

REPORT

PARTICIPATORY SITUATION ANALYSIS WORKSHOP

For Crab Bay Area,
Malekula Island, Vanuatu
12 - 29 APRIL 2004



A PSA workshop conducted by the International Water Project for planning community-based sustainable resources management projects for Crab Bay. The villages involved in the analysis include Hatbol, Lingarak, Portindir, Barrick, Loune, New Bush, Bushman Bay, Tevaliaot, Mapest, Limap, Tebibbi, Taremp and Uripiv Island.

Wycliff Bakeo
June 2004

ACKNOWLEDGEMENT

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My special thanks goes to the Supporting Facilitators namely Japheth Hidson (Forestry Dept.) Kevin Morris (Fisheries Dept.) Naomi Malau (Women Council) from Malampa province, Roy Matariki (former director of Water Supply), Trinison Tari (Environment Dept.), and Leah Nimoho and Primrose Malosu (IWP- Vanuatu) who have assisted in the facilitation of the workshop and village consultations.

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GLOSSARY

INTRODUCTION

Experiences have shown that where development initiatives are determined and controlled externally with minimal input from the intended beneficiaries, the success rate is low. IWP emphasizes a participatory approach where the primary stakeholders' participation is crucial throughout the process of a development cycle. And it is them that should define any external assistance to suit their local situation leading to best possible choices of action for finding sustainable solutions for resources management concerns identified.

The main purpose for the workshop is to train local facilitators who would in-turn facilitates their own community consultations to identify community concerns related to coastal degradation and root causes of the problems. The results of the consultations would assist them, through IWP assistance, to develop a pilot project addressing prominent management concerns highlighted in the analysis. Another purpose is to trial the draft Facilitator Resources Kit as a resource guide in the analysis. It is IWP intention to use experiences and feedback from the workshop to adopt a Kit that could be used more widely in Vanuatu for addressing community-based natural resources management issues.

The workshop took a total of 16 days inclusive of weekends. This consisted of 7 days training the local facilitators, 3 days consulting village stakeholders and collecting data in communities, and another 3 days analyzing the data collected and wrap up. The workshop was convened at the Malampa Provincial headquarter at Lakatoro. There were 30 full time participants including representatives of the participating local community's participants, provincial officers and facilitators from Port Vila. The communities are mostly represented by two members including a male and a female. The local participation is well represented by youths, men and women as well as chiefs and members of the locally initiated Marine Protected Area of Crab Bay. The provincial officers represented Fishery, Forestry and Women Council offices. The facilitators brought in from Port Vila included the core facilitators namely the trainer and VIWP staffs and the 2 supporting facilitators to provide a supporting role in facilitating the training workshop and community consultations.

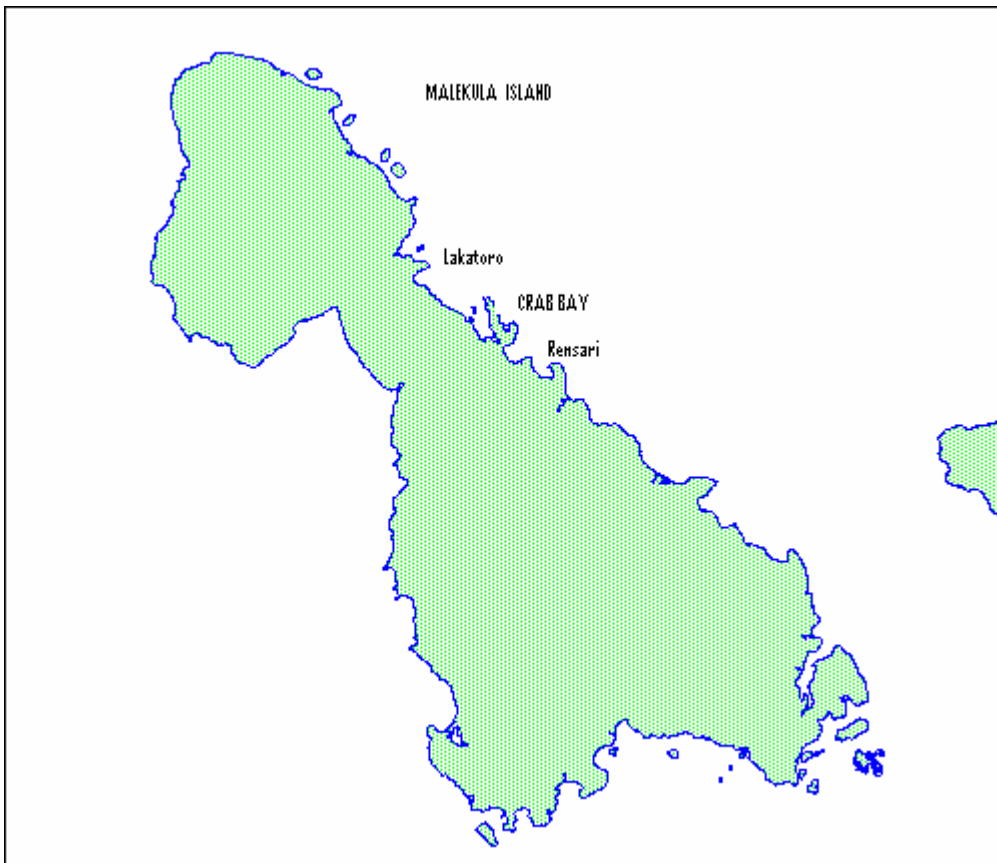
A post workshop consisted of core facilitator's-briefing envisaged to ensure all data and discussions notes were captured by the project for analysis and reporting. And the results of the analysis would be taken back to the communities for review and adoption before the project-designing phase. And the project plans to organize a 2-day workshop to provide an opportunity for technical input to the problem and opportunity analysis, and initiate the process for project mapping.

Crab Bay is located at the southern end of the Central Malekula area council on the eastern coastline of the island south of Port Stanley. According to chief Kalo of Barrick village, the bay was nicked name by the early European settlers who found the crab to be of great abundance. It was said to be everyway on the ground, in trees and dwelling areas and along the tracks that they needed to be cleared up to be able to walk through from one place to another or sleep in peace without being climbed over by the crab. The population of Central Malekula area council which includes Crab Bay is estimated at 4,578 (1999 census) of which around 50% of this live around the Crab Bay area. The fisheries resources notably the crab serviced most of the villages and settlements within the area. Three big coconut plantations intercropped with cocoa and other products like pepper and vanilla are located within the area. These are PRV, Mapest (former Saremet) and Savoie.

The population of the area is made up of local people, people with origin from Uripiv Island and people from mostly Paama and Ambrym brought in to work in the plantations. According to the inland villages like Limap and Lingarak, their ancestors used to live next to the Bay but due to the development of plantations and the need to be close to their garden, they move up into the interior where they are established today. IWP is mindful and aware of the sensitivity of the land ownership issues and does not want to interfere but concentrate its effort in educating different stakeholders to properly manage their resources. It is found that all villages in the watershed and even in the area council and a good part of North Malekula used to have access to harvesting the rich fisheries resources of the Bay. The area extending from Port Stanley to Crab Bay is perhaps the most extensive marine ecosystem found in Vanuatu. Port Stanley and Crab Bay share a comparatively huge mangrove forming an ideal fish breeding habitats, with the sheltered ocean provided by a string of islands including the Uri to the

north end result in a haven for a range of sea resources from fishes to shellfishes and crustaceans.

Lakatoro is the provincial headquarter and centre of business for the island, which is a 15 minutes truck ride north and Rensari Secondary school the same distance south. The airport and health services are a further 30 minutes ride north at Norsup. These centers were originally developed by the former British and French District Agencies respectively during the colonial era. Malekula is the second largest island in Vanuatu, with a population of over 18,984, also hosted the government owned Metenesel cocoa plantation. The province of Malampa consisted of Malekula including several offshore islands, Ambrym and Paama.



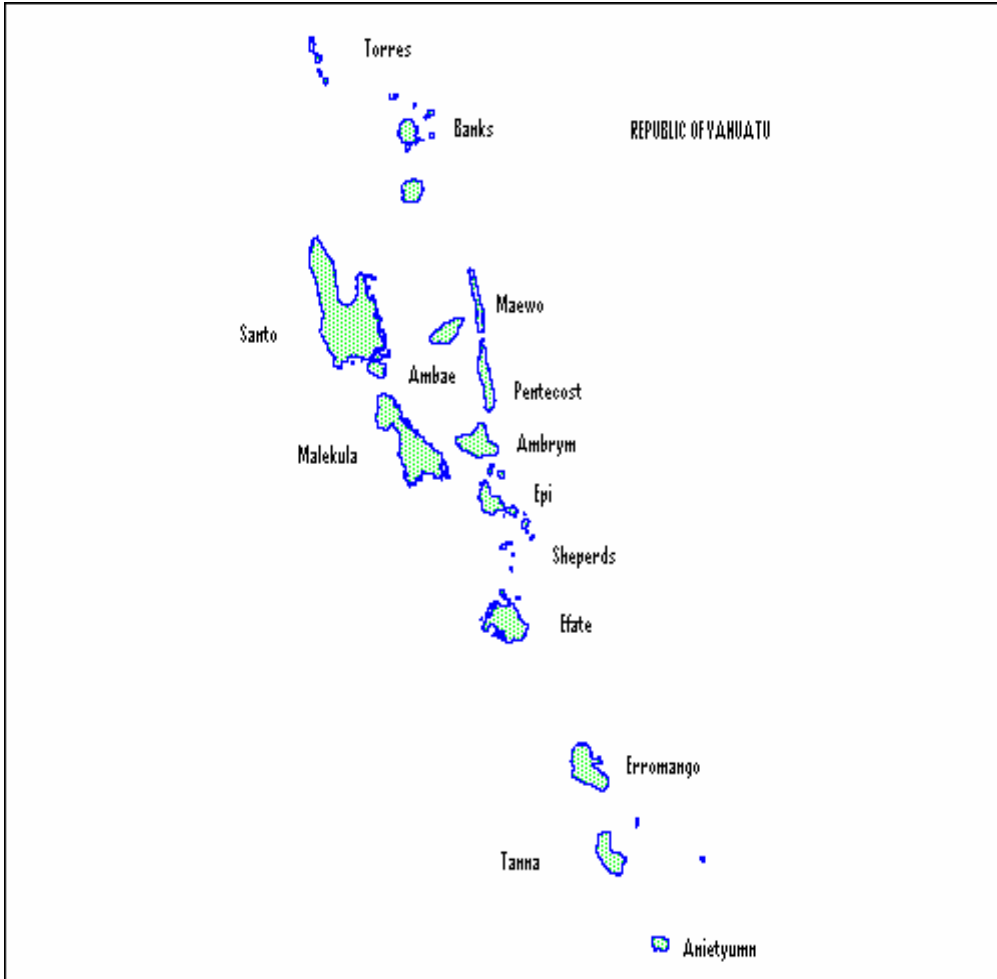


Fig 1: Maps showing crab bay, Malakula in Vanuatu

PRE - WORKSHOP

In 2003 the IWP National Task Force (NTF) committee selected the Crab Bay Area in central Malekula in the Malampa Province of Vanuatu as the project's piloting site. The decision was made primarily because of the existing community self-initiated Marine Protected Area established to conserve the fast declining crab (scientific name) and other important fisheries resources, which have been heavily fishes. The protected area includes the pristine and most extended marine ecosystem of Crab Bay and Amal.

The IWP National Coordinator made 2 visits to Crab Bay. The first visit was in October 2003 to initially engage the community with the IWP project through awareness raising for community understanding of the IWP pilot project and how the project's interest could be integrated to support their initiatives in coastal resource management. And during that visit the community and the project agreed for a formal meeting at the community to understand the situation relating to coastal degradation within the Crab Bay area that has lead to the institution of the Marine Protected Area. Also agreed on the staging of the Participatory Situation Analysis workshop. The second visit was made on February 2004 to reschedule the workshop which could not take place as agreed during the first visit, and analyze stakeholders involvement in the workshop. The program however was temporarily disrupted by cyclone "Ivy"

In March 2004 the project engaged a local consultant to complete the Facilitator Resource Kit for Vanuatu as the main training resource for the participatory situation analysis. And to facilitate the planning and designing of a pilot project that could address aspects of the situations to enhance sustainable management of marine and fresh water resources in Crab Bay area

In the latter part of March, the IWP NTF gave the go ahead for the community situation analysis workshop to proceed. IWP Assistant traveled to Malekula to raise awareness on the workshop dates and finalize participants and determine logistics support and organization.

The project staffs, trainer, supporting facilitators and participants arrived at the main training site at Lakatoro in Malekula on 12 April 2004. The project staffs briefed the Trainer and especially the supporting facilitators with regards to the objectives of the training and community consultations clarifying their roles in a meeting, prior to the workshop.

The Malampa Provincial Council Secretary General (SG) officially opened the workshop in the presence of community representatives and MPA committee members. "The council development policy for the area is a cautious one because it has so far found it hard to deal with the socio-economic and ecological complexity of the area and for the time being we want to have the area as a conservation area to protect the rich marine ecosystem encompassing the Port Stanley and Crab Bay area" said the SG.



Fig 2 Workshop Participants posing with their certificates

TRAINING WORKSHOP

Introduction & Target Setting

Following a brief presentation by the project's national coordinator on IWP and interest in assisting community-based sustainable resources management initiatives, the participants were informed of the development cycle notably the situation analysis phase of project planning process.

The purpose of the workshop is to train local facilitators in participatory tools for data collection, community facilitating techniques, skills and knowledge in identifying and analyzing resources management concerns and potential solutions. The workshop facilitated the completion of the situation analysis for resources management concerns and start discussing opportunities that would address the identified concerns through a pilot project.

