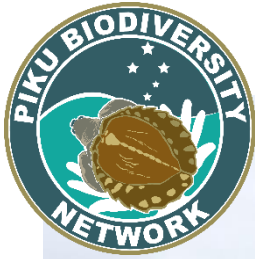


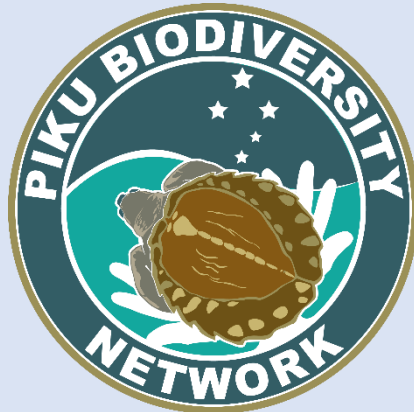
NOVEMBER 27, 2020



# CLIMATE CHANGE IMPACTS IN THE KIKORI RIVER DELTA

A COMPILATION OF TWO REPORTS FROM WARD COUNCILORS

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This document was compiled with assistance from the Piku Biodiversity Network.

The Piku Biodiversity Network is a not-for-profit Non-Government Organization that works towards enabling and promoting biodiversity conservation in Papua New Guinea. The Piku Biodiversity Network has worked out of the Kikori River, Gulf Province for over 12 years as the Piku Project before registering as an entity in 2017.

For more information about the work the Piku Biodiversity Network does contact the organization on email. [pikuoffice2019@gmail.com](mailto:pikuoffice2019@gmail.com) or Call +675 340 2529

# **Situation Report on Climate Change Related Destruction of coastal villages in the Kikori Delta of the Kikori District, Gulf Province. Papua New Guinea.**

## **Introduction**

Climate change and its impacts are being felt throughout the world. Islands of the Pacific are especially vulnerable to the impacts of climate change, where the most substantial impacts in the region could include the loss of infrastructure, land, mangroves, increased intensity of storms, flooding etc. as well as community susceptibility to diseases due to these conditions. Climate change is impacting the lives and the livelihoods of the people of the Pacific and the need to build their resilience is immediate. Papua New Guinea is one of 43 nations on the Climate Vulnerable Forum and ratified the Paris Climate Change Agreement in 2016 taking a stance on climate action.

This brief report would like to update the Papua New Guinea Climate Change Development Authority (CCDA) on the climate change impacts for coastal villages in the Kikori Delta, Gulf Province, Papua New Guinea. We would like to highlight two villages and the plight they face with situation reports from the ward members for your consideration and information. Over the last decade a number of villages have been forced to abandon ancestral homes and ties and move because of the destruction caused to villages by the river, sea and storms. Most of the villages have become inhabitable with the last resort of relocation taken as villages have evacuated themselves. This document includes two reports from the ward councilors of two of the last remaining villages on the coast of Kikori, Goare and Veraibari villages.

