Addressing Small Scale Fisheries Management through Participatory Action Research (PAR), an Experience from the Philippines

Lutgarda L. Tolentino
WorldFish Philippine Country Office. c/o SEARCA, College, Laguna, 4031, Philippines
Tel: +63-49-5362290 Fax: +63-49-5362290 E-mail: l.tolentino@cgiar.org

Lily Ann D. Lando
WorldFish Philippine Country Office. c/o SEARCA, College, Laguna, 4031, Philippines
Tel: +63-49-5362290 Fax: +63-49-5362290 E-mail: l.lando@cgiar.org

Len R. Garces
WorldFish Philippine Country Office. c/o SEARCA, College, Laguna, 4031, Philippines
Tel: +63-49-5362290 Fax: +63-49-5362290 E-mail: r.garces@cgiar.org

Maripaz L. Perez
WorldFish Philippine Country Office. c/o SEARCA, College, Laguna, 4031, Philippines
Tel: +63-49-536 2290 Fax: +63-49-5362290 E-mail: Ma.Perez@cgiar.org

Claudia B. Binondo
WorldFish Philippine Country Office. c/o SEARCA, College, Laguna, 4031, Philippines
Tel: +63-49-5362290 Fax: +63-49-5362290 E-mail: c.binondo@cgiar.org

Jane Marina Apgar
World Fish Center, Jalan Batu Maung, Batu Maung, 19960, Bayan Lepas, Penang, Malaysia
Tel: +60-46-202133 Fax: +60-46-26553 E-mail: m.apgar@cgxchange.org

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Abstract: This case demonstrates the potential of addressing small scale fisheries management through participatory action research (PAR) in one of the CRP 1.3/AAS sites in the Philippines. Following the iterative process of PAR, a series of focus group discussions (FGDs) to reflect on the issues and concerns of small scale fishermen (SSF) in Barangay Binitinan, Balingasag, Misamis Oriental, Philippines was carried out from February to May, 2014. This was followed by the conduct of consultative workshop among stakeholders in SSF in June 2014, the main objective of which was to develop a collective action plan for the management of said resource. The FGDs employed facilitated iteration and reflection of issues affecting various groups of small scale fishing community, while the Consultative Workshop among stakeholders used the appreciation-influence-control model of participatory stakeholder engagement (Ratner 2011).Consequently, various stakeholders of small scale fisheries begin to understand, appreciate and take actions together. A feeling of trust and confidence among them begin to develop which enabled them to craft a collective action plan on sustainable management and governance of municipal waters and fisheries resources. Aside from these outcomes, these processes led to the admission of "sahid" (beach seine) operators that they are indeed using illegal gear, that their gear would be replaced by the legal one by the Bureau of Fisheries and Aquatic Resources (BFAR), that the Law Enforcers would implement the Law and the small scale fishermen would abide the rules and would be

apprehended by Law Enforcers once they violate the rules and the LGUs asking stakeholders to feedback the amendments necessary to make municipal ordinances well fitted to them. Another major outcome of these processes was the identification of research topics which the stakeholders identified to be necessary so that science-based productivity and governance decisions can be put in place. All of these activities fall within the PAR processes.

Keywords: Participatory Action Research; small scale fisheries; governance

1. Introduction

The importance of capture fisheries, especially small scale fisheries (SSF) or municipal fisheries, as a source of nutrition, employment and income for many coastal areas especially rural poor can hardly be overestimated (World Bank/FAO/WorldFish 2010). This is particularly true in the Philippines, where about 56% of its 1634 municipalities are along the coasts. The Philippine Fisheries Law (Republic Act 8550) defines the municipal fishers as individuals using fishing vessels of three (3) gross tons or less or do not require the use of fishing vessel. Their fishing grounds are within the municipal fishing waters or not more than 15 kilometers from the shoreline. The municipal or small-scale fishers are usually challenged with depleted fishery habitats, intensified resource competition and conflict, post- harvest losses, limited institutional capabilities, inadequate/ inconsistent fisheries policies, weak law enforcement, and weak institutional partnerships. Its deterioration started as early as the 1970s (Muallil *et al.,* 2014) but initial signs of severe depletion of fish stocks to the level indicative of biological and economic overfishing became manifested in the 1990s. This is despite the fact that several management frameworks ranging from co-management, community-based management and integrated coastal zone management and formulations of laws and policies to protect SSF resources have been put in place (La Viña 2001). Therefore, learning how to improve governance is an important concern, especially among SSF in the Philippines.

Coming up with appropriate governance arrangements for SSF are not easy to put in place. This is because these are located in complex socio-ecological aquatic agricultural systems where there are many resource users with differential power and conflicting interests.. These are further aggravated by disconnected efforts, unclear division of responsibilities, or poor responsiveness to local needs on the part of government, private sector, or civil society groups. All of these factors make their governance very complex. Overcoming these governance obstacles requires processes that enable diverse stakeholders to build mutual understanding of their obstacles and opportunities, explore options for influencing change, and take actions that help achieve collective priorities. By bringing all key stakeholders into the process ensures that multiple perspectives are represented, that local actors have opportunities to influence each other's understanding, and ultimately builds commitments to action that would not be possible through an outsider's analysis alone. This is where the use participatory action research (PAR) can be of utmost significance to bring about transformational change to all of its stakeholders.

