

# 3. FINDINGS AND RECOMMENDATIONS



## Starting point

The capacities of communities as well as of individuals, i.e. the resources and assets they use to anticipate a hazard, cope with it, resist it and recover from its impact<sup>12</sup> are key elements in understanding and reducing vulnerability.<sup>13</sup> Both concepts are determined by physical, environmental, social, economic, political, cultural and institutional factors<sup>14</sup> and are thus context-specific. Like unspun fibres, once woven they form a shape – e.g. a basket in Vanuatu or a mat in the Solomon Islands, mentioned factors define the circumstances in which people live.

In view of such complexity, a single focus in DRR is detrimental to communities affected by a hazard; instead, a holistic approach is needed to make DRR more effective and sustainable. Prerequisite for such an approach is information about the living situations of people at risk, the circumstances and conditions as well as the relations and relationships that establish their realities.

This report focuses on aspects that influence and define roles and capacities of women and men on the community level. It intends to distinguish and depict some of the fibres that generate the social systems in which the TBR project is being implemented; fibres that determine the degree to which communities are capable of organising themselves to increase their capacity for learning from past disasters for better future protection and to improve risk reduction measures<sup>15</sup> - their weaving of a culture of resilience.

### 3.1 The community level Roles and capacities of women and men

The following descriptions comprise the findings of the Participatory Action Research (PAR) carried out in three communities in Vanuatu and the Solomon Islands: Lemoga (Gaua) in Vanuatu, Namokaviri (Guadalcanal) and Namorako (Malaita) in the Solomon Islands. The findings are not specified according to countries but rather to communities, as the political-administrative division of communities, tribes, cultures, islands etc. into two countries was done rather randomly.

The people concerned live on different islands, all of which have their own history, their own infrastructure and which often also exhibit different physical environments, characterised for instance by different hazards as well as hazard risks. Based on this, the term 'community' is used in a rather pragmatic way, defined by the necessities of the project work, i.e. it refers to administrative structures that were created by outsiders fully or at least partly reflecting the organisational structures people gave themselves.<sup>16</sup>

However, since there are many similarities between the involved communities, observations are summarised. When differences are consequential for recommendations or conclusions, they are specified. In case just two out of three communities are mentioned, the information about the third community is incomplete.

It is similar as to the mentioning of women and men. Since the PAR was conducted with women and men separately, it is unavoidable that information remains incomplete. Such is the case when one sex, more so with men, are not commented on. Apart from that, the focus was on participatory processes, and thus time was used to discuss respective results instead of gathering facts. Whenever possible, information is specified. Assumptions are added when considered adequate.

12. See Benson/Twigg (2007:105).

13. See UNISDR (2007:156)

14. See Benson/Twigg (2007:15).

15. See Floodsite (2005:25).

16. It needs to be made clear though that this use of the term must include the fact that there are numerous sub-communities that can be defined along different lines - gender is one of those lines. In case of the project, other lines, such as poverty, livelihood etc. might be equally important.

### 3.1.1 Physical fibres

1. The communities of Lemoga, Namokaviri and Namorako are situated on three different islands. The islands are accessible by boat and plane. Since flights are pricy, people usually go by sea in case they leave their islands. The infrastructure on the islands is merely basic, and it is not easy to get to the communities. However, all communities are accessible by vehicle.
2. Depending on the coming direction, in case of Namokaviri and Namorako, a river needs to be crossed. There are no bridges to the communities. In Namorako, there is a very basic and unsafe bridge within the village. Mostly, people go by foot, sometimes several hours through the bush, but occasionally there is a truck that serves as a taxi. The team experienced that the service is not reliable; during its visit there was no truck available due to toothache of the driver. Fuel is available, but not easy to get. In case a disaster strikes, immediate help and evacuation is not possible and the communities have to rely on themselves.
3. During the transect walks in Lemoga and Namokaviri we saw houses made out of timber and palm leaves (walls, roof); in Namorako, some buildings had parts made out of cement (for example the floor in the school), the others were mainly built with timber and stood on stilts (made out of timber or cement). There were some open shelters used as kitchen or place for animals. Basic toilets existed in Lemoga (no exact number, but at least one, part of the CAP) and Namorako (no exact number but at least two, part of CAP). A toilet in Namokaviri was under construction (as part of CAP). Usually, people go into the bush or use the river to defecate. [Note: The term 'basic toilets' is utilised for designated locations used for defecation in or near the village. Such a toilet can be a built structure or just a location, like a dug hole in the soil, surrounded by walls made out of touch leaves, which is used for this purpose frequently. Basic toilets meet minimum criteria regarding definition, privacy and enclosure. Otherwise, it is common to just go into the bush or river and have no designated location or area (defecation field).]
4. The villages seemed to have different parts, sometimes clearly separated from other houses; in Namokaviri, one part of the village is separated from the rest by a



river. In case of flooding, there is no accessibility of the respective other side. In Lemoga, the houses are grouped on different heights. In case of heavy rain, the paths in between are flooded, and the respective other parts are accessible only with difficulty or not at all. In Lemoga and Namorako, most of the villages seemed to be well maintained and clean, and there are pits for garbage. This is not the case in Namokaviri. There is a newly built evacuation centre in Lemoga (part of CAP) and a newly cleaned evacuation site in Namorako.

