

Received: 12 December 2017

Accepted: 3 May 2018

## **Cash Transfers and the Rice Economy of Bicol, Philippines<sup>1</sup>**

**Rolan Jon Bulao**

*College of Business and Management, Partido State University, Camarines Sur, Philippines*

*Corresponding author: rbulao@gbox.adnu.edu.ph*

**Lourdes Adriano**

*Core Agriculture Support Program, NIRAS, Bangkok, Thailand*

**Kristine Busadre**

*Department of Social Welfare and Development Regional Field Office 5, Albay, Philippines*

**Earl John Hernandez**

*College of Arts and Sciences, Partido State University, Camarines Sur, Philippines*

### **Abstract**

Most studies on the Philippine government's conditional cash transfer, Pantawid Pamilyang Pilipino Program (4Ps or Pantawid), assess its impact on education, health, and nutrition, the program's primary targets. This study attempts to determine qualitatively the program's impact on the rice economy of Bicol, Philippines, through a rice value chain (RVC) analysis. The analysis traces and maps the value chain segments of rice demanded by 4Ps consumers and the changes in the organization, structure, and performance of such segments due to the 4Ps consumers' demand push. The study finds that rice consumption of beneficiaries has changed in terms of quality and quantity. Moreover, beneficiaries have had better access to credit because of 4Ps. Millers also manifest increased profitability. Among the RVC players, the program has greater impact on retailers and wholesalers. The study provides evidence on the positive unintended consequences of 4Ps to local economies.

**Keywords:** Conditional Cash Transfer, 4Ps, Rice Value Chain, Poverty, Positive Externality, Multiplier

---

<sup>1</sup> The study, completed on 5 July 2016, was commissioned by the Department of Social Welfare and Development (DSWD) and funded by the Department of Foreign Affairs and Trade (DFAT) of Australia.

## 1. Background

Since 2007, the Government of the Philippines (GPH) has been disbursing cash to the poorest households in an effort to cut intergenerational poverty by setting conditions related to improving access to education, health, and nutrition. The Pantawid Pamilyang Pilipino Program (“Bridging Program for the Filipino Family,” acronym 4Ps) is the country’s conditional cash transfer (CCT) program which is administered by the Department of Social Welfare and Development (DSWD). In 2016 alone, the GPH allotted PhP 5.2 billion (\$ 109.47 million<sup>2</sup>) for over 370,000 beneficiaries in the Bicol Region (DSWD RFO V), one of the highest allocations among the regions in the country. This amount is equivalent to about 27% of the region’s internal revenue allotment (IRA) given to different local government units for the same fiscal year. While the IRA has been the traditional national government stimulus fund to local economies, the infusion of significant additional funds through the 4Ps has added more cash resources to the economies of the regions, provinces, municipalities, and barangays (villages). Theoretically, the infusion of more cash that passes from one hand to another in local economies has the potential of boosting not only household income but also other economic activities in the locality such as production and trade, employment, and investment in local industries. However, the potential contribution of Pantawid to the local economy has hardly been given attention by existing research works.

Previous studies (Quimbo et al., 2015; Reyes et al., 2013; Son and Florentino, 2008; Tutor, 2014; Montilla et al., 2015) primarily focused their analyses on the impacts of the 4Ps on education, nutrition, and health—the three major target areas of the program. While a significant portion of the Pantawid cash grant is usually spent by beneficiaries on buying their children’s school supply needs, it cannot be denied that a substantial portion of the payout is also used to purchase food for the family. Rice, being the staple food of Filipinos across income classes, eats up a sizeable slice of the Pantawid cash grant expenditure. Bicol, with a total regional output of PhP 142.6 billion

---

<sup>2</sup> US\$1.00=PhP47.50 (Average for January-December 2016, per *Bangko Sentral ng Pilipinas*).

(\$3 billion), is recognized by the Department of Agriculture (DA) as one of the top five rice producing regions in the country (DA, 2016), harvesting a total of 1.258 million metric tons of paddy rice in 2014 (PSA, 2015). Unlike previous impact assessments of Pantawid which focused on the targeted outcomes of the program on education and health, this study examines whether the Pantawid beneficiaries' rice spending impacts on the rice value chain (RVC) and generates a ripple effect on the other economic sectors. Economic theory predicts that government cash transfers generate multiplier effects on the local economy.

Specifically, this study aimed to: (1) assess how the Pantawid pump-primes the rice economy of Bicol Region; (2) evaluate how rice consumption, both in terms of quality and quantity, is being affected by 4Ps; (3) identify changes in empowerment behaviors and actions of Pantawid beneficiaries toward other rice stakeholders, including government, private sector, and NGOs; and (4) analyze the changes in organization, structure, and practices of RVC players in the light of the 4Ps implementation.

