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# Socio- economic Analysis Report

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Rendova Island

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## SOCIO ECONOMIC WORKSHOP REPORT

The socio-economic and gender analysis workshop begins with an informal setting the scene as other participants arrive. This informal session begins to give the participants the analysis methods, some key questions for participants to assess their socio-economic activities and who is doing what and where. Dr. Ravi from the Ministry of Agriculture and Livestock led the session asking the following questions:

- Where do you come from? - highlighting village/community where she/he comes from.
- What activities do you do – refer to agricultural activities
- Tell us what happened to these activities or what crops has been impacted by the disaster
- Why do you think they have been impacted?
- What are the major categories of people in your community?
- Which group has been most affected by the disaster?

*“Disasters tend to reveal existing national, regional and global power structures, as well as power relations within intimate relations”*

(Enarson and Morrow, 1998:2).

The following section examines the direct and indirect impacts, and looks at how they have affected women, men, children, elderly and People living with Disability as well as the responses to earthquake-tsunami at two levels: first, that of individuals and their strategies for coping with the crisis; second, the actions of governments and the coordinated bodies of civil society and international organisations. The final section attempts to draw together the salient points and challenges suggested by the analysis. It also offers some recommendations for integrating this approach into future emergency and recovery scenarios and for reducing community’s current vulnerability.

### Introduction

Disasters such as Earthquake-tsunami are natural phenomena, but their impacts are not. Rather, their effects are the result of the actions of human beings and are determined by the circumstances of the country in question, i.e., poverty, social inequalities, and the extent of deforestation, among other factors. Blaikie et al. (1994:3) point out that there is a risk inherent in treating disasters as something

peculiar or as events detached from people's daily lives. In the communities of Solomon Islands, this serves as a warning against analyses that separate natural disasters from their political and socio-economic context, from economic growth in line with the neoliberal model, and from the vulnerabilities inherent in this process, which affect the impact of an earthquake-tsunami such as 2010 on Rendova.

Moreover, where disasters take place in societies governed by power relations based on gender, age or social class, their impact will also reflect these relations and, as a result, people's experience of the disaster will vary. Today, the importance of the gender perspective during times of crisis and emergency is acknowledged, both on account of the differentiated impact on men and women and on account of the different strategies adopted by them to deal with such situations (Byrne, 1995; CAW, 1998). Despite the recent activities and publications on disasters, a gender perspective has not become mainstreamed within disasters research. Moreover, although a number of gender training manuals and guides have been made available, often the so called 'tyranny of the urgent' wins out over good practice.

## **I. Methodology and approach**

### **A. Sources of information**

Up until 2011, no studies had been conducted on the impact of earthquake-tsunami in the Western region. Even with both a social and an economic focus, which should constitute an important source of information that could provide an overview of the situation of communities in the region, both before and after earthquake-tsunami?

This analysis is based on the analysis of existing documents and reports on the impact of earthquake-tsunami, relief distribution complemented by informal interviews with key informants during the workshop held in Rendova from July 25 – August 5, 2011. During the initial stages of this process, it became evident that there was a lack of recent and updated information available in general, and about the socio-economic situation of women & men in the rural areas of Solomon Islands in particular.

### **B. Basic concepts**

Before the situation post earthquake-tsunami is examined, it is important to clarify a number of concepts. The issue of vulnerability in general, and that of the men and women of the communities in the Rendova in particular, needs to be addressed. It is also essential to know what is meant by a gender perspective with respect to a focus on women & men. Lastly, it is also necessary to examine one of the most important places in times of crisis: the household.

#### **1. Vulnerability**

Vulnerability is a key concept in predicting and understanding the existence of differentiated impacts on the various groups in a society (Blaikie et al., 1994). The concept of vulnerability takes into account people and the differences among them; in other words, it facilitates analysis of the social situation, affirming that people's circumstances change and can be changed, in this case, by an event such as an earthquake. Consequently, the concept does not look at the resources available to the different social

groups in order to describe their current place in society (vulnerability as a passive concept), but rather to gauge the prospects for changing the situation (vulnerability as an active concept).

The concept of vulnerability focuses on limitations or lack of access to resources; that notwithstanding, many investigations have attempted to foreground to a greater extent the “positive”, i.e., the uses to which people put the available resources, together with their self-help strategies in crisis situations. This notion of vulnerability considers the combination of external aspects –the risks or intensity of an external shock or disaster (such as a tsunami) – and internal aspects –the ability to cope with such disasters without sustaining major damage, or ability to recover after the event.

**INTERNAL AND EXTERNAL ASPECTS OF VULNERABILITY**

<b>Vulnerability</b>	
<i>External aspects</i>	<i>Internal aspects</i>
Intensity of the experience (depends on geographical location, etc)	Ability to recover after the disaster (depends on access to resources, etc)

**a) Types of vulnerability**

It is possible to identify different types of vulnerability: economic, social, political, physical, psychological. It is also necessary to take into account the intensity of the disaster and the ability to recover from it, though often the two are related. Above table sets out some different types of vulnerability and their definition.

**TYPES OF VULNERABILITY**

<b>Situation involving “lack of...”</b>	<b>Leads to</b>
Integration in the community (e.g., recently arrived migrant)	Social vulnerability
Inclusion in the decision-making process (e.g., woman)	Social vulnerability
Feeling of power or control over one’s life (e.g., woman in a violent relationship)	Psychological vulnerability
Feeling of security (e.g., high crime rate)	Psychological vulnerability
Health (e.g., Disabled person)	Physical vulnerability
Physical resources, such as money, housing, etc.	Physical vulnerability

Vulnerability is directly related to impact. For example, earthquake-tsunami affected not only people who were deemed vulnerable, but also, as in Rano, people who have access to resources (cash, permanent buildings, etc). The loss of one’s dwelling led to a situation of physical vulnerability (being homeless), social vulnerability (dependency on others) and psychological vulnerability (the trauma of the experience of loss), among others. However, even when these types of vulnerability are significant, especially for recovery plans, it is the vulnerabilities experienced by people prior to a disaster occurring that require the greatest attention.

In this respect, assessment & analysis indicate that prior resources are reliable indicators of vulnerability, that is to say the extent of the damage caused by the impact and people's ability to bounce back. Information received by the facilitators has identified major aspects of post-disaster survival and recovery:

- Income, savings,
- Land, livestock, tools.
- Health and nutrition; food, security.
- Appropriate, secure housing.
- Functional education; administrative skills.
- Close family networks.
- High rate of adult dependency in the household.
- Access to public and/or private transport.
- Time.
- Social networks; community integration.
- Political power and influence.
- Power in the household; access to, and control of, household resources.
- Access to emergency resources (relief).

These resources essential to survival and recovery are unequally distributed in all communities, which means that in equally dangerous environments, people and social groups are impacted in different ways. The following categories are the hardest hit:

- Low-income households.
- Socially isolated households.
- Elderly and children
- People with a disease or a mental or physical disability.
- Women.

It is possible to predict based on above analysis that the following groups of women & men will be especially hard hit:

- Poor and low-income.
- Elderly.
- Having a disability or disease.
- Single heads of household.

### **b) Vulnerability in the region**

A mapping of risks and vulnerability has not done prior to the crisis situation in 2010 in the region, and it was difficult to offer major insights into vulnerability in Rendova before earthquake-tsunami of 2007 & 2010. The analysis is not based on various elements used to “measure” the vulnerability indices of

different provinces in the Solomon Islands, along with various groups within them that could give us the following context of the region.

These are:

- Poverty index.
- Health condition (mortality, morbidity).
- Malnutrition index.
- Female headed households.
- Housing conditions.

These elements provide a solid foundation on which to analyse the situation in each country (province, ward, community), but they do not provide for gauging the real situation of women & men in the region. One of the criticisms leveled at the assessment is that it uses a concept of vulnerability that is more passive than active, with a greater focus on the circumstances facing individuals than their prospects for recovery in the wake of a disaster.

