

Improving management effectiveness for the Marine Protected Areas of Rodrigues (Indian Ocean).



Report on Community Consultation 1

November 2010 to January 2011

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1 Executive Summary

Rodrigues is a semi-autonomous dependency of the Republic of Mauritius, situated within the Mascarene Archipelago, a recognized global biodiversity hotspot. The island is of volcanic origin and is encompassed by an extensive fringing reef, with a wide shallow lagoon that covers an area of 240 km². Intensive fishing pressure in the lagoon has resulted in drastic declines of both fin-fish and invertebrate landings and degradation of lagoon habitats.

In recognition of the need to improve the status of the island's marine resources, the Rodrigues Regional Assembly (RRA) has gazetted new MPAs. The new MPAs include four marine reserves in the north (covering 24.2 km²), which were selected by the local communities with the support of the local marine NGO Shoals Rodrigues under a grant of UNDP/GEF/SGP, and were formally gazetted in 2007. In addition, a larger multiple-use MPA has been developed on the south coast (covering 43 km²) which was co-funded by a UNDP-GEF project, and formally gazetted in 2009.

A Marine Reserve Coordination Committee (MRCC) has also been established, composed of representatives of the relevant Government Authorities; representatives of the Fishers Associations; the local marine NGO (Shoals Rodrigues) and other key stakeholders. A preliminary management plan has already been prepared for one of the four northern reserves (Rivière Banane), and other activities such as the demarcation of these reserves have already taken place.

Building on this momentum, this project aims to contribute towards the overall marine conservation vision of the RRA by supporting the next stage in the implementation of the Marine Reserves. The project will provide the MRCC with training to facilitate the development of a new management plan for the effective management of the Marine Reserves in the north.

The project is being run by Shoals Rodrigues in collaboration with the RRA with financial support from the Global Environment Facility Small Grants Programme and the Regional Programme for the Sustainable Management of the Coastal Zones of the Countries of the Indian Ocean (ReCoMaP), financed by European Union. The project will consist of a series of training workshops and consultation meetings with fishers and tour operators to ensure that their interests are taken into consideration and addressed in the management actions.

This document reports the results of the first round of consultation with 102 fishers from 9 villages (Rivière Banane, Baladirou, Roseaux, Anse Goeland, Baie du Nord, Baie Malgache, Baie aux Huitres, Pointe L'Aigle, Pointe Palmiste). Of those consulted: two of the villages fish in or in proximity to the Rivière Banane Marine Reserve (24 fishers); one of the villages consulted fish in or in proximity of Anse aux Anglais (6 fishers); five of the villages consulted fish in Grand Bassin (70 fishers) and; two of the villages fish in or in proximity to Passe Demi (21 fishers). The majority of fishers have noticed a decline in fish catches in recent years and a good majority welcomes the idea of the marine reserves. They are however worried about how they will earn a living while waiting for the benefits of the reserves. The majority state that for the reserves to be successful there needs to be better regulation and enforcement and many suggest that fishers should work together with FPS to patrol the reserves. Most would be happy to do alternative forms of employment, although some villages asked for compensation.



2 Introduction

The four Northern Marine Reserves (Rivière Banane, Anse aux Anglais, Grand Bassin and Passe Demi) were originally identified with the support of the local community and they were formally gazetted in 2007. A management plan has since been prepared for one of the four areas (Rivière Banane), the areas have been demarcated, and other activities are underway within Rivière Banane. This project aims to develop a joint management plan for all four of the reserves. This report documents the first round of community consultation meetings which were held between November 2010 and January 2011. The purpose of these meetings was to build upon the discussions had during the selection and designation process. The overarching aims of these meetings were as follows:

1. To inform the local stakeholders (fishers, traders and tourism operators) that a management planning process is to commence, and
2. To capture any new concerns, and identify any specific issues at each of the sites.

The consultations mapped resource use patterns and attempted to identify existing conflicts / negative attitudes between groups of people involved in marine and coastal resource use.

3 Methods

It was proposed that consultations be held at 13 villages that were either in proximity to the Marine Reserves or where either was known that there were fishers that use the resources in the reserves (see Figure 1). The villages proposed for inclusion in this first round of consultation was as follows:

- **Rivière Banane**
- **Baladirou**
- Grand Baie
- Terre Rouge
- **Roseaux**
- Anse aux Anglais
- **Anse Goeland**
- **Baie du Nord**
- **Baie Malgache**
- **Baie aux Huitres**
- Pointe Monier
- **Pointe L'Aigle**
- **Pointe Palmiste.**

Consultations were arranged for 11 of these 13 villages (highlighted in bold). It was decided not to hold a meeting at either **Anse aux Anglais** or **Grand Baie**. The decision not to consult at Anse aux Anglais was because the majority of the fishers that use this landing site are from Terre Rouge and Roseaux. The decision not to consult at **Grand Baie** was due to the fact that there are now very few registered fishers left in this village, two of whom have been attending the workshops and the others are not interested in attending meetings. Meetings were arranged for Terre Rouge and Pointe Monier but these did not happen because: at **Terre Rouge** the meeting was organised for 28/01/11; nobody turned up but it is not known why the fishers did not attend this meeting. At **Pointe Monier**, a meeting was organised on two separate occasions (once on 26/01/11), but no one turned up on



either occasion. It is thought that this was because the majority of the fishers at Pointe Monier are either off-lagoon fishers or illegal fishers. The fishers from **Baie Aux Huitres** and **Pointe l'Aigle** were consulted at the same meeting. So in total 8 consultation meetings were held with 9 villages out of the originally proposed 11 villages.

The consultations followed the guidance provided see Annex 1. At each village, the fishers were welcomed and the reason for the meeting was explained. A map was shown to the fishers and they marked on the map where they fished. Each fishing area was given a name and fishers explained what type of fishing they did in those areas and the type of fishing gear used. The fishers were then asked a list of questions:

1. Are they aware of the marine reserves?
2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).
3. Do they feel that the area inside the marine reserve is healthy?
4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?
5. Have fish/octopus catches from inside the reserves changed over the past 5 years?
6. What do they think are the benefits of the marine reserves?
7. Do they have any concerns about the marine reserves?
8. What would make the marine reserves work better?
9. What would they like to see improved?
10. What activities do they think should be regulated inside the marine reserves?
11. What activities would they not like to see regulated inside the marine reserves?
12. How many people from their village fish inside the marine reserves?
13. Which marine reserves do they fish in?
14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?
15. Do fishers from other villages fish in the marine reserve? Which villages?
16. What types of fishing take place inside the marine reserve?
17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?
18. Where are the fish/octopus sold?



19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?
20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?

The questions provoked long and some short responses and the consultation team captured these responses. Not all fishers wished to comment. After about one hour, at the end of the meeting, the community consultation team stayed with the fishers for a while to hear what other things they had to say and to capture these comments.



Figure 1: Map showing the location of the villages and fish landing stations mentioned in the report.

4 Results

The first round of community consultations consulted with 102 fishers from 9 villages: two of the villages fish in or in proximity to the Rivière Banane Marine Reserve (24 fishers); one of the villages consulted fish in or in proximity of Anse aux Anglais (6 fishers); five of the villages consulted fish in Grand Bassin (70 fishers) and; two of the villages fish in or in proximity to Passe Demi (21 fishers).

Some of the questions provoked long discussions. Fishers expressed concerns about their income and explained that they are relying on the Bad Weather Allowance to survive. A good majority of fishers still welcomes the idea of the reserves but they are worried about how they will earn a living while waiting for the benefits of the reserves. Most of them are ready to do another job instead of fishing for the time it will take for the reserves to produce something.