Brainstorming Participants' Expectations for the workshop

Learn more about managing resources

To exercise good control over resources

Women become more involvement in resources management

Learn to manage resources for future generation

Learn about system and approach for information collecting

Understand more about life in a community

Learn about local perspective to managing resources

To expect IWP to assist them manage the Marine Protected Area (MPA)

Awareness about why we use participatory approach

Equip participants with skills to conduct field survey

To build capacity of community and online services

The project specific outputs for the training workshop are

- Participants aware about why we use participatory approach in data collection and analysis
- Participants equipped with skills to conduct community consultation and field survey
- Community stakeholder and online services skills and knowledge in the process of situation analysis and project planning is enhanced

And its outputs for the situation analysis

- Trained local facilitators representing participating communities in development concepts and simple tools to enable them to facilitate participatory data collection and analysis relating to natural resources management issues as well as background data
- Identify a list of prioritized management concerns and opportunities for further assessment and development into a pilot project etc
- The communities stakeholders have participated in the PSA and initial project planning process
- The resulting lesson learnt shall be share widely with agencies and peoples that are directly responsible and have stakes in natural resources management and community development issues
- Tested the Facilitator Resource Kit for adoption as a guide for conducting participatory situation analysis and project planning for sustainable resource management in Vanuatu.
- Compile village resources management profile for each of the participating villages, as a secondary output

Rules

The participants agreed to two important rules to enable them achieve the over-all goal for the workshop

- Have respect for each others
- Keep to time

Development Concepts

The workshop identified and discussed each of the different phases of a development or project cycle to have a broader picture of PSA, using the

project cycle mapping in Figure 3. The participants were familiarized with participatory development concepts including stakeholder participation, learning and sustainability. And the important roles played by facilitators in helping the process along.

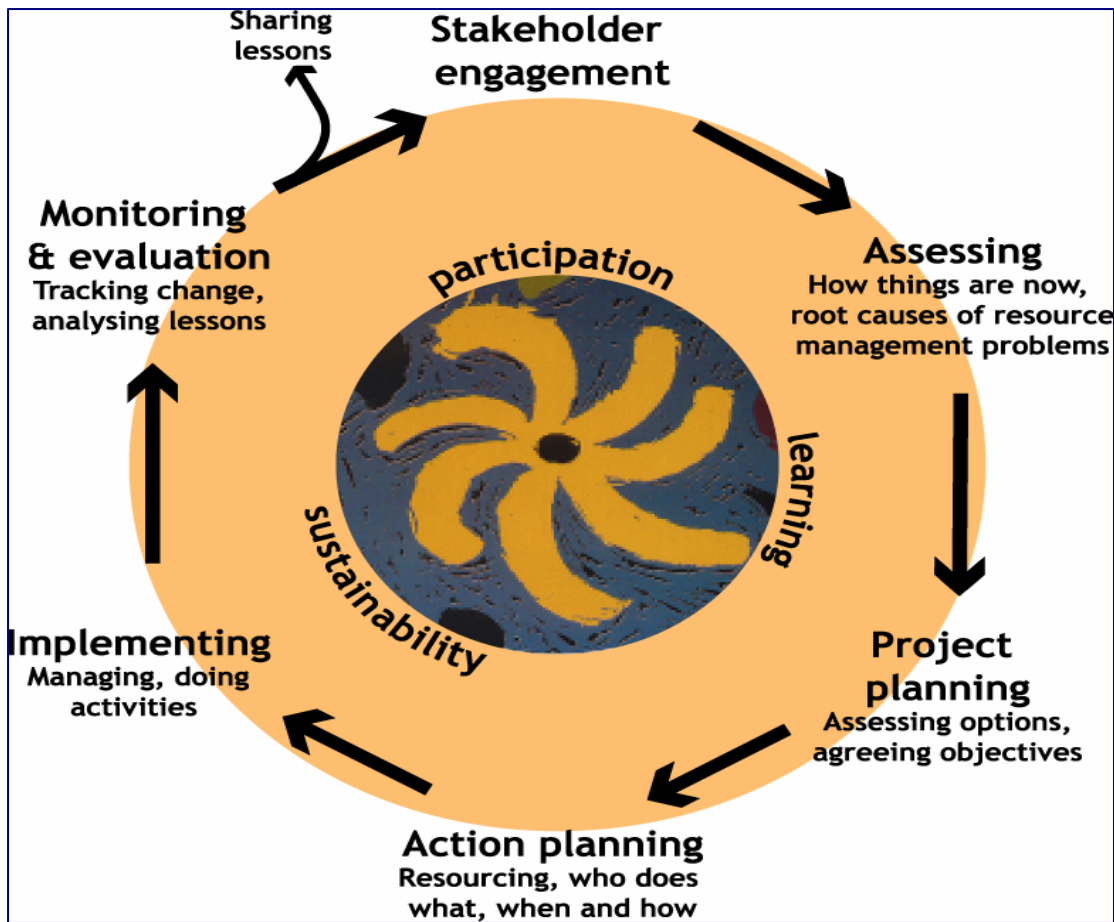


Fig 3: Project Cycle for Participatory NRM

Stakeholders

In natural resource management, stakeholders are those people or groups who possess a stake or interest in or are affected by the management of the natural resource or issue with which we are concerned (Borrini-Feyerabend, 1996). When looking at stakeholders in relation to an issue, it is important to look for specific interest groups within large stakeholder categories though usually we differentiate them simply as primary, secondary and tertiary stakeholders to correspond to the group with direct interest or concern and those indirectly concerned. And the key

organizations with direct responsibility for managing the resources or activities.

Participation

Stakeholders' participation comes in different forms from passive participation to self-mobilization depending on opportunities and practical constraints. In sustainable development projects functional participation where stakeholders are involved after project objectives developed by the external stakeholder is considered sufficient to meet projects' goals. For community-based project it is important the people are highly involved as early as needs analysis and through out the cycle so that they are well motivated to commit more of their local resources to drive the project forward.

Learning

The participatory approach promotes learning in at least three modes, firstly learn through experimenting or trial and error (adaptive management), secondly learning by sharing from a wide technical skills and field that are brought together to participate, and thirdly reflection learning by self-discovery, building on existing personal skills and knowledge

Sustainability

The sustainability of the project relates to the ongoing or long-term successful operation of the project. A lot of rural projects have failed because it is driven from outside without sufficiently developing the local capacity to commit own resources to maintaining the project once aid provisions end.

Facilitator

A facilitator makes it easy and assists participants to contribute and supports them during the process. A facilitator is required to have good listening skills and can make a group function, with positive attitudes that help full participation by different stakeholders involved

Background Data

Background information is vital to determine the social context of resources management issues, and be able to identify options that fit local situations.

The workshop used different PRA tools to capture background data showing location of village and resources, households, activities and important social services within the village and external, population dynamics, local institutions, livelihood sources and economic activities. The tools used with details included in the **appendix3**:

Tools and exercises used for collecting background data

- Village or social map
- Population and household surveys
- Resources mapping
- Livelihood sources analysis
- Services Access
- Institutional analysis

Resources Management Data

The most crucial part of PSA is for the community to identify the most crucial resources management concerns to analyze

Tools and exercises used for collecting & analyzing resource management data

- Brainstorm resources management concerns
- Resources Ranking - matrix ranking
- Brainstorm stakeholders for resources management issues
- Analyzing stakeholder relation to concerns and solutions - table of matrix
- Seasonal Calendar
- Transect
- Problem Tree
- Solution Tree

Workshop proceedings

The workshop adopted a process whereby each exercise and tool is introduced by the trainer using a prepared example and then participants are divided into 4 small working groups to carry out the exercise themselves using one of their communities for the exercise. The working groups were assigned at least one supporting facilitator to assist but they were expected to do the work. When the small groups have completed their work they do presentations on their work in plenary for discussions.

Brainstorming resources management concerns

For this exercise participants were firstly encouraged to brainstorm broad natural resource management issues. Secondly, from the broad issues, they are required to identify and rank resources that are important to them. Thirdly the workshop brainstormed the ranked resources management concerns. Below is list of concerns for the highest priority White crab.

White Crab Management issues

No respect for taboo	Every one including the committee enforcing the taboo must respect taboo	Use of distractive method of harvest - use coconut, tin paint, kill crab after checking whether it is "crease" enough to be eaten - sweet, stick them into their hole and kill them, leave coconut over hole, etc
Crab number declining		
Sell crab without control	Truck ran over crab at night	
No taboo for harvesting	Not enough available information about crab life cycle	
Not enough awareness		
Spoil crab house	Cruel to crab - when they over harvest for their immediate meal o	When not sold kept in tin and many died
Cut and burn tree in the crab area	need - crab died and sting and be thrown away	Need to improve crab marketing in local market
Harvest small size		

Harvest female carrying
eggs

Pull out tooth and throw
away rest of the crab

Find it harder to find

Natural dead or eaten
by fish etc

Not appreciative of
crab as useful resource

Identifying stakeholders

Stakeholders identification and analysis is a principal activity for situation analysis. Stakeholder analysis during PSA is important so that the prominent groups or those with high stake and influence could be identified and consulted.

Participants identified stakeholders for white crab management concerns

1. Women crab seller at Lakatoro market
2. Women collect crab for sale
3. Every member of household collect crab to eat and other domestic requirements
4. *Exchange for food and kava
5. Lakatoro market buyers
6. Vila/Santo buyers
7. Visitors
8. Family Vila/Santo

* - Exchange food voluntary by women usually concerns those at the market. They would occasionally exchange for instance, crab with root crops. The youth would do the same for Kava out of perhaps desperation to drink kava when they do not have vatu to buy. It was however expressed that these are rare and could not be considered as serious stakes.

Stakeholder - Problems relation

The participants firstly were asked to analyse how each different group identified above is affected by the problem and how it helps influence the problem. Then they determined the level of the effect and contribution to the problem using low, moderate, high and very high. The matrix table below present example for stakeholder groups for White crab related problem, "number of crab declining"

Group	In what ways are they effected by the problem	Extent they are affected by the problem	In what way do they contribute to the problem	Extent they contribute to the problem
Woman crab seller Lakatoro market	Have less crab to sell	Moderate	Contributed to over harvest by concentrating on selling crab	High
Woman collect crab for sale	Harder to find crab where they used to find	Very high	Uncontrolled harvest	Very high
Every one collect for food etc	Harder to find	Very high	Uncontrolled harvest	Very high
Exchange for food/kava		-	-	-
Lakatoro market buyers	Less crab meals	Low	Big demand and offer high price for crab	High
Vila/Santo buyers	Not enough crab to sell meaning income on crab is lost or decreased	Low	Provide a market demand in excess of local market	Low
Visitors	Minimal	Low	Minimal	Low

Family Vila/Santo	No longer receiving crab from home	Low	Minimal	Low

Stakeholder -Solution relation

For this, the participants analysed how each stakeholder group identified is affected by a solution to a problem and how it can influence decisions to address resource management concerns. And determine the level of effect and influence on solutions taken using low, moderate, high and very high. Below is an example of a solution taken by a working group is "Limit harvesting of crab by season" to analyse the stakeholder-solution relation.

Group	In what ways are they effected by the solution	Extent they are affected by the solution	In what way can they influence decision for the solution	Extent they may influence decisions for the solution
Woman crab seller Lakatoro market	Sale from crab will decrease	Moderate	None	Low
Woman collect crab for sale	Use less crab to sell but use other resources to sell	Low	Woman share concern with village as she is responsible for ensuring family survives and have money to spend on basic needs	High
Every one collect for	Having less crab dishes in	Low	Voice concern to the chief	High

food etc	their meals			
Exchange for food/kava	-	-	-	-
Lakatoro market buyers	No crab to sell during closing period	Low	None	Low
Vila/Santo buyers	"Forget crab from Crab Bay and buy else where"	Low	None	Low
Visitors	None	Low	None	Low
Family Vila/Santo	None	Low	None	Low

Summarized stakeholder analysis

The participants combined the assessment of the effect and influence for problems and solutions in one table. The table below showing the combined stakeholders analysis for the white crab management issues.

Group	Extent they are affected by the problem	Extent they contribute to the problem	Extent they are affected by the solution	Extent they may influence decisions for the solution
Woman crab seller Lakatoro market	Moderate	High	Moderate	Low
Woman collect crab for sale	Very high	Very high	Low	High
Every one collect for food etc	Very high	Very high	Low	High
Exchange for food/kava	-	-	-	-

Lakatoro market buyers	Low	High	Low	Low
Vila/Santo buyers	Low	Low	Low	Low
Visitors	Low	Low	Low	Low
Family Vila/Santo	Low	Low	Low	Low

As this is the first time for participants and even most of the supporting facilitators have to do this analysis, it was initially difficult to fully grasp. As the example above indicate, they have not given enough consideration to secondary and other stakeholders when it comes to the level of influencing they can contribute to finding solutions for management issues. As a result of this limitation, it was decided that the village only need to identify the different stakeholders and the activities they are involved with in relation to the management concern.

SEASONAL CALENDAR

This tool is important once a resource is identified to be important and management solutions are required to be instituted to address the concerns. For instance using the white crab in the above-mentioned example. The workshop developed a fishing calendar for the crab. The tool is useful to determine fishing or collecting effort, needs and climatically variation that contribute to the management concerns

Fishing Seasonal Calendar for white crab

Environmental Factors		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se p	Oct	Nov	Dec
Windy/Calm		←	Win		→	←				→		←	→
Cold/Hot				Hot					Cold	→		Hot	←
Wet/Dry		←	Wet		→	←					Wet		→
Important Resources		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Se p	Oct	Nov	Dec
White Crab	Population	xx x	xxx	xxx	xx	xx	x	x	x	x	xx	xxx Kra	xxx Leve
	Level of Harvest	xx x	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx x	xxx	xxx	xxx
	Taboo			Chie f	place s	Tabo o							
	Gear	←	Use	Torc h	Light	Bag rice	Or bag	flou r					→

Gardening Calendar

In addition to fishing calendar, the workshop run a gardening calendar to see how resources harvest could be better planned between marine and land resources to ensure domestic and economic needs are met through out the year without putting too much pressure on few resources.