Governance emerges from the interactions of many actors, from the private sector up to civil society organizations. It can be formally institutionalized or expressed through subtle norms of interaction or even more indirectly by influencing the agendas and shaping the contexts in which actors contest decisions and determine access to resources (Lebel *et al.*, 2006). It is about how decisions are made on matters of public importance (Ratner 2013) as expressed through discursive debates, negotiation, mediation, conflict resolution, elections, public consultations, protests, and other decision-making processes (Lebel *et al.,* 2006). It includes people's authority to use, manage, and influence the use of natural resources through formal legal and institutional framework such as laws and regulations as well as the informal sets of norms, traditions, social networks, and power relationships that guide and constrain the interactions of stakeholders with one another and with the natural environment. Governance is structures and processes by which societies share power, shapes individual and collective actions (Young as cited by Lebel *et al.,* 2006). Therefore, it is not the sole purview of the state through government.

This paper is about the use of Participatory Action Research (PAR) and how it can influence change among stakeholders in small scale fisheries. It is made up of the following sections: an articulation of why the use of participatory action research (PAR) is a good way to go for addressing the governance challenges of managing small scale fisheries; a discussion of the context of the community where it is implemented; its implementation; and finally, how it facilitated the process of change among stakeholders as well as in helping identify research topics that will answer some of the pressing concerns of the community to solve their governance challenges.

2. PAR and the Challenge of Small Scale Fisheries Management

The use of participatory action research (PAR) is one of the Research in Development (RinD) approaches of the CGIAR Research Program on Aquatic Agricultural Systems or CRP 1.3/AAS. The CRP 1.3/AAS is a multi-year research initiative launched in July 2011, which is designed to pursue community-based approaches to agricultural research and development that target the poorest and most vulnerable rural households in aquatic agricultural systems. Led by WorldFish, a member of the CGIAR Consortium, the program is partnering with diverse organizations working at local, national and global levels to help achieve impacts at scale.

The CRP 1.3/AAS in the Philippines operates in selected sites in the Visayas and Mindanao regions, which we named VisMin Hub. There are eight communities or barangays in the VisMin Hub where we have started our work. These are in Barangay Pinamgo in the Municipality of Bien Unido, Bohol Province; Barangay Mancilang in the Municipality of Madridejos, Cebu Province; Barangays Maac and Mahayahay in the Municipality of Sogod, Southern Leyte Province; Barangay Galas (Upper and Coastal) in Dipolog City, Zamboanga del Norte Province; and Barangays Binitinan and Waterfall

in the Municipality of Balingasag, Misamis Oriental Province.

In CRP 1.3/AAS, research is not only used as a problem solving device, but more importantly as a device to *empower and support* people who depend upon aquatic agricultural systems (particularly the most marginalized) in a development process that they *themselves* define. The program aims to achieve this by using Participatory Action Research (PAR) to implement research that fosters empowerment and collective learning. Following the iterative processes of planning, implementing, observing and reflecting stages of PAR, Apgar and Douthwaite (2013) believe opportunities for transformative change will emerge that can potentially bring lasting benefit to the marginalized. Embedding research in the development context makes people learn and critical of their present state and begin to think of possible ways to move forward and yet mindful of whose learning and development are supported. On the other side, CRP 1.3/AAS aims to learn from implementation of the program through PAR, to understand better how agricultural research can leverage development outcomes and impact. They argue that, using iterations of acting and reflecting, PAR is a participatory process of inquiry which seeks to answer questions about real life concerns to improve the wellbeing of those engaged. "It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities." (Reason & Bradbury as cited by Apgar and Douthwaite 2013). Apgar and Douthwaite (2013) further argue that unlike most research endeavors that present *ex post* findings, research through PAR process is dynamic and continuous, enabling feedback in real time. The participatory and action oriented focus builds ownership of the process by the participants, who learn through their own experiences and are able to change their own lives and social worlds. The schematic representation of this is shown in Figure 1.