The results of these consultations are documented in full in Annex 2. The discussions with these communities and the responses to the specific questions are summarised below:

4.1 Marine Resource Use Patterns – Fishers Knowledge

The fishers were asked to draw on the maps the areas where people from their village fish (i.e. different areas for different types of fishing, different times of the year etc.). Examples of the maps produced are shown in Figure 1. The fishers were then asked to provide further details about the fishing method used (i.e. line, basket trap, seine net etc), the characteristics of the fishing ground (e.g. on sand/coral/seagrass), the main target species (i.e. what they go there to fish for) and the time of year when this ground is fished. These observations are summarised below:

Rivière Banane Marine Reserve

- Seine net fishing (illegal) occurs day and night (all year round) targeting jacks, unicornfish, rabbitfish, goatfish. This is sometimes on foot and by boat during low and high tide respectively.
- Basket trap fishing targeting unicornfish, parrotfish, and chub (Congo) (January to February).
- Octopus fishing on foot using harpoon is of very high importance during low tide only (all year round).
- Spear fishing targeting octopus (all year round).
- 'Batatran' to catch small fish (illegal fishing)
- Tourism activities take place in the reserve between January and December. There are at least 6 tour operators that offer snorkelling and diving.

Anse aux Anglais Marine Reserve

- Octopus fishing on foot using harpoon (all year round)
- Line fishing by boat targeting unicornfish, rabbitfish, goatfish (all year round)



- Basket trap fishing both within and off-lagoon, targeting parrotfish, surgeonfish, goatfish, emperors, unicornfish, rabbitfish (all year round). According to fishers there are around 100 traps around Passé Cabris (high importance).
- Seine net fishing targeting unicornfish, jacks, surgeonfish, rabbitfish, parrotfish (during the open season between March - October)
- Squid fishing, line fishing (trolling - la traine) in the reserves between February to September.
- Spear fishing targeting octopus, unicornfish, emperors, parrotfish and shells, between January and December
- There are always conflicts between the registered fishers and the illegal fishers; sometimes the legal net seine fishers use small size nets as well.
- Tourism activities by 5 tour operators who offer diving and snorkelling outside the reef and inside the reserves.

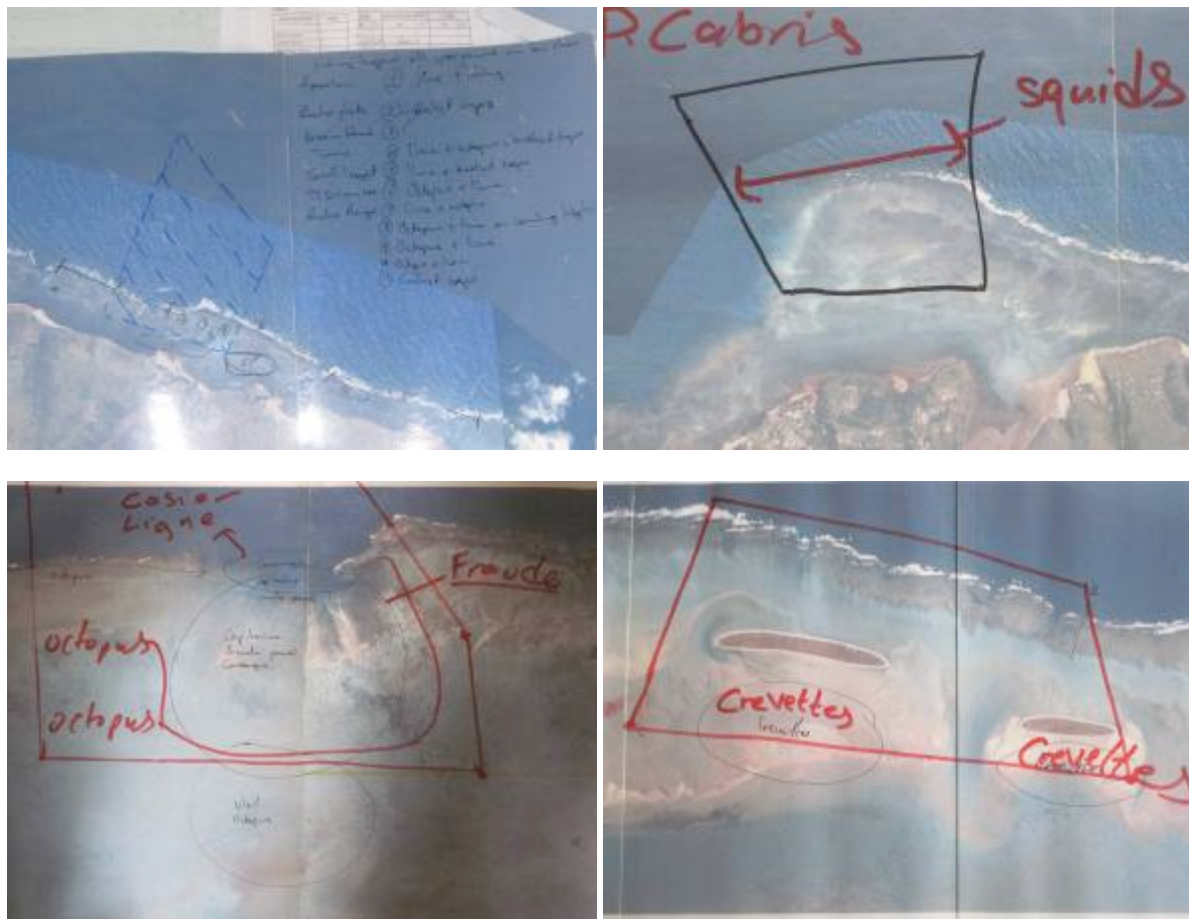


Figure 1: Examples of the results of the marine resource use mapping for (a) Rivière Banane (b) Anse aux Anglais, (c) Grand Bassin and (d) Passe Demi.

Grand Bassin Marine Reserve

- Casting (from boat) from outer lagoon close to the reef, targeting emperors, groupers, sharks that sometimes attack their catch (all year round).
- Line fishing (from boat) from the channel inside lagoon to outer lagoon targeting emperors, Goldlined Seabream (Guele Pavé), jacks (March-April and October-December), during high tide.
- Line fishing (la traine) off lagoon targeting squid by boat (April–October) depending on the moon.
- Line fishing in-lagoon targeting emperors, small groupers (Beng), goatfish (January to December) just after high tide.
- Octopus fishing on foot and by boats depending on tide using “Harpoon” and “Fuine” (all year round). Very high importance as most of the octopus fishing ground falls in the reserves.
- Illegal fishing using net and spears targeting all type of fish and shells using boat (all year round, day and night).
- Basket trap fishing in channel inside and off lagoon targeting parrotfish, unicornfish, rabbitfish (all year round). High importance as there are quite a few traps but mostly owned by tour operators, government employed people.
- Shark and Jack fishing off lagoon by boat from April – October according to fishers it’s when sharks spawn.

Passe Demie Marine Reserve

- On the sandy patches in the reserve area they target prawn (crevettes) using nets and fishing on foot (all year round) on low tide and at night only.
- Tourism activities inside the reserve include kite surfing, from boats deployed from Baie du Nord and Mourouk throughout the year depending on tide (high water).
- There is also surfing inside the channel depending on tide and weather (high tide and windy).
- Fishers spill oil on the sea in order to increase visibility through the water to catch octopus and Cono Cono (shells).
- Majority of fishers are government officials and not registered fishers.