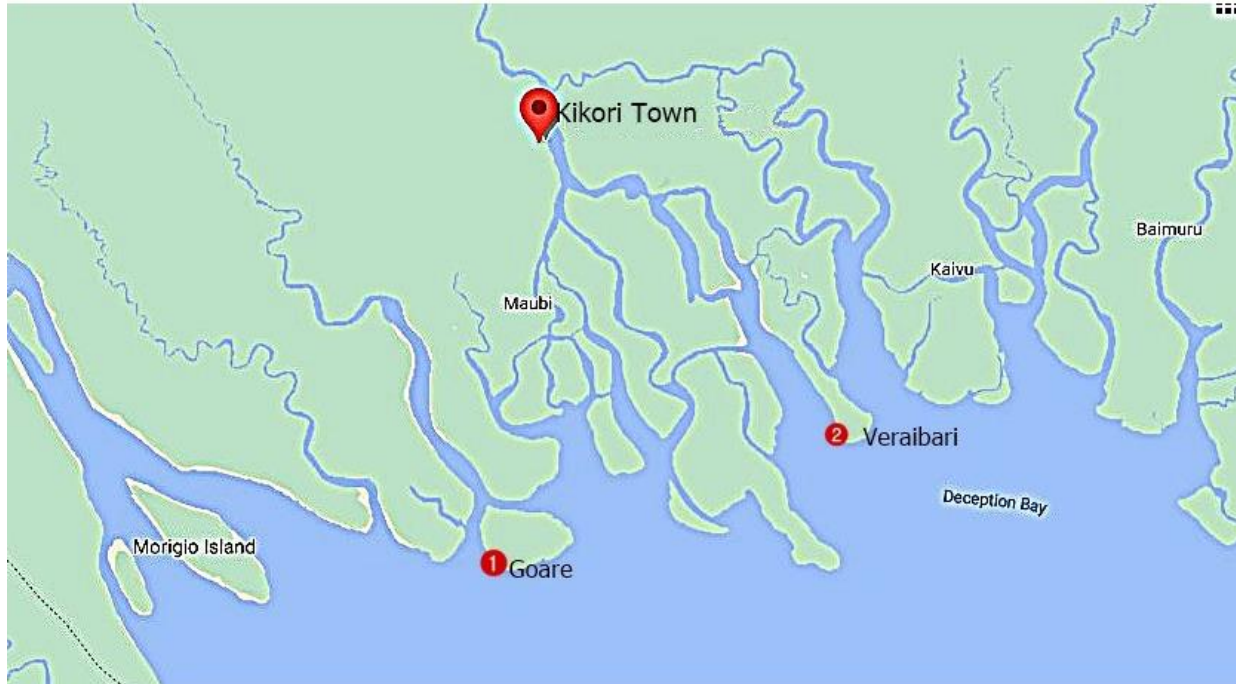
This report includes two reports from the ward councilors of Veraibari village in the East Kikori LLG and Goare and Dopima villages of the West Kikori LLG.

## **Impact Area – The Kikori River Delta**

The Kikori River is 445 km in length and is Papua New Guinea's fifth largest river. The Kikori River is included in the Kikori River Basin, a nominated World Heritage Area because of its biodiversity and cultural diversity values. The Kikori river drains the Hegigio and Tagali Rivers of the Southern Highlands and Hela Provinces into the Gulf of Papua.

The Kikori River Basin and its drainage extends from the Southern Highlands Province and its alpine grasslands to the extensive mangrove wetlands of the Gulf Province. The delta includes large alluvial plains below 40 m elevation covered in mangroves and dissected by a distributary system of river channels meandering extensively across the Gulf of Papua. The Kikori and the Purari deltas together comprise the largest continuous area of mangroves in Papua New Guinea. Rainfall in this area is one of the highest recorded in the world where recorded rainfall is between 4 – 8 meters annually.

The coast of the Kikori delta comprises delta islands exposed to the Gulf of Papua. Coastal beaches, sandbars and islands are created and destroyed by wind and wave action. The dynamic environment of the Kikori delta and changes to its coastline have been exacerbated by climate change.



***Map of the Kikori Delta indicting Kikori town and the villages of Goare and Veraibari,***

Climate Change Impacts in the Kikori Delta, Gulf Province of Papua New Guinea includes the rising of sea levels. Increased flooding and increased intensity of storm surges. A number of villages have already relocated as their villages have become unable to sustain the human population. Fresh water sources have become more saline as salt intrusions enter into water sources. June and July are the peak months for storm surges in the Gulf of Papua and many villages have faced the destruction of these storms. Villages have moved themselves up the river to the small township of Kikori, this forced climate change migration is already causing friction amongst the tribes as settlers and traditional landowners argue over fishing and food resources.

This Report would like to bring the plights of two villages to the Climate Change Development Authority (CCDA) as case studies of what is occurring in the Kikori River Delta and across the Gulf of Papua in the hope that these areas may receive much needed and long overdue attention and assistance with climate action and building climate change resilience.

## History of Climate Change Impacts on Veraibari Village.

*Report By Councilor Eric Warege*

Date: 27-Nov-2020

### Introduction

Back in 1989 to 1990 our village Veraibari was very beautiful.



