

INTEGRATING EFFECTIVE RISK ASSESSMENTS INTO PLANNING PROCESS: A COLLABORATIVE ACTION TOWARDS DISASTER RESILIENCE

Actions that keep communities safe and resilient against hazards such as flood, storm surge, earthquake and drought rely on a careful and accurate assessment of the overall situation and risks faced by the population. An effective risk assessment takes into account the voice of the people by using participatory tools to harness traditional/local knowledge, and at the same time brings in scientific knowledge to better understand current and future scenarios. Clear policies and improved capacities combined with collaborative action of stakeholders across government levels, and across disciplines, is needed to link risk assessment to planning, investment and practice.

Policy Recommendations

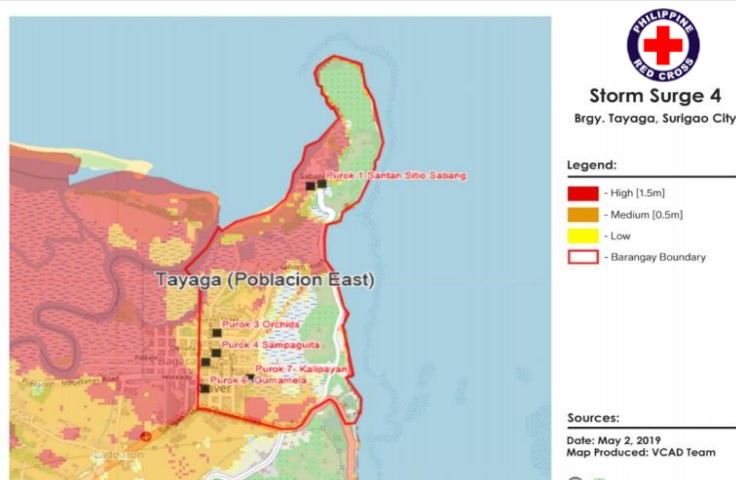
The Provincial/Municipal/City Policymakers in Surigao del Norte should support the integration of risk assessment in the planning process by undertaking the following:

Adopt a localized guideline on conducting effective risk assessment, highlighting the uptake of both traditional/local and science-based information, to improve the general guidelines on mainstreaming disaster risk reduction and climate change and adaptation into land use plans and sectoral plan.

Ensure better access and use of technology and scientific knowledge (e.g. geospatial data, climate projections, natural resources) at the barangay/municipal/city level by disseminating information through various formats (e.g. printed) and user-friendly and interactive platforms to empower stakeholders to develop and exchange localized risk information.

Build formal partnership amongst the public sector, private sector, the academic/research entities, civil society organizations and community representatives through regular dialogue, collaborative risk assessment and action planning towards well-informed decision making.

Invest in building the knowledge and technical capacity of subnational and local government in facilitating methods and approaches in risk assessment and in integrating results in planning, budgeting, implementation and monitoring and evaluation.



Risk Assessment in Barangay Tayaga, Claver, Surigao del Norte. Traditional knowledge was harnessed through participatory mapping (photo on the left). This was then aligned with the geospatial data generated through the Vulnerability and Capacity Assessment Digitalization (VCAD) facilitated by Philippine Red Cross (photo on the right). Altogether, the data and information gathered and analysed informed the community about the areas at risk as well as the levels of risk they are exposed to. This led to collaborative action planning among identified stakeholders because data and information were shared and understood.

WHAT ABOUT RISK ASSESSMENTS?

Many communities in Surigao del Norte province are located along coastlines or rivers, exposing the population to hazards that are exacerbated by climate change such as floods and storm surges. The province is also prone to earthquakes and other natural hazards. To address these risks, the first step is for individuals, communities and governments to understand the risks they are facing. This can be done through the process of risk assessments.

A risk assessment is a methodology to analyse potential hazards and evaluate existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihood and the environment on which they depend. Risk assessments with associated risk mapping include: a review of the technical characteristics of hazards such as their location, intensity, frequency and probability; the analysis of exposure and vulnerability including the physical, social, health, economic and environmental dimensions; and the evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios.

Results from risk assessments provide a strong foundation on which plans, policies and investments are built. Hence, risk assessment should be an integral part of analysis and decision-making processes.

On Disaster Risk Reduction and Management Plans. A risk assessment informs the prioritization and design of appropriate and explicit risk reduction actions that comprise DRRM Plans. This includes a range of short-term actions such as emergency preparedness, early warning systems and risk communication.

On Development Plans. A risk assessment provides key information for the review of the potential of development policies, programs and projects to reduce or aggravate vulnerabilities and hazards, and for an enhanced set of development issues, goals, objectives and targets.

