Connecting Land Rights to Food Security:

Case Study of Farming Communities in Selected Provinces in the Philippines

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and tenure is identified as the major constraint in overcoming rural poverty in the Philippines. It affects the majority of the country's poor, which comprise 22 percent of the population that surpassed the 100 million mark in 2015 (UNDP, 2016). Land tenure is also linked to the other challenges faced by agricultural households such as hunger, limited access to basic services, low productivity and underemployment. There is little understanding, however, on the interactions of these challenges.

This paper explores linkages between land tenure and food security towards addressing hunger and poverty.

This initiative is supported by the Global Land Tool Network (GLTN) through the CSO Rural Cluster work plan for 2016-2017. It builds on the elaboration of the "Continuum of Land Rights" and developing tools to generate data towards correlating tenure with food security.

For Asia, GLTN is partnering with the Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC), which has been in the forefront in advocating land rights in Asia since the 1980s. In 2000, it launched the 200-Village Project to ensure food security of rural households among its members, with land as a major component.

This is an abridged version of the Philippine paper of the same title.

Objectives

The overall objective is to explore the link of land access and food security towards addressing hunger in the Philippines. This report investigates this link at the community level through case studies in specific alienable and disposable (A&D) lands¹ in the Philippines.

While focused on sugarcane and rice farming communities in the Philippines, this study specifically aims to contextualize GLTN's land tool on the "Continuum of Land Rights" in the selected areas; identify food security related factors linked to land access along the continuum of land and property rights; and describe a framework in linking land tenure and food security.

Focus of the Study

The study focuses on 22 small farmer communities in the provinces of Iloilo (for rice-growing communities), and Negros Occidental (for sugarcane). A rice farming community in Leyte have been initially targeted in the data gathering phase but eventually excluded to meet the timeframe of the study.

The identification of study sites was based on the land tenure status of the respondents using the continuum of land rights tool of the GLTN to have a comprehensive picture of the relationship of land tenure to social and food security. The sites were selected based on the crops planted to determine whether the produce has a direct correlation to the food security of the community.

The sites were also selected from the provinces where the government recorded the largest farm areas awaiting redistribution under its agrarian reform program. This is based on the government's so-called land acquisition and distribution (LAD) balance. Negros and Iloilo are among the DAR's top 10 provinces with high LAD balance, based on January 2017 figures.

The contexts and the agrarian situation in each of the selected provinces is discussed in this paper's Section, 'A Closer Look at Land Tenure and Food Security in the Study Areas.'

A&D lands are the only lands that can be privately owned. This includes agricultural lands (and reclassified lands) and privately owned lands (based on State grants or laws). These lands are subject to: (a) purchase which vests ownership; or (b) lease which vest only the right to occupy and use for the period agreed upon. In 2003, 64.8 percent of lands classified as alienable and disposable were privately owned (Eleazar, et. al., 2013).

Methodology

An overview of land governance in the Philippines with a focus on alienable and disposable lands utilizing secondary data is incorporated to provide the national context. A review of literature was conducted in assessing hunger and poverty especially those of the agricultural households. The study then puts into context the "Continuum of Land Rights" of the GLTN.

Using the land continuum categories adapted for selected provinces in the Philippines, focus group discussions (FGDs) were conducted. Participants were identified through purposive sampling with groupings based on their land classifications – sugarcane farmers are one of the poorest while rice growers constitute the highest number as a sector. These were undertaken by ANGOC CSO partners, CARRD and Kaisahan from April to May 2017. CARRD conducted FGDs in rice growing communities in Passi City and San Enrique in the province of Iloilo. Kaisahan's respondents were from Hinigaran and Binalbagan City in Negros Occidental.

A food security framework with its linkages to land tenure was then formulated as the basis in identifying possible tenure influences.

Country Overview of Land Tenure, Hunger and Poverty

Land Tenure

In the Philippines, lands are either public domain (State-owned) or alienable and disposable (A&D). Publicly owned lands include classified forestlands, mineral lands, and national parks. They are subject only to usufruct and resource utilization rights under certain conditions. Only A&D lands (which include agricultural lands) and those bestowed by the State through grants or legislations can be privately owned.

Though customary ownership rights over ancestral lands are recognized in the Constitution, it was only with the enactment of Republic Act (RA) 8371 or the Indigenous Peoples' Rights Act (IPRA) of 1997 that government had a clear basis in recognizing, protecting and promoting the rights of indigenous cultural communities/indigenous peoples. These include, among others, right of ownership, right to develop lands and natural resources, right to stay in the

territories, right in case of displacement, right to regulate entry of migrants and right to resolve conflicts (IPRA, 1997).

The Philippines' total land area of about 30 million hectares is legally classified into: (i) forestlands, and national parks; and (ii) alienable and disposable lands. Most ancestral domains are located within forestlands.

As of 2011, classified forestlands and established national parks covered 15.05 million hectares or 50 percent; unclassified forestland of 0.755 million hectares or 3 percent and A&D lands spanning 14.19 million hectares or 47 percent. Of the 15.05 million hectares of the public domain, about 4.1 million hectares are not covered by any tenure agreement or instrument, which leaves them essentially under open access conditions (Eleazar, et. al., 2013).

