

# Strategies in Rural Changes: *Manobo-Pulangihon* Women's Adaptation on Agro-Industrialization

Eva Natividad Mendoza\*

## Abstract

As agro-industrialization promotes alterations in the landscape and lifescape of indigenous people (IP) particularly their women who are viewed as 'carers' of their environment and 'bearers' of their culture, it is interesting to explore how these communities cope and view them as agencies rather than as victims of such changes. Anchored on Giddens's Structuration theory, this paper aims to describe the *Manobo-Pulangihon* women's adaptive strategies on agro-industrialization and explore on the enabling mechanisms that facilitated these strategies. Using qualitative methods (Focus Group Discussions & Key Informant Interviews) and reviewing secondary data, this study revealed that the *Manobo-Pulangihon* women demonstrated their sense of agency by strategizing psychological, economic, and socio-cultural ways of adaptation to agro-industrialization. It also shows the support of government, a private company, and non-government organization in their adaptation. Thus, knowing the capacities and strategies of women could possibly lead to a more participatory, inclusive and sustainable development in rural communities.

## Keywords

indigenous women, agro-industrialization, adaptive strategies

Received 1st March 2018; Accepted 10th July 2018

## INTRODUCTION

Agro-industrialization revolutionizes many farming communities. As Wilkinson (1995 cited in Reardon and Barrett, 2000, p.2) puts it, agro-industrialization involves three related sets of changes namely: "a) growth of agro-processing, distribution and farm input provision, off-farm activities by agro-industrial firms ...; b) institutional and organizational change in the relation between agro-industrial firms and farms...; and c) concomitant changes in the farm sector, such as changes in product composition, technology, and sectoral and market structures."

In a broader perspective, agro-industrialization, especially in developing countries, is driven by globalization (Reardon and Barrett, 2000). McMichael (2007) mentioned the pressure on resources of the agrarian South as a key dimension of contemporary globalization, rooted in its imperial past. It implies that those with power (military or monetary) in the world system can control resources and alter rural landscapes. This demonstrates new relations of production where agriculture is converted to agribusiness, resulting to threats and opportunities for farming communities in the global South. This is also accompanied by inexpensive food imports from the global North resulting to the displacement of "local farmers" and replacement of staple food. Another essential dimension of globalization in the agrarian world involves changes in relations of social production. This could be manifested in rural people's engagement in off-farm income from others' farms and plantations, rural industries, and migrants' remittances.

In this context, agro-industrialization causes transformation in the various spheres of rural life, much more of an indigenous community. In Bukidnon, an agricultural province with some IP communities, agro-

industrialization like plantation agriculture, is evidently proliferating. Data from the Environmental Science for Social Change (ESSC) and the Bukidnon LGU showed that as of 2005, pineapple plantation occupies 2.06%, the banana plantation has .43%, and sugarcane covers 7.18% of the total area of Bukidnon.

The IPs in Bukidnon traditionally (and even today) are engaged in subsistence farming. They are into swidden farming where the size of the area being cultivated would depend on a person's "ability to clear the area, care for the crops" and on the household needs for subsistence. The men often clear the area while the women participate in planting crops (sweet potato, taro) and in weeding (Suminguit & Burton, 2000).

## Agro-industrialization in Rural Communities: Pros and Cons

Studies reveal both positive and negative consequences of agro-industrialization in rural communities. Its positive consequences primarily revolve in the creation of employment opportunities for the rural people. Maertens (2008) mentioned that the horticulture export industry in Senegal, Dakar West Africa had created rural employment. It sourced out part of the production of local small landholders. It also provided employment to members of rural households. Among the sampled households, there is an increase regarding the share of households with one or more members working in the fruit and vegetable agro-industry from 3% (in 1995) to 34% (in

\*Department of Behavioral Sciences, College of Arts and Sciences  
Central Mindanao University

## Corresponding author:

Eva Natividad Mendoza

Email: [evamendoza@cmu.edu.ph](mailto:evamendoza@cmu.edu.ph)

2005).

