Climate-Induced Internal Migration in the Philippines: Preliminary Assessment of Evidence for Policy and Governance

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Abstract

Experience with extreme events over the decade produced new categories of development and humanitarian dilemmas that demand better solutions. These events did not only alter landscapes and ecosystems, or displaced millions, but also proved that the "business as usual" mode of doing things does not necessarily work. Such is the case of people or groups of people who move due to environmental factors. Migration is an age-old demographic phenomenon but its interplay with climate-related variables represents a new territory of inquiry. In view of this, the study postulates that internal migration in the Philippines is compelled by specific climate drivers and slow onset events. The research asks the basic question: how does slow onset climate events propel internal migration in the Philippines? Accordingly, it examines (a) the prevailing policy regime or existing policy framework that relates with slow onset events and internal migration; (b) the density of actors or stakeholder network involved; and, (c) support actions needed to further enhance the understanding of the dynamics between climate change and human mobility. Overall, the study hopes to improve applied knowledge relating to the sustainable management of human mobility in the context of climate change in the Philippines. It argues for the need to substantiate the link been climate change and internal migration to determine the value and applicability of migration as a strategy for risk reduction or adaptation and to guide future research, policy and program.

A. Background and Objectives

Climate induced disasters in the Philippines create new imperatives for safety and adaptation. Projections indicate that the country generally will get warmer particularly during the months of March, April and May, and mean temperatures are expected to rise by 0.9°C to 1.1°C in 2020 and 1.8°C to 2.2°C in 2050 (CCC, 2011).[2] This means greater climatic variability that could trigger erratic temperatures, rainfall patterns, and more intense extreme events. Given the state of exposure and vulnerability of many communities throughout the archipelago, this scenario may signify heightened risk exposure or greater incidence of climate-related disasters that could convert to billions of damages or prompt changes in adaptive and response mechanisms of at risk populations.

Previous bouts with extreme events produced new categories of development and humanitarian dilemmas that demand better solutions. For example, episodes of "super typhoons" over the decade did not only alter landscapes and ecosystems, or displaced millions, but also proved that the "business as usual" mode of doing things does not necessarily work. Typhoon Yolanda in 2013 demonstrated the challenge of large scale displacement never before seen in the country that pushed the government to rethink its risk reduction and climate change adaptation strategies.

Relative to the process of rethinking is the examination of the relationship between climate and internal migration. Migration is an age old demographic phenomenon but its interplay with climate-related variables represents a new territory of inquiry. The UNFCCC recognizes climate-induced migration as an adaptation strategy in the Cancun Adaptation Framework but there appears to be insufficient knowledge and experience to properly manage human mobility due to climate change (GIZ, 2018).

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[2] The projections done by the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) used a mid-range emissions scenario.

This study argues that climate migration is happening in the Philippines but this is largely viewed as a humanitarian dilemma that needs to be prevented. Following the Cancun Adaptation Framework, there is a need to examine this dilemma and direct efforts to make climate induced migration as a programmatic development strategy. Doing so demands the evaluation of the applicability of migration as a measure to reduce risks or enhance adaptive capacities of vulnerable communities.

As used in this study, climate change refers to alterations in the state of climate attributable to anthropogenic factors (UNISDR, 2009). It influences the frequency, severity, duration, timing and even location of climate and weather related hazards, and triggers disruptive events that demand corresponding solutions from affected populations and communities. This study postulates that internal migration in the Philippines is compelled by specific climate drivers and slow onset events or SOEs. This is an observable trend that needs to be documented and examined to improve management. SOEs are extensive, "low severity but persistent" weather anomalies or climate events that generate cumulative changes (Hugo, 2010; Wilkinson, et al. 2016).

The study asks the basic question: How does climate change related events affect internal migration in the Philippines? Accordingly, it examines (a) the prevailing policy regime or existing policy framework that relates with slow onset events and internal migration; (b) the density of actors or stakeholder network involved; and, (c) support actions needed to further enhance the understanding of the dynamics between climate change and human mobility.

To answer the question, the study enlisted expert opinions and gathered inputs from practitioners in the field. Additional data were derived from government and non-government partners through email communication. The study does not claim to be the source of definitive information about internal migration in the context of climate change in the Philippines, but it could be used as reference to guide future research, policy and program.

