

**The *Yaman ng Lawa* (Blessings of the Lake) Initiative in Santa Rosa City, Laguna, Philippines:
An inclusive, participatory approach to public policy development**

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Abstract

Inclusive, participatory approaches to public policy development are emerging as a means to address challenges arising from traditional, top-down mechanisms. In Santa Rosa City, Laguna in the Philippines, *Yaman ng Lawa* is an initiative that encourages policy ‘recipients’ in meaningfully contributing to the development of policy recommendations for managing environmental risks to food and human health security. The Santa Rosa City *Yaman ng Lawa* Initiative recognizes that (1) scientific and local knowledge are equally valuable in policy development; (2) socially disadvantaged people and communities themselves are capable of assessing, planning and decision making; (3) the scientific community can be a catalyst for change; and (4) local and national offices should strive to promote 'voice' over 'control' in policy decision making. This paper describes the various activities of the Santa Rosa City *Yaman ng Lawa* Initiative. Residents of lakeshore villages and officials from all levels of government were engaged in various types of activities, namely, public consultations, community assemblies, dialogues with policy decision makers, and stakeholders’ forum. Representatives of various sectors of the community took part in the activities including fisherfolk, farmers, women leaders, village health workers, among others. Eight interrelated issues were identified during public consultations, which were ranked in terms of relevance and severity during community assemblies. In the stakeholders’ forum, community representatives described priority issues in the lakeshore: (1) changes in livelihood, (2) persistent flooding, (3) solid waste management, and (4) hunger and malnutrition. Government officials discussed current interventions and available resources to address community-prioritized issues. The participatory approach empowered communities with information for healthy settings, healthy lifestyles, and healthy populations; encouraged community initiatives; and enhanced community ownership of solutions to environmental issues, particularly those related to Laguna Lake. With this mechanism in place, stakeholders from grassroots to top-level officials were represented in discussions relevant to public policy development. Replication of the participatory mechanism in other areas in the Silang-Santa Rosa sub-watersheds and, ultimately, in all sub-watershed areas, and its institutionalization in the city, regional, or national levels are recommended.

Key words

policy development, participatory action research, sub-watershed area, stakeholder participation

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Background

Community stakeholders' inputs during policy development are, historically, limited. Prior work has identified a wide variety of reasons to explain this phenomenon including the lack of interest in changing the status quo; socioeconomic, geographical and cultural barriers to participation; and systematic exclusion by government (Fischer et al., 2007; OECD, 2009). Traditional, top-down mechanisms are also regarded as one of the factors that can limit people and communities from meaningfully contributing in the formulation of public policies that would be sensitive to their needs, demands, values, perceptions, and experiences (Dodd & Boyd, 2000; Smith, 2003). Whatever the reason may be, the resulting exclusion positions them as policy 'recipients' rather than policy stakeholders. Apart from the concern for potential marginalization of grassroots stakeholders' interests, it has been previously argued that overlooking the critical role of people and communities in shaping policies can lead to difficulties in reaching substantial policy implementation success and sustainability (Holmes & Scoones, 2000).

In the recent years, there has been an increasing interest to address challenges arising from traditional, top-down policy development mechanisms by adopting more inclusive, participatory approaches that put equal value to the grassroots experience of communities and the technical expertise of policy decision makers (Dodd & Boyd, 2000; Smith, 2003). Shifting from 'vertical' to 'horizontal' approaches underline that socially acceptable, politically viable, and technically sound public policies are informed by multiple perspectives from diverse stakeholder types (Dodd & Boyd, 2000). This shift calls for greater emphasis to be placed in creating and strengthening linkages between policy decision makers and the communities they serve, and in increasing opportunities for community stakeholders to take more prominent roles in the process.