5. In all villages there are small plots for crops around the dwellings, sometimes further away from the houses. In Namorako, these are organised, well-kept gardens. However, they are in a lower-lying part of the village, and in case of flooding (about twice a year), the gardens are destroyed.
6. Women and girls, men and boys have access to markets, health facilities, schools, often far away and not easy to reach (approximate walking distances: health facility 1 ½ - 2 hours, market ½ - 1 hour, airport 2-3 hours (Lemoga)). Only in Namorako there is a school. Children of Lemoga and Namokaviri can go to the next village to go to school (approximate walking distance for a grown up ¾ - 1 hour). There are churches in all villages (at least one, in Namokaviri even three of various nominations).
7. There is little supply of electricity. Some families in Namorako use solar panels. Possibly, they are also in use in the other communities, since there are many people, mostly men, who have mobile phones, which need to be charged. The phones are mainly used to listen to music as there is no consistent transmission, e.g. while Namorako hardly experiences telephone breakdowns, breakdowns happen few times a week in Namokaviri. During the stay in Lemoga it was experienced that network coverage is very unreliable.
8. There are corn shells, wooden drums and iron gongs used as traditional means of communication and information. Women are not supposed to use the wooden drum or the shells. This is a privilege, which is not liberally shared between men and women. However, the iron gongs in Namokaviri and Namorako were hit by women. The pastor in Lemoga said that corn shell and fires on the surrounding mountains were used to inform when community-related matters needed to be shared, e.g. death of a community member. All the named means of communication are well known by the people. Particular patterns and codes regarding the type of information need to be further investigated. With regard to modern means of communication, it turned out during a focus group discussion in Lemoga that the majority of men owned a mobile phone whereas the majority of women did not.

### 3.1.2 Natural fibres

1. Namokaviri and Namorako are located at a river, Lemoga is close to the sea. Sources of potable water supply differ: while Namorako has water tanks (CAP result) and access to water pipes, the people of Lemoga use either rain harvesting or a well. In Namokaviri, water has to be fetched from the river or dug out of holes. The lack of access to clean water was a key problem identified in Namokaviri. The loss of or drying up of the dug water holes was mentioned during discussions. This bears particular relevance for women and girls, as it is mainly them who fetch water. They are required to dig more water holes or walk longer distances to access water. Also, diarrhoea as a result of poor quality water supplies was mentioned. Changes of the groundwater levels are registered, however, they are not directly attributed to climate change. It was observed that



Hole dug to fetch water, near Namokaviri

some people in Lemoga use rain harvesting; however, this is not common practice. [Note: The source of water for the tanks in Namorako was described as a kind of basin/dam. However, none of the local staff have looked up the place. A hike would have taken at least half a day and thus was given up.]

2. Community members had varying facts to report on the intensity and frequency of natural events. The PAR team did not see it as their task to record those events and to verify this information. The consultant came to the conclusion that the already conducted VCAs are better suited to document the history of those events and natural hazards for each community in detail. Still, as an example, flooding is a major and frequent threat to all visited communities. (1) In Lemoga it was reported that sometimes, family members were separated from each other for a night or so because they were visiting other houses when the major connecting paths were under water or became too slippery to be used. This is particularly dangerous for children, pregnant women and elderly people. As one measure of the Action Plan, a drainage was dug near the newly built evacuation centre. (2) In Namokaviri, the river erodes its banks and floods the village. This causes damage to houses and crops. There were no reports about changing practices or actions taken; understanding as to how erosion may be prevented was very limited. A highly frequented footpath just along the riverbed is not secured, which is a constant risk for children, as the soil gets very slippery after rain. (3) In Namorako, flooding destroys gardens at least twice a year and necessitates people to vacate their houses. The water level rises considerably. Some people started to raise their houses by increasing the height of the stilts. The newly cleaned evacuation site – a measure of the Action Plan - is on higher grounds. Women and men of Lemoga and Namorako said their increasing awareness that climate change is a major contributing factor was related to the TBR project. The transect walk showed that community members of different groups were aware of potential risks in the communities; they were able to demonstrate what measures had already been taken to reduce risks. In part this was credited to previous project activities.
3. Women and men of all communities pursue gardening. A variety of crops grow on small plots, which sometimes appeared to be wild vegetation. There is very little single-crop cultivation. As it is common for horticultural societies, there is a shifting pattern of field use. After some time, the garden is moved to another area. The vegetation in a new area is cleaned in a “slash/burn” technique. There is

no mechanised farming equipment, which would not be of much use for such cultivation conditions anyway. However, this makes the gardening very labour-intensive. Irrigation is not (yet) needed, rain is still sufficient though people realise changes in precipitation patterns.

