I	1	1	1	1	I
IV-B	15,926	2,760	14,005	21,330	54,021	1.1	125,969	2.7	116,518	179,990
V	51,636	17,886	55,278	49,299	174,099	3.7	148,879	3.1	282,692	322,978
VI	30,914	35,002	36,483	18,712	121,111	2.6	99,794	2.1	173,231	220,905
VII	9,272	2,773	7,776	12,612	32,433	0.7	45,194	1.0	38,550	77,627
NIR	21,105	30,486	117,877	43,532	213,000	4.5	79,700	1.7	309,317	292,700
VIII	20,926	8,373	24,264	33,679	87,242	1.8	345,076	7.3	221,244	432,318
IX	10,672	8,291	18,186	18,195	55,344	1.2	172,957	3.6	165,060	228,301
Х	16,965	3,155	18,654	15,002	53,776	1.1	285,115	6.0	251,344	338,891
XI	8,696	7,460	69,444	25,332	110,932	2.3	137,103	2.9	208,680	248,035
XII	34,918	13,970	110,444	15,503	174,835	3.7	503,015	10.6	518,046	677,850
CARAGA	6,545	3,562	31,859	9,862	51,828	1.1	218,835	4.6	102,048	270,663
ARMM	24,744	17,203	27,475	2,224	71,646	1.5	149,948	3.2	215,625	221,594

Source: Author's summary of data from DAR PIMD (as of end of 2016)

Notes: Lands acquired and distributed through VLT are compensable but payment is made by beneficiaries directly to landowners. Lands acquired and distributed through LES are

compensable but payment is made by beneficiaries directly to DAR.

Table 11. LBP Compensable CARP Area and Val	lue by Mode of Acquisition
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Mode of Acquisition	Total CARP Area (Has)	Total Amount Paid (PhP)	Average Value (PhP/ha)
CA (RA6657)	271,388	15,293,342,695	56,352
CA (RA9700)	20,569	2,570,843,385	124,987
OLT (EO228) a/	126,903	663,305,992	5,227
OLT (RA 6657)	295,110	2,312,963,020	7,838
OLT (RA 9700)	298	2,987,050	10,015
GFIs (RA6657)	3,614	175,473,445	48,553
GFIs (RA9700)	98,585	1,206,531,360	12,238
VOS (RA6657)	636,706	36,926,420,986	57,996
VOS (RA9700)	27,168	3,810,414,396	140,256
LO	11,177	81,858,834	7,324
R3	17,192	80,071,627	4,658
Grand Total	1,508,709	63,124,212,791	41,839.88

Source: Author's estimate from LBP claims data as of end 2013

a/ combined codes EO and E9 which refer to OLT claims valued based on PD27 (EO228)

CA (RA6657) – Compulsory Acquisition Funded under RA 6657

CA (RA9700) – Compulsory Acquisition Funded under RA 9700

E4 (GFI RA6657) – EO 407 Funded under RA 6657

E7 (GFI RA9700)- EO 407 Funded under RA 9700

E9 (OLT)– EO 228 Funded under RA 9700

EO (OLT) – EO 228 Funded under RA 6657

PD (OLT) – PD 27 Claims valued based on RA6657- date of taking.

P9 (OLT)– PD 27 Claims Funded under RA 9700

LO – LOI 1180 (Special Acquisition of Hacienda Tabacalera in Ilagan, Isabela)

R3 – RA 3844 Agrarian Code of 1963

Table 12 – Average Land Values by Mode and by Crop

0000	CARP	Percent				A	verage Land Value	e (PhP/Ha)			
CROP	Area (Hectares)	Distribution	CA (9700)	CA (RA6657)	GFIs (RA6657)	GFIs (RA9700)	OLT (RA 9700)	OLT (RA 6657)	VOS (RA9700)	VOS (RA6657)	All Modes
Rice	475,032	31.5	132,812	57,535	78,822	12,837	8,576	8,125	118,020	69,956	18,679
Corn	139,773	9.3	79,759	29,377	41,594	7,032	8,413	5,540	83,136	38,292	26,013
Banana	6,800	0.5	83,967	263,540	22,871	22,259			124,973	212,155	222,773
Coconut	140,947	9.3	60,438	35,345	47,034	10,130			96,287	39,500	37,004
Rubber	7,663	0.5	41,510	87,318	23,169	11,598			65,116	52,309	57,174
Sugar	56,278	3.7	313,849	103,725	140,760	59,583			307,411	127,697	119,379
Fruit Tree	9,219	0.6	124,425	151,230	66,893	28,336		2,800	165,925	165,355	133,062
Others	107,637	7.1	70,638	41,631	23,757	10,847		7,128	57,165	40,294	39,336
Combined	544,161	36.1	138,433	54,641	57,125	12,474	28,447	6,524	169,016	60,851	56,895
Banana combined with other crops	5,719	0.4	115,214	48,365	17,214	11,320			59,501	84,733	69,426
Coconut Combined with other crops	129,021	8.6	75,575	32,440	41,656	14,205			109,509	35,788	34,581
Corn Combined with other crops	93,107	6.2	80,741	34,099	67,179	7,670		5,449	85,842	42,500	37,930

All Crops	1.508.709	100.0	124,987	56,352	48,553	12,238	10,015	7,838	140,256	57,996	41,840
IDLE	21,200	1.4	51,819	19,791	21,431	6,763		9,208	23,362	11,375	14,513
Idle First	8,429	0.6	37,599	29,319	45,493	10,633			60,907	31,105	31,438
Others Combined with other crops	24,687	1.6	66,614	37,643	31,090	9,778			74,604	36,735	40,406
Fruit Tree Combined with other crops	7,379	0.5	137,360	81,272	58,864	16,646			186,206	101,835	92,337
Sugar Combined with other crops	111,544	7.4	268,212	119,337	80,339	37,239			245,021	123,359	134,912
Rubber Combined with other crops	4,813	0.3	63,818	62,064	59,997	8,239			150,679	46,058	48,662
Rice Combined with other crops	159,462	10.6	112,087	45,366	68,261	9,607	28,447	6,941	110,827	44,464	33,506