The scientific community can play a crucial role in policy development, resulting to what is often referred to as evidence-informed or evidence-based policy. In the agenda setting stage, research can be used to identify and define problems and potential policy solutions (Fischer et al., 2007; Kingdon, 2003). In the policy formulation stage, the scientific community can provide technical expertise in selecting and designing intervention options (Fafard, 2008; Fischer et al., 2007). In the policy evaluation stage, monitoring and evaluation studies may support continuation, suggest termination or spur modification or reformulation of policy (Fischer et al., 2007; Kingdon, 2003).

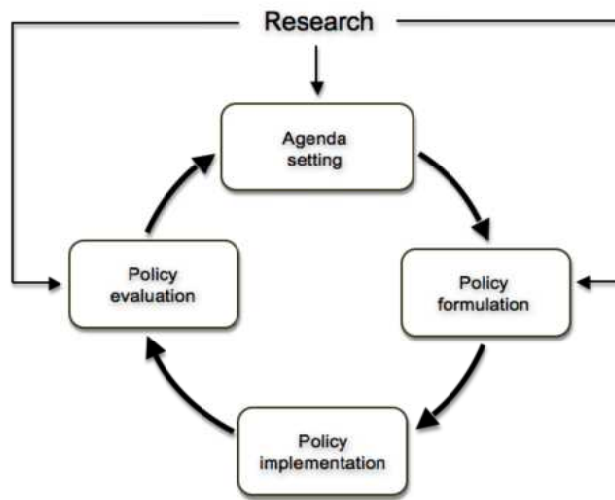


Figure 1. The policy process and usual entry points for research

In addition to the usual entry points for research in policy development, the scientific community can further contribute to the process by embracing the core tenet of participatory rural appraisal – empowerment of local people. Participatory rural appraisal is a group of approaches and methodologies that developed in the 1980s. In contrast to rapid rural appraisal, its predecessor, participatory rural appraisal veers away from extractive, elicitive methods of data collection. It positions researchers as facilitators, convenors and catalysts for enabling local people to conduct, analyze and share their investigations (Chambers, 1994).

The four-year collaborative project entitled “*Managing Environmental Risks for Sustainable Food and Health Security in Watershed Planning in Lake Laguna Region*”, also known as Laguna Lake HEAD (Health, Environment, and Diversity) Project, aimed to determine the relationships among environmental stressors (chemical, physical, biologic and socioeconomic), food risks, and human health in the Laguna Watershed area. The study was undertaken by Philippine-based (University of the Philippines Manila, University of the Philippines Los Baños, Laguna Lake Development Authority, and Health Futures Foundation, Inc.) and Japan-based (Research Institute for Humanity and Nature) researchers from the fields of medical, physical, and social sciences, in partnership with the community stakeholders in the Silang-Santa Rosa sub-watershed area. As project implementation progressed, the imperative to move from research to community action and public policy development became clearer. *Yaman ng Lawa* or Blessings of the Lake was conceptualized as a platform to address this need. This paper aims to describe the principles, approaches and various participatory public policy development activities of the *Yaman ng Lawa* Initiative in Santa Rosa City, Laguna, Philippines.

Guiding Principles and Approaches Underpinning the *Yaman ng Lawa* Initiative

The Lake HEAD Project, in general, puts people and communities at the center of trans-disciplinary research. Its team of researchers from the fields of medicine, public health, environmental science, agriculture, economics, toxicology, epidemiology, information technology, public policy and social

sciences utilizes complementary approaches and methodologies to provide evidence that establish the path of causation from environmental degradation to food and health security (see Figure 2). This guiding principle – of putting people and communities at the center of research – is what makes the project novel and seminal because methods and critical findings, which would otherwise be contextualized in silos, are ultimately integrated to aid in policy development for improved population health outcomes.