4. Land was referred to either as private land or as community land. It needs further clarification whether 'land' actually means property or whether it refers to land usage. Depending on the area, there is patrilinear (Malaita, Gaua) as well as matrilinear (Guadalcanal) inheritance.<sup>17</sup> However, all three societies were patriarchal.
5. In Guadalcanal the land is hereditary matrilinear. Besides of disparities based on gender, this may explain why men work less in the gardens: it is their wife's not their own property.
6. On Guadalcanal there is a lot of logging. It is unclear what implications this has on availability of land, land use rights, or on erosion and flooding patterns.
7. Some people have livestock - mainly chickens and pigs. Women and men are involved in fishery, albeit they fish different kinds of fish. There is occasional hunting (mostly men) and gathering of wild plants (mostly women).

### 3.1.3 Social fibres

1. All communities share a number of features of horticultural societies: they lack ploughs and animal traction, which differentiates them from agrarian societies. They do not make domesticated herd animals their main basis of subsistence - like in the case of pastoral societies. Instead, they use domesticated plants as the major basis for subsistence. Women and men work hard in their gardens to plant, weed and harvest a great variety of crops, as well as process food. Sometimes a distinction between domesticated and wild plants was made (taro and wild taro, wild yam).
2. Although it looked as if in general women and men do the same things (gardening, fetching water, getting fire wood etc.), they do not seem to perform together or jointly: both groups knew unexpectedly little about each other's undertakings, and generally expressed true surprise when group exercise outcomes were presented, i.e. all assessed information (daily life routine, income sources, expenditures, gender roles in marketing etc.). There is little knowledge about each other, which also indicates that women and men do not communicate much about their daily lives, their respective experiences, interests or needs. With regard to access to or control of information this is vital knowledge.
3. On first impression, the social and political organisation of Lemoga, Namokaviri and Namorako seems to encompass some formal political roles (filled by mainly male but also female members of the village council). The male village chief (elected in all cases) as well as the male pastors/priests have dominant positions. The latter are also attached to the motherhouses of the respective churches. In case of the three communities, all chiefs and pastors/priests were men. Kinship and church membership appeared to be important for organising social interactions.
4. Most of the marriages are arranged. Early in children's lives, the future couple's parents make the arrangement, which is partly based on kinship, but also

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17. Land is passed down either through male (patrilinear) or female (matrilinear) lines of the respective clans. Patriarchal on the other hand refers to a general socio-political structure in which men dominate the positions of power, throughout the society as well as in individual relationships.

considers land ownership and individual property background. The agreement, including the bride price, requires the consent of the chief.

5. It is noteworthy that young men were mostly absent or appeared to keep distance to the communities; they almost were invisible. It did not become clear what they contribute to the communities, hence it seemed that they do not have a defined and thus secure place in the community. However, according to conversations with men in all three villages, elder boys have to fulfill certain roles such as leaving their homes when they become adolescents to live with other young men somewhere further away from the community – most likely a *rite de passage* into manhood.
6. The team met with respective chiefs and obtained permission to carry out the planned activities. Within the village, it did not seem to be necessary to obtain consent or permission of other family elders, husbands, and/or other male or female decision makers for whatever action.
7. The lines emphasising kinship ties are not yet obvious to the consultant. They seemed to be mainly patrifocal. The societies are patriarchal, with a very formal hierarchical structure.
8. The leadership of the chief and the priests is very paternalistic, i.e. their attitude and behaviour seems to limit people's liberty or autonomy as there is hardly any space (or concept) of individual civic responsibility. Furthermore, their attitude and behaviour suggests superiority towards other community members, women and girls in particular, and people act and react correspondingly. This gives the impression that actions and choices - again of women in particular – are not really voluntary and not genuinely theirs. Tasks seem to be delegated, usually from men to women, regardless of the women's own will. This observation is supported by the way men talk about their wives: I will tell her what to do, she will cook/be in the garden, I will make her participate etc.
9. Although it seems some activities, for instance the sale of crops, are carried out by women without consultation of men, there is hardly an understanding of civic liberty or autonomy when it comes to individual decision-making power. This may explain the way women participate in the project. Only in Namorako, women's participation seemed willingly. In the other communities females seemed to be coerced to join. These are just impressions, the facts are by far too little to make clear statements.
10. During the meetings with women in Lemoga, social differences became particularly evident. Women consistently placed themselves in certain groups (group one: better dressed, wearing some jewellery, not with many children, hair done, more articulate, actively participating; group two: wearing worn out clothes, no jewellery, with many children, not articulate, little or no participation; little eye or other contact between the groups). Yet, the team did not want to address poverty issues as they thought it was rude and inappropriate. It was reported that there is no word for 'poor' in Bislama; instead people use expressions like 'somebody is lacking something.' However, the team clearly had an understanding of the concept. As a baseline for poverty reduction or social vulnerability measures, it would be necessary to explore the local concept of poverty. What are indicators for wealth/poverty? How are poorer families perceived in the community? How is poverty defined? Who or what is blamed for it?