The country's 14.19 million-hectare A&D lands are given to private ownership; and subject to a system of titling, purchases, leases, registration and recording. This includes the agricultural lands subject to redistribution under the Comprehensive Agrarian Reform Program (CARP).

Land rights should be documented, mapped, recorded, or registered to protect the owner from the claims of third parties. It is necessary, however, that before any right is recognized, it should be free from adverse claims and conflicts.

Poverty, Food Security and Agriculture

A study conducted by the Philippine Institute for Development Studies showed that poverty in the country remains highly agricultural in nature. In 2009, poverty incidence among agricultural households² (57 percent) is thrice that of the non-agricultural (17 percent). Three in four poor individuals live in rural areas. Moreover, data show that as a family relies more on agriculture, the greater is the poverty incidence (PIDS, 2012).

Ironically, many of the farmers are also food poor, otherwise called subsistence poor (PIDS, 2012). In the recent report of International Food Policy Research Institute (IFPRI), the Philippines' hunger index ranks 68th (of 118 countries). Among the types of crops, the subsectors with high poverty rates are corn growing (64 percent), coconut growing (56 percent), sugarcane growing (53

NSO defines an agricultural household in the FIES as one whose income derived from agricultural sources is equal to or higher than that derived from non-agricultural sources.

percent), and growing of coffee, cacao (54 percent). In terms of total number of poor, the share of *palay* (rice) growers is the largest at 30 percent (PIDS, 2012).

Challenges in Overcoming Rural Poverty and Hunger

Lack of access to land has been a major constraint among farmers for the past decades. Other than the small size of landholding, farmers are challenged by their low productivity, limited access to financing and linkages to market. Moreover, natural disasters and internal displacements due to recent conflicts have contributed substantially to increasing hunger and poverty in the country.

Land Size and Tenure

The average farm size is 1.2 hectares. The decreasing land size vis-à-vis the increasing rural population amplifies the problem. Moreover, families that rely heavily on agricultural income also have more members and young children (PIDS, 2012).

Under the government's Comprehensive Agrarian Reform Program (CARP), some 7.8 million hectares of agricultural lands have been targeted for distribution. In 2013, around 6.9 million hectares have been distributed to some 5 million smallholders. Those who benefited from the program are now facing new challenges such as market linkages and financing. Those who have gone into various long-term contracts (such as long-term lease, joint venture, marketing contracts) between large agribusiness companies and cooperatives (of agrarian reform beneficiaries or ARBs) have problematic contractual arrangements that do not favor smallholder ARBs (FAO, 2016).

Among indigenous peoples (IPs), the delay in the issuance of certificates of ancestral domain titles (CADTs) of an estimated 2 million hectares has been a major challenge. It is reported that no CADT was issued from since 2012 to date (2017).

Basic Services

Thirty percent of those in the agriculture sector do not have access to electricity (compared to 14 percent of the total population), 26 percent do not have sanitary toilet facility in their dwelling units and 15 percent are deprived of

access to potable water (compared to 9 percent for the whole country) (PIDS, 2012).

By agriculture subsector, those engaged in forestry activities have the highest incidence of poverty at 68 percent (PIDS, 2012). The majority of these upland dwellers are IPs. This can be partly explained by the lack of basic services, limited livelihood opportunities and restricted access.

Underemployment and Migration

One clear issue that binds poverty with agriculture is underemployment. Almost seven out of 10 poor workers (68 percent) in 2009-2010 who were underemployed were primarily engaged in agriculture, forestry or fishery (PIDS, 2012).

Many of them have sought work elsewhere. Some of them are overseas Filipino workers (OFWs). In 2014, OFWs were estimated to total 5 million.

This trend seems to suggest that working abroad could indeed be among the effective anti-poverty strategies of poor families especially those in the rural provinces. Recent studies³ find that migration offers development potential such as providing livelihood and remittances that may be used for local investments. In times of disaster, these remittances also increase.

Disasters and Internal Displacements

Natural disasters and internal displacement have significantly pushed up poverty incidence. Overall, in 1995-2014, climate risk of the Philippines, considered as long-term risk, was ranked fourth in the world. In 2013, the Philippines climate risk index ranked first in the world due to the impact of super typhoon Haiyan (Kreft, S. et. al., 2014). This has been the worst disaster recorded in Philippine history.

Between 2000 and 2012, the combined damage in agriculture amounted to Php 108.6 billion (NDRRMC, 2013). Typhoon Haiyan's total damage to agriculture in 2013 amounted to Php 3.3 billion (NDRRMC, 2013). The Department of Agriculture (DA) in July 2016 reported that the combined damage of El Niño and

³ Studies include Interrelations Between Public Policies, Migration and Development (IPPMD) of OECD Development Center and "Remittances and Disaster: a Review" published by the International Journal of Disaster Risk Reduction.

La Niña weather patterns during the period had amounted to US\$325 million (FAO, 2017).

The number of people displaced due to conflict is also very high, particularly in Mindanao. In 2015, a total of 407,397 persons were displaced in 16 provinces of Mindanao (UNHCR, 2015).

A Closer Look at Land Tenure and Food Security in the Study Areas

In establishing the linkages between land tenure and food security, a detailed assessment of various classifications of land tenure in agricultural land was conducted in the provinces of Iloilo and Negros Occidental. With the adapted land tenure continuum, FGDs were conducted with representatives from each classification.