B. A Framework for Understanding Internal Migration in the Philippines

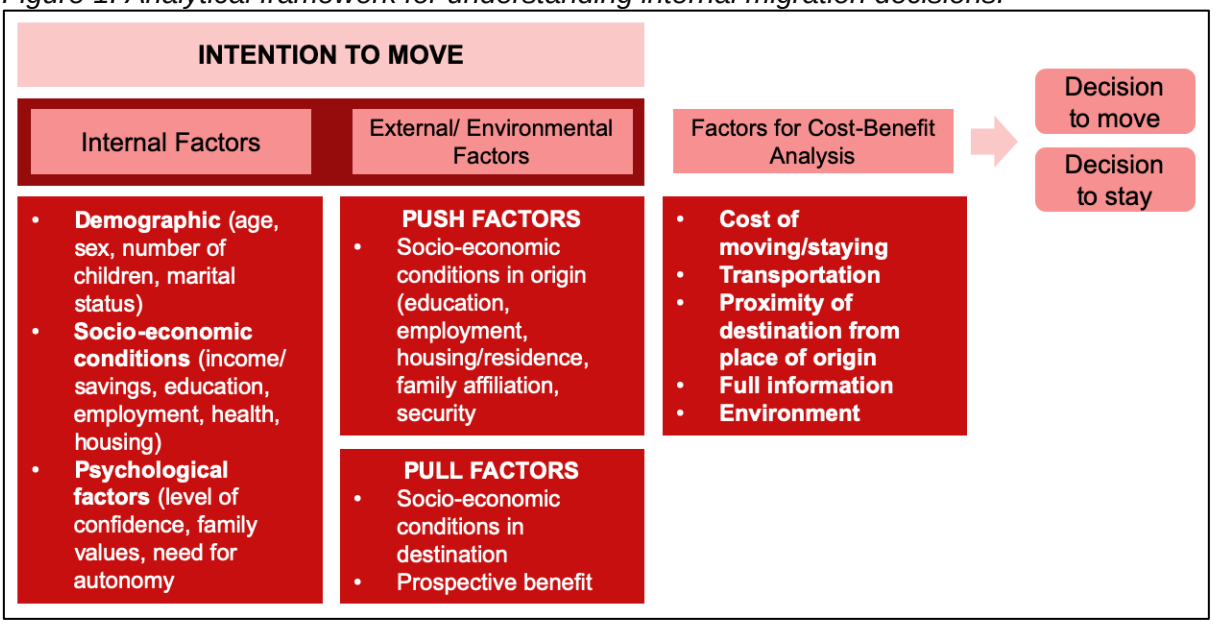
Human movement is a global phenomenon driven primarily by unequal distribution of opportunities between and among countries or regions (UNDP, 2009). Discussions on cross-border movement dominate the exchange of ideas and debates on human mobility for decades. A similar observation holds true for the Philippines. Since the government exported Philippine labor in the 1970s, international labor migration dwarfed other discourses on the human mobility modalities in the country (Calzado, 2005; IOM, 2013). Accordingly, plans and policy actions were geared more towards the regulation and protection of Overseas Filipino Workers (OFWs). Foreign remittances only strengthened the argument for the government to give the necessary focus and support to Filipinos working abroad. In 2018, the contribution of OFWs to the economy reached an all-time high of $32.2 billion (Lucas, 2019).

Cross-border movement, however, does not capture the whole range of mobility. In fact, most movement in the world does not involve state border crossing. The Human Development Report in 2009 ventured a conservative estimate, tagging the number of internal migrants worldwide at approximately 740 million, more or less four times bigger than the number of international migrants (UNDP, 2009). The situation in the Philippines is consistent with this global trend. The Philippine Statistics Authority (PSA) estimated that in the period between 2005 to 2010, around 2.86 million Filipinos have changed residence internally, either as long-distance or short-distance movers (Perez, 2016). Looking at the 2.5 million increase of stock of international migrants over the same period (from 7 million to 9.5 million), and counting out the temporary international labor migrants who were included in the 2010 Census of Population and Housing (CPH), the number of internal migrants easily tops international migrants by 50 percent (Ogena, 2015).