In addition, there is a positive effect of contract-farming of small landholders with horticultural export companies in African countries with their farm productivity, rural incomes and poverty reduction (Minten et al., 2009 & Asfaw et al., 2007 cited in Maertens & Verhofstadt, 2012). The development of horticultural export chains promoted welfare effects as analyzed by a number of empirical literature (Mithoefer and Waibel, 2011 cited in Maertens & Verhofstadt, 2012).

In the Philippines, particularly in Bukidnon, agro-industrialization or plantation agriculture also contributed to a more stable income for some of the rural households as revealed in the study of Mendoza (2009) in the municipality of Lantapan. The landowner respondents mentioned that their decision to allow the company to rent their farmland allowed them to have a regular income. Thus, they are able to acquire material things like cars and send their children to school. Many of them have built houses made of relatively permanent materials. Those who became plantation workers were also able to buy appliances.

However, agro-industrialization also affected negative changes in rural landscape and lifescape. McMichael (2007) revealed that exports of certain crops (coffee, sugar, cacao, soy, etc.) and livestock in the global North had left behind forty-four million "chronically hungry Brazilians." It was also argued that the food export regime worked at the disadvantage of the local farmers because of the low price of their products (Friedmann, 1982 cited in McMichael, 2007).

Indeed, in the 1995 Agreement on Agriculture of the World Trade Organizations, agro-exporting and food importing are prioritized over domestic production that could hardly compete with the global market. Thus, subsidies to small farmers like in India have been cut and focused instead on agribusinesses on export crops. Hence, the commercial mono-cropping is observed to have transformed the landscapes of rural communities (McMichael, 2007). There is an exclusion of smallholders, especially the poorest farmers, from horticultural export chains (Dolan & Humphrey, 2000 & McCulloch & Ota, 2002 cited in Maertens & Verhofstadt, 2012).

In Colombia, as agro-industrialization continues to expand since multinational corporations could easily bring farm inputs (e.g., fertilizers, pesticides, machinery), small-scale producers are forced to face the associated challenges of these changes. These may include the high cost of production, which had lead to incurring a big amount of debt and even selling their farmlands. Thus, they needed to engage other livelihood strategies to survive (Piniero, 2016).

Aside from the high cost of production, the impact is likewise evident in their environment. This is brought about by the intensive use of chemicals. More so, agro-industrialization leads to changes in other aspects of rural people's lives such as their changing knowledge and practices about farming and shifts in the roles that were traditionally performed by men and women in these

communities (Piniero, 2016).

In the study in Lantapan, Bukidnon, Philippines, there are negative consequences of plantation agriculture in the economic, and socio-cultural lives of the rural people. These include increasing debts, the selling of right to recommend for employment in the company, and the decline of community's traditional practices, e.g., *hunglus* (or cooperation and reciprocity), free labor, *tilaw* or free taste of harvested crops, *dayong* or *pahina* (or cooperation) (Mendoza, 2009).

### Women and Agro-industrialization

The 'woman question' may also be explored in the course of agro-industrialization. In the study of Maertens (2008) in Senegal, it was found out that agro-industrial employees are from households with significantly more female laborers (94%). In fact, it was revealed by some company managers that horticulture agro-industry attracted more female workers because of their "delicate fingers" in picking and handling products. As horticultural export industry flourished in Senegal, there is also an increase in female off-farm wage employment in large agro-industrial estates (Maertens & Verhofstadt, 2012).

Piniero (2016) mentioned that because of agro-industrialization in the rural part of Colombia, many women are no longer confined in their domestic niche but have already become part of the paid labor pool. Women are already employed in big landowners (also to do) the tasks that were previously performed by men. They are hired particularly in cow milking because presumably, they are more careful in extracting milk ensuring the milk quality.

This transformation of gender roles may be attributed to their economic hardship. They needed to look for other livelihood strategies because their land is no longer productive or has been sold to others. Thus, engaging in farm labor (by both husband and wife) is an option for the family to survive. This involvement of women in agriculture also affected their participation in the family's decision-making. They have become actively involved in making decisions in the household particularly related to farming. The women are now consulted by their husbands on matters relating to investments and expenses in the farm (Piniero, 2016).