<u>Iloilo</u>: As of 2015, the province has a population of 1.9 million, with 26.20 percent living below poverty threshold (Iloilo Provincial Planning and Development Office, 2015). The province has a total land area of 466,342 hectares, with 75 percent considered as A&D lands while the rest are timberlands. Of the A&D lands, 73.93 percent are agricultural. With most of the lands devoted to agriculture, the province ranks fifth in both rice and sugarcane production in the entire Philippines (Iloilo Provincial Planning and Development Office, 2015). The subsistence incidence⁴ in Iloilo increased to 17.3 percent in 2012 (NSCB, 2013).

<u>Negros Occidental</u>: It is the fourth largest island in the Philippines with 792,607 hectares (DENR VI, 2017). With a population of 2.49 million in 2015, it is the most populous province in Western Visayas and eighth in the country. Based on the 2009 Official Poverty Statistics of the National Statistical Coordination Board (NSCB), the province has the second biggest share in the total number of poor families. In 2012, the number of families living below the poverty threshold was 164,827 (NSCB, 2013).

Implementing CARP in Negros is extremely challenging because of strong landowner resistance, low capacity of farmworkers and the diverse support services required. Negros is home to landowners who employ various means in resisting the agrarian reform program. As of January 2016, there are 112,564

⁴ Subsistence Incidence refers to the proportion of families (or population) with per capita income less than the per capita Food Threshold to the number of families (population).

hectares of agricultural lands from 9,001 landholdings that had yet to be distributed (DAR Negros, 2016).

Land Rights Continuum in Agricultural Lands in the Two Selected Provinces

In the agricultural lands in the two provinces, 11 tenure classifications were identified. Below are short descriptions for each classification (based on the FGD findings of CARRD and Kaisahan) focusing on land rights, access and tenurial instrument used.

The diagram below illustrates best the land rights continuum in these two provinces with the 11 identified tenure classifications arranged from informal to formal land rights.

Fig. 5. Land Rights Continuum for Farmers in A&D Lands, Philippines

Migrant or Seasonal Worker	Informal Settler	Agricultural Laborer or Farmworker	Claimant	Share- cropper	Lease- holder			
INFORMAL LAN	INFORMAL LAND RIGHTS							
Collective CLOA holde land awaitin subdivisior	er, holde	er, land whed-out f	CLOA holder, // land under formal lease- ut or contract	CLOA hold awarded free or und amortizati	d Culti der title	wner- ivator w/ deed or d patent		

*Note: CLOA refers to the "Certificate of Land Ownership Award" given to beneficiaries under the Comprehensive Agrarian Reform Program.

Table 1. Descriptions of tenure classifications of A&D lands, Philippines.

Tenure Classification	Physical Access	Tenurial Instrument
Migrant or Seasonal Worker		None
Hired labor for a certain period within the cropping cycle.		

FORMAL LAND RIGHTS

Informal Settler Family resides and cultivates the land for free but	Family cultivates land for free without permission	None
without permission from the landholder.		
Agricultural Worker Works for the landowner, receives salary and should enjoy other rights and benefits as a laborer under the labor laws.	In-situ worker paid on a daily basis	Employment contract but often not in writing
Farmer Claimant with Tax Declaration	Family cultivates the land; pays taxes	Tax declaration
Farmer pays the real property tax and enjoys the right to possess and use the land.	. ,	
Sharecropper Tenant farmer cultivates the land belonging to or possessed by another, with the latter's consent for purposes of agricultural production, and requires to give at least 50 percent of the farm income as share to the landholder. Share cropping is no longer allowed by law.	Individual cultivates the land but management belongs to the landholder and tenants	Often none, based on verbal agreement
Leaseholder Tenant farmer cultivates and manage the land belonging to or possessed by another, with the latter's consent for purposes of agricultural production with a fixed rental of 25 percent of the farm income from the primary crops, and 20 percent for the auxiliary crops to the landholder, in cash or in kind.	Tenant farmer cultivates and manage the land. Family members can help in the cultivation but cannot hire farm help or accept sub-lessee	Leasehold contract (verbal or written)
Collective CLOA Holder Awaiting Subdivision of Land Farmer beneficiaries with or without physical possession of the land awaiting the subdivision of assigned plot to the beneficiaries.	Family or individual cultivates an assigned plot of land	Collective CLOA
Individual CLOA Holder with Land Informally Pawned Farmer beneficiary loses control and possession	Loses physical access to the land until loan is paid	EP, Individual CLOA with land pawned informally
of the land until loan is fully paid. A ground for disqualification as beneficiary if done within the 10-year prohibitory period.		
Individual or Collective CLOA Holder with Land Formally Leased Out Farmer beneficiary receives rental fees but loses	Receives rental fee and may be hired as a farm worker based on the contract agreement	EP, CLOA (collective or individual) but with annotation of the lease agreement
control and possession of the land. He/she maybe hired as farmworker depending on the terms of the agreement.		