4.2 Community Consultations Results - Summarised by Village

Rivière Banane – [Rivière Banane]

At this meeting there were 12 fishers who thought that the coral inside Aquarium is healthier, but fish and octopus numbers have declined. The fishers support the marine reserve, but think that there will need to be good enforcement and discipline, and that fishers should work with FPS. They are interested in the alternative livelihoods, but there have been problems, for example, with the glass bottom boat, there have not been enough clients. They also want the tour operators from outside the reserve to contact the local fisher's association so that there is income from the reserves. Some fishers thought that the Marine Reserve at Rivière Banane is too large. They also think that the zoning is going to cause a conflict with the reserve as there will be no bad weather allowance.

Baladirou – [Rivière Banane]

At this meeting there were 12 fishers all of whom were aware of the marine reserves. They do not fish in the reserve, they fish around it. They think that there are big octopus, corals and fishes in the reserve and that the area is healthy and better than it was 5 years ago. They think the marine reserve will result in more fish and octopus. They think there is a need for stricter control and they suggested using fishers to help patrol the reserves.

Roseaux – [Anse aux Anglais]

At this meeting there were 6 fishers; the majority of fishers have returned their cards (voluntary retirement at 50 years). They have all been aware of the Marine Reserves project for a long time and feel that it's taken too long to implement the Reserves. They feel that the Anse aux Anglais Marine Reserve is in a good place and is productive, but for these reasons people fish there to earn their livelihoods. They feel that the Reserves are a good thing, but they need money to live and they say that fishers are suffering, but they don't like to complain. They said that if there is other work for them to do, then they are ready to do it. They also feel that fishers should be involved in surveillance of the Marine Reserves.

Baie Aux Huitres & Pointe L'Aigle – [Grand Bassin].

At this meeting there were 9 fishers. Fishers from these village fish in Grand Bassin. They think that the coral in the area is still in a good condition in the pass, but fish and octopus numbers have declined. They thought the declines were due to there being too many fishers and illegal fishing; they think there needs to be rangers, closed seasons, and that government officials should not be allowed to fish in the lagoon. They think that the reserves should be patrolled by rangers that are ex-fishers, or the teams should consist of fishers and FPS officers. They also think that there are too many meetings, and not enough action.

Anse Goeland – [Grand Bassin]

At this meeting there were 25 fishers. They think that Grand Bassin Marine Reserve is too large and that this will prevent the fishers from catching fish. They think that there are too many illegal fishers



and illegal fishing and that the law needs to be more severe. They asked whether the demarcation buoys will be removed before the next election. They suggested closing the seine net fishery for a few years to see what happens as a result, they also suggested closing the prawn fishery and giving compensation to the fishers. They asked for compensation for not fishing in the reserves. They said that Carcasses is a big nursery, and they wanted to know why it was not included in the reserves.

Baie du Nord – [Grand Bassin]

At this meeting there were 28 fishers. They are not in agreement with the reserve at Grand Bassin at all. They say that fishers will die of hunger and that it hasn't yet reached the point where Rodrigues needs marine parks. They asked for compensation of Rs 12,000 per month because they are giving up their sea, but they felt that they should be allowed to fish until the sea is finished. They said that all of the demarcation buoys should be removed. They also said that until the meeting, they hadn't heard anything about Marine Reserves. They refused to listen and they also said that next time we should bring one of the Commissioners to assist the meeting.

Baie Malgache –[Grand Bassin and Passe Demi]

At this meeting there were 8 fishers, they support the proposed marine reserves. They think that fish numbers have declined due to overfishing, but also because the sea is warmer and there is more pollution. They think there needs to be better discipline / enforcement for the reserves to work. They were interested in glass bottom boat as an alternative livelihood activity.

Pointe Palmiste –[Passe Demi]

At this meeting there were 13 fishers, all of whom were aware of the Marine Reserves. They frequently fish around Ile aux Cocos when there are strong winds and they feel that the coral in this area is no longer healthy and isn't like it was before. They believe that the reserve is a good thing, but are concerned about what they will eat; life is difficult and their families need to live. They also felt that for the reserves to work there need to be strict laws and good surveillance. They asked for compensation to not fish in the Reserve. They felt that they should still have the right of passage through the passes near Ile aux Cocos. They think that school leavers should be employed as rangers to protect the reserves.

4.3 Community Consultation Results – Summarised by Questions

Is anything special about the areas inside the marine reserves?

The fishers consulted think that the reserves are important (with the exception of Anse aux Anglais):

- *Rivière Banane*: The Rivière Banane (RB) fishers identified 'Aquarium' for the beautiful corals and fishes, and the juvenile fish. Baladirou (BA) fishers think there were big octopus, corals and fishes in the reserve.
- *Anse aux Anglais*: The Roseaux (RO) fishers do not think there anything particularly special about the area.
- *Grand Bassin*: The fishers from Baie aux Huitres (BAH), Pointe l'Aigle (PA), Baie Malgache (BM) and Pointe Palmiste (PP) think that the area is important because of the channels, and there are



lots of small fish and big fish. One village described Grand Bassin as a train station where all the fish pass through into the lagoon.

- *Passe Demi*: The fishers from Pointe Palmiste (PP) think the area may act as a nursery because there are lots of juvenile fish and lots fishes and lots of live corals.

Do they feel that the area inside the marine reserve is healthy?

The fishers think that there areas inside the reserves are generally healthy areas but there are some areas in all the reserves that have been damaged, with the exception of Anse Aux Anglais:

- *Rivière Banane*: The BA fishers think the area is healthy, whereas the RB fishers think that area is not healthy. RB fishers said that although the majority of the corals are alive there is some damage and the fish stocks are diminished. Flooding from the land causes corals to die.
- *Anse aux Anglais*: The RO fishers think that the area is healthy.
- *Grand Bassin*: The fishers from BM think there are lots of live corals and juvenile fish and the coral is healthy in the channels.
- *Passe Demi*: The PP fishers think the area has deteriorated

Has the state of the marine environment inside the reserves changed over the past 5 years?

The majority of fishers think that the state of the reserves have declined in the past 5 years:

- *Rivière Banane*: The BA fishers think the area has improved; the RB fishers think the area was better when the reserve was controlled, the state declined after other fishers went to fish in the reserves.
- *Anse aux Anglais*: The fishers from RO think that the state of the marine environment has declined.
- *Grand Bassin*: BM fishers think the state of the environment is worse; BAH and PA fishers think that everything has diminished (fish, octopus, corals destroyed) throughout the lagoon.
- *Passe Demi*: BM fishers think the state of the environment is worse.

Have fish/octopus catches from inside the reserves changed over the past 5 years?

The majority of fishers have noticed a decline in catches in the past 5 years:

- *Rivière Banane*: The BA fishers think that catches have increased; the RB fishers think that the situation was better when the area was controlled.
- *Grand Bassin*: The BAH and PA fishers think everything has diminished (fish, octopus, corals destroyed).
- *Anse aux Anglais*: The RO fishers think fish and octopus have diminished.
- *Passe Demi*: The PP fishers think that catches have declined.

What do they think are the benefits of the marine reserves?

The majority of fishers recognise that the benefits of the marine reserves might include more fish and octopus, a more stable income and alternatives:



- *Rivière Banane*: The RB and BA fishers both think that there will be more fish and octopus plus healthier corals.
- *Passe Demi*: The PP fishers think they may have a more stable income; the BM fishers think that there will be more fishes, and they could get a glass bottom boat to get tourists to visit the reserves and get money.
- *Grand Bassin*: Need rangers with the power to arrest and power to confiscate boats and traps.

Do they have any concerns about the marine reserves?

