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

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List of Acronyms

A&D alienable and disposable
AJD Agrarian Justice Delivery
AO Administrative Order
AOCs agrarian operation centers
APPC Asia-Pacific Policy Center
APT Asset Privatization Trust
ARB agrarian reform beneficiary

ARBO agrarian reform beneficiary organization

ARC agrarian reform community

ARCCESS Agrarian Reform Community Connectivity

and Economic Support Services

ARF Agrarian Reform Fund

ARMM Autonomous Region in Muslim Mindanao ARPT agrarian reform program technologist

ARR Agrarian Reform Receivable

AVAs agribusiness venture arrangements
BARC Barangay Agrarian Reform Committee

BIR Bureau of Internal Revenue CA compulsory acquisition

CAF Census of Agriculture and Forestry
CAR Cordillera Administrative Region
CARL Comprehensive Agrarian Reform Law
CARP Comprehensive Agrarian Reform Program

CIA CARP implementing agency

CLOA Certificate of Land Ownership Award

CNI capitalized net income

CPH Census of Population and Housing

CSF common service facility
DA Department of Agriculture
DAR Department of Agrarian Reform

DARRO Department of Agrarian Reform Regional Office

DBM Department of Budget and Management

DENR Department of Environment

and Natural Resources

DepEd Department of Education

DILG Department of the Interior and Local Government

DOH Department of Health DOJ Department of Justice

DOLE Department of Labor and Employment

DPS direct payment scheme

DPWH Department of Public Works and Highways
DSWD Department of Social Welfare and Development

DTI Department of Trade and Industry

EO Executive Order

FAO Food and Agriculture Organization

FWBs farmworker-beneficiaries
GAA General Appropriations Act
GDP gross domestic product

GFI government financial institution

GOL government-owned land

ha hectares

HLI Hacienda Luisita Inc. HVC high-value crop

KKK Kilusang Kabuhayan at Kaunlaran LAD land acquisition and distribution LBP Land Bank of the Philippines

LDIS Land Distribution and Information Schedule

LES landed estates

LHA leasehold arrangement
LRA Land Registration Authority
LTI land tenure improvement

MARO municipal agrarian reform officer

MCSDO Management Committee on Stock Distribution Option

MOA Memorandum of Agreement MPC multipurpose cooperative

NIA National Irrigation Administration

NIR Negros Island Region

ODA official development assistance

OLH Operation Leasehold
OLT Operation Land Transfer
PAL private agricultural lands

PARC Presidential Agrarian Reform Council

PARCCOM Provincial Agrarian Reform Coordination Committee

PARO provincial agrarian reform officer

PCGG Presidential Commission on Good Government

PD Presidential Decree

PMO Privatization and Management Office

RA Republic Act

SBF sugarcane block farming SDO stock distribution option

SETT settlement lands

SRA Sugar Regulatory Administration SOP strategic operation province

SPI Sycip Plantation, Inc.

UPLB-IARDS University of the Philippines Los Baños Foundation and the

Institute of Agrarian and Rurban Development Studies

VLT voluntary land transfer VOS voluntary offer to sell

WB World Bank

Abstract

This study evaluates the performance of the Comprehensive Agrarian Reform Program (CARP) in the last 30 years using the program's theory of change. 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. Among others, the study also notes that while there is weak evidence of overpricing of the land acquired by the government, the delay in CARP implementation is expected to increase the cost of land acquisition due to increased land/zonal land prices as a result of urbanization in the countryside.

While the implementation of the program may have been flawed, there is no need to redo the CARP. Instead, government should focus on support programs to modernize agriculture benefitting small farmers, i.e., scaling up promising arrangements such as agrarian reform communities, block farming, and agribusiness venture arrangements. On the other hand, issues on land consolidation, land ownership concentration, or land conversions can be better addressed through convergence efforts of land agencies and digitization in land management and administration.

Background of the Study

The Comprehensive Agrarian Reform Program (CARP) was introduced almost three decades ago with the approval of Republic Act (RA) 6657, also known as the Comprehensive Agrarian Reform Law (CARL) of 1988. The program is an expanded version of previous land reform programs in the country beginning in 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 of opening up frontier lands, while the redistributive program involves the redistribution of property or rights on private agricultural lands (PAL) and the abolition of agricultural (or share) tenancy.

However, while postwar 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 Presidential Decree (PD) 27. RA 3844 and PD 27 decreed the abolition of share tenancy, instituted a leasehold system, lowered the ceiling on agricultural landownership to 75 hectares (ha) (RA 3844) and further to 7 ha under PD 27.² In particular, PD 27 is considered the precursor of CARL, based on its primary objective of "tenant emancipation" and nationwide coverage notwithstanding the fact that only rice and corn lands were included. The disposal of public A&D agricultural lands continued but as an adjunct component under CARP.

The CARL adopted similar mechanisms for leasehold and land transfers as PD 27. However, while PD 27 was operationalized based on the principle of land to the tiller, the CARL has broader objectives. It adopted the United Nations (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" (Leong 1992). This means CARL has the triple objectives of equity/social justice, improvement of farming efficiency, and poverty reduction.

¹ RA 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 PAL were set at very high levels: 300 ha of contiguous lands planted to rice; 600 ha for corporate farms and 1,024 ha for private farms; other than rice (RA 1400 or Land Reform Act of 1955).

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 were set at a lower landownership ceiling of 5 ha. Furthermore, support services to agrarian reform beneficiaries (ARBs) were made an integral component of CARP.

To date, CARP has been implemented for almost 30 years claiming land distribution accomplishment of over 4.8 million ha of private and nonprivate agricultural land³, benefitting about 2.8 million 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 ha 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 (LAD) 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 legal environment of CARP has been porous, especially the interpretation of laws that allowed agriculture lands to be exempted from coverage under CARP (De la Cruz et al. 2003). The implementation of land reform has also 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.

³ Nonprivate lands are government-held lands that include 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 lands previously proclaimed for agriculture and resettlement purposes.

⁴ Estimated total agriculture land is assumed 70 percent of A&D, of which 31 percent are non-owner-cultivated agriculture lands based on a benchmark survey of potential CARP beneficiaries in the 1990s (IARDS 1992).

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

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. The next section presents an overview of the land reform programs in the Philippines. The third secrion discusses CARP theory of change and develops the results chain framework for the analysis. The fourth section examines CARP implementation and outputs. The fifth section discusses the impact of CARP based on the intended effects of the program while the sixth section presents resources provided for CARP implementation. The last section concludes the discussion and provides forward options for the program.

Overview of 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 have caused unfairness in landownership 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 A&D public agricultural lands, while redistributive refers to the redistribution of PAL 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

⁶ Access by the farmers has been limited because the American government at that time chose not to subsidize the program. The interested farmer or purchaser have to pay for land based on prevailing market prices and spend 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 2008).

by the land reform measures that dealt mainly with regulation of tenancy.⁷ Alongside these redistributive measures, the distribution of public A&D lands was likewise drummed up. This was started through the Public Land Act of 1936 which was operationalized through Commonwealth Act 691 and later by RA 1160 or the National Resettlement and Rehabilitation Administration Law of 1954.

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 (LES) or "haciendas" (Land Reform Act of 1955 [RA 1400]), the acquisition of LES 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 landownership for agricultural lands was set at a very high level, that is, 300 contiguous ha for private lands planted to rice, 600 contiguous ha for corporate farms, and 1,024 ha 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) agricultural leasehold system which was to convert share tenancy to leasehold with a fixed rent at 25 percent of the average harvest in the three normal years preceding the operation and (2) establishment of owner-cultivatorship and the economic family-size farm, which provided for the compulsory acquisition (CA) of private lands (individual and corporate farms). A Land Authority was established for the expropriation proceedings of PAL for the purpose of subdivision into economic family-size farm units and their resale to bonafide tenants, occupants, and qualified farmers. The owner-cultivatorship system lowered the retention limit of ownership of agricultural lands to 75 ha, way below the limits set under the Land Reform Act of 1955. The Code also reorganized and strengthened land settlement and legal assistance to tenants and small farmers and created the Land Reform Authority to take over the activities of the Land Tenure Agency and the Land Bank of the Philippines (LBP) to handle the financial aspect of land acquisition. The 1963 Agrarian Code though has limited impact on the

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

sector due to the insignificant funding provided by the government for redistribution of private lands. Government budget on land redistribution under the program was less than PHP 1.0 million for four years (Putzel 1992). Moreover, the 75-hectare ceiling excluded a significant proportion of farms especially rice and corn farms.

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. PD 27 has increased smallholder family rice and corn farms. It was intended to address the design limitations of the Land Reform Code of 1963. PD 2 was first issued in September 1972 declaring the entire country under land reform. Thereafter, PD 27 followed, adopting the two-step land distribution scheme of the 1963 Code-the agriculture leasehold system referred to as Operation Leasehold (OLH) or Leasehold Operation under PD 27, and the ownership-cultivatorship component as Operation Land Transfer (OLT). However, there have been significant changes in retention limits and expropriation procedures. Under OLT, lands above the retention limit of 7 ha 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.8 Eligible tenant farmers received a Certificate of Land Transfer issued by the Secretary of Agrarian Reform for the land they occupy and cultivate, up to a maximum 3 ha if irrigated or 5 ha if unirrigated. For PAL, the beneficiary pays the land in equal amortization to the LBP at 6-percent interest within 15 years. Upon completion of amortization, the tenant is deemed owner and is issued a land title called Emancipation Patent. 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 percent of average production for three normal years (net of the costs of seed, harvesting, threshing, loading, hauling, and processing).

⁸ 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 (lyer and Maurer 2008). However, PD 27 fixed prices at 1972 government support price of PHP 35 per *cavan* for rice and PHP 31/cavan for corn.

The CARP land distribution strategy draws heavily from two earlier laws, RA 3844 and PD 27. 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, covers all agriculture lands, provides support services to beneficiaries, and adopts the principle of "just compensation" in the government acquisition of private lands for redistribution to farmers. The program also provided for "market-oriented" redistribution process, whereby agreements between landowner and tenants on the terms of payment and redistribution are allowed.

CARP includes the following key policies/programs:

- 1) 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).
- 2) Exclusion and exemption: Excluded under the coverage of CARP are military reservations, penal colonies, educational and research fields, "timberlands", undeveloped hills with 18-degree slope, and church areas. On the other hand, exemptions include private farms directly, permanently, and exclusively used for prawn farming or fishponds and for commercial livestock and poultry raising. Also exempted are lands that have been zoned as nonagricultural (industrial, commercial, or residential) prior to June 15, 1988, the date of effectivity of the CARL (Department of Justice [DOJ] Opinion 44 series of 1990). These lands may be currently used for crop production but are exempted from coverage because they are classified nonagriculture based on local land use plans.
- 3) Retention limit: CARL further lowered the ceiling on land ownership of agriculture lands to 5 ha and allowed additional

⁹ The land must have been actually, directly, and exclusively used for prawn farms and fishponds. In cases where the fishponds or prawn farms have been subjected to CARP, by voluntary offer to sell, commercial farms deferment, or notice of CA, they can be exempted from CARP if a simple or absolute majority of the actual regular workers or tenants consent the exemption within one year from the effectivity of RA 7881 (March 12, 1995). In cases where the fishponds or prawn ponds have not been subjected to CARP, the consent of the farmworkers shall no longer be necessary. Fishponds, while exempted for land distribution, are required to provide a profit-sharing incentive plan whereby 7.5 percent of net profit, before tax, are given to regular workers over and above their compensation.

- 3 ha for each heir (of at least age 15 and actually tilling the land or directly managing it).
- 4) Land valuation and owner compensation: CARL required just compensation on land, which is based on land valuation according to the following: (1) capitalized net income, (2) comparable sales, and (3) market or zonal value. Land valuation is primarily the responsibility of the LBP which appraises the property based on the land valuation formula provided by the Department of Agrarian Reform (DAR). 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.
- 5) Beneficiary repayments and subsidy: Lands that have been paid by government through LBP (i.e., compensable lands) are amortized by beneficiaries over 30 years with 6 percent annual interest. Public A&D lands are noncompensable based on the Public Lands Act, along with nonpublic lands, except those foreclosed properties of government financial institutions (GFIs) and the land estates.
- 6) Modes of acquisition of private lands: CARL provides for various acquisition modes that include: (1) OLT, the mechanism used for rice and corn lands under PD 27; (2) CA, a mechanism where government expropriates private lands, whether or not the 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 the landowners' compensation by 5 percent, and corresponding 5-percent 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 no less favorable to peasants than if it were the government purchasing the land.
- 7) Nonland transfers: These are land transfers that do not involve actual transfer of landownership but changes or improvement of property rights over land assets. The mechanisms include:

- (1) OLH, which is a lease agreement between landowner and tenant applied to agriculture lands not covered by CARP (e.g., below 5 ha or on retained agriculture lands of owners) and (2) stock distribution option (SDO), whereby corporate landowners give their farmworkers 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). A moratorium on SDOs was imposed starting 2011 due to the Supreme Court decision to revoke the stock distribution plan of the Hacienda Luisita Inc. (HLI) and the ongoing petitions of revocation by farmer-beneficiaries for other previously approved SDOs. Recently, a bill has been filed in Congress (House Bill 555) that considers, among other provisions, the abolition of SDO as a redistribution scheme under land reform.
- 8) Disposition of public agricultural lands: CARP supported the disposition of public agricultural lands through the Department of Environment and Natural Resources (DENR). The process for the disposal of public lands follow the Public Land Act and Free Patent Law. However, the ceiling on landownership of agriculture lands follows RA 6657 of the CARL.
- 9) Agribusiness venture arrangements (AVAs): CARP encouraged consolidated ownership or management of agriculture farms/ landholdings especially for commercial or export crops through AVAs such as lease back, growership, production, and profit sharing, as well as block farming. Under AVAs and block farming, lands are transferred to cooperatives or farmers' associations or are individually integrated, with or without investors, to enable a production system for economies of scale.
- 10) 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 the sale of assets recovered by the Presidential Commission on Good Government (PCGG) from ill-gotten wealth of the Marcos family. The fund is augmented by budget coming from the government's general appropriations.

- Support services: This refers to an integrated package of support services to beneficiaries of land reform. Beneficiaries are assisted in terms of credit, roads, irrigation, postharvest facilities, technology transfer, and organization to guide them to become farm entrepreneurs. In particular, DAR adopted the agrarian reform community (ARC) strategy to deliver the needed support services. An ARC consists of a barangay or a cluster of barangays with the highest concentration of ARBs. DAR promoted the ARCs as economic growth points, which enabled ARCs to access official development assistance (ODA) from multilateral and bilateral development partners. The program beneficiaries' development of CARP has been essentially funded through the ODA. To complement the creation of ARCs and provide support to ARBs outside of ARCs, DAR established in 2012 the Agrarian Reform Community Connectivity and Economic Support Services (ARCCESS). ARCCESS is a strategy that provides direct and strategic assistance to farmers' organizations. Unlike ARCs, the unit of assistance is the farmers' organization, and support services are provided to help farmers' organizations become strong and more resilient. In recent years, the convergence of support services with other government agencies—Department of Agriculture (DA), Department of the Interior and Local Government (DILG), Department of Education (DepEd), Department of Social Welfare and Development (DSWD), Department of Health (DOH), Department of Trade and Industry (DTI) was strengthened through the ARCs and ARCCESS.
- 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 cases, representation of ARBs by DAR lawyers before judicial and quasi-judicial 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.

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, and poverty is engrained in the long-standing unfairness in landownership and tenancy relations 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 poverty. Private property rights to land also provide the incentives to improve farm productivity and 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 increased productivity, household incomes and investments, and reduction in rural poverty. The results chain is focused on the DAR process as the DENR public lands component has a different process altogether. Besides, the distribution of public lands merits a different study by itself.