## **2. Conditional Cash Transfers and Economic Development**

The Conditional Cash Transfer (CCT) program has long been adopted in various developing economies around the world in addressing poverty. Cash transfer is a form of government assistance that aims to empower the poor through the use of small amount of cash in productive and life-improving means (DFID, 2011). It is particularly important in reducing transitory poverty<sup>3</sup> where there is increasing recognition that while globalization brings opportunities to poor households, it also exposes the latter to stresses (e.g. volatile food prices) and shocks which can exacerbate poverty. In addition, institutionalized transfer programs are found to be more efficient and effective than repeated annual emergency food aid in situations of chronic food insecurity (DFID, 2011). The impact of cash transfers on hunger has been most notable in the developing countries where poverty incidence and magnitude are higher. This is because households receiving additional income

---

<sup>3</sup> Transitory or Transient Poverty is a measure of vulnerability to consumption fluctuations. It is defined by Jalan & Ravallion (2007) as the component of time-mean consumption poverty that is characterized by consumption variability.

are more likely to prioritize spending on more and/or better-quality food. About half of the transfers is expected to be spent on food, a third on household expenses, and the rest on health, education, savings and investment (DFID, 2011).

While local economic development is not the primary target of cash transfers, they can pump-prime the local economy by raising demand for consumption of local goods, assets and inputs by poor. (DFID, 2011). Creti (2010) and Asfaw (2012) provide that the effects of cash transfers already go beyond their immediate impact on household consumption and can potentially generate positive short-term income impacts that can contribute to longer-term development. Both authors concluded that cash transfers may have spillover effect from the target population to the whole local economy.

Creti (2010) found evidences of the multiplier effects of the cash transfer programs and how the local market actors benefit from said cash injection. In rural Mexico, each dollar transferred to a beneficiary generates an additional income of over \$2 in the local economy. When beneficiaries spend their cash locally, this produces not only redistribution of incomes but also increased production and trade. In Ghana, Asfaw (2012) found that there are also multiplier effects on the labor market.

Kabeer (2012) observed that CCTs help raise overall household consumption, increase investment in productive assets, and reduce child labor. However, there is no conclusive proof that CCTs directly contribute to poverty reduction, increased loans and transfers and household behavior in local communities. Further, the study also revealed that there is no evidence that CCTs raise inflation in the local economy.

In assessing Ghana's LEAP Program, Asfaw (2012) revealed that the local economy was stimulated as evidenced by more diversified goods available and enhanced labor market. Moreover, the LEAP program increased the credit worthiness of beneficiaries. Finally, Asfaw found out that food is one of the top priorities of the beneficiaries, thereby creating investment in farming particularly in maize and rice.

## 2.1 Rice Value Chain

In studying value chains, Dooren (2005) identified some relevant questions that may be asked about a chain. These include information on actors involved in the chain, how the costs and benefits are negotiated and divided over the chain, the factors that influence the relations between the different players, how the different actors influence the relations between the different players, and the process by which (small) producers, like farmers, can acquire a greater portion of the benefits from the chain in a sustainable way.

In the Philippines, government participation in industrial development is predicated on the participation of small and medium enterprises (SMEs). On the other hand, large private sector actors are endowed with capital and technological knowledge, and therefore hardly rely on government support. Big firms can play a crucial role as both a supplier and buyer of goods and services to and from SMEs (Briones, 2014). Dela Peña (2014), in a rapid appraisal of the RVC from northern and central Luzon to Manila, observed that profits of value chain players increase as a result of bigger volume, high inventory turnover, integration of operations across levels, and investments for quality improvement. Tracing the RVC, Briones and Dela Peña (2015) concluded that each stage is characterized by strong competition among the current players.

In tracing the RVC, the authors (as in Manalili, 2006; Rola et al., 2012; and Rola et al., 2016) started with the farm where the commodity is produced. The harvested rice from the farm is sold to traders, who then sell paddy rice to rice millers, who process the paddy into milled rice. From the mill, the rice goes to wholesalers, who may also procure milled rice from importers. Wholesalers then sell it to retailers, which in turn may be classified as either traditional retail outlets (local public markets or roadside stalls) or modern retail outlets (supermarkets and retail chains). In order to compete, actors in the value chain employ certain strategies: for example, retailers weigh and pack rice depending on customer's demand while some millers add vanilla and pandan to enhance aroma.

## 2.2 Rice Market and the Poor

Aguilar (2005) argues that consumption of rice reflects the stratification of contemporary Filipino society, as can be inferred from recent trends in rice consumption. He also asserts that more Filipinos view themselves as rice consumers rather than producers.

Rice has many direct and indirect linkages with other sectors of the economy (Cororaton, 2004). Thus, rice is a critical item, especially in the diet of the poor considering that 34 percent of the food expenditure of the bottom 20 percent of households is spent on rice (ADB, 2008). Cororaton (2006 & 2010) further noted that over 60 percent of the rural poor household's expenditure is food, half of that spending is devoted to purchase of rice or corn. The same study indicated that the same pattern of expenditure is also observed among the urban poor households.