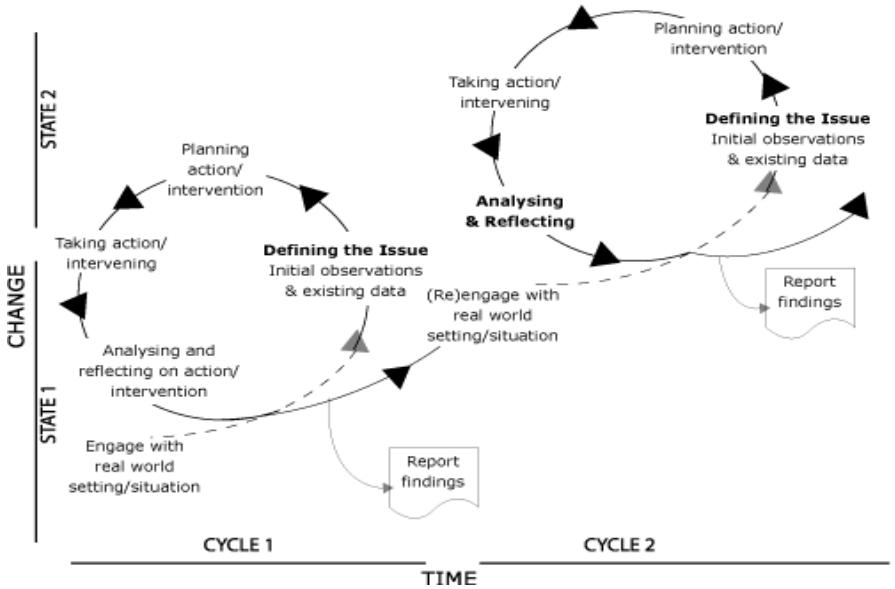


Figure 1. Schematic representation of operationalization of PAR
(Source: http://emedia.rmit.edu.au/edjournal/?q=book/export/html/279)

According to Apgar and Douthwaite (2013), PAR starts when a group of co-researchers (includes stakeholders and researchers) plan to do something in order to improve upon a real life concern. Next, during the acting step, the group intervenes in some way in the social context. The observing step is concerned with identifying the consequences of actions, and finally, in the reflecting step, the group "makes sense" of what has happened through thinking about how it fits with the group's experience and theories.

The use of PAR to address governance issues among SSF may help solve its challenges. Issues on policy development, institutional capability development and equity in access to resources are least prioritized in most community-based management projects in the Philippines (Pomeroy and Carlos 2004).

These might have not been even addressed by most community-based management projects. According to Pomeroy and Carlos (2004) there has been discrepancy between reported activities and project objectives in community-based management projects as a review of these projects indicates that the top three reported objectives were on resource assessment and monitoring, resource protection and conservation, and resource rehabilitation. But when actual activities or 'interventions' of these community-based management projects were examined, the topmost activity was focused on community organizing, followed by intervention on education, training and skills development.

3. Research Context

Binitinan and Waterfall are coastal communities in Balingasag, Misamis Oriental. They are the two of the focal sites of CRP1.3 /AAS Program in the Philippines. The majority of households in these communities are the poorest, most marginalized and vulnerable who depend on fishing. During the first visioning and action planning of these communities in August 2013, one of their priority dreams is the enforcement of fishery laws. Such dream falls within the third initiative of the house framework of the VisMin Hub (i.e., enhance and effective governance structure). The premise of their dream is the uncontrolled access of commercial fishermen into their municipal waters, use of illegal fishing methods and nets among them and the inability of Law Enforcers to implement fishery laws.

These cause their declining fish catch, which consequently leads to low income, which further leads to less access to food and difficulty of sending their children to school. Thus, in their action plans, they wanted to implement the use of appropriate fishing gear and equipment and the reactivation of fish wardens (AAS Team Philippines 2014 a, b) to guard their municipal waters. Though they distrust the fish wardens, they want them reactivated, nevertheless. The distrust come from the allegations that these wardens were oftentimes easily be bribed by offenders or LGU officials who would always intervene on behalf of the offenders.

During the community mobilization and community visioning and action planning exercises conducted by CRP1.3/AAS

Program, the staff noted some of the conflicting discourses that these communities have regarding the fish wardens and their desire to acquire a commercial fishing vessel called "tapay" (fish lift nets). A "tapay" is prohibited to fish in municipal waters as prescribed in RA 8550 or the Philippine Fisheries Code of 1998. These made the CRP1.3/AAS team to further engage with them to understand where these conflicting discourses were coming from. The CRP 1.3/AAS team realized later that fishermen in these villages are socially differentiated and stratified. There are "sahid" and "baling-baling" groups as well as those who fish using motorized boats and those who fish with non-motorized boats called "baroto". The sahid group is the most numerous, does not own boats, and fish up to about one meter deep water only.

The sahid fishers are further divided into "manahiray" and "mangangabay. The "manahiray" are those who own the fishing net, while the "mangangabay" are those who provide labor. There are also sharing arrangement and labor availability issues associated in various sub-groups. The sharing arrangement between the "manahiray" and "mangangabay" is 50/50. The 50% of the "manahiray" accrues to him/her only but he/she shoulders the repair/mending of the broken nets. The 50% share of the "mangangabay" is equally divided among them. Thus, one of their issues is the very low/nil income they get from their participation in sahid. This is especially true if they almost catch nothing which is often times the case. On the other hand, the "manahiray" complains about the unpredictability of the "mangangabay's" labor. Sometimes, they do not like to join the operation. On the part of off shore fishermen and their "mangangabay", their sharing arrangement is to deduct from the amount of the fish catch the expenses for fuel and boat depreciation cost, the remaining amount is subdivided equally among the team members. At the end of the day, the share of each member is also very nil.

The "sahid" group is alleged to be illegal fishers as they use very fine mesh nets (mesh sizes less than three (3) cm between two (2) opposite knots of a full mesh when stretched). They are alleged to catch the juveniles and destroy the corals. The thought of their being illegal seems to have allowed other small scale fishermen to verbally or sometimes physically abuse them. They are the poorest and most marginalized sector of small scale fishing community. They have the least capitalization to engage in fishing operations, catch the least demanded and preferred fish species and sell to consumers who have the least market voice, the poorest in the community.