Source: Authors estimate from LBP Claims data as of end 2013

Table 13. National Annual Palay Yield and Land Compensation Values

	١	/ield (cavan	s/ha/year)			Gross Reven	ue (P/ha)			Estimated CNI 6% (P/ha)		Land
Year	Average	Irrigated	Rainfed	Upland	Average	Irrigated	Rainfed	Upland	Average	Rainfed	Irrigated	Compensation Values (P/ha)
1993	96.19	111.64	43.71	29.45	8,417	9,769	3,825	2,577	23,170.68	10,529.06	26,892.35	16,381.65
1994	97.21	113.99	43.19	31.92	8,506	9,974	3,779	2,793	23,416.39	10,403.80	27,458.43	15,548.08
1995	93.39	108.4	42.28	30.9	8,172	9,485	3,700	2,704	22,496.21	10,184.60	26,111.88	31,419.08
1996	98.78	114.63	43.22	28.55	8,643	10,030	3,782	2,498	23,794.58	10,411.03	27,612.60	25,330.53
1997	101.61	117.62	42.85	29.78	8,891	10,292	3,749	2,606	24,476.28	10,321.90	28,332.84	29,020.72
1998	90.68	102.91	38.46	32.77	7,935	9,005	3,365	2,867	21,843.41	9,264.42	24,789.43	36,561.24
1999	104.45	118.63	43.60	28.1	9,139	10,380	3,815	2,459	25,160.39	10,502.57	28,576.13	36,241.56
2000	107.71	122.24	44.60	33.45	45,346	51,463	18,777	14,082	124,835.76	51,691.35	141,676.01	89,887.35
2001	110.9	124.95	47.28	35.46	45,303	51,042	19,314	14,485	124,716.67	53,170.46	140,517.11	96,489.96
2002	115.74	129.74	49.57	37.18	51,041	57,215	21,860	16,396	140,515.09	60,180.86	157,511.90	98,649.17
2003	114.06	127.64	50.47	37.85	50,415	56,417	22,308	16,730	138,789.47	61,412.45	155,313.77	105,626.19
2004	120.82	134.77	53.28	39.96	57,087	63,679	25,175	18,881	157,159.82	69,305.37	175,305.65	108,990.62
2005	122.03	136.88	52.7	39.52	63,639	71,383	27,483	20,610	175,195.04	75,659.91	196,514.77	117,202.26
2006	128.25	142.72	56.03	42.02	67,075	74,643	29,304	21,976	184,654.52	80,672.07	205,488.45	123,474.35
2007	131.56	145.59	58.57	43.93	73,739	81,603	32,828	24,623	203,002.02	90,375.71	224,650.84	121,944.03
2008	130.23	143.01	59.68	44.76	92,007	101,037	42,164	31,623	253,293.53	116,075.85	278,150.25	148,426.65

2009	131.12	179.52	82.73	93,623	128,180	59,066	-	257,740.30	162,606.69	352,873.91	149,151.53
2010	131.50	180.98	82.01	100,924	138,905	62,943	-	277,839.76	173,278.88	382,400.64	131,879.91
2011	134.44	182.61	86.27	91,082	123,719	58,445	-	250,745.32	160,897.66	340,592.98	130,987.09
2012	140.47	192.27	88.66	100,785	137,957	63,613	-	277,458.30	175,125.39	379,791.20	133,976.44
2013	141.60	193.91	89.28	122,695	168,026	77,364	-	337,775.20	212,979.29	462,571.12	122,105.78
2014	160.07	201.05	90.22	160,070	201,050	90,220		440,667.30	248,372.61	553,483.86	153,358.16

Source: Authors estimate from the data of the Bureau Agriculture Statistic;

Note: Yield per cropping from BAS data adjusted to annual yield using crop intensity in irrigated farms

irrigated= 2.27; rainfed =1.46

Upland data from 2009 onwards not available

Gross revenue estimated from yield and farmgate price

CNI = capitalized net income at 6% for 30 years. Net income estimated at 20% of gross revenue Excludes landholdings compensated based on PD27/EO228 or RA3844 (EO, E9, LO, R3) Land compensation values estimated from Land Bank data

Table 14. Distribution of CARP Compensable Landholdings by Value and by Crop

20,000-39,999 40,000-79,999 80,000-119,999 120,000-199,999 200,000-299,999				Nu	mber of Lan	dHoldings (LH) a/				Total	
Value (P/hectare)	RICE b/	CORN	COCONUT	SUGAR	BANANA	FRUIT TREE	RUBBER	Combined Crops	IDLE	OTHERS	No. of LH	% to Total
below 20,000	19,613	5,771	4,959	210	141	175	104	8,722	1,893	3,011	44,599	37.7
20,000-39,999	1,892	4,478	6,156	224	75	166	58	7,307	277	2,163	22,796	19.3
40,000-79,999	5,184	4,034	5,438	918	529	167	150	9,202	189	2,037	27,848	23.5
80,000-119,999	2,427	712	1,267	1,615	203	165	36	4,153	20	566	11,164	9.4
120,000-199,999	2,850	91	165	1,765	72	305	25	3,805	28	282	9,388	7.9
200,000-299,999	160	12	27	365	25	113	12	1,048	11	53	1,826	1.5
300,000-499,999	8	2	4	102	60	56	2	326	6	33	599	0.5
500,000-999,999	3		3	4	37	68		22	1	4	142	0.1
1,000,000 and above	3	1	1	2	1	1		3	1	6	19	0.0
Total number of LH	32,140	15,101	18,020	5,205	1,143	1,216	387	34,588	2,426	8,155	118,381	100

Source: Authors estimate from LBP Claims data as of end 2013

a/ landholding refers to Landowners lot

b/ excludes 17,783 landholdings valued using EO228 or PD27 valuation formula

Table 15. CARP Land Compensation Subsidy by Program Type(in Million pesos; as of March 30, 2015)