The majority of fishers are concerned that there needs to be better regulation and enforcement. They are also interested in alternative forms of employment:

- *Rivière Banane*: The fishers from BA think that there needs to more strict control. The RB fishers commented on the alternative projects such as farming and animal husbandry. They have a glass bottom boat but there are no clients. Other people such as tour operators or divers take tourists in the reserves when they could have done that since they have the glass bottom boat.
- *Anse aux Anglais*: The fishers from Roseaux think there should be alternatives jobs provided, they also think that it has taken too long to establish, and there is illegal fishing.
- *Passe Demi*: Needs control
- *Grand Bassin*: More control and enforcement; need rangers who have the power to arrest, give contraventions and confiscate boat, traps etc. The BAH and PA fishers think there will be more competition as the area for fishing will be reduced.

What would make the marine reserves work better?

The majority of fishers agree that there needs to be better regulation and enforcement if the marine reserves are to work:

- *Rivière Banane*: The fishers from RB and from BA think that the fishermen should patrol the reserves (the RB fishers suggested that patrols should comprise of both fisheries officers and fishermen so that there are no bribes and corruption).
- *Anse aux Anglais*: The RO fishers think there should be better control and supervision.
- *Grand Bassin*: More control and enforcement.
- *Passe Demi*: The PP fishers think there needs to be better patrols and control

What would they like to see improved?

The majority of fishers agree that there needs to be better regulation and enforcement:

- *Rivière Banane*: The fishers from RB and BA would like to see better regulation and enforcement. The BA fishers also said they want another source of revenue for the fishers.
- *Anse aux Anglais*: Leave the sea to fishers only and not government employees
- *Grand Bassin*: The BM fishers think that the control must be firm to allow the fishes the chance to repopulate. BAH and PA fishers think there is a need for open/close seasons for line, traps like seine net fishing for the lagoon to get a chance to recuperate.
- *Passe Demi*: More control



What activities do they think should be regulated inside the marine reserves?

All fishers think that fishing and illegal fishing should be regulated in the marine reserves; some fishers think that all activities should be regulated:

- *Rivière Banane*: The BA fishers think there should be no activities allowed. The RB fishers think that all activities should be regulated, including tourist activities (e.g. glass bottom boats). They would like tour operators to contact the fishers association for the visits so that there will be money coming through the community.
- *Anse aux Anglais*: The RO fishers think that no activities should be allowed in the reserve. No illegal fishing.
- *Grand Bassin*: BAH and PA fishers think that for the reserves to work no activities should take place except for monitoring. They also want only fishermen allowed to fish in the sea, no government workers should be allowed to go fishing.
- *Passe Demi*: The PP fishers think there should be no activities in the reserves

How many people from their village fish inside the marine reserves?

- *Rivière Banane*: BA fishers fish outside the reserve; RB fishers fish inside the reserve.
- *Anse aux Anglais*: There are 35 fishers from RO that fish in the reserve.
- *Grand Bassin*: Most BAH and PA fishers use the reserve and; all BM fishers use the reserve
- *Passe Demi*: All BM fishers use the reserve.

Which villages fish in the marine reserve?

- *Rivière Banane*: Rivière Banane, Baladirou, Grande Montagne, Pointe Coton, Brûlé, Vainqueur
- *Anse aux Anglais*: Roseaux, Vangar, Citronelle and, Terre Rouge
- *Grand Bassin*: Baie du Nord, Pistache, Mt Charlot, Soupir and, Baie Malgache.
- *Passe Demi*: Baie du Nord and Baie Malgache.

What types of fishing take place inside the marine reserve? (most important in bold)

The different types of fishing and the most important type of fishing in each reserve are as follows:

- *Rivière Banane*: **line**, traps and illegal fishing (Batatran) (RB)
- *Anse aux Anglais*: **octopus**, line, underwater fishing, traps (RO)
- *Passe Demi*: **line**, octopus, traps, illegal fishing (PP)
- *Grand Bassin*: **traps**, line, octopus, fish in boats (BM); and **line**, traps seine net (BAH and PA)

Where are the fish/octopus sold?

- *Rivière Banane*: Highest bidder or taken home for personal consumption (RB)
- *Anse aux Anglais*: On the beach (RO)
- *Passe Demi*: To public or taken home for personal consumption (PP).
- *Grand Bassin*: At home base depending on customer and own consumption (BM); the fishes are sold to "bayant".

What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?



- *Rivière Banane*: Tourist diving and snorkelling
- *Anse aux Anglais*: Tourist diving, snorkelling
- *Passe Demi*: Tourists visiting Coco Island.
- *Grand Bassin*: Diving, Snorkelling.

Which groups are in conflicts with the groups represented in the Focus groups?

No conflicts were reported by any of the fishers in the consultations



5 Discussion

The first round of consultation with the fishers consulted with 102 fishers from 9 villages. The consultation showed that all the fishers were aware of the marine reserves and in general they were also generally supportive.

The fishers that use Rivière Banane were generally supportive of the reserve even though they have noticed problems. The level of support for this reserve may reflect the improvements in the health of the marine reserve that were witness when the area was controlled. They also noticed declines when fishers from outside the area started exploiting the reserve again. The level of support may also reflect the higher level of external input this reserve has received previously, and the alternative livelihood project. Fishers from Baladirou specific expressed interest in the possibility of developing a similar alternative livelihood project as had been implemented at Rivière Banane.

The fishers from four of the five villages that use Grand Basin were generally supportive, but there was one village that were strongly against this reserve, and another that thought the reserve was too big. The fishers that were supportive of the reserves recognise the importance of Grand Basin; they have witnessed a decline in catches, which they think is due to over-fishing, as a result of there being too many fishers, and due to illegal fishing.

The fishers that use Passe Demi think the marine reserves are a good thing. They are however concerned about their income and expressed interest in alternative livelihood options, such as glass bottom boats. They also think that it has taken too long to implement the marine reserves.

Other common concerns that were expressed during these meetings were as follows:

- **Number of fishermen:** There has been an increase in the number of fishermen; and there are now too many fishers in the lagoon. Several of the fishers indicated that they thought that only registered fishers should be allowed to fish and for government officials to be prevented from fishing. They are concerned that the displaced fishers that previously fish in the reserve will then just fish in the areas outside the reserve and increase the pressure on other parts of the lagoon.
- **Political Support:** Some fishers think that the demarcations buoys will be removed each time elections come. They say it will be hard for fishers to respect the reserves if it will be that way.
- **Monitoring, Control and Surveillance:** All but one of the villages consulted stated that there needs to be better monitoring, control and surveillance for the marine reserves. All but one of the villages also suggested that ex-fishers could become rangers, or that ex-fishers could join the patrols with Fisheries Protection Service. They think that ex-fishers would improve the effectiveness of the patrols, as they know location of the passes and channels, and where illegal fishing takes place. They also think that ex-fishers would reduce the likelihood of bribes.
- **Paid Work:** Fishers from several of the villages expressed their interest in alternative employment if the marine reserves are implemented. Alternative employment options that they proposed during the meetings included: employing fishers as rangers to patrol the reserves, road cleaners, or general labourers to cut down “piken loulou” and reforest it with other trees and to clear the mud and sand from the channels (instead of giving the work to Mauritian companies).
- **Compensation:** Two of the villages that use Grand Basin asked for compensation if the area was closed, and one of the villages that use Passe Demi asked for either compensation or alternative



employment. The Rivière Banane fishers were concerned about the implications of the combined impact of the new zoning scheme for the bad weather allowance and the marine reserves on their monthly income.