	Jan Oct	Feb Nov	Mar Dec	Apr	May	Jun	Jul	Aug	Sep
PLANTING ACTIVITY									
Yam			→	→	→	→			
Banana	→	→	→	→	→	→	→	→	→
Fiji Taro			→	→	→	→			
Island Cabbage	→	→						→	
Manioc	→	→	→	→	→	→	→	→	→
Kumala			→	→	→	→			
	Jan Oct	Feb Nov	Mar Dec	Apr	May	Jun	Jul	Aug	Sep
HARVEST ACTIVITY									
Yam			→	→	→	→			
Banana	→	→	→	→	→	→	→	→	→
Fiji Taro									
Island Cabbage	→	→	→	→	→				
Manioc	→	→	→	→	→	→	→	→	→
Kumala			→	→	→	→			

Transect

Transect is another useful tool to validate brainstormed resources management concerns. The workshop did not have the benefit to do this in a participating village as the workshop was held in a neutral location. However it one during the training exercises next to the training site to familiarize participants with this effective tool.

Transect from Lakatoro at MDC to sea at the Lakatoro wharf/ Uripiv landing

	Zone 1	Zone 2	Zone 3
Physical description	Land	Coastal	Tide mark
Marine life observed		Crab, hermit	Hermit, crab, fish, sand, shells, sea snake and mangroves
Resources used for income	Coconut, cocoa, fruit and nuts	Banana Chicken	Coral, sand, canoe, boat
Resources used for food, craft and other subsistence purpose	Coconut, fruits, nuts, poison rope, palm tree pandanas,	Burao, samblong, namanbe, natavoa	Fish, hermit, shell fish, mangrove, namariu
Past traditional management practices	Fishery notice		Unaware of
Existing management practice or regulated action to conserve resources	Sign board for Fishery Department Fences	Fishery Garage	None
Observed changes or resources problems	Plantation clearing of big tress for coconut tree Plastics, bottles,	Houses Smaller tress Water supply Rubbish including	

	tin and other domestic rubbish	plastics, batteries, plastics, etc	
Other land or marine use that affects this area	Main road to Uripiv wharf Small dirt tracks	Jetty washed out by strong sea	Coral Sand Boats
Possible opportunities	Farm or village Improve fencing	Repair jetty for proper landing for people of Uripiv	Tourist area for relax Picnic

Problem & Opportunity Analysis

Identifying resources management problems may be straightforward but is not the same for analyzing them for root causes. The workshop uses "problem tree" to identify root causes and SWOT analysis to assess weaknesses and opportunities for ongoing interventions. The workshop however was not able to go into opportunity or solution analysis apart from general discussions as part of the problem tree exercise. For problem tree participants and even some supporting facilitators, were finding it difficult to grasp. There seems to be some difficulties in keeping statements in negative connotation, taking broad perspective and be specific on causes. A lot of the analysis, when reversing causes to problem they often does not make sense. This is a crucial part of the analysis and it is important the core facilitating and IWP team review them again.

The workshop found that the need for resources prioritization is imminent to streamline focus to most pressing resources management problems and especially those that are directly related to the Crab Bay project site. Prioritization is made using matrix ranking with prescribed criteria. The participant defined criteria in their own words as "main area of focus" And the three main criteria used include;

- level use for food
- level use for income,
- Use for other needs.

The workshop agreed to use these criteria in ranking resources for the village consultations.

Selection of most important resources by workshop

Criteria	Level use for food	Level use for income	Level us for other needs	Score	Rank
White crab	10	10	2	22	1
Caledonia crab	10	7	2	19	3
Oyster	5	1	1	7	8
Mangroves	5	2	10	17	4
Trochus	8	5	1	14	6
Turtle	0	2	1	3	9
Reef fish	10	10	1	21	2
Freshwater prawn	8	5	2	15	5
Clam	5	8	2	15	5
Coconut scraper bivalve - banu	2	5	3	10	7

The scoring is from 0 to 10

The first criterion concerns the level of dependency for food

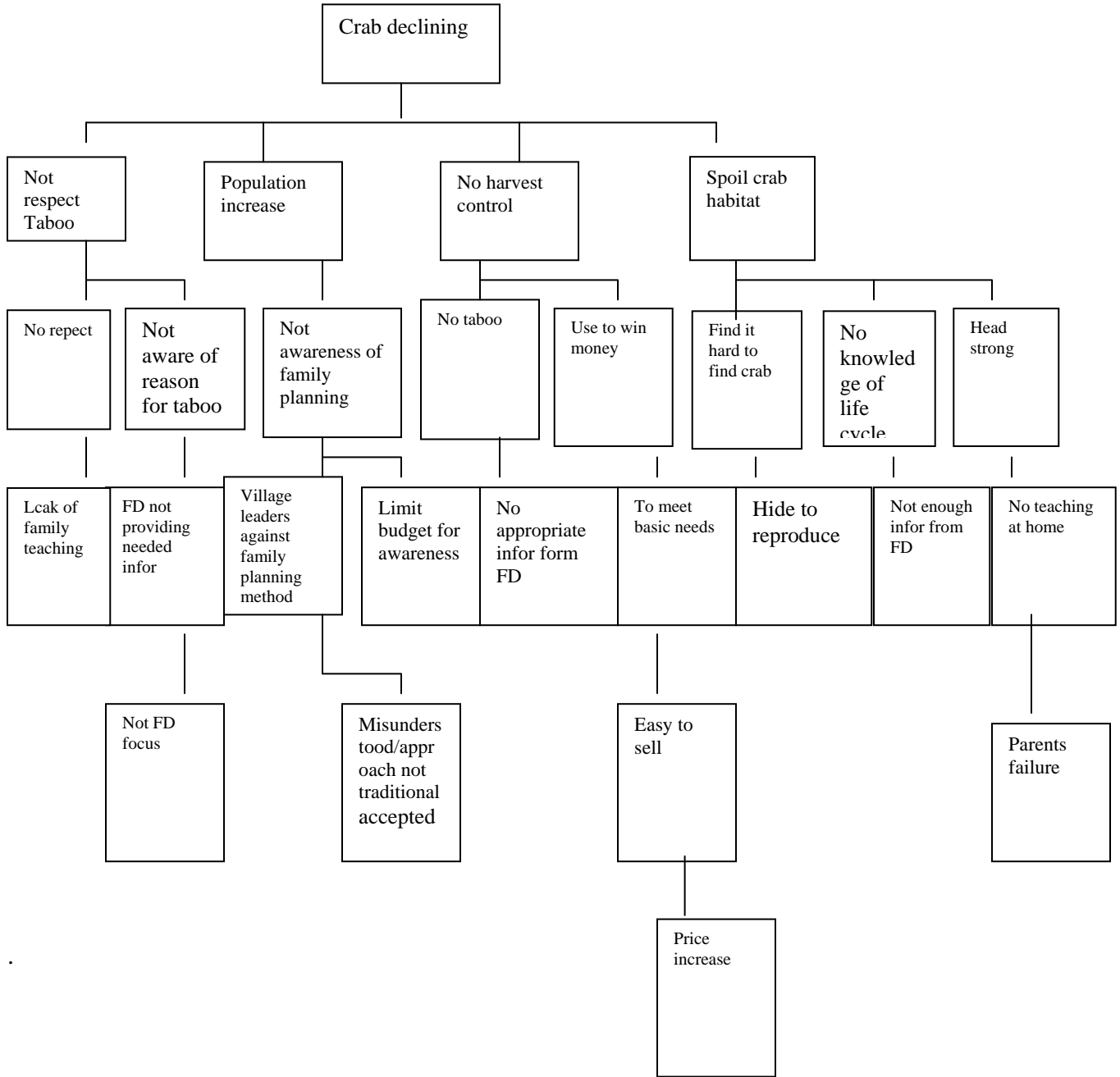
The second concerns the dependency for money

The third criterion concerns other usefulness for domestic and social wellbeing. And combining the criteria it highlights the most highly targeted resources.



Fig 4: A Small working group leader making a presentation in plenary

Problem Tree for White Crab



COMMUNITY CONSULTATIONS

It took 3 days to complete consultations in the villages using the following steps

Step 1. Background information

- Village maps
- Population
- Households
- Organization
- Resource map
- Service access

Step 2. Brainstorming broad environmental concerns

- Step 1 Resources used by them
- Step 2 Resources of importance at Crab Bay

Step 3. Ranking of resources using these criteria

1. Level of use for money
2. Level of use for food
3. Level of usage for other domestic needs

Step 4. Brainstorm of ranked resources management concerns

Step 5. Stakeholders related to management concerns of ranked risks

1. Identify stakeholders
2. Describe stakeholders activities related to the concern and solution

Step 6. Seasonal Calendar for ranked resources

Step 7. Problem analysis for root cause for the ranked resources. This was left open for communities who felt they can do it or else ran an exercise

on white crab to have people thinking about the process of getting to root causes of problems.

The consultations took place in 11 villages and conducted by the trained local facilitators with assistance from members of the supporting facilitators

Village	Main Local Facilitators	Other local Facilitators	Supporting Facilitator from Core Team
Lingarak	Kalen Api	Retia Api	Roy Matariki
Hatbol	Spethly Jonah	Anzel Kali	Roy Matariki
Portindir	Jif William Muramur	Seline Song	Japheth Hidson
Barrick	Kalmara Noel		Wycliff Bakeo
Loune	Manoa Kaun	Sandra Toi	Primrose Malosu
Bush man Bay	Manoa Kaun	Alexandra Theuil	Primrose Malosu
New Bush	Manoa Kaun	John Kensi	Primrose Malosu
Tevaliaot/Mapest	Elder Ati Tomaki	Melesa Edwin	Naomi Malau
Limap	Graham James	Sandrella James	Trinison Tari
Tebibi/Tarem	Elder Shing Matan	Kenery Ambong Mary Kernis Caroline Kali	Kevin Morris
Uripiv/Uri	Jif Fetnet	Jif Apina Maki Mary Banga	Leah Nimoho

The raw data collected from the village consultation are compiled into a separate report AMAL/KRAB BEI VILLAGE PROFILES. The analyzed data and resources management issues are summarized and discussed in the wrap up section of the report.

Feedback and assessment from the villages' consultation are discussed in the Lesson Learnt section of the report

DATA COLLECTION – Village Consultations

The workshop has 3 days to wrap up with the first day used up to organize and input data. For the other two days the workshop focused in analyzing on the important resources found at Crab Bay.

The village resources ranking were summarized into on table of ranking. The number shows the level of ranking each village placed on each resource. For example the mullet was ranked 1st at Loune and third at Bushman Bay. And white crab was ranked 2nd in most of the villages except Nui Bush, Tevaliot and Barick where it was ranked 1st.

Resources ranking for 11 villages

Resource	Loune	Bushman Bay	Hatbol	Lingarak	Nui Bush	Portindir	Limap	Tevaliot	Tebibi Tarem	Urivip	Barick
Mullet	1	3									
Land crab white	2	2	2	2	1		2	1	2	2	1
Mangroves	3	1	7	5	2		6	3	5	2	4
Oyster	4						7				
Clam	6	5		7	4		6				
Octopus	9		8								
Turtle	8						6		5		
Mud whelk		4	4		3		5	5	4	4	3
Eel	9			3			4		3		
Surf Clam - kokas	5		5	4						1	
Trochus		5	8		4	1	7		5	5	5
Green snail						2					
Shark	8										
Crab Caledonian	4						6	4			
Lobster	7						7				

Freshwater prawn			1	1			1		1		
Polished nerite - nasise			8	9				3	6		
Land crab - black			3				2			2	2
Reef fish			6	3	2	3	3	2	3	2	3
Freshwater fish				6			4	2			
Chiton - strong back				8			5			3	
"Coconut scraper" bivalve - banu										6	
Hermit crab							5				
Red eye crab							7				
Coral/sand											
Maguru - mackerel											5

For scoring the workshop adds up the number of times or frequency a resource was ranked number 1, how many times ranked number 2 and so on up to rank number 7 and tallied them up. The resource with the highest score becomes the most important resource.

Village Ranking

Resources	1	2	3	4	5	6	7	Total Score	Rank
Mullet	1		1					2	
Land crab - white	4	7						11	1
Mangroves	1	2	2	1	2	1	1	10	2
Oyster				1			1	2	
Clam				1	1	2	1	5	6
Octopus								0	
Turtle						1	1	2	

Mud whelk			2	4	2			8	4
Eel			2	1				3	
Surf clam - kokas	1			1	2			4	7 c
Trochus	1			1	4		1	7	5
Green snail		1						1	
Shark								0	
Crab Caledonian				2		1		3	
Lobster							2	2	
Freshwater prawn	4							4	7 b
Polished nerite - nasise			1			1		2	
Land crab - black		3	1					4	7 a
Reef fish		3	5			1		9	3
Freshwater fish		1		1		1		3	
Chiton strong back			1		1			2	
Coconut scraper bivalve - banu						1		1	
Hermit crab					1			1	
Red eye crab							1	1	
Coral/sand								0	
Maguru - mackerel					1			1	

The workshop came up with 9 most important resources to the concerned villages and relevant to the Crab Bay area. These included but not

necessarily in this order, Land crab (white), Mangrove, Reef fishes, Mud Whelk, Trochus, Clam, Land crab (black), Freshwater Prawn and Surf Clam. The priority may vary depending on how many level of ranking one tallied. For example if the workshop had taken only rank 1 to 3 resources, it would have been in this order, white crab, reef fishes, mangroves, black crab and freshwater prawn. These resources could be selected for baseline indicators to analyze management issues in any planned initiative for the area could be varied.

