

CHAPTER 7

Flood-risk Amplification Communication Theory: Towards a Modified Social Amplification of Risk Framework

The Social Amplification of Risk Framework (SARF) of Kaspersen et al. (1988) is primarily uni-directional or linear as it reflects only the role of the integration of risk assessment with the psychological, sociological and cultural perspectives of risk perception and risk related behavior. However, the amplification only involves the level of the source of message and considered the receivers as end-user of the risk messages. It therefore lacks the elements of a community based and networked integrated elements necessary for risk event. Figure 27 highlights the following modifications in the Social Amplification of Risk Framework (SARF): (1) the community becomes the central focus of the amplification then extends its reach to the informal and formal networks; (2) strategic risk

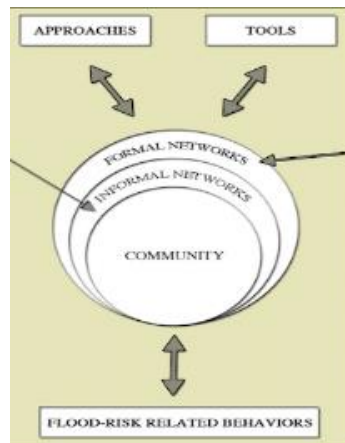
communication triad is highlighted to cover the element of flood risk related behavior which includes the lessons and responses in flooding experiences as major factor in message development, utilizing the approaches and tools to strategize the flood-risk communication towards the target audience.

Despite the “ripple-effect” at the social amplification stations, the individual is not considered as a major element in the social amplification of risk framework which is contrary to most researches on risk amplification which focused on the social components of the framework. It does not consider that the individual can provide significant contribution for amplification in the process. The respondents’ direct experiences on flood risks increases memorability and imaginability of the hazard, as well as provide feedback on the nature, extent and manageability of the hazard, creating better perspective and enhanced capability to avoid the risk. Thus, it can serve as a risk amplifier as well as act to attenuate risk.

Figure 27

Flood-Risk Amplification

Communication Theory (FRACT)



The proposed Flood-Risk Amplification Communication Theory highlights the modification in amplification of SARF (Figure 27) which can be a guide to address the following concerns found to be absent in the current communication system of Davao City: the lack of communication protocols at the barangay level; the insufficiency of communication approaches; failure to involve all the affected residents; and the lack of coordination and management on communicating flood risk. The respondents expressed that the current set-up of risk communication can still be improved in terms of its strategies and management since more people are living in flood-prone areas and risk of flooding increases due to climate change and urbanization, hence, it is increasingly important to communicate flood risk to the public (Haer et al., 2016). Nyondo in 2006 (as cited in Skinner & Rampersad, 2014) also emphasized that if the process of communication is difficult in our ordinary and daily lives, it is far more so in times of disaster. The challenge remains to not only respond with accurate, understandable and complete information as quickly as possible during a disaster, but also to communicate in a proactive way that involves members of communities to reduce the potential risk of a disaster.

Ensuring that risk reduction and management at the community levels is achieved for the flood vulnerable

communities of Davao City, the risk communication management approach should consider the integration of flood risk communication integrated with the disaster management cycle. The approach used in designing the proposed framework has the following objectives:

- (1) Empower the communities to work towards self-reliance specifically on flooding.
- (2) Create interoperability at the levels of the community.
- (3) Build community capacity and preparedness through a more sustained risk communication management.
- (4) Engage community participation and develop strategies that are context-specific.
- (5) Deliver programs that can address flood risk communication as well as disaster management in an integrated and complementary approach.

Moreover, the planning and crafting of the details of the program would entail the adoption of the following reminders:

- Flood risk communication planning cycle should be present in every stage of the disaster management cycle.
- The objectives of the communication plan should be dependent on the context.

- To ensure effective implementation of the flood risk communication, it is imperative that human and material resources are sufficient and adequate.
- Resources and activities are dependent on the following functional areas: research, monitoring and evaluation, policy matters, media placement, training and capacity building and community-based education and development activities.

The **Flood-Risk Amplification Communication Theory** integrates the gaps both in the literature and the needs of the flood vulnerable communities in the context of flood risk reduction concerns. The theory is proposed based on the following areas of concern:

(1) Underlying principles

Institutional Mechanism. This includes the policies or legal basis of the agencies task/function, the communication protocols or procedures, and the flow of communication and the expectations of both the organization and the community. Institutional structures and mechanisms for inclusive disaster risk governance can be achieved through participatory processes that can lead to a participatory and collaborative policy making which involves the government institutions, stakeholders and the affected communities.

Alternative Policy Recommendations. Three areas for policy recommendation for a “localized” DRR communication

interventions include: (a) creation of the working group to do further research and craft a synthesized reception analysis of the current risk communication system among the 63 flood vulnerable communities; (b) crafting of the manual of protocols for a quick reference guide for all the stakeholders; and, (c) include in the communication plan the period of implementation and the appropriate evaluation and monitoring of the strategies.

(2) Guiding parameters

(a) Balanced and coordinated strategies for reducing risk and coping with impacts of flooding should emanate from the community levels towards the different agencies involved, involving a simultaneous approach of “top-down”, “bottom-up” as well as horizontal communication flow to encourage a transactional communication process among all the involved sectors.

(b) Transboundary and cross-sectional cooperation should be encouraged. Risk reduction and disaster response must be coordinated among various stakeholders and concerns must be systematically identified and anchored in flood-risk management plans that clearly defines the context-specific concerns of the communities.

(c) A localized and participatory approach must encourage the involvement of the communities, in particular, encourage risk dialogue to enable local interests, experiences

and knowledge to be integrated into locally adapted risk management strategies.

(d) Formulation of binding regulations or policies for incorporating the community concerns in the planning process to enhance coping mechanisms and capacities.

(3) Elements of the proposed theory

The following elements will be utilized in the operationalization of the Flood-Risk Amplification Communication Theory:

(a) strategic risk communication aimed towards flood risk reduction

(b) stakeholders which include the community, the formal and informal social networks as major actors of the risk communication process: informal social networks include family-relatives and neighbors; while the formal social networks involves the different agencies including the disaster coordinating unit, the mass media; emergency team units; social work unit; health unit and NGOs

(c) flood-risk related behavior reflecting the lessons from the experiences and practices of the communities that can be shared among the stakeholders.

(d) approaches in the strategic risk communication which include the strategies of information flow, multi-lateral knowledge development, interoperability of mechanisms

highlighting the integration of communication, control and coordination.

(e) the communication tools which highlights a study of appropriateness of specific tools for specific target audience

(f) flood-risk messages to account for the significant messages that would address the specific contexts and needs of the informal as well as the formal social networks.

The proposed theory is aimed towards community safety in the events of flooding which encourages community self-reliance, long-term community-based programs that is context-specific. This theory recognizes that people have varied perceptions on risk and adaptive measures and encourages prior assessment of existing knowledge and practices as inputs to the crafting of the flood risk communication management approach.