- **Delays in the implementation of the Marine Reserves:** Fishers said that there had been too many meetings over the years but nothing has changed, everyone is still fishing within the marine reserves without control.

Table 1 (overleaf) lists the fish landing stations along this coast and the number of registered fishers per landing station (see Figure 1 for map). During Community Consultation Round 2, the consultation team will attempt to visit more of the villages from other fish landing stations to discuss the marine reserves:

Rivière Banane Marine Reserve

Pointe Coton (FLS)	Pointe Coton Roche Bon Dieu Tréfles
Rivière Banane (FLS)	Rivière Banane Grande Montagne Brûlé Bel Air
Grand Bay (FLS)	Grand Baie Vainqueur Baladirou

Anse aux Anglais Marine Reserve

English Bay (FLS)	Terre Rouge Citronelle Vangar Roseaux
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Grand Bassin Marine Reserve

Anse Goeland (FLS)	Anse Goeland
Pointe L'Aigle (FLS)	Point L'Aigle
Pointe Monier (FLS)	Pointe Monier Mt Charlot Soupir
Bay Malgache (FLS)	Baie Malgache
North Bay (FLS)	Baie du Nord Pistache / Anse Nicolas La Ferme
Oyster Bay (FLS)	Baie aux Huitres

Passe Demi Marine Reserve

North Bay (FLS)	Baie du Nord Pistache / Anse Nicolas La Ferme
Bay Malgache (FLS)	Baie Malgache
Pointe Mathourin (FLS)	Pointe Palmiste

Table 1: Number of Registered Fishers per age group and sex and per Fish Landing Station (SOURCE: Fisheries Protection Service, Rodrigues)

FLS No.	Age Group -->	18 to 30		31 to 40		41 to 50		51 to 60		61 to 70		71 to 80		81 to 90		TOTAL		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	Male (M)	Female (F)	ALL
1	Pointe Monier	2	0	47	0	44	1	10	0	1	0	0	0	0	0	104	1	105
2	Pointe L'Aigle	0	0	2	0	9	0	3	0	0	0	0	0	0	0	14	0	14
3	North Bay	1	0	46	0	52	0	12	0	1	0	0	0	0	0	112	0	112
4	Pointe Mathourin	1	0	26	1	24	3	5	0	1	0	0	0	0	0	57	4	61
11	St François	0	0	11	6	10	12	2	1	0	0	1	0	0	0	24	19	43
12	Pointe Coton	0	0	7	8	12	10	3	2	0	0	0	0	0	0	22	20	42
13	Rivière Banane	0	0	9	4	11	10	2	3	0	0	0	0	0	0	22	17	39
14	Grand Bay	5	0	27	20	18	20	2	4	0	0	0	0	0	0	52	44	96
15	English Bay	0	0	9	12	5	17	2	3	0	0	0	0	0	0	16	32	48
16	Bay Malgache	1	0	9	0	14	0	0	0	0	0	0	0	0	0	24	0	24
20	Oyster Bay	0	0	4	0	19	0	2	0	0	0	1	0	0	0	26	0	26
21	Anse Goeland	0	0	13	0	19	1	6	0	0	0	0	0	0	0	38	1	39
	TOTAL	10	0	210	51	237	74	49	13	3	0	2	0	0	0	511	138	649



ANNEX 1: Guidance for the Community Consultations

ANNEX 1: Guidance for Community Consultation 1

1. Why are we consulting with the community?

Effective management almost always requires strategic partnerships and engagement with the individuals, groups or organisations who influence an MPA's values and/or are dependent on an MPA's resources (Wells and Manghubhai 2004).

The four Northern Marine Reserves (Rivière Banane, English Bay, Grand Bassin and Passe Demi) were originally identified with the support of the local community and they were formally gazetted in 2007. A management plan has since been prepared for one of the four areas (Rivière Banane), the areas have been demarcated, and other activities are underway within Rivière Banane.

The community consultation meetings to be held now will build upon the discussions had during the selection and designation process. The aim of these meetings will be to two-fold: 1. to inform the local stakeholders (fishers, traders and tourism operators) that a management planning process is to commence, and 2. to capture any new concerns, and identify any specific issues at each of the sites.

In order, to prepare the management plans for these reserves it will be necessary to have good up-to-date information on how the local community are using the resource as this will contribute to the development of adaptive management strategies for the area. We need to improve our understanding of the current conflicts and the attitudes of different groups using marine resources. This information will also help us to focus our energy on particular groups when investigating ways to reduce pressure on the marine resources inside the reserves as part of the planning process.

So as part of these consultations we will identify 1. the resource use patterns, which will inform us how people use the marine and coastal resources (who, what, where, when, how and how much) and 2. existing conflicts/negative attitudes between groups of people involved in marine and coastal resource use.

2. Which communities are we consulting?

We will conduct consultations in 13 villages along the north coast:

- Rivière Banane
- Baladirou
- Grand Baie
- Terre Rouge
- Roseaux
- Anse aux Anglais
- Anse Goeland
- Baie du Nord
- Baie Malgache
- Baie aux Huitres
- Pointe Monier
- Pointe L'Aigle
- Pointe Palmiste.



3. Who are we consulting with?

The four main user groups which we will be consulting with include:

- Fishers using different gears - lines, seine nets, basket traps etc.
- Reef walkers for octopus, sea cucumber, shell collecting etc.
- Tour/dive operators who are based at a number of hotels and guest houses along the north coast (dive operators, kite surfers, glass bottom boat, tourist trips to Ile aux Cocos, sport fishing)
- Buyers / Traders of marine products (fresh and dried fish, octopus, sea cucumbers)

4. How will the information collected?

Collecting data on resource use patterns and identifying conflicting issues and areas will be done through focus group interviews with 6 to 12 informants. Maps will be used to visually represent the areas where stakeholders operate.

5. Preparation for Community Consultation 1

5.1. Consultation team

The Community Consultation team will consist of 2 Shoals staff members, 1+ Marine Reserve Squad observer, 1 fisher from MRCC and 1 other fisher from village nearest the reserve.

5.2 Informant selection

The MRCC fisher representatives could act as the intermediary between the MRCC and the villagers. The MRCC fishers could be asked to assist in selecting the informants to participate in the consultation. The informants should be from the villages, and include both males and females, and be representative of the different types of fishing (incl. reef walking) undertaken by that village.

5.3. Preparing the interviews

It is important to PREPARE so that:

- Nothing is forgotten
- The interview is good.

This means that you KNOW:

- What you are going to discuss with the group, before meeting.
- How you are going to start the discussion

6. What are we asking in the interviews?

6.1. Introduction to informants

Before starting the consultations introduce the purpose and reassure the informants about the objectives as they might be suspicious. Thus:



- Introduce yourself (briefly).
- Introduce the objective of the meeting: aim of this project to develop management plans in consultation with sea users: we are keen to discuss your activities, so that we can take better account of these activities when planning.
- Tell the informants how long the session is expected to be (max 2 hours)
- Ask the participants to introduce themselves and their activity (name, age, gear used if fishers, product traded if traders etc). TAKE NOTES.

6.2. The CONSULTATION

REMEMBER: The groups should be REPRESENTATIVE of a large number of other people. It is essential that you, as the interviewer make sure that you get information on all the people the group represents (i.e. the information gathered should be representative of ALL fishers from that village).

FISHERS CONSULTATION

With the fishers, we will first complete the resource mapping, and then provide more specific information and ask questions from the group second. The reason for this is to try to minimise the bias in the resource use mapping exercise.