The average annual food expenditure by farm households amounted to PhP 40,186.77 (\$846.04) in the Philippines but only PhP 34,690.05 (\$730.32) in the Bicol Region (PSA, 2015). Meanwhile, the average annual income of the farm households in the Philippines amounts to PhP 57,628 (\$1,213.22) while it was only PhP 36,579 (\$770.08) in Bicol.

With an average of 56 kg per caput consumption, rice is the single most important food item in terms of calorie intake providing over 20 percent of the ordinary Filipino dietary energy (Calpe, 2006). This figure is significantly higher for the poorest quartile of households as they depend on rice for about 60%-65% of their calorie intake (David and Balisacan, 1995, and Sebastian et al., n.d., as cited in Intal and Garcia, 2005). This implies that rice consumption may be a good indicator measuring the efficiency of poverty alleviation programs implemented by the government.

Reyes et al. (2012) noted that poverty is directly related to larger family size, lower educational attainment, and involvement in agricultural activities. Almost half of agricultural workers are poor. Poverty incidence among households whose main occupations are farmers, forestry workers, and fishermen was 46.2% in 2009 which seems to indicate that the relatively high poverty rate in the country is related to employment in the agricultural sector which yields lower income (Reyes et al., 2012). In 2014, the PSA

reports that the agriculture sector generated 11,801,000 jobs in the Philippines, 860,000 of this come from the Bicol region.

In terms of wages, data from PSA show that the real wage of rice farm workers in the Philippines in 2011 was PhP 138.97 (\$2.93) per day for both sexes. Agriculture approximately contributes 25.6% to the Bicol region's economic output and absorbs the biggest proportion of its labor force, at 40.7%, (DA Annual Report, 2014), but the income received by this sector is barely enough to sustain the needs of agrarian households. This problem is exacerbated by rice price volatilities (Timmer, 2009), which result in negative shocks to poor households, majority of whom are in the agriculture sector.

### **3. Methodology and Data**

The study primarily employed qualitative techniques in gathering data. With value-chain analysis (VCA) as the main framework of analysis and complemented by secondary data from government offices, key informant (KI) interviews and focus group discussions (FGD) were conducted in the provinces of Camarines Sur and Albay. The chosen sites for the FGDs were towns or cities with the largest number of beneficiaries, major rice producers (Libon in Albay and Libmanan in Camarines Sur), and major rice consumers (Legazpi City in Albay and Naga City in Camarines Sur).

While Albay and Camarines Sur have the biggest share of 4Ps budget and beneficiaries, the provinces are polar opposites in terms of the domestic rice market. Albay is a rice-deficit province while Camarines Sur is a rice-surplus area. While considered a rice insufficient province, Albay has an array of agricultural programs and projects implemented by its local government. On the other hand, Camarines Sur does not even have a provincial agriculturist which may be due to the presence of the DA regional office there.

A total of 68 respondents participated in the FGDs, which were invited through the Pantawid parent leaders as coordinated by the municipal and city offices of the DSWD. There were 19 Pantawid and 13 non-Pantawid participants in Camarines Sur. In Albay, 19 Pantawid and 17 non-Pantawid beneficiaries served as respondents. The study focuses on the Pantawid group.

The VCA framework for the Bicol rice market has four main segments or functions. Moving backwards, since we start with both Pantawid and non-Pantawid beneficiaries as end-consumers of rice, the RVC flows from (1) Consumption to (2) Marketing and Distribution to (3) Rice Processing and to (4) Rice Production. To complement the VCA and to provide quantitative analysis into the pump-priming effects of the Pantawid on the local economy, level-level regression was used to estimate the marginal propensity to consume (MPC). The MPC in turn was used to estimate the multiplier effect of the 4Ps grant to the Bicol economy.

In the KI interviews, a total of four rice retailers, a farmers' corporation with rice processing plant, two miller-traders, one trader-miller-wholesaler-retailer, a church-based non-government organization (NGO) official, a church-based lending company manager, two bank managers, two supermarket managers, a hotel manager, and a fast-food restaurant manager were interviewed in Camarines Sur. There were six rice retailers, three bank officers, a hotel manager, two fast-food restaurant managers, a supermarket supervisor, two millers, and one agrivet store manager KIs in Albay.