The other lower ranked resources in order of importance include; Freshwater eel, Crab Caledonian, Fresh water fish, Chiton, Polished Nerite, Lobster, Turtle, Mullet, Green snail, Coconut scraper bivalves, Hermit, Red eye crab, Mangru, Octopus, Shark and coral & sand.

Resource management concerns for ranked resources

The core group compiled the resources management concerns pooling them from results of village presentations. The resources management concerns identified are mostly related to resources depletion and degradation of fisheries and freshwater resources. The other less common concern related to water lily infestation in sections of the freshwater (river) identified by inland villages of Lingarak and Hatbol

RESOURCES	Management issues mo concerns.
FRESHWATER PRAWN	<ol style="list-style-type: none"> 1. Number decreasing 2. Dive both night and day 3. Harvest females with egg 4. Sell to earn money 5. Harvest small size 6. No respect for Taboo 7. Spoil hiding area (Clear bushes) 8. Use diving glass 9. Use destructive Fishing methods (blocking or dipping

	<p>out water, Mosquitoe net, Poison Rope)</p> <ol style="list-style-type: none"> 10. No longer use traditional method of catching and breeding prawn 11. Water Lilly - accessibility hard but protect prawn 12. Use for fundraising 13. River and stream flash out with heavy rain carry prawn down stream or killed them.
<p>MUD WHELK</p>	<ol style="list-style-type: none"> 1. Sell for money 2. Harvest small size 3. Harvest daily for food 4. Population regeneration very high 5. Easy to access or harvest 6. Exchange for food 7. Not aware of taboo 8. Use for bait 9. Live long after harvest and remove from seawater 10. Can be a problem if introduce to new areas without good study. 11. Not aware of its life cycle and ecology. 12. Eaten too by other animals
<p>LAND CRAB - WHITE CRAB</p>	<ol style="list-style-type: none"> 1. Population declining 2. Harvest female crab 3. Getting harder to catch 4. Not respect Taboo 5. Harvest females with egg 6. Harvest small size 7. Man/Woman/young and small children all can harvest crab 8. Clear bushes for development -destroying crab habitats 9. No harvest control in place 10. Population increase. 11. Excess harvest resulting in high waste 12. Women sell at market 13. Selection of crab to see if they are greased and

	<p>throw away if they are not</p> <ol style="list-style-type: none"> 14. No respect for crab as important commodity 15. Break put claws and discard rest of the crab 16. Natural death during egg bearing and when sun is really hot 17. Eaten by other animals 18. Move into new area as traditional spots are over fished or have been cleared up for development. 19. No taboo in place. 20. Not respecting rules to limit sale to only 5 ropes of crab with each rope of not more than 10 crabs 21. Money they earn for crab is decreasing every year 22. Crab request or order from outside the village order 23. Almost everyone can access crab bay to collect crab 24. Chief does not respect taboo he places 25. Chief o authority does not consult all village stakeholders before establishing taboo 26. Not sufficient information on the life cycle and ecology of the crab.
<p>LAND CRAB - BLACK CRAB</p>	<ol style="list-style-type: none"> 1. Is distinctively more seasonal than white crab and available only for a shorter period Nov - Feb. 2. It is tastier when it carries eggs and grease. 3. Sale faster than white Crab <p><i>Note: Other concerns are similar to the white crab.</i></p>
<p>TROCHUS</p>	<ol style="list-style-type: none"> 1. Use as food and sell shell. 2. Discard shell if there is no market 3. Number declining and over fished in same areas 4. Dive at night to catch 5. Harvest undersize 6. Sellers do not respect law for troches 7. Collecting troches even if they do not need to pick them 8. Sell only or interested in meat only for orders 9. Exchange for other food 10. Respect under size for sale but not for food

	<ol style="list-style-type: none"> 11. No respect Taboo 12. Reef is not productive 13. Seawater is not clean due to run off from large river beds
REEF FISH	<ol style="list-style-type: none"> 1. No harvesting control for food and sale 2. Use new fishing technology easier to catch fish. 3. Poison fish with vines 4. Not sufficient information about the life of fishes 5. Easier to catch when carrying egg because they are less mobile and come near shore 6. People are very familiar with good fishing spots resulting in localized over fishing 7. Fish population declining 8. Adults, females, youth and children all can fish any time they want to. 9. Not respect Taboo 10. High demand for fish for fund raising activities towards varies community stakeholder groups such as church, women and youth groups. 11. Population increase 12. Satisfy fish orders. 13. Chase fish as a bad method 14. Set gill net overnight 15. Use for bait 16. Over harvest for specific needs 17. Young people hobby to go diving for fish 18. Depend on fish for income when copra price is bad. 19. Everyday activity.
MANGROVE Natongtong	<ol style="list-style-type: none"> 1. Cut down for house construction 2. Easy accessed quality timber 3. Make fire for pikniquing or outdoor camping within the roots 4. Dig out roots when looking for shells, crabs and oysters 5. Cut down for new developments

	<ol style="list-style-type: none"> 6. Cut down to use for fence posts. 7. Sale for money as posts 8. Not respect Taboo 9. Not enough knowledge on the life of mangroves.
SURF CLAM Kokas	<ol style="list-style-type: none"> 1. Harvest for food and sale 2. Used to be traditionally women fishing but now men fish them. 3. Easy to catch 4. Distractive method used 5. Not enough information on life. 6. Cyclone can affect the habitat
CLAM SHELL	<ol style="list-style-type: none"> 1. Resource is declining 2. Not enough knowledge on life of clam. 3. Use distractive method 4. Good meat sought out for local dish laplap. 5. Collecting undersize 6. No Taboo in place

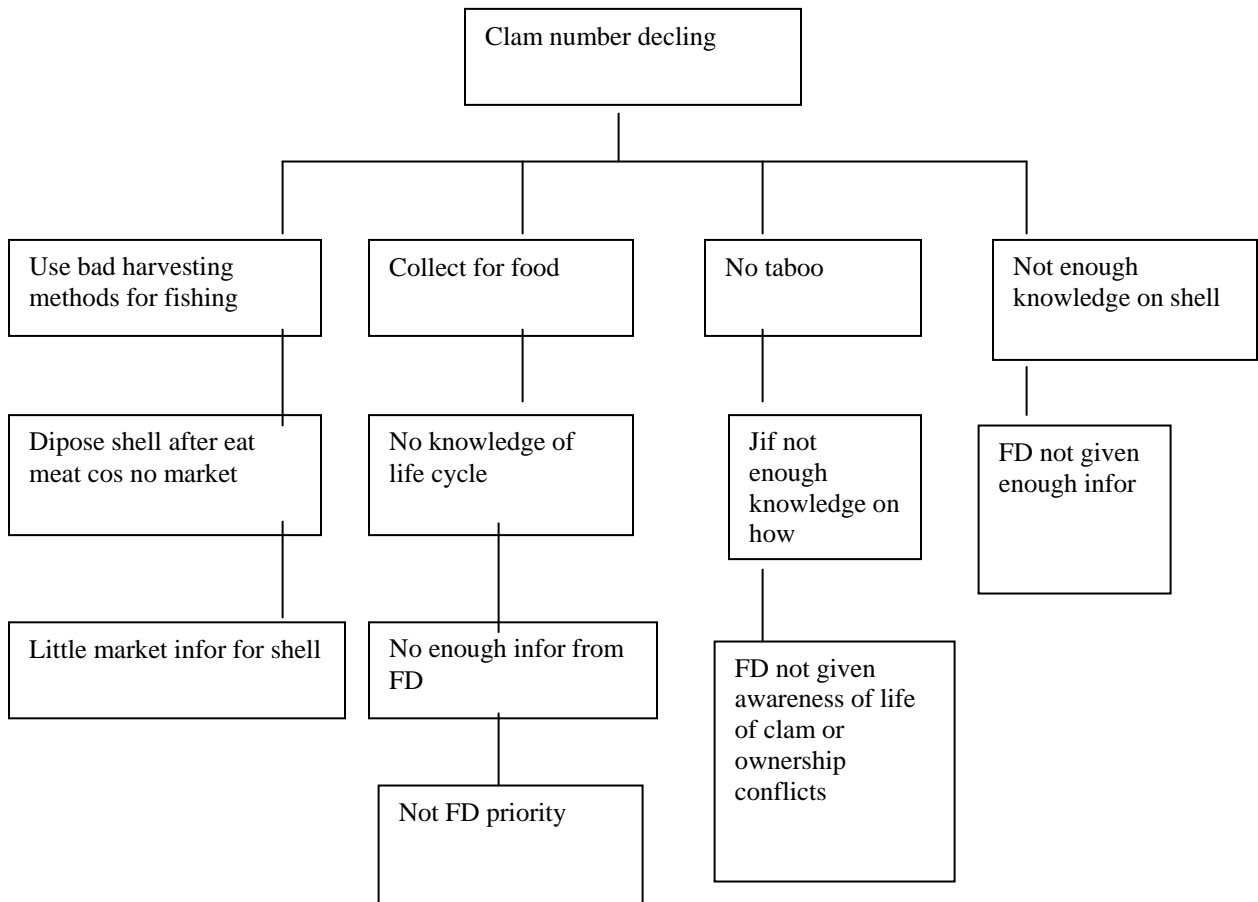
Problem Analysis

The workshop selected the 9 highest ranked resources for problem analysis and finding root causes using a problem tree exercise. However there wasn't enough time during this session to identify opportunities using a solution tree.

The analysis are presented here as results of exercises done during the workshop without any furnishing from the author. This is perhaps useful in reflecting the understanding that has transpired. However the problem analysis will need to be reviewed and further developed by the project staffs for logical linking to a final Participatory Problem Analysis and opportunities for addressing the concerns highlighted.