The problem is that it is more difficult to measure the opportunities or ability to use the resources available than it is to measure limitations or lack of resources. Placing the emphasis on abilities makes it necessary, at the least, to carry out analysis in the local sphere, which means earmarking more resources for research in the community. However, the core of the problem is that the effectiveness of the research methods and the accuracy of the qualitative results sometimes called into question.

For these reasons, the discussion that follows builds on the vulnerability components used and proposes the inclusion of some indicators that may provide a better picture of the situation facing women & girls compared to that facing men & boys. At the end of the section, a blueprint is outlined for measuring vulnerability from a gender perspective.

### *(i) Poverty and access to, and control of, financial resources*

Poverty is important as a component of the vulnerability of individuals and the various social groups, but the way in which it is calculated limits its usefulness. In terms of gender, the methods that are generally used to “measure” poverty fail to reflect the unequal situation of women, especially within the home. Put differently, secondary poverty is as significant as poverty per se for women, because it reflects the fact, for example, that men do not hand over all their income to the household but rather use some of it for their “social” activities (drinking alcohol, among others). There may be cases of households that are not considered poor, in terms of income, but in which women and children actually live in (secondary) poverty because the resources available to them are far fewer than the total household resources. In this regard, a number of interviews with some women attending the workshop indicated that it is very common for men to hold back income for themselves and that, on average; they allocate between 50% and 70% of their total income to the household. The women further point out that they (women) use all or almost all of their income to satisfy the needs of the household and to care for their children. Therefore, women who do not have access to their own income constitute a vulnerable group.

In order to obtain data on secondary poverty, it is necessary to incorporate a component that reflects women's degree of financial dependence in households headed by a man. The proportion of male-headed households where the woman is not gainfully employed might be a proxy for secondary poverty.

Lastly, where women are concerned, it is important to think more about access to, and control of, resources than about poverty per se. Again we run up against the difficulty of measuring "control", hence the need to formulate a proxy. One possible solution would be to consider property ownership, i.e., the percentage of women who hold title to land or homes. In this way, it is also possible to reflect changes in how vulnerability is defined, when housing is identified as a potentially important resource for the generation of income and, by extension, for reducing vulnerability/poverty, as the World Bank has done in several of its studies.

In addition, the source of employment is relevant when assessing the impact of a disaster. Accordingly, vulnerability mapping projects should include the most important sources of employment in each area, so as to ensure a rapid response in terms of economic recovery after any disaster.

Lastly, there is a need to take into account the importance of subsidies for survival. In that regard, the impact of a disaster is twofold: it signifies the loss of items purchase by individual farmer's money, such as seeds, as well as the loss of productive capacity for recovering their money. One of the participant states that, "farmers also found themselves heavily in loss due to the emergency and some of them not able to sell the bulk of their crops at very cheap prices, in order to be able to pay some of the damaged items that earthquake-tsunami destroyed."

#### *(ii) Health conditions*

General mortality and morbidity reveal the extent of health vulnerability in the wake of a disaster. However, it might also be useful to consider a number of indicators focusing on specific groups, such as women of child-bearing age and the population aged under 6, in relation to cases of maternal mortality and diarrhea, respectively.

On account of their health status, it is also possible to identify other vulnerable groups in disaster situations:

- Abused women.
- People living with AIDS, who experience greater physical vulnerability not only due to their disease, but also because of their social status or social exclusion.

In order to prevent discrimination against these and other vulnerable groups and be able to meet their specific requirements, it is necessary to implement, among others initiatives, awareness building and training programmes for all people involved in emergency situations

#### *(iii) Malnutrition*

Though other indicators may be of use in measuring the degree of food security enjoyed by a particular population, the malnutrition index broken down by sex and age is an important indicator in itself.

*(iv) Female headed households*

It is important to take into account the proportion of female-headed households, but the way in which this is done is subject to debate. Some experts believe that its importance lies in it being a line of analysis rather than as an indicator of vulnerability per se. Including the proportion of female heads of household as an indicator implies that it is not necessary to draw distinctions between women in urban and rural areas, young and older women, or among indigenous, and black and mixed-blood women. Advocates of this approach argue that the reality of vulnerability is the same for all these women, and that their vulnerability is different and more pronounced than that of women who live with a partner. Although the vulnerability of women heads of household is different from that of female spouses in male-headed households, both groups are in fact vulnerable (Bradshaw, 1996). Placing the spotlight on women heads of household may detract attention from those who live with a partner, which is the reality of most women.

*(v) Housing conditions*

In addition to housing, the state of local infrastructure in general is also important; this covers schools, health posts, and especially transports links. Damage to roads/bridges/wharfs may impact seriously on men and women’s ability to recover from a disaster.

*Table below presents a set of indicators that could be used as a vulnerability index for countries and communities, men and women, adults and young people.*

**PROPOSED VULNERABILITY INDEX USING A GENDER APPROACH**

<b>Variable</b>	<b>Indicator</b>
<b>Poverty</b>	
Poverty index	Disaggregated by the sex of the person heading household.
Households that are economically dependent on a man	Proportion of women without paid work in male headed households (proxy for secondary poverty).
Lack of stable income	Proportion of the population that is unemployed or without stable employment, broken down by sex.
<b>Access to financial resources</b>	
Access to resources with the potential to generate income	Proportion of the population with land and/or house title, broken down by sex (proxy for control of resources).
Range of sources of income	Proportion of households with a single source of income, broken down by sex of the person employed.
Loans	Proportion of households with loans, broken down by sex of person named.



Health conditions	
Mortality, morbidity	Population broken down by sex.
Diarrhea in children aged less than 6 years	Population broken down by sex.
Maternal mortality	Population broken down by age.
Security	
Malnutrition indices	Population broken down by sex.
Housing conditions	Population broken down by sex of the head of household.
Disaster preparedness	Existence of a contingency plan (proxy for knowledge of a plan).
Marginalization	
Illiteracy indices	Population broken down by sex.
Organization of the community	Broken down by type of women's groups/mixed groups (proxy for participation).
State of transport links	Analysis of sources of work broken down by sex.

### c) Women's vulnerability prior to 2010

Several women reveal that the women in their villages face a range of vulnerabilities, the main ones being:

- Financial. In a context of widespread poverty, women are even poorer, on account of lower incomes, dependence on men's incomes, scant recognition of their productive labour, limited access to resources with potential to produce income, and secondary poverty.
- Social, due to the high proportion of teenage mothers.
- Physical, in that a poor population is concentrated in areas of risk, without contingency planning or disaster preparedness.

When drawing up the vulnerability profile of women prior to the event, we are again faced with the shortcomings of official sources of information, due to the lack of reliable data broken down by sex and age, and in respect of disparities between men and women. Nevertheless, it is possible to have an approximate idea of women's vulnerability by considering Solomon Islands, through annual reports from "Human Development Index, Central Bank of Solomon Islands, etc".

## 2. Gender approach

Women are invisible in emergency situations due to their exclusion from relief and assistance projects. Just as this is a problem, so their participation in such activities also appears problematic. The degree and nature of women's exclusion/inclusion in reconstruction work covers a wide range, depending on who makes up the meta group.

A focus on people, for example, contends that in periods of emergency and relief all people suffer loss and that it is necessary to look at them without taking into account their specific characteristics. Such an approach makes women invisible in all respects, including that of their specific needs. The importance of giving consideration to pregnant and breast-feeding women, both during the emergency –due to their lack of mobility– and on account of their subsequent needs for a greater quantity of food and water.

The fact that women are not treated as a separate category extends to the point where they are not counted as women. More than one year after earthquake-tsunami, “there are still not many statistics on impact differentiated by gender. Most of the participants interviewed indicated that they did not explicitly take gender into account and did not break down their data on the disaster by sex nor analyse their results from a gender perspective.”