The "sahid" group on the other hand argued that, they should not be perceived as illegal. Their main argument for this is not based on their use of a particular small mesh nets but on the way they pursue their livelihood. Engaging in "sahid" operation as a source of livelihood is a clean way of living, according to them. In fact, they vehemently denied using fine mesh nets. They even compared their "sahid" nets with those who fished through "baling-baleng"[1], also another type of beach seine. They are alleged to destroy the coral reef. But they also denied this as their nets do not touch the bottom. They would not even like to fish in

coral areas as their nets would be entangled. As to the allegation that they catch the juveniles, they alleged that those who catch the spawners like the offshore fishermen should be illegal too. While nobody openly articulates that they should be decimated based on the discourse about them, they are also perceived as hindrance to the easy passage of other small scale fishermen from the shore to the sea and vice-versa. Their being illegal is seemingly supported by social control like ostracism, direct verbal and physical harassment and ordinances, thus completing the requirements for the institutionalization of perception about their illegality.

Aside from the fact that different sub groups of fishermen in the municipal waters are competing for the use of the same resource system, the commercial fishermen also compete with them. Based on RA 8550 otherwise known as Philippine Fisheries Code of 1998, commercial fishers should not enter into municipal waters. But this provision of the RA 8550 is often times violated by commercial fishers.

Aside from competition among small scale fishermen and between the small scale fishermen and commercial ones who intrude into municipal waters, they also argued that there are many of them eking a living from the same resource. Further, their resource system is already polluted from industrial and household wastes. All of these are consistent with the findings of Muallil *et al.* (2014) study which states growing population, pollution and competition between small and big scale fishermen as issues affecting them. The presence of Mariculture Park in Waterfall (an adjacent barangay of Binitinan), which supposedly is to augment small scale fishermen's livelihood opportunities limits their fishing ground. They contend that the 200 hectares occupied by Mariculture Park could have been their fishing ground. They are barred from coming near it for fear that they would break the nets. In fact they thought that fish population is concentrating under the Mariculture Park because of excess feeds. Even the river mouth in Binitinan is inaccessible to them because it has been used as a conditioning area for bangus fingerlings for Mariculture Park.

The law on the non-incursion of commercial fishers into municipal waters is difficult to implement as small scale fishers and commercial fishers are either cooperating, or in conflict with each other. This is happening when these two groups spotted a school of fish within municipal waters. Since small scale fishermen's capacity to catch is small, they would allow the commercial fishers to fish the area on the condition that they would be given a share of the catch. If such is the case, the small scale fishermen would not complain about the commercial fishers' entry into municipal waters. On the other hand, if these two groups would not reach such a deal, then small scale fishers would complain against them.

Because of their heterogeneity and the many daily cooperation and contestation they have against each other, their dreams and discourses are contradictory at times. It is observed that the complaint of those who attended the first visioning and action planning of these barangays on illegal fishermen is not just referring to commercial fishermen intruding into municipal waters but also to

those "sahid" and "baling-baling" groups who used illegal mesh nets within municipal waters. But their dream of having a "tapay" is a manifestation of their desire to catch as much as the commercial fishers in the municipal waters.

All of the above are indications of the various schemes of cooperation, manipulation and contestation happening in their daily interactions with one another and other stakeholders. These are also indications of unequal power distribution among users of a common-pool resource system. As Foucault as cited by Clement (2013), discourses are important instrument to effect power at strategic level. They can significantly affect the role of actors and drive institutional change by framing the way problems are perceived and potential solutions imagined and debated. Our interactions with "sahid" and off shore fishermen indicate this. Both of them allege each other of illegal practices. But the voice of off shore fishermen is louder than those of the "sahid" and "baling-baling" groups not only because of RA 8550, also known as Philippine Fisheries Code of 1997 but also of National Integrated Protected Areas System Act of 1992 and other local legislations. Their social and economic position is better than that of the "sahid".

4. The Research Process

The contradictory stance of small-scale fishermen's discourses as well as their relationships with one another and other stakeholders motivated us to dig deeper into their issues by consciously applying the facilitated iterative reflection of their issues and concerns for them to surface out and verbalize how they think they should be resolved. Their heterogeneity guided us to specifically organize the FGDs to consist of "sahid" group, off shore fishermen with boats, and the "baroto" group. The series of FGDs were conducted in February and May, 2014.