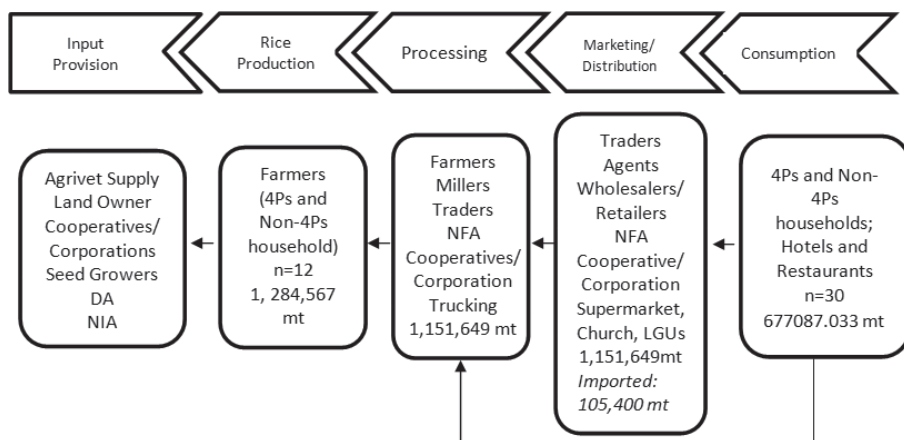
During the conduct of KI interviews and FGDs, field observation notes and photo documentation were made. The notes and documentation provide proofs of the changing dynamics of the rice market as a result of Pantawid implementation.

#### **4. Discussion of Findings**

The diagram below shows the Bicol rice value chain, based on the field interviews and discussions in the provinces of Albay and Camarines Sur. In general, almost every segment of the value chain indicates improvements in the well-being of actors/ stakeholders as a result of the implementation of Pantawid.



**Figure 1.** Rice Value Chain of Albay and Camarines Sur, Bicol, Philippines



#### 4.1 How the 4Ps pump-primes the rice economy of the Bicol Region

The Pantawid Program cash grants along with the IRA create a multiplier effect on the local economy of Bicol. Researchers estimate the multiplier to be 7.87 and 3.49 for the first and second income deciles, respectively. The researchers estimate that the 4Ps cash grant for Bicolanos potentially generates an additional PhP 18 to 40.9 billion (\$378.95 to 861 million) income to the local economy. Assuming a multiplier of 2.938 for the entire Bicol population, cash transfers are estimated to generate an additional PhP 15.28 billion (\$321.68 million) income in the region's economy, which is about 5% of Bicol's gross regional domestic product. These estimates are supported by the observed improvement in the rice business climate which extends to other industries such as supermarkets and groceries, as well as the transportation sector. Since Pantawid consumers spend on public transportation to withdraw their cash grant, public utility vehicles (e.g. tricycles and jeepneys) also benefit from the Pantawid cash transfer.

#### 4.2 How rice consumption is affected by the 4Ps

Rice consumption of Pantawid beneficiaries has changed in terms of quality as manifested by the demand shift from National Food Authority (NFA) rice (considered a relatively inferior variety) to commercial rice. According to the respondents, the relatively lower prices of commercial rice enabled

Pantawid beneficiaries to afford better quality commercial rice. There is an increase in quantity consumed by beneficiaries that are mainly due to two factors: growing children and extended family (i.e. children starting their own family but are still living with their parents). With the additional cash from the program, the Pantawid beneficiaries are able to increase their consumption and at the same time shift to better quality rice varieties. On the other hand, Pantawid beneficiaries who are rice farmers attribute their shift to better-quality rice to the introduction of new hybrid seeds. Pantawid beneficiaries who are rice farmers are also more rice self-sufficient than their non-farmer counterparts.

#### **4.3 Changes in empowerment behaviors and actions of 4Ps Beneficiaries toward other rice stakeholders**

Pantawid beneficiaries can now easily access credit from rice retail stores. These stores can easily identify Pantawid beneficiaries as they travel as a group to public markets and nearby retail stores to buy rice. Consequently, Pantawid beneficiaries have stronger relationship with retail stores which forms a “*suki* (favored-customer/seller) relationship” over time. One respondent shared:

When I have more money, I buy from my *suki* (frequently-patronized) store because it sells at discounted price.

However, Pantawid beneficiaries’ access to credit from rice retailers has also exposed them to unscrupulous retailers where, as one respondent revealed, the latter add an interest of up to 32% from the original price. Pantawid beneficiaries tend to trust rice retailers more than the non-Pantawid rice consumers do. Non-Pantawid rice consumers tend to be more guarded in their dealings with rice retailers.

Pantawid rice consumers’ buying behavior has also changed. From buying rice on retail (per kilo) and daily basis, most of the Pantawid respondents now buy rice in bulk (per sack basis) during the payout.

In both provinces covered by the study, Pantawid consumers engage in information sharing in their rice purchasing activities. During parent meetings, the beneficiaries share some information with others regarding rice prices and consumption. In case of an unscrupulous rice retailer, information regarding

this is relayed to others so as to warn their fellow beneficiaries not to buy from such source. However, in terms of collective action, the group exhibited weakness as they do not buy rice as a group of beneficiaries specifically after payout.