Therefore, the first step towards ensuring that the specific basic needs of women and girls are addressed over the short and long term is to collect data broken down by sex and age segment immediately after a disaster.

Nevertheless, addressing those needs in isolation creates the risk of confusing them with those of the family. Many of women’s so-called practical needs –identified as such because it is they who take on the responsibility of fulfilling them– benefit all members of the family (provision of water, health, housing, basic services and food). These practical needs stem from women’s position within the division of labour; they result mainly from the roles of women which, at the same time, reinforce them; they are a response to an immediate need; they originate under specific conditions and do not question the subordinate position of women, though they are the product of this position.

Giving exclusive consideration to these practical needs may lead as a result to a perception of women as the most efficient providers of services (in point of fact, an approach centred on the family). In addition, the failure to take into account the range of activities that women undertake or their triple role– reproductive work, productive work and community work– translates into an absence of recognition of women beyond their role as mothers and housewives. In other words, there is a risk that the unequal relations of power that exist between men and women in a society will not be acknowledged.

For these reasons, the inclusion of women’s practical needs in the wake of a disaster like 2010 (earthquake-tsunami) does not amount to a gender perspective.

A gender perspective does not solely address women’s practical needs; it also looks at the responsibilities of men and women and the relations between them. Such a perspective points towards what are termed “strategic” needs and is formulated on the basis of an analysis of women’s subordination in society. A gender focus “helps to ensure that the impacts of ‘second-generation disasters’ are prevented or mitigated, which involves minimizing the possibility of negative consequences, such as domestic violence, as a result of relief supplies.” Women’s strategic needs call into question the nature of the relationship between men and women; they are designed to overcome

women's subordination; they include access to other resources; and they involve the elimination of institutionalized forms of discrimination, initiatives to counter domestic violence and alleviation of the burden of household tasks .

It is perhaps easier to think of the strategic needs of gender as changes necessary for tempering inequality between men and women. Underpinning the design of recovery programmes with a gender perspective makes it possible to acknowledge not only people's needs but also their self-help strategies and actions. It also goes some way to recognising the existence of unequal relations between men and women, which forms the basis for understanding the various needs and abilities of both sexes.

Today, some agencies and the government endorse the idea of considering relief supply as an opportunity for transformation. Nevertheless, what is actually meant by this "transformation" depends on each player's viewpoint. For example, in the opinion of the women interviewed, relief agencies in the Solomon Islands have not included changing gender roles or relations on their work agendas.

Some experts on gender and disasters believe, however, that crisis situations provide a real opportunity for changing inequality in relationships between men and women.

Working from a gender perspective, makes it possible to achieve more effective outcomes, as it enables organizations:

- To learn about the differentiated impact of emergencies on men and women in relation to their needs and their multiple roles.
- To understand changes in access to, and control of, resources in post-disaster situations.
- To identify and develop the strategic capabilities of men and women.

### **3. Power relations in the household**

The places of power where unequal relations are constructed in a society are myriad: the community, the workplace, to name a few. One of these places, the household, acquires greater significance in disaster situations as it becomes a major focus for the distribution of emergency aid, as well as for disaster and vulnerability impacts.

The importance of the household is recognized in the literature on gender and disasters because of the range of activities that take place within it: production, reproduction (in the broad sense) and consumption. Many relief and assistance are directed at "the family" and treat all its members as direct beneficiaries. The household is also significant in disasters and crises, in view of the changes that take place there and the disintegration that may result. Moreover, in emergencies, the gender and generational relations that exist in households are shifted to and reproduced in the communal areas of shelters.

Many people give the family and the household a central role in their relief and recovery efforts, but few take into account the way that households operate. When implementing any project with a gender focus, it is necessary to pay particular attention to the unequal power relations in those spheres. Projects aimed at the family that do not take these relations into consideration are doomed to fail, since unequal gender relations within the home often mean that resources cannot reach women and children.

#### **a) Household structure**

A significant proportion of households, in both rural and urban areas of Solomon Islands, do not conform to the image of the nuclear family comprising the father, the mother and their children. There are a significant number of extended households.

Household structure is a key factor in emergencies in terms of their response capability and resilience, as well as their needs and their responses to relief and recovery efforts.

Household headship is another basic element. As a general rule, female -headed households are considered to be “vulnerable” on account of their poverty and lack of access to other social and economic resources. Reasons for this include the fact that they are situated in areas at greater risk or because women must choose between the two roles that they perform, that of a woman –caring for the children– and that of a man –protecting assets–, which causes greater losses. In addition, female-headed households are believed to be less resilient in the wake of a disaster than male - headed ones.

However, it has not been proven that the damage sustained by female -headed households is in fact greater than in male -headed ones. In Other parts of the Western Province, it does not show a significant difference depending on the sex of the head of household. This may be explained by the pervasive vulnerability of households in all of the regions affected by earthquake-tsunami 2007, which meant that the impact was borne equally by all.

That notwithstanding, local and international organisations points out that where there were differences was in the ability to recover. For instance, female heads of household were less likely to sow in earthquake-tsunami aftermath than their male counterparts; this held true even for female heads of household who were given help to do so.

Some analysis indicates that even when female-headed households may be poor, they are not necessarily poorer than male -headed households in the same situation. Hence, it is important to learn what is really going on within households, as well as the type of poverty they experience, in terms of access to and control of resources. It is also necessary to understand the gender and generational relations that are established in those spheres.

#### **b) How households operate**

Studying the way households operate offers insight into their response to crises and their effects; it also increases knowledge about the impact of relief and recovery initiatives, in terms of access to resources, the roles and responsibilities of individuals in their households, and changes in each person’s degree of well-being. Recovery initiatives may also impact on support systems and social norms. In addition, all

such actions may have an effect on perceptions of one's own contribution to the household, and therefore open up the possibility of changes, whether positive or negative, in the status of women.

One of the models that facilitate understanding of how households operate is that of “cooperative-conflict”, formulated by Sen (1987; 1990), in which negotiation plays a central role. This author contends that the members of a household seek to improve both their own situation and the collective “well-being” of the household, and establish different priorities for this. Resolving these differences is a function of each member's ability to bargain. The factors that have a bearing on bargaining ability or position are each member's self-perception with respect to his or her worth as a person and the perception of worth that other people in the household confer on him or her. Both, in turn, depend on the value placed on each member's contribution to the household's wellbeing, which often translates into the quantity of resources –e.g., income– that can be obtained. Women are generally in a weaker bargaining position than men because their contribution is invisible, is not recognized or is considered less worthy, which affects their self-esteem.

Agarwal (1997) has produced an overview of the most important and useful characteristics of the different models for understanding the functioning of households and has proposed the inclusion of qualitative aspects. According to this model, other factors in addition to financial considerations also affect the bargaining position of each of the household's members; such factors include support systems, whether communal or external (participation in a group, family exchange networks, among others), and social norms and institutions that provide the setting for power relations within that sphere.

Thus, the various people in a household have over time different roles in the decision-making process, or different positions of power for deciding on the use of resources. The members of a household cooperate with one another for the benefit of all; however, although all have the potential to emerge with equal benefit, some members stand to benefit less than others. Women figure among the less favoured group as a general rule. There is cooperation as long as all benefit in some way, but conflict arises when some get more than others due to differences in their negotiating positions. The opportunities that exist outside the home also have a bearing on the relative position of people within it; those who do not have many opportunities outside that sphere will accept unequal access to resources far more readily.

## **II. Impacts of earthquake-tsunami from a gender perspective**

In this section, the methodological premises characteristic of an analysis with a gender perspective are applied to the effects of 2010 earthquake-tsunami, bearing in mind the above-mentioned limitations due to scarcity of information and lack of consideration paid to gender in the available data.