The inputs provided to implement CARP consist of the agrarian fund, agrarian reform staff that includes adjudicators, valuators, surveyors, and facilities. Interagency committees were also created to support DAR and facilitate the subdivision and approval of surveys (DENR), valuation (LBP), land titling (Land Registration Authority [LRA]) and the provision of support services to agrarian beneficiaries (DA, Department of Public Works and Highways [DPWH], DILG, DTI, DOJ, Department of Budget and Management [DBM], etc.). These agencies, together with representatives from nongovernment organizations, represent the CARP implementing team at different levels of government.

At the national level, the Presidential Agrarian Reform Council (PARC) is the highest policymaking body for the CARP. It is chaired by the president of the Philippines, with the DAR secretary as vice chairman. Members of the PARC include the secretaries of the DENR, DTI, DPWH, DBM, DILG, Department of Finance, and Department of Labor and Employment (DOLE); the Director-General of the National Economic and Development Authority; 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 representatives of ARBs (two each from Luzon, Visayas, and Mindanao, with one of the two representatives belonging to cultural minorities).

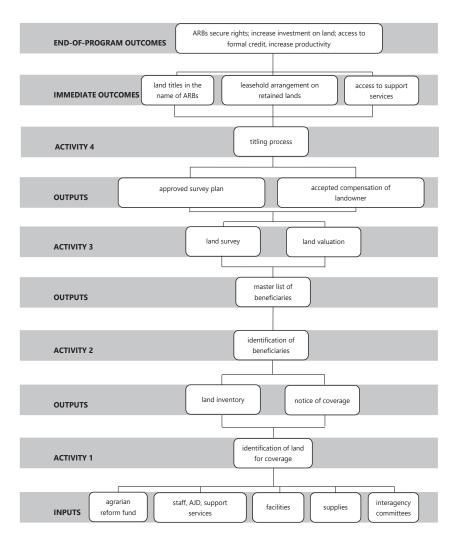


Figure 1. CARP results chain framework

CARP = Comprehensive Agrarian Reform Program; ARB = agrarian reform beneficiary; AJD = Agrarian Justice Delivery

Source: Authors' representation

The Provincial Agrarian Reform Coordinating Committee (PARCCOM) is the implementing committee at the provincial level. 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, and one representative each from the DA, DENR, and LBP.

At the barangay level, which is the lowest political unit in the country, the implementing committee is the Barangay Agrarian Reform Committee (BARC). 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.

The CARP fund comes from several sources and is pooled under an ARF. Under RA 9700, the sources of funding or appropriations come from any or all of the following: (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 PCGG; (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 PHP 5.0 billion from the General Appropriations Act (GAA) and 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 DA, the DENR, and the regular courts.

The CARP consists of four main activities. The first set of CARP activities involves the identification of agricultural landholdings for CARP coverage. CARP has been implemented on the assumption that land use and landownership information can readily be obtained from the land agencies such as the LRA, Land Management Bureau, 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, and barangay mapping. The CARP covers A&D public lands intended for and suited to agriculture, other government-owned lands (GOL) devoted or suited to agriculture, and private lands purposely for and suited to agriculture.

According to various studies such as Adriano (2008), Ballesteros and Tiamson (2013), and De los Reves (2016), the lack of a central database on land and landownership information has made the identification and creation of the inventory of lands for CARP coverage difficult. Former DAR Secretary Virgilio De los Reyes noted that the LRA and the Registry of Deeds do not have information on which titled properties are used for agricultural purposes. De los Reyes (2016) further pointed out that some old land laws have residual powers over new ones. He expressed 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 nonagricultural are actually being used for agricultural purposes. There are also cases where owners have already successfully reclassified their lands as nonagricultural to 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 whether 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. There are issues as well of undocumented land transactions. In such cases, the DAR would have to track even the undocumented current landowner to inform them that the land would be covered by 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 (PCDSPO and DAR 2014). Aside from the erroneousness or nonavailability of records, access to land records even among government agencies is very difficult due to a decentralized land recording system (Ballesteros and 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 make the identification of the actual scope of agrarian reform difficult but also prevent realistic planning due to constant changes in scope.

Considering this situation, the inventory of lands for CARP coverage is mostly based on the A&D public agriculture lands and nonpublic government lands that are pre-identified for listing under CARP. This includes LES, proclaimed lands, resettlement lands, and lands foreclosed by GFI. For the identification of PAL, DAR relied primarily on the provincial and municipal agrarian reform officials (e.g., municipal agrarian reform officer [MARO] and PARO) for land inventory at the local levels. The MAROs and PAROs chair the CARP implementing team at the local levels. DAR also provided incentives to landowners to voluntarily offer their lands for redistribution under the program through the VOS and VLT schemes.

Related to the land information problem is the legal environment that slows down or adversely affects the implementation of CARP. Laws are not specific on the identification of agriculture lands. Agriculture lands are defined as lands not classified as commercial, industrial, and residential—a definition that easily allows land use for agriculture to be converted into nonagriculture and be reclassified through a simple zoning ordinance of the local government. Likewise, the law also defines land that are over 18 degrees in slope as forest or public lands, regardless of whether there is any tree cover. This definition is applied nationwide even in regions and provinces with irregular terrain, and reclassifying them as A&D lands requires legislative action. Public lands cannot be titled and, given the lack of effective control, they are essentially "open access" lands. The country also has no national land use law, and the proposed bills to address this gap have been pending in Congress since the 1990s.

Moreover, the agrarian justice system is slow. The resolution of conflicts regarding coverage and land use can take years. Although DAR

has an agrarian justice system, there is a huge backlog of cases because the office is undermanned. In 2000, or 10 years after the implementation of CARP, the case load for each adjudicator was recorded at 700 cases per year (De la Cruz et al. 2003). The recording system was also done manually. In some cases, the resolution of cases takes longer since the parties can appeal to the regular and higher courts that may issue decisions where redistribution is only the last recourse.

In the absence of land information, the program can be subject to the desires of politicians at the local level. Local politicians, including those at the barangay level, are also from landed families or are influenced by big landowners that provide electoral support. Thus, the identification of lands for CARP coverage can be biased or subject to transactional agreements between landowners and members of the implementing committees at the local level.

The second set of CARP activities pertains 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 landowners or by a listing method with validation by landowners.

As stated in DAR Administrative Order (AO) 09, series of 2011, the basic qualifications of farmers/tillers to be qualified as CARP beneficiary 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 is located
- (4) At least 15 years of age at the time of identification, screening, and selection
- (5) Willing, able, and equipped with the aptitude to cultivate and make the land productive

RA 6657 lists down qualified CARP beneficiaries in this 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

¹⁰ It was only in 2014 that improvements in reporting and monitoring systems were put in place through the establishment of a nationwide Legal Case Monitoring System.

above beneficiaries; and (7) others directly working on the land. RA 6657 also provides that the BARC 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. Pre-identification of beneficiaries is common in VLT schemes. As mentioned earlier, this scheme is a contract agreement between the landowner and the tenant. It is assumed that the contracting beneficiary is the legitimate beneficiary. However, it might happen that the contract is between the landowner and the 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 percent of VLT beneficiaries are relatives or heirs that are nontillers or have no interest in farming (DAR 2000; Borras 2005).

Similar to the identification of lands for CARP coverage, the listing of farmer-beneficiaries can be subject to biases and political influence of those in the PARCCOM or BARC. The prioritization of beneficiaries as provided under RA 6657 can be porous. De los Reyes (2016) noted that conflicts do arise among farmworkers claiming to be land beneficiaries. Olano (2002) presented a case study of the Guingona estate, a 609-hectare land in Bukidnon, which was placed under CARP. Three groups of farmworkers claim to be the rightful beneficiaries of the land: San Miguel Agrarian Reform Beneficiaries Farmers' Association, Kapunungan sa Mamumuong Mag-uuma sa Philippine Greenhills, and PhilTreed. Olano (2002) wrote that the conflict among the three groups caused tension, and there have been many violent incidents where members of the groups were involved. Also, according to De Los Reyes (2016), specific identification of tenants only works in tenanted farms such as rice, corn, and coconut farms but not for haciendas/plantations where there are several types of workers, e.g., permanent, seasonal, and temporary farmworkers. The law qualifies all types but does not specify guidelines on the qualification process. This can also lead to conflict among farmworkers.

It is important to note that conflicts in land coverage and CARP beneficiaries create instability in property rights. There have been instances of cancelled awards or CARP-issued titles due to conflicts that emanated from coverage and beneficiary identification. De los Reyes (2016) provided specific details of cancellation cases filed with the DAR

Secretary's Office since 2010.¹¹ From July 1, 2010 to April 30, 2016, there have been 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 cancelled titles, 827 (80.68%) were cancelled in favor of the former landowners, while 111 (10.83%) were in favor of another ARB (De los Reyes 2016). The balance reverted to the state. These cancellation cases cover issues on titles retained by owners, land zoned as nonagriculture, and the proper identification of beneficiary.

The third set of activities under CARP includes preparation and approval of land surveys for subdivision and titling. While DAR provides for the expenses 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 the unavailability of land documents and the absence of a single projection map among land agencies. The absence of a single projection map implies that land boundaries can be erroneous. It requires gathering, securing, and 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 those of individuals or corporations, lands foreclosed by GFIs, and LES acquired by the government from private individuals or corporations. On the other hand, non-PAL and private lands under VLT are not compensable. The government has not or does not acquire them, thus they do not go through the valuation process.

In particular, the LBP has been tasked to determine land values based on a formula provided for under the law. Note that CARP had

¹¹ Before June 2010, the resolution of these cases had been diffused to adjudicators in the provincial level. RA 9700 revised the process such that all cancellation cases from 2009 onwards are to be filed at the DAR Secretary's Office, which was given the sole authority to decide on these cases.

 $^{^{12}}$ VLT is a direct payment scheme between the landowner and beneficiary on terms mutually agreed upon by both parties.

adopted programs of PD 27 of 1972 and the Land Reform Code of 1963. Lands identified 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 formulas as set by the government based on the date or period of land acquisition. PD 27 has the simplest valuation—it is based solely on the average gross production valued at government support price for rice and corn in 1972.¹³ The valuation guideline in PD 27 is usually challenged by the landowners on the basis of violation to the Bill of Rights.¹⁴

Land valuation activities start with a joint field investigation by DAR and the LBP; preparation of the Land Distribution and Information Schedule (LDIS); evaluation of the completeness of the claim folders; preparation and deposit of the landowner compensation; and the cancellation of the landowner title and preparation of the title of the Republic of the Philippines for each lot/parcel to be issued with a Certificate of Land Ownership Award (CLOA).

The DAR and the LBP produce a Field Investigation Report which contains information on the landowner's profile, the landholding's topography, present physical status, accessibility to roads, availability of transportation and irrigation, land use, crops planted, average gross production, and others.¹⁵ The valuation is then estimated from the information obtained from the field investigation report. Although the just compensation formula has been updated and improved, the valuation by LBP can still be contested in the regular courts. The regular court, not the DAR court, is the final arbiter in the case of land valuation. Although the legal case will not delay the distribution and titling process, the installation of beneficiaries can be delayed. Compared to the last decades, the issue on land valuation, however, has diminished over time.

The fourth set of activities pertains to land titling. Land titling follows the approval of land subdivision and survey plans and/or

¹³ See footnote 10.

¹⁴ Section 9, Article III of the 1987 Philippine Constitution states that "Private property shall not be taken for public use without just compensation".

¹⁵ There were cases where the DAR and LBP only discovered at this stage that the lands are no longer appropriate for agriculture or that they are already devoted to nonagricultural use (De los Reyes 2016). Delays can also be caused by the objections of the landowners, preventing the entry of DAR and LBP officials into the property. DAR AO 09, series of 2011, seeks to address this constraint by: (1) providing DAR (after a 15-day notice) the authority to choose the retention area for the landowner; (2) providing for an initial temporary valuation of the land; and (3) treating it as if it were classified as an idle land (DAR AO 09, series of 2011).

determination of land valuation. As mentioned earlier, land valuation applies only to compensable lands. However, land titling is not affected by the decision of the landowner to accept or reject LBP's 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. 16 On the other hand, in case of rejection or the absence of any response from the landowner on the value offered, LBP 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 creation of a trust account in the name of the landowner. The DAR takes immediate possession of the land and requests the appropriate Registry of Deeds for the issuance of a Transfer Certificate of Title in the name of the Republic of the Philippines and the beneficiaries.

The issues that prevent 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 of first-time land registration are rigid (Ballesteros and Tiamson 2013). Constraints caused by judicial control over titles in the registry make the seemingly routine registry processes such as corrections of clerical mistakes, issuance of lost owner's certificates of title, and weeding out fake and spurious certificates, difficult as these require court processes. There is no adequate mechanism to ensure consistency of information between the land agencies. The process becomes tedious and creates uncertainties. These issues not only delay the process but also render land transfers under the current institutional arrangements unlikely.

¹⁶ 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 other qualified investments in accordance with the PARC guidelines; (3) tax credits; and (4) LBP bonds. Prompt payment of the compensation would encourage other landowners in offering the sale of their agricultural land for distribution.

A key objective of CARP is to convert tenants, farmworkers, lessees, and others, into landowners. This is completed through the issuance of a land title called CLOA or emancipation patent to the identified beneficiary, which in effect recognizes the titleholder as a registered owner of a property in the Philippines.¹⁷ 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.¹⁸ In past years though, collective CLOAs 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. It was also a strategy to address the issue of ARBs pawning or selling their lands upon award. The collective CLOA thus becomes a "parent title" with the names of the individual beneficiaries listed on it.

In the case of leasehold operations, the DAR is tasked with the preparation, registration, and implementation of leasehold contracts. However, since there is no database of lands with leasehold contracts, DAR has not been able to effectively monitor these arrangements. DAR also did not improve on the previous system and is simply recording the contracts that have been provided. DAR has not differentiated between new and recurring contracts, and has not kept a database of lands that have been converted to leasehold arrangement (LHA) under CARP. With regard to DAR's role of regulating contracts, it is doubtful whether this is carried out, given that there is no clear output of LHAs resulting from CARP implementation. Previous studies noted that landowners also resist the implementation of leasehold operations (De la Cruz et al. 2003). In 1995, DAR noted that only 19 percent of landowners surveyed were in favor of the implementation of the leasehold program (DAR 1995 in De la Cruz et al. 2003). The landowners have resorted to various measures to resist implementation. Some of them eject tenants and substitute them with farmworkers over whom they have more control. Other landowners contest the computation of average yields on which the LHA is based.

¹⁷ Emancipation patents are titles issued to beneficiaries of the land reform under PD 27 or OLT.

¹⁸ For instance, beneficiaries who are a couple, or are related as parent and child, or siblings

Assessment of CARP Implementation and Accomplishments

Redistributive Land Reform Program (DAR)

Scope analysis

The DAR scope for redistributive land reform was originally estimated at 3.82 million ha and projected to benefit some 1.56 million farmers and agricultural workers (e.g., share tenants, farm workers, and agricultural lessees). This estimate was issued by the PARC using the 1980 Census of Agriculture as basis. The program was to be implemented in three phases (Table 1). Phase I, which represented 28 percent of the total area, was 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 GFIs and lands acquired by the PCGG. Phase II covered LES and settlement areas disposed of through the early land reform programs, and private agricultural farmlands above 50 ha These lands represented 30 percent of the scope. Phase III consisted of a total area of 1.58 million ha, or 41 percent of the scope covering private agricultural farms between 5 and 50 ha.