Our FGDs were framed with two major objectives. One is to unpack the issues affecting small-scale fishermen and the communities that depend on them; and, to identify potential interventions to address their issues and concerns that eventually enable them realize their dreams. These results guided us in the conduct of consultative workshop which was held on June 30, 2014 in People's Palace, Balingasag, Misamis Oriental. The Consultative Workshop was founded on the use

FGD session conducted by Field Research Assistant

of Appreciation-Influence-Control (AIC) of participatory stakeholder engagement (Ratner 2011, Ratner 2014). It is a whole systems approach to stakeholder interaction, analysis and collaborative planning. It entails a shared appreciation of the context for the issue at hand, sharing experience with the aim of influencing others' perspectives and preferences for potential courses of action, and finally narrowing in on the particular realm of actions within an individual's or group's control (Ratner *et al.,* 2014). By distinguishing factors that can be appreciated, influenced, and controlled, the model makes explicit recognition of the whole context for action and power of the different actors who are either directly engaged or who have influence on the outcomes (Smith as cited by Ratner 2014). Therefore, in identifying the key actors of the Consultative Workshop, we were conscious of their different degrees and bases of power and the manner they use such.

The Consultative Workshop was attended by 85 participants coming from the groups of small scale fishermen, commercial fishers or those classified by law as taking fishery species for profit beyond subsistence and using fishing vessels of 3.1 gross tons and more, representatives from the Municipal and Barangay LGUs, the Regional Director of the Bureau of Fisheries and Aquatic Resources (BFAR), officers and men of Law Enforcement agencies of the Philippine National Police under the Balingasag Local Government Unit (PNP/Balingasag LGU), Philippine National Police/Maritime (PNP/Maritime) and BFAR's Quick Response Team (QRT). The small scale fisher representatives were chosen from those who attended the series of FGDs. composition of participants and their nested levels of power, organization and purpose are shown in the Table 1.

The Consultative Workshop on the Sustainability and Governance of Small Scale Fishermen had the following objectives:

1. To present the various national, regional and local legislations affecting small scale fisheries;
2. To discuss the issues and concerns on small scale fishermen management in Binitinan and Waterfall; and,
3. To identify specific activities and strategies that could be pursued to promote sustainable management and governance strategies of small scale fisheries in Balingasag.

Photo taken during the Consultative Workshop on 30 June 2014

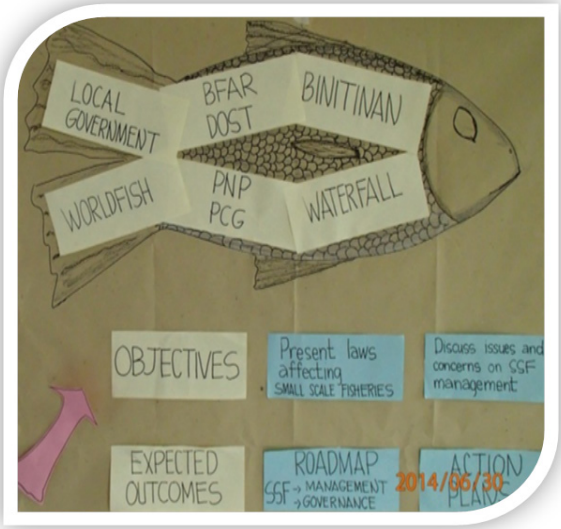
Table 1. Breakdown of participants at the consultative workshop for small scale fishers.

Institutions	Male	Female	Total	Mandate
Balingasag Municipal Government • Office of the Mayor • Office of the Vice Mayor • Office of the Sangguniang Bayan • Office of the Municipal Agricultural Officer (MAO)	3	3	6	Implement management, conservation, development, protection, utilization and disposition of all fisheries and aquatic resources in municipal waters
Barangay Local Government • Binitinan (2) • Waterfall (2)	1	3	4	Implement management, conservation, development, protection, utilization and disposition of all fisheries and aquatic resources in municipal waters
Small Scale Fishers • Binitinan (15) • Waterfall (8)	9	14	23	
Commercial Fishers[i] • Jasaan (13) • Opol (7)	9	11	20	
Bureau of Fisheries & Aquatic Resources X • Office of the Regional Director (3) • Fisheries Resources Management Division (2) • Research/Training Services (1) • Fisheries Law Enforcement Section - Quick Response Team (13)	16	3	19	
PNP/Maritime Command X	4	0	4	To police Philippine waters
PNP/Balingasag LGU	2	1	3	To police municipal domains
WorldFish	3	3	6	
Total	**47**	**38**	**85**	

There were two major sessions contained in the Consultative workshop, the Input and the Workshop Sessions. The Input Session was composed of the following presentations: 1) National and Regional Small Scale Fishery Laws like regulation on the use of fine mesh net, prohibition on the use of active gear in municipal waters, regulation and ban on some fishery resources, regulation and prohibition of selected fishing gear used in municipal waters and definition of commercial and municipal waters; 2) Municipal Laws/Ordinances on Small Scale Fisheries; and, 3) Issues and Concerns among Small Scale Fishermen in Binitinan and Waterfall. After the Input Session in the morning, participants moved into working group discussions in the afternoon. Participants counted off from 1 to 3 and were grouped according to their number: 1) Sustainability; 2) Governance; and 3) Research.

