

# POLICY BRIEF

AKI RESEARCH GRANTS ON POVERTY ISSUES

Volume V, No. 8, FEBRUARY 2021

ISSN # 2094-3342



De La Salle University

**AKI**

Angelo King Institute  
for Economic and Business Studies

## Examining Chronic and Transient Poverty Using the Community-Based Monitoring System (CBMS) Data

With poverty reduction as the government's primary goal, monitoring the poverty situation of households is deemed necessary. In the Philippines, several local government units (LGUs) have adopted the Community-Based Monitoring System (CBMS) as a local poverty-monitoring tool. This study used the constructed CBMS panel data for the municipality of Orion in Bataan province consisting of 4,299 panel households (for the period 2006, 2009, and 2012) to identify chronic and transient poor households.

### Policy Recommendations

Any policy or program should be designed such that it clearly addresses the needs of its target beneficiaries. The differences in the characteristics of chronic and transient poor households should be considered when identifying the appropriate interventions for them.

1. Chronic poor households (i.e., poor in most observation points) need improvement in their skills through training and education, which will eventually allow them to find better employment opportunities and earn a much higher income. Because educational attainment of the household head is found to be significant in reducing the probability of being poor, policies and programs should focus on improving the educational level of chronically poor households. In addition, given their poor housing conditions, chronic poor households require assistance in the form of housing projects, and the construction of safe drinking water facilities and sanitary toilet facilities.
2. Transient poor households (i.e., non-poor in most observation points) generally need insurance that will protect them against various economic and natural shocks as well as other programs that will help them manage their risks and stabilize their income. Transient poor households affected by natural calamities (e.g., severe flooding, typhoons) require insurance to prevent them from falling into poverty. Households with a member who suddenly lost his/her job may become poor, especially if the households do not have other

Written by

Alellie B. Sobreviñas  
*School of Economics, De La Salle University*

stable sources of income. Some may be able to recover without relying heavily on government intervention, but most of them would require some assistance, such as unemployment insurance.

3. Other LGUs in the Philippines with several rounds of CBMS implementation should use their CBMS data to identify chronic and transient poor households. This will allow them to design suitable projects for specific groups of households in their own localities while maximizing the full potential of their CBMS data.

## Key Results

### *Extent of Chronic and Transient Poverty*

In the literature, one of the operational definitions of chronic poverty is based on the duration of poverty such that the chronically poor households are those which are poor (i.e., with per capita income below the poverty threshold) at each, or at most, observation points (Baulch & Hoddinott, 2000). Meanwhile, transient poor households are those that are poor at a given point in time but with per capita income above the poverty line in most observation points. Using the constructed CBMS household panel datasets in Orion, these definitions were adopted in this study to identify transient and chronic poor households.

Figure 1 presents the movements in and out of poverty among households in Orion during the period 2006, 2009, and 2012. Data showed that 23.5% of the panel households are chronically poor, with 5.9% classified as consistently poor from 2006 to 2012. Meanwhile, 32.3% of the households are considered transient poor, a proportion that is higher compared to chronic poor households. The rest of the households were never poor (44.2%).

### *Characteristics of Chronic and Transient Poor Households*

A comparison of the characteristics of the two groups of households revealed that chronic poor households generally have: (a) larger household size; (b) higher dependency ratio; (c) mostly male-headed; (d) less educated household heads; (e) more dependent on agriculture as a source of income; (f) larger proportion living in makeshift housing; (g) larger proportion of informal settlers; (h) larger proportion without access to safe water; and (i) larger proportion without access to sanitary toilet facilities (Figure 2). These findings have several implications. Bigger

households tend to have lower income per capita. The higher dependency ratio among the chronic poor households implies that each productive member experienced a heavier burden because they need to provide support to more members in their respective households, including children and older adults. The proportion of chronic poor households, which relied on income from agriculture, is higher compared to that estimated for transient poor households. This pattern is true for the entire period of the study. This can be explained by the fact that agriculture-dependent households earn lower income (particularly, small-scale agriculture) than their counterparts in the non-agriculture sector. As expected, chronic and transient poor households have poorer living conditions than those who have never been poor. However, there is enough evidence to show that chronic poor households generally have poorer living conditions than transient poor households.

### *Effects of Economic and Natural Shocks on Households*

Natural calamities, health-related shocks, and employment shocks may push households to poverty, especially those just above the poverty line. For instance, strong typhoons and severe flooding can damage their properties and assets. These include farming households whose crops may be damaged by these natural calamities, thereby affecting their income. In addition, households with members who suddenly lost their job may experience an immediate decline in their total income. Sickness of a productive household member may also reduce the household's income, particularly if the illness prevents the member from going to work. Even the sickness of a child in the household (especially for long-term illnesses) may require time and care from an adult member, which diverts the latter's time away from work, thereby reducing their income.