Among private farms, it was shown by estimates at the beginning of CARP implementation that the largest scope comprised of farms between 5 and 24 ha representing 46 percent of the total area of PAL. Farms above 50 ha represent 31 percent of private lands. These estimates are supported by studies of Hayami et al. (1990) and Balisacan (2007), which showed that prior to CARP (that is around 1988), there were fewer large-scale farms or haciendas. Both studies noted a significant reduction in the proportion of operational farm size above 25 ha around the 1980s mainly due to rapid population growth and the slow expansion of productive employment in agriculture.

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 ha and DENR's share was 3.77 million ha. 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. However, the inventory by mode was discontinued partly due to the difficulty of achieving targets,

and because 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.¹⁹ Crop identification becomes relevant only for lands that are compensable, which are private lands acquired through OLT, CA, and VOS, and those foreclosed by GFIs.

Table 1. Initial scope of CARP land acquisition and distribution component by land type and phase, as of 1991

Land Time by Dhees	Ar	ea	Number of Beneficiaries		
Land Type by Phase	ha ('000)	Percent	Number ('000)	Percent	
National	3,820.9	100.00	1,553.5	100.00	
Phase I	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, 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 ^a	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 ha	1,063.6	27.84	354.50	22.82	
2. Private agricultural lands between 24 and 50 ha	517.7	13.55	172.50	11.10	

CARP = Comprehensive Agrarian Reform Program; PCGG = Presidential Commission on Good Government; ha = hectare

Notes: ^a Scope of commercial farms was estimated at 35,635 ha.

CARP implementation on commercial farms was to be implemented starting 1998. Source: Adriano (1991)

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¹⁹ 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 the MARO who supervises the agrarian reform program technologists (ARPTs) 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).

Currently, the DAR's CARP scope is around 5.423 million ha. Based on DENR-National Mapping and Resource Information Authority 2013 estimates of the area of private domain, the existing CARP scope of 5.4 million ha already covers 48 percent 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 ha of land to 2,807,108 ARBs (Table 2). The total land reformed area has covered 89 percent of the total DAR scope. In most regions, accomplishments surpassed the national average. The remaining areas for land reform are in regions with peace and order concerns (Region V - Bicol Region and Autonomous Region in Muslim Mindanao) and the provinces of Negros, which are known for its sugar estates. Overall, DAR CARP accomplishments were substantial covering about 83 percent of the estimated total titled agricultural lands and untitled agricultural lands.²⁰

However, in terms of target areas or provinces, CARP fell short of its prioritization objective. In the initial years of CARP, DAR identified 24 strategic operation provinces (SOPs) (Executive Order [EO] 406 of 1990), which account for 70 percent of the land distribution workload, as the priority provinces where DAR was directed to concentrate its activities. 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 2 shows that the prioritization of provinces has not been followed. Total land-reformed area in SOPs represents only 68 percent of the target. In non-SOPs, coverage was over 100 percent of scope. The accomplishment in nonpriority areas exceeded that in the scope by 37 percentage points.²¹

²⁰ According to the Land Management Bureau, it is estimated that of the 14.19 million ha of A&D lands, 4.42 million ha are titled agricultural lands. Of the 4.56 million ha of untitled A&D lands, about 30 percent (or 1.36 million ha) are classified as agricultural lands.

²¹ 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 directional provision is often determined on grounds of expediency (DOJ Opinion No. 9 [1997]).

Table 2. CARP land acquisition and distribution accomplishment
versus scope, as of December 2016

	Scope	Total LAD Accomplishment		ARBs Benefited (head count)		LAD Balance		
Province	(gross area in ha)ª	Gross Reformed Area (ha)ª	Percent to Scope	Percent to Outputs	Number	Percent to ARBs	Gross Area	Percent to Scope
National	5,423,541	4,823,037	88.9	100.0	2,807,108	100.0	600,504	11.1
SOPb	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	-	-

CARP = Comprehensive Agrarian Reform Program; LAD = land acquisition and distribution; ARB = agrarian reform beneficiary; ha = hectare; SOP = strategic operation province Notes: ^a Gross reformed area refers to total area covered including retained area of landowner.

Source: Authors' summary

It was also noted that the overall targets of DAR across provinces were not particularly consistent with key indicators like the landholding Gini index and number of landless farmers (WB 2009). Ideally, CARP coverage should be in areas or provinces with large numbers of tenants/landless workers and in provinces with the most number of big landholdings. Correlation analysis shows that this was not the case (Table 3). 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 a high concentration of agriculture landholding. This holds true for both private and nonprivate lands, except for private lands that are earmarked for CA. 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 CA, those covered under the previous land reform program (OLT), and government lands that are former agricultural estates (e.g., LES). 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 a high concentration of tenants or landless workers.

Retained area represents only about 1 percent of area covered.

b SOP was estimated to represent 70 percent of scope, including 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. Pearson correlation estimates of CARP coverage

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				
Operation land transfer	-0.2519 **	0.3828 ***				
Government financial institutions	-0.0095	0.1089				
Voluntary offer to sell	-0.2245 *	0.0520				
Compulsary acquisition	0.2795 **	0.4263 ***				
Voluntray land transfers	0.0214	-0.4013 ***				
Settlement	-0.2346 **	-0.0823				
Landed estates	-0.1101	0.3289 ***				
Government-owned lands/ Kilusang Kabuhayan at Kaunlaran lands	0.0873	0.3004 ***				

Notes: *** significant at 1 percent

Source: World Bank (2009)

Coverage of private and nonprivate agricultural lands

Around 55 percent (2,625,547 ha) of land distributed are PAL, while around 45 percent (2,116,033 ha) are of non-PAL (Table 4). More than half (about 57%) of the distributed private lands were voluntarily and/or directly transferred by landowners to the tenants under VOS or VLT arrangements. Around 36 percent of private lands were transferred through CA and confiscatory scheme under PD 27, while 7 percent were the private lands foreclosed by government banks and dispensed to DAR for distribution under CARP. It is shown that voluntary transfers by landowners have been the main mode of 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 the landowners' compensation. The VOS scheme had caused a major controversy in the initial phase of CARP when a scandal (also known as the Garchitorena scandal) involving coverage of a large tract of land paid at a hefty amount but of little productive value was exposed (Putzel 1992). The scandal opened the possibility of marginal private lands being distributed and

^{**} significant at 5 percent

^{*} significant at 10 percent

Table 4. Distribution of the Comprehensive Agrarian Reform Program area, by mode and by period

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	Grand Total Area (1986–2016)
				(in ha)			
National	22,439	907,083	1,671,244	631,146	658,027	851,641	4,741,580
PAL	14,955	544,338	839,600	437,385	384,340	404,929	2,625,547
8		20,073	115,656	84,338	40,992	108,521	369,580
GFI		71,339	51,741	16,174	266'6	22,580	171,831
OLT	14,950	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	098'899
Non-PAL	7,484	362,744	831,643	193,761	273,687	446,714	2,116,033
TOS		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
Total accomplishment	ıt (in %)						
National	100	100	100	100	100	100	100
PAL	29	09	20	69	58	48	55
Non-PAL	33	40	50	31	42	52	45

Table 4. (continued)

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	Grand Total Area (1986–2016)
				(in ha)			
PAL Accomplishment (in %)	(in %)						
PAL	100	100	100	100	100	100	100
CA	,	4	14	19	11	27	14
GFI	•	13	9	4	8	9	7
OLT	100	65	15	7	5	12	22
VLT	0	9	37	31	54	36	32
VOS	'	12	28	39	27	19	25
Non-PAL Accomplishment (in %)	ment (in %)						
Non-PAL	100	100	100	100	100	100	100
OOL	'	40	09	09	65	64	58
LES	'	7	c	-	0	9	4
SETT	100	53	37	39	35	30	38
			-	1 1 2 1 2 1	٠	H (

PAL = private agricultural land; CA = compulsory acquisition; GFI = lands owned/foreclosed by government financial institutions; OLT= operation land transfer or lands covered by Presidential Decree 27; VLT = voluntary land transfer, i.e., direct payment to landowner scheme; VOS = voluntary offer to sell; GOL = government-owned lands; LES = landed estates; SETT = settlement lands; ha = hectare Notes: ^a period of the implementation of the Comprehensive Agrarian Reform Program Extension with Reforms Law (RA 9700) Source: Authors' compilation of marginal lands paid beyond its market value because of the scheme's potential susceptibility to abuses.²²

The VLT is a different case altogether. The VLT scheme provides for a direct transfer of land to beneficiaries on terms mutually agreed upon 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 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 (who are usually nontillers or have little desire to till).²³ This partitioning of the 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 2000, p. ix). Second, VLT accomplishments are sale transactions between nonlegitimate ARB beneficiaries. This is reflected in the DAR accomplishment by size which included farm sizes below 5 ha. Third, VLT beneficiaries are only so on paper. There is no effective transfer as the identified beneficiary remained as workers and the title is kept by the landlord in anticipation of a resale after the 10-year rental or sale prohibition. Fourth, VLT beneficiaries were completely unaware of the transaction. The landlord simply submits land for coverage with a 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. The DAR estimated that as much as 70 percent of VLT accomplishments are not transfers to legitimate ARBs (DAR 2000).

Among the distributed non-PAL, around 58 percent consist of GOL. Settlement lands (SETT) and LES make up around 38 percent and 4 percent, respectively. GOL 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

²² To avoid similar abuses in the future, EO 405 was issued in 1990, which vested upon the LBP the primary responsibility to determine land valuation and compensation for all lands covered under RA 6657. The EO provided the safeguards in ensuring that lands distributed are not valued on the basis of speculation.

²³ If a landowner has children, 3 ha may be awarded to each child with the following qualifications: (1) he is at least 15 years old as of June 15, 1988 and (2) he is actually tilling the land or directly managing it as stated in RA 6577 of 1988, Section 6.

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 lands have been bestowed to DAR by different government agencies. Settlement and LES were mostly carried over from the postwar land reform initiatives.

Most of the settlement areas are the frontier lands provided to the landless that have been bestowed to DAR for administration. LES 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 when CARP was instituted, a substantial number of the allocated areas in settlements and LES had not yet been titled in the name of the beneficiaries.

Except for the LES, 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 resold to them.

Based on the data from the recent survey of ARBs (Barrios et al. 2015), the ecosystems of land acquired through CARP showed that more than one-third are in upland areas and more than 40 percent are nonirrigated farms (Table 5). For GOL/KKK and GFI lands, there is a larger percentage of lands in upland areas. The crop most commonly planted in lowland irrigated lands is palay. In the lowland nonirrigated lands, aside from *palay*, the most commonly planted crops are banana, corn, and coconut. In the uplands, the major crops are palay, coconut, corn, and sugarcane (Table 6).

Table 5. Ecosystem of agrarian reform beneficiary lands by mode of acquisition

Mode of Acquisition	Lowland Irrigated	Lowland Nonirrigated	Upland	Total	Lowland Irrigated (in %)	Lowland Nonirrigated (in %)	Upland (in %)
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

VLT = voluntary land transfer; DPS = direct payment to landowner scheme; CA = compulsory acquisition; VOS = voluntary offer to sell; OLT= operation land transfer or lands covered by Presidential Decree 27; GFI = lands owned/foreclosed by government financial institutions; KKK = *Kilusang Kabuhayan at Kaunlaran*; GOL = government-owned lands; , SETT = settlement lands; LES = landed estates

Source: Authors' compilation

Table 6. Major crops on agrarian reform beneficiary lands by ecosystem and mode of acquisition

Mode of Acquisition	Lowland Irrigated	Lowland Nonirrigated	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

VLT = voluntary land transfer; DPS = direct payment to landowner scheme; CA = compulsory acquisition; VOS = voluntary offer to sell; OLT= operation land transfer or lands covered by Presidential Decree 27; GFI = lands owned/foreclosed by government financial institutions; KKK = *Kilusang Kabuhayan at Kaunlaran*; GOL = government-owned lands; SETT = settlement lands; LES = landed estates

Source: Authors' compilation

Individual and collective ownership

Almost half of the entire land (46% or 2,168,116 ha) distributed by DAR were issued with collective CLOAs (Figure 2). About 42 percent of the CLOAs issued to beneficiaries of distributed private lands are collective in nature, and around 50 percent of those issued to beneficiaries of non-PAL 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 percent (708,565 ha), followed by VLT/direct payment scheme with 20 percent (432,929 ha), VOS with 18.7 percent (405,893 ha), and settlement with 15.6 percent (339,036 ha).

KKK/GOL Landed Estate VLT/DPS FI/FO 407/448 OLT/PD 27 VOS CA 200.000 400,000 600,000 800,000 1.000.000 1.200.000 1.400.000 ■ Collective CLOA Issued (in hectares) ■ Noncollective CLOA Issued (in hectares)

Figure 2. Land acquisition and distribution accomplishment by mode as of January 2016 (collective vs. noncollective)

CLOA = Certificate of Land Ownership Award; CA = compulsory acquisition; VOS = voluntary offer to sell; OLT= operation land transfer or lands covered by Presidential Decree 27; GFI = lands owned/ foreclosed by government financial institutions; KKK = Kilusang Kabuhayan at Kaunlaran lands; GOL = government-owned lands; SETT = settlement lands; LES = landed estates; VLT = voluntary land transfer Source: De los Reyes (2016)

Most of these collective CLOAs have been issued to individual ARBs that are not considered associations or cooperatives. As mentioned earlier, this was a scheme to fast track LAD implementation mostly during the 1990s. Sources from the DAR also pointed out that subdivision surveys were not undertaken to prevent the farmer-beneficiaries from selling or mortgaging their land (De la Cruz et al. 2003). Initially, this was supposed to be a temporary stage but subdivision was eventually neglected after the

accomplishment had been reported. In recent years, DAR has prioritized the subdivision of collective CLOAs with greater calls from the beneficiaries to stabilize property rights over the ownership of agriculture lands by farmers.

As of January 1, 2016, the remaining land area for subdivision is 848,420 ha out of the 2,168,116 ha of lands issued with collective CLOAs. Lands under CA, VOS, OLT, GFI, LES, SETT, and KKK/GOL, which make up 579,566 ha out of the 848,420 ha, are considered priorities for subdivision (Table 7). The remaining 268,854 ha, which are VLT lands under co-ownership lands awarded to farmers' associations/cooperatives, are considered nonpriorities. The VLT outputs were not considered a priority because it has been assumed as part of the agreement between the landowner and the 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).

Table 7. Inventory of collective Certificate of Land Ownership Award as of January 1, 2016 (in hectares)

Total Area of C	ollective 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
Subtotal			1,319,696
Balance for Su	bdivision		848,420
Priority for Sub	division:		
	LBP-compensable lands (CA, VOS, OLT, and GFI)	228,604	
	non-LBP compensable lands (LES, SETT, and KKK/GOL)	350,962	579,566
Nonpriority 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

CLOA = Certificate of Land Ownership Award; CA = compulsory acquisition; VOS = voluntary offer to sell; OLT= operation land transfer or lands covered by Presidential Decree 27; GFI = lands owned/foreclosed by government financial institutions; KKK = Kilusang Kabuhayan at Kaunlaran lands; GOL = government-owned lands; SETT = settlement lands; LES = landed estates;

VLT = voluntary land transfer Source: De los Reyes (2016)

Land valuation and price subsidy to ARBs²⁴

All PAL have to be paid by the ARBs either through the LBP or directly to landowners. Beneficiaries of LES, which were 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 under no obligation to pay the land.

Beneficiaries that pay directly to landowners are covered under the VLT mode. Land valuation of these properties are neither the concern of the LBP nor DAR. So far, the agreements between the landowner and the beneficiary in terms of price and payment have been meritorious for both parties. Cases of landowner and beneficiary conflicts under this mode are nil.