Individual or Collective CLOA (Certificate of Land Ownership Award) Holder Individually or collectively in possession and cultivating the land. Farmer beneficiary is still paying the land amortization and cannot transfer or convey the property to other person within the 10-year prohibitory period unless through hereditary succession or to the government.	Individually or collectively installs and tills the land and enjoys the full harvest	Individual CLOA or Collective CLOA (as the preferred mode of the farmers)
Owner Cultivator with Title or Full Patent Enjoys all the rights as owner and has fully paid his/her land amortization	Individually cultivates the land and enjoys the full harvest	EP, CLOA, Certificate of Title (original or transfer)

Given that agricultural lands are covered by the government's agrarian reform program and its implementation is closely monitored by multi-interest parties, the continuum follows a more legal and documented recognition of land rights. It affirms GLTN's pronouncements that:

"Rights to land can be viewed as lying on a continuum. At one end are formal land rights, where the owner is an individual, who holds a set of registered rights to a parcel of land that are enshrined in law. At the informal end of the continuum are informal rights; a group of individuals (such as a clan) who may have traditional rights to use a piece of land."

Summary of Findings of the FGDs

In conducting the FGDs, a common guide questionnaire was used covering seven key topics, namely: housing and home lots; sources of income and livelihood; migration; credit and loan resources; tenurial status of the farm lands; perception of food security; and perception of community problems.

Housing and Homelots

Those holding formal tenure instruments such as CLOA and EP have semi-permanent to permanent types of housing occupying bigger home lots (more than 300 square meters) and with no threats of being evicted. Farmers at the other end of the continuum have semi-temporary to semi-permanent houses with lots of less than 300 square meters. They are very vulnerable to decisions of the landowner.

Income and Livelihood

Land is a major source of livelihood for farmers. CLOA and EP holders, having full control on the utilization of the land, can plan according to their needs, availability of labor, seasonality of production and market opportunities. More importantly, they can plan on sustaining their food needs to ensure household food security. These decisions are not open to land claimants and leaseholders. They also need to have secondary income once the peak season of planting and harvesting is done.

Employment and Migration

As in many other provinces in the Philippines, the lack of financial capital and employment opportunities in the rural areas are forcing farm households to send family members to urban centers and abroad for employment. Unfortunately, this opportunity is not affordable to land claimants, farm laborers, leaseholders, and CLT holders.

Only those who have collective CLOA and EP have at least one member, mostly women who finished at least high school, who migrated either abroad or to Manila. Migrant workers regularly send remittances to their families. These remittances come in handy during "hunger" months and in times of calamity.

Credit

Regardless of tenurial arrangement, most of the respondents regularly avail loans either from formal or informal lenders. Those with more formal legal rights are able to borrow from formal lenders who have relatively low interest rates. Loans are primarily used to buy farm inputs.

Farm Size and Food Needs

Interestingly, those who have more formal land tenure have bigger farm sizes. In Iloilo, CLT, collective CLOA, and EP holders cultivate one hectare on average, and 2.5 hectares at most. Land claimants and leaseholders, on the other hand, cultivate only 0.5 of a hectare of land on the average.

Given the amount of harvests and the needs of the family, those with 0.5 of a hectare of rice land allot all their harvests for household consumption. Those who have, on the average, one hectare of land sell at least 60 percent of their harvest in the form of *palay* or unhusked rice.

Perception of Food Security

In the FGDs in Iloilo, CARRD correctly assumes that "regardless of tenurial status, all of the respondents consider farming as their primary source of food. Rice cultivation is primarily for the satisfaction of the household food requirement. Except for farm laborers, all maintain backyard gardens to raise vegetables and farm animals to augment household food requirements."

A major factor to consider is farm size. Those who have 0.5 of a hectare or less are not able to supply their food needs while those with an average of one hectare of land think that they have enough supply of food for the household. This also allows them to diversify their crops including poultry and livestock to satisfy their nutritional needs.

Given the above FGD results, it can be concluded that farmers having more formal rights are more food secure than those at the other end of the continuum. They also enjoy better housing, services, livelihood and employment opportunities for other members of the family.

Between crops, rice farmers said that they had sufficient food supply, whereas sugarcane farmers said that they experience seasonal hunger each year.

Analysis of results

Linking Land Rights to Food Security

Land is taken primarily as a factor of production especially among farmers. As such, land right is essential. Land right, however, has other dimensions that are important in ensuring land productivity. In studying the link between land tenure and food security, these dimensions have to be articulated. In the FGDs, four dimensions of land may be identified: as a factor of production, as a property, as a production unit, and as a landscape domain.

As a factor of production: Land is an important factor of food production. As such, land size is a very important consideration. It is not surprising therefore that those farmers cultivating less than a hectare experience food inadequacy while those cultivating more than a hectare will have enough surplus to sell in the market.

On the other hand, land quality such as soil fertility, moisture retention capacity and ease of cultivation is an equally important consideration in enhancing productivity. With this dimension, technology is an important consideration. Sustainable agricultural technologies can go a long way in enhancing food security.

As a property: Land as a property has an important function in accessing resources and services to make the land productive. Farmers usually do not have the necessary resources to procure needed agricultural inputs, irrigation services or transport facilities. They borrow from money lenders who siphon the farm income, leaving the farmers with a negative bottom line.

Formal lending institutions have relatively low and reasonable interest rates but would require collaterals in the form of land titles. Thus, formal land rights have an advantage. These documents are also required in securing basic services such as electricity and potable water.

