

Post Relocation Survey Report: Tegua Community, Torba Province, Vanuatu

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Introduction

1. The field visit to Tegua in the Torba Province, Vanuatu was undertaken to carry out a post relocation survey. The relocation was carried out under the Capacity Building for the Development of Adaptation Measures in Pacific Islands Countries (CBDAMPIC) project as an adaptation measure to the vulnerability that the people of Tegua are facing due to salt-water inundation.
2. Inundation is not a unique problem for Vanuatu but common in most atoll and low-lying areas of high volcanic islands in the Pacific thus the need for climate change adaptation. Even if global agreements to reduce emissions are implemented today, the impacts will continue to be felt for many decades. The frequency and severity of extreme events such as tropical cyclones and storm surges are already creating havoc in the Pacific. In a warmer world, the impacts of these extreme events would only increase. In this small community of Tegua in Vanuatu, the effect of sea level change is already being felt by the community now thus their decision to relocate.
3. This report contains the findings of the post relocation survey that was carried out for the Tegua community. A questionnaire was applied to the community and the synthesis is presented in this report (questionnaire attached). This approach was chosen due to the limited time available and also it was deemed the most suitable because it allowed the people to reflect on the situation from hindsight. Was the decision to leave the old site and relocate, the best option for the community? Given their experience now, was there a better option; if so what would be that option? Such detailed questions provided the opportunity for the people to reflect on their past and current situations and provide a very informed perspective on issues of importance not only to the communities in Vanuatu but the global community at large. A total of 40 people (men, women and youths) were interviewed.

Brief Background

4. SPREP with funding provided by the Government of Canada, has responded to the call for adaptation from Pacific Island countries by supporting four countries to develop adaptation measures that will reduce climate related risks at the national and community level to the effects of climate change, variability and sea level rise. The CDN 2.2 million-dollar CBDAMPIC project that has been executed by SPREP over three years (January 2002 to March 2005) is the first Stage III³ adaptation implementation project to be implemented in the Pacific. The

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³ Decision 11/CP.1 lays out three stages of adaptation as follows:

Stage I: Planning, which includes studies of possible impacts of climate change, to identify particularly vulnerable countries or regions and policy options for adaptation and appropriate capacity-building.

four countries involved in the project were; Cook Islands, Fiji, Samoa and Vanuatu.

The Tegua Pilot

5. Tegua community is one of the three pilot projects for the CBDAMPIC project in Vanuatu (see plate 1.0). It is very vulnerable to storm surges and tidal waves due to its very low elevation and has suffered from frequent inundation and coastal erosion of 2 to 3 meters per annum. The village is 5 m from the high water mark (HWM) and any strong south easterly during high tides will generate waves that will overtop the 1m coral strands that act as barrier and floods the whole village and dwellings. The most recent flooding was during our stay on 14th February 2007.

Plate 1 Tegua village by the sea



Impacts of flooding on livelihood

6. Flooding has caused major problems to the Tegua community. People use traditional materials for their housing and this deteriorates very quickly when in contact with water. Families have to do maintenance on an annual basis as a direct result of inundation. One of the major issues also with relation to flooding is the time taken for flood waters to recede. Given that the water table is close to the surface, pools of water are visible for days making it a good breeding ground for mosquitoes. Furthermore extensive salt marshes located behind the village contribute significantly to flooding in the event of heavy rain.

Stage II: Measures, including further capacity-building, which may be taken to prepare for adaptation, as envisaged by Article 4.1(e).

Stage III: Measures to facilitate adequate adaptation, including insurance, and other adaptation measures as envisaged by Article 4.1(b) and Article 4.4; resilience of vulnerable ecosystems. (See Annex IV) As evidenced by these projects, the GEF's extensive experience in implementing cross-sectoral management strategies (such as integrated coastal zone management) to achieve global benefits while supporting sustainable development goals gives it invaluable experience to assist countries adapt to climate change.

7. The link between flooding and increase in malaria and skin infections can easily be traced by going through the records of the health assistant in Tegua. Past experiences have shown that in an event of flooding, there is always an increase in skin diseases and also malaria infections. This is understandable given the favorable conditions that the floodwater provides for mosquitoes and other water borne diseases. Compounding the problem is the outflow of open pit-toilet wastes into flooded areas due to the rise in water table during floods. The limited amount of freshwater on the island does not allow families the opportunity to use freshwater for washing their children if they happen to play in the flood and muddy waters. This is also a period when the health aid post on the island is always stretched in terms of medicine and other support needed. People will have to travel to another island called Loh for medical assistance or in very serious cases, airlifted to Santo.