Program Type	Land Value Paid to LO	Increase Due to Revaluation/Court Decision	Land value to be Amortized by Farmer a/	s	Total Land Price Subsidy	Regular Subsidy c/	No. of FBs d/	Average Amount to be Amortized per FB (Pesos)	Land price Subsidy per FB (in Pesos)
	(a)	(b)	(c)		(d)= {(a) + (b)} - (c)	(e)			
PD 27/EO 228	3,228.19	291.07	3,018.32	b/	500.94	0.00	282,326	10,690.90	1,774.35
RA 6657	54,545.67	2,480.91	44,853.24		12,173.34	6,566.63	577,666	77,645.64	21,073.31
RA 9700	8,659.15	4.84	7,690.57		973.42	1,015.01	38,960	197,396.65	24,985.04
Total	Php66,433.01	Php2,776.82	Php55,562.14		Php13,647.70	Php7,581.64	898,952	61,807.68	15,181.79

Source: Authors estimate from LBP Agrarian Reform Receivables System (ARRS) summary tables

a/ Includes ARBs with and without LDIS

b/ Inclusive of P1,205.38 Million fully paid accounts prior to system conversion

c/ Regular subsidy is subsidy to farmer beneficiary on regular amortization payments

d/ Estimated based on average area per FB as follows: (1) 1.5 for PD27 ; (2) 1.8 for RA6657 and 9700

Table 16. Loan Collection Performance of Farmer Beneficiaries(as of March 2015)

		Amount to be Amortized by	Farmer Ben	eficiaries (in Million _I	Amount	Collected Fro				
Program Type	LO Compensation (in Million pesos)	With LDIS		Without LDIS	TOTAL	Principal	Interest	Not Yet	FAR	Collection Performance (%)
		ADC	NYD	(d)	(e)	(f)	(g)	Due (h)	(i)	

		Principal (a)	Interest (b)	(c)							Principal	P+I
PD27/EO228	3,228.19	1,678.81	1,722.63	90.31		1,769.12	608.98	1,057.50	36.67	457.16	37.64%	49.54%
RA 6657	54,545.67	2,727.25	2,069.97	8,457.14	34,326.14	11,184.39	1,116.98	676.56	1,563.07	2,957.96	62.47%	52.77%
RA 9700	8,659.15	30.34	16.92	544.99	7,128.66	575.33	4.62	2.76	17.10	23.36	45.78%	38.03%
TOTAL	66,433.01	4,436.40	3,809.52	9,092.44	41,454.80	13,528.85	1,730.58	1,736.82	1,616.83	3,438.49	55.30%	51.55%
AOC I	325.24	83.23	47.28	124.53	32.00	207.76	50.17	44.43	57.89	33.64	76.57%	80.94%
AOC II	3,414.32	389.30	357.68	1,382.28	1,214.05	1,771.58	149.74	166.95	186.00	173.87	58.36%	53.88%
AOC III-A	3,335.46	405.07	406.12	1,003.14	606.55	1,408.21	165.58	159.06	261.91	132.14	64.09%	54.66%
AOC III-B	2,637.21	895.28	610.36	1,251.38	800.11	2,146.65	516.56	728.45	334.76	236.13	69.21%	85.84%
AOC VI-A	2,898.04	82.55	71.50	214.61	2,140.64	297.16	32.50	31.31	30.20	143.34	55.61%	51.02%
AOC VI-B	16,228.57	95.26	65.09	331.89	13,385.80	427.15	31.93	37.61	10.48	290.28	40.11%	46.84%
AOC IV	5,388.39	339.49	268.59	845.44	3,221.65	1,184.92	133.94	76.18	164.86	543.20	59.24%	48.51%
AOC V	3,361.40	345.03	249.96	579.13	1,635.47	924.15	102.91	88.17	72.42	189.42	42.00%	39.48%
AOC VII	5,297.39	72.13	50.31	485.72	3,950.69	557.85	16.24	12.60	14.99	129.04	35.85%	31.90%
AOC VIII	1,526.23	43.27	49.71	67.30	1,173.38	110.57	8.98	7.19	7.21	135.39	32.08%	23.34%
AOC IX	1,781.13	85.75	27.38	167.45	1,200.25	253.19	24.62	10.68	15.47	157.02	39.61%	39.49%
AOC X	1,901.23	255.25	181.08	572.84	761.15	828.09	147.46	133.82	113.59	228.06	70.78%	71.80%
AOC XI	6,964.88	501.07	258.53	1,050.46	3,357.84	1,551.52	230.96	99.51	265.68	720.50	64.77%	58.14%
AOC XII	11,373.52	843.74	1,165.92	1,016.29	7,975.23	1,860.03	119.00	140.87	81.39	446.07	21.66%	16.32%
Source: Authors summ	nary of LBP collection data											
Total number of FBs w	vith LBP			=	898,952	=	100%					
FBs with Partial Repay	yment			=	110,851	=	12%					
FBs with Due and Col	llectible Amortization but with	nout Repayment		=	117,163	=	13%					
FBs with Fully Paid A	mortization			=	97,633	=	11%					
FBs without LDIS / LA	AS			=	573,305	=	64%					

	# of ARR	# of			Amour	nt (P)	-	Average Amount
AOC	Accounts	ARBs	Area (Ha)	Orig. Principal	O/S Balance	Arrearages	% in Arrears	of Arrears per FB (P)
AOC I	6,961	4,619	4,895	83,423,901	77,634,962	35,113,188	45.23	7,601.90
AOC II	41,563	23,042	33,471	1,248,498,915	1,223,030,769	301,538,837	24.66	13,086.49
AOC III-1	17,796	13,576	22,375	955,598,155	931,533,649	238,848,234	25.64	17,593.42
AOC III-2	34,101	25,187	43,143	1,063,884,235	1,010,437,050	399,773,727	39.56	15,872.22
AO IV	23,087	18,644	28,937	845,961,468	823,795,573	208,973,174	25.37	11,208.60
AOC V	34,057	25,784	43,214	660,937,391	636,847,132	239,792,237	37.65	9,300.04
AOC VIA	9,429	6,316	7,765	204,835,116	198,307,834	50,423,100	25.43	7,983.39
AOC VIB	5,849	4,057	6,447	287,263,794	274,433,244	65,191,111	23.75	16,068.80
AOC VII	9,684	7,040	9,215	391,573,004	386,630,924	49,522,135	12.81	7,034.39
AOC VIII	8,487	5,602	8,061	88,583,278	86,234,892	33,570,163	38.93	5,992.53
AOC IX	4,149	3,098	10,965	199,855,237	193,536,786	60,055,443	31.03	19,385.23
AOC X	14,710	11,331	19,782	444,158,831	421,176,275	114,537,117	27.19	10,108.30
AOC XI	24,312	16,553	26,989	939,992,576	908,515,794	264,298,288	29.09	15,966.79
AOC XII	33,031	28,847	73,341	1,659,715,015	1,633,155,478	722,552,562	44.24	25,047.75
TOTAL	267,216	193,696	338,598	9,074,280,917	8,805,270,362	2,784,189,316	31.62	14,374.02