Resource Use Mapping (per Village)

We want to find out where the fishers from each village carry out their activities. For this you will need a large map of the north coast of Rodrigues. Ideally the map should be a laminated satellite image print out – it should show the villages, offshore islets and other important coastal features, but it should not show the marine reserves. *You may want to have several copies of this map printed, in case you need to use more than one map per village.*

(Estimated time to complete 1 hour)

STEP 1. At each village:

- Ask the fishers to **draw on the map** the **areas where people from their village fish**.
- Ask them to draw the areas as **specifically** as possible (i.e. different areas for different types of fishing, different times of the year etc and)
- Once they have finished drawing on the map, give each of the different **FISHING AREAS** a number and write these numbers next to the area on the map.

STEP 2: For each FISHING AREA, ask and record (using Survey Form A):

- The name of the fishing site.
- Characteristics of the site (e.g. on sand/coral/seagrass).
- Main target species (i.e. what they go there to fish for). If there are more than 1, then get the group to rank them according to importance.
- Fishing method used (i.e. line, basket trap, seine net etc). If they use more than 1 gear type, then rank them according to importance for that fishing area.
- How many hooks do they use/how many traps do they put down in that area? What bait do they use in the trap for which fish? Do they fish there using a boat or on foot?



- Which months of year fish do they fish there?
- When do they fish there (e.g. day/night, high tide/low tide, full moon)?

If there are a large number of fishers then it might be appropriate to use more than one map for the different gear types. If not, then information can go on the same map.

STEP 3: At each village, ask and record (using Survey Form A):

- Once the fishers have given you all of the above information for each fishing area, then ask them which areas are most important to their village, or are they all same (in terms of catching most fish/earning most money)? Rank the areas according to their importance; if 2 areas have equal importance then they can be given the same score.

TAKE PHOTOGRAPHS OF THE MAPS!

Questions for Fishers (per Village)

After the mapping exercise you can then give a brief introduction to the marine reserves and their history at this point and re-iterate what the information will be used for (i.e. to produce a management plan, which takes their interest into consideration). Then you can ask the group the following questions and record their responses, either in notebooks or using SURVEY FORM B.

At this point it is probably worthwhile having a large map or PowerPoint projection to illustrate the location of the marine reserves.

General Questions

- Are they aware of the marine reserves?
- Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).
- Do they feel that the area inside the marine reserve is healthy?
- Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?
- Have fish/octopus catches from inside the reserves changed over the past 5 years?
- What do they think are the benefits of the marine reserves?
- Do they have any concerns about the marine reserves?
- What would make the marine reserves work better?
- What would they like to see improved?
- What activities do they think should be regulated inside the marine reserves?
- What activities would they not like to see regulated inside the marine reserves?

Resource Use

- How many people from their village fish inside the marine reserves?
- Which marine reserves do they fish in?
- If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance.



The following questions should then be asked about the marine reserve(s) within which people from that village fish.

- Do fishers from other villages fish in the marine reserve? Which villages?
- What types of fishing take place inside the marine reserve?
- What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance.
- Where are the fish/octopus sold?
- What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling).

Conflicts

- Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators.

Comments?

- Any other comments?

TOUR OPERATORS CONSULTATION

With the tour operators we will ask questions from the group of tour operators first, and then complete the resource mapping second.

Questions for Tour Operators

Ask the group the following questions and record their responses, either in notebooks or using SURVEY FORM C.

General Questions

- Are they aware of the marine reserves?
- Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).
- Do they feel that the area inside the marine reserve is healthy?
- Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?
- What do they think are the benefits of the marine reserves?
- Do they have any concerns about the marine reserves?
- What would make the marine reserves work better?
- What would they like to see improved?
- What activities do they think should be regulated inside the marine reserves?
- What activities would they not like to see regulated inside the marine reserves?

Resource Use



- Do they carry out activities inside the marine reserves?
- Which marine reserves do they use?
- If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance.

The following questions should then be asked about the marine reserve(s) within which the tour operators use.

- What tourist activities take place inside the marine reserves?
- What other activities take place inside the marine reserve (e.g. fishing)?

Conflicts

- Are there any conflicts? Which groups are in conflict with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why?

Comments?

- Any other comments?

Resource Use Mapping for Tour Operators

We want to find out where the tour operators carry out their activities. For this you will need a large map of the north coast of Rodrigues. Ideally the map should be a laminated satellite image print out – it can show the villages, offshore islets and other important coastal features, but it should not show the marine reserves.

We would recommend doing the resource mapping for the tour operators on an individual basis or in small groups of similar operators (i.e. 1 group for operators who take tourists to Ile aux Cocos; 1 group for dive operators etc). You could do this at the end of the meeting or you could arrange to meet the individuals independently. If you meet them independently, you should use one map per tour operator. If you do this at the end of the meeting you could use one map per activity and number the areas sequentially (e.g. diving, snorkelling, glass bottom boat, kite surfing).

(Estimated time to complete 1 hour)

STEP 1. For each tour operator/group of tour operators present:

- Ask the tour operator to **draw on the map** the **areas where they offer activities**.
- Ask them to draw the areas as **specifically** as possible (i.e. different areas for different types of activity, different times of the year etc and)
- Once they have finished drawing on the map, give each of the different **AREAS** a number and write these numbers next to the area on the map.

STEP 2. For each tourist activity area, ask and record on FORM D:

- The name of the site.



- Characteristics of the site (e.g. on sand/coral/seagrass). If they mentioned any special species that are found there, can they map where they occur?
- Main activities (for diving please say whether they are training dives or pleasure dives for experienced divers). If there are more than 1, then rank them according to importance (if you are interviewing more than one tour operator you can then use matrix ranking).
- How many people do they take in 1 trip (average number if possible, or maximum)?
- How often do they take tourists to that site?
- Which months of year do they take tourists there?

STEP 3: For each tour operator/group of tour operators present, ask and record on FORM D:

- Once the tour operators have given you all of the above information for each tourist area, then ask them which areas are most important to them, or are they all same (in terms of earning most money)? Rank the areas according to their importance; if 2 areas have equal importance then they can be given the same score.

TAKE A PHOTOGRAPH OF THE MAP!

7. Interviewing skills

- **PROMPT:** It will be important to prompt the focus group participants to make sure that they give information on all the people involved in the activity and not only on the people who are in the focus group.
- For example, ask questions like "do all fishermen fish inside the reef?", "do all fish traders sell their fish at the XX market?" Etc. If not, "who sells elsewhere? And where do they sell?"
- **LISTEN:** listen to what people have to say, they know more about their activities than you do, this is why you are interviewing THEM.
- Everyone has to speak. Make sure that all the people in the group speak and that the person involved in the activity we are discussing speaks (if the group is mixed).

8. Note taking

8.1. Write information fully in the forms provided

- Notes need to be clearly written so to make work easier for the person who will enter the data. Write the information in full.
- Forms will be provided to make sure no themes are forgotten. The forms will serve as an interview guide.
- It might be worth taking a notebook so that comments and all relevant information is captured; then use this information to fill in the form.

8.2. Example of form

The following format is suggested to accompany the resource mapping exercise.



COMMUNITY CONSULTATION 1 –Resource Mapping (Fishers) - FORM A

Examples shown (to be deleted before printing!)