**Photo 1. An old photograph taken outside Veraibari village, vegetation lined the shoreline and the village was 20 – 50 m inland from the shore.**

From 1991 to 2000 our village Veraibari started feeling the impact of wave action and in that period we lost our first school area with a long double classroom, a permanent structure built by the Tax Credit Scheme of Chevron Niugini – Kopi Base. Also destroyed were traditionally built two double classrooms and a teacher's house as well as a permanent teacher's house, built from the same tax credit scheme above. During this time our community also lost a few homes to the waves.

In 2001 the area we had relocated the school to also began to be destroyed by the waves, a few more houses were also destroyed.

Between 2017 and 2020, the rate of destruction increased. The King tides got higher and the wind and waves got stronger. We really begin to feel the impacts of climate change.



**Photo 2. In 2020, the rising sea and waves destroyed two teacher’s houses and forced us to close the school and consider relocation. This is the second relocation.**

This year (2020) between March and August two teacher’s houses got destroyed, the teacher moved into the classroom to live and school had to be closed down while we managed the situation. In 2020, with the assistance of other community leaders we decided to move the entire village further inland on our small island. The relocation of the village will also include the relocation of the school away from the fast-approaching shore.

As an indication of homes we have lost I am providing a list of names and houses destroyed by the wind and waves, floods and tides over the years. (See table 1)

My village Veraibari, for half the year and especially between the months of June and August we face the flooding Kikori River, the winds of the season and the wave action this causes. We are relocating our village for the fifth time in our history because of the rising sea and the destruction caused by waves.

As a ward member of the East Kikori Local Level Government, I would like to invite the Climate Change Development Authority (CCDA) to visit our village and the villages of the Kikori coastline, help us conduct an assessment and provide us assistance and advice as we face the impact of climate change and desperately seek support with this problem.

Please do not hesitate to contact me should you require further information.

**Councilor Eric Warege**

**Ward 9. East Kikori LLG, Kikori District Gulf Province.  
Mobile Number. 72764803**

**Table 1. List of names and the year homes were destroyed**

<b>REF #</b>	<b>HOUSEHOLD HEAD - NAME</b>	<b>YEAR</b>
1	Eric Warege	1997
2	Aitoma Jimmy	2001
3	Baigu Jimmy	2003
4	Gaumau Haupea	2003
5	Komo Ara	2002
6	Jimmy Kabai	2002
7	Baravi Eimoruo	2010
8	Joe Warege	2011
9	Voiti Maipari	2001
10	Maipari Kakarau	2002
11	Ebo Omae	2016
12	Moio Poimo	2017
13	Genoho Eric	2018
14	Joe Dairo	2019
15	Babua Ama'ai	2019
16	Ama'ai Babua	2019
17	Taunaga Eric	2019
18	Hakai Ama'ai	2019
19	Diaru Gaia	2019
20	2 Teachers houses, 2 classrooms	2019-2020
21	Tom Jimmy	1997
22	Sanaki Tavar	1999
23	Hamera Gumau	1996
24	Owen Dairo	2000
25	Wahiti Aubau	2001
26	Aukiri Binavai	2002
27	Oiki Ara	2000

**Village Report 2. Goare and Dopima Villages, Ward 12. West Kikori LLG, Kikori District, Gulf Province**

**Village 2. Ward Dopima and Goare villages**

**Population of LLG ward: 310 people**

**Villages in LLG ward: (Two) Dopima village and Goare village**

**Report by Ward Councilor: Mr Buara Esege**

**Date: November 2020**

**Goaribari Island and the villages of Dopima and Goare**

The villages of Dopima and Goare are located on the island of Goaribari which lies between the Kikori River and the Gulf of Papua in the Gulf Province of Papua New Guinea. Goaribari island is significant to the cultural heritage of the Kerewo tribe for decades expeditions have been carried out to this island and their artefacts in collections throughout the globe and in the National Museum in Port Moresby. The two villages make up ward, today only Goare village remains and the people of Dopima village have immigrated to settlements of the small town of Kikori after their village became inhabitable.



***Picture. Goare village in October 2015.***

**Sea level rise and Kingtides**

The patterns of water and waves breaking down and building islands in the Kikori Delta is reflected in custom and beliefs of the Kerewo tribe to which Goaribari island belongs. According to beliefs sorcerers being able to build up and break down islands. We have a culture where we believe that men have the power to move the land, sea and water.