As a production unit: As a production unit, land has to be managed well to maximize productivity. Farm management, however, requires skills in technical innovations, in accessing resources as inputs for production and in establishing market linkages to dispose their products. Having secure land rights enable the farmer to negotiate contracts, enter into a partnership and in investing for long-term engagements.

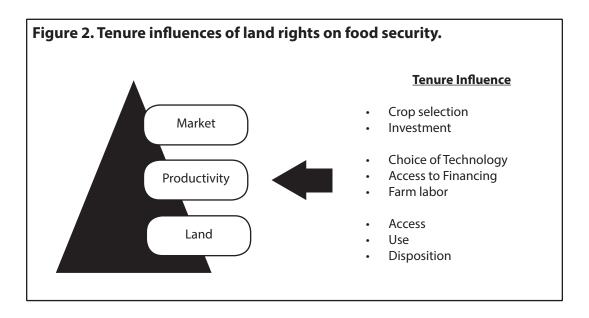
This is not easy for agrarian reform beneficiaries. In Negros Island region as reported by Kaisahan, "the beneficiaries (being farm workers for generations) are weak as they are highly dependent on the landowners... They rely on the landowners for their food, children's education and other basic needs. They are used to doing specialized and segmented work (cane cutting, weeding, etc.) and have no experience in managing a farm. On top of it all, they fear the landowners." Nevertheless, it is an important dimension of land tenure for ensuring food security.

As a landscape domain: As a component of the ecosystem, land use and management can stabilize or disrupt environmental cycles and processes. With the increasing risks in agriculture brought about by climate change and conflicts, recognition of land rights and instituting good land governance can have a significant impact in reducing disasters and internal displacements that are closely linked to hunger. This is significant for the Philippines especially some of the islands in the eastern coasts.

Moreover, land rights recognition can also contribute to climate change adaptation. Nearly 90 percent of the remaining forest cover are within the ancestral domains of the indigenous peoples but a huge hectarage still awaits issuance of CADTs.

Tenure Influence of Land Rights on Food Security

Among farming households, ensuring food security requires land, capacity in making it productive and fair disposal of its produce. Having rights to the land does not only allow access and use but provides the leverage in making the land productive. Moreover, the influence to engage the market allows the family to save in times of abundance and subsist in times of difficulty.



Assessment and recommendations

In a country where majority of the rural households dependent on agriculture continue to languish in hunger and poverty, the recognition of land rights within the framework of good land governance becomes a critical government program intervention. This comes with urgency as disasters and internal displacements intensify with the changing climate and political instability.

Some specific suggestions forwarded in the local consultations to improve land governance include the provision of support services, establishment of crop insurance, expansion of existing socialized credit windows, establishment of market links for farmers' produce and mandatory social preparation for potential agrarian reform beneficiaries.

This program intervention is also in line with the UN call for a more inclusive development along the UN-SDGs, particularly SDG 1 and 2. Thus, further studies on this inherent connection can provide insights in addressing global hunger and poverty. ■

Acronyms

ANGOC Asian NGO Coalition for Agrarian Reform and Rural Development

ARBs agrarian reform beneficiaries
A&D Lands alienable and disposal lands

CARRD Center for Agrarian Reform and Rural Development

CARP Comprehensive Agrarian Reform Program

CADT Certificate of Ancestral Domain Title
CLOA Certificate of Land Ownership Award

CLT Certificate of Land Transfer
CSO civil society organization
DA Department of Agriculture

DAR Department of Agrarian Reform

EP Emancipation PatentFGD focus group discussionGLTN Global Land Tool Network

IPs indigenous peoples

Kaisahan Kaisahan tungo Sa Kaunlaran Ng Kanayunan at Repormang

Pansakahan Inc.

OFWs overseas Filipino workers

LAD Land Acquisition and Development

PhP Philippine Peso (currency)

PIDS Philippine Institute for Development Studies

SDG Sustainable Development Goal

UNDP United Nations Development Programme

Definition of Terms

Subsistence incidence refers to the proportion of families (or population) with per capita income less than the per capita Food Threshold to the number of families (population).

Food threshold is the minimum income required to meet basic food needs and satisfy the nutritional requirements set by the Food and Nutrition Research Institute to ensure that one remains economically and socially productive.

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Annex 1. Summary of findings of the FGDs with sugarcane farmers in Negros Occidental facilitated by Kaisahan

On Housing and Homelot

Almost all of the respondents lived in their respective residents for more than 30 years with semi-permanent houses made of bamboo, concrete and lumber with nipa and galvanized iron for roofing. The smallest size of the homelot is 35 square meters, and the biggest is 600 square meters. Despite difficulties, most of the respondents stayed in their communities for more than 30 years.

ARBs whose houses are located in the homelot within their CLOAs have better security of tenure in their homelots than the farmworkers, and ARBs whose houses are located outside of the land awarded to them. Under the CARL, ARBs are entitled to a maximum of 1,000 square meters for their homelot.

All respondents have access to pump and artesian wells for their water, and only buy mineral or distilled water if a family member is sick or if there is an outbreak of diarrhea in the community.

On Source of Income

All respondents said that farming is their primary source of income and most respondents have secondary source/s of income but the combined income from farming and other sources are not enough to provide for the family's basic needs especially healthy and nutritious food.