11. The presence of the church is very strong and influences how the community is organised. Members of one church nomination usually live close to each other. There are many connections between the different church members and the respective organisations. However, even though there is much networking, the relationships seem very formalised. In Namorako, women and men expressed that they lack spaces to meet informally for exchanging thoughts or discussing their concerns. Against this background, the two community gatherings were very fruitful and appreciated by all participants.
12. Many women in Lemoga complained about their husband's drinking of *kava*. [Note: An essential and integral part of life for men in Vanuatu involves *kava*, a drink made out of a root, which has sedative and muscle-relaxant effects. The drinking of *kava* is considered a ritual that strengthens ties among groups, reaffirms status and rank in the community. It is used in ceremonies and cultural practices to communicate with spirits. More often than not, it is consumed just for relaxation - by many men almost every day. Women only drink it every now and then. As it is the case with other drugs, its effects vary from person to person, however, taken in moderate doses it makes the consumer happy and sleepy. It relieves stress and anxiety. A higher dose may lead to mood swings and a general state of apathy.]<sup>18</sup> *Kava* causes much irritation; it is expensive and what is more, it makes men drowsy to the extent that they sleep much longer the next morning than their wives. Consequently, women cannot rely on the men until they have recovered. Women listed *kava* as a serious risk factor. Not only were they aware of the impact of *kava*, they also knew about the implications it has for when a disaster strikes. Women were more risk aware than men and showed more responsibility concerning other family members, children in particular.
13. People of different groups participated in transect walks as well as in the other exercises the team carried out. There was partly bewilderment among men that women were involved at a broader level, but we did not experience any open discrimination against particular groups during the activities; there was no open resistance or antipathy regarding the involvement of women.

#### 3.1.4 Human fibres

1. People are very skilled in cultivating a huge variety of crops. Their knowledge regarding plants, soils and weeding is thorough. It includes knowledge on cropping techniques, suitability of soils for particular plants, the effect of erosion and over-farming. Since women do most of these works, it is them who own this knowledge. Men displayed surprise about the variety of crops women plant. Not all families plant the same or the whole variety. After one of the sessions about income sources, some participants said they had learned new, alternative planting options.
2. Many women are illiterate or have attended school for just a very short time, while very few have completed secondary school. One woman in Namorako works as a teacher. A few women speak English, and some know other second languages. Many women lack self-confidence or are not used to speaking in front of bigger groups or in the presence of a stranger. Generally, the percentage of men who speak English or another second language is significantly higher than that of women. Information relating to literacy skills of men is not sufficient.
3. Taking into consideration the considerable workload of women and the great number of tasks, it is seen that women have great organisational and time management skills.

18. For further information on *kava*, see: <http://www.druginfo.adf.org.au/drug-facts/kava>; <http://www.kava.com/>

4. There are not many opportunities for paid labor within the communities. Hence there is underemployment within certain groups, certainly within the group of adolescent young men. While some (young men) do not know what to do with their time, others (young women and women) are overloaded with work. Certainly, this has its impact on the development of the self-esteem of the respective groups. Related to this is the question about social status, it is not clear whether people have to work for it or whether it is 'given to them'.

### 3.1.5 Financial/economic fibres

1. Some men offer their labour in one of the cities (Auki, Honiara, Port Vila). They are away from home for some time, come back and then leave again. In Namokaviri some men work for the logging company either as security guards or as loggers. Men mentioned that they were skilled in house construction and repair works. They also engage in wood-carving.
2. Women are skilled weavers. They produce baskets, mats and other woven items to use or to play with. Some (Namokaviri, Namorako) said they would make products (pop corn, boiled rice, cooked corn, bake cakes) to sell at the market or as trade items. In Lemoga and Namorako women also produce items for decoration.
3. Livestock serves multiple functions: it is a source of income, savings and insurance and contributes to food security.<sup>19</sup> Yet, not much livestock was seen in the villages. There were some chickens and pigs; only one chief owns cows. Visiting the market near Namokaviri showed no marketing of livestock on that particular day. However, there may well be informal trading in livestock and livestock products contributing to food security in two ways, i.e. through increased consumption of animal source foods or increased income to purchase or trade additional food for the household. It should be further explored how livestock presently contributes to household incomes, who performs livestock-related labour and the importance of livestock as assets with regard to income generation.
4. In all communities there were differences among the two sex groups as well as differences between them, i.e. among women and among men as well as between women and men. Using data collection and analysis that includes comparisons among different women and girls and with men and boys will increase the understanding of gender issues.

### 3.1.6 Roles and capacities of women and men - implications for DRR

1. The workload of women is enormous. A 'normal day' of women as described during the PAR in Lemoga for example included the following chores: morning devotion, going to toilet and wash (i.e. fetching water), preparing breakfast for the family (i.e. getting food, firewood, fetching water), preparing water for bathing for the family (i.e. fetching water to fill the bucket used for personal hygiene, sometimes including collecting firewood to also heat up water), prepare children for school, waking up children and (sometimes) husband, feeding them, cleaning up (dishes, kitchen, rubbish, washing clothes), prepare food in case there are no leftovers from the breakfast, go to the garden and work (weeding, cleaning, clearing, harvesting), collect food for dinner, collect firewood, fetch water, prepare dinner, wash children, feed children, evening devotion, bring children to bed, eating dinner, cleaning up, going to sleep. All reproductive work is usually women's responsibility. Women not only have much longer working days - compared to men, they also have more tasks that comprise reproductive,

<sup>19</sup>. See ILRI (2011).