While the influx of agro-industrialization in IP communities affected changes in the economic, social, political, and cultural aspects of their lives and transformed their landscape, various alternatives had been explored to survive. The agrarian world has manifested resilience in facing these challenges and even that of natural disasters (McMichael, 2007).

### Structuration Theory

One of the postmodern social theorists is Anthony Giddens who argued in his "Structuration Theory," an important characteristic of humans. He contends that human activities are produced not simply by their consciousness, nor by their social construction of reality and by social structure but by expressing themselves as

actors. They engage into practice through which both consciousness and structure are produced. Giddens referred it to reflexivity, which is not just "self-consciousness but as a monitored character of the ongoing flow of social life" (Giddens, 1984, p. 3). This concept of reflexivity represents the dialectical process through which "practice, structure, and consciousness are produced" (Ritzer, 2011, p. 522).

In reflexivity, Giddens affirmed that actors rationalize their physical and social contexts. By rationalization, he meant "a process rather than a state and as inherently involved in the competence of the agents" (Giddens, 1984, p.3). Ritzer puts it as "the development of routines that not only give actors a sense of security but enable them to deal efficiently with their social lives" (Ritzer, 2011, p. 522). They are motivated by their wants and desires that caused them to perform an act. The actor is an agent with power or the ability to transform situations. Thus, the agent has "the ability to make a difference in the social world" (Ritzer, 2011, p. 523).

Hence, while several studies demonstrate these consequences of agro-industrialization in these communities (Calderon & Rola, 2003; De Leon & Escobido, 2004; Mendoza, 2009), there is a dearth of studies describing how these communities, particularly the women who have been described as bearers of their culture and carers of their environment, adapt with the process of agro-industrialization (Shiva, 1988). In effect, their contributions

to family and community survival, and their potentials for development have less likely been recognized.

Thus, as this paper demonstrates, the Manobo-Pulangihon (one of the IP communities in Bukidnon) women's adaptation to agro-industrialization, it has both theoretical and practical contributions. It attempts to contribute to the theoretical stance that women are agencies capable of making sense of their changing environment. On the practical side, knowing the capacities of women, it shall offer a basis for designing appropriate support mechanisms for these women and other people in a similar condition. It aims to describe the Manobo-Pulangihon women's adaptive strategies on agro-industrialization; and explore the enabling mechanisms that facilitated these adaptive strategies.

## METHODOLOGY

This study, which is descriptive and exploratory, was conducted in Quimtras, a community with most of its residents are Manobo Pulangihon or Pulangiyens. Quimtras is a sitio in Barangay Butong, one of the 31 barangays of the municipality of Quezon in the province of Bukidnon. It was purposely selected as the locale of this study because of the presence of an Indigenous community as well as an agro-industrial firm. It is also accessible to the researcher.

Table 1  
*Socio-demographic Profile of Women FGD Participants*

Variable	Frequency	Percentage
<b>Age</b>		
21-30	2	16.7
31-40	2	16.7
41-50	2	16.7
51-60	2	16.7
61-70	2	16.7
above 70	1	8.3
Not identified	1	8.3
TOTAL	12	100
<b>Civil Status</b>		
Married	5	41.7
Widowed	5	41.7
Separated	1	8.3
Single	1	8.3
TOTAL	12	100
<b>Religion</b>		
"Lumad"(Indigenous Religion)	8	66.7
Others (Western)	4	33.3
TOTAL	12	100
<b>Occupation</b>		
Farming	6	50.0
Housekeeping	5	41.7
Small-scale business	1	8.3
TOTAL	12	100

The Manobo Pulangihons or Pulangiyeans compose one of three subgroups of Manobo in Western Bukidnon who represents one of the 9 (defined) major subgroups of Manobo in the Philippines. The Manobos are considered as the "most numerous of the ethnic groups in the Philippines in terms of the relationships and names that belong to this family of languages" (NCCA, 2015).