Resource - Clamshell

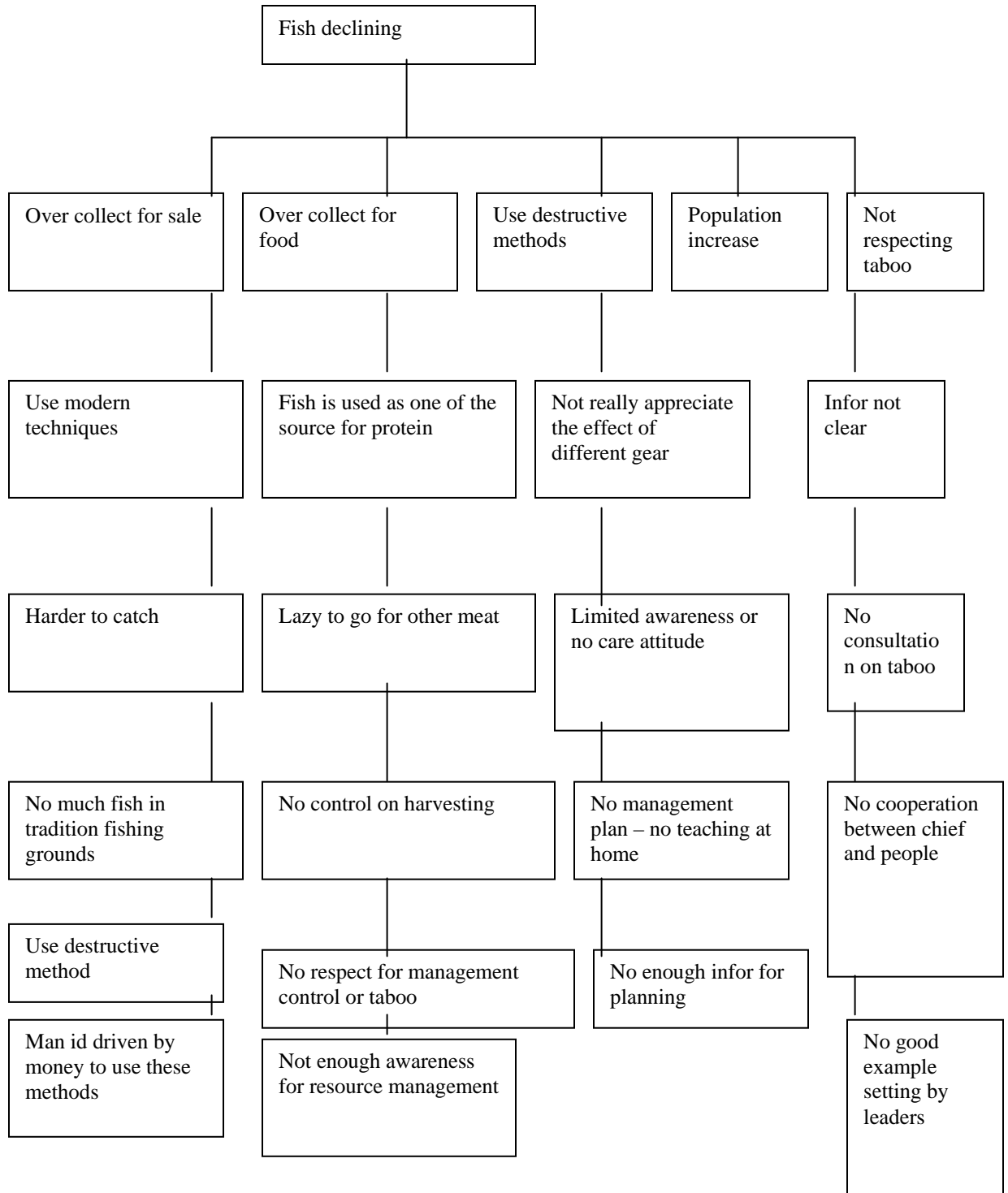
Problem - Depleting resources



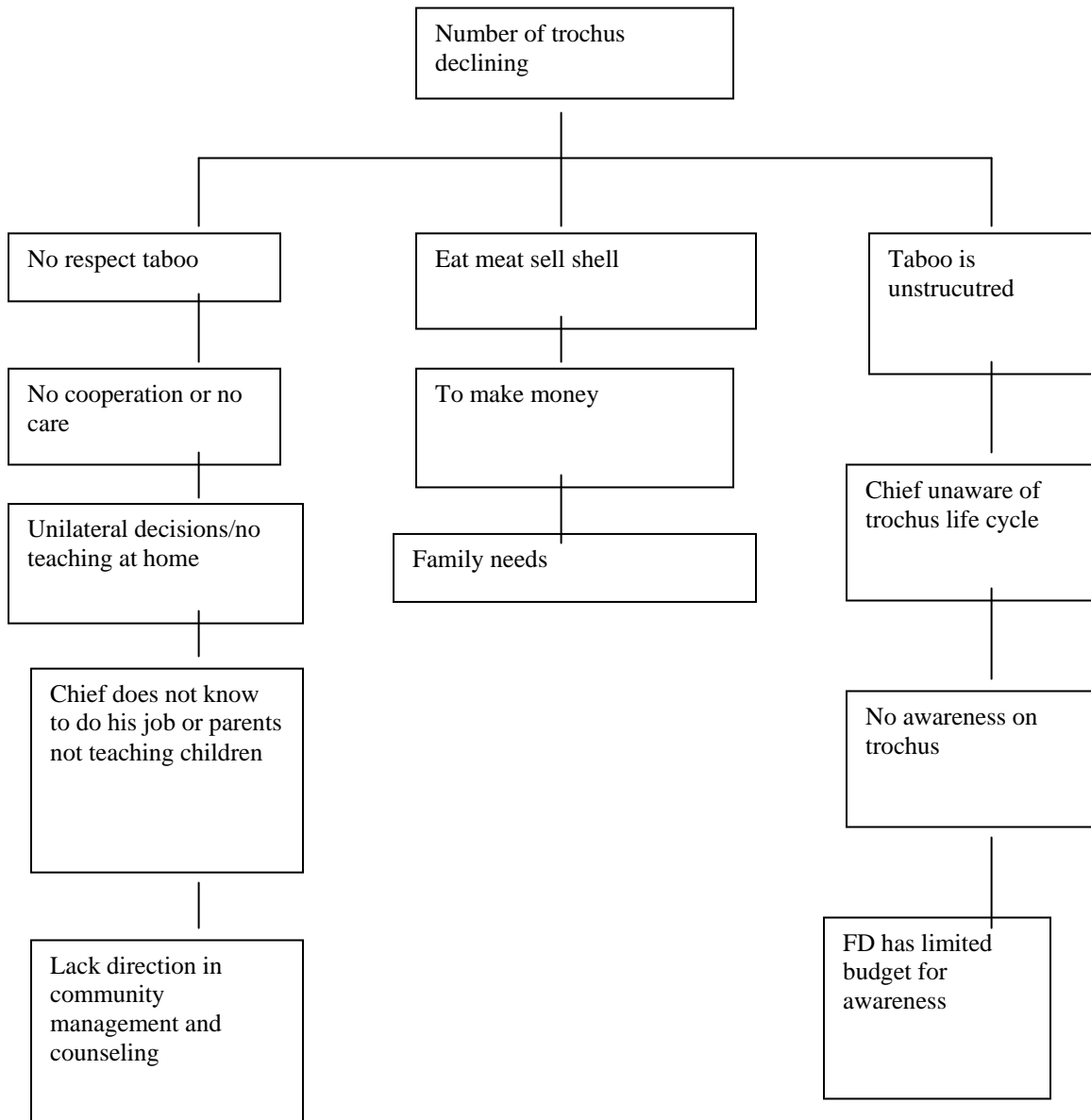
Clamshell is mostly harvested for food or meat. The shell is usually discarded, as there is no known market for it at the moment. There is no specific regulation for its conservation however some communities like Uri and Maskelyn has take own initiatives to conservation this resource.

Resource - Reef fishes

Problem - Depleting resources

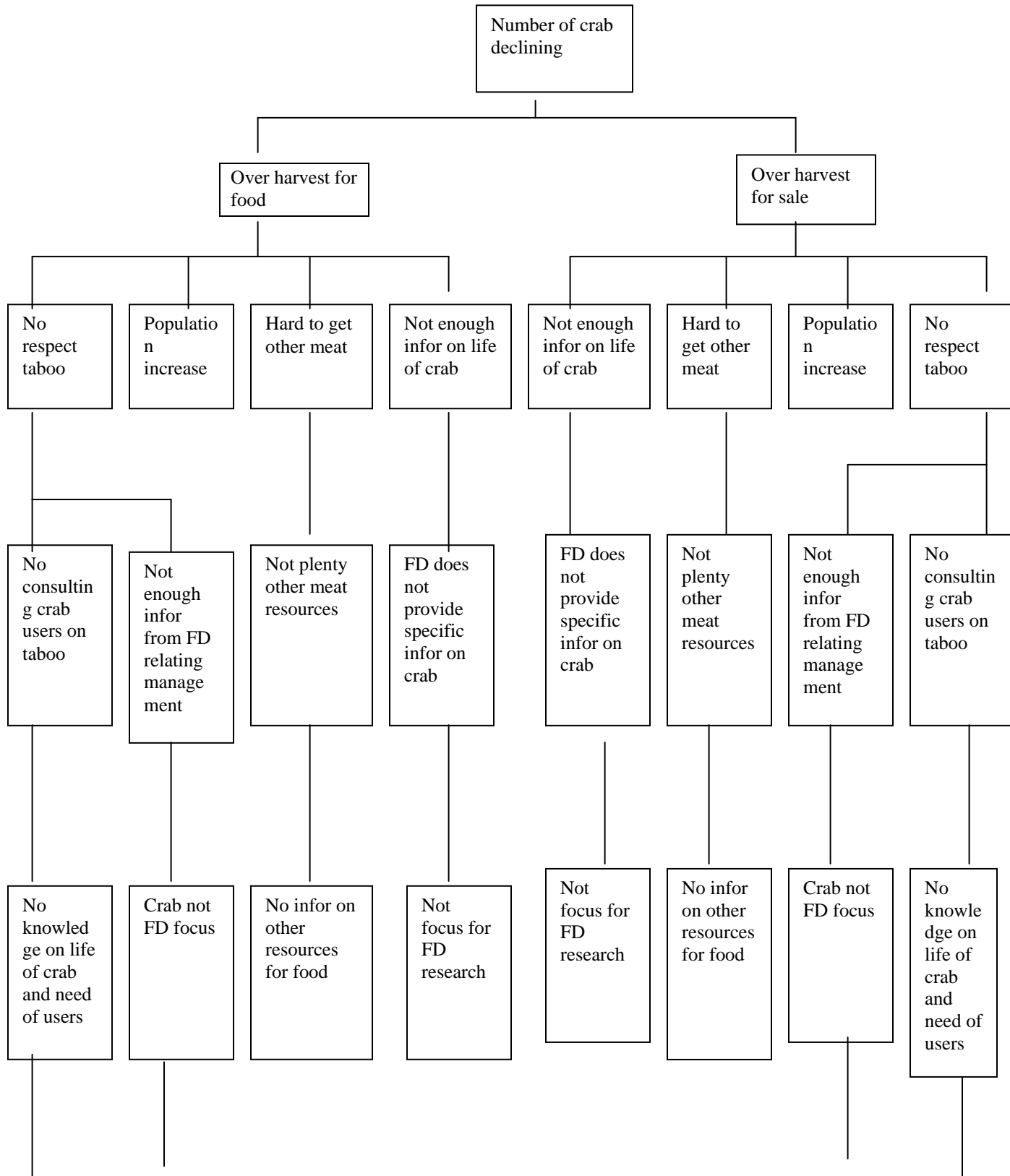


Resource - Trochus
 Problem - Depleting resource



Trochus had high value and has been fished in Malekula for commercial purpose for over a decade. It is now recently introduced by Fisheries Department to Crab Bay to replenish the reefs with good initial results.

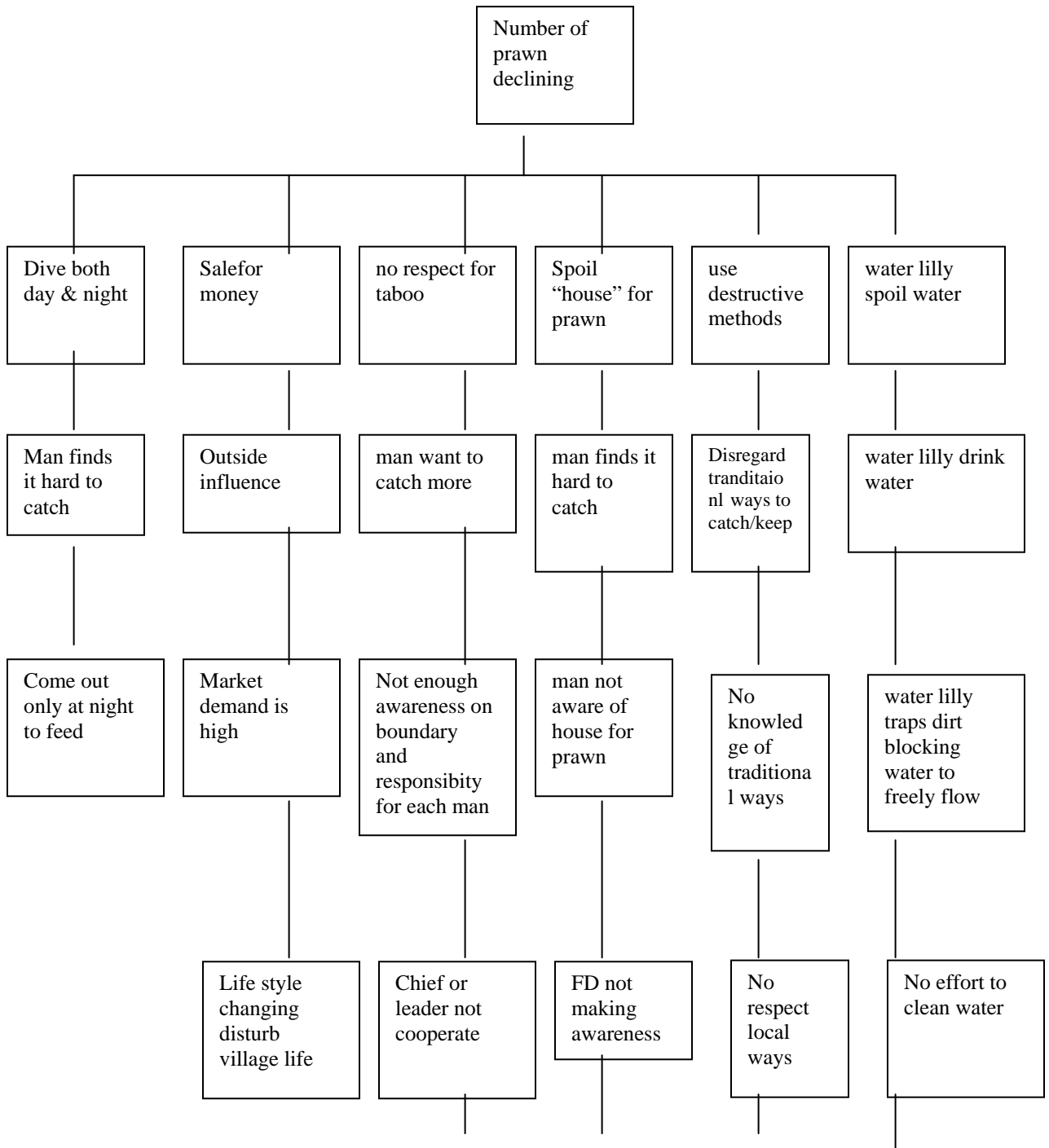
Resource - Black crab/White crab
 Problem - Depleting resources