## Interview with Miss Loretta, Lemoga



"It is nice to live here because it is very quiet. We live at the shore. Many people are interested to come to our area. [...]"

When the cyclone comes the people tell us we will move, but my parents say no. We listen to the warnings, we have a radio, we listen to the warning when there is a cyclone and we follow the tracking map. Tracking maps help a lot. We know what to do then. [...] We don't pack, we just go, we leave the things because sometimes it is too late to pack. We just close the house and just go. Now we go to the evacuation centre. I feel safer with the evacuation centre. [...] We haven't got a cyclone since we have built the evacuation centre. The evacuation centre helps a lot. Before the evacuation centre was not yet here, we do not know what to do. And now when the cyclone comes, everyone must move to one place and stay in one house. [...]"

After a cyclone, the place is crowded, some trees fell, some houses fell so we must start again to make our house. We help each other, sometimes families do not have food, so we must give some food. Sometimes some people are hungry because the wind spoiled the food and so some people help them. [...] We do not have water problems when there is flooding, because the water is just flowing into the sea. Sometimes we do not have enough water, we must go to the spring to wash. We have to get water and bring it to the house. [...]"

I helped building the evacuation centre. I got the sand for the evacuation centre. We also wove the touch leave for the house. My father and my mother taught me to make touch leave. I also can do the wall, mats and baskets. I like to weave with all my friends because we make fun and talk. We meet every Friday, sometimes we go to church and in our place and we learn from each other. [...]"

We built [the evacuation centre, H.Bill] together because, we only use manpower, we go together to work and learn from each other. We stood and watched the men dig the hole, so we learned. [Has something changed for you since the evacuation centre was built?, H.Bill] Yes. Something changed since the evacuation centre. First all the people threw all their rubbish around. But when the Red Cross comes the people dig a hole to throw the empty things and rubbish and the rubbish [from what] we cook. It helps us a lot. It is nice. I also helped to cut the trees, first the tall trees were here and now they cut the trees. I also helped to clean the trees. [...]"

I went to school until year 10 and I want to go back to school but my mother and my father say we don't have enough money. It is expensive."

productive as well as community works. In comparison, a 'normal day' of men listed the following activities: "Private prayer, toilet, getting water, collecting firewood, help in cooking, have breakfast, encourage children to go to school, go to the garden (weeding, cleaning, clearing, harvesting) or "to work" (*kopra*-related activities, housing, labour), have lunch, rest, afternoon work (get food), help cooking, change and wash, evening prayer, *kava*, have dinner, sleep." Women's daily routine does not allow time for rest or leisure. Since there is literally no time slot for unusual or extra activities, anything they do in addition to their daily chores increases their work burden. This includes implementing DRR measures.

2. Against these odds, women have been involved in the implementation of the measures of the Action Plan. [Note: With regard to the evacuation centre, labour was divided as follows: men did the base construction and were responsible for putting the leaves on the roof, women were responsible for making the touch leaves. Activities that were performed by both women and men included cutting and weaving of walls, chopping of trees/leaves, and the carrying of sand.]
3. In Namorako, many households are run by women because their husbands have left for work in Honiara. Considering their involvement in the PAR, this certainly has enhanced their emancipation in spite of cultural norms dictating that women's active participation in community affairs is limited. However, the conditions in Namorako, i.e. absence of too many men, demand their active participation because without it, necessary community works would remain undone. This is due to the fact that the men who remain in the village (including the chief) are not very engaged in activities such as the implementation of the Action Plan. The community drew conclusions of the situation and replaced the existing committee by another one, with higher participation of women. This example matches the topic and shows that (a) if it suits personal interests change is possible and (b) change can happen with different ownership and a different qualitative pattern of participation. For instance, two weeks before the PAR took place, the chief and other male VDRC members decided to take more women on board because preparations had not been done - taking on more women was the most convenient way to solve this problem. The day before the visit of the SIRC team, the evacuation site - one measure projected in the Action Plan - was cleared by two men and eight women of the community. Although women are de facto running the village, this activity required men's authorisation for the women to start. During a semi-structured interview women expressed their frustration about the lethargy of the men and the negative impact it had on the progression of necessary works. But their own initiative first needed official permission by the men. Although women have an understanding of what are necessary actions, they do not take the initiative because they are not supposed to. In this case, the attitude of men becomes a risk for women and children.
4. There is a culture of patriarchal decision-making. Men spend a lot of time together in an informal setting (e.g. consumption of *kava*), which is naturally used for bonding, the exchange of views and for lobbying of individual positions and defining group interest, re-enforcing hierarchies etc. This may imply that men know more about each other, know better what each of them is doing at a particular time. Transmitting information and accessing it seems, is easier for men. That may have dangerous implications for women, as they are differently included in the traditional flow of information, which mainly indicates that they will get information second or third-hand and later.
5. Although women's capacity to influence and decide on family matters cannot be underestimated, they lack a concerted influence in community matters. Adequate

forms of participation in socialising and decision-making have to be found in cooperation with the different groups and the community as a whole.