Table 17. ARR Accounts in Default by Regional AOCs(as of May 31, 2015)

Source: Authors summary of LBP ARR summary tables

AOCs= agrarian operations center

Default refers to farmer beneficiary accounts with 3 or more annual amortization arrearages

Table 18. DAR LAD Balance by Region (in hectares, as of end 2016)

Region	Scope	Balance Area	% to Scope
National	5,425,344	602,306	11.1
CAR	105,774	3,081	2.9
I	144,516	1,333	0.9
П	417,740	44,178	10.6
III	449,788	11,971	2.7
IV-A	218,503	20,201	9.2
IV-B	190,936	3,688	1.9
V	413,545	86,471	20.9
VI	257,651	31,344	12.2
VII	84,749	3,320	3.9
NIR	427,656	125,279	29.3
VIII	494,005	60,153	12.2
IX	238,273	8,859	3.7
Х	362,166	19,480	5.4
XI	261,517	10,613	4.1
XII	731,098	44,325	6.1
CARAGA	294,654	16,861	5.7
ARMM	332,773	111,149	33.4

Table 19. Distribution of Landholdings by Nature of the Problem

Nature of Problem	Gross Area (Ha.)	No. of LH	
ARB Issue	10,310	1,221	
Basic Document Flaws/Infirmities	36,842	3,825	

Coverage/Land-use Issue	47,930	4,851
Land Titling Issue	50,505	5,925
Survey Issue	45,114	4,551
Land Valuation Issue	738	30
Succession/Land Transfer Issue	40,570.	5,077
Peace and Order Issue	6,227	626
Unspecified problems	2,097	352
Grand Total	240,333	26,458
Actual Count of Problematic landholdings*	148,168	14,758

* Some landholdings have multiple problems

LH = landholdings Source: Ballesteros and Tiamson (2013)

Table 20. DAR LAD Balance (Gross Area) by Crop and by Region a/ (in hectares; as of end 2014)

Region	Rice	Corn	Coconut	Sugarcane	All Commercial Crops	Mixed Crops	Root Crops	Vegetables	Others	Total Gross Area
NATIONAL	160,878	87,108	207,635	133,095	21,835	58,979	1,993	9,541	13,721	694,784
% Share	23%	13%	30%	19%	3%	8%	0%	1%	2%	100%
CAR	1,890	1,069	12		95	71	10	62	3	3,212
1	1,234				48				91	1,373
II	23,026	22,139		1,440	83	1,779	17	4,311		52,794
III	14,332	77	117	207	792	2,054	108	176	86	17,948
IV-A	974	30	17,996	2,201	1,096	2,293	99	106	54	24,850
IV-B	2,991	107	1,312		574	142			6	5,131
V	11,486	708	61,147	221	512	18,238		3,325	110	95,746
VI	16,544	985	957	117,280	998	19,555	20		358	156,698

VII	2,518	3,912	496	2,514	71	25	11		6,966	16,513
VIII	8,696	1,122	45,328	6,193	489	40	1,330	270	21	63,488
х	3,511	13,162	16,550	1,463	1,141	805	102	52	357	37,142
ХІ	957	933	8,382	150	1,783	689			74	12,967
XII	19,009	19,926	4,745	1,419	4,251	3,413		36	2,671	55,471
CARAGA	4,726	2,451	8,845		4,848	6,155	250		273	27,548
ARMM	47,609	19,761	33,244	8	4,052	3,720	45	1,204	2,644	112,289

Source: Summaary table from DAR Field Operations data

a/ breakdown of LAD balance by crop not available as of end 2016.

Table 21. DAR LAD Balance (Gross Area) by Land Size (PAL Only)(in hectares; as of end 2014)

Region/Province	> 50	> 24 to 50	> 10 to 24	> 5 to 10	5 and below	Total Gross Area	Total Gross Area (excluding 10 ha and below)
NATIONAL	191,948	65,606	207,894	164,178	5,946	635,571	465,447
% Share	30%	10%	33%	26%	1%	100%	
CAR	294	293	1,213	849	164	2,812	1,799
1	692	107	361	175	12	1,346	1,160
Ш	15,414	2,361	10,620	17,076	120	45,591	28,395
III	1,625	855	4,143	2,520	148	9,289	6,622
IV-A	8,212	3,415	7,153	5,887	137	24,804	18,779
IV-B	545	437	1,201	1,525	38	3,747	2,183
V	15,874	10,240	32,235	34,864	1,189	94,401	58,349
VI	67,524	26,950	38,252	19,421	1,022	153,168	132,725
VII	6,909	1,243	5,186	2,689	81	16,107	13,338
VIII	8,190	5,455	24,037	23,999	106	61,788	37,683

іх	1,474	919	6,718	2,466	24	11,600	9,111
x	8,584	2,934	12,218	10,242	357	34,335	23,736
хі	3,742	1,292	4,194	3,555	76	12,860	9,229
XII	5,330	2,613	13,081	14,511	454	35,990	21,024
CARAGA	2,584	483	6,835	10,623	196	20,720	9,902
ARMM	44,954	6,009	40,449	13,777	1,824	107,013	91,412

Source: Author's summary from DAR Field Operations data

Note: Breakdown of LAD balance by size not available in 2016.