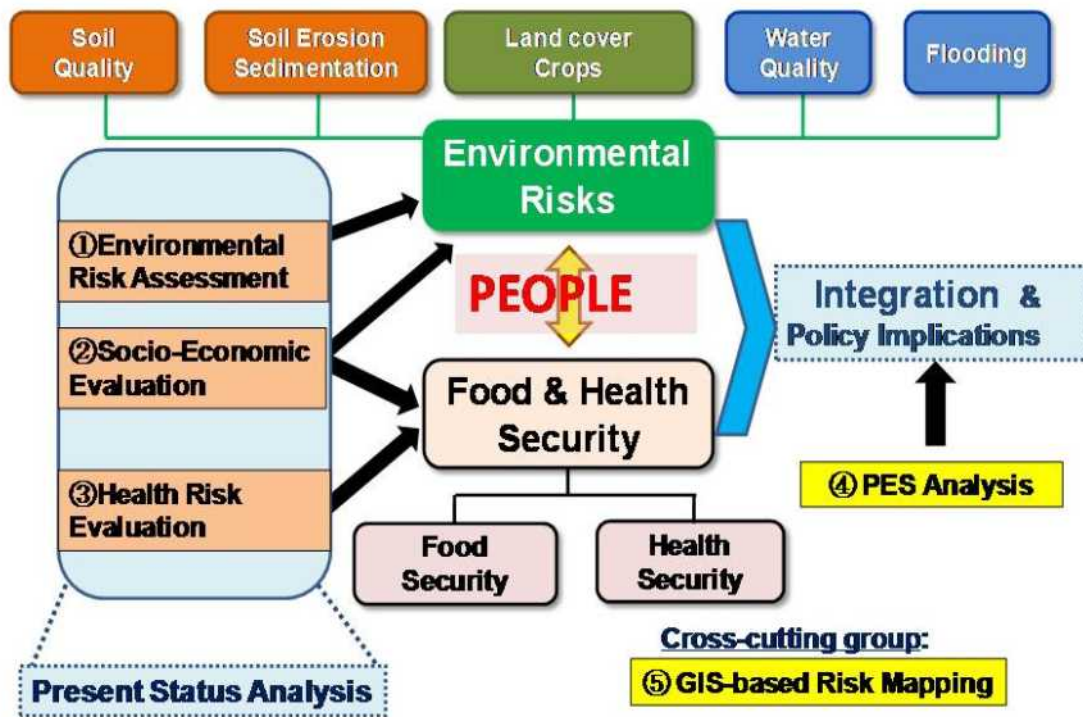


Figure 2. General research framework of the Lake HEAD Project (Courtesy of Prof Ryohei Kada, PhD)

Guided by the general research framework of the project, the Health Risk Evaluation Team used a mix of strategies from the medical and public health sciences, and social medicine to determine the what, how and why insofar as human health is concerned (Figure 3). More important than the variety of methods employed to address research objectives is the use of community-based, participatory research technologies to ensure community research ownership at every step of the research process.