The village floods and we experience high tide levels into the village sometimes with the kingtides and sometimes during the storm season when it becomes very windy. When that kingtide arrives, the village is flooded and parts of it submerged under water, there is an increase in wind speed, the waves rise and this is when we experience the highest tide and its flooding effects into the village in the year. Traditionally, it was only these big kingtides once or twice a year the village looked forward to and the village was relative stable.

We have noticed the sea level and changes that are occurring with the sea rising but since the 1990s and into the 2000s the rate of change has become very fast. We are seeing unprecedented change. Before the 1990s the population of people in the village was greater than what we have now and that was because the village was good and nice and people wanted to live in that good village. However, since the early 2000s we have observed that things today aren't like how it as in the past. In the past we had good, strong, sturdy houses today the houses you see are like temporary shelters, but people live in these temporary shelters. These temporary shelters are now the houses in the village that make the village. People are reluctant to build stronger houses because a month or a few weeks after houses are built the water levels increase and reach these houses, there is almost no need for a permanent building.



***Picture. Houses at Goare village in 2018. Houses are built temporarily as the sea rises***

## Relocation

It is very difficult to talk and think about relocation, this is our land and very hard to leave it. I have a big concern about how I can keep the village and ensure that it is a good place when we can continue to live here and be happy in this village. As a ward councilor I wonder how I can bring in the basic services I am planning to bring my people.



***Picture. Dohumo settlement-Kikori Urban. Villagers have relocated themselves from the coast of the Kikori Delta to settlements near Kikori Town.***

Most of our villagers now take almost permanent residence in settlements near Kikori town. Kikori town is not on our customary land and living here is difficult. The river where we would like to get fish here for our every day survival or even to get sago is problematic especially with the landowners who own this area, this is someone else's land. Moving around to hunt, fish or get sago we always face conflict with the landowners of this area. Just following the service here we are already putting ourselves in a conflicting situation.

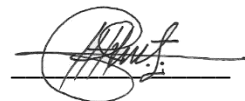
Currently people from our village, and our tribe the Kerewo tribe currently reside in a local settlement near Kikori town known as Kekea. This land belongs to the Kibiri Tribe, and the land our villages live on was bought by our local New Apostolic Church. A lot of the other settlers from our tribe who have moved

up to build houses near Kikori town and around Kekea settlement are illegally settling but have no choice given what the water is doing to the village. As this is not our land whenever there are issues with local landowners here the issue of the land is brought up and people know how this land could be taken back at any time. We have had discussions with developers and even the Government that have discussed the idea of relocation, telling us they will help us move to another place. In the 1980s these discussions were had with my father and I heard about this, where they wanted to relocate us from the villages up the Kikori River to higher ground. This never happened because our fathers and grandfathers said "This is our land, we already see the situation, we know that there is an option to move and we can go up (the Kikori onto higher land), but we are used to standing on sand and we think we can bring services and live in the villages still with the sea rising."

### **Challenges**

The people of Goare and Dopima have the idea that we need to live in a good place, its very worrying, how can we leave this place and go somewhere else. My ward has 310 people between Dopima and Goare villages. There are 48 men over 35, 45 women over 35, children under 10 are 110 and youths are 108. Most people have married out, others have moved to Port Moresby. Many people have left the village and moved out of the district and province. I have lost touch with a lot of these people. In the 1970s and 1980s people left my ward and the people who have migrated out I have not counted. Currently there are 310 people in my care not counting those who have moved out a long time ago. We have a youth bulge and most youth marry early, the population is growing. The village prefers that basic services like health and education be brought back to the village for ease of access and to avoid the conflicts of living on another tribe's land. I bear these expectations.

With this narrative I would also like to take this opportunity to seek advice, to seek assistance and Government intervention from the Climate Change Development Authority. I would like to invite you to visit my ward and the West Kikori LLG to record and report what is occurring here in the Gulf of Papua and begin working with us to find solutions and ways forward for our people.



Mr Buara Esege - Ward Councillor

Also. West Kikori LLG President  
Kikori District, Gulf Province.