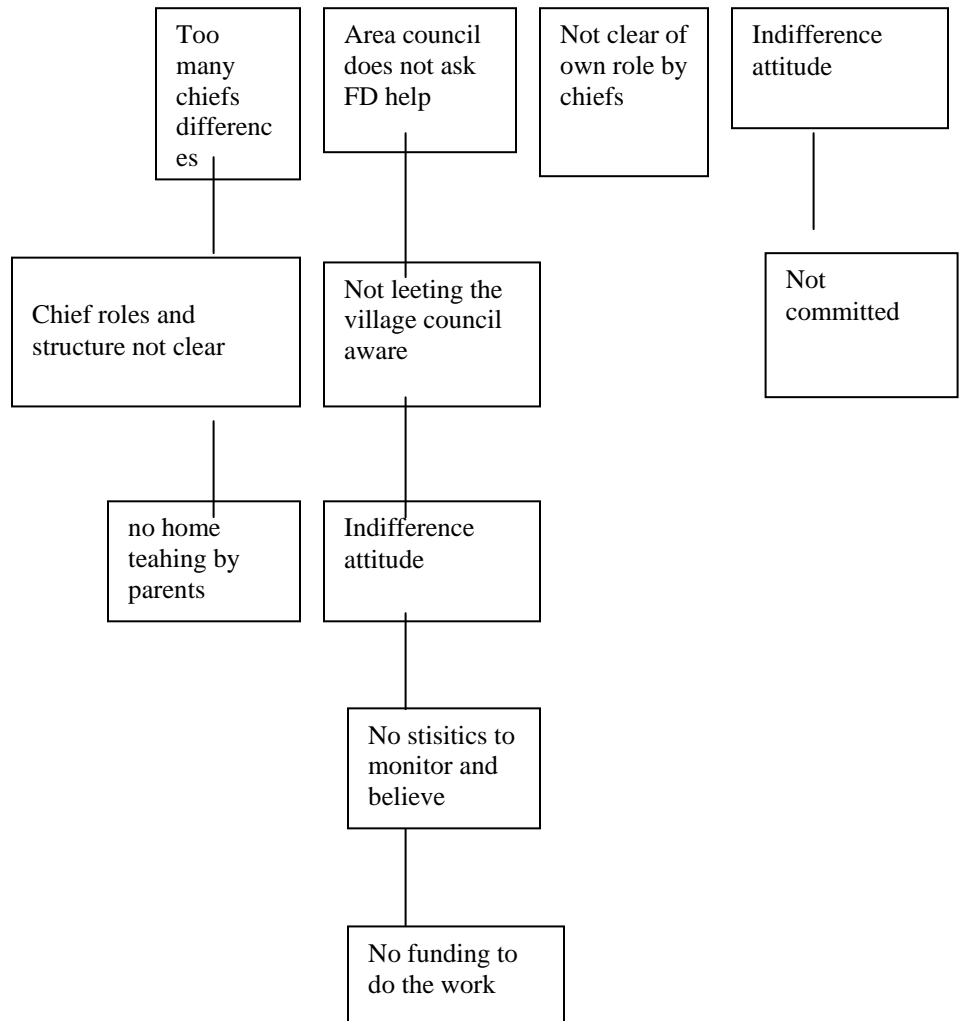




The Land Crabs especially the white crab is rated by the coastal villages within the Crab Bay area as the most important resource. It provides them with protein and source of money for households. However it is reported it has been harvested without much control. There is no known legislation for managing land crab though communities have started to take some initiatives such as the MPA of Crab Bay to conserve the resource.

Resource - Freshwater Prawn
 Problem - Depleting resource





Freshwater prawn is identified by inland villages of Crab Bay area to be the most important resource. It is a high valued food product in high demand by resteraunts related to tourism industry as well as important protein source for the people. Though there does not seem to be any program at the moment to develop freshwater prawn in Vanuatu.

(Data for Mud Whelk, Surf Clam and Mangrove for problem tree incomplete or missing).

The problem analysis clearly indicated the concern for the decline in resources. The root causes of problems could be pooled under these categories:

Resource management consciousness

Malekula being a big island and blessed with huge resources. This has created misconceptions in peoples' mind that the resources will always be there to harvest. It makes people to takes things easy say compare to say, Paama or Ambae where people really need to work hard to get meat for their meal. The saying goes "when you have plenty you get lazy or ignorance'. The resources of Malekula are being harvested without control, virtually raped by traders until Uri Island and Maskelyns decided to establish conservation areas. This was more recently followed by Crab Bay placement of a Marine Protected Area. There is also some conservation on part of Dixon reef on the western part of the island. However there is a good need for awareness raising to communities concerning the proper management of their resources as the analysis have shown, most resources are being heavily fished out.

Lack of information and awareness on resources management issues from line agencies

Land Crab is an important resource for most of the islands of Vanuatu as food and money sources. And yet the Fisheries Department and Environment Unit have not engage study or compile information on the life and ecology of the crab. Fisheries instead introduced trochus into Crab Bay. The line departments involved with resources and environment management should develop provincial strategies for targeted resources and collaborate with international institutions to study and make available technical information for dissemination to community stakeholders to enhance their capacity to better manage their resources.

Institutional and capacity building to properly institute and monitor resource management regimes

The complexity of socialization makes resources management very difficult. This include land ownership versus community leadership, different roles of custom chiefs from tribal chiefs, higher demand for money to traditional bartering with modernization of cultures and emerging socio-economic needs. There is loss of respect and disintegration of local cohesion and unity with in

the community as people become more enterprise minded and complete for individual status. The evolution has meant that the chiefs and leaders not only demand respect but they need to have a good level of understanding to lead and strong institutions to help them govern

SWOT ANALYSIS

The workshop ran a SWOT analysis on the certain aspects of the operation of the MPA as a training exposure of this tool to participants. However it was intended to generate discussions how local people relate themselves to it and their perceptions of its effectiveness, weaknesses, and opportunities for improvement.

Issue/Action	Strength	Weakness	Opportunities	Threats/Risks
MPA	<p>Resources increase</p> <p>Reduce environmental disturbances</p> <p>Resources adjacent to the MPA area witnessing fish abundance and size as well as catch</p>	<p>Enforcement weak</p> <p>no gat man is actually monitoring the area far from villages covers a big area to enforce by sighting</p>	<p>More public awareness for reasons for MPA - use Radio and news paper</p> <p>Put up signs to show the boundary of the area</p> <p>Select village monitors</p> <p>Review the total ban system for more practical approach</p>	<p>Total entry ban into the area threatens access in mere traveling between unprotected areas through the MPA area</p> <p>Compensate time of monitors to motivate</p>

Committee	<p>Polled from all villages concerned for one common interest</p> <p>Committee member gives awareness to their own villages</p> <p>Committee members are village leader including chiefs</p>	<p>No cooperation</p> <p>No female in committee</p> <p>Selection hemi kam aotside FD (as a start)</p> <p>Management structure is not fully complete</p>	<p>Not clear whom committee reports to?</p> <p>Include women in committee once structure is completed</p> <p>Improve committee</p> <p>Go back to villages to select members after instituting a management structure</p>	<p>Women not confident</p> <p>Some member may not accept being replaced</p> <p>Identify the various interest and stakes for MPA and ensure all is properly consulted for new changes that could improve the MPA to be respected by all</p>
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The feedback was encouraging and they are keen to continue to look at other aspects on the MPA however time did not allow for this. However it

would have been interesting to assess the marketing quota on crab the MPA placed on marketing of crab at local market at Lakatoro.

POST WORKSHOP

The workshop was only able to go through problem analysis using problem trees. Even so there seemed to be a need for tidying up a lot of them. In addition technical inputs are required from government services and other concerned stakeholders to ensure root causes highlighted are more realistic as possible and missing data are included. This would involve mainly senior officers from the provincial and national services especially the MALAMPA province, Fisheries, Forestry and Environment. A two day consultations could be convened for this purpose as well as being an opportunity to analyze potential solutions leading on to initiating planning process and project mapping.

The results of this analysis would be taken back to the participating villages and local stakeholders for their feedback and final endorsement. The project staff would thereafter progress to assess the options, plan and complete the pilot project designing.



Fig 5: Small Working Group in deep concentration

DISCUSSIONS

Training Process

The training was mainly supported by handouts drawn from the Facilitator Kit. However due limited time between the completion of the kit and the workshop not all materials were translated to "bislama" and simplified and even sorted. The handouts were given out to participants after the introduction each exercise or topics so as not to disrupt the attention given to the trainer. They were provided with binders to file the handouts and notes. The training program is in the **appendix 1**:

The training delivery consisted of an introduction and presentation of at least one prepared example of the exercise or tool. This is followed by having participants breaking into small working groups to do the exercise themselves using one of their own villages to do. At the end of the exercise the groups make presentations in plenary followed by general discussions and finally a round up by the trainer highlighting learning opportunities.

The working groups are selected around the main participating villages and included both male and female participants. And efforts are made to ensure everybody in the group has a fair chance to contribute to discussions and take part in the presentation in plenary. The groups are more or less the same through out the training and were assigned at least one supporting facilitator to provide advice when the need arise.

The first part of the training that focused on preparing the participants to collect data and especially the resources management issues took 7 days. A fair amount of time may have been spent on raising awareness on development concepts and tools for collecting social data that the workshop had to rush through the most important exercises concerning resources concerns. And the need to give the participants enough time to prepare to go out into the villages for the consultation also squished the time spent on exercises like problem and opportunity analysis.

The second part, which is wrap up, took another 3 days including a day spent to draw all the primary data for all villages together by the core group. The workshop concentrated on analyzing the resources data collected from the village consultation. The focus was on the resources management data and analysis. The other data were input to the computer to be summarized into village profile and returned to the villages at a later date. Following the presentation the resources were ranked for importance to the Crab Bay area. The workshop came up with 9 highest ranked resources to be analyzed. Using these resources the core facilitating team compiled the prepared the list of concerns for each resource using the results presented by the village teams. And had the participants ran the actual analyze using the problem tree in small working groups. This provided more opportunity to do problem tree using the real concerns raised by each village.

Towards the end it was clear that there won't be enough time to do attempt exercises the solution tree. It was also noted that exhaustion started to build up as participants were getting restless and sessions become disruptive. It was also felt that since they were having problems with the problem tree it would be unwise to introduce a new exercise. It is considered that solution tree could be done by the project staffs and presented to the community for endorsement at a later stage.

Participation

The participants were selected by IWP in consultations with the village leaders and MPA committee. A few nominees who could not attend sent in their family members instead. Most of the participants are young people to middle age while only 7 are elderly. A list of participants in **appendix 2**:

The group work encouraged most participants to actively participate though male dominance was evident. The female participants are mostly young girls and year 10 leavers and contributed well to discussions. It is the girls in all groups that do the writing.

The over-all participation was really good. A number of male participants have gone through similar participatory planning approach in the past with

the Land Use Planning Office have assisted in the smooth operation of the working group. The chiefs, MPA members and village elders among the participants provided useful comparison in management practices between the traditional and present time.

Village Consultations

For these consultations the local facilitators did their own villages with assistance provided by at least a supporting facilitator. The consultations were principally for collecting data using the steps provided in the section above. There were only required to run through a problem tree on the depletion of the white with the community to raise awareness on the tool used to analyze for root causes. There were not required to do the solution tree or opportunity analysis. However the problem analysis provided an opportunity for general discussion on potential solutions. The feedback from village consultations was generally satisfactory even for some villages the level of participation was reported below expectations.



Fig 6: Small Group Work during Uripiv Data Collection consultations

Practicality and challenges

Though the villages have interest in resources at crab bay project sites, it is fair to say that the most affected villages would be those within and adjacent including Barrick, Loune, bushman bay, Tevaliaot and Mapest plantation and Portindir. The others including Uripiv island, Limap, Tebibi & Taremp, Hatbol and Lingarak though have free access to Crab Bay, their demand for resource use for the area is relatively low.

The first challenge for IWP is that it is not dealing with one community but several villages covering a good part of Central Malekula Area Council, villages with different perceptions to resources management issues. The second is to identify a workable management structure that would incorporate the different village interest to work together to promote sustainable resource management individually though this should be done complimentary to the pilot project. Apart from perhaps the Presbyterian Church organization structure there is not a structure in place for working cooperatively, apart from the 18 months old Marine Protected Area initiative. The MPA ran by a committee that represents the villages from Portindir to Tebibi & Taremp on the coastal and Lingarak and Hatbol to Limap in the interior seem to be a good institutional basis to explore by IWP. It is considered that institutional strengthening has to be a pre-requisite for any development activities to ensure long-term sustainability and success.

The data collected is broad and not only relates to resources management so it is likely individual village profile could be developed as a secondary output to the ranked resources management analysis.

The MPA is a good discussion point by the workshop however the initial tendency of using the MPA as a management prototype meant that participants were not given the opportunity to look more deeply into the reason why the MPA was set up and its objectives. This has led the workshop to do a SWOT analysis for the MPA. The existing committee was selected by Fisheries Department and may not have the benefit of wider consultations for its goal and structure. The ban is inclusive of any living things that finds itself in that area and is totally out of bounds. The benefit is the increase level of resources to harvest after 3 years.

The chiefs or management authority of the area are to be consulted on any new development in the area before the Province can give its position to any new investment or development in the area. It is therefore important to keep this authority in the picture and it be given the over-all management authority over the MPA and the committee. As it is the MPA enforcement is weak as committee members are not accountable to an authority except to seek the police assistance.

Stakeholder analysis created some confusion initially as it is new. Some supporting facilitators were over cautious over the tool so that participation was held back initially - especially with the use of the table of matrix. The difficulty resulted in a decision not to analyze the stakeholders in the village but merely identify them and describe their activities relating to the management issues. And it was found that stakeholder groups are not distinctive. For example collector of crab could be women, kids, and men and youth even it is the women that normally ended up selling crabs at the market in Lakatoro. There appear to be the same group appearing for most NRM issues



Fig 7: The workshop encourages women's participations

EVALUATION & LESSONS LEARNT

Daily feedback through simple evaluation was started but not sustained. The three days evaluation and end of workshop sample forms are included in the **appendix 4**: Feedback was also provided by the supporting facilitators giving their own assessment of the workshop. These feedback together with the Trainers own assessment form the basis for the lesson-learnt section of this report.

Preliminary visits would have to ensure the right people are engaged so that everybody is quite clear of the workshop expectations and fully participated in the actual data collection. The success a workshop depends on good preparation and available background information as noted in parts of this section. It was reported by some supporting facilitator that village turn out for the community consultation were low and there seemed to be lack of coordination on part of the chiefs. It may be that there was a break down of communication between the persons IWP engaged and the chiefs in some villages. IWP engaged the local Fishery Officer to coordinate local organization.

The background and socio-economic data collection exercises that took a good part of the workshop could have been done or mobilized during preparatory visits so that the workshop resources dealt specifically with identifying and analyzing resources concerns and solutions.

The tools and exercises are very useful in participatory planning process however the application of each tool and exercise would depend on each situation and the resources given to such a workshop.