Beyond purchase of rice and other food products, 4Ps also manifest positive impact in the overall well-being of beneficiaries who are also rice farmers. Non-government organizations (NGOs), such as local church-based groups, disclosed that it is easier for them to organize farmer-members who are Pantawid beneficiaries as they are already accustomed to complying with DSWD requirements on group activities. NGO support to Pantawid farmers is not confined to informing and training the latter on the latest farming technology but also in accessing government and privately-provided credit and other support services.

#### **4.4 Changes in organization, structure, and practices of RVC players**

##### *4.4.1 Wholesalers-Retailers*

There are several changes in the organization, structure, and practices of RVC players as a result of 4Ps implementation. Among the RVC players, the program has the greatest impact on wholesalers and retailers. The retailers and wholesalers in the study disclosed that they could identify Pantawid beneficiaries during payout as their buyers because they come to their retail stores as a group. They also confirm that there is a slight increase in their income with the Pantawid beneficiaries as a group of buyers. These RVC players have extended credit and other special arrangements to Pantawid rice consumers to encourage them to buy. FGD participants shared that retailers seem to be more excited to see Pantawid beneficiaries approaching their stalls. KI interviews and secondary data also support the increased income received by rice wholesalers and retailers as a result of the implementation of Pantawid.

Using information shared by one of the KIs, researchers estimate that income from wholesale and retail is about PhP 3 million (\$63,157.89) in a regular month and even reaches PhP 3.75 million (\$78,947.37) during payout, as 20-30% more bags are sold. Incrementally, an additional monthly profit of PhP 744,786 (\$15,679.71) is earned by the wholesaler-retailer due to Pantawid

payouts. Thus, in one cropping season, average incremental increase in profit due to Pantawid is about PhP 2.98 million (\$62,736.84), assuming a 25% increase in sales due to payout. This may be an understatement as the KI interviewee is but only one of the several sellers in his town. The figures are potentially higher for the wholesalers-retailers in the bigger cities of Bicol.

#### *4.4.2 Millers*

Some consumers procure rice directly from millers. The four (4) respondent-millers in this study are also engaged in both retailing and wholesaling activities. Respondent-consumers buy directly from millers due to lower or discounted prices these millers set compared to retail stores in a public market or sari-sari stores.

Two millers from Libon, Albay recognized Pantawid beneficiaries as their customers because the latter proceed to their retail stores before and after payout. Some pay in cash while others promise to pay when the cash grant is received. One miller/*comprada* confirmed that they allow beneficiaries to buy rice on credit as long as the latter pays when they receive their cash grants. As a result, there was an increase in retail sales because of these new arrangements. Written contracts were no longer executed by these millers. They shared that as long as the beneficiary has a good credit standing, they allow the latter to avail rice on loan.

Further, among the three miller-retailer informants, one mentioned that their income on retail increased upon the implementation of the 4Ps. The other miller-retailer, as he is only a small enterprise in the area, does not monitor his sales but was able to recognize Pantawid beneficiaries purchasing rice from him. Meanwhile, the third miller-retailer also does not recognize any increase in his sales from retailing as he cannot distinguish his customers whether they are Pantawid or non-Pantawid beneficiaries.

#### *4.4.3 Farmers*

Among the RVC players, the farmers have the highest return per kilogram compared to the other players. Nevertheless, other players, especially wholesalers-retailers and big rice mills, earn much bigger total returns due to economies of scale. Big rice mills also indicate significant income improvement

as manifested by increased investments in their facilities although this may not be necessarily solely due to 4Ps. Most Pantawid-farmer beneficiaries depend on other rice value chain actors on borrowing for or farming inputs, although some benefit from services provided by the government and NGOs. 4Ps provides a small relief to farmers since a portion of the payout is sometimes used to procure farming inputs.

Since certain costs and incomes differ between the cropping seasons, returns to farmers also vary. In Libon, return on cropping expenses range from 24% to almost 50% during wet season. The return to non-Pantawid beneficiaries is larger since they are economically better off, and hence, excluded from Pantawid program. However, during dry season, return on expenses among Pantawid farmers is 77.5% compared to only 61% among non-Pantawid farmers. One unique cost item present among Pantawid farmers is rent as most of them do not own the land they till. Despite this additional cost, their total cropping season expenses are still lower compared to non-Pantawid farmers since the Pantawid farmers usually choose cheaper inputs. Since output of non-Pantawid farmers is generally higher than that of the Pantawid farmers, total income of the former is higher than that of the latter. In Libmanan, return on expenses during wet season range from about 7% to 64.8%. During dry cropping season, returns on expenses range from about 49% to almost 127%. Non-Pantawid farmers receive higher absolute returns on both cropping seasons which is mainly due to higher output (up to 1000 kg difference), higher buying price of paddy rice and proportionally lower expenses compared to Pantawid farmers. Just like the Libon Pantawid farmers, several Libmanan Pantawid farmers also rent the land they till, which adds up to their costs.