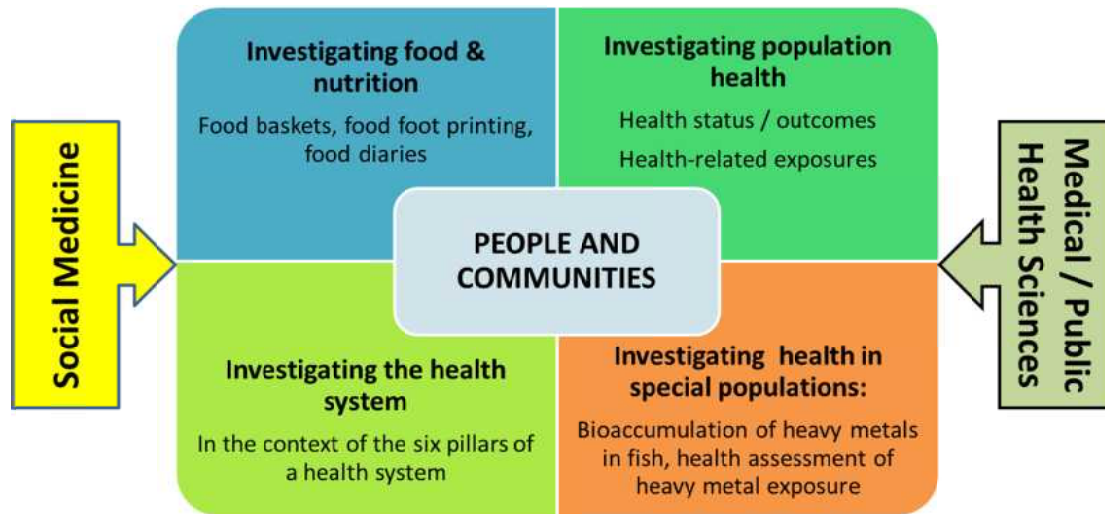


Figure 3. Approaches of the Health Risk Evaluation Team

Through years of community engagement, the imperative to move from research to community action and public policy development became clearer. When the *Yaman ng Lawa* Initiative was conceptualized in 2012, the Health Risk Evaluation Team hence sought to address the challenge of social transformation through participatory policy development in its selected pilot area of Santa Rosa City, Laguna. It aimed to engage community stakeholders in discussions on salient issues and related factors that affect human health and overall quality of life in the lakeshore.

In keeping with the principle of placing people and communities at the center of research and action, *Yaman ng Lawa* recognizes that

- 1) Scientific and local knowledge are equally valuable in policy development;
- 2) Socially disadvantaged people and communities themselves are capable of assessing, planning and decision making, especially in matters that would affect their health and well-being;
- 3) The scientific community can be a catalyst for change by sharing knowledge that support healthy settings, healthy lifestyles and healthy populations; and
- 4) Local and national offices should strive to promote 'voice' over 'control' by addressing barriers to participation in the policy process.

Participatory Activities of the Santa Rosa City *Yaman ng Lawa* Initiative

For *Yaman ng Lawa* in Santa Rosa City, residents of the lakeshore villages of Aplaya, Caingin and Sinalhan and policy decision makers were engaged in various participatory activities to identify and discuss their knowledge, perceptions and experiences on prevailing lakeshore issues (Figure 4). Activities were co-organized with village officials, village health workers and community leaders. The research team provided technical assistance in preparing relevant materials for the activities.

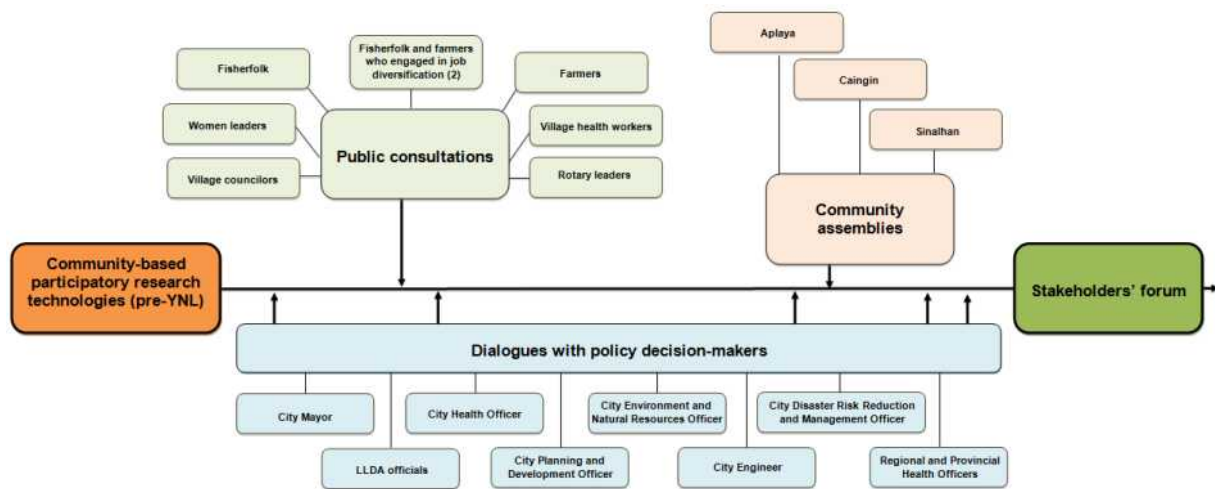


Figure 4. Activities of the *Yaman ng Lawa* Initiative

Public consultations. Focus group discussions were conducted with the following stakeholder groups: fisherfolk, farmers, women leaders, representatives of local civil society organizations, village health workers and village councilors. One of the themes emerging from the discussions was the inadequacy of household income due to changes in local fishing and farming industries. Two additional sessions were held with fisherfolk and farmers who engaged in job diversification to further explore this theme.