 Table 22. Distribution of parcels by tenure status, CAF 2002

Tenure Status	CAF 1	991	CAF 2002	
Tenure Status	Number of Parcels	% to Total	Number of Parcels	% to Total
Fully owned	2,149,153	44.1	1,513,034	43.8
Tenanted	961,664	19.7	641,209	18.6
Leased/rented	266,983	5.5	196,304	5.7
Rent-free	691,150	14.2	315,924	9.2
Held under CLT/CLOA	143,281	2.9	142,077	4.1
Owner-like Possession Other than				
CLT/CLOA	586,048	12.0	513,599	14.9
Others	62,423	1.3	39, 583	1.1
Not reported	14,928	0.3	90,037	2.6
Total	4,875,630	100.0	3,451,767	100.0

Table 23. Approved Stock Distribution Applications, Status Report, as of June 2015

C	CORPORATION	LOCATION	REPRESENTA- TIVE/ DESIGNATION	CROPS PRODUCED	AREA (ha)	NO. OF FWBs	DATE AP- PROVED	STATUS
1	Hacienda Luisita, Inc.	San Miguel, Tarlac	Mr. Pedro Cojuanco, President	sugarcane	4,916	6,296	11 Nov. 1989	SDO revoked; Land Distribution ongoing
2	Archie Fishpond, Inc	Bago City, Negros Occ.	Mr. Arsenio Al Acuna	prawn culture/ sugar	102	155	15 Feb. 1991	Merged as one corporation with AA Acuña Agricultural Corp. as the surviving one. Complete folders
3	Arsenio Al Alcuna Agricultural Corp.	Cadiz, Negros Occ.	-do-	sugarcane	108	93		pertaining to the Petition for revocation was returned to the DARRO Task Force on SDO for further action. On March 9, 2009, The DARRO Task Force was specifically directed to initiate negotiation between the LO/Corp representative and the FWBs to possibly improve the terms of reference in the Memorandum of Agreement. In compliance thereto, DARRO VI submitted a report on Dec.19,2009 with the following updates:1. FWBs were advised to organize themselves to enable them to comply with the requirements of AO 1, S.2006 on the filling of petition for Revocation of SDO and to enable them to bargain for better benefits and improve the MOA; 2. Joint regional-provincial TFs on SDO shall conduct monitoring of the reorganization of FWBs on the first quarter of 2010.
4	Elenita Agricultural Development Corp.	Brgy. Burgos Cadiz City, Negros Occ.	-do-	sugarcane	113	82		
5	Ma. Clara Marine Ventures, Inc.	Bago City, Negros Occ.	-do-	sugarcane	58	58		
6	Palma Kabankalan Agricultural Corp.	Kabankalan-Ilog, Negros Occ.	-do-	sugarcane	219	113		
7	Tabigue Marine Ventures, Inc	EB Magalona, Negros Occ.	-do-	sugarcane	50	64		

(CORPORATION	LOCATION	REPRESENTA- TIVE/ DESIGNATION	CROPS PRODUCED	AREA (ha)	NO. OF FWBs	DATE AP- PROVED	STATUS
8	Ledesma Hermanos Agricultural Corporation	San Carlos, Negros Occ.	Mr. Julio Ledesma/ Carlos Ledesma, Stockholders	sugarcane	1,024	747	13 May, 1991	On July 28. 2010 the DARPO Task Force on SDO conducted monitoring, field validation and interview at Hacienda Fortuna, Brgy Buluangon, San Carlos City. The corporation allowed the DARPO TFSDO to inspect its books and other financial records. The FWBs affirmed that they are covered by Philhealth, they may avail of dental services which they may reimburse to the corporation upon presentation of receipts. They may avail of free medical consultation at the Nabingalan Planters Association clinic and may also avail of medical loans through the Credit cooperative. They are likewise given housing allowance, SIL, bereavement, maternity and paternity leaves, They receive 13th month pay, milling incentive bonus, pension, retirement and separation pay. The corporation had put up a deep well and toilet facilities for the FWBs. The corporation likewise put up relocation sites for retirees at 150 square meter per retiree. Aside from these, the corporation also extends benefits to the FWBs that were not stipulated in the MOA. 1. Congrits Milling Pa-premyo given in kind- congrits 3-50 kilos to harvesting laborers based on performance. 2. Milling premium of Milling Cabo (P6.00 per day), dispatcher, checker,

с	ORPORATION	LOCATION	REPRESENTA- TIVE/ DESIGNATION	CROPS PRODUCED	AREA (ha)	NO. OF FWBs	DATE AP- PROVED	STATUS
9	Hernandez Sugar	San Enrique, Iloilo	Mr. Eduardo Hernandez/Ms	sugarcane	231	205	28 February,	crawler tractor operator (P3.00 per day) based on performance. 3. Loading incentives P6.00 per ton for harvesting laborers per week. 4. The corporation donated lots for three (3) Elementary and High School sites. 5. free High school tuition fee at Don Carlos Ledesma National High School. College scholarship is extended to deserving students by the office of the Congressman. The corporation also provide free shuttle services No Petition for Cancellation filed
	Plantation, Inc.		. Matilde Hernandez, Stockholder				1992	
10	Negros Industrial By- Prod and Proc.,Inc. Nos Najalin Agri- Venture Inc. (Navi)	La Carlota, Negros Occ.	Mr. Rudolf Jularbal, Vice President	sugarcane	438	273	28 February, 1992	With Petition for Cancellation of SDO filed by the landowner and Petition for Cancellation of Exemption filed by the farmer beneficiaries