Plate 2 House materials rot easily due to flooding



CBDAMPIC Project Intervention

8. The main problem that has prevented the people of Lateu from relocating to higher grounds on their own is the issue of water. Their main source of water at present is a small water tank that was supplied by the Government years ago and fresh water springs at low tides. There are no above ground water sources in the whole island of Lateu and people rely on rainwater they harvest to maintain a constant supply for their daily sustenance. Containers to hold water are scarce and people rely on buoys that drift into the shores of Lateu to hold water that are harvested.
9. The CBDAMPIC project intervention included improving the ability of people to harvest water and be able to store it for longer periods of time than is currently the case. In action terms, it included providing the people of Lateu six water tanks of 6,000 liters each, which gives a total of 36,000 liters of quality fresh water now available to the people of Lateu. The CBDAMPIC project also provided roofing materials that were erected as shelters to harvest water for the tanks. The project intervention enabled several things to happen. The people are now moving to higher grounds therefore avoiding coastal inundation that they have been

vulnerable too for many years. People now have an abundant source of water, which is a basic need for any human being. They also have access to newly built Ventilated Improved Pit Toilets introduced by the Vanuatu Health Department.

The New Village Site

10. Lirak is the name of the land where the village is located and it is now the new name for the village. It is a tradition for this community to use names of places or living things that have sustained them for generations to name their houses, sons and daughters or new places they move to. The official opening to mark the opening of the new Lirak was made by Hon Joshua Kalsakau, the Minister for Ni-Vanuatu Business in 2005.

Plate 3 The new community site, Lirak



Synthesis of Results

Social and cultural context

11. According to all the respondents, the decision to relocate was an excellent one and they had no regrets. None of the problems faced in the old site had reoccurred since their stay for over a year in the new site. Without the flooding hazard, the houses do not suffer from material rot therefore the people do not have to go through the usual annual maintenance routine they were used to in the past. This change has freed up time and space for the people to concentrate on current development issues rather than focusing their efforts on repair and restore. The new site also has a lot of trees and forests buffering the new village from strong winds. In the old site, the strong winds did contribute to the quick deterioration of dwelling materials.
12. During the visit, several families were still in the process of building their new

houses at the new site (see plate 4). The community at large and relatives from other islands such as **Toga** have also come in from time to time to help in the relocation and rebuilding process. As an appreciation for the labour provided, the relatives are allowed to harvest the Coconut Crabs that is in abundance in the island of Tegua. Coconut crab known scientifically as *Bitrus latros* is a large terrestrial crustacean found in the South Pacific and the Indian oceans and is a delicacy in the islands. It can be sold as high as USD10.00 per kilogram in the open market in Port Vila, the capital of Vanuatu. This reciprocal way of assistance is common in most Pacific Island countries and is a source of social capital for the people to utilize at times.

Plate 4 House construction in process



New Vulnerabilities

According to all the respondents, they have not encountered new vulnerabilities at the new site. Even though the new site can be hot during the day, the big trees that surround the village provide the shade that cools the village surroundings. Unless there is a volcanic eruption, the respondents indicated that they do not foresee any future vulnerability related to the new site.

New opportunities as a result of adaptation

13. The whole relocation issue has provided a positive outlook for the people of Tegua. Observation and also responses received clearly shows that self-esteem and confidence of the people have increased. As a community isolated in so many ways from the outside world, and having to face the vulnerabilities associated with climate related extreme events, the move has provided them with an opportunity to start anew.
14. With the availability of 36,000 litres of water for consumption, the people are now rarely using the sea for bathing and washing. People have increased their water use from 8 buckets per day to 16 buckets⁴. This has translated into direct health

⁴ A bucket in this case is around 6 liters for small; 12 liters for medium; and 20 liters for large buckets.

benefits in particular the decline in skin diseases and infections. The health assistant had also recorded a decline in the number of visits and need of his service after the relocation took place.