### **A. Direct impacts**

#### **1. Material damage disaggregated by sex**

### ***Loss of life***

There is no death during this event as communities know what to do compare to 2007 earthquake-tsunami.

### ***Housing***

The number of houses destroyed or damaged by earthquake-tsunami was estimated at 265. They are not broken down by sex of the owner or head of household.

It was predicted that 2010 earthquake-tsunami had greater damage in dwellings compared with dwellings damaged during 2007 earthquake-tsunami.

### ***Social infrastructure***

Earthquake-tsunami of 2010 damaged 4 classrooms, 1 Area Health Centre suffered serious damage, while 1 wharf was put completely out of action.

Rather than evaluate the impact differentiated by gender on education, based on the proportion of males and females affected by schools shutting down, a more appropriate course of action would be to examine the indirect effects that could impact on the student population's ability to continue their studies, as well as examine the effects of the destruction of schools on community work, given their role as community meeting places.

### ***Productive labour***

- Agriculture

Estimates of the impact on the islands agricultural and livestock sector give greater weight to production losses –a macroeconomic focus– than to losses in subsistence capacity of individuals and households, a microeconomic focus.

The greatest loss was felt to be “the harvest” (46% reported it as the most significant loss for their family and 45% as the most significant for the community). More men than women cited the harvest as the most significant loss (50% of men and 36% of women), but both sexes cited it as the most important.

- Work in the informal sector

It is more difficult to quantify the impact on the lives of women and men in the rural informal sector and those involved in informal income-generating activities in rural areas, the main sources of subsistence for the vast majority of the community.

It is important to note that:

All households suffered damage of a similar magnitude, regardless of headship.

In terms of coping strategies, men's role changed to concentrate on family activities compared to before the event occurred.

Young women worked proportionately less before and after the earthquake-tsunami. At first glance, the impact on productive work is greater among women who are not heads of household, but this does not take into account the priority that female heads place on finding some form of generating income.

The situation of young women who are not heads in independent households is even more alarming and underlines the need to include them as a category for study with a specific impact.

However, productive and income-generating activities form only a part of women's daily work. Information sources of assessment conducted after the event, as well as official and national sources, have failed to count women's reproductive and community work as a contribution to GDP, either before or after earthquake-tsunami.

### ***Reproductive work***

Household tasks performed by women are worth far more than estimated in monetary value. Measurement of Standard of Living in local communities estimates that women devote 5.4 hours a day to housework, with women aged over 20 putting in more than 6 hours on average. In the wake of the damage and destruction of sources of water and food occasioned by tremor, it can be assumed that household tasks became more difficult and that the number of hours set aside for them increased.

### ***Community work***

The economic impact on community work, especially by women, is difficult to quantify. According to participants interviewed, women devoted on average two hours per day to "social and community" activities. In the aftermath of earthquake-tsunami, it is likely that this has increased, given that, for instance, in three of the ten communities attended the workshop, more than half the women had not participated previously in community activities. A substantial number of women were involved in recovery, though to varying degrees and with different effects on their time.

It is not clear whether the high number of women involved was due to the increase in time available to them, due to the lack of productive work, or whether the proportional reduction in such work was due to lack of time on account of their involvement in rehabilitation.

## **2. Recognition/lack of recognition of work carried out by women to deal with the crisis**

Women worked alongside men in evacuation and clean-up activities doing the same kind of things, both in communities and outside; however, their efforts received scant recognition. In other communities, for instance, only a small percentage of men reported that women remained inactive during the emergency period. Some indicated that women did not take part at all. Others acknowledged that women did do something, but failed to appreciate their contribution.

Most men acknowledged the major role played by women only when this involved non-traditional tasks. It should be pointed out that this recognition is still perceived as a "help" to men, rather than as a contribution by women to dealing with the crisis situation.

The women interviewed said that immediately after earthquake-tsunami, they played a major role in cleaning and searching for food/water. However, some women indicated that men did not value those activities. They also stated that while men acknowledged their contribution during the emergency period, afterwards they forgot about it.

Therefore, it is possible to conclude that, during emergency periods:

- The traditional divisions of roles and responsibilities of men and women remain in place;
- The myriad “extra” activities performed by women do not lead to their inclusion in decision-making processes;
- Men’s recognition of women’s work –in rescue operations, for instance– is short-lived and limited in scope;
- The work performed by women was not highlighted, even in research on the impact of earthquake-tsunami which noted the sex of people coordinating evacuation, but not the sex of people working in temporary shelters providing food, care and other essential services during the emergency, activities normally carried out by women.

To sum up, it is difficult to quantify the impact of earthquake-tsunami as regards violence, given that general socio-economic impact evaluations are still lacking. The cost in terms of pressure on health services is not significant either, given the lack of information. The cost of working days lost is difficult to measure, given that women are concentrated in the informal sector. Lastly, the cost in terms of complaints procedures is only appreciable when these function properly and are accepted by the population. Psychosocial costs, like fear, lack of self-esteem among women and their daughters, are even more difficult to quantify. Nevertheless, it is vital to monitor violence in general and violence towards women in particular, in order to head off secondary consequences in the wake of catastrophes such as earthquake-tsunami.

The most important direct and indirect effects of 2010 earthquake-tsunami have on women were:

**Time:** More time devoted to reproductive work; community work was sometimes more important than productive work (financial cost to the family).

**Safety:** The emotional impact caused by earthquake-tsunami resulted in feelings of fear and insecurity. The inability to meet the need for psychosocial care may have consequences over the long term.

**Income:** Rural households experienced a reduction in their sowing capacity, and this meant the loss of a source of income. This represented a cost as regards generation of income, with consequences for their health and that of their children.

### III. Strategies for dealing with crisis situations and their consequences



## **Coping strategies**

Specialists in humanitarian disasters have stressed at length the importance of immediate personal actions and strategies implemented by the affected populations of their own accord as key to their successful recovery and the reduction of losses in the aftermath of a disaster. In this regard, “In the initial days after the earthquake-tsunami, prior to stakeholders becoming involved, sending staff and offering assistance to the affected communities, had already decided how to respond to the threats and hazards caused by the earthquake-tsunami.

Furthermore, households tailor their strategies according to the resources available and their ability to mobilize them, which, on occasion, can mean changes in gender roles.

There are different types of strategies, which relate to different levels of need.

## **STRATEGIES FOR DEALING WITH CRISES**

### **Stage 1. Safety mechanisms: minimize risks and manage losses**

- Strategies include: Changing the farming system
- Selling small animals (e.g., chickens)
- Reducing consumption
- Collecting items from the forest
- Migration of one or more members of the family

### **Stage 2. Selling goods**

- Strategies include: Selling animals
- Reducing levels of consumption still further

Recovery initiatives must take into account the following facts:

- The strategies adopted by people and households have long and short-term effects. A positive effect in the immediate term may be negative in the long term.
- Strategies that have positive effects on the well-being of the household may have negative consequences for one or more of its members.
- Sometimes the strategies that women adopt on their own initiative benefit the household, but have a negative impact on themselves.

The strategies implemented by households and their members post earthquake-tsunami were not overly different from those they were accustomed to implement. Some describe as a permanent crisis; the majority of the population does not have many options after a “disaster” that forms part of a chronic cycle.

Nevertheless, it is important to outline some of the strategies adopted:

- The importance of support networks and the exchange of informal/family resources. Women, for instance, shared activities such as child care and food preparation. However, the capacity of families to use these exchange networks may have been negatively impacted by a phenomenon such as earthquake-tsunami, owing to the loss of material resources that could have been exchanged.

Men adopted two strategies:

- The more common strategy was to leave in search of work in other parts of the country
- Some consoled themselves with alcohol, which led to an increase in social problems.

As for the women, the female participants interviewed spoke of their “creativity” in seeking out forms of subsistence, but there are few concrete examples of their actions. The evidence indicates that after earthquake-tsunami, some women became involved in small productive activities, but they were few in number.