С	ORPORATION	LOCATION	REPRESENTA- TIVE/ DESIGNATION	CROPS PRODUCED	AREA (ha)	NO. OF FWBs	DATE AP- PROVED	STATUS
11	Calatrava Negros Occ.	Calatrava, Negros Occ.	Mr. Otto G. Weber, Jr., Corporate Secretary	Sugarcane	174	177	01 Sept, 1992	On October 22, 2010 the recommendation of the DARCO- MCSDO on the Petition of the FWBs for the revocation of the Stock Distribution Option (SDO) was presented to the PARC technical Committee. The PARC Technical committee favorably endorsed the MCSDO's recommendation and agreed to elevate the matter to the PARC Executive Committee.
12	SVJ Farms, Inc	Talisay, Negros Occidental	Ms. Regina Villanueva, Chairman of the Board	sugarcane	170	143	16 Nov. 1992	On March 17. 2015 the recommendation of the DARCO- MCSDO on the Petition of the FWBs for the revocation of the Stock Distribution Option (SDO) was presented to the PARC technical Committee. The PARC Technical committee favorably endorsed the MCSDO's recommendation and agreed to elevate the matter to the PARC Executive Committee.
13	Asia Agro- Industrial Enterprises	Don Marcellino, Davao del Sur	Mr. Henry C. Wee, President and Chairman of the Board	coconut	100	29	26 April, 1994	On March 17. 2015 the recommendation of the DARCO- MCSDO on the Petition of the FWBs for the revocation of the Stock Distribution Option (SDO) was presented to the PARC technical Committee. The PARC Technical committee favorably endorsed the MCSDO's recommendation and agreed to elevate the matter to the PARC Executive Committee.

(CORPORATION	LOCATION	REPRESENTA- TIVE/ DESIGNATION	CROPS PRODUCED	AREA (ha)	NO. OF FWBs	DATE AP- PROVED	STATUS
Oth	Others: On-going Assessment for SDO Approval							
1	14 Colored Corporation	EB Magalona and La Carlota City, Negros Occ.	Mr. Arturo J. Ledesma and Ms. Teresa Barrientos, Authorized Representative S	sugarcane	747	663		Persuant to the agreement during the Dec. 17. 2009 PARC Execom Meeting, site validation and consultation were conducted of Feb.3-4,2010 by the PARC Execom designated Validation Team. Results of site validation/consultation were presented during the PARC Execom Meeting on June 2,2010.
2	Garcona Agro- Industrial Corporation	Caputatan Norte, Medellin, Cebu City	Manuel R. Garcia, President	sugarcane	46	47		With PARC Execom. Motion for reconsideration for the denial of the SDO application filed by GARCOMA is recommended for further denial.

Table 24. DENR Accomplishment on the Disposition of Public lands(July 1987 - December 2014)

		PUBLIC A & D							
ADMINISTRATION	Accomplishment (ha)	% to Scope	No. of ARBs	% to Total ARBs	Average Area per beneficiary (ha)				
Aquino Administration (July 1987-June 1992)	539,086	21.44	244,845	10.44	2.2				
Ramos Administration (1992-June 1998)	489,069	19.45	550,783	23.49	0.9				
Estrada Administration (July 1998-2000)*	113,383	4.51	139,698	5.96	0.8				

Arroyo Administration					
(2001-2004)**	352,400	14.01	293,843	12.53	1.2
Arroyo Administration (2005-2010)	589,624	23.45	604,658	25.79	1.0
Aquino Administration (July 2010- Sept 2014)	406,656	16.17	510,798	21.79	0.8
TOTAL	2,490,218	99.03	2,344,625	100	1.1
Scope	2,514,581	100.00	n.a.		n.a
Land Disposition Balance	24,363	0.97			
	· · · · ·		·	·	•
		ISF	Areas (CSC/CBFM)	***	
ADMINISTRATION	Accomplishment (ha)	% to Total Accomplishment	No. of ARBs	% to Total ARBs	Average Beneficiary area (ha)
Aquino Administration (July 1987-June 1992)	335,053	32.14	152,998	45.16	2.2
Ramos Administration (1992-June 1998)	373,392	35.81	179,607	53.01	2.1
Estrada Administration (July 1998-2000)	334,189	32.05	6,203	1.83	1.8
Arroyo Administration (2001-2004)					
Arroyo Administration (2005-2010)					
Aquino Administration (July 2010- Sept 2014))					
TOTAL	1,042,634	100	338,808	100	3.1
Scope	1,200,000				

Source: DENR CARP Office summary tables

Table 25. Average CARP Area of ARBs	by Region (as of 2016)
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Region	Total Net Area Distributed	# of ARBs	Average Area per ARB
National	4,741,580	2,807,108	1.69
CAR	102,335	81,318	1.26
I	143,045	118,944	1.20
П	366,082	211,392	1.73
111	429,393	281,125	1.53
IV-A	189,276	123,487	1.53
IV-B	179,991	130,273	1.38
V	322,978	194,583	1.66
VI	220,903	136,634	1.62
VII	77,626	69,067	1.12
NIR	292,299	247,618	1.18
VIII	432,317	195,345	2.21
IX	228,302	130,796	1.75
Х	338,890	217,614	1.56
XI	248,035	179,495	1.38
XII	677,849	283,387	2.39
CARAGA	270,662	135,471	2.00
ARMM	221,594	70,559	3.14

Source: Author's estimate of data from DAR PIMD (as of end of 2016)

Table 26. ARBs in ARC and not in ARC by Region (as of end of 2016)

Decien	ARBs in ARC a/		ARBs not i	in ARC	Total ARBs	
Region	Number	% to Total	Number	% to Total	Number	% to Total
National	1,506,184	54	1,300,924	46	2,807,108	100
CAR	70,215	86	11,103	14	81,318	100
Ι	92,542	78	26,402	22	118,944	100

II	107,338	51	104,054	49	211,392	100
III	155,844	55	125,281	45	281,125	100
IV-A	57,950	47	65,537	53	123,487	100
IV-B	83,454	64	46,819	36	130,273	100
V	85,928	44	108,655	56	194,583	100
VI	55,189	40	81,445	60	136,634	100
VII	51,061	74	18,006	26	69,067	100
NIR	105,193	42	142,425	58	247,618	100
VIII	123,396	63	71,949	37	195,345	100
IX	79,537	61	51,259	39	130,796	100
Х	98,384	45	119,230	55	217,614	100
XI	100,111	56	79,384	44	179,495	100
XII	119,808	42	163,579	58	283,387	100
XIII	99,207	73	36,264	27	135,471	100
ARMM	21,027	30	49,532	70	70,559	100

Source: Author's presentation of data from DAR PIMD (as of end of 2016)

a/ ARC refers to Agrarian Reform Communities

Table 27. ARBOs in ARC by Region (as of end of 2016)