Qualitative methods of data collection like Focus Group Discussions (FGDs) and Key Informant Interviews (KIs) and a review of secondary data, were employed in this study. There was a total of 12 participants in the FGDs who were purposely selected based on certain criteria, e.g., a number of years in the community, knowledge, and experience relative to the agro-industrialization in the community, etc. Table 1 presents their socio-demographic profile. There were also six KIs who were purposely selected based on their involvement in the process of agro-industrialization in the area: two local officials/leaders, The Manobo Pulangihon chieftain, and three company representatives. Secondary data (e.g., contract between the company and the community) was likewise reviewed to validate the responses of the FGD participants and KIs further. The data were gathered last April-May, 2016. The generated data were transcribed and subjected to thematic analysis where patterns and themes of the responses were determined and analyzed to form part of the discussion.

## RESULTS AND DISCUSSION

### *Manobo-Pulangihon/Pulangiyeans* Women's Adaptive Strategies

When a community is confronted with an event that may affect alterations in their existing activities and social relations, they would more likely develop various

strategies to cope and adapt. There may be forms of resistance brought about by the new situation, but along the process, there are efforts strategized to survive. From the contention of Giddens (1984), humans or communities motivated by their desire for a sense of security are agencies who are consciously making sense of their physical and social contexts.

Agro-industrialization in a Manobo-Pulangihon community could be viewed as an event that affected changes not only in the psyche of every member but most importantly in the economic and cultural milieu, as well as in the social relations among members in the community. It could be noted, however, that the introduction of plantation agriculture particularly sugarcane plantation, in the Manobo-Pulangihon community in Quezon, was less likely unexpected/unwanted (unlike calamities or disasters). When the company offered the community for a lease/rent arrangement, they agreed to the terms and conditions. However, the sugarcane plantation had eventually affected alterations in their lives as a community.

Thus, it is interesting to explore how the Manobo-Pulangihon, particularly their women, adapt to such changes. The women revealed a number of ways that they employed to survive. While they admitted that life is still difficult despite having their farmland rented by the company, they have managed to survive. Figure 1 shows their various strategies to cope with their situation. Their strategies involve economic, socio-cultural, and psychological ways. These strategies are presented in a pyramid with the economic strategies as the base and the psychological strategies on top. While the economic strategies are the first that were mentioned by the respondents and may support Maslow's hierarchy of needs (with the biological needs as the base) (Taormina, R.J. & J.H.

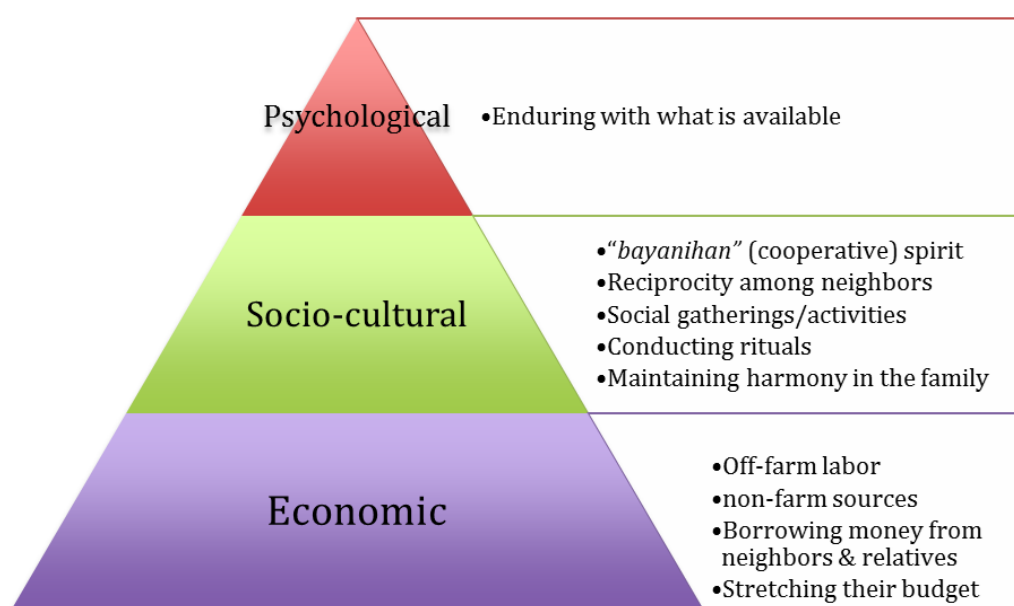


Figure 1. Adaptive Strategies of Manobo-Pulangihon Women

Gao, 2013), it does not necessarily mean that it is the most significant. All the strategies are considered important for these are all employed by the Manobo Pulangihons to survive.