It is important to draw specific resource focus before or earlier on in the workshop so for proper allocation of workshop resources. This would give the village specific resources to draw the concerns from. This way the analysis would be more comprehensive because they are dealing with fewer resources.

Careful selection of local facilitators that have direct interest in resources management issues with a minimum level of education. This is to ensure they fully participate and actively interact stimulating better learning opportunities, and to achieve a good pace. Most of the participants were good in participating in the training session however only some could utilize the skills and knowledge to facilitate the community consultations. It was good to bring in many young girls however adult women who are directly involved in marketing and managing homes could influence discussions with first hand situations and experiences. It was good to have some both elderly and young chiefs participated.

The project staffs and the trainer have not properly briefed the supporting facilitators in the tools and approach used for the workshop. This has resulted in situations where conflicting advice given and even seen some obvious disagreements among the facilitators

The workshop was fortunate to have the Fishery, Forestry and Women representative involvement that have provided technical input to the analysis and provide expert advice on selected issues.

Checking of training materials and photocopy and translate into "bislama" should be done in good time so that handout and teaching aids be provided without disruptions.

Stakeholders' analysis is an exercise that did not go too well so that in village consultation it was decided to only identify them and activity they are involved with instead of ranking the level they impact and affected by the issues. It is revealed that there is little division of labour when it comes to resources management issues. For example although women are primary seller of crab all peoples in the village are involved in fishing the crab. The same woman that sells crab is also selling taro or fruits and nuts. The family nucleus is strong so that what the wife or husband is doing, it is doing for the family rather than itself as a separate stakeholder.

Due to the sensitivity of land ownership, unfortunately the workshop did not specially analysis the stake of landowners relating to the resources management as it would have liked. This also true for emigrants who are brought in to work in the plantations

The existence of the MPA is a good basis for future involvement of IWP though can become a prejudice and limit open discussion on management regime and new ideas

Provincial Council staffs were busy and none took part on a full time basis though national service extension staff based in the councils had participated

Dealing with 9 communities of course is harder to do than if we had dealt with one community. As the consultations shows there is a marked difference in perceived important resources. As much as it is a challenge to deal with diverse resource priorities, a project that would incorporate all these needs could be more challenging. It was therefore decided that each village data could be compiled into village resources profile to be returned to them subject to availability of fund to bind them.

Problem analysis was not done thoroughly enough due to time constraints and unfamiliarity by participants and some of the supporting facilitators. There needs to be time given to group work in smaller groups based on familiarity on the resources or concerns analyzed rather than selected by random. Give more thoughts to problem tree and analyze causes broadly, specific with causes, test the cause by reverse the question to see if it makes sense.

It is important to involve technical inputs from senior officers of concerned services dealing with natural resources harvesting and management, and any other stakeholders that may have high interest in resources management and community-based projects.

The duration of the workshop is too long for participation concentration. With a well-planned preparatory visit outputs, a workshop consisting of training and data collection should take a maximum of 7 or 8 days.

Recommendations

The following are the author general recommendations on options to be considered by the IWP for addressing the resource management concerns highlighted during the PSA for Crab Bay Area

1. Establish or re-enforce the Crab Bay Area MPA management structure to become the institution facilitating input and ongoing support to the pilot project.
2. Review and formalize the terms of reference for the MPA in consultation with the relevant stakeholders for a more focused resource management regime.
3. Engage Fisheries and Environment to conduct resource assessment baseline study to support the MPA or resource management plans.
4. Produce training and awareness materials on important resources and disseminate to communities through follow up visits.
5. Assist Malampa Province identify community-based profitable environment projects for the area

APPENDICES

Appendix 1: WORKSHOP PROGRAM

Program blong Participatory Situation Analysis long Crab Bay communities long Malekula <u>12 - 28 April, 2004</u>		
Week 1		
Monday 12 April	Ol man blong woksop oli kam wan ples long Lakatoro.	
Tuesday 13 April 8.00am- 9.00am -10.00 am 10.45am -12.00 12.15 1.00 pm	Setemap ples blong woksop Woksop i open Introdaksen mo background blong woksop LUNCH Wanem impotence blong wokshop	Lakatoro Provincial Conference room
Wednesday 14 April 8.00 am 10.00 am 11.00 am 14.00 pm 16.00 pm	Veleg map Village Populasen Village oganaeseses Risos map Sos blong livelihood	
Thursday 15 April 8.00 am 11.00 am 22.00 pm	Wanem nao ol problem long envaeromen tedei we i stap affectem laef blong yumi Whu nao i affected (long gud saed mo bad saed) long ol wan wan long olgeta problems yia Sisonol Calenda	
Friday 16 April 8.00 am	Transekt Prakticol	
Saturday 17 April 8.00 am	Practicol Seasonal Calenda	
Week 2		
Sunday 18 April	Announcem field work long veleg	

<p>Monday 19 April</p> <p>8.00am</p> <p>9.00 am</p> <p>16.00 pm</p>	<p>Transekt</p> <p>Hao blong analysem problem thru long discusen wetem ol man, woman long komuniti</p> <p>Hao blong skelem ol concens we oli impoten mo priority</p>	
<p>Tuesday 20th</p> <p>8.00 am</p> <p>11.00am</p>	<p>Hao blong skelem ways blong lukluk long ol impoten mo priority concens</p> <p>Mekem rere long filwok long veleg</p>	
<p>Wednesday 21 April</p>	<p>Kolektem ol bakgraon infomesen</p>	
<p>Thursday 22 April</p>	<p>Diskasem ol problem long enviromen long ples</p>	
<p>Friday 23 April</p>	<p>Hao blong adressedem ol problems yia</p>	
<p>Saturday 24 April</p>	<p>Finisim gud ol wok we i stap yet blong mekem</p>	
<p>Week 3</p>		
<p>Sunday 25 April</p> <p>4.00pm</p>	<p>Ol woksop participants oli kambak long Lakatoro</p>	
<p>Monday 26 April</p>	<p>Putum ol infomesen i kam tugeta</p>	
<p>Tuesday 27 April</p>	<p>Analysem Data</p> <p>Draftem output</p>	
<p>Wednesday 28 April</p> <p>8.00 am</p> <p>11.00 am</p> <p>14.30 am</p>	<p>Revisem output</p> <p>Finalisem output</p> <p>Ripot i kobak long ol veleg lidas mo nara representatives</p> <p>Closing ceremony mo presentation blong certificate</p> <p>END blong woksop</p>	
<p>Thursday 29 April</p>	<p>Evriman blong woksop i ko bak long ples blong olgeta</p>	

APPENDIX 2: LIST OF PARTICIPANTS

Participants List

Name		Roles & Responsibilities
Kevin Morris	Malampa Province fisheries Extension Office	Supporting Facilitators
Japheth Hidson	Malampa Province Forestry Extension Office	Supporting Facilitator
Elda Arthy Tomaki	Taveliaout	Local Facilitator
Jif William Muramur	Port Indir	Local Facilitator
Seline Song	Port Indir	Local Facilitator
Graham James	Limap	Local Facilitator
Sandrella James	Limap	Local Facilitator
Melisa Edwin	Mapes	Local Facilitator
Kalen Api	Lingarak	Local Facilitator
Retia Api	Lingarak	Local Facilitator
Manua Kaun	Louni	Local Facilitator
Sandra Toi	Louni	Local Facilitator
Elda Sing Matan	Tarim	Local Facilitator
Carolyn Kali	Tebibi	Local Facilitator
Kenry Ambong	Tarim	Local Facilitator
Mary Kernis	Tebibi	Local Facilitator
Jif Apina Maki	Uripiv	Local Facilitator
Mary Banga	Uripiv	Local Facilitator
Jif Fetnet	Uri	Local Facilitator
John Kensi	New Bush	Local Facilitator
Naomi Malau	Provincial Womens Representatives	Supporting Facilitator
Kalmari Noel	Barrick	Local Facilitator
Alexandra Theuil		
Anzel Kali	Hatbol	Local Facilitator
Spethly Jonah	Hatbol	Local Facilitator
Primrose Malosu	IWP	Supporting Facilitator
Roy Matariki		Supporting Facilitator
Trinison Tari	Environment Unit	Supporting Facilitator
Leah Nimoho	IWP	Supporting Facilitator
Wycliff Bakeo	Trainer	

APPENDIX 3: TOOLS USED TO COLLECT SOCIAL & BACKGROUND DATA

EXERCISE: SOCIAL MAP -Information about village

Draw a village map to show village plan or layout, household location, services or activities within village

Draw sketch of village

And information of services accessed outside the villages. Choose some youths with a few leaders of both sexes to complete this.

Service access

Service Name	Location name	Means of transport to the service (use by foot/by boat or by truck)	Distance	Cost of transport to the service

Purpose:

Usefulness of data:

Resources:

Butcher paper, markers

2- 2&1/2 hours

What lesson learnt (evaluation)?

Results (outputs)

EXERCISE : HEAD OF HOUSEHOLD MEETING – Information about population and the people of the village

Obtain the information from the head of ALL household in the village. Organization a meeting session with the heads of the household in one evening

Questions
How many people living in your house
How many are male
How many are female
How many are of age from 0 – 17 years
How many are of age from 18 – 55 years
How many are of age over 55 years
How many members living are only here temporarily for work, missionary, education, visiting and do not intent to remain permanently
Do you belong to a specific clan or tribe If yes, write down its name (for locals only)
What church or religion do you belong to

Purpose:
Household interview has a broader application subject to what questions you include

Usefulness of data:

Resources:
Butcher paper, markers, papers and pencils
30 minutes

What lesson learnt (evaluation)?

Results (outputs)

EXERCISE: VILLAGE ORGANIZATIONS – Information about different organizations and committees in the village

Analyze the organizations by:

1. Prepare the list of important organization
2. Ask each president and committee members of the organization on the list to provide answers to these:
 - a. Organization set up to do what?
 - b. What sort of activities does it involve itself with?
 - c. Does it involve the whole community or only an interest group? What is that group?
 - d. What are some of the strength and weaknesses of the organization?
3. Discuss results of the organization analysis together to draw relevance to natural resources management issues

Purpose:

Usefulness of data:

Resources:

Butcher paper, markers, papers and pencils

1 & 1/2 - 2 hours

What lesson learnt (evaluation)?

Results (outputs)

EXERCISE : NATURAL RESOURCES MAP – Locate natural resources & economic activities of the village

Sketch a physical map showing the natural resources and activities

Discuss results to note down concerns and opportunities relating to management issues

Ask a good representative from male, female and youth leaders (at least 8 people) to be involved if a village meeting is not possible.

Purpose:

Usefulness of data:

Resources:

Butcher paper, markers, papers and pencils

1 & 1/2 – 2 hours

What lesson learnt (evaluation)?

Results (outputs)

EXERCISE : LIVELIHOOD SOURCES – Information on sources of income and livelihood

List down sources of livelihood in three categories of natural resources, human resources and services. For services obtain number. For example number of bakeries in the villages. This can be done in extension to the resources mapping exercise with the same participants.

Purpose:

Usefulness of data:

Resources:

Butcher paper, markers, papers and pencils

30 minutes – 1 hour

What lesson learnt (evaluation)?

Results (outputs)

Evaluation (questions) for Daily Exercise

1. Ol samting we yu lanem tudei

Mi kasem gud save

Mi save smol nomo

Mi no save nating

Wanem samting nao yu no kasem gud save long hem. _____

2. Ol samting we yu lanem tudei

Mi interest tumas

Mi gat smol interest

Mi no gat interest nating

3. Ol samting we yu lanem tudei

Hemi niu

Mi gat save lelebet long hem finis bifo woksop

Mi save long hem mo mi stap usum finis bifo woksop

4. Wanem tingting blong yu long woksop

Feedback samples of Daily Evaluation

Evaluasen Monday 19 April 2004

Seasonal calenda

Ranking

Participatory problem analysis

Save blong participants long topic yia

Mi kasem gud save long hem	Mi save smol	Mi no save nating
16	11	

Interest blong particpans lon topic yia

Hemi interest tumas long mi	Mi gat smol interest	Mi no gat eni interest
23	2	

Wanwan topic

Hemi Niu	Mi save lelebet	Mi save finis
22	4	

Ol commens;

- Risos material kit i had blong mi andastandem
- Need blong kasem moa save blong hao blong mekem problem analysis

Evaluasen Wednesday, 14 April 2004

Risos mappings

Social mappings

Save blong participants long topic yia

Mi kasem gud save long hem	Mi save smol	Mi no save nating
21	2	

Interest blong participans lon topic yia

Hemi interest tumas long mi	Mi gat smol interest	Mi no gat eni interest
23		

Wanwan topic

Hemi Niu	Mi save lelebet	Mi save finis
13	11	

Ol commens;

- Sam wod i had blong andastan
- Nidim save blong tokbaot gud manejmen blong risos long veleg mo Komuniti
- Sam moa explenesen long ol activity mo topic.
- Sam moa exercise bae givhan blong mi andastandem gud

Evaluasen Thursday 15 April 2004

Brain storming concerns & problems

Stakeholders

Stakeholders analysis

Save blong participants long topic yia

Mi kasem gud save long hem	Mi save smol	Mi no save nating
16	11	

Interest blong participans lon topic yia

Hemi interest tumas long mi	Mi gat smol interest	Mi no gat eni interest
23	3	

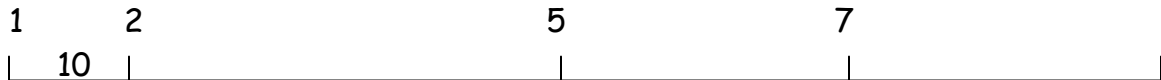
Wanwan topic

Hemi Niu	Mi save lelebet	Mi save finis
19	6	

Ol commens;

Forom Wanem?