6. The three communities involved in this research exhibit a remarkable economy of compactness and self-sufficiency. As a consequence, they usually recover from disasters relatively unharmed.
7. Since women are the main providers for the family, they have better skills regarding the management of money and goods. Also, they are experienced in providing in times of crises.
8. It is women who take on the responsibility for children, sick and elderly. They know the specific needs or vulnerabilities of other family members, which may be crucial when a disaster strikes.
9. The absence of men due to labour migration (predominantly in Namorako) clearly places additional load on the remaining community members. It also deprives the community of active members for DRR and disaster response. Thus, women feel demotivated and tired of constant stress. Both men and women – the former because of the constant responsibility, the latter because of their workload and not adequately employed commitment - seem to have reached their limits. They desperately need support and encouragement.
10. No personal, i.e. in the private houses, preparedness measures have been observed. There were no indications that behaviour is increasingly directed towards disaster risk reduction. However, this does not necessarily mean that people do not attribute significance to measures. It may simply indicate that other activities enjoy higher priority - especially when urgency has faded over time after a disaster.

### **3.1.7 Roles and capacities of women and men in food production and income generation**

1. Both groups, female and male community members, reported noticed climate changes, i.e. generally less reliable seasonality of weather and rainfall, wind, and water variability. There is awareness that this may cause increasing difficulties (failure of crops, changing times for planting, flooded gardens, destroyed crops etc.). A few people, mainly men, said they started contemplating about alternatives such as planting more crops that are more hazard-resilient (Lemoga), moving gardens into higher grounds (Namorako), and adapted planting/cropping times for vegetables and fruits (Lemoga, Namokaviri). Even if the communities do not yet act consistently upon their observations and new experiences, there is an increased awareness that was associated with TBR disaster awareness messages. Yet, the understanding of the scientific reasons behind climate change seemed low - even though community experience correlates with scientific climate change projections.
2. In all communities men are engaged in fishing; in the case of Namokaviri men also hunt. As mentioned above, some men go to Port Vila, Honiara or Auki for labour. The majority of them return home on a more or less regular basis. The overwhelming majority of women and men in all three communities are engaged in producing food rather than cash crops.
3. In Lemoga, women and men work mainly in the family gardens. Both plant, weed, water, harvest. Most of the production is food crop; in case there is a good



Oven used for *kopro* production

harvest, some of the products might be sold in the market or traded in the village. The income is kept by the one who sells the goods. Among the crops are bananas, pineapple, peanuts, breadfruit, many root crops (yam, sweet potato), cabbage, spring onion, taro, cocoa, and beans. Where both sexes are involved in gardening, women showed themselves amused, irritated and annoyed when shown the lists of crops produced by men. They said that men were mainly involved with *kava*, cocoa and the production of *kopro* [Note: *Kopro* is the dried kernel of the coconut, from which coconut oil is extruded.] However, the chief in Lemoga and some other men were trying hard to convince the rest about equal workload and involvement. A more detailed investigation was not possible due to time constraints.