Sessions were started by sharing preliminary findings of various Health Risk Evaluation study components. Participants then identified key issues affecting health and well-being in the lakeshore. They also discussed their experiences and perceptions on current community- and city-level policies, programs and services for each of the identified issues and proposed other interventions to address them.

Eight key lakeshore issues were identified during public consultations: (1) persistent flooding, (2) solid waste management, (3) changes in livelihood, (4) hunger and malnutrition, (5) health issues, (6) education, (7) accumulation of chemicals in the lake, and (8) emerging forms of substance abuse. Details on the number and type of stakeholder groups that identified these are provided in Table 1.

Table 1. Key lakeshore issues identified by stakeholder groups in the Santa Rosa City lakeshore communities

Issue identified	No. of groups	Stakeholder groups
Persistent flooding	8	Village councilors; women leaders; rotary leaders; fisherfolk; village health workers; farmers; and, fisherfolk & farmers who engaged in job diversification (2)
Solid waste management	6	Village councilors; women leaders; rotary leaders; fisherfolk; village health workers; and, farmers
Changes in livelihood	6	Rotary leaders; fisherfolk; village health

		workers; farmers; and, fisherfolk & farmers who engaged in job diversification (2)
Hunger and malnutrition	3	Village councilors; women leaders; and, fisherfolk & farmers who engaged in job diversification (1)
Health issues	3	Women leaders; village health workers; and, fisherfolk & farmers who engaged in job diversification (2)
Education	2	Village health workers and fisherfolk & farmers who engaged in job diversification (1)
Accumulation of chemicals in the lake	1	Farmers
Emerging forms of substance abuse	1	Women leaders

Participants described the interrelatedness of key issues identified (Figure 5). As an example, persistent flooding was perceived to be linked to five other lakeshore issues. Problems in solid waste management were suggested to be a contributing factor to the increasing frequency and severity of flooding incidents in the lakeshore. Flooding was perceived to affect education as submersion of public school facilities in floodwater warranted suspension of classes for prolonged periods of time. Furthermore, school facilities were also used as evacuation centers. Participants noted the increased incidence of diseases such as cough and colds, diarrhea, *tinea pedis*, dengue, leptospirosis, and tuberculosis especially among displaced households. They also described how flooding can interrupt livelihood and bring about food insecurity, particularly, for farmers and fisherfolk.