Given the lack of “hard” data on the strategies adopted by women, we will limit ourselves to pointing out a number of changes in two communities.

After earthquake-tsunami, there was a decline in the percentage of women involved in productive work. Nonetheless, a greater number of women cited their contribution to the household. This was true both among women with productive work and among those without. For their part, men valued the women’s contribution more when they had productive work, but their assessment of the worth of reproductive work declined. In other words, while women without productive work acknowledged their own contribution to a greater extent, their partners placed less value on the work performed by them. This situation is a potential source of conflict between partners.

### **Women’s experience**

The evaluation of relief activities is not specifically an analysis from a gender perspective, but the inclusion/exclusion of women has an impact on both men and women. In addition, the problems that arose during the execution of relief distribution, and differences between the community and their leaders, had a negative (indirect) impact on the situation of women.

During the workshop, the majority of the women interviewed (70%) stated that the response agencies took their opinions into account. However, one in every three women indicated that the priorities of the organizations differed from those of the community.

This suggests that, in situations where there is contention between the community and the relief activities, there is a greater chance of conflict within the couple over participation and use of resources.

There is also a significant link between, on the one hand, differences in opinion between organizations and the community and, on the other, the perception of changes in levels of violence towards women. Of women who cited problems between both groups, 43% indicated that after earthquake-tsunami there was

more violence towards women, compared to only 24% of those who had not cited problems. Therefore, one indirect impact of reconstruction projects where there were difficulties may be an increase in conflicts within the couple and violence towards women in their homes.

### **Rehabilitate with transformation?**

Women's participation in development projects creates an opportunity for modifying not only their roles but also their relations with men. This also goes some way towards changing the power imbalance facing women, by improving their access to, and control of, resources. Women's involvement may, furthermore, lead to an improved perception of their position and their worth, and, as a result, of their rights as regards decision-making. Gender-focused recovery, with a primary goal of transforming unequal power relations, has the potential to promote sweeping change.

There is a risk that women's participation, their access to resources, their demands for recognition or appreciation may lead to conflict within the couple. Disharmony may increase when men are not involved in development projects, or when they lack access to resources, in general, and this increases their feelings of frustration after a natural disaster. In situations like this, conflict can easily turn into violence.

On the one hand, while women participated in project activities, these had objectives that were based more on the women's "practical" needs than their strategic ones. However, changes in access to resources do not modify women's roles and responsibilities. By the same token, there is no change in men's and women's perceptions about the worth of their contribution.

On the other, the lack of a relationship between a heightened perception of contribution, conflict and violence, may also mean that the inverse process mentioned, that of an increase in violence, does not exist.

However, frustration stemming from any recovery process, which generated problems between the groups and with the community, together with generalized frustration as a result of the damage wreaked by earthquake-tsunami, will appear to lead to greater conflict in households and an upsurge of violence against women.

## **IV. Summary and recommendations**

This section is divided into two parts. The first part contains a summary of the situation, vulnerability and impacts of earthquake-tsunami. The second part sets out recommendations regarding future impact assessments, including some useful indicators.

### **A. Summary of the situation post earthquake-tsunami**

### **1. Most significant specific direct impacts**

- Time. Women are required to devote more time to reproductive and community work, at the expense of productive work (financial cost for the family).
- Income. Sowing capacity declined in rural households, causing them to lose their regular source of income. Female spouses paid the cost in terms of their participation in productive activities, both agricultural and informal.
- Production. Costs in production, an important source of income and subsistence for the family.

### **2. Impacts of relief activities**

- Women were involved in cleaning, distribution and evacuation, but not in decision-making processes.
- Women enjoyed the same access to material resources as men, but relief did not take into account the socio-economic situation in order to find out about the use of those resources.
- An opportunity was missed to overhaul the existing titling system.

### **3. Women's vulnerabilities after earthquake-tsunami**

- Physical. Lack of housing.
- Financial. Lack of a regular source of income.
- Psychological. Mental health problems. Feelings of insecurity and fear in the face of disasters.

## **B. Recommendations**

### **1. Prior to a disaster: importance of mapping projects**

It is vital that projects include the following mapping elements:

- Particular socio-economic vulnerability of each area, taking into consideration gender and age differences.
- Organizational capacity of each area, given its importance in preventing loss of life in emergencies.
- Productive base (and economic potential) of each area, differentiated by gender.

Consideration of factors that have a bearing on this, and identification of markets for the sale of output and transport routes used.

- Groups with specific vulnerabilities and different needs for evacuation and contingency plans.

### **2. Concept of vulnerability: need for a common concept**

- This informal research provides a solid foundation for describing the situation as regards vulnerability and identifying areas of risk in the community, to which can be added elements that give a better account of the situation of women.

- Other region's study could, if adapted to the circumstances of the region, be used or complemented to put greater emphasis on people's resilience in the wake of a disaster.

### **3. Methodology: the importance of a range of participatory methods**

In order to provide for women's inclusion in censuses and evaluations, it is necessary to:

- Design questionnaires that take into account difficulties in obtaining information about women's activities and the impact of emergencies on them.
- Include women as significant sources in information-gathering.
- Use different methods to collect information on general and specific needs on different groups of people and their priorities, particularly those that involve the people affected.
- Involve women in the information-gathering process as "researchers". It has been proven that the inclusion of women provides for better quality information.
- Consider initiatives by other organisations as examples of good practices
- Accept that recovery projects may have an impact as equally important as the disaster. Monitoring and evaluation of the process must form an integral part of any recovery plan at the macro level.

### **4. Analytical framework**

- Develop the analytical framework suitable for Solomon Islands.
- Consider household models of operation.

### **5. On women's participation in the planning, design and monitoring of emergency programmes and recovery projects**

All recovery projects should include as standard practice:

- An analysis of the vulnerabilities and capabilities of the community, differentiated by sex and age, as the basis for the planning process.
- Strengthening the organization of the community and existing coordinating bodies.
- A gender training component.
- A component addressing social problems (mental health and violence).
- An analysis of the environmental impact.

Any analysis conducted for the purposes of evaluation or monitoring must encompass indicators that identify women's real participation in the planning, design and monitoring of emergency programmes and rehabilitation projects. This involves the following requirements:

- In the local sphere: it is important that project monitoring and evaluation in terms of men's and women's participation consider:
  - Proportion of women in decision-making bodies and project management structures.
  - Women's perception as to whether their opinions are given consideration.

- Proportion of local proposals submitted by women's groups and proportion of projects managed by women.
- Ratio of material benefits to non-material benefits.
- As a basic requirement, it is important that donor agencies:
  - Have staff that has gender awareness.
  - Provide training to their counterparts so as to ensure inclusion of a gender perspective.
  - Include requirements concerning the percentage of men and women involved and the form that involvement takes.

### **Lessons Learnt**

Moreover, where disasters take place in societies governed by power relations based on gender, age or social class, their impact will also reflect these relations and, as a result, people's experience of the disaster will vary. Today, the importance of the gender perspective during times of crisis and emergency is acknowledged, both on account of the differentiated impact on men and women and on account of the different strategies adopted by them to deal with such situations. Despite the recent activities and publications on disasters, a gender perspective has not become mainstreamed within disasters research. Moreover, although a number of gender training manuals and guides have been made available, often the so called 'tyranny of the urgent' wins out over good practice.

The most important lesson is that cultural roles and patterns of power are negotiable. To improve similar initiatives, it would be fruitful to tactfully overcome male dominance by making women's participation a prerequisite of the project to be implemented, through an incentive-based - not advocacy-based - approach.

### **The Challenges**

The biggest challenge obviously was the local culture's traditional conservatism. It was overcome in part by making the process as culture-sensitive as possible with the help of local women who are both qualified and strongly aware of local norms.