Internal migration is considered as one of the three major population processes, along with fertility and mortality, however, it is not well-inscribed in population projections. This contributes to data deficiency resulting to the omission of internal migration in policy decisions, development plans and programs, and investments.

The Philippine Commission on Population (POPCOM) attempts to address this using an analytical framework to better understand the dynamics of internal migration in the Philippines (see Figure 1). The framework expresses the complex interplay of social, economic and demographic variables that drive migration. The combination of internal, external and environmental factors and cost influences the decision to move or to stay (Perez, 2016).

Figure 1. Analytical framework for understanding internal migration decisions.



Source: Perez, 2016.

This observation is reflective of prevailing theories on migration. Karpestam and Andersson (2013) underscore the prospect of higher income, aversion to risk behavior, demand for immigrant labor, social network, changing economic characteristics in places of origin, and availability of institutional mechanisms as factors that could facilitate migration. Beyond socio-economics, Kulcsar (2013) argues that it is vital to link climate change and migration as part of "dynamic environmental context where human actions take place."

The challenge of linking migration with climate change can be attributed to the lack of appropriate lenses that would allow researchers to sift or isolate the environmental and climate-related drivers of mobility. Studies that explore the relationship between climate variabilities and migration are very scarce. Design of appropriate policy measures and actions can be difficult unless the dynamics between the two are hashed out. In contrast, there are numerous studies related to displacement and humanitarian crisis resulting from intense climate events (see DWSD, IDMC, IOM and SAS, 2014).

Migration differs from displacement by virtue of the triggering event. Migration is equated with slow onset, extensive events like sea level rise, increasing temperatures, drought, and saltwater intrusion (Leighton, 2009; Wilkinson, et al., 2016) while displacement is tied with rapid onset, intensive events like strong typhoons, massive flooding or destructive storm surges. There is usually an element of "force" involved in displacement, i.e., massive destruction of assets. It also tends to affect the broader population. Conventionally, movement associated with displacement tend to be sudden, short term and temporary (Wilkinson, et al., 2016).

The scale and severity of rapid onset disasters and the subsequent displacement and humanitarian crises draw more attention than slow onset events. There are existing schemes within the government to generate data on displacement due to natural or human-induced causes but none for internal migration. National and international NGOs use their own standards to monitor movement to support or supplement government data but there is also tendency to focus on displacement.

Migration to some degree it is voluntary and the decision to move is mediated by choice, considering other elements within the agency of the affected individual or household (Renaud, et al., 2011). It can be "seasonal, long term or permanent" (Wilkinson, et al., 2016). Decisions to migrate maybe actualized after an indefinite time lapse and oftentimes do not appear consequential to a crisis or an emergency event. Hugo (2010) suggests to view climate risks causing mobility, whether fast onset or slow onset, in a spectrum where "voluntary" and "forced" movements occupy both ends.

These challenges, notwithstanding, the need to link climatic variabilities with internal migration is crucial given prevailing realities on the ground. But policy frameworks both at the international and national levels "have yet to make crucial link" between climate change impact and human mobility (Wilkinson, et al., 2017; McAdam, 2012; Laczko and Aghazarm, 2009) precisely due to difficulties in establishing categorical evidences. Climate variabilities cannot be automatically attributed to climate change as "climate attribution science is much stronger at understanding the influence of climate change on hazards but not every occurrence is caused by or unduly exacerbated by climate change" (Stapleton, et al., 2017). More in-depth studies and validation are needed in the Philippines to ascertain the link between climate risks with climate change (Cruz, at al., 2017).

This analytical gap must be addressed through research that disentangles the various drivers of internal migration, particularly if it is ultimately driven by choice. Although it is tempting to negate other contextual factors by directly pointing to climate change as the only driver, this invites misinterpretation and narrowing down of "options for facilitating choice and people's capacity to move, or to be resilient in place" (UNDP, 2009; Stapleton, et al., 2017). A close examination of factors affecting choice is, therefore, important. This requires a recognition of social (kinship networks, social capital), cultural (sense of place, belongingness), economic (livelihood), and political (participatory governance, planning and policy making) factors affecting the decision making process. And this could potentially broaden the latitude for policy making, planning, programming and other support mechanisms that can eventually present migration as a strategy for adaptation and not as evidence of failure to adapt or cope.