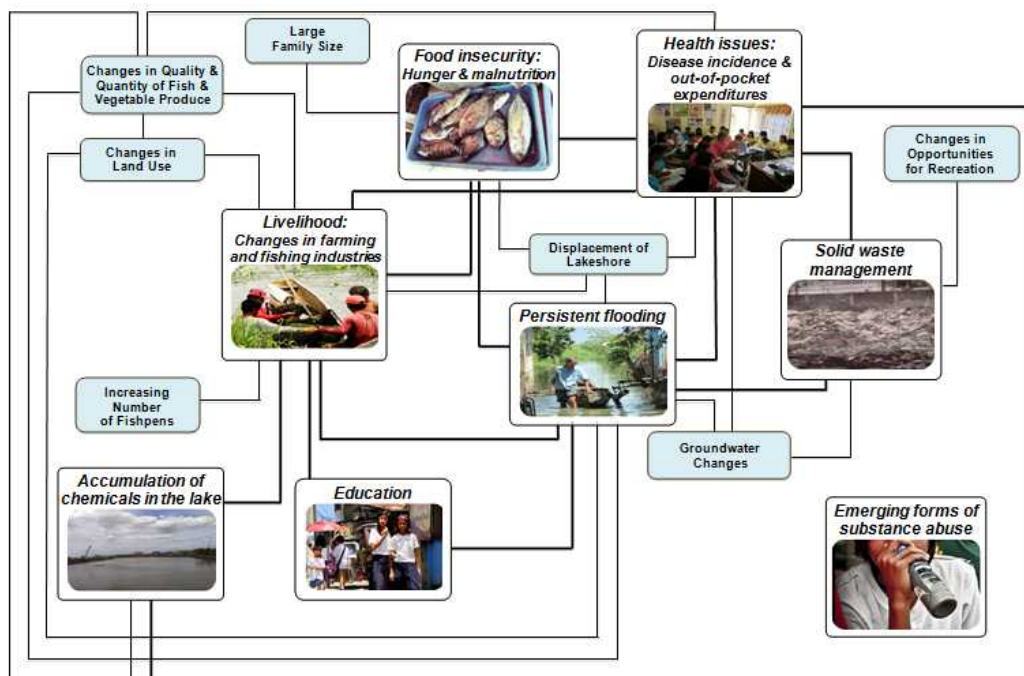


Figure 5. Concept map of key lakeshore issues and their interrelatedness

Dialogues with local policy decision makers. A series of dialogues with officials of lakeshore villages, heads of local offices (City Health Office, City Environment and Natural Resources Office, City Disaster Risk Reduction and Management Office, City Engineering Office, and City Planning and Development Office) and the City Mayor were held. The Health Risk Evaluation Team shared its preliminary research findings and the proceedings of public consultations. Local policy decision makers acknowledged the issues and potential solutions identified by the community, and they expressed their concerns about managing risks from an aggregate standpoint (village-, city- and national-level interventions). In persistent flooding, for example, public officials concurred with the community on the increasing severity and frequency of flooding events. Contributing factors identified include siltation of eroded soil, clay, mud, rock, solid waste, and other materials from upland to lowland areas; diminished absorptive capacity of the soil; and proliferation of water hyacinths in the lake. Key interventions to address this issue include (1) operationalizing the city master plan for flood control, which includes continued implementation of dredging the lake’s river tributaries; (2) creation of a Laguna Lake-wide ring dike; (3) strengthening the current solid waste management efforts such as construction of materials recovery facilities in every village and revitalization of the project that discourages use of plastic products; and (4) initiating intersectoral collaboration between LLDA and lakeshore cities and municipalities for sustainable watershed management.

Community assemblies. An assembly was held in each of the lakeshore villages. The community assemblies were started by presenting the eight (8) key issues identified during public consultations. The rank of issues in terms of relevance and severity were determined as follows:

- 1) Each participant was given a set of metacards numbered from ‘1’ to ‘8’.
- 2) Participants were asked to assign a numbered metacard for each of the issues in descending priority. That is, they pasted the metacard numbered as ‘1’ in the designated voting area of the issue they considered to be most relevant and most severe.
- 3) The overall rank was computed as the sum of number values that were assigned for each issue. The three most relevant and most severe issues (i.e., those with the lowest sum) were identified.

Participants were then divided into small groups to discuss interventions that would address the priority issues in their community. Each group reported salient points of their discussion.

Issue prioritization results are presented in Table 2. The highest-ranking issues are changes in livelihood, persistent flooding, solid waste management, and hunger and malnutrition

Table 2. Prioritization of key lakeshore issues in terms of perceived relevance and severity

Rank	Aplaya	Caingin	Sinalhan	Overall
1	Livelihood	Livelihood	Persistent flooding	Livelihood
2	Persistent flooding	Solid waste management	Food insecurity	Persistent flooding