Date:	Village:
Interviewer:	Map No:
No Fishers:	Males: Females:

No. Fishing Area (as on map)	Name	Characteristics (Sand/algae/coral/seagrass)	Target species	Fishing Method	Details (boat/foot; no traps/hooks)	Months of the year												Time	Importance
						J	F	M	A	M	J	J	A	S	O	N	D		
1	<i>Carcasse</i>	<i>Sand, coral patches</i>	<i>1, Cordonnier, 2. Capitaine,3 Bengue</i>	<i>Line</i>	<i>Boat; 50 hooks</i>	x	x	x							x	x	x	<i>Day; high tide</i>	<i>1</i>
2	<i>Carcasse</i>	<i>Sand, coral patches</i>	<i>Corne</i>	<i>Basket trap</i>	<i>Boat; 2 traps</i>				x	x	x	x	x					<i>Day; high tide</i>	<i>2</i>
3	<i>Carcasse</i>	<i>Sand, coral patches</i>	<i>Octopus</i>	<i>La fourine</i>	<i>Boat & foot</i>	x	x	x	x	x	x	x	x	x	x	x	x	<i>Day; low tide</i>	<i>2</i>
4																			
5																			
Comments					Conflicts: List of other groups (e.g.: gears, authorities, traders, tourist groups....) with which the user groups are in conflict and REASON for the conflict.														

ANNEX 2: Results of the Community Consultations



Date: 24/11/2010 15:00 **Village:** Baie Aux Huitres & Pointe L'Aigle
Interviewer: RR, EB, JR, SP,LF **Map No:**
No Fishers: 9 **No Males:** 9 **No Females:** 0

1. Are they aware of the marine reserves?

Yes

2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).

Lots of channels, lots of small fish. Coral are healthy near the channels.

3. Do they feel that the area inside the marine reserve is healthy?

Lots of channels, lots of small fish. Coral are healthy near the channels.

4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?

Everything has diminished (fish, octopus, corals destroyed). Deterioration throughout the lagoon. There has been an increase in fishermen. Too many for the lagoon of Rodrigues. Too many underwater fishing or other illegal fishing at night. The authority doesn't possess a boat rapid enough to cover the distances between home base and the illegal activities.

5. Have fish/octopus catches from inside the reserves changed over the past 5 years?

As above

6. What do they think are the benefits of the marine reserves?

Need ranger who has the power to arrest, give contravention and confiscate boat, traps etc...

7. Do they have any concerns about the marine reserves?

Need ranger who has the power to arrest, give contravention and confiscate boat, traps etc...

8. What would make the marine reserves work better?

Need ranger who has the power to arrest, give contravention and confiscate boat, traps etc...

9. What would they like to see improved?

Need open/close seasons for line, traps ... like seine net fishing for the lagoon to get a chance to recuperate.

10. What activities do they think should be regulated inside the marine reserves?

Activities in the reserves: too much competition. Fishers from the other reserves will have to go elsewhere to fish and since the area of fishing has diminished there will be too much competition between the fishers and as a result the fish catch will drop way below the redline. For the reserves to work no activities should take place there except for the monitoring. Only fishermen are allowed to fish in the sea: meaning no government worker should be allowed to go fishing. Don't use ex-government worker (those that have already retired) to occupy new post in the government. There is a fresh supply of HSC student or University student holding degrees, diploma or even doctorate available in Rodrigues so why don't we use them to occupy these posts instead of ex-government worker who are enjoying their pensions and other benefits.

11. What activities would they not like to see regulated inside the marine reserves?

As above.

12. How many people from their village fish inside the marine reserves?

Most of them fish there.

13. Which marine reserves do they fish in?

Grand Bassin

14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?

15. Do fishers from other villages fish in the marine reserve? Which villages?

Fishers from the following villagers, Baie du Nord, Pistache, Mt Charlot, Soupir, go fishing in the Grand Bassin region.

16. What types of fishing take place inside the marine reserve?

Seine net, traps, line

17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?

Line, traps seine net

18. Where are the fish/octopus sold?

The fishes are sold to "bayant".

19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?

None



20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?

None

Comments:

Alternative: give the fishers a paid job, such as; rangers to keep watch of the reserves, road cleaning, cut down “piken loulou” all over the island and reforest it with other trees. Give the fishers the job of digging out the channel and put the sand/mud in the marina instead of giving it to Mauritian companies.

Too much meeting all over the years but still nothing can be seen. Everyone is still fishing within the marine reserves without any restraint

Surveillance has to be done by fishers who has recycled to the ranger job and not by the fisheries as there is too much corruption within that organization. Or team comprises both members of the fisheries unit and members of the fishermen community can be used as ranger to patrol the reserves.

Grand Bassin is like a train station where all the fish pass to go everywhere in the lagoon.

There is illegal fishing in the reserves both during the day and night.

Unicorn fish doesn't migrate; it stays within the reserves boundaries.



Date: 25/11/2010

Village: Rivière Banane

Interviewer: RR,EB, JR, SP

Map No:

No Fishers: 12

No Males: 2

No Females: 10

1. Are they aware of the marine reserves?

Yes

2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).

Aquarium (beautiful corals and fishes). There are lots of juvenile fish there.

3. Do they feel that the area inside the marine reserve is healthy?

Not healthy, majority of the corals are alive but there are some that are destroyed and the fish stock has diminished. Floods cause corals to die. Some of the fish go out in the open sea.

4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?

It was better when the reserves was controlled, but it went downward after as certain other fishers went in the reserves to fish even though they know that they are in the reserves.

5. Have fish/octopus catches from inside the reserves changed over the past 5 years?

As above

6. What do they think are the benefits of the marine reserves?

The benefits is that there will be more fishes and octopus plus healthier corals.

7. Do they have any concerns about the marine reserves?

Alternative project: farming and animal husbandry. They have a glass bottom boat but there is no client to take out to visit the reserves. There is also the problem that other people such as tour operators or divers take tourist in the reserves when they could have done that since they have the glass bottom boat.

8. What would make the marine reserves work better?

Make fishermen themselves patrol the reserves or make a team comprising both fisheries officers and fishermen like this there will be no bribe and corruption. Hire someone who has extensive knowledge of the sea such as names and location of the passé and channel, proper location of reserves and have good knowledge of what the reserves is and what you can do and cannot do there.



9. What would they like to see improved?

Better regulation and enforcement

10. What activities do they think should be regulated inside the marine reserves?

Tourist activity such as glass bottom boat, but they have to contact the fishers association for the visits. So there will be money coming through the association to the fisher community.

11. What activities would they not like to see regulated inside the marine reserves?

Illegal fishing.

12. How many people from their village fish inside the marine reserves?

Everyone

13. Which marine reserves do they fish in?

Rivière Banane.

14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?

No

15. Do fishers from other villages fish in the marine reserve? Which villages?

Grande Montagne, Pointe Cotton, Brule, Vainqueur

16. What types of fishing take place inside the marine reserve?

Traps, line, Illegal fishing such as using Batatran

17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?

Line fishing

18. Where are the fish/octopus sold?

Highest bidder or own consumption

19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?

Diving, Snorkelling.

20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?



No

Comments:

Break the zone as they don't get any bad weather allowance this way.

Reserves + zone = nothing at the end of the month.

The reserves are too big, should close off a smaller region. Some even want to cancel the whole reserves as they say it's not working.

Date: 25/11/2010 13:00

Village: Baie Malgache

Interviewer: RR,EB,SP

Map No:

No Fishers: 8

No Males: 8

No Females: -

1. Are they aware of the marine reserves?

Yes

2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).

Lots of fishes are found there. Lots of live corals and juvenile fish.

3. Do they feel that the area inside the marine reserve is healthy?

Lots of fishes are found there. Lots of live corals and juvenile fish.

4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?

It's worse. Fishes has diminished; there are more fishermen, hot water and waste/decayed water.

5. Have fish/octopus catches from inside the reserves changed over the past 5 years?

As above.