On the other hand, ARBs under OLT, CA, VOS, GFI, and LES are financed by the LBP. The LBP advances payment to private landowners, and the ARBs amortize the loan at 6-percent interest rate for a period of 30 years.

The LBP-compensable CARP area covers about 1.79 million ha, or 37.7 percent of the total LAD outputs (Table 8). Region III and Negros Island Region (NIR) have the largest LBP-compensable areas and are also the regions with the second and third largest number of ARBs, respectively. Region 12 has the largest noncompensable lands and also the highest number of ARBs.

Section 17 of RA 6657 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-percent 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

²⁴ The study used data from the LBP, which were obtained from the draft final report of the CARP accomplishment review funded by DAR and the Philippine Center for Economic Development.

Table 8. LBP-compensable CARP area by region

		LBP-Co	LBP-Compensable Lands (in ha)	Lands (in h			Non-LBP Compensable	3P able	Total LAD Outputs	Outputs
							(in ha)			
Region	ОГТ	GFI	VOS	S S	Subtotal	Percent to Total LAD Area (in %)	Total of VLT, SETT, LES and GOL/KKK	Percent to Total LAD Area (in %)	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
_	31,261	1,842	8,943	1,657	43,703	6.0	99,342	2.1	120,159	143,045
=	209'62	9,730	51,109	12,852	153,294	3.2	212,790	4.5	254,871	366,084
=	214,487	6,842	29,695	39,388	290,412	6.1	138,980	2.9	342,710	429,392
N-A	15,943	1,257	30,714	50,032	97,946	2.1	91,329	1.9	169,670	189,275
IV-B	15,926	2,760	14,005	21,330	54,021	<u>L</u> .	125,969	2.7	116,518	179,990
>	51,636	17,886	55,278	49,299	174,099	3.7	148,879	3.1	282,692	322,978
>	30,914	35,002	36,483	18,712	121,111	5.6	99,794	2.1	173,231	220,905
II/	9,272	2,773	7,776	12,612	32,433	0.7	45,194	1.0	38,550	77,627
NIR R	21,105	30,486	117,877	43,532	213,000	4.5	79,700	1.7	309,317	292,700
III/	20,926	8,373	24,264	33,679	87,242	6 .	345,076	7.3	221,244	432,318
×	10,672	8,291	18,186	18,195	55,344	1.2	172,957	3.6	165,060	228,301
×	16,965	3,155	18,654	15,002	53,776	<u></u>	285,115	0.9	251,344	338,891

Table 8. (continued)

		LBP-Co	LBP-Compensable Lands (in ha)	Lands (in ŀ	la)		Compensable (in ha)	able)	Total LAD Outputs	Outputs
Region	017	GFI	VOS	5	Subtotal	Percent to Total LAD Area (in %)	Total of VLT, SETT, LES and GOL/KKK	Percent to Total LAD Area (in %)	Total Net Distributed Area	Total Number of ARBs
⋝	969′8	7,460	69,444	25,332	110,932	2.3	137,103	2.9	208,680	248,035
≅	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		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

lands covered by Presidential Decree 27; VLT = voluntary land transfer, CA = compulsory acquisition; VOS = voluntary offer to sell; GFI = lands owned/foreclosed by LBP = Land Bank of the Philippines; CARP = Comprehensive Agrarian Reform Program; LAD = land acquisition and distribution; OLT= operation land transfer or government fináncial institutions; KKK = *Kilusang Kabuháyan at Kauniaran*; GOL = govérnment-owned lands; SETT = settlement lands; LES = landed estates; ha = hectares; ARB = agrarian reform beneficiary; CAR = Cordillera Administrative Region; NIR = Negros Island Region; ARMM = Autonomous Region in Muslim Mindanao

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.

Source: Authors' summary

difference between the payment to the landowner and the average gross production of the acquired land.

Comparatively, PD 27 or lands covered by OLT applied confiscatory pricing. DAR has translated PD 27 valuation into a formula whereby land is valued at 2.5 times the average gross production 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;

PHP 50/cavan (or PHP 1.0/kilo) for palay and PHP 35/cavan (or PHP 0.70/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 RA 6657 and RA 9700 provisions. This difference in valuation for rice and corn lands partly caused delays in the completion of OLT lands since landowners contested the application of PD 27's valuation formula given that a new land reform law, RA 6657, 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 the valuation formula under RA 6657, even on OLT lands, DAR issued an AO 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 LBP deposits payment to the landowner's trust account, or when land acquisition process has commenced.

Under RA 9700 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 completed based on RA 6657. The law also included the value of standing crop and the Bureau of Internal Revenue (BIR) zonal values as factors for consideration in the valuation.

An examination of the land prices paid by the LBP shows different average prices per land and program type. Average land

prices for all modes (except on GOLs) show higher prices under RA 9700. For instance, for OLT (rice and corn lands), there were three valuation formula applied. Under the PD 27 valuation formula, average land price is only PHP 5,227/ha compared to PHP 7,800/ha and PHP 10,000/ha for RA 6657 and RA 9700, respectively (Table 9). It appears that the delay in the implementation of the land reform tends 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 9. LBP-compensable CARP area and value by mode of acquisition

Mode of Acquisition	Total CARP Area (in ha)	Total Amount Paid (in PHP)	Average Value (in PHP/ha)
CA (RA 6657)	271,388	15,293,342,695	56,352
CA (RA 9700)	20,569	2,570,843,385	124,987
OLT (EO 228) ^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 (RA 6657)	3,614	175,473,445	48,553
GFIs (RA 9700)	98,585	1,206,531,360	12,238
VOS (RA 6657)	636,706	36,926,420,986	57,996
VOS (RA 9700)	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

LBP = Land Bank of the Philippines; CARP = Comprehensive Agrarian Reform Program; ha = hectare; CA (Republic Act [RA] 6657) = compulsory acquisition funded under RA 6657; CA (RA 9700) = compulsory acquisition funded under RA 9700; OLT (Executive Order [EO] 228) = Operational Land Transfer funded under EO 228; OLT (RA 6657) = Operational Land Transfer funded under RA 6657; OLT (RA 9700) = Operational Land Transfer funded under RA 9700; GFIs (RA 6657) = government financial institutions funded under RA 6657; GFIs (RA 9700) = government financial institutions funded under RA 9700; VOS (RA 6657) = Voluntary Offer to Sell funded under RA 6657; VOS (RA 9700) = voluntary offer to sell funded under RA 9700; LO = Letter of Instruction 1180 (Special Acquisition of Hacienda Tabacalera in Ilagan, Isabela); R3 = RA 3844 Agrarian Code of 1963 Notes: ^aCombined codes EO and E9 which refer to OLT claims valued based on Presidential Decree 27 (EO228)

Source: Authors' estimates

Table 10 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 percent of the total compensable area. Sugar lands account for 11 percent; coconut, 18 percent; and commercial crops (rubber, banana, and fruit tree), only 2.8 percent. Controlling for crop type and mode, the average land values for crops are not necessarily highest under RA 9700. For instance, average land values of rice lands owned by GFIs is only about one-sixth the value of rice lands acquired under RA 6657. Likewise, the average land value of banana farms acquired under RA 6657 is three times the value under RA 9700. For sugar crops acquired through CA and VOS, average land values are higher under RA 9700 compared to RA 6657. The reverse is noted in the case of lands owned by government institutions. These differences in prices could be explained by differences in land productivity.

The research team examined land quality in the case of rice farms by estimating the valuation formula on palay yields and gross revenue under different ecological environments, that is, irrigated, rainfed, and upland. Table 11 shows that in 1993 and 1994, the land compensation values of palay landholdings acquired based on the RA 6657 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 year 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 periods 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.

Table 10. Average land values by mode and by crop

						Average I	Average Land Value (PHP/ha)	PHP/ha)			
Crop	CARP Area (in ha)	Percent 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	956'69	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	2,663	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	9.0	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	26,895
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
Rice combined with other crops	159,462	10.6	112,087	45,366	68,261	6,607	28,447	6,941	110,827	44,464	33,506
Rubber combined with other crops	4,813	0.3	63,818	62,064	29,997	8,239			150,679	46,058	48,662

Table 10. (continued)

						Average I	Average Land Value (PHP/ha)	PHP/ha)			
Crop	CARP Area (in ha)	Percent Distribution	CA (9700)	CA (RA6657)	GFIs (RA6657)	GFIs (RA9700)	OLT (RA 9700)	OLT (RA 6657)	VOS (RA9700)	VOS (RA6657)	All Modes
Sugar combined with other crops	111,544	7.4	268,212	119,337	80,339	37,239			245,021	123,359	134,912
Fruit tree combined with other crops	7,379	0.5	137,360	81,272	58,864	16,646			186,206	101,835	92,337
Others combined with other crops	24,687	1.6	66,614	37,643	31,090	9,778			74,604	36,735	40,406
Idle first	8,429	9.0	37,599	29,319	45,493	10,633			206'09	31,105	31,438
Idle	21,200	1.4	51,819	19,791	21,431	6,763		9,208	23,362	11,375	14,513
All crops	1,508,709	100.0	124,987	56,352	48,553	12,238	10,015	7,838	140,256	27,996	41,840

CARP = Comprehensive Agrarian Reform Program; PHP/ha = Philippine peso/hectare; OLT= operation land transfer or lands covered by Presidential Decree 27; RA = Republic Act; CA = compulsory acquisition; VOS = voluntary offer to sell; GFI = lands owned/foreclosed by government financial institutions; KKK = Kilusang Kabuhayan at Kaunlaran; GOL = government-owned lands; SETT = settlement lands; LES = landed estates Source: Authors' estimates

Table 11. National annual palay yield and land compensation values

>		Yield (cavans/ha/year)	s/ha/year)		9	Gross Revenue (PHP/ha)	(PHP/ha)		Estima	Estimated CNI (PHP/ha)	/ha)	Land
Year	Average	Irrigated	Rainfed	Upland	Average	Irrigated	Rainfed	Upland	Average	Rainfed	Irrigated	Values (PHP/ha)
1993	96.19	111.64	43.71	29.45	8,417	692'6	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	89.06	102.91	38.46	32.77	7,935	6,005	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

Table 11. (continued)

:		Yield (cavans/ha/year)	s/ha/year)		U	Gross Revenue (PHP/ha)	e (PHP/ha)		Estim	Estimated CNI (PHP/ha)	/ha)	Land Compensation
Year	Average	Irrigated	Rainfed	Upland		Average Irrigated	Rainfed Upland	Upland	Average	Rainfed	Irrigated	Values (PHP/ha)
2008	130.23	143.01	29.68	44.76	92,007	101,037	42,164	31,623	253,293.53 116,075.85	116,075.85	278,150.25	148,426.65
5009	2009 131.12	179.52	82.73		93,623	128,180	990'69	1	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	1	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	1	250,745.32	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	1	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	1	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

ha = hectare; CNI = capitalized net income at 6 percent for 30 years

Notes: Net income estimated at 20 percent of gross revenue. Excludes landholdings compensated based on PD 27/FO228 or RA3844 (EO, E9, LO, R3) Land compensation values estimated from Landbank data

Data from the Bureau of Agricultural Statistics (BAS); Yield per cropping from the Bureau of Agricultural Statistics (BAS); Vield 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

Source: Authors' estimates

The distribution of CARP-acquired landholdings by crop shows that palay farms (excluding those under PD 27 valuation), sugar farms, and combined farms have the most number of landholdings acquired valued between PHP 80,000 and PHP 200,000/ha (Table 12). Overall, 57 percent of CARP landholdings (excluding those under PD 27/ EO 228 formula) were acquired at less than PHP 40,000/ha. 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 nonagriculture lands. However, idle lands cover only 2,426 ha or 2 percent of the total, and most landholdings (78%) acquired were valued at less than PHP 20,000/ha. Moreover, the issue on idle lands can also arise from erroneous land use surveys. In such cases, LBP lists the land as idle. The land valuation data do not show evidence of overpricing or "speculative land prices".

As of March 2015, of the total 1.54 million ha acquired by government through LBP, landowners' compensation amounted to a total of PHP 69 billion or an average price of PHP 7,032/ha for claims under PD 27; PHP 43,760/ha for claims funded through RA 6537, and PHP 116,612/ha for claims under RA 9700 (Table 13). Total land price subsidy including the increased revaluation based on court decisions amounted to PHP 13.64 billion or 20 percent of the amount paid to private landowners. As expected given the land valuation formula, land price subsidy is lowest for those acquired under PD 27/EO 28. Land subsidy per farmer amounts to PHP 1,774 for PD 27; PHP 21,073 for RA 6657, and PHP 24,985 for RA 9700.

The other portion of the subsidy amounting to PHP 7.5 billion comes from regular subsidy to farmers in terms of reduction in the payment of amortization. RA 6657 provides that the farmer-beneficiaries' amortization payments for the first five annual payments may not be more than 5 percent of the value of the annual gross production as established by DAR. In the succeeding years, the scheduled annual payments should not exceed 10 percent 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 LBP 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 LBP is the subsidy from reduced interest rate. Moreover, no penalty is imposed on delayed amortization payments.

Table 12. Distribution of CARP-compensable landholdings by value and by crop

onle/v					Number of Landholdings ^a	Landholo	lingsª				ĭ	Total
(PHP/hectare)	Riceb	Corn	Coconut	Sugar	Banana	Fruit Tree	Rubber	Combined Crops	Idle	Others	Number of LH	Percent 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
80,000–19,999	2,427	712	1,267	1,615	203	165	36	4,153	20	266	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	1	53	1,826	1.5
300,000–499,999	80	2	4	102	09	99	2	326	9	33	299	0.5
500,000–999,999	3		3	4	37	89		22	_	4	142	0.1
1,000,000 and above	m	_	←	2	—			m	~	9	19	0.0
Total number of LH	32,140	2,140 15,101	18,020	5,205	1,143	1,216	387	34,588	2,426	8,155	118,381	100

CARP = Comprehensive Agrarian Reform Program; LH = landholdings
Notes: Data as of end of 2013 from the Land Bank of the Philippines Claims Department

* landholding refers to landowners lot

bexcludes 17,783 landholdings valued using Executive Order 228 or Presidential Decree 27 valuation formula

Source: Authors' estimates

Table 13. CARP land compensation subsidy by program type as of March 30, 2015 (in PHP million)

Program Type	Land Value Paid to Land- owners	Increase Due to Re-evaluation/ Court Decision	Land Value to Be Amortized by Farmers ^a	Total Land Price Subsidy	Regular Subsidy ^c	Number of FB⁴	Average Amount to Be Amortized per FB	Land Price Subsidy per FB
	(a)	(q)	(c)	$(d) = \{(a) + (b)\} - (c)$	(e)			
PD 27/EO 228	3,228.19	291.07	3,018.32 b	500.94	00:00	282,326	10,690.90	10,690.90 1,774.35
RA 6657	54,545.67	2,480.91	44,853.24	12,173.34	6,566.63	277,666	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	66,433.01	2,776.82	55,562.14	13,647.70	7,581.64	898,952	61,807.68 15,181.79	15,181.79

CARP = Comprehensive Agrarian Reform Program; PD = Presidential Decree; RA = Republic Act; FB = farmer-beneficiary; EO = Executive Order ^aIncludes agrarian reform beneficiaries with and without land distribution and information schedule Notes: Data from Land Bank of the Philippines Agrarian Reform Receivables System summary tables

"Includes agrarian reform beneficiaries with and without land distribution and info Pinclusive of PHP 1,205,380 fully paid accounts prior to system conversion

^c Regular subsidy is subsidy to FB on regular amortization payments ^dEstimated based on average area per farmer beneficiany as follows: (1) 1.5 for PD 27; (2) 1.8 for RA 6657 and 9700

Source: Authors' estimates

On the average, the amount to be amortized by each farmer-beneficiary is only PHP 61,807. This amount is even lower for beneficiaries of PD 27/EO 228—only PHP 10,690 per ARB—which is expected since these properties were acquired under confiscatory pricing. The amount to be amortized is highest among beneficiaries funded under RA 9700 at around PHP 200,000 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' accounts under the LBP Agrarian Reform Receivable (ARR) system categorized as follows: (1) PD 27/EO 228 consisting of 282,326 accounts, (2) RA 6657 with 577,666 accounts, and (3) RA 9700 with 38,960 accounts. Overall collection performance based on accounts due is 52 percent on principal and interest (Table 14).²⁵ About 11 percent 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 percent of the total ARR (Table 15). The top three agrarian operation centers (AOCs) with the highest number of accounts in default are AOCs II, III-2, and V. The poor loan repayment performance of ARBs creates insecurity in the property rights of agriculture lands, which hampers the operations of the formal land market.