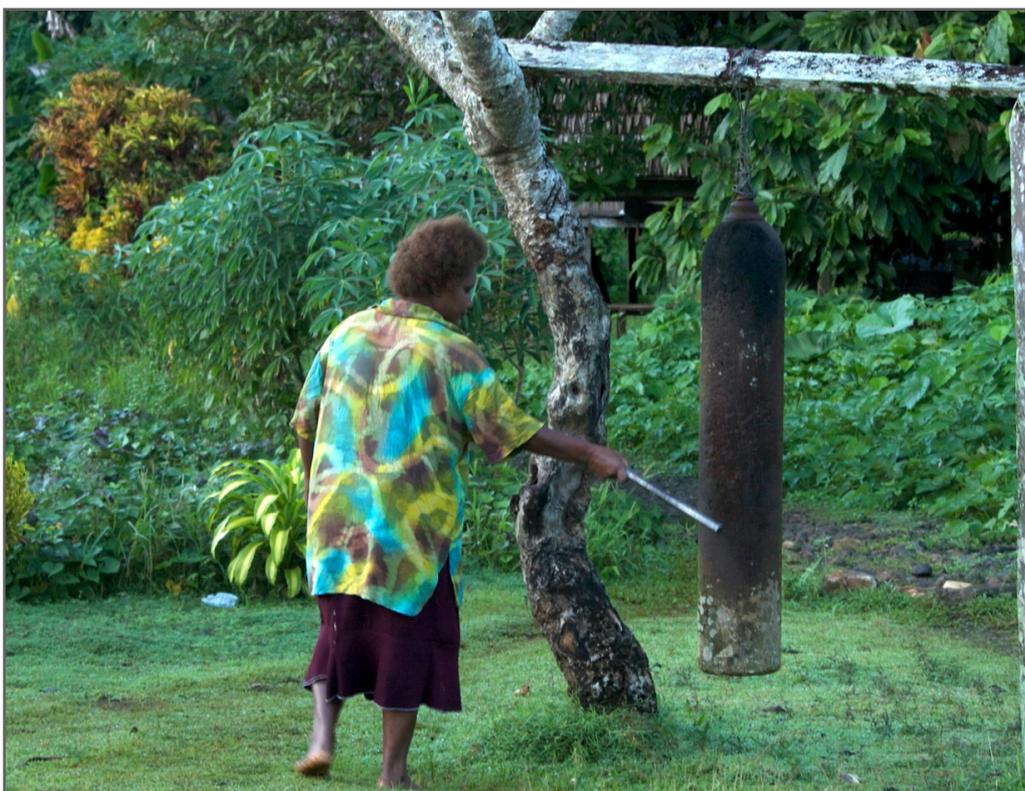
4. The production of *kopro* is a long process that includes several individual activities, some of which are performed by women. Nevertheless, men are more involved and also market the finished product. There was no time to analyse the involvement of women and men in the individual productive steps.
5. Women and men mentioned having chickens, pigs and fish as well as eggs for consumption and trading.
6. While women possess various gardening skills as well as knowledge on crops and their seasonality, the women interviewed knew little about storing or processing vegetables and fruit. However, there were brief remarks on the potential of some food items to be stored. It is assumed that men also have some knowledge on storing and processing food.
7. Women are skilled weavers. They produce mats, baskets and different items used for housing. They listed weaved products as items to sell, but the main purpose is personal use. Some women produce items for decoration such as necklaces or other trappings made out of seeds, shells or some fibres.
8. Men listed woodcarving, *kopro* and *kava* production as sources of income. Also, diving for two special kinds of shells was mentioned. In general, men make items connected to housing and construction; at times they sell those or their labour.
9. Men move to places where paid labour is found; it has to be analysed what this income is used for - especially whether it increases the family income or is used by themselves for matters of prestige, social ranking, drug habits etc.

10. The different expenditure patterns revealed that women are the family's main providers. To make ends meet, they must be good housekeepers and managers of money and resources.
11. Extraordinary needs (health care, social events, social obligations) place a huge burden on families and often deplete savings or bring families into debt.
12. One woman (*see box: Miss Loretta*) said that people help each other after a disaster (cyclone) happened. She stated that in case some families are short of food, others would support them.

### 3.1.8 Early Warning System

Information regarding the Early Warning Systems is rather limited. However, this is what was achieved during the stays in the three communities. The listed information will enable local staff members to assess missing relevant information to fill in the gaps, as further inquiries are necessary to provide the desired information.

1. The communication systems are mainly traditional. Observed were the use of corn shells and big iron gongs. There was talk also about the use of wooden drums and fire for communication. Traditional communication forms are part of the culture of the relevant community. As such, it is assumed that they are familiar to its female and male members, used and understood by them.
2. Observed modern means of communication comprised mobile phones and radios. Both women and men listen to the radio. Men in Lemoga mentioned Radio Vanuatu, Radio Australia and their mobile phones as information sources. However, all need energy supply, which may become an obstacle in case of emergency.



Woman in Namorako hitting the big iron gong

3. The women complained that they had no access to their husbands' mobile phones. This indicates that modern means of communication such as mobile phones and radios affect traditional communication forms as far as the inclusion of all members of the community is concerned. Traditional communication methods include all members; also, they function without high costs. Costs limit participation of women in particular.
4. According to the pastor, one corn shell in Lemoga is stored in the church, another one is kept at the chief's house. There may be more corn shells as there is another Catholic Church. In Namokaviri, the chief blew a corn shell when the team arrived at the boundaries of the village. It is assumed that this corn shell is kept in his house. The iron gong that was used to call the community members for meetings was in one of the churches. In Namorako one big iron gong was seen close to the school and church.
5. The use of corn shell and wooden drums is taboo for women, as both have ceremonial and spiritual implications. It is assumed by the consultant that there are also messages transmitted for men only. Women may understand their implications too, however, the contents of the messages may not be known to them. There was no mentioning of messages exclusively for women, yet it is likely that there are women-only messages too.
6. In Lemoga, the corn shell was used by the pastor to announce the beginning of community meetings and the church services. In Namokaviri and Namorako, the iron gong was used for the same purposes. The chief of Namokaviri also blew the corn shell when the group of facilitators was about to enter the village. This was to inform (and warn) the community members about our arrival.
7. There was no straightforward answer on the question whether exceptional use by women was accepted in case of emergency. Also, blowing the shell requires some skill. Thus, it is guessed that (most) women would not know how to use it for warning. The power of taboos relating to spiritual or ceremonial customs is very strong. So even if women and girls knew how to blow the corn shell, they would probably not do it – even in the face of an emergency situation.
8. Even though the sound of the corn shell goes very far and – according to the pastor in Lemoga - it is thus used to alert, neither shells nor wooden drums seem to be loud enough in case of strong wind and rain.
9. With regard to spreading of information: During a few conversations in Lemoga and Namokaviri, it appeared that people (mainly women in this case) maintain top-down patterns regarding obtaining information too. They, i.e. the women talked to, did not seem to be pro-actively seeking to be informed, as they assign and delegate responsibility to the chief and/or the pastor and/or the CDC/VDRC. In Namorako, the chief talked about the pressure he feels because of the constant responsibility people assign to him.