In groups 1 and 2, participants discussed issues arising from the sustainability and governance of small scale fisheries in Balingsag. Essentially, this meant small scale fisheries in the Macajalar Bay. After agreeing on the issues, the group then agreed on actions to address the issues and identified the specific actors for each, as well as the timeline for the agreed actions. In group 3, participants discussed possible researchable topics to support actions to sustain and govern small scale fisheries. The group did not make an action plan as these researchable topics will be presented to fishing communities for them to become partners of the

research process. To ensure that everybody would be able to participate in the workshop, each participant was required to write on a meta card the issues affecting small scale fisheries, and how he/she thought to solve it. Then these metacards were grouped by the group. The workshop session laid the groundwork for the development of a roadmap for sustainable management and governance of small scale fisheries in Balingasag in the form of an action plan. After the group discussions, each group appointed a member to present the group output in plenary.



5. Key Learning/Findings

One of the outstanding outcomes of these series of FGDs and Consultative Workshop was the open discussion of the issues and concerns of the various stakeholders of municipal waters. While the different stakeholders were not openly discussing these before, the application of facilitated iteration of issues and concerns among the various groups of small scale fishermen and the appreciation-influence-control model allowed all stakeholders to express their side without fear of being rejected or ridiculed by others. During the workshops of the Consultative Workshop, the groups on sustainability, governance and research groups were composed of people of various power and authority. The issues that they raised during the workshop reflected where they were coming from and yet were able to come up with action plans. Some of concrete examples of these are the desire of commercial fishermen to amend RA 8550 to enable them to fish legally within the municipal waters. The Law Enforcers expressed their desire to implement the fishery laws. The "sahid" group expressed their desire to follow the law but requested support for them to change their gear from the illegal to legal one. For the others, they wanted the amendment of the fishery laws by increasing the penalty of the violators.

The trust and confidence generated through deliberation of various stakeholders allowed "sahid" fishers from Brgy. Binitinan to admit that their fishing gear does not follow the prescribed mesh size. Therefore, the allegation of their being illegal fishers has basis. They have denied this for almost 40 years. Their admission carried an appeal to other stakeholders that they need help to find alternative livelihood. A "sahid" fisherman said, *"karong nabal-an na gyud namo mismo sa inyo nga mga law enforcer nga bawal gyud diay ang among panagatan, karon kung wag tangon ang among sahid unsa na man pud ang among ibuhi sa among mga pamilya?.Mahimo ba nga tabangan mi ninyo mahatag ano gikabuhi sa among mga anak og pamilya?* (Now that we have heard from the law enforcers that our fishing gear is illegal, if you are going to confiscate our

gear, then how are we going to support our families? Can you extend any help to us to support our children and families?).

Then another "sahid" fisherman said, if indeed our fishing gear is illegal then we asked the government to provide livelihood options. Then a motorized boat fisher said that the provisions of the law on the use of marine resources must be respected and implemented.

The conduct of facilitated iteration of issues and concerns was a tedious process of balancing the objectives of each participant in the group. But the reflection part of the process brought the participants to a higher level of consciousness to consider not only the present time and their individual needs and priorities. As one of the FGD participants said:

> *Karun na sayod nag ayuda kong agra-beh gyud ka illegal ang among gamit sa pagpanagat kay apil mutanga ka-dako sa isda makuha man sa among panagatan. Ug nakahunahuna akong akinahanglan wag tangon gayud ang among klase sa panagatan kay unsa naman lang kaha ang mamahimong kuha sa among mga anak inig dagko na nila kung kami karung ipangkuha na ang mga gagmay nga isdang adili manganinamo mapahimuslan? Kung sa kabukiran anaay balaod sa pagdili sa pagpamotol sa mga kahoy, ingun diay punang mahitabo dri sa kada-gatan diing idili punang maong klase sa panagatan nga sahid.*
>
> (Now I have learned how illegal our practices that even the smallest fish in the sea were caught by our fishing gear. And I have realized that this should be stopped right away because what will then be the future of fishermen if juveniles are caught? If in the uplands there are laws preventing illegal logging, it is also true in the coastal areas where the use of fine nets is illegal and one of it, is "sahid").

The sense of acceptance for the part of the sahid group was not that easy because according to BFAR, they need to surrender all the gear and these must be burned to be assured that they would not be used anymore. For the "sahid" owners, seeing their gear burned would be painful as it has symbolic meaning for them. One of the "sahid" owners verbalized if it was possible that the gear would not be confiscated but assured that they would not use it. It could be utilized in other form like fence for chickens at home. What was more important according to them was their willingness to adapt to changes and the legal way of fishing. One of the "sahid" owners even added that unlike before when she was not attending meetings and assemblies which made her not well informed of the laws and ordinances, but now it is more different, it is very good to be informed and be part of the community and trying to influence first her family members.

Another major outcome of Consultative Workshop is the recognition of the local government through its Vice Mayor that their municipal ordinances are already obsolete and that there is a need for widespread understanding of laws and ordinances and to this end recommended that the appropriate laws be translated to the local dialect and popularized. As well, she said that some laws and ordinances are actually outdated and thus need revision. Some may even be irrelevant in the present context.

For this, she solicited the assistance of the body for suggestions/ideas on how these outdated laws and ordinances can be updated/revised/improved or how some new ones can be enacted. An example of this is the municipal ordinance on danggit/ siganids. There should have a more technical or scientific data to pinpoint exactly what type of management control should be implemented and to determine its exact area.