### Socio-cultural Strategies

Aside from economic strategies, there are socio-cultural ways that would show the women's adaptation on agro-industrialization. It is interesting to note that the traditional 'bayanihan' spirit still prevails in this community. It is demonstrated through cooperation among the members of the community especially in times of difficulty. They are willing to share with their relatives and neighbors with what they have (e.g., goods or money) when the latter has a need and this trait is highly valued by the community. It is comparable to what Durkheim conceived as 'mechanical' solidarity, which is a social bond based on common sentiments and shared moral values. He argued that "primitive societies" like rural communities have "stronger collective conscience" or common understandings, norms, and beliefs (Durkheim, 1964 cited in Ritzer, 2011).

Similar to 'bayanihan' is the practice of reciprocity among the members of the community. There is a known traditional practice of the IPs in Bukidnon, the 'hunglus.' It demonstrates reciprocity and 'bayanihan.' In 'hunglus,' one voluntarily shares his/her time or labor for any activities in the farm of another (a relative or neighbor) without any compensation. In return, the latter could likewise expect the same voluntary service from the former (Mendoza, 2009). This practice may facilitate adaptation to the changes brought about by agro-industrialization. While some of them are no longer cultivating farmland, they could still expect their neighbor and relatives to assist them in some other ways. The respondents also mentioned that one of their ways to make their lives more adaptive to changes brought about by agro-industrialization is through their social gatherings or social activities like celebrating birthdays, founding anniversaries, etc. They revealed that by being together in these celebrations, they could have a sense of belongingness. These activities would strengthen their bond as a community. Thus, these would somehow offer them a sense of security amidst financial difficulty.

More so, embedded in the lives of the IPs is their culture, such as their religious beliefs and rituals. According to the women respondents, they held on to their beliefs and one way of manifesting it is through their rituals. They revealed that during their rituals, their sense of identity and

security is strengthened. They likewise feel the support of the community for they strongly feel the solidarity among them. Through these rituals, they could get support from their community thus, motivating them to survive.

For the IPs, the family is also an essential component of their life. Thus, they are motivated and determined to nurture it amidst some challenges, e.g., conflicts due to financial difficulties. Maintaining harmony in the family is a primary concern of these women. They revealed that attaining peace and harmony in the family could make their lives more adaptive to difficulties. While conflicts in the family are also experienced, and these women also assert and argue with their spouses, they made efforts to negotiate and settle matters.

### Psychological Strategies

It is likewise interesting to note that the resiliency of a Manobo-Pulangihon woman is demonstrated by the individual traits she possessed. She finds reasons to endure the difficulties patiently. Her 'enduring' spirit enables her to keep on living and adjust with the changes. It motivates her to strategize ways to survive.

These women endure with what is available in their situation. As mentioned by one of the FGD participants, "*magmantener lang mi mam, kung unsay naa dinha*" (...we will just endure with what is available...). This "enduring spirit" is not a sign of "withdrawal" or defeat but on the contrary, a manifestation of a determination to survive despite problems and difficulties encountered in life.

This clearly illustrates the contention of Giddens that humans as an agency, are accorded with the ability to make sense of their life, situations, and environment. Agents are motivated to pursue their sense of security thus they regularly "monitor their thoughts, activities, and their physical and social contexts" (Ritzer, 2011, p. 523). It is also supported in by Bourdieu (cited in Ritzer, 2011, p. 532) who argued that as agents, people "make choices and choose the strategies that they will employ in the social world."