While farmers earn between PhP 0.78 (\$0.02) to as much as PhP 6.11 (\$0.13) per kilogram in profit, they remain to be the poorest among RVC players. A major reason for the low return among Pantawid farmers in both Libon and Libmanan is their relatively smaller scale operations. Most of them plant rice in less than a hectare of land whereas several non-Pantawid farmers cultivate their own land in an area greater than a hectare. Another factor that deprives some Pantawid farmers of higher returns is their relatively limited capacity to buy certified seeds. Such farmers resort to using inbred seeds instead, which limit their output. These problems are exacerbated by the

difficulty in borrowing capital and even money for personal consumption from millers, which further limits their market power. This however is minimized in the case of several Pantawid farmers as they sometimes use a portion of the cash grant in purchasing inputs. However, respondents in Libon take a portion of their cash grants to buy vegetable seeds rather than farm inputs because the former has a shorter period of harvest than that of rice.

## **5. Summary, Implications, and Recommendations**

The study reveals that Pantawid's huge cash transfer to poor communities has the unintended positive multiplier effects and externalities on the local economy beyond its original target outcomes, which are better access to education and health for the poor. To yield greater benefits from these positive impacts and harness their potentials for the further development of the local economy of these poor communities, the following recommendations are proposed.

### **5.1 Indexation of cash grants to CPI**

Results of the study show that beneficiaries can afford commercial rice given current market prices. However, since rice price is volatile. Pantawid consumers are easily affected by negative supply shocks. Based on the 2012 FIES, around 20 percent of the poor's expenditure goes to rice. Moreover, a substantial portion of the Pantawid cash grant is spent on grocery items and other basic commodities. The increase in prices of these items can easily erode the poor's purchasing power. To prevent this from happening, the indexation of the cash grants to the CPI is highly recommended, provided the payout does not fall below the present amount received by the beneficiaries.

### **5.2 Assistance in strengthening farmers organizations**

The study found out that farmers' associations help their members gain access to: (a) credit, (b) modern farming equipment that boost farm productivity, and (c) relevant and timely market information and farming technology. A recent study of the World Bank (2017) showed that when farmers are organized, they have better bargaining leverage with the buyers

and traders and hence, can ask for a fairer price for their produce.<sup>4</sup> It is thus recommended that government provide systematic assistance to Pantawid-farmers to organize themselves into farmers' associations. This will also enable them as a group to enjoy the benefits of scale economies in terms of lower prices for the collective purchase of their farm inputs.

### 5.3 Improving access to credit

The study found out that Pantawid-farmers are saddled with debt from the other actors in the rice value chain (i.e., millers cum traders). Besides the Pantawid cash grants, there might be a need for the government to establish a credit scheme to meet credit requirements of poor farmers for their farm inputs. Although current credit policy of the government discourages government from directly engaging in the provision of subsidized credit scheme<sup>5</sup>, there are ways by which government can work with private financial institutions in extending lower interest credit to poor farmers by the former partly shouldering the burden of credit interest rates. By channeling credit to private financial institutions, this will avoid the usual borrowers' default of their loans as they no longer will see credit coming from the government as a dole out but must be paid to private banks. However, strict eligibility criteria, using the recently completed Farm and Fishery Registries, should be applied in extending low-interest credit to poor farmers and fishers.

If these recommendations would materialize, the positive externalities created by 4Ps would be further magnified. These policy actions, while directly aimed at improving the well-being of 4Ps beneficiaries in the short run, will likely spill over to industries and sectors of local economies. While cutting intergenerational poverty certainly does not happen overnight, 4Ps is a testament to that possibility.

---

<sup>4</sup> World Bank (2017) *The Mindanao Jobs Report: Agrarian Mindanao*. Taguig City: WB Office in Manila

<sup>5</sup> As stipulated in one of the provisions of the Agricultural and Fisheries Modernization Act (AFMA) of 1997 or Republic Act No. 8435.

## Acknowledgements

The authors would like to extend their profoundest gratitude to the Policy Development and Planning Bureau of the DSWD and the Department of Foreign Affairs and Trade of the Government of Australia for their logistical and financial support; former University President, Fr. Primitivo E. Viray, Jr., SJ, and Fr. James O'Brien, SJ Library of the Ateneo de Naga University for providing moral support and venues for discussion; Dr. Merlyne Paunlagui of UP Los Baños College of Public Affairs and Development for assisting in the formulation of FGD framework and questions; Dr. Fermin D. Adriano of the World Bank Office in Manila; DSWD Regional Field Office V for the assistance in the facilitation of the FGDs and KI interviews; the local government units of Naga City, Libmanan, and Libon for providing venues for FGDs; Asiawise Study Center, Inc. for providing a venue for discussions and final report writing; and our research assistants, Carmelle Anne Nopia, Donna Jean Pena, and Bea Anne Baroma, for their diligent work in data gathering.