Bagion	ARBOs i	n ARC a/	ARB0s not	in ARC	Total ARB0s	
Region	Number	% to Total	Number	% to Total	Number	% to Total
National	4,402	84	814	16	5,216	100
CAR	171	90	20	10	191	100
1	258	95	15	5	273	100
Ш	206	93	16	7	222	100
III	509	72	201	28	710	100
IV-A	235	91	24	9	259	100
IV-B	147	94	10	6	157	100
V	210	90	23	10	233	100

VII	214 251	83 76	45 79	17 24	259 330	100 100
VIII	419	96	16	4	435	100
IX	275	88	39	12	314	100
Х	369	90	41	10	410	100
XI	272	85	47	15	319	100
XII	371	67	179	33	550	100
XIII	377	90	42	10	419	100

Source: Author's presentation of data from DAR PIMD (as of end of 2016)

a/ ARBO refers to Agrarian Reform Beneficiary Organization

 Table 28. Agribusiness Venture Arrangements (AVAs) Inventory, as of March 4, 2015*

Region	No. of AVAs	% to Total	Area Involved (Ha)	% to Total	No. of ARBs	% to Total
CAR	11	2.4	1,158.56	1.6	650	1.1
1	2	0.4	110.03	0.2	241	0.4
II	16	3.5	4,351.30	6.1	2,367	4.0
	4	0.9	776.44	1.1	314	0.5
IV-B	1	0.2	54	0.1	44	0.1
V	2	0.4	5,870.00	8.2	3,125	5.3
VI	1	0.2	4,654.05	6.5	1,756	3.0
IX	7	1.5	1,052.00	1.5	792	1.3
Х	93	20.6	6,668.03	9.3	16,012	27.0

Total	452	100.0	71,329.90	100.0	59,195	100.0
XIII	199**	44.0	10,376.84	14.5	3,205	5.4
XII	44	9.7	15,394.95	21.6	10,517	17.8
XI	72	15.9	20,863.69	29.2	20,182	34.1

Source: SSO

** Individual ARBs counted

Сгор	Area (Ha)	% to Total Area	Number of ARBs	% to Total No. of ARBs
			-	
All Banana	14,501.07	27.7	14,866	32.7
Banana	10,452.67	20.0	11,726	25.8
Banana (Cavendish)	3,993.80	7.6	3,054	6.7
Banana (Bongolan, Organic)	54.6	0.1	86	0.2
Oil Palm	12,453.57	23.8	4,019	8.9
Pineapple	14,185.15	27.1	19,864	43.8
Pomelo	92.41	0.2	552	1.2
Sugarcane	3,777.20	7.2	2,619	5.8
Сасао	1,327.71	2.5	888	2.0
Other Crops (Rubber, HVCs,				
Papaya, Rice, Fruit Tees, etc.)	5,934.16	11.4	2,591	5.7
Total	52,271.28	100.0	45,399	100.0

Table 29. Area and number of ARBs covered under the Agribusiness Venture Agreement by Crop (as of October 2015)

Source of data: 2015 Inventory of AVAs, DAR

Table 30. Number and area covered by type of Agribusiness Venture Arrangement (AVA), 2015

Type of Agribusiness Venture Arrangement	Number of AVAs	Percent to Total AVAs	Area Covered (Has.)	Percent to Total Area
Lease Agreements	334	77.14	33,016.93	63.16
Lease agreement	222	51.27	22,015.11	42.12
Lease contract	90	20.79	6,570.63	12.57
Leaseback agreement	22	5.08	4,431.19	8.48
Growership Agreements	88	20.32	12,605.26	24.12
Marketing contract	4	0.92	4,458.00	8.53
Growership	33	7.62	4,391.82	8.40
Growership/contract growing	37	8.55	940.12	1.80
Growership/contract growing (agro-forestry)	1	0.23	272.00	0.52
Contract growing	9	2.08	1,246.60	2.38
Banana production purchase agreement	1	0.23	27.00	0.05
Banana supply and marketing agreement	3	0.69	1,269.72	2.43
Other Agreements	11	2.54	6,649.09	12.72
Joint venture agreement	4	0.92	5,602.44	10.72
Marketing with incentives	2	0.46	846.00	1.62
Contract of development agreement	1	0.23	57.40	0.11
Management contract	2	0.46	54.25	0.10
Rice retailing	1	0.23	30.00	0.06
Not indicated	1	0.23	59.00	0.11
Total	433	100.00	52,271.28	100.00

Source: Food and Agriculture Organization of the United Nations, 2016

Table 31. List of Phase I and Phase II Operational Block Farms

Year	Location	Name of Organization
2012	Magalang, Pampanga	Binhi ni Abraham
	Balayan, Batangas	Lucban MPC
	Nasugbu, Batangas	Kamahari

	Nasugbu, Batangas	Damba
	Lian, Batangas	Prenza
	Pontevedra, Negros Occ.	Kauswagan & Gen. Malvar
2013	Magalang, Pampanga	PASAMA
	Pili, Camarines Sur	Had. Salamat
	Tampalon, Kabankalan City, Negros Occidental	Minaba MPC
	Capiz, Iloilo	Vizcaya ARB MPC and Lantagan ARB, MPC
	Sta. Catalina, Negros Oriental	Manggolod Farmers Mpc
	Canlaon City, Negros Occidental	Ramrod Agricultural Multi-Purpose Coop. (RAMPUCO)
	Caputatan, Medellin, Cebu	ANARBA
	Ormoc, Kananga, Leyte	Boroc Agricultural Producers MPC
	Quezon, Bukidnon	J.A. Agro Employees Farmers Beneficiaries Livelihood Association
Paniqui, Moncada, Ramos, Anao, Gerona, Tarlac		Northern Cluster Producers Coop (NCPC)
	Lauan, Patnongon, and Bugasong, Antique	GMJ ARB Coop and ASSMMSA
	Passi, San Enrique, Iloilo	JAGUIMITAN-JARBEMCO and MAPILI- CATUBAY
	Escalante, Negros Occidental	Don Esteban ARB (DEARBA) and Had. Bongco Farmers Ass'n (HABFA)
	Cadiz City, Negros Occidental	PARAISO Food Workers ARB (El Sansi ARB)
	Cadit City	Hacienda Bernardita
	Talisay City, Negros Occidental	CASA MPC
	La Carlota, Negros Occidental	NARC
	Manjuyod, Negros Occidental	SYCIP Plantation Farm Workers