15. Since instalment, the water tanks have not gone empty even though they had provided water to the people from **Hiu** and **Loh** in late 2006 when there was a weak El Nino⁵ recorded in the region. The people are proud to be of assistance to their relatives from **Hiu** and **Loh** and have also put in-place stringent water conservation measures to ensure that in the event of a drought or El Nino, they would continue to have a consistent supply of water available.
16. The community on their own initiative had reconstructed the rainwater catchment sheds into bungalows and visitors to the island now use them. Since the opening of the new village site, the people of Tegua have hosted several provincial meetings and workshops. These meetings bring with it new developments and economic opportunities for the people of Tegua.
17. Interesting also to note are the responses from youths on the relocation. From the male respondents, the relocation has provided them the opportunity to plan for their own homes and for young men with families, a new sense of responsibility. There are already plans for young married men to have their own dwellings, which is a major development from past conditions.
18. New opportunities are also evident when the community is already planning for a kindergarten in the new site. Space is no longer a problem as there are more places for children to roam and play and also flooding is no longer a risk. In short, this is an opportunity that the people are already keen to pursue. The kindergarten provides a good pedestal for the future generations of Tegua to continue to higher education.

Summary

19. Overall, the relocation for Tegua community is a success. The people have adapted well to the new site and are continuing to develop holistically as a community. All the respondents have indicated that they have no regrets in their decision to relocate and are looking ahead to the opportunities before them.
20. In terms of adaptive capacity enhancement, the CBDAMPIC project intervention has greatly improved the people of Tegua's resilience to current and future climate change risks. They are no longer at risk to floods and storm surges and the diseases that follow these events. The location of the new site also buffers them from being hit by a tsunami-type-wave, as the location of the site is parallel with the wave and current flow. In such an event, the full brunt of wave energy would have hit the old village site.
21. In essence, the vulnerability context for Tegua has greatly been reduced given the adaptation intervention implemented. People are moved away from the vulnerable coastlines therefore are now better able to plan their lives and livelihoods without having to be faced with threats of sea level rise and its impacts. The adaptation

Often people use the medium to large buckets daily.

⁵ During El Nino, certain parts of the Pacific get rain whilst in others there is drought due to the shifting eastward of organised convection and rainfall.

intervention implemented for the people of Tegua have empowered them to new horizons and opportunities.

QUESTIONNAIRE

POST RELOCATION SURVEY – TEGUA

A] Impact of relocation on the socio-cultural circumstance of the community

1) After a year of relocating to your new village site, do you think this was a wise move or was it a mistake? _____

2) How has it impacted on your community's social sustainability⁶? _____

3) What has been a positive impact of the relocation to your life as a:

i) Individual _____

ii) Family _____

iii) Community _____

4) What are some of the negative responses of the relocation to your life as a:

i) Individual _____

ii) Family _____

iii) Community _____

⁶ Social sustainability in this case refers to the maintenance of political and community values. Social values and norms, being largely intangible, relate to the "ethics, value systems, language, education, work attitudes, class systems" and so on, that influence societal relations. Social sustainability also speaks to the satisfaction of basic human needs within the society such as food, clothing, and shelter. The sustainability of social needs and values alludes to the quality of growth that occurs in the economy. Equity in the distribution of resources is integral to social sustainability.

5) How has the relocation impacted on your cultural practices or programmes?
Can you discuss? _____

B] Impact of relocation on the economic circumstance of the community

6) Has the relocation affected you economically as an individual, family or community? _____

7) Has the relocation in any way changed your economic activities? Can you discuss? _____

8) What are some of the social capitals (social organizations, networks, trading systems etc.) present in the village and how have they been impacted by the relocation? _____

C] Impact of relocation on religion

9) Has the relocation to the new site in any way impacted on your ability or ways of approaching your religion or worship? _____

C] Vulnerability context – How has it changed?

10) What were the problems (vulnerabilities) that you were facing before that made you shift your community to your new site? Can you list and discuss?

11) Has this problem (vulnerabilities) declined when you are now in your new location? _____

12) After more than a years experience in your new place, do you feel there are new vulnerabilities that you are already facing or likely to face?

13) How are you coping with them there is any? _____

D] Adaptive Capacity – How has it changed?

14) How has the relocation improved on your adaptive capacity? _____

15) How can it be further improved if any? _____

E] Overall development context of the community

16) In your view, how has the relocation improved the overall development of your community? _____