C. Climate Change Related Drivers of Migration in the Philippines

The climate projections mentioned above implies that the Philippines will get to experience drier dry days (with less than 2.5 mm of rain), wetter wet days (with more than 300 mm of rain) and slight increase in the number of typhoon category (above 150 kph) tropical cyclones (Cinco, et al., 2013). Livelihoods prone to changes in climatic systems, like agriculture and fisheries, are more at risk calling for the need to examine climate change impacts into these sectors.

Bordey, et al. (2014), looks at the impact of increase in temperature into rice yields and finds that a 1°C increase in minimum temperature during summer months results to reduction in rice yields and increase in the number of female domestic worker overseas. Bohra-Mishra, et al. (2017), highlights that a one standard deviation increase in temperature corresponds to a 1.16 % increase in outmigration. Areas with higher concentration of rural population tend to exhibit greater propensity for movement as their livelihood resources manifest greater sensitivity to temperature increases or incidences of typhoons.

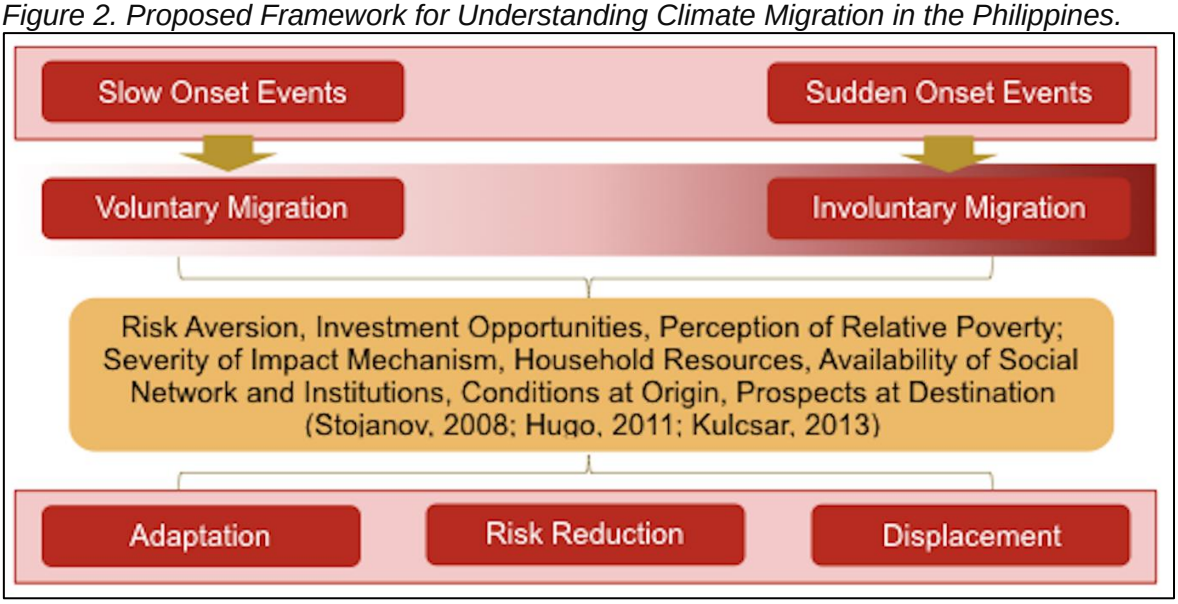
Studies like these show that increasing temperatures serve as drivers of internal migration. And these are corroborated by expert interviews and evidences on the ground. A Commissioner from the Climate Change Commission (CCC) shared that research for the Climate Change Action Plan ties crop failures with increases of outmigration cases. An official from POPCOM noted that in Rizal Province, a strong typhoon in 2009 forced people out of their communities to find jobs in urban areas due to destruction of agricultural assets. The two cases below illustrate the impacts of climate variables to communities and to ecosystems triggering disruption and movement.