Effective risk assessments inform plans by integrating science-based knowledge with traditional/localized knowledge through the use of wide range of tools and methods. This integration necessitates an **inclusive and participatory process** that allows for more integrated, and therefore more impactful solutions to risk.



Informed Local Decision-Making to Manage Risks: The Experience of Barangay Quezon, Mainit in Surigao del Norte

Barangay Quezon is one of the 21 barangays of Mainit. Due to its proximity to Lake Mainit, one of the largest lakes in the country, the barangay frequently suffers from flooding and related risks which put people at harm's way. The barangay underwent a Vulnerability and Capacity Assessment (or risk assessment), a process facilitated by Partners for Resilience through the Philippine Red Cross. This marked the birth of the barangay's **Weaves of Resiliency Program** – a set of integrated measures that sought to address risks related to disasters, climate change and environmental degradation. According to the incumbent barangay Chairperson, **these measures are like threads that should be woven into one to create a strong and resilient material. Similarly, the integrated measures have been woven into their overall development plan.**

The process of identifying and weaving these threads together necessitated **the united efforts of the barangay officials, community members, grassroot organizations, the Philippine Red Cross, the municipal government of Mainit and even the academe.** Through tools and methods such as group discussions, seasonal calendar, and risk ranking - the concerns and knowledge of the community were harnessed. This was enriched and verified with science-based information from the municipal and national government agencies (PAGASA, MGB and PHIVOLCS). The combined results were then used as a basis for decision making, particularly to update the Barangay Development Plan (BDP) which has been aligned with the Barangay DRRM plan. The data on hazards and their likely impacts were also used to enhance early warning and evacuation planning. Because people now know and understand the risks they face, they participated in the efforts to address them; they embraced the vision of a safe and resilient community. With all the efforts combined, Barangay Quezon is consistently recognized for its excellence in DRRM and CCA. It received Gawad Kalasag Awards from 2015 to 2017, most notably as second place national winner in 2017. The success of the barangay inspired the local government unit of Mainit to undertake multi-stakeholder processes that combine both traditional/local and science-based knowledge.

POLICIES SUPPORTING RISK ASSESSMENT

Government policies support the conduct of risk assessment and its integration into DRRM plans and development plans such as land use/physical plans, sectoral plans and climate change action plans across national, subnational and the local levels. Implementation of policies, however, is not without difficulty and challenges.

The Republic Act 10121 or the Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010 specifically states that it is the role of Local DRRM Councils and Barangay DRRM Committees to facilitate the conduct of risk assessments as bases for planning specifically of the Local DRRM Plans and Contingency Plans. Though progress has been made, the implementation of this policy has been challenged on the one hand by the lack of technical capacity to conduct assessments and planning at the local level, and on the other hand, the struggle in shifting from a response-oriented to a more proactive approach that put emphasis on risk-sensitive planning.

To support risk assessments, government agencies including the Philippine Institute of Volcanology and Seismology (PHIVOLCS), Mines and GeoSciences Bureau (MGB), and Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) were mandated to collect information, generate maps, and monitor hydrometeorological and geologic hazards. Investments have been made, however, at the local level utilization of data for risk assessment and planning is lacking. The task requires technical capacity and equipment which are not sufficiently available at the local level. More so, there is no strong institutional arrangement that can organize the work of agencies in an orchestrated manner e.g. in harmonizing data formats and developing single repository of information needed for planning.

Better links between risk assessment and DRR planning and Development Planning still needs to be established.

Both **RA 10121 and Republic Act 9729 (Climate Change Act of 2009)** declare that it is the responsibility of the state to mainstream disaster risk reduction and climate change in development processes. These frameworks specify the conduct of climate change and disaster risk assessment (CDRA) to support the mainstreaming of DRR and CCA into plans. In practice, however, these assessments are viewed as lengthy, data-intensive and costly procedures that are undertaken once rather than regularly as a crucial step of the planning process. Although multi-stakeholder planning teams were mandated to assist in the process, the resounding issues of lacking technical capacity and tools as well as weak institutional arrangement for coordination and collaboration at local level still persist. The guidelines developed are also found to be too general and difficult to adopt in the local context.

In 2008, the National Economic and Development Authority and its development partners formulated the **Guidelines on Mainstreaming DRR in Subnational Development and Land Use/Physical Planning** as an instrument to aid subnational and local government with the mainstreaming process. The guidelines put forward that with the subnational/provincial government as lead, intermunicipal/city planning will be easily facilitated to address hazards happening beyond political boundaries. But despite promoting a localized analysis, the window for integrating traditional/local knowledge encompassing wide array of experiences and good practices is not clearly explained.