In this study, a household is affected by natural calamities if it experienced during the last 12 months prior to the CBMS interview at least one of the following: typhoon, flood, drought, earthquake, volcanic eruption, and fire. Meanwhile, a household experienced an employment shock if all its adult members were employed in 2006 but had an unemployed adult member in 2009. The adult members considered are only those who are part of the labor force. Data showed that 6.1% of the households were affected by natural calamities, whereas 13.2% had an unemployed member in 2009. Transient poor households recorded slightly higher estimates with 7.0% and 13.8% affected by natural calamities and employment shock, respectively. About 18.4% of the households were affected by either shock, although less than 1% were affected by both shocks during the same period. An examination of the poverty status of affected households revealed that there were non-poor households in 2006 that became poor in 2009. In addition,

<sup>1</sup>CBMS is an "organized process of data collection, processing, validation and integration of data in local development processes" (Reyes et al., 2014).

there were households who experienced shocks in the past 12 months that were classified as poor in the succeeding year. Although this study does not claim complete attribution, it is possible that the shocks experienced by these households pushed them to poverty.

### Factors That Determine the Poverty Status of Households

Fixed effects models were estimated using the income poverty status of households as the dependent variable. Results confirmed that the household head's age, its squared value, and educational attainment are significant factors that explain the likelihood of being poor. In particular, there is a nonlinear relationship between the likelihood of being poor and the age of the household head. For every year increase in the age of the household head, the likelihood of being poor increases but will start to decline at a certain point. Moreover, households with a more educated head and with a member abroad (who are likely to send remittances) tend to have less probability of being poor. Meanwhile, the likelihood of being poor is higher for households with bigger size, higher dependency ratio, poorer housing conditions (i.e., informal settlers, without access to safe water and sanitary toilet facilities), and living in urban areas. Including year dummies in the model revealed that there were significant events that happened in 2009 and 2012 which affected the poverty status of households. Community-level characteristics also influenced the poverty status of individual households. For instance, households in communities that are highly dependent on agriculture as a source of income have a higher likelihood of being poor, whereas those in communities where the population is more educated tend to have less likelihood of being poor.

### Conclusion

This study demonstrated how the CBMS datasets for different periods could be used in analyzing poverty and in identifying chronic and transient poor. Using the generated panel dataset of Orion in Bataan, this study revealed some interesting patterns in terms of the poverty status of households over time. Data revealed that about 23.5% of households in Orion are chronically poor, whereas 32.3% are transient poor. Understanding the differences in the characteristics of chronic poor and transient poor households can help program implementers and policymakers identify interventions that address their unique needs. A similar study may be conducted in other local government units with several rounds of CBMS to help them identify chronic and

transient poor households, which can be useful in designing suitable projects and programs.

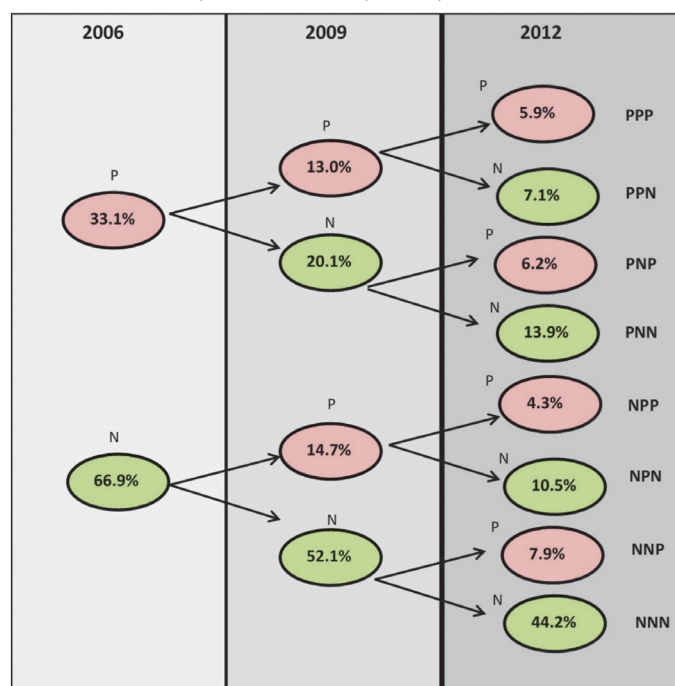
### References

- Baulch, B., & Hoddinott, J. (2000). Economic mobility and poverty dynamics in developing countries. *Journal of Development Studies*, 36(6), 1–24.
- Local Government of Orion (2006). *Community-Based Monitoring System [CBMS] Census 2006* [Dataset]. Orion, Bataan
- \_\_\_\_\_. (2009). *Community-Based Monitoring System [CBMS] Census 2009* [Dataset]. Orion, Bataan.
- \_\_\_\_\_. (2012). *Community-Based Monitoring System [CBMS] Census 2012* [Dataset]. Orion, Bataan.
- Reyes, C., Mandap, A.B. E, Quilitis, J., Bancolita, J., Baris, M. Jr., Leyso, N.L.C. & Calubayan, S.J.I (2014). *CBMS handbook*. De La Salle University Publishing House.