Increasing temperature as driver of migration is demonstrated by the El Niño in Northern Mindanao in 2015-2016 which resulted to PhP15.2 billion worth damages and losses (Agence France-Presse, 2016). The Citizens Disaster Response Center (2016), one of the organizations that responded to the calamity, bared that the El Niño resulted to extensive failure of harvest prompting farmers to migrate to other towns or nearby cities to find odd jobs. There were many undocumented cases of women who also moved to nearby cities to support their families, reversing productive and reproductive roles with their husbands (Oxfam, 2017; Chandran, 2018).

In Sorsogon City, seasonal variability interacts with environmental decline as driver of circular migration of small scale fishers. The city borders Sorsogon Bay, one the richest fishing grounds in Bicol that supports the livelihood of more than 5,000 fishing households. Before Typhoon Reming in 2007, the seasonality of fishing is predictable. Post-Reming, this regularity turned into variability and the normal peak fishing months were disrupted. Progressive environmental decline due to over extraction exacerbated survival woes of fishing households leading to migration. Seasonal migration is understood as a way of reducing risk from climate-related anomalies and dwindling fish catch. It involves the deployment of some family labor to other labor markets. Usually, the father or the mother leaves to look for alternative livelihoods outside the province. Able bodied men would usually find jobs in construction sites while women pursue domestic work. Children would be forced to stop schooling in some instances, and, if they are old enough to work, they too would find work.

Both cases show that when climate factors interact with livelihoods migration becomes an option. An expert from the agriculture department elaborates that climate change has severe impacts on livelihood assets that could push people to move. Addressing the need of farmers and fishers appear urgent the sectors employ almost 50% of Philippine labor force, statistically considered as the poorest and most vulnerable among Filipinos. The worsening intensity of drought or tropical storms due to climate factors should encourage more research to guide future actions.

Figure 2. Proposed Framework for Understanding Climate Migration in the Philippines.



The scenario for the immediate future is quite alarming for many Filipinos particularly for the most vulnerable groups. It is within this pretext that the this study is proposing this framework for understanding climate migration in the Philippines (see Figure 2). From this framework, climate induced internal migration refers to movement of individual or groups, determined by choice, covering short or long distances, permanently or seasonally, in response to specific climate triggers that affect their means of livelihood or survival.

In determining factors affecting migration decisions, it is important to consider both slow onset and sudden onset events. The severity of the event may define the immediacy of the decision to move. For example, a sudden onset event may consequentially trigger the movement of the household while an indefinite time lapse is involved before arriving at a decision to migrate due to slow onset events. Regardless, both events interact with various factors (risk aversion, investment opportunities, severity of impact mechanism, household resources, and social networks, among others) before the ultimate decision to move is made. Among rural households, migration decisions are usually negotiated at the household level rather than a unilateral decision of the household head. Policy makers can look at these dynamics in examining migration actions as adaptation or risk reduction strategies to facilitate choice or decision. Displacement resulting from extreme events can be construed as a policy or programmatic failure that disabled capacities for adaptation or risk reduction.

D. Mapping Policies and Stakeholder Network in the Philippines

There are no existing policy instruments that directly address climate change induced migration in the Philippines, but existing guidelines and policies can be examined to find opportunities for integration. Two landmark policies that recognize climate risks have been enacted: RA 9729 (Climate Change Act of 2009) and RA 10121 (Disaster Risk Reduction and Management Act of 2010). These laws are offshoots of the Philippine government's international commitments and created two governing bodies: the Climate Change Commission (CCC) and the National Disaster Risk Reduction and Management Council (NDRRMC).

CCC acts as an oversight body to coordinate, monitor and evaluate the programs and action plans of the government relating to climate change, while the NDRRMC is tasked with policy making, coordination, integration, supervision, monitoring and evaluation functions. These bodies have been noted for their (a) support to the localization of climate action and risk reduction initiatives; (b) integrated, coordinated, multi-sectoral, inter-agency, and community-based approaches; and, (c) empowerment of local government units (LGUs) and civil society organizations (CSOs) as key partners. They encourage local government units in pursuing policies, relevant to their respective contexts for they serve as crucial venues for safety and resilience promotion. Experts interviewed appear unanimous in their claim that local governments have pivotal roles in protecting their constituents from climate and weather variabilities.