²⁵ This does not include the advance payments made by farmers with no existing land distribution and information schedules (LDIS) yet. Accounts with no LDIS occur due to incomplete documentation which is part of the redocumentation activities currently being undertaken by the DAR.

Table 14. Loan collection performance of farmer-beneficiaries, as of March 2015

		Amor	unt to Be Am (ii	mortized by Farı (in PHP million)	Amount to Be Amortized by Farmer-Beneficiaries (in PHP million)	ciaries	Amount	Amount Collected from Agrarian Reform Beneficiaries (in PHP million)	n Agrarian F ıries Illion)	Reform	=	
Program	LO Compensation	With and Inf	With Land Distribution and Information Schedule	ution nedule							Collection Performance (in %)	lon e (in %)
Type	(in PHP million)	ADC	Q	NYD (c)	Without LDIS	TOTAL (e)	Principal (f)	Interest (g)	NYD (h)	FAR (i)		
		Principal (a)	Interest (b)		<u>)</u>						Principal	<u>-</u>
PD 27/ 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	45.7	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
AOCI	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	62.09	331.89	13,385.80	427.15	31.93	37.61	10.48	290.28	40.11	46.84

Table 14. (continued)

9	tion ce (in %)		-	48.51	39.48	31.9	23.34	39.49	71.80	58.14	16.32
= (Collection Performance (in %)		Principal	59.24	42.00	35.85	32.08	39.61	70.78	64.77	21.66
Reform		FAR (i)		543.20	189.42	129.04	135.39	157.02	228.06	720.50	446.07
m Agrarian F aries illion)		NYD (h)		164.86	72.42	14.99	7.21	15.47	113.59	265.68	81.39
Amount Collected from Agrarian Reform Beneficiaries (in PHP million)		Interest (g)		76.18	88.17	12.60	7.19	10.68	133.82	99.51	140.87
Amount (Principal (f)		133.94	102.91	16.24	8.98	24.62	147.46	230.96	119.00
aries		TOTAL (e)		1,184.92	924.15	557.85	110.57	253.19	828.09	1,551.52	1,860.03
Amount to Be Amortized by Farmer-Beneficiaries (in PHP million)		Without LDIS		3,221.65	1,635.47	3,950.69	1,173.38	1,200.25	761.15	3,357.84	7,975.23
mortized by Farı (in PHP million)	rtion redule	NYD (c)		845.44	579.13	485.72	67.30	167.45	572.84	1,050.46	1,016.29
ınt to Be Amı (ir	With Land Distribution and Information Schedule	U	Interest (b)	268.59	249.96	50.31	49.71	27.38	181.08	258.53	1,165.92
Amor	With I and Infe	ADC	Principal (a)	339.49	345.03	72.13	43.27	85.75	255.25	501.07	843.74
	LO Compensation	(in PHP million)		5,388.39	3,361.40	5,297.39	1,526.23	1,781.13	1,901.23	6,964.88	11,373.52
	Program	lype		AOC IV	AOC V	AOC VII	AOC VIII	AOC IX	AOC X	AOC XI	AOC XII

AOCs = agrarian operations centers; LO = landowner, ADC = amount of documented claims; FAR = farmer's advance remittance; NYD = not yet due; PD = Presidential Decree; RA = Republic Act; EO = Executive Order, LDIS = Land Distribution and Information Schedule
Notes: Data from the Agrarian Reform Receivable system summary tables of the Land Bank of the Philippines
Default refers to farmer-beneficiary accounts with three or more annual amortization arrearages.

Source: Authors' summary

Table 15. Agrarian reform receivable accounts in default* by regional agrarian operations centers

Agrarian	Number of Agrarian	Number of		4	Amount (in PHP)			Average Amount of
Operations Center	Reform Receivable Accounts	Agrarian Reform Beneficiaries	Area (in ha)	Original Principal	O/S Balance	Arrearages	Percent in Arrears (in %)	Arrears per Farmer- Beneficiary (in PHP)
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

ha = hectare; AOC = agrarian operations center

Notes: Data from the Agrarian Reform Receivable system summary tables of the Land Bank of the Philippines

*Default refers to farmer-beneficiary accounts with three or more annual amortization arrearages.

Source: Authors' summary

Remaining DAR CARP land for distribution

As with RA 6657, CARP extension (RA 9700, Sec. 7) 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". The law has indicated possible phasing as follows:

- Phase 1: (1) Completion of land distribution of all PAL with aggregate landholdings in excess of 50 ha which have already been subjected to a notice of coverage issued on or before December 10, 2008; (2) rice and corn lands under PD 27; (3) all idle or abandoned lands; all private lands voluntarily offered by the owners for agrarian reform, provided that for VLT only those submitted by June 30, 2009 shall be allowed; and (4) completion of transfer of all previously acquired lands wherein valuation is subject to challenge by landowners through the application of RA 6657 valuation formula as amended.
- Phase 2: (1) Lands 24 ha up to 50 ha; (2) all A&D public agricultural lands; (3) all arable public agricultural lands under agroforest, pasture, and agricultural leases already cultivated and planted to crops; (4) all public agricultural lands which are to be opened for new development and resettlement; and (5) all PAL of landowners with aggregate landholdings above 24 ha up to 50 ha which have already been subjected to a notice of coverage issued on or before December 10, 2008.
- Phase 3: All other PAL commencing with large landholdings and proceeding to medium and small landholdings under the following schedule: (1) lands of landowners with aggregate landholdings above 10 ha up to 24 ha; (2) lands of landowners with aggregate landholdings from the retention limit up to 10 ha.

As of end of 2016, which is the expected completion of the land distribution component of CARP under RA 9700, the DAR has yet to distribute a gross area of 602,306 ha (Figure 3). The regions with the highest percentage of undistributed land to scope are Region V, NIR,

and Autonomous Region in Muslim Mindanao (ARMM) with 20.9, 29.3, and 33.4 percent, respectively, as these cover contentious lands. One-third of this balance are problematic landholdings, which cannot be processed for acquisition and transfer due to several problems such as issues on succession and land transfer, land title and survey, coverage and land use, peace and order, ARB conflicts, among others.

Problematic landholdings cover an area of 148,168 ha (Table 16). Of these, 17 percent have land survey issues; 56 percent involve landholdings with problems on land titling, e.g., succession/land transfer issues; basic document flaws and infirmities; lost titles; titles with no technical description, among others.

ARMM Caraga XII ΧI X IX VIII NIR VII 84.749 VI IV-B IV-A Ш 449.788 П 144,510 CAR 2.9 National 11.1 0% 10% 20% 30% 100% 80% ■ Scope ■ Balance Area ■ % to Scope

Figure 3. Land acquisition and distribution balance of the Department of Agrarian Reform by region, as of end 2016 (in hectares)

ARMM = Autonomous Region in Muslim Mindanao; CAR = Cordillera Administrative Region Note: Data from Department of Agrarian Reform-Field Operations Office Source: Authors' representation

Table 16. Distribution of landholdings by nature of the problem

Nature of Problem	Gross Area (in ha)	Number of Landholdings
Agrarian reform beneficiary 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

ha = hectare

Note: *Some landholdings have multiple problems.

Source: Ballesteros and Tiamson (2013)

Nonland transfer accomplishments: Leasehold and stock distribution options

Leasehold arrangement. The abolition of share tenancy and installation of LHA began much earlier than the implementation of CARP. Specifically, RA 3844, Section 4 declared share tenancy to be contrary to public policy and was abolished except in the case of fishponds, salt beds, and lands principally planted to citrus, coconuts, cacao, coffee, durian, and other similar permanent trees at the time of the approval of the Act (Section 35). When RA 6389 (1971) was enacted, agricultural share tenancy had 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 RA 6657. The 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 belonging to or legally possessed by another, in consideration of a fixed amount in money or in produce or in both" (RA 1199, Sec. 4). 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 contracts with a fixed sharing arrangement. 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 arrangements. However, DAR does not have a database of leasehold contracts, only a listing with no details of each contract. As explained by DAR, it is possible that cases of renewed or recurring LHA contracts that were already accounted for in their previous accomplishment reports could be posted as part of new accomplishment resulting in double counting. DAR has yet to start the process of reviewing LHAs to enable an accurate and systematic recording of accomplishment.

Data from the 1991 Census of Agriculture and Forestry (CAF) show that the largest share (44%) of the total parcels cultivated, which is nearly 2.1 million parcels, were fully owned (Table 17). With CARP having been implemented for only three years in 1991, it is not surprising that a relatively big proportion (20%) were tenanted parcels. Parcels under LHA comprised nearly 6 percent only, although the incidence of rent-free lots was high at 14 percent. 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 as earlier mentioned.

The 2002 CAF data, which cover only the first 10 parcels cultivated/managed by the farmers/farm owners, show that, of the total 3,451,767 parcels, the proportion of fully owned parcels (43.8%) did not change significantly since 1991 (44.1%). The share of tenanted parcels also hardly changed at all, from 20 percent to 19 percent. Similarly, the percentage of leased parcels practically remained the same. The results from the CAF imply that there has been no significant change in operational LHAs, and this is supported by the study of Balisacan (2007) that showed Gini ratio for landownership (proxy by operational landholdings) in agriculture areas has remained high at 0.47.

²⁶ The lease arrangement is based on a 75/25 sharing of net harvest in favor of the farmer.

Table 17. Distribution of parcels by tenure status based on the 1991 and 2002 Census of Agriculture and Forestry

	CAF 1	991	CAF 20	02
Tenure Status	Number of Parcels	Percent to Total	Number of Parcels	Percent 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

CAF = Census of Agriculture and Forestry; CLT = Certificate of Land Transfer; CLOA = Certificate of Land Ownership Award

Note: Data from the Philippine Statistics Authority

Source: Authors' compilation

Results of socioeconomic surveys conducted in several areas in the country and among different crops revealed that sharecropping is still practiced, and is a dominant practice in some crops (Urbis 2005; UPLBFI 2007, 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.

Stock distribution option. The SDO is a scheme introduced under CARP. It was applied mainly 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 have seats in the company's Board of Directors. They may also acquire management rights in the corporate farm.

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 in 1990, the number of coverable cases decreased, and out of those left, only 13 applications, which cover 7,703 ha of land, had been approved (Table 18). HLI's area comprises around 64 percent (4,916 ha) of the total area of the 13 corporations, and its farmworker-beneficiaries (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 HLI, Arsenio Al. Acuna Agricultural Corporation, which is a merger of corporations, Ledesma Hermanos Agricultural Corporations, and Sycip Plantation, Inc. (SPI) (Penalba et al. 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 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. 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, or supervisory workers. SPI only included regular workers.

The study further revealed that the benefits given to the FWBs also varied. These benefits usually included cash dividends, free home lots/housing, guaranteed production shares or incentives, and continued provision of existing benefits. All the corporations with the exception of HLI extended alternative provisions (e.g., guaranteed bonus/dividends) in case of nonpayment 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 no dividends issued due to financial constraints. Hence, only the dividends distinguish the FWBs from other ordinary farmworkers, since the provision of the other benefits is actually contained in the Collective Bargaining Agreement and reiterated in the stock option plan.

Table 18. Approved stock distribution applications, status report, as of June 2015

	Location	Representative/ Designation	Crops	Area (in ha)	Number of Farmworker- Beneficiaries	Date Approved	Status
Hacienda Luisita, Inc.	San Miguel, Tarlac	Mr. Pedro Cojuangco, President	sugarcane	4,916	6,296	November 11, 1989	Stock distribution option (SDO) revoked; land distribution ongoing
Archie Fishpond, Inc.	Bago City, Negros Occidental	Mr. Arsenio Al Acuna	prawn culture/ sugar	102	155	February 15, 1991	Merged as one corporation with AA Acuna Agricultural Corp. as the surviving one. Complete folders pertaining to the Petition for Revocation was returned to the DARRO
Arsenio Al Acuna Agricultural Corporation	Cadiz, Negros Occidental		sugarcane	108	93		Task Force on SDO for further action. On March 9, 2009, The DARRO Task Force was specifically directed to initiate negotiation between the landowner/corporation representative and the farmworker-beneficiaries (FWBs)
Elenita Agricultural Development Corporation	Brgy. Burgos Cadiz City, Negros Occidental		sugarcane	113	85		to possiony improve the terms of reference in the Memorandum of Agreement (MOA). In compliance thereto, DARRO VI submitted a report on December 19, 2009 with the following updates: 1. FWBs were advised to organize themselves to enable them to comply with the
Ma. Clara Marine Ventures, Inc.	Bago City, Negros Occidental		sugarcane	28	28		requirements of Administrative Order 1, series of 2006 on the filing of Petition for Revocation of SDO and to enable them to bargain for better benefits and improve the
Palma Kabankalan Agricultural Corporation	Kabankalan- Ilog, Negros Occidental		sugarcane	219	113		MOA; 2. Joint regional-provincial task forces on SDO shall conduct monitoring of the reorganization of FWBs on the first quarter of 2010.
Tabigue Marine Ventures, Inc.	EB Magalona, Negros Occidental		sugarcane	20	64		

Assessment of CARP Implementation and Accomplishments

school tuition fee at Don Carlos Ledesma National High School.

lots for three elementary and high school sites. 5. free high

College scholarship is extended to deserving students by the office of the congressman. The corporation also provides free

shuttle services.