### **Potential for Replication**

To replicate the initiative in a different context, there is a need to gain the local community's support and confidence through negotiations and dialogue based on the above-mentioned incentive-based approach. Such a practice could be most useful in all elements of disaster risk reduction.

## Socio-Economic Analysis Report

### Introduction:

As Rendova slowly comes out of the disastrous effect of the 2010 Tsunami and Earthquake communities continue to be challenged in attaining their socio-economic wellbeing. A side from undermining the soio economic wellbeing of the people in Rendova, the disaster has had a bearing on the ability of these communities to resist future harzard.

In response to the disaster the SOI Government initiated the Recovery Assistance for Earthquake and Tsunami in the Solomon Islands” . The one year project funded by the UNDP’s Bureau for Crisis Prevention and Recovery is aimed at: *Rebuilding Livelihoods in affected communities and facilitating the stablishment of an Early Warning and Risk Management Systems for Geological, Flashflood and related Hazards*

In May 2011, UNDP’s Crisis Prevention and Recovery Unit in Solomon Islands commissioned a consultancy to carry out a socio-economic analysis in the project area. The assignment aimed at assessing the socio economic situation of the disaster affected communities with the aim to assist communities in making decisions on appropriate interventions that would promote long-term sustainable recovery and development. These interventions would also enhance the resilience of communities to future disasters.

From 11th July to 12th August the consultant embarked on the assignment whose objectives were to:

1. To conduct Socio Economic and Gender Training in the disaster affected communities
2. To conduct a post disaster needs assessments in the disaster affected communities
3. To identify scope for UNDP post disaster recovery intervention
4. To draw up a Community Action Plan for the disaster affected communities.

### Outputs/deliverables

The following outputs were expected from the consultancy:

- Socio- Economic and Gender Training Report produced
- Community Risks and Hazard Assessment Report produced
- Community Action Plans produced

### Methodology:

The socio economic analysis employed mainly qualitative methods and less of quantitative method. Here selected members of the affected communities were gathered and a series of discussions were held to discuss the socio-economic impact of the disasters on men and women of Rendova. Here perceptions of key informants about the impact of the 2010 disaster on the socio economic wellbeing and whether the proposed UNDP support is consistent with the post disaster situation in Rendova were elicited .

Because of time constraint the socio-economic analysis relied heavily on community leaders and others who represent the diverse interests in the community such as Village organisers, village chiefs, women's groups, CBOs and church elders. This choice was taken because of the wealth of knowledge they have on the socio economic situation in the communities and their earlier involvement in relief and Early Recovery activities following the disaster.

Eight focus group discussions were held; 5 in Lokuru and 3 in Baniata. This involved small discussion groups to give responses that would to some extent represent the general public.

Face-to face interviews with key persons including church elders and representatives of women's groups in Vancouver, Rano, Baniata and Ela beach.

In Lokuru, smaller meetings were conducted for men and others for women to elicit information specific to the extent of the impact among both men and women. This allowed for triangulation of information collected from the bigger group discussions.

### **Scope of the Socio-Economic Analysis**

Owing to resource (time and financial) limitation the analysis focused at understanding 1) how the livelihood means of men and women in Rendova was affected by the disaster 2) the level of community vulnerability to disaster and 3) the extent of community awareness about their exposure to risks and hazards. The following questions were therefore asked during the analysis to gauge community perceptions:

- What do you consider as the major sources of livelihoods in your community (e.g. fishing, agriculture, market vending, tourism, hunting etc)
- What was the performance of these sources of livelihood before/after the disaster?
- How were men and women affected by the disaster?
- Do you feel that there are specific groups whose quality of life was disproportionately affected by the disaster?
- Do you think community members are aware of the risks and hazards in their communities?
- What do you envision as the best ways to address community vulnerability in your areas?

### **Livelihood Impact**

#### *Housing*



The total number of houses destroyed or damaged by earthquake-tsunami was 265. It was established that the 2010 earthquake-tsunami had greater damage in dwellings than the 2007 earthquake.

### ***Social infrastructure***

The earthquake-tsunami of 2010 damaged 4 classrooms, 1 Area Health Centre, while 1 wharf was completely damaged.

### ***Production***

The impact on the islands' agricultural and livestock sector was most pronounced. This was particular so for the subsistence agricultural sector involving the majority of the community members. The crops that were most affected by the disaster include; cocoa and coconut. Five copra dryers were destroyed. Most gardens affected were in Retavo and Rano.

### **Community Vulnerability**

Rendova community is highly vulnerable to both natural and human-made disasters. This is because of the physical environment surrounding them, the level of knowledge that they have about the risk and hazards that they are exposed to and their ability to cope with these risk hazards.

### **Physical environment**

Because of its geological and geographical makeup Rendova is exposed to a wide range of natural and human induced disaster. This includes: river-coastal flooding, earthquake-tsunami, coastal erosion, soil erosion, sea level rise. Logging is increasingly viewed by community members as a human induced source of disaster in the area.

### **Knowledge of risks and hazards**

The recent disaster episode of 2007 and 2010 have increased the level of knowledge of communities about natural and human induced disasters. However, there is still limited knowledge about the risks and hazards that communities are exposed to. A hazard and risks assessment was conducted in Lokuru and Banita. This assessment showed that the major hazards the communities are exposed to include: high waves, earthquake & tsunami, river-coastal flooding and logging. The elements that were most at risk include; plantations, houses, marine resources, people, water supply system and environment.

### **Coping mechanisms**

The socio-economic analysis shows a rather limited capacity of the communities to cope with often disastrous impact of hazards. The economic situation of most households in Rendova is such that they cannot meet their basic socio-economic well-being. Because of their reliance on subsistence agriculture, a sector that was hard-hit during the disaster, agricultural production and productivity were compromised. This goes further to undermine the ability to cope with the effect of disasters.

There is evidence from the discussions with the communities that repeated disasters in Rendova has improved community based early warning system in the communities. From the 2007 experience, a relationship was established between movement of birds and likelihood of an earthquake. It was further confirmed during the 2010 earthquake when the earthquake occurred two days after, a similar movement of birds was detected by elders.

The social network in Rendova to support communities in an event in a disaster is rather limited. Despite the existence of church organisations, the wantok system, schools and health centres that potentially provide relevant support to disaster affected people, this potential support is constrained by resources and skills available in the communities.

**COMMUNITY ACTION PLANS**

**Lokuru**

**Livelihood Community Action Plan**

Enterprise	Potential Solution	Activity	Who (Responsible)	How (Done)
Coconut	Construct good standard copra processing mills	Public awareness meeting to identify <ul style="list-style-type: none"> <li>- Issues and constraints related to coconut industry</li> <li>- Natural resources availability</li> <li>- Human resources availability (gender balance)</li> </ul>	<ul style="list-style-type: none"> <li>- Local populace the public of the region (elders, men, women, youths, children: gender balance)</li> <li>- Lokuru Copra Producers Committee (LCPC)</li> <li>- Ministry of Agriculture</li> </ul>	Post- project Implementation Phase (verification, consultation, planning, implementation, monitoring and evaluation) <ul style="list-style-type: none"> <li>- High level of interest and participation by local populace – elders, men, women, youth and children (gender balance)</li> </ul>
	Improve copra buying services and prices	Form Lokuru Copra Producers Committee <ul style="list-style-type: none"> <li>- Value statement, constitution and rules</li> <li>- Consult and interact with Agriculture Extension Officer – Munda</li> </ul>	<ul style="list-style-type: none"> <li>- Ministry of Trade and Commerce</li> <li>- Ministry of Aid Coordination and Development Planning</li> <li>- Constituency Development Fund Coordinator (SNGRT Constituency)</li> <li>- MPF Coordinator, Ward 18, Western Provincial Government</li> </ul>	<ul style="list-style-type: none"> <li>- Land allocated and utilized for project</li> <li>- Local natural or raw materials contributed</li> <li>- Local human resources (intellectual and manpower) contributed</li> <li>- New knowledge, information and skills shared and gained</li> <li>- Received material and financial inputs from Sol.Is Gov't, donors, etc</li> </ul>