A thorough examination of both policies reveal that they do not directly account climate migration concerns. Authorities from the CCC and the NDRRMC confirmed this when they said that there are no specific policy provisions that tackle migration or displacement in relation to climate change.

However, a Commissioner from CCC says that migration is considered as a "system of interest" in the National Climate Change Adaptation Plan (NCCAP). It is subsumed under the Human Security priority. Population displacement and migration as a result of sea level rise or other large-scale biophysical, ecological or social disruptions are linked with security concerns associated with climate change. The NCCAP is currently being updated.

Meanwhile, a human rights expert asserts that RA 10121 is the “closest policy measure” to addressing climate related migration since it talks about the pre-emptive evacuation of people and assets in identified hazard areas. Indeed, the law mentions that it is the responsibility of the government to carry out service programs that provide for the needs and protect vulnerable groups.

Climate migration concerns can be moored on these national polices. Both have robust structure and multi-stakeholder composition and recognize the value of inter-agency, multi-stakeholder and participatory efforts. They are potentially fertile grounds for discussing climate migration issues. Both policies provide guidance in crafting mechanisms to ensure the protection and development of vulnerable groups and populations including climate migrants. CCC and NDRRMC support collaboration between government and non-government organizations, academic institutions and community-based organizations. They function as multi-stakeholder platform collective decisions and actions are underscored.

Recently, a working Sub-Committee on Internal Migration (SCIM) was formed by the National Economic Development Authority (NEDA) to oversee concerns on internal migration. The Commission on Population (POPCOM) is a member of this sub-committee and was instrumental in honing partnerships with other agencies to tackle concerns on climate migration. A more robust support for SCIM would go a long way in concurrent efforts to generate evidence on climate migration in the Philippines useful for policy and governance.

An official from POPCOM shares notable programs initiated by the agency to improve tracking of internal migrants. Migration Information Centers (MICs) have been piloted in areas observed to have high migration traffic like in Tanay, Rizal and in Malay, Aklan. POPCOM is also working in partnership with the Department of Interior and Local Government (DILG) to improve the Registry of Barangay Inhabitants and Migrants (RBIM) which could potentially generate localized internal migration databases. Moreover, it presently collaborates with GIZ on a program that aims to sustainably mange human mobility in the Philippines.

The Philippine Statistics Authority (PSA0 for its part produced a set of guidelines to standardize basic migration concepts for statistical purposes. It also developed a framework to measure internal migrants and to distinguish them from overseas Filipinos. PSA has carried out a National Migration Survey (NMS) but results have yet to be published (PSA, 2017).

Safety and resilience work in the Philippines are not exclusive domains of the government. Mechanisms for the participation of civil society organizations and private institutions are available. CSO participation at the regional, and local bodies is encouraged in policy and in practice. Mechanisms for private sector participation are also available along with guidelines that integrate safety and resilience agenda across the board.

E. Support Actions Needed

In spite of available evidence and actual experiences on the ground, climate migration remains largely unacknowledged by policy makers, planners and decision makers. More research, using a clear theoretical framework, is needed to clarify unblur overlaps with other related categories and clarify concepts.

Information databasing about internal migration using standardized assessment tools can be improved. Data collection instruments of government agencies can be refined to specifically track climate migrants. The NMS can potentially address this and it will be interesting to see how climate factors influence decisions to move or to stay. The establishment of the MICs in pilot areas can assist local governments in designing appropriate population management programs that cohere with existing standards on human rights and safety. There is also a need to integrate

population management programs in risk reduction plans and programs to correct widespread assumptions that population management is all about census of population.

Technical capacities to build robust climate related database are urgently needed, at the local level. Standard templates can be developed to unify data requirements and information generation processes. Concurrent databasing programs like the RBIM can be updated to consider climate and migration factors. The tool currently endorsed by the DILG to build climate information database, the Climate and Disaster Risk Assessment (CDRA), can be fitted with questions/parameters that would allow LGUs to track/monitor slow onset climate events like drought and sea level rise among others.