6. What do they think are the benefits of the marine reserves?

More fishes, get a glass bottom boat to get tourist to visits the reserves so that they can get money.

7. Do they have any concerns about the marine reserves?

More control and supervised/enforced

8. What would make the marine reserves work better?

More control and supervised/enforced

9. What would they like to see improved?

Control must be firm for the fish to have a chance to repopulate

10. What activities do they think should be regulated inside the marine reserves?

Security - the light has burn out for some time now and it has not been replaced.

11. What activities would they not like to see regulated inside the marine reserves?



No fishing activity at all, no illegal fishing.

12. How many people from their village fish inside the marine reserves?

Everyone

13. Which marine reserves do they fish in?

Grand Bassin, Passe Demi

14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?

Grand Bassin, Passe Demi.

15. Do fishers from other villages fish in the marine reserve? Which villages?

Baie Du Nord.

16. What types of fishing take place inside the marine reserve?

See map

17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?

Grand Bassin, traps, line, octopus, fish in boats

18. Where are the fish/octopus sold?

At home base depending on customer. Also for own consumption

19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?

Diving, Snorkelling.

20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?

No

Comments:



Date: 2/12/2010 15:00

Village: Anse Goeland

Interviewer: RR,EB

Map No:

No Fishers: 25

No Males: 25

No Females: -

- Will the buoys stay where it is or will it be taken out during election time like last time.
- Area too big.
- Has to light on buoys.
- Hiding place behind Ile aux Sables & Ile aux Cocos during bad weather.
- Fisheries unit not doing its work.
- Illegal fishing: spill oil on the sea to sea octopus and cono cono.
- Close shrimps fishing and give them some money like seine net fishing.
- During close seasons for seine net the fishers get money the government, so why not do the same for other fishers???
- Better and more severe regulation and enforcement.
- Get all the non-fishers (fonctionnaires) to pay a sum to contribute some money to give to fishermen. A kind of tax.
- All fishers should have gotten together to decide where to established the reserves.
- Too much political influence in regard to the buoys.
- The buoys have moved???. Check their GPS point.
- Find alternative work. Paid job for the fishermen such as digging the channel, cleaning the island of "piken loulou"....
- Close net fishing for a few years and analyse the results.
- Carcasses a big nursery. Why not including it in the reserves or cancel the Grand Bassin reserve and make one around Carcasses.
- Cancel the zoning system concerning the bad weather allowances.



Date: 13/01/11 15.00

Village: Pointe Palmiste

Interviewer: RR, EB

Map No:

No Fishers: 13

No Males: 13

No Females: -

1. Are they aware of the marine reserves?

Yes

2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).

Lots of juvenile fish there, may act as nursery.

3. Do they feel that the area inside the marine reserve is healthy?

No, it has deteriorated a lot.

4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?

Yes, it is worse than before.

5. Have fish/octopus catches from inside the reserves changed over the past 5 years?

It has greatly diminished.

6. What do they think are the benefits of the marine reserves?

A more stable income maybe.

7. Do they have any concerns about the marine reserves?

It needs to get better patrol, so that it works.

8. What would make the marine reserves work better?

Better patrol and controlled.

9. What would they like to see improved?

Same as above

10. What activities do they think should be regulated inside the marine reserves?

No activities in the reserves

11. What activities would they not like to see regulated inside the marine reserves?



No activities

12. How many people from their village fish inside the marine reserves?

None

13. Which marine reserves do they fish in?

Passé Demi

14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?

-

15. Do fishers from other villages fish in the marine reserve? Which villages?

Don't know

16. What types of fishing take place inside the marine reserve?

Line, traps, octopus, illegal fishing

17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?

Line, octopus, traps

18. Where are the fish/octopus sold?

To public or taken home for own consumption.

19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?

Tourists visiting Coco Island.

20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?

Comments:

They need allocation about rs3000/month or paid work for them to respect the reserves. Pay the people who have just left schools to protect the reserves.



Date: 15/01/11

Village: Roseaux

Interviewer: JR,SP, EB

Map No:

No Fishers: 6

No Males: 1

No Females: 5

1. Are they aware of the marine reserves?

Yes

2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).

No

3. Do they feel that the area inside the marine reserve is healthy?

Yes, most of the fish are there

4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?

It got worse

5. Have fish/octopus catches from inside the reserves changed over the past 5 years?

Yes it diminished

6. What do they think are the benefits of the marine reserves?

-

7. Do they have any concerns about the marine reserves?

Yes the reserves are a good thing, but before putting it in place should have found alternative like planting or other jobs. It has taken too long to put in place and there is illegal fishing taking place in the reserves.

8. What would make the marine reserves work better?

Better control and supervision.

9. What would they like to see improved?

Leave the sea to fisher only and not government employees

10. What activities do they think should be regulated inside the marine reserves?



No activities should be allowed in.

11. What activities would they not like to see regulated inside the marine reserves?

No illegal fishing and the law must be more severe. Fishers, NCG and FPS should work together.

12. How many people from their village fish inside the marine reserves?

35

13. Which marine reserves do they fish in?

English Bay marine reserves

14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?

15. Do fishers from other villages fish in the marine reserve? Which villages?

Roseaux, Vangar, Citronelle, Terre Rouge

16. What types of fishing take place inside the marine reserve?

Line, Net, Underwater fishing, traps

17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?

Octopus, Line, traps

18. Where are the fish/octopus sold?

On the beach at English bay

19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?

Tourist diving, snorkelling

20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?

No conflicts

Comments:



Date: 27/01/11 15.30

Village: Baladirou

Interviewer: RR,EB,SP

Map No:

No Fishers: 12

No Males: 1 -

No Females: 11

1. Are they aware of the marine reserves?

Yes

2. Do they feel that there is anything special about the areas inside the marine reserves? (e.g. are there lots of juvenile fish, healthy corals or species that aren't found anywhere else in the lagoon?).

Yes, big octopus, corals and fishes

3. Do they feel that the area inside the marine reserve is healthy?

Yes

4. Has the state of the marine environment inside the reserves changed over the past 5 years – is it better or worse?

Its better

5. Have fish/octopus catches from inside the reserves changed over the past 5 years?

It has increased

6. What do they think are the benefits of the marine reserves?

More fishes and octopus

7. Do they have any concerns about the marine reserves?

More strict control

8. What would make the marine reserves work better?

Use the fishermen to protect the reserves

9. What would they like to see improved?

Better control and supervision, another revenue for the fishermen

10. What activities do they think should be regulated inside the marine reserves?

No activity



11. What activities would they not like to see regulated inside the marine reserves?

No activity

12. How many people from their village fish inside the marine reserves?

None they fish outside it

13. Which marine reserves do they fish in?

Rivière Banane

14. If they use more than 1 of the marine reserves, get them to rank them in terms of the frequency of visits and in terms of their importance?

15. Do fishers from other villages fish in the marine reserve? Which villages?

Rivière Banane

16. What types of fishing take place inside the marine reserve?

17. What is the most important type of fishing that takes place in the reserve? If they use more than 1 type of gear, get them to rank them in terms of the importance?

18. Where are the fish/octopus sold?

19. What other activities take place inside the marine reserve (e.g. tourists diving, snorkelling)?

Tourist diving and snorkelling

20. Which groups are in conflicts with the groups represented in the Focus groups (we are not interested in personal conflicts!) and why? This will include other activity groups and other stakeholders such as tour operators?

Comments:

What are the projects that can take place for those who want to stop fishing (alternative livelihood)?

Take the fishermen out of the sea give them a plot of land for them to cultivate and make monitoring exercise.