Table 18. (continued)

Ledesma Hermanos Agricultural Corporation

	Assessment of CARP Implementation and Accon
Status	On July 28, 2010, the DARRO Task Force on SDO conducted monitoring, field validation, and interview at Hacienda Fortuna, Brgy Buluangon, San Carlos City. The corporation allowed the DARRO Task Force on SDO to inspect its books and other financial records. The FWBs affirmed that they are covered by PhilHealth so they may avail of dental services reimbursable 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 also given housing allowance, service incentive leaves, bereavement, matemity, 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. Relocation sites for retirees were also built 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 Papremyo given in kind—congrits 3-50 kilos to harvesting laborers based on performance. 2. Milling premium of Milling Cabo (PHP 6.00 per day), dispatcher, checker, crawler tractor operator (PHP 3.00/day) based on performance. 3. Loading incentives PHP 6.00/ ton for harvesting laborers per week. 4. The corporation donated
Date Approved	May 13, 1991
Number of Farmworker- Beneficiaries	141
Area (in ha)	1,024
Crops	sugarcane
Representative/ Designation	Mr. Julio Ledesma/ Carlos Ledesma, Stockholders
Location	San Carlos, Negros Occidental

Table 18. (continued)

Status	No Petition for Cancellation filed	With Petition for Cancellation of SDO filed by the landowner and Petition for Cancellation of Exemption filed by the farmer-beneficiaries	On October 22, 2010, the recommendation of the DAR Central Office-Management Committee on SDO (MCSDO) on the petition of the FWBs for the revocation of the SDO was presented to the PARC Technical Committee. The committee favorably endorsed the MCSDO's recommendation and agreed to elevate the matter to the PARC Executive Committee.	On March 17, 2015, the recommendation of the MCSDO on the petition of the FWBs for the revocation of the SDO was presented to the PARC Technical Committee. The committee favorably endorsed the MCSDO's recommendation and agreed to elevate the matter to the PARC Executive Committee.
Date Approved	February 28, 1992	February 28, 1992	September 1, 1992	November 16, 1992
Number of Farmworker- Beneficiaries	205	273	771	143
Area (in ha)	231	438	174	170
Crops	sugarcane	sugarcane	sugarcane	sugarcane
Representative/ Designation	Mr. Eduardo Hernandez/ Ms. Matilde Hernandez, Stockholder	Mr. Rudolf Jularbal, Vice President	Mr. Otto G. Weber Jr., Corporate Secretary	Ms. Regina Villanueva, Chairman of the Board
Location	San Enrique, Iloilo	La Carlota, Negros Occidental	Calatrava Negros Occidental	Talisay, Negros Occidental
	Hernandez Sugar Plantation, Inc.	Negros Industrial By-Prod and Proc,, Inc. Nos Najalin Agri- Venture Inc.	Calatrava, Negros Occidental	SVJ Farms, Inc.

Assessment of CARP Implementation and Accomplishments

Table 18. (continued)

	Location	Representative/ Designation	Crops Produced	Area (in ha)	Number of Farmworker- Beneficiaries	Date Approved	Status
Asia Agro- Industrial Enterprises	Don Marcellino, Davao del Sur	Mr. Henry C. Wee, President and Chairman of the Board	coconut	100	29	April 26, 1994	On March 17, 2015, the recommendation of the MCSDO on the petition of the FWBs for the revocation of the SDO was presented to the PARC Technical Committee. The committee favorably endorsed the MCSDO's recommendation and agreed to elevate the matter to the PARC Executive Committee.
Others: Ongoi	Others: Ongoing Assessment for SDO Approval	or SDO Approval					
14 Colored Corporation	EB Magalona Mr. Arturo J. and La Ledesma and Carlota City, Ms. Teresa Negros Barrientos, Occidental Authorized Representati	Mr. Arturo J. Ledesma and Ms. Teresa Barrientos, Authorized Representatives	sugarcane	747	993		Persuant to the agreement during the December 17, 2009 PARC Execom Meeting, site validation and consultation were conducted of February 3–4, 2010 by the PARC Executive Committee designated Validation Team. Results of site validation/consultation were presented during the PARC Executive Committee Meeting on June 2, 2010.
Garcona Agro- Industrial Corporation	Caputatan Norte, Medellin, Cebu City	Manuel R. Garcia, President	sugarcane	46	47		With PARC Executive Committee. Motion for reconsideration for the denial of the SDO application filed by Garcona is recommended for further denial.

ha = hectare; AO = Administrartive Order; DARRO = Department of Agrarian Reform Regional Office; PARC = Presidential Agrarian Reform Council

It was also pointed out that the ARBs or FWBs under the SDO usually do not participate in the decision-making process. This tends to create factions among FWBs between those opposed to management and those who favor the management, eventually leading to decisions to nullify the SDO and revert to a land transfer scheme.

FWBs in 10 of the 13 SDO corporations have already filed petitions for cancellation. Of these corporations, the stock distribution plan that the Tarlac Development Corporation executed with its spin-off corporation, HLI, and its 6,296 qualified FWBs, has been revoked. 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 to the 4,916 ha of HLI lands under the CA coverage of the CARP, and land distribution is currently being undertaken.

Meanwhile, the DAR is also reviewing the conditions of the FWBs in other SDOs considering that provisions of the contracts between FWBs and corporations have not been examined thoroughly. Moreover, the concerned DAR provincial offices were not required to monitor the FWBs and the corporations to ensure that the terms stipulated in the stock distribution plan are being followed.

The AA Acuna Agricultural Corporation is another major case for SDO cancellation. The corporation is a merger of six companies (Archie Fishpond, Inc., Arsenio Al. Acuna Agricultural Corporation, 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 Acuna Agricultural Corporation and the FWBs to improve the terms stipulated in the Memorandum of Agreement between the two parties. Meanwhile, the revocation petitions of FWBs of three companies (Calatrava Negros Occidental Inc., SVJ Farms Inc., and Asia Agro-Industrial Enterprises) had been favorably endorsed by the PARC Technical Committee and 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 were only conducted in February 2014 and the results presented to the PARC Executive Committee on June 2, 2014. Meanwhile, the PARC Executive Committee has recommended for the second time the denial of Garcona's application for coverage under the SDO.

A farmers' group has sought the revocation of all SDOs and other nonland transfers. The *Anak Pawis* Party List has filed House Bill 555 in 2016 for a genuine land reform program that will completely junk the SDOs, AVAs, and other nonland transfers from CARP.

CARP program of support services

ARC and ARB organizations

A key feature of the CARP is the incorporation of a program of support services for beneficiary development. The DAR adopted the ARC strategy in the provision of support services to ARBs and agrarian reform areas. ARCs are formed through clustering of contiguous barangays where the concentration of ARBs is highest. Since ARCs are area based, both ARBs and non-ARBs in the barangay benefit from support services. The ARCs are envisioned as economic growth points in rural areas and as such have received substantial resources from ODA funds, both multilateral and bilateral. The investment in the ARCs encompasses a wide spectrum of development assistance that includes infrastructure such as farm-to-market roads, irrigation, and farm facilities. It benefited ARBs as well as smallholder farmers, landless workers, fisherfolk, indigenous people, rural women, and other marginalized sectors in the rural communities. DAR continues to launch new ARCs or expand existing ones to widen outreach for support services.

As of end of 2016, 1.5 million ARBs are already covered by ARCs, and around 1.3 million still outside of ARCs (Table 19). Among the regions, the Cordillera Administrative Region has the highest percentage of ARBs in ARCs (86%). Regions I, VII, and XIII have more than 70 percent of ARBs in ARCs. On the other hand, ARMM, Regions VI, and XII have the lowest percentage of ARBs in ARCs.

Despite the substantial resources provided to ARCs, studies noted minimal gains. The Asia-Pacific Policy Center (APPC) reported that although the income of ARBs in ARC areas is higher than ARBs

Table 19. Agrarian reform beneficiaries within and outside agrarian reform communities by region, as of end of 2016

	ARBs in	ARC	ARBs not	in ARC	Total A	RBs
Region	Number	Percent to Total	Number	Percent to Total	Number	Percent 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
I	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
Χ	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

ARB = agrarian reform beneficiary; ARC = agrarian reform community; CAR = Cordillera Administrative Region; NIR = Negros Island Region; ARMM = Autonomous Region in Muslim Mindanao Note: Data from Department of Agrarian Reform Planning and Information Management Division Source: Authors' presentation

in non-ARCs, the difference is negligible (APPC 2007). The study covered the period 1991–2002, whereby a family of six living in ARCs—areas with land reform support services—had just PHP 1,170 more in net income per month than those living in non-ARC areas. A recent study (Monsod et al. 2016) covering the period 1991–2010 showed that there is no "stand-alone" ARC effect. On average, it does not matter whether an ARB household lives in an ARC or not. Congruently, ARB households, whether living in ARCs or not, have lower probability of being poor. The same study attributed the muted effects of ARC

intervention to other area-based programs of government such as the *Kapit-Bisig Laban sa Kahirapan*-Comprehensive and Integrated Delivery of Social Services program of the DSWD, One Town, One Product of the DTI, and the National Convergence Initiative of DA-DAR-DENR, which have also provided support to non-ARC areas. However, since the study is unable to isolate these effects, it may also be argued that the same intervention of the other national government agencies has also been provided to ARC areas.

The studies, however, do not cover the period 2012 onwards when DAR had instituted improvements in the provision of support services. In 2012, DAR adopted the ARCCESS strategy to address the high production cost, low profit, and low income of smallholder farmers. These goals are to be met by strengthening farmers' organizations by providing them access to farm machinery and equipment, and services. A component of the ARCCESS is the provision of common service facilities (CSFs) to smallholder farmers' organizations. CSFs are farm implements, equipment, and machinery that were given as grants to farmers' organizations on condition that these will be used as a business asset.

On the other hand, access to services includes professional support for capacity building on business development and agri-extension, access to credit and crop insurance, and improving the policy environment specifically in relation to stabilization of land property rights and simplification of procedures for registering and re-registering farmers' organizations and cooperatives (with the Securities and Exchange Commission and Cooperative Development Authority) and putting them in the formal economy (with the BIR).

The ARCCESS strategy is channeled to farmers' associations or agrarian reform beneficiary organizations (ARBOs) in both ARC and non-ARC areas. This strategy also provided access to ARBs in non-ARC communities to support services from the DAR. Collaborative effort among government agencies, e.g., DA, DILG, DTI, DSWD, DOH, and DepEd, are also being strengthened through various partnership programs designed to improve farm productivity and income, ensure food security, and mitigate levels of malnourishment and other poverty alleviation programs for rural communities.

As of end of 2016, there are 5,216 ARBOs created wherein 4,402 (84%) are in ARCs and 814 (16%) in non-ARCs (Table 20). ARBO membership includes both ARBs and non-ARBs. A major project that

emerged from ARCCESS and considered to be a good model of support services is the sugarcane block farming (SBF), which enabled smallholder farmers to synchronize their efforts without compromising their property rights.

Table 20. Agrarian reform beneficiary organizations in agrarian reform communities by region, as of end of 2016

	ARBOs	in ARC	ARBOs n	ot in ARC	Total	ARBOs
Region	Number	Percent to Total	Number	Percent to Total	Number	Percent to Total
National	4,402	84	814	16	5,216	100
CAR	171	90	20	10	191	100
I	258	95	15	5	273	100
II	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
VI	118	87	17	13	135	100
VII	214	83	45	17	259	100
NIR	251	76	79	24	330	100
VIII	419	96	16	4	435	100
IX	275	88	39	12	314	100
Χ	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

ARBO = agrarian reform beneficiary organization; ARC = agrarian reform communitiy;

CAR = Cordillera Administrative Region; NIR = Negros Island Region

Note: Data from Department of Agrarian Reform - Planning and Information

Management Division Source: Authors' presentation

Sugarcane block farms

SBF has been implemented since 2012 in sugarcane areas. It was conceptualized as part of the National Convergence Initiative of the DA, DAR, and Sugar Regulatory Administration (SRA). The goal is to increase productivity of sugarcane farms of ARBOs such as cooperatives and farmers' associations, and enhance their skills in managing agribusiness

enterprises. SBF is expected to result in: (1) reduced cost of production; (2) increased farm productivity from 60 to 75 tons of cane/ha; and (3) at least one agribusiness activity established per block farm.

The block farming scheme entails consolidation of small farms into a business unit comprising of 30–150 ha. This business model allows for organized planting, purchase of inputs, cane hauling, and bidding of warehouse receipts to take advantage of plantation-scale production or economies of scale. Farmers, mostly ARBs, with LHAs of less than 2 ha are encouraged to group their production areas into integrated farm blocks with small farms being at least 2 kilometers apart. The farmers' association manages the block farm while the ARBs retain ownership of the lands. Depending on the arrangement entered into with the ARBOs, they may work on their own farms or opt to get hired as farmworkers.

DAR provides the ARBOs with funds for the operation and monitors project implementation and fund utilization. DAR also provides at least one farm equipment or a CSF to improve sugarcane productivity and to give ARBOs the opportunity to have an enterprise by renting out the CSF.

For at least two cropping seasons, the farmers undergo coaching and are guided on farm management practices. The profit-sharing arrangement will depend on the agreement among 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, among others, will depend on the decision of ARBO officers and members.

Meanwhile, the DA provides the necessary irrigation systems and farm-to-market roads. DA also gives starter inputs for the diversification of agricultural production facilities.

The SRA, which is an attached agency of DA, assists DAR in identifying and validating the block farm enrollees. It provides technical assistance and extension and capacity-building programs, as well as financing for farm operations, production facilities, processing technologies, and market linkage in the case of *muscovado*. SRA also assists in the management of funds released to ARBOs and in monitoring the operations of block farms. Based on the agreement among the agencies, SRA has been tasked to prepare the block farm operations manual/ business plan and CSF operations manual, but DAR had instead hired business development service providers to handle these functions.

In 2012, Phase I of the Sugarcane Block Farms had been identified and implemented in 15 farms, 9 of which are located in the Visayas and 6 in Luzon. Phase II was implemented in 2013 covering 29 farms, 18 of which are in the Visayas while 8 are in Mindanao. As 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, a credit program implemented by the DA, DAR, and the state-owned LBP for CARP beneficiaries.

Case studies on SBF show promising results. De los Reyes (2016) reported that in pilot areas/organizations, block farms gained an average increase of 32.8 percent in cane yield/ha. Of the 15 pilot areas, a 75–100 percent increase in yield was recorded in block farms in the province of Tarlac and as much as 54 percent in Negros Oriental. Only two from the pilot block farms showed less than 10 percent-increase in yield (Table 21).

Agribusiness Venture Arrangements. Another DAR project that has gained support for agriculture development under an agrarian reform setting is the AVA. The AVA has been adopted as a strategy for agribusiness development especially for reformed lands cultivated for commercial crop production since 1998 (DAR AO 9, series of 2011). AVAs are intended to address the concerns on economies of scale for agricultural production efficiency and security of land tenure for ARBs. AVAs are of two main types. One involves an ARB, individually or as an association, entering into an agreement with investors for the control and management of the land owned by the ARB or farmers' association. This arrangement is also referred to as lease arrangement. The other type involves an ARB, individually or collectively, entering into a marketing agreement with investors whereby the ARB (individually or collectively) remains as the operator or manager of the farm but adopts the recommended technologies of the investor and agrees to sell the produce to the investor at predetermined prices.

As of March 4, 2015, the DAR has recorded a total of 452 AVAs nationwide, 44 percent of which are in the Caraga Region (Table 22). Nearly 92 percent of these AVAs are located in Mindanao, especially in Region XI, where the production of commercial crops (e.g., banana, pineapple, fruit trees, an others) are prevalent. AVAs in Mindanao cover an area of about 71,330 ha (76%). A total of 59,195 ARBs have entered into AVAs with more than half (51%) in Regions X and XI.