Then finally the Regional Director of the Bureau of Fisheries and Aquatic Resources said, "Let us all work together to help one another". She also advised everyone that we need to clarify our terminologies so that in discussing fishing gear a beach seine is a beach seine for everyone. In the same way, there should be a common understanding of closed season and mesh size. But the most important outcome of the Consultative Workshop is the framing of the action plans on sustainability, governance and the identification of research topics which can help guide the implementation of sustainable management and governance of municipal water resources.

According to Ostrom as cited by Crona and Bodin (2010), initiation of collective action in resource management contexts is largely dependent on common understanding of the problem and how it can be solved. When attempting to move or transform a system characterized by ongoing resource depletion to a state of more ecologically sustainable resource governance, the ability of stakeholders to subscribe to such a shared vision is of particular importance (cf. sensemaking) (Olsson et al. as cited by Crona and Bodin 2010). Conceptually, this dynamic interaction is represented in three dimensions as nested levels of power, organization and purpose. Critically, power is conceived not as a zero-sum game (one's gain is another's loss) but as a realm that can be expanded as different actors identify together with higher levels of common purpose, and then organize to achieve the goals aligned for that purpose (Ratner 2011).

After the Consultative Workshop, the implementation of the gear swapping (replacement) for the "sahid" was conducted on October 29, 2014. It was attended by the Undersecretary of Department of Agriculture and concurrent Director of the Bureau of the Fisheries and Aquatic Resources (BFAR), the BFAR 10 Regional Director, the Mayor and the Vice-Mayor of Balingasag, Law Enforcer personnel from the Local Government, Maritime and Quick Response Team, representatives from the Barangay LGU and the "sahid" operators. Twenty (20) "sahid" fisher beneficiaries received new gillnets and boat engines. The fishers in turn surrendered their "sahid" nets to local government for disposal.

6. Lessons Learned

6.1 Provision of "Safe Spaces"

A major lesson derived from this initiative is the significance of providing "safe spaces" for people to discuss their issues and concerns without fear of being ridiculed or judged by others. This is consistent with the belief that participation builds trust, and deliberation leads to understanding needed to mobilize and self-organize (Lebel *et al*., 2006). Leeuwis as cited by Lebel (2006) states, deliberation is a process of open com-

munication, discussion and reflection among actors who have alternative viewpoints and understanding. When it works well, deliberation makes it possible to learn about the various views and motivations of others even when their positions remain fixed (Schusler as cited by Lebel 2006). This is consistent with the appreciation part of the AIC model. In all of these, WorldFish has provided the bridging and brokering of relationships among stakeholders and catalyze their actions.

6.2 Ownership of the Process of Change

While it is still early to argue that transformational change among the stakeholders is already underway, the ownership of the process of change is becoming manifest. In one of the monthly reports of the Community Immersion Team (CIT), it was stated that the community was very thankful of the AAS process. They felt deeply the changes and recognized the importance of strong participation which led them to step by step owning their issues and willingness for a change. This only shows they are learning, the way they talk and accept mistakes are signs of changes. These are evidenced by the following story written during the Knowledge Fairs of one of the participants:

6.3 Life of the Sahid Fishers

Story told by Sabeniano Subalan, fisher:

You can call me Ben. Fishing is our only means of livelihood. The type of fishing that we do uses a gear what we call sahid. For quite a long time now, our family has been dependent on this type of fishing. We never had any misfortunes before. But as it appears now sahid is actually illegal. I then called meeting for all sahid fishers to gather ideas on what to do so we do not lose our livelihood. All sahid fishers agreed that we will never abandon this kind of fishing as this is the only livelihood that we have. It is, without doubt, difficult to put an end to something that we have been doing ever since. It was passed on to us by our elders and is being practiced for forty years now.

I never expected that someone would ever look for me one day. I wondered who they were. I met them – Vianney of BFAR, Karen from the municipal's office, and their colleagues. They asked for the kind of livelihood that we have. I said it is only fishing. Many months passed, I was again called for a meeting. I received good news from this meeting – that there are solutions to all our problems. WorldFish came to our lives and we listened to everything they said even though they did not promise anything. Their main purpose is to guide us in solving our problems.

Months later, WorldFish eventually discussed about sahid fishing. They even observed how it is being done. They have seen our catch as well. Even the small fishes are unavoidably being caught by the sahid. And they have seen it. Months passed and we were again gathered in the town of Balingasag. Last 30 June (2014), a Consultative Dialogue was held and there, all their concerns about sahid were deliberated. We were all there with the different agencies of the government and WorldFish. There, we came to understand everything, that is, sahid does bring damage to our seas. And so,

the sahid fishers were awakened like realized they were wrong.

WorldFish brought about significant changes to us, sahid fishers. We did not expect a change in our views with regard to our livelihood. This [CRP 1.3/AAS Program] has also taught us to realize the power of dreaming. We will only hope for the fulfillment of BFAR's promise of giving out nets and pump boat in exchange for sahid through their Gear Swapping Program. We are grateful for the CRP 1.3/AAS and WorldFish as they helped us with means so we can put an end to sahid fishing in our place."