### Acknowledgments

The author wishes to acknowledge the support of the Angelo King Institute for Economic and Business Studies of De La Salle University Manila and the National Economic and Development Authority. The author is also grateful to LGU-Orion in Bataan for giving permission to use their CBMS data in this research.

**Figure 1**  
 Movements In and Out of Poverty Among Households in Orion, Bataan 2006, 2009, and 2012



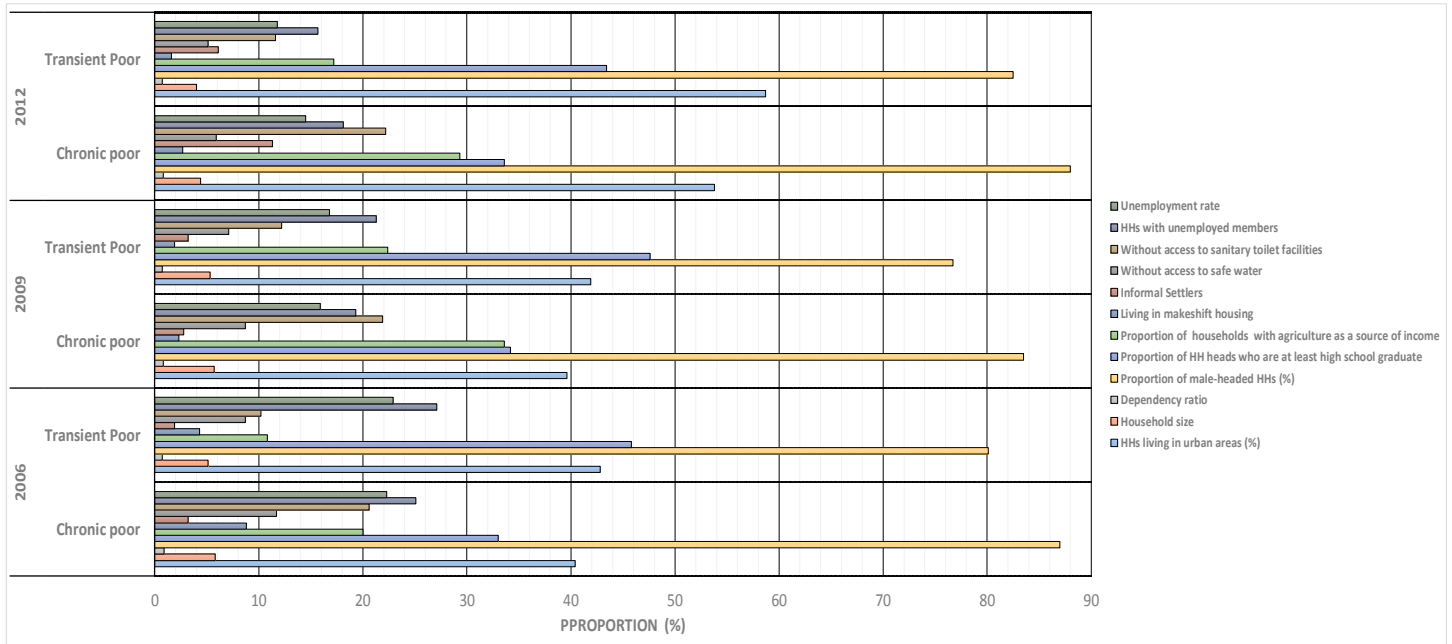
Note: The figures reflect the share of the population subgroup to the total number of households in the panel, which implies that the percentages for each year add up to 100. Note, however, that some figures may not add up to 100 due to rounding.

Source of basic data: Local Government of Orion CBMS Census: 2006, 2009 and 2012.

<sup>2</sup>The Hausman test suggest that the fixed effects model is preferred over the random effects model.

<sup>3</sup>A test was conducted to determine if the coefficients for all the year dummies are jointly zero and the result showed rejection of the null hypothesis that the coefficients are jointly equal to zero.

**Figure 2**  
*Characteristics of Chronic and Transient Poor Households in Orion, Bataan*



Source of basic data: Local Government of Orion CBMS Census: 2006, 2009 and 2012.

## CONTACT INFORMATION

**DLSU - Angelo King Institute for Economic and Business Studies (DLSU-AKI)**  
 Room 223, St. La Salle Hall  
 2401 Taft Avenue  
 1004 Manila

Angelo King International Center  
 Corner of Arellano Avenue and Estrada Street  
 1004 Manila

+63-2-8524-4611 loc. 287,  
 +63-2-8524-5333, +63-2-85245347 (Fax)  
<https://www.dlsu-aki.com>