				<ul style="list-style-type: none"> <li>- Received technical advice and expertise from SIG, donors, etc</li> </ul>
	establish reliable and regular shipping transport service	Formulate Project goals, strategies, action plan, time-frames and costing (budget)	UNDP RDP office EU Office SI Copra Exporters SINSA	<ul style="list-style-type: none"> <li>- Increased income spread around region in relation to increased copra processing activities</li> <li>- Increased financial statutes and ability to meet costs of goods and services</li> <li>- Improved standard of living experienced in general</li> </ul>
		Consult with external financiers, donors and business stakeholders		<ul style="list-style-type: none"> <li>- The project is judged to have uplifted the quality of community life through an improved sustainable livelihood activity related to the coconut industry</li> </ul>
Gardening	improvement of soil nutrient	consultation with appropriate and technical departments and authorities <ul style="list-style-type: none"> <li>- Ministry of Agriculture and Livestock – Munda station, UNDP, NDMO, etc.</li> </ul> Consultation with local communities	local populace (selected women group or person to lead consultation process)  Ministry of Agriculture and Livestock  UNDP  NDMO	high yield of crops (especially vegetables)

		<p>Identify and discuss with people willing to offer land for site demonstration of farming technique</p> <p>Finalise agreed site for farming</p> <p>Signed MoU with group/people offer site for farming</p>		
	establishment of demonstration farm	<p>consult with appropriate and technical authorities (UNDP, NDMO, MAL, etc)</p> <p>farming site clearance</p> <p>building of demonstration plots and nursery house</p> <p>training of farmers</p> <p>material/seed distribution to farmers</p> <p>on-site support and assistance</p>	<p>local community</p> <p>UNDP</p> <p>NDMO</p> <p>Ministry of Agriculture and Livestock</p>	<p>household have enough vegetables in their gardens and eaten</p> <p>proactive participation of farmers and extend practices to other communities</p> <p>demonstration farm utilized and accesses by community members</p>
	improve access to market	<p>consultation with Agriculture Extension Officer</p> <p>Identify constraints</p>	<p>local community</p> <p>Agriculture Extension Officer</p>	<p>local populace earn income (support school fees, health and other basic items for whole family met)</p>

		<ul style="list-style-type: none"> <li>- Transport</li> <li>- Market</li> <li>- etc</li> </ul>	Constituency Development Fund Coordinator	basic household items purchased
Cocoa	<p>In consultation with the Ministry of Agriculture and Livestock, this enterprise has a support programme currently implemented throughout the country (<b>CLIP</b> – Cocoa Livelihood Improvement Project). For possible intervention, MAL will be the lead agency thus requires logistical support from other stakeholders.</p>			

### Disaster Risk Reduction Plan

<b>Hazards</b>	River-coastal flooding, earthquake-tsunami						
<b>Objective(s)</b>	To reduce the negative impact of identified hazards						
<b>Indicator</b>	Minimal negative impact on community						
<b>Hazard</b>	<b>Activities</b>	<b>Time-frame</b>	<b>Available resources</b>	<b>Resources needed</b>	<b>Amount of resources needed</b>	<b>Community people responsible</b>	<b>Organisation responsible</b>
Earthquake - Tsunami	<b>Consultation and finalising of DRR Action Plan</b>	Aug	HR	Facilitator		VO, Elders, people trained in DRR Action Planning	UNDP NDMO
	<b>Information sharing</b>						
	Consultation with relevant agencies	Aug	HR, venue	Facilitator		Disaster Committee, VO, Elders, others	UNDP NDMO
	Confirm date	Sept	HR, venue				NDMO
	Conduct Information Education and Communication drive in all communities	Sept	HR, venue	Technical personnel		Disaster Committee, VO, Elders, Pastors, Others	UNDP NDMO Other relevant agencies
	<b>Evacuation Plans</b>						
	Develop Evacuation Plan	Sept	HR	Technical personnel		Disaster Committee, VO, Elders, Pastors	UNDP NDMO
	Consultation with community	Oct	HR			Disaster Committee, VO, Elders, Pastors	

## Socio-economic Analysis Report

	Orientation with community on Evacuation Plan	Oct	HR, venue			Disaster Committee, VO, Elders, Pastors	
	Organise exercise drill	Nov	HR, venue	Facilitator, observer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Conduct exercise drill	Nov	HR, venue	Facilitator, observer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	<b>Community Emergency Supply &amp; stock</b>	Oct					
	Consultation with relevant agencies and community	Oct	HR, venue			Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Identify appropriate items, site for storage	Oct	HR, venue, building site			Disaster Committee, VO, Elders, Pastors	
	Build storage for emergency supply and stock	Dec	HR, Building site, local materials	External resources not at the community level		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Develop MoU on use of items and restock in consultation with community and	Dec	HR, venue			Disaster Committee, Elders, Pastors, VO, others	UNDP NDMO Other relevant agencies



	relevant agencies						
	<b>Emergency Response Training</b>	Nov					
	Consultation with relevant agencies & community to identify volunteers for training	Sept	HR			Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Identify and confirm date for training	Oct				Disaster Committee, VO, Elders, Pastors, others	UNDP NDMO Other relevant
	Conduct Emergency Response training	Nov	HR, venue	Facilitator, trainer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Conduct Emergency Response exercise	Nov	HR, venue	Facilitator, trainer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies

### Contingency Plan

<b>Hazards</b>	Earthquake-tsunami, coastal-river flooding, tropical cyclone, coastal erosion, soil erosion, sea level rise					
<b>Objectives</b>	To conduct orderly evacuation, search and rescue of affected people from Vancouver					
<b>Indicator</b>	Zero loss of life					
<b>Hazard</b>	<b>Analysis of Risk</b>	<b>What if? Scenario</b>	<b>Action Points</b>	<b>System installed?</b>	<b>Roles &amp; Responsibilities</b>	
Earthquake-tsunami	High	<p>Destroy coastal community (i.e. houses, water supply system, gardens)</p> <p>Elderly, women, children will be injured</p> <p>Canoe's &amp; OBM destroyed</p> <p>Coconut &amp; cocoa plantations will be destroyed</p> <p>Psychological effects will be high</p>	<p>Inform every members of community</p> <p>Evacuate community to higher ground</p> <p>Take head count</p> <p><i>Evacuation centre set up</i></p> <p>Collect emergency food, water, medicine, light, radio, tent</p> <p>Monitor situation &amp; liaise with relevant stakeholders</p> <p>If the situation can be coped, the hazard is manageable</p>	<p>Activate evacuation plan</p> <p>Monitoring of situation will continue until assured of no further risks</p>	<p>Disaster Committee, VO, Pastors, Elders, Youth &amp; volunteers, women, children</p>	<p>NDMO</p> <p>Provincial Disaster Management Office</p> <p>Relevant SIG Departments</p>

			If situation is not manageable, conduct search and rescue for missing person			
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## Baniata