All respondents are vulnerable to inflation because their main source of food is the market and not their farms, hence might be more expensive to achieve food security in the future.

On Migration

Most respondents have family members who have migrated due to lack of better and stable farm income to provide for their family. This, according to them, is because of the lack of support services to small farmers. This is also the reason they are investing in their children's education for them to have better opportunities to find more stable sources of income than farming.

On Credit/Loan Sources

All respondents have outstanding credit or had previously accessed credit either from microfinance institutions, foundations and or from individual lenders. All lenders charge interests but with different rates and with different terms of payment. Main reasons they avail of loans are for farm productivity, food and education.

On Tenurial Status and Food Security

All respondents, regardless of the status of their land tenure, are food insecure due to lack of income in sugarcane farming, but those with secured land tenure just need support services interventions to develop their asset, the awarded land, to improve their socio-economic standing, compared to farmworkers and to potential farmer beneficiaries whose future of owning the land they are tilling remains uncertain.

Small owner cultivators exclusively planting sugarcane would still experience lack of food during the lean months because of the lack of support services and other sources of income. They have little chance to secure their household's food security because of the long cropping cycle, the lack of market aside from the sugar mills which are controlled by the landowners. The cropping cycle for sugarcane is nine to 10 months and lean months would be three to four months.

Mono-cropping, especially if sugarcane, is a threat in sustaining the land tenure security of small farmers. Sugarcane farming can only be lucrative if a farmer owns at least 50 hectares of land. If small farmers will not shift to other crops or diversify, former landowners and ariendadors are expected to continue their pursuit to reclaim the lands awarded to agrarian reform beneficiaries to expand their vast sugarcane plantation.

Securing the land tenure of farmers will give them the freedom to diversify and break the mono-cropping system. Crop diversification will help provide their household free and nutritious source of food. This practice can also be a good opportunity for ARBs to have a more steady and additional source of income if they sell a portion of their harvest since the cropping cycle of the vegetables is shorter and more frequent.

The lack of access to socialized credit for small farmers exposes them to informal lenders charging unreasonable interest rates. This is one of the reasons the net income of most of the respondents is not enough to sustainably provide nutritious food for their families because they need to pay the loan and the exorbitant interest. Small owner cultivators might lose their land for non-payment of loans if they use it as collateral. But even if the support and livelihood opportunities are lacking, they still think that holding on to their land is important to achieve economic empowerment and food security for their families.

Possible Indicators of Land Rights and Food Security

- If farmers are peacefully tilling the land and received quality and need based support services
- If farmers have the freedom to diversify and shift to a sustainable farming system
- If a significant percentage of food on the table are from their own harvest
- Lessen dependency of farmers to credit to support farm production and the family's basic needs

Recommendations

For the Government

- Government (DAR) should do mandatory social preparation for potential agrarian reform beneficiaries while waiting for the completion of the land acquisition processes. Social preparation should include the formation of people's organization, organizational and farm planning, and values formation.
- The government should put a specific timeframe in the land acquisition and distribution processes and strictly implement it to avoid uncertainty in the tenurial security of potential agrarian reform beneficiaries.
- The government should prohibit agricultural venture arrangements that are unfair and will limit the rights of agrarian reform beneficiaries to personally cultivate, possess and manage their farmlands. Implementation of the initial capitalization of new agrarian reform beneficiaries and expansion of existing socialized credit windows for agrarian reform beneficiaries to lessen exposure of farmers to excessive interest rates charged by the individual lenders. These support services are mandated by RA 9700 (CARPER) but initial capitalization was not implemented and socialized credit window is limited.

The Agrarian Production Credit Program (APCP) can only be accessed by people's organizations but would require DAR endorsement and facilitation. A collateral-free credit window for individual ARBs should also be explored.

- The DA should adopt a need-based policy in providing support services and will prioritize agrarian reform beneficiaries in the provision of support services.
 Need-based means that the government should provide comprehensive and necessary support based on the farm plan of the community.
- Given the unpredictable weather pattern because of climate change, automatic crop insurance for agrarian reform beneficiaries is necessary for farmers to avoid indebtedness. Introduction of farming technology and crops that can adapt to changing climate should also be provided to farmers.
- The government should encourage agrarian reform beneficiaries to adopt a diversified farming system by making the support for crop diversification more accessible to farmers.
- Establishment of market links for farmers' produce and provision of support that will help put additional value to their produce. All respondents think that income boost is needed to have sufficient and nutritional food for their household.
- The government must have a food security program that will assist small farmers during off season. Emergency employment (food for work, cash for work), provision of support services for secondary farm-based livelihood like (e.g. livestock, poultry) non-farm (e.g. sari-sari store), and or inclusion of their families to the conditional cash transfer program of the government.
- College scholarships to farmers' children on agri-related courses to ensure second and third generation of farmers with knowledge and skills to make their farm sustainable and productive.

For the Farmers

- Form or strengthen their organizations to sustain their fight to secure land tenure and to access necessary support from the public and the private sectors.
- Proactively engage the government to fast-track the resolution of their land tenure issues.
- Solidify community support and expand the network of like-minded groups supportive of their land rights claims.
- Enhance their knowledge on land and human rights and develop skills in making claims and network-building.