## References

- Aguilar, F. Jr. (2005) *Rice in the Filipino Diet & Culture* (Discussion Paper Series No. 2005-15, July 2005). Philippine Institute for Development Studies.
- Asfaw, S. (2012) *From Protection to Production: the impact of cash transfer programs on economic activities in Africa*. Retrieved from [http://www.fao.org/fileadmin/user\\_upload/p2p/Publications/presentations/Asfaw\\_Sweden11Sep12.pdf](http://www.fao.org/fileadmin/user_upload/p2p/Publications/presentations/Asfaw_Sweden11Sep12.pdf)
- Briones, R. & Dela Peña, B. (2015) *Competition Reform in the Philippine Rice Sector* (Philippine Institute for Development Studies Discussion Paper Series No. 2015-04). Retrieved from <https://dirp4.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1504.pdf>
- Briones, R. (2014) *Compilation and Synthesis of Major Agricultural Value Chain Analysis in the Philippines* (Philippine Institute for Development Studies Discussion Paper Series No. 2014-35). Retrieved from <http://www.value-chains.org/dyn/bds/docs/889/pidsdps1435.pdf>



- Calpe, C. (2006). *Rice International Commodity Profile*. Food and Agriculture Organization of the United Nations, Market & Trade Division. Retrieved from [http://www.fao.org/fileadmin/templates/est/COMM\\_MARKETS\\_MONITORING/Rice/Documents/Rice\\_Profile\\_Dec-06.pdf](http://www.fao.org/fileadmin/templates/est/COMM_MARKETS_MONITORING/Rice/Documents/Rice_Profile_Dec-06.pdf)
- Cororaton, C. (2004) *Rice Reforms & Poverty in the Philippines: A CGE Analysis* (ADB Institute Discussion Paper No. 8). Retrieved from <https://www.adb.org/sites/default/files/publication/156759/adbi-dp8.pdf>
- Cororaton, C. (2006) *Philippine Rice and Rural Poverty: An Impact Analysis of Market Reform Using CGE* (International Food Policy Research Institute MTID Discussion Paper No. 96). Retrieved from <https://ageconsearch.umn.edu/record/58578/files/mtidp96.pdf>
- Cororaton, C., Corong, E. & Cockburn, J. (2010) Agricultural and Non-Agricultural Price Distortions in the Philippines: Implications on Poverty. In K. Anderson, J. Cockburn & W. Martin (Eds.) *Agricultural Price Distortions, Inequality, and Poverty* (pp. 247-282). Washington, DC: World Bank. Retrieved from [http://siteresources.worldbank.org/INTTRADERESEARCH/Resources/544824-1272467194981/Ag\\_Price\\_Distortions\\_Inequality\\_Poverty\\_0310.pdf](http://siteresources.worldbank.org/INTTRADERESEARCH/Resources/544824-1272467194981/Ag_Price_Distortions_Inequality_Poverty_0310.pdf)
- Creti, P. (2010) *The Impact of Cash Transfers on Local Market: A Case Study of Unstructured Markets in northern Uganda*. Retrieved from <http://www.cashlearning.org/downloads/resources/calp/impact-of-cash-transfers-on-local-markets-text-only.pdf>
- Dela Peña, B. (2014) *Rapid Appraisal of the State of Competition in the Rice Value Chain* (Philippine Institute for Development Studies Series No. 2014-25). Retrieved from <https://dirp4.pids.gov.ph/webportal/CDN/PUBLICATIONS/pidsdps1425.pdf>
- Department for International Development (2011). *Cash Transfers*. Evidence Paper Policy Division. Retrieved from <http://webarchive.nationalarchives.gov.uk/+http://www.dfid.gov.uk/Documents/publications1/cash-transfers-evidence-paper.pdf>
- Department of Agriculture (2014). Annual Report of the Department of Agriculture. Diliman, Quezon City: Department of Agriculture.