With its critical role in population management, POPCOM can expand its involvement in national bodies for CCA and DRRM. It could input guidance in designing population management programs for to strengthen risk and vulnerability reduction efforts. Conversely, climate change and risk reduction perspectives can broaden POPCOM's understanding of and approach to internal migration and consider its value as a strategy for risk reduction and adaptation.

The benefits of inter-agency cooperation can only be maximized if the lead organization is strong. Weak coordination mechanisms within inter-agency platforms could mean falling back to institution-specific mandates and de-prioritizing of inter-agency goals (Domingo and Olaguera, 2017). Collaboration means sharing of functions and generating new tools and approached to address evolving problems.

Academic institutions appear to be untapped resources for work on human mobility in the context of climate change. Research institutions and academic institutions have been known to work autonomously, limiting opportunities for dialogue and knowledge sharing. Research outputs can be used to ensure evidence-based policy making. Meanwhile educational programs can be enhanced through the development of learning exemplars useful in expanding knowledge about climate migration.

It is important to understand the multiple layers of their marginalization affecting the basic sectors in the country to craft customized programs and projects. Accelerated registration of farmers and fishers could provide objective basis regarding the extent of their needs. Strategies for community organizing and organizational development can also be considered for farmers to collectivize efforts and actions. Improving insurance literacy and access can be useful in protecting lives and livelihoods assets. Support for insurance firms that offer these kinds of premiums can also be developed through tax incentives and other relevant mechanisms.

F. Some Recommendations

As discussed, climate migration can be interpreted in three ways: as an issue, as a framework, and as a lens. It represents a new area of inquiry in the Philippines. However, this does not mean that its relevance is heretofore unrecognized. Climate migration is a vital addition to concurrent discourses and dialogues on climate resilience, disaster risk reduction and sustainable development in the country. Experts have recognized its value and suggested for more research and evidence generation to guide policies and decisions.

As an issue, climate migration appears to be under the radar of the government, including agencies from the national and at the local level. It is an issue because evidence from other countries and regions have established the link between climate change and migration, but the same level of appreciation and recognition appears nascent in the Philippines. It has not been considered plans and in the PPAs of the government in spite of actual experiences from the ground. These experiences have been but the extent of the experience remains indeterminate or undefined.

The archipelagic character of the Philippines compounds this challenge. Based on rainfall distribution, there are four climatic conditions in the Philippines and they variably interact with locations and communities. It is difficult to generalize the implications of climate factors to the Philippines because they would simply vary. Therefore, addressing the challenge of climate change and its bearing to mobility at the local level demands appreciation of variable local conditions. In other words, a one size fits all solution will not apply.

As a framework, climate migration proposes a new way of approaching the climate related challenges in the Philippines. This will require familiarity with concurrent approaches and finding ways for innovation and integration. Some of these are not necessarily new. What is new is the acknowledgement that climate change indeed triggers movement of people. Prevailing strategies and approaches should be changed to meet this new challenge. Gender and human rights parameters are crucial in improving plans, policies, researches and dialogues. Localization of initiatives should be supported since the challenge of the changing climate is steepest locally.

As a lens, climate migration re-evaluates the conventional understanding of migration as demographic movement across time and space triggered mainly by the lure of better economic benefits and the imperatives of urbanization and modernization. It requires greater sensitivity to specific community conditions that climate factors are gradually modifying as they interact with environmental conditions.

To address the needs identified, the study recommends: continuous framework development to understand and delineate categories climate migration; profiling of climate migrants to improve tracking; applying multidisciplinary perspectives in migration research considering the implications of human behavior to decision making and how these interact with environmental factors; develop a range of policy recommendations to address the complex dynamics of climate migration as a risk reduction option or as a form of adaptation; improve scientific knowledge about climate change as socio-ecological events impacting bundles of ecosystem and human communities; use of remote sensing application to analyze shifting land use and settlement patters; intensification of vulnerability assessment initiatives that highlight the value of local studies to determine which areas within the country are safe or unsafe and feed this into spatial plans; exploration of inter-LGU alliances to manage risks (using ecosystems-based approaches, or ridge to reef approaches) that transcend politico-administrative boundaries; factoring poverty incidence rate and water area as a criteria for allocating budgets; and, prioritizing adaptation and risk reduction investments for poor and vulnerable LGUs.

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