PROSPECTS FOR THE FUTURE/RECOMMENDATIONS

With the rapidly changing environment linked to disaster and climate change impacts, the goal of reducing risks entail urgent need for a dynamic and comprehensive approach where development interventions are designed based on the understanding of hazards and changing exposures and vulnerabilities. Hence, to enhance and strengthen the mandate of local governments for reducing risks **decision makers in Surigao del Norte should:**

1) Adopt a localized guideline on conducting effective risk assessment, highlighting the uptake of both traditional/local and science-based information, to improve the general guidelines on mainstreaming disaster risk reduction and climate change and adaptation into land use plans and sectoral plans.

By adopting a localized provincial guideline, provincial and local multi-stakeholder planning teams will be guided on how, when to, and whom to involve to ensure the alignment of traditional/local knowledge and scientific knowledge. With this, planning teams and decision-makers will be able to effectively identify the entry points of risk assessment into the subnational and local planning process.

By highlighting processes that integrate scientific knowledge with traditional/local knowledge, local understanding and shared responsibilities to reduce risks are enhanced. It also allows for the identification of solutions that are flexible to future changes.

2) Ensure better access to technology and scientific knowledge (e.g. geospatial data, climate projections, natural resources) at the barangay/municipal/city level through common web-based platforms and regular offline dissemination to empower stakeholders to develop and utilize localized risk information.

By doing so, an efficient system to generate, share and manage risk information among the local government units, communities and other stakeholders will be put in place. The web-based platform will streamline the process of accessing data for LGUs as it will serve as a common repository for various information generated by mandated agencies. Regular offline dissemination on the other hand will facilitate risk communication at community level.

3) Build formal partnership among the public sector, private sector, academic/research entities, civil society organizations and community representatives including grassroot organizations and vulnerable groups through organized platforms for collaborative risk assessment and action planning towards well-informed decision making.

By doing so, risk assessments will prompt better decision making by harnessing the wide array of knowledge, expertise and resources of stakeholders to solve integrated risks that need integrated solutions. Through organized participatory platforms gaps in vertical coordination (community to higher levels of government) and horizontal (among agencies and other critical stakeholders) will be addressed. As collaboration and ownership is strengthened and institutionalized through well-defined roles and tasks, stakeholders will be more likely to identify innovative and integrated solutions/strategies and commit to a longer-term vision.

4) Invest in building knowledge and technical capacity of sub-national and local government to facilitate methods of risk assessments and to integrate results in planning, budgeting, implementation, monitoring and evaluation.

By doing so, the subnational and local government will have the leverage to lead the journey towards resilience. They will have the knowledge and skills to fulfil their roles and responsibilities in a more efficient and effective way. They will also be able to gain the trust of communities and stakeholders to share information and participate in the processes.

References

- Charlotte Benson. (2009). *Mainstreaming Disaster Risk Reduction into Development: Challenges and Experience in the Philippines*. Philippines: International Federation of Red Cross Red Crescent Societies and ProVention Consortium.
- Department of Interior and Local Government. (2015). Guidelines on Mainstreaming Climate Change Adaptation and Disaster Risk Reduction in Local Development Planning. *Memorandum Circular 2015-77*. Philippines.
- Housing and Land Use Regulatory Board. (2014). *Supplemental Guideline on Mainstreaming DRR and CCA in the Comprehensive land Use Plan*.
- Jha, A., & Stanton-Geddes, Z. (2013). *Strong, Safe and Resilient: A Strategic Policy Guide for Disaster Risk Management in East Asia and the Pacific*. The World Bank.
- National Economic and Development Authority, United Nations Development Programme, European Commission Humanitarian Aid. (2008). *Mainstreaming Disaster Risk Reduction in Subnational Development and Land Use/Physical Planning in the Philippines*. Philippines.
- Partners for Resilience Philippines. (2011). Tools for Community Risk Assessment. *How to Integrate: Climate Change Adaptation and Ecosystem Management and Restoration*. Philippines.

The Partners for Resilience (PfR) through the **Philippine Red Cross** has been advocating for the integration of Disaster Risk Reduction (DRR), Climate Change and Adaptation (CCA), and Environmental Management and Restoration (EMR) into the overall resilience framework in Surigao del Norte since its first phase of implementation in 2011 to 2015. During Phase II (2016 to 2020) implementation, key **stakeholders including the leaders and personnel from the provincial/municipal/city government, and the leaders and community members from 25 partner barangays have been exposed to various learning platforms** that aimed at building their knowledge and capacity in mainstreaming DRR, CCA and EMR into plans, policy and practice.



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