- Department of Agriculture. DA launches national year of rice in Bicol. *Department of Agriculture website*. Retrieved from <http://www.da.gov.ph/index.php/2012-03-27-12-04-15/photo-releases/3503-da-launches-national-year-of-rice-in-bicol>
- Department of Social Welfare and Development Regional Office 5. Legazpi City, Albay.
- Dooren, C. (2005) *Rice Value Chain Analysis*. Retrieved from <http://condesan.org/mtnforum/sites/default/files/publication/files/5197.pdf>
- Government of the Philippines (1997) *Agricultural and Fisheries Modernization Act (AFMA) of 1997 or Republic Act No. 8435*. Retrieved from <http://www.officialgazette.gov.ph/1997/12/22/republic-act-no-8435-s-1997/>
- Intal, P. Jr. & Garcia, M. (2005) *Rice and Philippine Politics* (Philippine Institute for Development Studies Discussion Paper Series No. 2005-13). Retrieved from [http://saber.eaber.org/sites/default/files/documents/PIDS\\_Intal\\_2005.pdf](http://saber.eaber.org/sites/default/files/documents/PIDS_Intal_2005.pdf)
- Kabeer, N., Piza, C. & Taylor, L. (2012) *What are the economic impacts of conditional cash transfer programmes? A systematic review of the evidence* (Technical report) London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. Retrieved from <https://assets.publishing.service.gov.uk/media/57a08a6840f0b649740005a4/CCTprogrammes2012Kabeer.pdf>
- Manalili, N., Tumlos, L.A. & Casiwan, C. (2006) Supply-Chain Perspective. In Balisacan, A., Sebastian, L. & Associates (Eds.) *Securing Rice, Reducing Poverty: Challenges and Policy Directions* (pp. 239-276). Los Baños, Laguna: Southeast Asian Regional Center for Graduate Study and Research in Agriculture.
- Montilla, M., Delavin, E., Villanueva, R. Jr., & Turco, R. (2015) Pantawid-Pamilyang Pilipino Program (4Ps): Assistance to Pupil's Education. *Asia Pacific Journal of Education, Arts and Sciences*, 2(3), 1-5. Retrieved from <http://oaji.net/articles/2015/1710-1440094900.pdf>
- Philippine Statistics Authority Regional Statistical Services Office V (2015). *Regional Social and Economic Trends: Bicol Region* (CD).

- Quimbo, S., Capuno, J., Kraft, A., Molato, R. & Tan, C. Jr. (2015) *Where Does the Money Go? Assessing the Income and Expenditure Effects of the Philippines' Conditional Cash Transfer Program* (University of the Philippines School of Economics Discussion Paper No. 2015-02). Retrieved from <http://www.econ.upd.edu.ph/dp/index.php/dp/article/view/1472/950>
- Reyes, C., Tabuga, A., Asis, R., & Datu, M.B. (2012) *Poverty & Agriculture in the Philippines: Trends in Income Poverty & Distribution* (Philippine Institute for Development Studies Series No. 2012-09). Retrieved from <https://dirp4.pids.gov.ph/ris/dps/pidsdps1209.pdf>
- Reyes, C., Tabuga, A., Mina, C. & Asis, R. (2013) *Promoting Inclusive Growth Through the 4Ps* (Philippine Institute for Development Studies Discussion Paper No. 2013-09). Retrieved from [https://dirp4.pids.gov.ph/ris/dps/pidsdps1309\\_rev.pdf](https://dirp4.pids.gov.ph/ris/dps/pidsdps1309_rev.pdf)
- Rola, A., Paunlagui, M., Domingo, D.A., Olviga, T., Bon, S., Lalicán, D. & Hernandez, J. (2016). Productivity and Profitability Outcomes of Seed Choice Behavior of Rice Farmers in Quezon, Palawan, Albay, and Camarines Sur, Philippines. *Rice-Based Biosystems Journal*, 2(1), pp. 23-33. Muñoz, Nueva Ecija: Philippine Rice Research Institute.
- Rola, A., Rabang, M.J., Paunlagui, M. & Rodriguez, C. (2012) Towards rice sufficiency in Southern Tagalog and the Bicol Regions: A Trends Analysis. In Rola, A. & Paunlagui, M. (Eds.). *Policy Perspectives for Food Self-Sufficiency at the Regional Level: Southern Tagalog and Bicol, Philippines*. Quezon City: Department of Agriculture-Bureau of Agricultural Research and University of the Philippines Los Baños.
- Son, H. & Florentino, J. (2008) *Ex-ante Impact Evaluation of Conditional Cash Transfer Program on School Attendance and Poverty: The Case of the Philippines* (Asian Development Bank Working Paper Series No. 142). Retrieved from <https://www.adb.org/sites/default/files/publication/28381/economics-wp142.pdf>
- Timmer, C.P. (2009) *Rice Price Formation in the Short Run and Lung Run: The Role of Market Structure in Explaining Volatility* (Center for Global Development Working Paper No. 172). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.631.986&rep=rep1&type=pdf>

- Tutor, M. (2014) *The Impact of Philippines' Cash Transfer Program on Consumption* (University of the Philippines School of Economics Discussion Paper No. 2014-05). Retrieved from <http://www.econ.upd.edu.ph/dp/index.php/dp/article/view/1458/928>
- World Bank (2017) *The Mindanao Jobs Report: Agrarian Mindanao*. Taguig City: WB Office in Manila.