### Enabling Mechanisms for Adaptation on Agro-industrialization

The adaptation of Manobo-Pulangihon women and their families is further facilitated by the support provided to them by some government agencies, private company (leasing their land), and non-government organization. Table 2 shows the specific contribution of

Table 2  
Support to Manobo-Pulangihon Community

Government	Company	Church-based NGO
<ul style="list-style-type: none"> <li>• 4Ps (DSWD)</li> <li>• Rice distribution (DRRMC)</li> <li>• Support in claiming ancestral domain title (NCIP)</li> <li>• Training (DA)</li> </ul>	<ul style="list-style-type: none"> <li>• Employment</li> <li>• Goods (paints, drums, etc.)</li> <li>• Scholarships</li> <li>• Burial assistance</li> <li>• Water supply</li> <li>• Livelihood training</li> </ul>	<ul style="list-style-type: none"> <li>• Support in claiming their ancestral domain</li> <li>• Housing materials</li> <li>• Food supply for almost two years</li> </ul>

each entity.

Thus, as agro-industrialization or plantation agriculture in Manobo-Pulangihon promoted alteration in their landscape and lifescape, emerging social structures are established. These structures to some extent have facilitated the adaptation of these women. Specifically, economic support like cash grants, employment, food supply, burial assistance, housing materials were provided. The women respondents mentioned that the Pantawid Pamilyang Pilipino Program (4Ps), a human development program of the government, had helped them despite its meager amount. Aside from the rent the Manobo-Pulangihon community received from the company, there are also few of them who have been hired as workers in the company.

Moreover, from the perspective of the company, the community likened it (the company) to a 'patron' whom they approach in times of needs. They asked for burial assistance and other things that are needed in their community like paint for school buildings, drums for water storage, and the like.

There were also forms of technical assistance offered to the community by the company, e.g., training, policies, legal support. These had equipped the former with resources that had contributed to their adaptation. The assistance of the NGO and NCIP in facilitating the claim for their ancestral domain was highly recognized by the women respondents. The training that provided them had also enhanced their capacities.

Such structures are therefore viewed as enabling for the Manobo-Pulangihon women as what Giddens emphasized that structures could be both constraining and enabling. While on the one hand, these structures impede them to do things, on the other hand, they are facilitative for the agents to do things they want to pursue (Giddens, 1984; Ritzer, 2011).

While the Manobo-Pulangihon women recognized the contribution of these institutions to their adaptation, they had actually identified their limitations. However, as agencies, they did not only identify these limitations, but they did also compliment whatever is lacking. For instance, they maximized the meager amount given to them by the government. Asking assistance from the company and other institutions likewise demonstrate the women's capacity to negotiate. Amidst the bureaucratic challenge of the government, they persistently negotiated with the National Commission on Indigenous People (NCIP) and the Department of Environment and Natural Resources (DENR) to succeed and get their claim for Certificate of Ancestral Domain Title (CADT).

## CONCLUSIONS

As agro-industrialization affected alterations in the landscape and lifescape of the Manobo-Pulangihon community, their women can strategize ways to adapt and survive. They clearly demonstrated their sense of agency which according to Giddens (cited in Ritzer, 2011), the human's conscious ways of making sense their physical and

social contexts as they are motivated by their desire for a sense of security. Their adaptive strategies are manifested in psychological, economic, and socio-cultural ways.

Moreover, these strategies are facilitated by the support of some institutions and groups like government, a private company, and non-government organization. They offered economic and technical support, which contributed these women and their community to survive in the course of agro-industrialization.

Thus, while the Manobo-Pulangihon women identified issues and problems brought about by agro-industrialization, they can develop strategies to adapt the process. Their sense of agency and resiliency could be viewed as a potential resource for more inclusive development especially when enabling mechanisms are also instituted by concerned socio-political entities.

## RECOMMENDATIONS

Based on the findings of this study, concrete interventions may be provided to the Manobo-Pulangihon women and other women in indigenous or rural communities by concerned institutions. More integrated and sustainable capability building projects appropriate to their demonstrated skills and capacities may alleviate their present socioeconomic condition and overall well-being.