### 3.1.9 Recommendations

#### A. Physical Disaster Risk Reduction

1. The following risks impact daily life of all groups, as safety in general is a concern that matters for everyone, i.e. women/girls and men/boys. The mentioned risks implicate necessary activities, which could become part of the respective Action Plans. The relation to gender reveals when considerations such as who will do what or questions like how will gender expertise be included, have gender issues been discussed, how have women/girls been included in the work plan etc. are built in when developing adequate measures.
2. The path next to the riverbed in Namokaviri is very unsafe, particularly for children. It is unsafe for two reasons: (1) the soil gets slippery when it rains, and (2) the water erodes the soil. Think of establishing a different, safer route, clear the trees that make the path even narrower. How about gabions to protect from erosion? Could that include an income generating possibility?
3. The bridge in Namorako is dangerous and should be replaced.
4. Find out about the actual impact of the logging on the islands on water irrigation, soil erosion, land use pattern as well as consequential social changes. There might be a need to be more aware of the consequences logging has on the eco-system and the environment to be pro-active with regard to risk reduction.
5. In Lemoga, even after a 'normal' rain, water was gathering in the village. How about bringing in some external expertise on where and how to establish adequate drainage and irrigation systems?

#### B. Participation

1. For an equal participation and involvement of women in the different phases of DRR programmes, they require alternative ways to be involved in decision-making processes. It seems that the current representation of women in the CDCs/VDRCs does not support or assist their substantial input concerning their interests or practical and strategic gender needs. A different form of organisation should be considered. Possibly, for the time being, parallel functioning women's CDCs/VDRCs are necessary to represent women's concerns.
2. Adequate forms of participation in socialising and decision-making have to be found in cooperation with the different groups and the community as a whole. The situation in Namorako seems to be favourable since the women are aware of gender inequalities and start to express their exhaustion. Discussions also revealed that most of the men who were present in Namorako were very aware of this condition. The experience of the focus group discussion as well as the semi-structured interview was very positive, both, women and men enjoyed the joint gathering and the talking. Practical considerations about adequate forms of participation need to take the attitude of the facilitating staff into consideration. In case they are not patient or express boredom and disinterest, it will be very difficult to have an inspiring discussion. Also, venue and time should be convenient for all who want to participate.
3. Conduct gender-segregated risk assessments, as women have different needs, interests and experiences. However, they may not express them when the results are shared and discussed with men. Possibly, there might be a conflict of interest:

the fact that women may have an opinion of their own, which is different to their husband's or mother-in-law's, may cause offence. Certainly, results have to be communicated, but to avoid confrontation this may require other ways of sharing them. How about letting women present the results of the men's group and vice versa? How about putting the results into dancing, performing or singing? However, maybe it is not yet the right time for sharing and it needs separate committees. Promoting gender equality for the moment may mean that women will also have the same or their own forms of organisation and decision-making, parallel to those of men. Equality does not mean the same for women and men, but the same decision-making power, or access to and control over resources. And this probably requires very different measures for women and men. This rationale may result in changes in the tasks that are currently conferred to the committees as well as in the process of establishing them.

### C. Communication patterns

1. Promote dialogue and less formalised communication patterns. For the time being the latter particularly refers to the way trainings are conducted: are the facilitators trained in participatory methods, how about their attitudes, language etc? Are there other teaching methods than confronting training? (which does not necessarily mean less structured or that there is no agenda). Furthermore, it refers to opportunities to create space for informal get-togethers of women and men: how to facilitate exchange of personal experience? Both experiences in Namokaviri and Namorako were very interesting and touching as less formalized communication patterns were possible in these particular settings (evening in Namokaviri with theatre, singing, performances etc, semi structured interview in Namorako in the evening).

#### Extracts of interviews in Namorako



#### The chief

"The newly elected VDRC has not met, because it is just two weeks ago and we are in a process and some of the members are not here [in the village]. To be honest, we don't meet so often. We do have an idea what to do in the future, we know what we have discussed with the RC about it, but we have not yet talked. There are a lot of things to do but [...] we haven't done. [...] if we can better organize ourselves [we will, HB]...it depends on the leaders. [...] We believe, that [Hennie, the newly elected VDRC member, HB] will lead. Important thing is to prepare the evacuation site and when we prepare it [we] will ask the RC for another tank to prepare there, at the site. When flood comes so we can move. [Flood is the biggest hazard] we are facing. [Before] we just ran to the top [of the mountain]"