- Shift to diversified farming system and maximize the use of the land awarded to them. Introduce food crops for the family's food consumption and nutritional needs.
- Invest in secondary source of income, preferably other farm-based livelihood like livestock and poultry.
- Access production loans offered by the government for friendly terms and lower interest rates.
- Encourage their children to take up agriculture courses and use their acquired knowledge, skills and technology in making their farm more sustainable and productive.
- Develop organizational and farm development plans as part of community social preparation in becoming owner cultivator.

Annex 2. Summary of findings of the FGDs with rice farmers in Iloilo facilitated by CARRD

Profile of the Respondents

Almost all respondents, who also happen to be household heads, are mature in age, with most groups having an average age of 60. This indicates a still active involvement and contribution of the respondents to the livelihood and food security of their households despite their advancing age.

Both genders were well represented in all clusters, despite having slightly more male than female respondents.

The average size of a Philippine household as of 2010 is five persons. Less than half of the groups in this study are below average, while a majority is slightly bigger in terms of household size. Those with bigger households are mostly groups with younger household heads.

Almost all groups have respondents who are affiliated with people's organizations. The two groups without memberships in these organizations are those with both the youngest (43 years old) and oldest (69 years old) average age of respondents. It appears that the respondents who are between these average ages find value in being members of people's organizations.

On Housing and Homelots

Tenurial status influences the type of housing and size of homelots. Farmers who do not have full ownership of the land, such as land claimants, farm workers, leaseholders, and CLT holders have semi-temporary to semi-permanent housing with homelot sizes at less than 300 square meters. While farmers who have full ownership of land, such as EP and CLOA holders, regardless if still amortizing or fully paid with the Land Bank of the Philippines, have better types of housing – from semi-permanent to permanent -- and have bigger home lots, with sizes of more than 300 square meters.

Tenurial status affects the security of farmers over their homelots. Farmers who do not have full ownership of the land, such as land claimants, farm workers,

leaseholders, and CLT holders feel insecure as regards the stability of their rights over their homelots. Since these kinds of arrangements are normally entered into verbally between the farmers and the landowners (even if there are written agreements, most farmers do not have copies of these agreements), the farmers are extremely vulnerable to the decisions of the landowners with respect to the utilization of the land.

Tenurial status does not appear to have a direct relationship to the household's source of drinking water. Regardless of tenurial status, most of the households have individual pump wells at home.

On Sources of Income and Livelihood

Despite the differences in tenurial arrangements, respondents consider farming as their primary source of income and as a family-operated business where both male and female household heads, as well as those members of the household capable of enduring farm activities, help in cultivating, maintaining, and managing the farm.

Tenurial status affects the respondents' perception of the stability of their income. Farmers who do not have full ownership of the land, such as land claimants, farm workers, and leaseholders consider income from farming as only temporary because they are still dependent on the decision of their landowners with regard to land use. This is the complete opposite of the perception of the respondents who are CLOA and EP holders. CLT holders, though still burdened to pay annual rental to their land owners, perceive that their livelihood is secured as they have certificates to show that they are the legally identified tenants.

Tenurial status appears to have a connection to the secondary source of household income. Most of the respondents who do not have full ownership of their land resort to taking on other on-farm jobs such as being paid farm laborers to augment their household income. While those with full ownership of the land allot a portion of their area for growing sugarcane and pineapple, aside from rice, to augment household income. Full control over the land allows them to easily diversify their respective farms.

On Migration

Tenurial status seems to have a relation to the household members' migration to Manila or abroad. Household members of landowners have better chances of seeking employment outside their hometown.

Respondents who are collective CLOA and EP holders, being owners of homelots or the land they till, have better access to funds that allow them to send their children to school and improve the latter's chances of seeking employment in Manila or abroad. By augmenting the household income through remittances, the household's opportunities for higher land productivity and the children's higher educational attainment are also improved.

On the other hand, respondents who are land claimants, farm laborers, leaseholders, and CLT holders have limited finances to send their children to school. A good educational background, or at least a high school diploma, is most often a requirement for seeking employment in Manila or abroad. Children from these households may have been prevented from migrating because of low educational attainment.

On Credit and Loan Sources

Availment of credits and loans, in general, is not influenced by tenurial arrangement, as most respondents, regardless of tenurial status, regularly borrow from lenders primarily to purchase farm inputs.

Access to the type of credit and loan sources, however, may be determined by tenurial arrangement. Formal lenders, which are presumably stricter in terms of documentary requirements, may limit their clientele to those who have proof of sources of income, such as ownership of real property. CLT, EP, and CLOA holders are the usual borrowers of cooperatives KASAPPI, PARECO, and JARCO. These cooperatives require their borrowers to submit certifications from the local Department of Agrarian Reform that state that the borrowers are in the masterlist of actual or potential agrarian reform beneficiaries.

Non-holders of proof of ownership or of local DAR certification, for lack of other options, would resort to informal lenders who charge significantly higher

interest lending rates (eight to 10 percent per month) compared to their formal counterparts (three to five percent per month).

On Tenurial Status of Farm lands

Security of ownership of farm lands is naturally related to tenurial status. Collective CLOA and EP holders feel secure about their land ownership. Their title to farm lands gives them the corresponding right to control the utilization of these lands.