Rank	Aplaya	Caingin	Sinalhan	Overall
3	Solid waste management	Food insecurity	Livelihood	Solid waste management
4	Health issues	Persistent flooding	Solid waste management	Food insecurity
5	Food insecurity	Education	Education	Health issues
6	Education	Health issues	Health issues	Education
7	Accumulation of chemicals in the lake	Accumulation of chemicals in the lake	Accumulation of chemicals in the lake	Accumulation of chemicals in the lake
8	Emerging forms of substance abuse	Emerging forms of substance abuse	Emerging forms of substance abuse	Emerging forms of substance abuse

Individual-, household-, village-, and city-level solutions to address the prevailing issues in the lakeshore were proposed during the community assemblies. Themes emerging from proposed solutions that were discussed in all three sessions are as follows:

- 1) Adopting measures to care for the environment such as tree planting, practicing proper garbage disposal, and cleaning drainage systems;
- 2) Matching family size with household income through family planning and engaging in alternative forms of livelihood;
- 3) Maintaining desirable personal traits such as self-discipline, being industrious, and being perseverant.

It is of note that the foreseen effects of proposed solutions consistently discussed in all three assemblies were not specific to a single prioritized lakeshore issue. Furthermore, the solutions were mainly individual-level and household-level actions.

Stakeholders' forum. Representatives from lakeshore villages and officials from various levels of government (community, city, provincial, regional and national) participated in a forum. Community representatives described priority issues in the lakeshore and presented possible individual-, household-, community-, city- as well as national-level solutions. In response, public officials (1) described current interventions to address and/or mitigate the effect of community-prioritized issues; (2) identified existing gaps in implementation; and 3) presented recommendations to address these gaps. As a case in point, to address the issue of highest priority (on the overall) – changes in livelihood – there are alternative livelihood projects such as charcoal briquette production using water hyacinths and small-scale development enterprises. Other efforts include boosting ecotourism to increase job opportunities. Current family planning strategies were also described in relation to perceived consequence of changes in livelihood (food insecurity due to insufficiency of household income). Public officials openly discussed

challenges encountered in implementing these interventions such limited machinery for charcoal briquette production and generally low level of compliance to family planning practices.

Concluding Remarks

This paper described the activities of the Santa Rosa City *Yaman ng Lawa* Initiative as a model for promoting inclusive, participatory approaches to public policy development. In this endeavour, the Health Risk Evaluation Team sought to empower people and communities with information to promote healthy settings, healthy lifestyles and healthy populations through the sharing of research findings in every activity. Facilitation rather than imposition is demonstrated (1) in co-organizing activities in partnership with village stakeholders and (2) by not steering the content of community discussions towards its research interests. The experiences, perceptions and intervention options presented by the community brought to the fore of attention their capabilities in assessing, planning and decision making, especially in matters that would affect their own health and well-being. The community expressed their appreciation for genuine rather than token involvement in the Initiative and looked forward to organizing community initiatives to address their priority issues. *Yaman ng Lawa* promoted the voice of the community not only in its entirety as in the stakeholders' forum or by group as in public consultations, but provided opportunities for individual perceptions to be counted through techniques such as issue prioritization in community assemblies. In seeking to be a catalyst for positive change, the Health Risk Evaluation Team was mindful about maintaining a neutral, solutions-focused stance in facilitating the activities. As a consequence, the eventual policy dialogue was informed by empirical evidence, sensitive to the needs of the community as they themselves have identified and straightforward with respect to challenges in implementing interventions. With this participatory mechanism in place, stakeholders from grassroots to top-level officials were represented in various types of discussions relevant to public policy development. Opening communication lines and fostering an environment of cooperation among policy stakeholders are, however, but initial steps for community-based and community-led initiatives to prevent and mitigate risks to food and health security in the locality. Policy stakeholders need to continually re-define their seemingly divergent interests as mutual issues and pool their efforts to implement solutions that are mutually responsive to their needs. Replication of Santa Rosa City *Yaman ng Lawa* in other local government units in the Silang-Santa Rosa Sub-watershed areas and, ultimately, in all sub-watershed areas, and its institutionalization in the city, regional, or national levels are recommended.

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