Tanjay, Negros Oriental	San Julio Farm Workers MPC
Mabinay, Negros Oriental	SAMAC (SUFARMFUCO)
Bais City, Negros Occidental	KASFARBECO
Bayawan, Negros Oriental	LAPAY (LARBEMCO)

Source: DAR

Table 32. CARP Obligations Incurred (By Expense Class)

As of 31 December 2016

In Million Pesos

	REPUBLIC ACT NO. 6657	REPUBLIC ACT NO. 8532	REPUBLIC ACT NO. 9700	
AGENCY	(July 1987 to 1998)	(1999 to 2009)	(2010 to 2016)	TOTAL
LBP	21,508.16	40,150.33	18,721.42	80,379.90
PS	2,326.49	851.194	-	3,177.69
MOE LO	2,193.15	2,107.15	5,947.56	10,247.86
Comp.	14,082.22	37,191.99	12,773.86	64,048.06
СО	2,906.30	-	-	2,906.30
DAR	17,628.80	78,873.99	79,118.24	175,621.03
Regular	<u>16,964.83</u>	<u>47,027.86</u>	<u>45,526.74</u>	109,519.43
PS	8,236.11	20,723.74	17,185.26	46,145.11
MOE	7,393.74	23,390.87	27,749.93	58,534.54
СО	1,334.98	2,913.25	591.55	4,839.78
Fund 101	<u> </u>	<u>12,101.41</u>	<u>22,512.67</u>	34,614.08
PS		7,540.29	15,749.77	23,290.06
MOE		4,158.87	6,762.91	10,921.78
СО		402.256	0	402.26
FAPs	<u>663.97</u>	<u>19,744.72</u>	<u>11,078.83</u>	31,487.52
PS	-	247.569	89.08	336.65

MOE	72.425	8,005.16	4,254.32	12,331.9 [,]
СО	591.545	11,491.99	6,735.43	18,818.97
DENR	2,498.78	3,481.34	3,610.44	9,590.50
PS	697.423	947.885	568.33	2,213.64
MOE	1,617.00	2,528.17	3,042.12	7,187.30
СО	184.355	5.281	-	189.6
LRA	495.518	1,057.84	1443.461	2,996.8
PS	354.959	794.01	537.958	1,686.9
MOE	105.217	263.826	905.493	1,274.5
СО	35.342	-	-	35.3
DA	2,380.04	-	-	2,380.0
PS	299.863	-	-	299.8
MOE	1,570.68	-	-	1,570.6
СО	509.497	-	-	509.5
DPWH	2,663.72	2,607.30	174.796	5,445.8
PS	-	-	-	0.0
MOE	-	-	-	0.0
СО	2,663.72	2,607.30	174.796	5,445.8
NIA	4,087.11	3,194.47	1,242.53	8,524.1
PS	255.185	731.773	376.349	1,363.3
MOE	127.981	175.285	79.234	382.5
СО	3,703.94	2,287.41	786.942	6,778.2
DTI	519.599	577.37	378.148	1,475.1
PS	314.593	405.1	233.345	953.0
MOE	157.774	171.625	144.803	474.2
со	47.232	0.646		47.8
DOLE ^{7/}	9.544	28.769	17.79	56.1

PS	2.567	2.696	-	5.26
MOE	6.672	26.073	17.79	50.54
СО	0.304	-	-	0.30
TLRC	265.08		-	265.08
PS	-	-	-	0.00
MOE	265.08	-	-	265.08
СО	-	-	-	0.00
Grand Total	52,056.34	129,569.15	104,706.83	286,332.32
PS	12,487.19	32,244.25	34,740.09	79,471.54
MOE	13,509.72	40,827.03	48,904.17	103,240.91
LO				
Comp.	14,082.22	37,191.99	12,773.86	64,048.06
СО	11,977.22	19,305.88	8,288.72	39,571.81

Source: DBM GAA

Table 33. Estimated Budget Requirement for LO Compensation by Crop

Crops	LAD Balance CARP Area (Ha)	Average Value (P/ha): 2010-2014	Total Requirement (in Million pesos)
Rice	127,455	130,705	16,659
Corn	66,570	94,087	6,263
Coconut	165,588	98,726	16,348
Sugarcane	115,613	209,998	24,278
All Commercial Crops	15,331	154,038	2,362
Mixed Crops	45,147	104,517	4,719
Others Combined	8,987	88,877	799
Others	12,817	108,534	1,391

All Crops	567,837	123,685	72,819
LBP Estimate (All Crops)	567,837	216,557	122,969

Source: Author's estimate from DAR LAD balance and estimated LBP average land prices by crop Notes: LAD balance of CARP Area for Private Agricultural Lands only (as of January 1 2015) Average Land Value (estimated from LBP valuation by crop under RA9700 or CARPer)

FIGURES

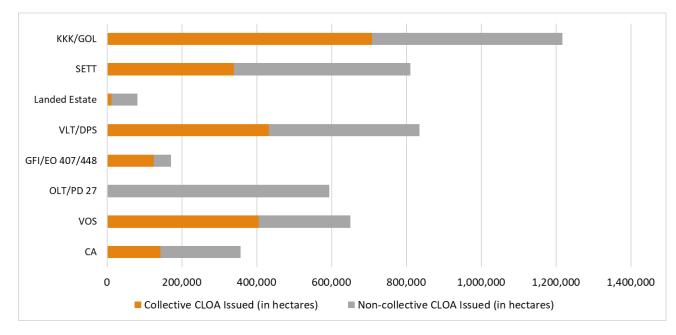


Figure 2. LAD Accomplishment by Mode as of January 2016 (Collective vs Non-Collective)

Source of Data: De los Reyes (2016)