4. Wanem nao lukluk blong yu long saed blong trening process mo long olgeta aktiviti?



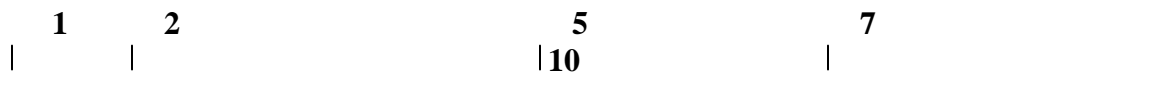
Very Bad
Good

Fair

Very

Forom wanem?

5. Wanem nao lukluk blong yu long saed blong organaesesen blong ples blong trening, ples blong silip, kaikai, transpot, allowance etc....?



Very bad
Good

Fair

Very

Forom Wanem?

6. Listim daon wan o tu samting workshop yia hao i giv han long yu, hao hem i niu mo hao emi helpem save blong yu ikam antap moa bikwan.

1.

2.

7. Hao nao yu ting yumi save impruvum kaen workshop olsem?

Sample feedback from supporting facilitators

Overall Comments - Trinison Tari, Environment Unit

Ol brief comments blong mi ia, emi base long observation, mo wanem mi harem long woksop long Lakatoro mo vilej.

Lakatoro Workshop

1. Simplifaem training manual/exercise

PRA tools blong collectem ol information/data emi really gud. Mo tu training long hem emi successfully carried out. Thanks to Wycliff Bakeo for all the hard work. Wan comment nomo se bae hemi mo gud yet blong simplifaem training manual/exercises i kam long Bislama. From samfala toktok long English i hard lelebet blong ol participants i andastanem gud.

2. I nidim wan gudfala map blong project site Crab Bay

Hemi no wan big issue be bae emi mo gud yet sapos i gat wan gudfala map blong soem pilot project site during woksop. IWP emi bin assume se evriwan we i stap long woksop i save location blong Crab Bay wetem ol vilijes we project i wok wetem.

3. Ino gat briefing long ol facilitators long Port Vila

Emi mo gud yet sapos ol facilitators oli should gat wan briefing long ol contents blong woksop. Tu, programme blong woksop i should ready tu bifo yumi ko long Malakula. Hemia i impoten blong yumi aware gud long wanem bae yumi mekem long woksop o long vilij. Otherwise yumi manej blong ko tru long ol samting ia bifo woksop i start.

General comments

4. Low Attendance blong ol man/woman long wanwan vilij

Turn out blong man long tu-tri dei woksop long wanwan vilej hemi about 20% or 30% long total population blong wanwan vilej. Hemi no soem wan clear indication whether evriwan i sapotem wok blong project or nogat. Limap for example, i gat 187 pipol, be namba blong attendance blong woksop long 2 dei, hemi range between 20-30 pipol nomo. I mas gat risons why turn out emi no really gud. Samfala risons emi:

- toktok ino pass gud about woksop (by Kevin??)
- Ol man i save about woksop, be oli no mekem effort blong attendem
- May be, oli gat ol narafala wok blong mekem long sem taem ia
- oli no andastanem or interest long project
- Ino gat gudfala cooperation or structure blong wok long community.
- I mas gat sam differences o raorao we stap

Generally speaking, i gat sapot long wok blong project long Crab Bay. Few pipol we oli attendem woksop long vilij oli expresem bigfala interests.

5. Ol participants long Lakatoro woksop oli soem fulap interest, mo i gat gud gender balance

Fulap long ol participants oli soem interests blong lanem ol samting. Mo tu participation blong olgeta i soem se oli gat sapot long project blong IWP long Crab Bay. About 80% long ol paricipants emi ol youth. About 20% emi ol jifs mo ol olfala woman. Namba blong ol man mo woman emi lelebet semak i.e. 50% male, 50% female. Hemi gud blong luk gender balance long ples ia.

6. Structure blong wok long wanwan vilij emi no clear

I tru i gat ol chiefs long wanwan kominiti. Be yumi no save whether cooperation between ol jifs mo pipol blong olgeta hemi gud o nogat. Mi luk olsem long sam vilij, ol chiefs oli no active inaf long wok blong olgeta so i no gat respect long olgeta.

7. Ino gat tabu long ol risos

Long fulap vilij, mi luk olsem ol jifs i neva bin putum tabu long ol risoses. Jifs oli never bin tokbaot wetem ol narafala lidas mo pipol long vilij, spos i gat need blong putum tabu long wan risos. Whether emi permanent tabu or seasonal tabu long wan risos we oli luk se namba blong hem iko taon.

8. Ino gat manejmen rules

Ol jifs mo nara lida long vilij wetem ol pipol blong olgeta, oli no sidaon tugeta blong putumap sam manejmen rules blong oli wok folem blong menejem risos blong olgeta. E.g. hamas crab long wan rope, mo hamas rope blong salem long market long wan market day by wanwan woman.

Wanem blong tingbaot blong mekem long fiuja

Hemi nid blong identify ol critical erias we IWP i save wok long hem. I gat trifala main tingting we mi ting se yumi save lukluk long em:

1. Provaedem mo infomesen about laef blong ol impoten risoses

Identify ol erias we yumi save provaedem mo infomesen long olgeta mo distribute iko long kominiti

E.g. Laef blong samfala impoten risoses olsem - crab, trochus, naura, oysters, natongtong, etc..

Tru long: Brochures, Factsheets, posters etc...

Yumi nid blong tekem photo long samfala risoses ia.

2. Impruvum wok blong ol jifs

I mas gat wan clear structure blong wok blong ol jifs wetem ol pipol blong olgeta. Relationship blong tufala i mas gud. Oltaem i mas get trust mo respect long ol pipol towards jifs blong olgeta. Spos ino gat respect mo trust, emi wan problem. Yumi mas traem blong brekem barrier we i stap???

Wanem blong mekem?????

- 1) Enkarejem wok blong ol jifs blong i kam antap. Impruvum working relationship blong ol jifs wetem ol pipol blong olgeta. How???
- 2) Kivim mo save, enkarejmen o tingting iko long olgeta blong oli luk save impotens blong lukaotem gud risos blong olgeta.

3. Project i save help blong strengthen MPA insaed long Crab Bay??

Setting up blong MPA mo putum tabu, emi own initiative blong ol kominiti. Hemi wan gud starting point long saed blong risos manejmen. Main tingting bihaen long MPA ia i blong protecktem o increasem namba blong ol crab. Be, nao ia tingting i includum ol nara marine risoses tu long Crab Bay.

IWP i save help wetem funds blong mekem wok long long ol eria ia?????????

1. Faenem stret eria blong MPA. Fisheries Department i save givhand blong mekem wok ia.
2. Fisheries Department mo Environment Unit i save mekem wan proper stock assessment or biodiversity assessment mo putum long wan ripot.
4. IWP wetem Fisheries Department i save help droemap manejmen rules or by-law blong risos manejmen long Crab Bay.
5. Sapos study i soem se sam risos emi depleted, Fisheries i save help out wetem restocking.

Enkarejmen toktok

Oltaem yumi mas tekem ol comments positively. Spos yu tekem negatively, bae i diskarejem yumi bigwan long wok blong project. Hemi wan challenge long yumi everiwan, be spos yumi wok olsem wan team, babae fulap gudfala tingting (constructive ideas) i kamaot. Mo yumi save handlem ol issues we yumi luk wetem manejmen blong ol risoses long Crab Bay.

Lessons Learnt from the PSA Community Training Workshop provided by Primrose Malosu

1st Week of Training - Introduction to Facilitators Toolkit and Exercises

- Toolkit need to be simplified more to the "grass root level" so as to allow discussions to be more transparent and everyone is satisfied.
- In between workshop sessions there must be at least 5/6 minutes break to wake everyone up or keep everyone on the "line" (for instance, someone can lead everyone in stretching arms and legs, or walking around the room or playing a short game etc....)
- In order to find out if everyone understands what has been taught simply ask someone from the participants (especially those who are quiet and don't really talk that much) to stand up and give his/her overall "save" about the workshop. From this we can find out if this particular person how much knowledge or understanding he/she has captured from the workshop and too, it would be an advantage for this person in gaining confidence in herself before she uses the tools in his/her community.

Arrangements

- Assistance needs to take note that there is a need to provide surplus materials for the workshop incase if there is a run down of materials.
- Preparation - Make sure to check if all handouts are in place and in order accordingly to each steps. Moreover, make sure that all hand outs are enough for everybody before hand.
- Posters have to be pinned up on the wall around the conference room (posters on environment or community posters) to make the workshop more realistic, friendly and convincing (eye-catching?)

Findings from the 1 week training

- There is no cooperation between the villages surrounding Crab Bay area
- The workshop participants have gained more interest on the Project and its activities and eager to learn more.
- The workshop has caused the representatives from each Krab Bay related villages, to work together for the first time ever.
- The Chiefs from several villages are very weak therefore don't gain the respect from their people....WHY?
 - a) Probably because they themselves don't set good examples to the community
 - b) They don't abide by the laws they themselves, establish. Eg. Taboos
 - c) They don't take part in solving problems in the community
 - d) They don't work closely with the Province or Area Secretary for Central Malekula?

- e) The people do not know how often they meet to discuss issues
- They do not have frequent visits or awareness from the Fisheries department. However, the Fisheries Department do involve the community, especially young people, to do the monitoring of trochus reseedling at Crab Bay and also seed weed programme.
- Not all the people in the community is aware of Fisheries Regulations in terms of harvesting of Marine Resources like Freshwater Prawn, trochus, oysters etc.. (especially the youths)
- Resources in Crab Bay is not an issue to several villages which are far away like: Tembibi, Tarem, Limap, New Bush compared to Villages like Louni, Port Indir, Barrick Hatbol, Bushmans Bay and Lingarak in which the people rely on the resources for mainly eating. People of Louni village are on the top of the list for they eat and market the marine resources, especially crab.
- The 2 points of Amal and Crab Bay are the MPAs. Need to map out the area for Project Information and Fisheries Department electronically.
- It was reported from the participants that all resources in Crab Bay area are not to be extracted from the Land down to the Sea. Marine Protected Area Committee has to provide information on the establishment of the MPA: When it started, When will the people have access to the area, what resources are protected (all the resources, or only some?)

2nd Week Village Consultation (Wednesday-Friday) - Louni Village

- Chief dominance and other male dominance in most of the discussions. The reason for this is the women are shy or afraid? to speak out.
- There were more people in the first day, Wednesday and less the next day because women were out collecting crabs and men going out to fish in preparatory for Market on Friday (Market demand is normally at its peak on Fridays especially on Government Pay days).
- Supporting facilitators need to be prompt to village meetings in order to gain interest from the community and moreover to keep everyone together before they disperse to their various working places. Need to remember not to take up too much of their time also in one day. A morning session is enough with them.

Findings

- Chiefs are very weak when it comes to responsibilities. They hardly establish taboos (In Louni, the last time a taboo was established, was in 1999/2000 for seasonal fishing) or have any local management rules. Because, of the weak responsibility the people don't listen to them (no respect?). Moreover, no cooperation whatsoever.
- Everybody in Louni depends on the resources from the sea to make money E.G. Fish, Crabs etc... People are aware of the taboo in selling crabs at the Market but they do not care because it is their only source of income. Copra and Cocoa is not their commercial practice.
- The stakeholders inside Louni village do not cooperate well.
- Women or men from other villages married to Louni villages realize that this daily practice is a problem and do all the talking whilst the others sit and listen.
- The village consultation has had a big impact on the people. The Chiefs and women gained more interest and realize during each step of the discussions, the problems that they themselves are contributing to their own environment and the future.
- The Problem Tree is the most powerful part in which both sides, women and men equally took part in because they start to get more and more clear over the problem issues. The question "Why" is effective in each stage of the problem tree.

Arrangements

- (Before sending each representation from the villages to announce meeting make sure to really clearly emphasize the importance of having everybody i.e. women, men and the young people to participate so that we do not collect a biased information etc...)
- Transport organization - Good to have 2 sets of transport each day so everyone is on time for the village meetings and back to base on time.
- Representatives from the workshop have to let the women in their villages to prepare food prior to meeting for their participation is definitely needed. (So therefore they have to prepare lunch first thing in the morning?)

* Overall I recon there is too much time spent on the training, 7days, whereas only 3 days spent in collecting information from the villages. It is important to get adequate information from everyone's contribution in the

villages. The 3 days is very short and also tiring for some of the facilitators who have to work 2/3 places during that time given.

3rd Week- Presentation of data Collection from Village Consultation

- Supporting Facilitators all have to enter data electronically and prepare raw data needed prior to the presentations. In this way, the other facilitators are happy that they have a collection of their data put together and are able to go through each data collection step by step.
- Not only do we need to get the Maps recorded on camera, but also the boys or girls from each village could draw up risos maps and village maps from the big butcher paper onto A4 paper so they can be scanned and included in each village profile.
- Involve the Malampa Province rep. To the remaining days of the presentation.
(And also the area secretary)

Arrangements

- Preparation of the closing ceremony.
 - Meeting with the ladies responsible for the preparation of food. Have to work a little faster to prepare the food on time set for the closing (note that the closing ceremony was 3 hours delayed).
 - other logistic arrangements also have to be noted like... the preparation of laces etc...

Overall Comments

- Very good participation from the participants. I have no doubt that they have shown great interest in the workshop and that they have learnt a lot of new things not only from the workshop but from their villages also.
- As a first time experience in community participatory the overall training was theoretically interesting and practically challenging during the second week in terms of information deliverance.



- The training was well delivered and very well captured. The toolkit is very useful that I am sure that it will have a big impact on any future community training.

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