Similar studies could also be conducted in other indigenous or rural communities to capture further realities that may strengthen the theoretical stance that women are agencies. These empirical data may prove that indigenous or rural women could make sense of their physical and social contexts when alterations or even sudden disruptions occur in their lives and communities.

## ACKNOWLEDGMENT

The proponent of this study is thankful to the CMU administration for its funding support. She is also grateful to the Manobo-Pulangihon FGD participants, the community leader respondents, and the company representatives for their time in participating in this study.

## REFERENCES

- Bradshaw, S. (2008). From structural adjustment to social adjustment: A gendered analysis of conditional cash transfer programmes in Mexico and Nicaragua. In: *Global Social Policy*, 8, (2), 188-207. DOI: <http://dx.doi.org/10.1177/1468018108090638>.
- Calderon, R.P. & Rola, A.C. (2003). *Assessing the benefits and costs of commercial banana production in the Philippines*. (Working Paper No.03-03). UPLB Laguna, Philippines: Institute of Strategic Planning and Policy Studies. Retrieved from <http://www.uplb.edu.ph>.
- De, Leon T. O., Escobido, G. M. O., & Alternate Forum for Research in Mindanao. (2004). *The banana export industry and agrarian reform*. Davao City, Philippines: Alternate Forum for Research in Mindanao.

- Environmental Science for Social Change (ESSC) and the Local Government of Bukidnon. (2005). *Land Cover Map of Bukidnon*. Institute of Environmental Science for Social Change.
- Giddens, A. (1984). *The constitution of society: Outline of the theory of structuration*. Berkeley: University of California Press.
- Maertens, M. (2009). Horticulture exports, agro-industrialization, and farm–nonfarm linkages with the smallholder farm sector: Evidence from Senegal. *Agricultural Economics*, 40, (2) 219-229. doi:10.1111/j.1574-0862.2009.00371.x
- Maertens, M. & Verhofstadt, E. (2013). Horticultural exports female wage employment and primary school enrolment: Theory and evidence from Senegal. *Food Policy*, 43, 119-131.
- McMichael, P. (2007). Globalization and the agrarian world. In G. Ritzer (ed), *The blackwell to globalization*. USA, UK, & Australia: Blackwell Publishing Ltd.
- Mendoza, E. (2009). Socio-cultural implications of plantation agriculture: A case in Bukidnon. *Philippine Journal of Social Work*, 54, 1-31.
- Molyneux, M. & Thomson, M. (2011). Cash transfers, gender equity and women’s empowerment in Peru, Ecuador and Bolivia. *Gender and Development*, 19 (2) 195-211. DOI: 10.1080/13552074.2011.592631.
- Piniero, M. C. (2016). Globalization and industrialization of agriculture: Impacts on Rural Choconta, Columbia. *Revista Luna Azul*, 43 (468-498).
- Reardon, T. & Barrett, C. (2000). Agro-industrialization, globalization and international development: An overview of issues, patterns and determinants. *Agricultural Economics*, 23, (3) (195-205). DOI: 10.1111/j.1574-0862.2000.tb00272.x.
- Ritzer, G. (2011). *Sociological theory*, 8th ed. New York: McGraw-Hill.
- Shiva, Vandana (1988). *Staying alive: Women, ecology, and survival in India*. U.K. & India: Kali for Women.
- Suminguit, V. & Burton, E. (2000). *A study on ancestral domain recognition and management within and around the Mt. Kitanglad range national park*. (Southeast Asia Policy Research Working Paper, No. 18). Retrieved from <http://www.icraf.cgiar.org/sea>.
- Taormina, R.J., & Gao, J.H. (2013). Maslow and the motivation hierarchy: measuring satisfaction of the needs. *The American Journal of Psychology*, 126 ( 2), 155-77.
- National Commission on Culture and the Arts (2015). *Featuring Manobo culture profile*. Retrieved from <http://ncca.gov.ph/about-culture-and-arts/culture-profile/manobo/>