Table 21. Production increase of block farms during first year of implementation

Name of Block Farm	Prior to Block Farm (in tc/ha)	Block Farm (in tc/ha)	Percent Increase (in %)
Binhi ni Abraham (Concepcion, Tarlac)	40.00	70.00	75.0
North Cluster Producers Cooperative (Paniqui, Tarlac)	50.00	100.00	100.0
Lucban MPC (Balayan, Batangas)	37.00	50.58	36.7
Kamahari MPC (Nasugbu, Batangas)	43.67	57.31	31.2
Damba MPC (Nasugbu, Batangas)	41.00	47.31	13.3
Prenza MPC (Lian, Batangas)	50.00	54.81	9.6
Kauswagan MPC (Pontevedra, Negros Occidental)	45.44	55.48	22.1
Gen Malvar MPC (Pontevedra, Negros Occidental)	38.00	53.27	40.2
Minaba MPC (Kabangkalan, Negros Occiddental)	42.05	52.92	25.9
Hda. Bernardita ARBMPC (Cadiz, Negros Occidental)	77.00	82.75	7.5
CASA MPC (Talisay, Negros Occidental)	59.25	67.24	13.1
Sycip Plantation Workers (Manjuyod, Negros Oriental)	80.00	123.55	54.4
San Julio Farm Workers (Tanjay, Negros Oriental)	55.00	65.00	18.2
KASFARBECO (Bais, Negros Oriental)	52.00	65.00	25.0
LARBEMCO (Bayawan, Negros Oriental)	41.50	49.83	20.1

tc/ha = tons cane per hectare; MPC = multipurpose cooperative

Source: De los Reyes (2016)

Table 22. Agribusiness venture arrangements inventory as of March 4, 2015*

Region	Number of AVAs	Percent to Total	Area Involved (in ha)	Percent to Total	Number of Agrarian Reform Beneficiaries	Percent to Total
CAR	11	2.4	1,158.56	1.6	059	1.1
_	2	0.4	110.03	0.2	241	0.4
=	16	3.5	4,351.30	6.1	2,367	4.0
≡	4	6.0	776.44	<u></u>	314	0.5
IV-B	~	0.2	54	0.1	44	0.1
>	2	0.4	5,870.00	8.2	3,125	5.3
5	_	0.2	4,654.05	6.5	1,756	3.0
×	7	1.5	1,052.00	1.5	792	1.3
×	93	20.6	6,668.03	9.3	16,012	27.0
₹	72	15.9	20,863.69	29.2	20,182	34.1
≡×	44	9.7	15,394.95	21.6	10,517	17.8
≡X	199**	44.0	10,376.84	14.5	3,205	5.4
Total	452	100.0	71,329.90	100.0	59,195	100.0
WWW - Wildings	tire arrangement: b	AVV = ravipurinass vontura respondanton - harters. CAD = Cardillars Administrativa Basian	illora Administrativo Do	200		

AVA = agribusiness venture arrangement; ha = hectare; CAR = Cordillera Administrative Region Notes: *Individual agrarian reform beneficiaries were counted.

Data from the Department of Agrarian Reform - Support Services Office Source: Authors' representation

Table 23 shows the distribution of the AVAs by crops planted. The largest portion, (about 39%) of the total area covered by the AVAs are planted with pineapple, followed by banana (31%) and oil palm (8%). These three crops cover almost 78 percent of the total area under AVA. Lease agreement or land use production agreement is the most common form of AVA, with 77 percent of AVAs using this type of arrangement. This covers areas that were planted to sugarcane, banana, pineapple, ube, and palm oil. About 20 percent of AVAs are contract-growing growership agreements, and the remaining 3 percent are other forms of contracts, such as joint ventures and marketing contracts (Table 24).

Food and Agriculture Organization (FAO) (2016) noted that while AVAs have been in existence in the Philippines for 26 years, there are still very few examples of successful agribusiness arrangements between ARBs and investor-companies. The bulk of AVAs are LHAs but the study noted that these agreements are often one-sided. There is no objective standard for determining market rates for land, and ARBs are not aware of their obligations and entitlements under their contracts. Moreover, most farmers cannot rely solely on lease payments to improve their living conditions. It has to be supplemented by on-farm and off-farm income (such as employment and income-generating projects).

The same study noted that the successful ones are those arrangements that allow the empowerment of farmers and increase their management skills. ARBs who entered into lease agreements had poorer economic results than those who were involved in joint ventures or growership arrangements. Lessors generally saw no improvement in their socioeconomic conditions over the duration of their AVAs (FAO 2016). The exceptional cases are those lease agreements whereby the investor (lessee) has provided the ARB cooperative with continuing support through upgrading in terms of technology and management expertise, which eventually encouraged the cooperative to develop other business opportunities (e.g., leaseback agreement of Tagkawayan Agrarian Reform Beneficiaries Employees Cooperative and ANANAS, leading pineapple producer in FAO 2016).

On the other hand, growership contracts provide better opportunities for farmers to participate fully in the value chain. Farmers are also trained to ensure the good quality of their produce and are therefore able to compete well in the markets. However, investors usually shy away from this arrangement because they want to have control

Table 23. Area and number of agrarian reform beneficiaries covered under the agribusiness venture arrangement by crop, as of 2015

Crop	Number of AVAs	Percent to Total Number of AVAs	Area Involved (in ha)	Percent to Total Area	Number of ARBs	Percent to Total Number of ARBs
Cassava	12	2.7	1,681.55	2.8	892	1.8
Rice	2	1.	1,322.31	2.2	918	1.9
Corn	7	1.6	2,441.80	4.0	1,147	2.3
Coconut	2	0.4	5,870	9.6	3,125	6.3
Cacao	6	2.0	646	1.	882	1.8
Banana	315	70.5	15,105.68	24.7	15,267	30.9
Pineapple	21	4.7	13,929.15	22.8	19,460	39.4
Sugarcane	9	1.3	414.15	0.7	199	0.4
Oil palm	49	11.0	11,588.68	19.0	3,734	7.6
HVC mix	14	3.1	7,880.17	12.9	3,130	6.3
Pomelo	4	0.9	92.41	0.2	552	<u></u>
Tobacco	e	0.7	128.00	0.2	131	0.3
Total	447	100.0	61,099.90	100	49,437	100.0

AVA = agribusiness venture agreement; ARB = agrarian reform beneficiary; ha = hectare; HVC = high-value crop Note: Data from the Departmnet of Agrarian Reform - Support Services Office Source: Authors' representation

Table 24. Number and area covered by type of agribusiness venture arrangement in 2015

Type of AVA	Number of AVAs	Percent to Total AVAs	Area Covered (in ha)	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	06	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 (agroforestry)	-	0.23	272.00	0.52
Contract growing	6	2.08	1,246.60	2.38
Banana production purchase agreement	_	0.23	27.00	0.05
Banana supply and marketing agreement	m	69.0	1,269.72	2.43

Table 24. (continued)

Type of AVA	Number of AVAs	Percent to Total AVAs	Area Covered (in ha)	Percent to Total Area
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	_	0.23	57.40	0.11
Management contract	2	0.46	54.25	0.10
Rice retailing	_	0.23	30.00	90.0
Not indicated	_	0.23	29.00	0.11
Total	433	100.00	52,271.28	100.00

AVA = agribusiness venture arrangement; ha = hectare Source: Food and Agriculture Organization of the United Nations (2016)

over the production and marketing. There have also been cases of pole-vaulting among some ARBs.

The above findings are supported by an earlier study on AVAs for oil palm in Mindanao. Nozawa (2011) noted that AVAs that encourage or allow farmer entrepreneurship showed better results than those that simply had their land leased. Regardless of the type of the land granted (whether individual or collective CLOAs), AVAs with compound contracts, such as contract growing accompanied by management contract and production, processing, and marketing agreements, are preferable and are effective schemes for the promotion of agribusiness.

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 nonexperimental (e.g., before and after, or participant vs. nonparticipant analysis) and quasi-experimental methods that construct counterfactuals.

Recent analysis of CARP impact using nonexperimental methods that provided comparison between ARBs and non-ARBs shows positive correlation between ARBs and household income. Barrios et al. (2015), using the 2015 survey of ARBs and non-ARBs, noted that being an ARB has positive effects on total household incomes.²⁷ The authors 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 an ARC area can generate higher income than a non-ARB in an ARC area. The results, however, cannot solely be attributed to CARP or to being an ARB since there is no information about their level of incomes and welfare to the intervention.

Similar results were reported by Monsod et al. (2016) using the nonexperimental method. They also noted the positive association of landownership and household welfare, that is, households who own land

²⁷ Total income is the sum of annual income from various components including farm, off-farm, nonfarm, remittances, poultry and livestock, AVA, and microenterprise activities (Barrios et al. 2015).

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 were constructed so that attribution is possible, are presented below.

Hayami and Kikuchi (1982, 2000); Otsuka (1987, 1991); Umehara (1997); and Deininger et al. (2000) are studies that assessed the impact of the land reform program during the period 1980–1990. These studies cover the period of implementation of PD 27 or the OLT scheme which 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).

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 the 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 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 PHP 134 at 2003 prices; and (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 aged 6-24 years.

In the same study, APPC also analyzed whether landownership, 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 data set, 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 15-17 percent higher, on average, than those of landless households who did not benefit from either land tenure improvement (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 land-owning non-ARBs in ARC shows that ARBs have higher per-capita incomes, higher per-capita expenditures, and lower probability of being poor. In particular, the difference in predicted per-capita income between ARBs and land-owning non-ARBs both of which reside in ARCs was 7.5 percent. The increase implies the combined effects of LTI (ARB status) and ARC interventions.

In 2009, the World Bank (WB) further examined the performance of CARP by reviewing existing evidence and extending the earlier impact analysis done by APPC and the University of the Philippines Los Baños Foundation and the Institute of Agrarian and Rurban Development Studies (UPLB-IARDS) using updated data.²⁸ Using the UPLB-IARDS 1990–2000 panel data set, the study found that average real per-capita income among CARP beneficiaries increased from PHP 14,625 in 1990 to PHP 21,903 in 2000. The corresponding increase for non-CARP beneficiaries was from PHP 18,025 in 1990 to PHP 21,575 in 2000. This represented a 15-percent difference but was only marginally significant (p-value at 0.15). In terms of poverty dynamics, the new analysis found

²⁸ The UPLB-IARDS data set was from a micro study conducted by the UPLB and 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 data set were considered flawed. Several researchers (Habito et al. 2003; APPC 2007; WB 2009) pointed out that the IARDS panel data set is not a true panel due to (1) the consumption expenditure modules were not consistent across rounds and the items were not sufficiently disaggregated to provide reliable measures of living standards and (2) income modules, though considerably more detailed, also varied across time. These changes across survey rounds could have resulted in systematic over- or underestimations of expenditures or income although it is not clear exactly how. The WB study utilized the data by limiting the definition of ARB strictly to CARP beneficiaries.

that 52 percent of CARP beneficiaries who were poor in 1990 became nonpoor in 2000. Meanwhile, 15 percent of CARP beneficiaries and 22 percent of non-CARP beneficiaries who were not poor in 1990 fell into poverty by 2000. These results indicated a positive but modest impact.

The WB 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, such 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—1991–1997 and 1991–2006.

The extension study found that total land distribution performance (CARP accomplishment vis-à-vis scope) had a significant negative relationship to the rate of change in poverty incidence for the period 1991–2006. For the 1991–1997 period, it was private land redistribution that had a positive significant effect on poverty reduction. Specifically, estimates showed that a 10-percent increase in CARP performance (for the 1991–2006 period) or in private land redistribution (for the 1991–1997 period) increased the rate of poverty reduction by 3 or 2 percentage points. The report noted that CARP could account for 8 percent 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 1991–1997, most of the CARP subcomponents had positive significant impact on poverty reduction, and the estimates were quantitatively large for OLT^{29} and CA. This was not observed for the period 1991–2006 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", (p. 21). It stressed the difficulty of reliably estimating the magnitude of this impact due to data limitations.

Another 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

²⁹ OLT is the distribution of rice and corn lands while CA is the equivalent for nonrice and noncorn areas. Both modalities are expropriatory in nature.

the effect of the integrated package of interventions from CARP (LTI + ARC).³⁰ 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 CPH 1990, 2000, and 2010; the Census of Agriculture 1991 and 2002, which covers agricultural barangays; and the ARC Master List of the DAR.³¹ 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 2000–2010 (by 2.1-percentage points);
- (2) per-capita expenditure increased in both ARC and non-ARC barangays. The improvement was slightly higher in non-ARCs;
- (3) in ARC areas, housing and landownership improved at a faster rate. In non-ARC areas, educational attainment improved at a faster rate; and
- (4) barangay-level nonmonetary 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 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, although modest, effects of CARP. 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, p. 23), "there is still a lack of clarity on how or through what channels agrarian reform interventions may be working." It is possible that the welfare effects are indeed similar whether land is acquired through CARP, or inherited, or purchased. In terms of access to credit, the results have been disappointing. While ARBs in ARCs and members of farmers' cooperatives have shown improved access to credit, the effect of CARP on access to formal credit markets has been

³⁰ Since the unit of observation is the barangay, it is possible that the results also capture other support programs by DA, DTI, or the 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.

³¹ 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).

hampered by the legal restrictions on transfers (i.e., sale or mortgage) of awarded lands as well as concerns about the permanence of land reform titles due to the existence of collective titles and cancellations of DAR-issued titles (WB 2009). In a recent survey of ARBs, it was shown that they remained dependent on informal credit and goodwill of friends and relatives (Barrios et al. 2015).

Studies by different authors in other countries, i.e., India, Paraguay, Honduras, Nicaragua, and Bolivia, also did not find significant evidence of the land reform and credit sector channel (Kemper et al. 2011). Exceptions are in Viet Nam and Thailand, where evidence of positive effects of land reform on formal credit has been observed (Siamwalla et al. 1990; Feder and Feeny 1991; Kemper et al. 2011; Narh et al. 2016). Among developing countries, Viet Nam has had the most effective land reform program (Narh et al. 2016). Viet Nam's success was attributed to the presence of subsidized credit that is targeted only to poor landowners and a comprehensive land reform that included redistribution, tenure, and restitution that benefited mostly landless people.

The effects of land reform in other countries show that local conditions and practices are critical to the success of land reform programs. For instance, in Ghana and Kenya, the land reform program has been introduced without properly managing the customary and informal property rights that already existed, thus creating multiple access routes to land (Narh et al. 2016).

CARP Funds and Resource Utilization

Compared to previous land reform programs in the country, the implementation of CARP was provided with special funding sources. From 1987 until December 2016, the ARF had four major fund sources: national budgetary support from the GAA, PCGG, APT/Privatization and Management Office, and other sources. Of the four, the national budgetary support provided the largest amount (PHP 149.88 billion) which accounted for 56 percent of the total ARF (Table 25). The second largest contributor to the ARF was the PCGG funds (PHP 77.28 billion) which comprised 29 percent of total funds. It is

 $^{^{32}}$ Kemper et al. 2011 mentioned the studies done by Pender and Kerr 1999; Carter and Olinto 2003; Boucher et al. 2005; Torero and Field 2005.

notable that national budgetary support for the program surged in 2000, and since then has become the major source of CARP funds due to the depletion of PCGG funds.

The total CARP budget amounted to PHP 309 billion for the period 1988–2016 or about PHP 10.65 billion annually (Table 26). This represents about 0.44 percent of gross domestic product (GDP) during the initial years (1987–1991) of the program (Manasan and Mercado 2003). However, since then, the trend had been downward—0.35 percent of GDP in 1992–1997 and 0.28 percent in 1998–1999 (Manasan and Mercado 2003). By 2010–2016, its share to GDP is 0.15 percent.

Among the CARP implementing agencies (CIAs), the DAR and LBP got the biggest chunk of the CARP budget. The combined expenditure of both agencies amounted to 89 percent-65 percent is provided to DAR and 24 percent to LBP. The DAR's budget was spent for program administration of LTI and provision of support services, while LBP's budget was used to compensate landowners of private lands. The administrative cost for CARP landowners' compensation was obtained from the corporate funds of the LBP. The landowners' compensation thus reflects the cost of privately owned agricultural lands. The larger share of LBP in the first 10 years reflects the focus of the program on LAD but in the latter years starting 2000, budget support had shifted to support services or the program beneficiary component of CARP. During the period 2000–2010, Congress had cut the landowners' compensation from the CARP budget, and at one instance, there was zero allotment for acquisition of new lands. The main argument for the budget cuts was for the DAR to focus on support services for the millions of beneficiaries who have already received their land. The allotment for support services channeled to the Foreign-Assisted Projects Office of the DAR surged during this period and even comprised about a third of the funds allocated to DAR.33

Under RA 9700 (2010–2016), Special Allotment Release Order releases to the DAR accounted for 82 percent of the total allotment, while the LBP's share or releases for landowners' compensation dropped from PHP 34.27 billion to PHP 12.93 billion. With regard to DENR, its budget share to the total CARP budget was less than 4 percent from 1987 to 2013. However, this low budget is not a major issue for DENR since

³³ The allotment was intended to support foreign-funded infrastructure projects that were provided by international development agencies through a loan agreement or as technical assistance.