7. Tipping the Balance of Power is Indicative of Equity in Process and Outcomes

The Consultative Workshop was attended by stakeholders from various organizations of power and authority. All of them are responsible for the implementation of RA 8550 and the municipal ordinances. Recognizing that all of them have responsibilities to implement the law made them realize their "power within". As they part of a system that is interdependent to one another, the success or failure of any initiative that they are part of would not succeed without their cooperation. The words of the BFAR Regional Director 10 admonishing everybody to help one another is a key message to support each other.

8. Collective Action Plan

Crafting a collective action plan is not that easy when participants in its design come from various points of view and have differential power. However, when an improved sense of clarity about the purpose of cooperation, roles and responsibilities of stakeholders involved are well laid out, then trusting one another is not difficult to achieve. A cooperative multi stakeholder platform is achieved as shown in this case.

9. Networks and Cross Scale Linkages

Networks of fishers among themselves and across scales were established as a result of all these processes. Before the AAS community engagement in Balingasag, stakeholders of small scale fisheries were not discussing how they can be of help and support to each other. The Law Enforcers from the local government units up to regional institutions, while wanting to apprehend the law violators just closed their eyes. But the Consultative Workshop brought them together for a discussion to come up with strategies on how to help each other. Thus, networks within and cross scale linkages are established. A very concrete example of this is the inclusion of the 20 "sahid" fishers as part of National Stock Assessment Program (NSAP) of BFAR's catch monitoring. All these indicate that as shown in Figure 2, the processes of planning, acting, observing and reflecting are part and parcel of every step of community visioning and action planning, review of action plans, deepening engagement, development of new action plans, and implementation of specific PAR plans.

10. Fostering conditions for transformation

Conditions for transformation have been put in place. There are symbolisms attached to the gear swapping ceremony that took place on October 29, 2014. While it was painful for the "sahid" fishers to sur-

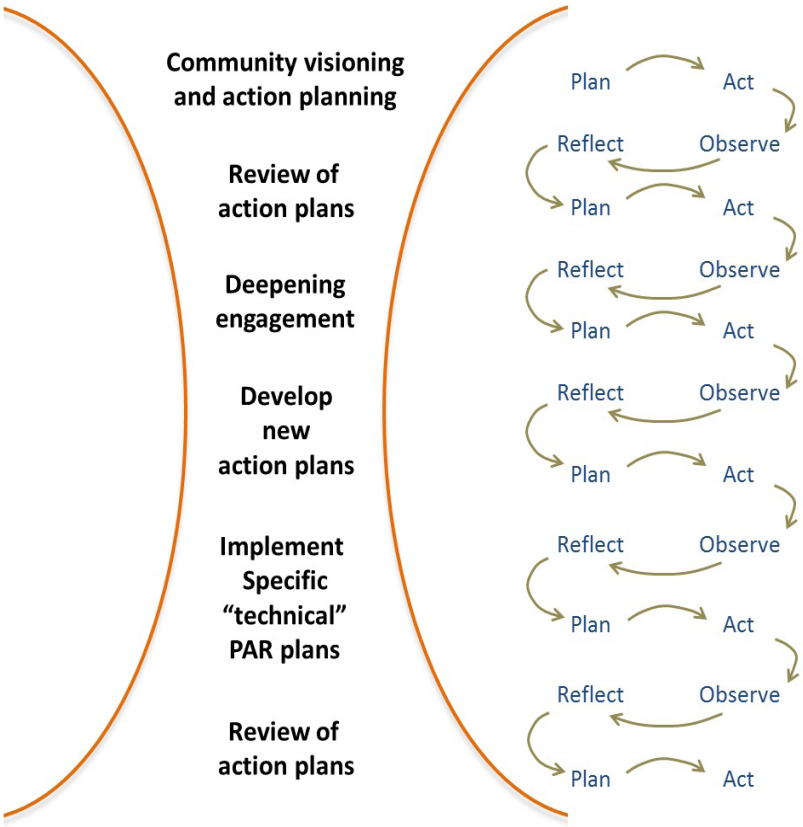


Figure 2. PAR research funnel in community engagement (adapted from Nurick& Apgar, 2015)

render their nets, their gesture symbolizes their readiness to embark on a new way of doing their fishing. On the part of the BFAR, it was able to reach out to these people who have been pain in their necks for a long time. Agreeing with one another and coming up with an action plan on how to manage and govern their fisheries resources is an indication of change in people's behavior, attitudes and mindsets.

11. Conclusion

This paper concludes by illustrating how integrated is the iterative process of PAR in the whole process of community engagement of the CRP1.3/AAS program. The processes of planning, acting, observing and reflecting are part and parcel of every step of community visioning and action planning, review of action plans, deepening engagement, development of new action plans, and implementation of specific PAR plans. In so doing, the program participants become reflexive so as to ensure that sustainable and equitable change is created by them and for them. The use of PAR has demonstrated the potential for transformation of mind sets, attitudes, relationships within and across stakeholders. It also demonstrates how research through PAR can identify researchable topics that are of use to the community and to the development stakeholders.

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