On the other hand, land claimants, farm laborers, leaseholders, and CLT holders do not feel secure about their land ownership as landowners still have influence over land use.

The size of farm lands dictates the type of crops and the allocation of the harvest of the respondents. The bigger the farm land, the more varied are the crops that are grown. While rice remains the primary crop regardless of tenurial arrangement, the respondents with bigger land size, particularly the CLT, collective CLOA, and EP holders, are able to plant sugarcane and pineapple. Harvest yield from farm land that is 0.5 of a hectare is only able to sustain the household consumption requirement, while 60 percent of the harvest from land that measures around 1 hectare can be disposed of by the household and be converted to income.

On Perception of Food Security

Perception of food security is directly connected to tenurial status. Respondents who are secure about their land ownership claim that they are also secure about the sufficiency and diversity of their food supply.

But tenurial status is not the sole factor that influences one's perception of food security. Land size, labor productivity, and natural disasters also contribute to this perception.

The bigger their farm land, the better are the harvest yield and the variation in the crops that are cultivated by the respondents. The threshold appears to be one hectare. If their land measures less than one hectare, food security and diversity are not fulfilled.

Labor productivity is also important. It is a factor that respondents are able to control. Without labor, the respondents might hasten the risk of losing control over their real property because their recourse would be to lease their land.

However, despite one's industry, if natural disasters strike, a factor over which one has little or no control, respondents would anticipate less food supply and diversity.

On Perception of Community Problems

The community problems raised by the respondents go beyond their tenurial status. Problems with potable water, farm-to-market roads, understanding agrarian reform laws, and availability of laborers are common to the respondents and are basic to their form of livelihood.

Most respondents believe in collective effort, which explains their membership to people's organizations. They think that barangay-based cooperatives or groups could help advocate on their behalf and initiate the changes they need in their respective communities. But they only see the cooperatives and other barangay-based groups as initiators because to them, the local government has the responsibility of resolving these community problems.

Conclusions

The series of focus group discussions conducted show a direct relationship between tenurial arrangements, household productivity, access to market and household food security. The FGDs conducted were able to simulate various external factors that affect household decision-making. These factors include migration, community problems, food and income sources, credit and loan sources, and food and nutrition security. Findings from the FGD demonstrate that all of these factors are tied or are affected by tenurial instruments of farming households.

Access and ownership of land appear to be a major determinant for agricultural productivity, access to economic resources, and food and nutrition security. Access to and ownership of land provide families with leverage against some of the factors adversely affecting productivity and market access. These adverse factors include limited capacity for decision-making in terms of crop

diversification; limited access to credit and loan sources, which would have supported better input sourcing; and limited access to organizations offering technical and financial support. Based on the FGD, these factors provide landowners with a reasonable edge against non-landowners, and thus put them in better social and economic positions in their communities.

Findings in the FGD also showed that improved tenurial status provides households with a better sense of security. With this sense of security comes the independence to make "informed" decisions about their livelihoods. Results from the FGD actually demonstrated that making informed decisions come with finding value to memberships in community organizations and cooperatives – a predisposition, usually found more prevalent among landowners than farm workers and farm tenants. Armed with information, farming households with access to and ownership of their land are able to more efficiently allocate their resources to improve their levels of productivity. For instance, landowners are able to plant sugarcane and pineapple (apart from their prime commodity, which is rice) to increase their income levels. These decisions, however, cannot be made by farm workers and farm tenants, since they have to consider their landowners in the decision-making process.

Because landowners find more value in organization membership, most of them are affiliated in at least one community organization or cooperative. This affiliation not only allows them access to credit, it also provides them access to capacity-building and marketing support. Their increase in productivity is thus supported with a marketing function, which then transforms their produce into more tangible forms of income.

Overall, findings in the FGD were able to demonstrate direct links among land ownership, productivity, and market. Food and nutrition security comes in with increased income levels, as households find themselves in a better position to buy more food for the family, and even grow nutritious crops on their land (aside from their main crop).

Recommendations

Grassroots information drive on agrarian reform law should be implemented. Most of the respondents, even full-fledged agrarian reform beneficiaries, do not have a full grasp of the provisions of the CARPER Law, particularly on how it is

implemented and what their legal rights and responsibilities are. Equipping them with basic and updated information on agrarian reform law will teach them to act accordingly whenever there are issues that might threaten their rights over the land.

Organizing the farmers into cooperatives or associations is essential to achieving collective voice and actions to resolve not only agrarian-related issues but also basic issues that affect the community as a whole. Hence, there is a need to strengthen capacities of barangay-based farmers' organizations.

Changing weather conditions that affect productivity of the farm is beyond the control of the farmers. Hence, there is a need to enhance farmer's adaptive capacity and resilience to climate change and variability. At the farm level, this can be done by climate-proofing agricultural practices such as farm diversification and adapting efficient irrigation system etc.

Most of the farmers are doing their best to send their children to school in the hope that they will find better employment and opportunities outside of the community. They do not see a bright future in agriculture. This is evident by the age of the respondents who are mostly nearing retirement. The challenge is how to make agriculture 'cool' to the younger generation. This can be done by enhancing or reviving support for both formal and informal agriculture education system, such as family farm school, farmer field school, farm business school, and farm learning sites, among others, that are specifically designed for the youth.