Table 25. Agrarian reform fund by sources of funds, from July 1987 to December 2016

Dracion+	APT/PMO	PMO	PCGG	98	Other Sources	ources	GAA Augmentation	vA ∩tation	Total	le:	Annual
Administration	Amount (in PHP billion)	Percent	Amount (in PHP billion)	Percent	(in PHP billion)						
Benigno Aquino III (2010–2016)	2.115	69:0	2.015	99.0	0	0	114.746	37.45	118.876	38.80	19.12
Gloria Arroyo (2000–2010)	5.925	1.93	54.055	17.64	1.576	0.51	51.603	16.84	113.159	36.94	11.32
Joseph Estrada (1998–2000)	0.951	0.31	0.418	0.14	0.183	90.0	15.002	4.90	16.554	5.40	3.10
Fidel Ramos (1992–1998)	5.011	1.64	17.606	3.75	1.208	0.39	7.06	2.30	30.885	10.08	5.15
Corazon Aquino (1986–1992)	18.583	6.07	3.365	1.20	4.935	1.61	0	0	26.883	8.78	4.48
Total	32.585	10.64	77.459	25.28	7.902	2.58	188.411	61.50	306.357	100	10.21

APT/PMO = Asset Privatization Trust/Privatization and Management Office; PCGG = Presidential Commission on Good Government; GAA = General Appropriations Act

Note: Data from Presidential Agrarian Reform Council based on statement of accounts submitted by the Bureau of the Treasury; Net of custodianship expenses and other remittances credited to General Fund equivalent to 40 percent of sales proceeds; Out of the PHP 35.043 billion recovered Swiss account in January 2004, only PHP 24.511

billion was actually transferred to the Agrarian Reform Fund in the amount of PHP 8.854 billion, PHP 7.300 billion, and PHP 8.357 billion in calendar years 2004, 2005, and 2006, respectively. The PHP 10.0 billion of said PHP 35.043 billion was earmarked for human rights victims.

Source: Authors' representation

Table 26. CARP agrarian reform fund allotment/Special Allotment Release Order releases (in PHP million), by expense class and Republic Act

Department of Agrarian Reform 20,015.98 32.80 83.313.86 64.49 97.812.30 82.28 20,1,142.14 Land Bank of the Philippines 27,025.71 44.29 34,272.60 26.53 12,932.22 10.88 74,230.53 Department of Environment and Pagistration Authority 548.67 0.90 1,083.08 0.84 1,674.10 1.41 3,305.85 Land Registration Authority 2,602.19 4.26 2,985.61 0.00 0.00 0.00 2,602.19 Department of Agriculture 2,602.19 4.69 2,985.61 0.31 1,674.10 1.41 3,305.85 Department of Public Works and English Works 4,191.75 6.87 3,311.81 2.56 1,512.25 1,27 9,015.82 Department of Trade and English Mondustry 642.26 1,05 607.18 0.47 559.32 0.47 1,808.76 Department of Labor and Employment 15.54 0.00 0.00 0.00 0.00 0.00 265.08 Resource Center 61,020.68 10,000 129,191.02 </th <th>Agency</th> <th>Republic Act 6657 (July 1987– 1998)</th> <th>Percent to Total</th> <th>Republic Act 8532 (July 1999–2009)</th> <th>Percent to Total</th> <th>Republic Act 9700 (2010–2016)</th> <th>Percent to Total</th> <th>Total</th> <th>Percent to Overall Total</th>	Agency	Republic Act 6657 (July 1987– 1998)	Percent to Total	Republic Act 8532 (July 1999–2009)	Percent to Total	Republic Act 9700 (2010–2016)	Percent to Total	Total	Percent to Overall Total
outces 24.29 34,272.60 26.53 12,932.22 10.88 74, 20,00 t of Environment and outces 2,850.32 4.67 3,616.89 2.80 4,286.39 3.61 10.88 10.90 10.83.08 2.80 4,286.39 3.61 10.00 10.00 2.70 10.00 10.00 2.70 <t< td=""><td>Department of Agrarian Reform</td><td>20,015.98</td><td>32.80</td><td>83,313.86</td><td>64.49</td><td>97,812.30</td><td>82.28</td><td>201,142.14</td><td>65.07</td></t<>	Department of Agrarian Reform	20,015.98	32.80	83,313.86	64.49	97,812.30	82.28	201,142.14	65.07
tof Environment and cources. Fources ration Authority 548.67 0.90 1,083.08 0.84 1,674.10 1.41 3. Tof Agriculture 2,602.19 4.26 0.90 0.00 0.00 0.00 0.00 2. Tof Agriculture 2,863.18 4.69 2,985.61 2.31 100.00 0.08 5. Tof Public Works and 4,191.75 6.87 3,311.81 2.56 1,512.25 1.27 9. Tof Labor and experimentation 15.54 0.03 21.93 0.02 18.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Land Bank of the Philippines	27,025.71	44.29	34,272.60	26.53	12,932.22	10.88	74,230.53	24.01
tof Agriculture 2,602.19 4.26 0.00 0.00 0.00 2, conductor 2,602.19 4.26 0.00 0.00 0.00 0.00 2, conductor 2,863.18 4.69 2,985.61 2.31 100.00 0.08 5, conductor 2,863.18 4.69 2,985.61 2.31 100.00 0.08 5, conductor 2,863.18 6.87 3,311.81 2.56 1,512.25 1.27 9, conductor 2,863.18 0.03 2,133 0.03 1.554 0.03 2,133 0.03 1.559.32 0.47 1, conductor 2,553.8 0.43 0.03 0.00 0.00 0.00 0.00 0.00 0.00	Department of Environment and Natural Resources	2,850.32	4.67	3,616.89	2.80	4,286.39	3.61	10,753.60	3.48
t of Agriculture 2,602.19 4.26 0.00 0.00 0.00 0.00 2, and bublic Works and 2,863.18 4.69 2,985.61 2.31 100.00 0.08 5, and bublic Works and 2,863.18 4.69 2,985.61 2.31 100.00 0.08 5, and bublic Works and 2,191.75 6.87 3,311.81 2.56 1,512.25 1.27 9, and bublic Works and a constant of L5.54 0.03 21.93 0.02 18.00 0.00 0.00 anter 61,020.68 100.00 129,191.02 100.00 118,876.58 100.00 309,	Land Registration Authority	548.67	0.90	1,083.08	0.84	1,674.10	1.41	3,305.85	1.07
t of Public Works and 2,863.18 4.69 2,985.61 2.31 100.00 0.08 5. gation Administration 4,191.75 6.87 3,311.81 2.56 1,512.25 1.27 9, t of Trade and 642.26 1.05 607.18 0.47 559.32 0.47 1. t of Labor and treatment and Livelihood 265.08 0.43 21.93 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	Department of Agriculture	2,602.19	4.26		0.00	0.00	0.00	2,602.19	0.84
ggation Administration 4,191.75 6.87 3,311.81 2.56 1,512.25 1.27 9, 127 9, 127 9, 127 9, 127 9, 127 9, 127 9, 127 9, 127 9, 127 12, 127 <t< td=""><td>Department of Public Works and Highways</td><td>2,863.18</td><td>4.69</td><td>2,985.61</td><td>2.31</td><td>100.00</td><td>0.08</td><td>5,948.79</td><td>1.92</td></t<>	Department of Public Works and Highways	2,863.18	4.69	2,985.61	2.31	100.00	0.08	5,948.79	1.92
t of Trade and 642.26 1.05 607.18 0.47 559.32 0.47 1.1 1.254 0.03 21.93 0.02 18.00 0.02 18.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	National Irrigation Administration	4,191.75	6.87	3,311.81	2.56	1,512.25	1.27	9,015.82	2.92
t of Labor and trick of Labor and the line of Labor and Livelihood 265.08 0.43 0.00 0.00 0.00 0.00 0.00 0.00 0.00	ent of Trade	642.26	1.05	607.18	0.47	559.32	0.47	1,808.76	0.59
and Livelihood 265.08 0.43 0.00 0.00 0.00 0.00 enter 61,020.68 100.00 129,191.02 100.00 118,876.58 100.00 309,	Department of Labor and Employment	15.54	0.03	21.93	0.02	18.00	0.02	55.47	0.02
61,020.68 100.00 129,191.02 100.00 118,876.58 100.00	Technology and Livelihood Resource Center	265.08	0.43		0.00	0.00	0.00	265.08	0.09
	Grand total	61,020.68	100.00	129,191.02	100.00	118,876.58	100.00	309,128.21	100.00

Note: Data from the Presidential Agrarian Reform Council and Department of Budget Management - General Appropriations Act Source: Authors' representation CARP = Comprehensive Agrarian Reform Program

with or without CARP, its mandate of disposition of public A&D lands is funded through its regular budget.

Other CIAs that were provided funds were the DA, LRA, DPWH, NIA, DTI, DOLE, and Technology and Livelihood Resource Center. Releases to the DA had stopped in 1994. Funding for support services was instead channeled to ARCs, which were launched in the same year. ARC budget including funding from development agencies have been channeled through the DAR and/or the local government units (LGUs), since the DA has already devolved its functions to the LGUs.

Despite the substantial amount provided to CARP, the program had not been fully implemented. The scope for land distribution is still over 600,000 ha, and the bulk are PAL that are productive and are utilized for high-value crops (e.g., sugar lands), and with major investments in agriculture.³⁴ It is estimated that a substantial amount is still needed for landowners' compensation. Using average crop values, the budgetary requirement for land compensation is about PHP 73 billion (Table 27). The LBP estimates a higher figure of PHP 123 billion.

Table 27. Estimated budget requirement for landowner compensation, by crop

Crop	Land Acquisition and Distribution Balance CARP Area (in ha)	Average Value (PHP/ ha): 2010–2014	Total Requirement (in PHP million)
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

CARP = Comprehensive Agrarian Reform Program; LBP = Land Bank of the Philippines; ha = hectare Notes: Land acquisition and distribution balance of CARP area for private agricultural lands only (as of January 1, 2015); Average land value (estimated from LBP valuation by crop under RA 9700 or CARPer)

Source: Authors' estimates

 $^{^{34}}$ Rejection rate of landowners for LBP compensation recommendation was highest in Negros Occidental.

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 an estimated total non-owner-cultivated agriculture land and 54 percent of total farming households in the country. However, there is evidence that the program had been poorly targeted in terms of areas covered and beneficiaries. DAR experienced difficulty in constructing the land inventory and master list 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 and 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 are concentrations of landownership holdings or where tenancy arrangements are highest. The land tenure improvement was instead carried out based on expediency. Almost 60 percent 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 for the land. While market-initiated arrangements, such as VOS and VLT, reduce administrative cost and facilitate land transfer, it can be subject to abuse especially when good information on landownership and agriculture workers are scarce. On the other hand, land distribution had been slowest in areas of CA, which usually are the more productive areas.

The cases that have been brought to the DAR agrarian justice system reveal the problems that result from poor targeting and the lack of an efficient land record system. First, the DAR had to deal with conflicts between landowners and ARBs due to delays in the implementation of land reform in identified strategic areas. Second, it had to deal with conflicts among ARBs regarding the choice of beneficiary. Third, it had to deal with cases of cancelled titles due to the inclusion of exempted 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 have been cases where land was paid at prices beyond the market values, these were isolated

cases placed under control when LBP took the lead in determining land valuation based on a valuation formula agreed upon with the DAR. The study also notes that there is weak evidence of overpricing of land acquired by the government, but the delay in CARP's implementation is expected to increase the cost of land acquisition due to urbanization pressures in the countryside. The total price subsidy to farmers, which is estimated to be the price paid by the government above the capitalized net income of land, amounted to 20 percent (about PHP 13 billion) of total landowners' compensation. The difference is largely explained by changes in zonal values and market values of land over time. A substantial amount of subsidy comes from the amortization subsidy to farmers and implicit subsidies, such as below-market interest rates and the nonimposition of penalties for delayed payment. The rationale for the amortization subsidy was to make payment affordable to ARBs, but even then, the collection performance had only been about 52 percent. About 13 percent of the accounts have been fully paid, but there is also a considerable number of accounts (30%) in arrears, i.e., no payment made for at least three years.

In the case of nonland transfers, the SDO apparently did not benefit most beneficiaries. With the exception of three SDOs, 10 of the 13 corporations with approved SDOs have petitions for cancellation filed by the beneficiaries. The block farming scheme introduced by DAR as a strategy for support services looks more promising. Block farming integrates production and marketing in small farms suitable for sugar farms and other crops that need to take advantage of economies of scale. An initial assessment of sugarcane block farms noted that small farmers gained an average of 32.8 percent in cane yield/ha. Some of the 15 pilot sugarcane block farms recorded an increase of 75–100 percent in yield.

For LHAs, there had been no significant change in lease tenure between 1991 and 2001. Several studies have reported that share tenancy persists and that the old sharing arrangement scheme, specifically in coconut farms, is still being practiced. This means that the rental rate of 25 percent of the net produce specified in RA 6657 was not being followed. On the other hand, studies also point out that the share tenancy arrangement has been found to be efficient especially in rural economies of developing countries, due to the farmers' limited capital and access to credit, and their vulnerability to economic and natural shocks. The DAR has also not developed a monitoring system for leaseholds, which could be due partly to CARP's focus on

redistribution and the presence of multiple forms of land-sharing and tenancy arrangements in agriculture areas.

Impact studies on CARP have reported some welfare gains, but these are muted and are generally observed among areas where lands covered have higher productivity. It is also not clear through which channels CARP was able to improve welfare, since welfare effects were similar between land-owning agricultural households that acquired land through CARP and those households that acquired land through purchase or inheritance. The impact of support services was also minimal. The evidence of CARP's impact on credit access has also been disappointing. While ARBs in ARCs and members of farmers' cooperatives have shown improved access to credit, mainly due to the presence of government programs, access to formal credit markets has been hampered by the existing legal restrictions on transfers (i.e., sale or mortgage) of awarded lands as well as concerns about the indefeasibility of land reform titles due to the existence of collective titles and the possible cancellation of DARissued titles (WB 2009). ARBs have remained dependent on informal credit sources.

The CARP can be considered the longest-running land reform program in Asia and, possibly, the world. A key issue raised is whether there is a need for further land redistribution or for government to focus on improving the productivity and farm incomes of small farmers. While there is yet no systematic information of landownership in the agriculture sector, it has been observed that the existence of haciendas has significantly declined over time both as a result of increasing urbanization and possibly land reform programs. However, the Gini ratio for farm operation in agriculture areas has not changed much since the 1990s, which indicates that there can be multiple forms of access to agricultural land other than ownership. This implies that support for farm operations is critical to encourage ARBs or small farmers in general, to operate, manage, or invest in the land awarded to them. This is where government resources should focus on and the promising experiences from the ARC strategy, DAR-DA convergence, SBF and agribusiness ventures can be scaled up.

Likewise, issues on the indefeasibility of CARP-issued titles and the stability of property rights in agriculture should be addressed. The DAR has to facilitate the resolution of conflicts, title cancellation, default on land payments by ARBs, and transfers of awarded lands. The issues

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on landownership concentration, land consolidation, or land use can be dealt with by the convergence of land agencies (e.g., DENR, DAR, LRA, DA) to support the ongoing improvements and digitization in land administration at the LRA and the DENR.

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