### Livelihood Community Action Plan

Enterprise	Solution	Activities	Who	How
Coconut	Support local copra buyers	<ul style="list-style-type: none"> <li>Consult local copra buyers and copra buyers from Noro/Honiara</li> </ul>	Agriculture Department, community representation	<p>Feedback to local farmers</p> <p>Local farmers have access to market</p>
	Establish copra dryers	<ul style="list-style-type: none"> <li>Consult with local community, agriculture department</li> <li>Identify suitable site for copra dryers</li> <li>Cut timbers for copra dryers (community will supply trees to be sawn for timbers and local materials)</li> <li>Build copra dryers at various sites (community contribution: labour and other accommodation)</li> </ul>	UNDP, Agriculture Dept, Village Organiser, farmers	Copra dryers built and used by community
	Training for farmers	<ul style="list-style-type: none"> <li>Identify farmers for training on how to produce quality copra</li> <li>Consultation with agriculture department for training</li> <li>Identify venue and confirm date for training</li> </ul>		Quality copra produced by farmers
Gardening	Establish market house	<ul style="list-style-type: none"> <li>Consult with local community</li> <li>Identify suitable site for building of market house</li> <li>Sign MoU market house</li> <li>Cutting of trees for timber</li> <li>Collection of local materials for building site</li> <li>Building of market house (community contribution: labour and other appropriate items)</li> </ul>	Village Organiser, UNDP, community representatives	Community used market house to sell products

		that available at the community)		
	Training and supply of planting materials	<ul style="list-style-type: none"> <li>• Consultation with local community, agriculture department and other relevant institutions</li> <li>• Identify site for demonstration of planting materials</li> <li>• Sign MoU with local group/people owned plot of land</li> <li>• Clear site for demonstration farm plot</li> <li>• Confirm date for training</li> <li>• Supplying of planting materials for local farmers</li> </ul>	Village Organiser, Agriculture Dept, UNDP and Women Representatives	<p>Demonstration farm used by local community</p> <p>Local farmers produce high yield crops</p>
Cocoa	Establish cocoa dryers	<ul style="list-style-type: none"> <li>• Consultation with relevant institutions and local communities</li> <li>• Identify suitable site for building of copra dryers</li> <li>• Sign MoU with local community</li> <li>• Clear site for copra dryers</li> <li>• Cut timbers for building of copra dryers</li> <li>• Build copra dryers at various sites</li> </ul>	Village Organiser, UNDP, Agriculture Dept	Cocoa dryers used by local communities
	Training and support from Agriculture Department	<ul style="list-style-type: none"> <li>• Identify local cocoa farmers (beginners and on-going)</li> <li>• Identify venue and date</li> <li>• Training and demonstration (include field visit to existing farm sites)</li> </ul>	Village Organiser, Agriculture Dept, UNDP	<p>Effective management of cocoa farms</p> <p>Quality of cocoa produce</p>

### Disaster Risk Reduction Plan

Hazards	River-coastal flooding, earthquake-tsunami						
Objective(s)	To reduce the negative impact of identified hazards						
Indicator	Minimal negative impact on community						
Hazard	Activities	Time-frame	Available resources	Resources needed	Amount of resources needed	Community people responsible	Organisation responsible
Earthquake - Tsunami	<b>Consultation and finalising of DRR Action Plan</b>	Aug	HR	Facilitator		VO, Elders, people trained in DRR Action Planning	UNDP NDMO
	<b>Information sharing</b>						
	Consultation with relevant agencies	Aug	HR, venue	Facilitator		Disaster Committee, VO, Elders, others	UNDP NDMO
	Confirm date	Sept	HR, venue				NDMO
	Information sharing & Educational talks	Sept	HR, venue	Technical personnel		Disaster Committee, VO, Elders, Pastors, Others	UNDP NDMO Other relevant agencies
	<b>Evacuation Plans</b>						
	Develop Evacuation Plan	Sept	HR	Technical personnel		Disaster Committee, VO, Elders, Pastors	UNDP NDMO
	Consultation with community	Oct	HR			Disaster Committee, VO, Elders, Pastors	
	Orientation with	Oct	HR, venue			Disaster	

	community on Evacuation Plan					Committee, VO, Elders, Pastors	
	Organise exercise drill	Nov	HR, venue	Facilitator, observer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Conduct exercise drill	Nov	HR, venue	Facilitator, observer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	<b>Community Emergency Supply &amp; stock</b>	Oct					
	Consultation with relevant agencies and community	Oct	HR, venue			Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Identify appropriate items, site for storage	Oct	HR, venue, building site			Disaster Committee, VO, Elders, Pastors	
	Build storage for emergency supply and stock	Dec	HR, Building site, local materials	External resources not at the community level		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Develop MoU on use of items and restock in consultation with community and relevant agencies	Dec	HR, venue			Disaster Committee, Elders, Pastors, VO, others	UNDP NDMO Other relevant agencies

	<b>Emergency Response Training</b>	Nov					
	Consultation with relevant agencies & community to identify volunteers for training	Sept	HR			Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Identify and confirm date for training	Oct				Disaster Committee, VO, Elders, Pastors, others	UNDP NDMO Other relevant
	Conduct Emergency Response training	Nov	HR, venue	Facilitator, trainer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies
	Conduct Emergency Response exercise	Nov	HR, venue	Facilitator, trainer		Disaster Committee, VO, Elders, Pastors	UNDP NDMO Other relevant agencies



### Contingency Plan

Hazards	Earthquake-tsunami, coastal-river flooding, tropical cyclone, coastal erosion, soil erosion, sea level rise					
Objectives	To conduct orderly evacuation, search and rescue of affected people from Baniata					
Indicator	Zero loss of life					
Hazard	Analysis of Risk	What if? Scenario	Action Points	System installed?	Roles & Responsibilities	
Earthquake-tsunami	High	<p>Destroy coastal community (i.e. houses, water supply system, gardens)</p> <p>Elderly, women, children will be injured</p> <p>Canoe's &amp; OBM destroyed</p> <p>Coconut &amp; cocoa plantations will be destroyed</p> <p>Psychological effects will be high</p>	<p>Inform every members of community</p> <p>Evacuate community to higher ground</p> <p>Take head count</p> <p>Evacuation centre set up</p> <p>Collect emergency food, water, medicine, light, radio, tent</p> <p>Monitor situation &amp; liaise with relevant stakeholders</p> <p>If the situation can be coped, the hazard is manageable</p>	<p>Activate evacuation plan</p> <p>Monitoring of situation will continue until assured of no further risks</p>	<p>Disaster Committee, VO, Pastors, Elders, Youth &amp; volunteers, women, children</p>	<p>NDMO</p> <p>Provincial Disaster Management Office</p> <p>Relevant SIG Departments</p>

			If situation is not manageable, conduct search and rescue for missing person			
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## **Conclusion**

This report provides a snapshot of the socioeconomic sectors that were impacted by the disaster. the underlying causes of the extent of the impact and how this can be addressed to ensure a meaningful recovery and development in post disaster areas. It also highlights new areas for further analysis.

The socio-economic analysis report will be helpful for UNDP, NDMO, Government (central & provincial) as well as communities in shaping decisions on how to address post-disaster recovery of Rendova and other disaster affected communities in Solomon Islands.

To enable UNDP proceed with implementation of community priorities, further assessment needs to be taken in the following areas:

- The households most affected
- How the disaster affected soil fertility
- Quantifiable level of risks and hazards
- Information, Education and Communication activities in the community
- The existence and effectiveness of disaster risk reduction entities in the community, if any
- The potential for involvement of relevant partners (churches, environmental health, agriculture, forestry, education departments, health centres and village elders)

## **Recommendations/Next Steps for UNDP**

### **Rebuilding Livelihoods**

- Establishment of on-farm demonstrations aimed at improving soil fertility and productivity of subsistence agriculture.
- Establish and quantify material needs for post disaster livelihoods recovery
- Establish the needed logistical support for extension service providers
- Develop detailed livelihoods revitalization work-plan with field implementers
- Fine-tune the community action plan to ensure it is in line with the project commitment.

### **Hazard and risk assessment**

- Conduct a Risk Assessment on the basis of local knowledge.
- Risk knowledge assessment should be done at community level
- Support the development of Community Risk Reduction and Management Action Plans
- Follow up workshop on disaster management at community level
- Conduct Information Education and Communication drive in all communities
- Orientation with community on Evacuation Plan
- Conduct Emergency Response training targeting emergency response teams

- Conduct Emergency Response drills in selected communities
- Set up evacuation centers