

**INSTITUTE FOR ENVIRONMENT AND SANITATION STUDIES (IESS) UNIVERSITY OF
GHANA**

**Coastal Community Resilience to Climate and Diarrhoea (C2R-CD) Project
Summary Report on Scoping Survey to Potential Study Communities**

Prosper Adiku (PhD Student, WP4)

July 2020

Introduction

The C2R-CD project is a 5-year research aimed at generating knowledge in support of resilience building to climate change and improved diarrhoea management in coastal communities. Funded by the Ministry of Foreign Affairs of Denmark (MFA) as part of Denmark's international development cooperation and with the IESS as lead implementer, C2R-CD emphasizes the multiple influences of climate change on environmental and epidemiological dynamics in coastal areas. C2R-CD is transdisciplinary with partners from the Centre for Climate Change and Sustainability Studies, the EPA, People's Dialogue on Human Settlements, Office Research, Innovation and Development, School of Nuclear and Allied Sciences, Public Health, Departments of Animal and Conservation Sciences, Marine and Fisheries Sciences, Sociology and Physics. The research also provides an opportunity for capacity building targeted at researchers, students and community members. Work packages (WPs) responsible for the execution of the project objectives include:

Work Package (WP)
WP 1: Climate Related & Biophysical Studies
WP 2: Public Health & Transmission Pathways
WP 3: Community & Institutional Dynamics
WP 4: Integrated Assessment and Scenario Building
WP 5: Community Involvement, Mobilization and Education for Impact

A reconnaissance survey (21 – 23 July 2020) was undertaken to some coastal communities to enable the Project Team select study sites. For an effective site selection, the team developed a set of criteria to guide the observations during the visit to the communities and include flooding related impacts, population and water, sanitation and hygiene (WASH) situations in the communities visited. Below is a summary of observations during the visits:

1. Fanko Community, Ahanta West Municipal Assembly-Western Region: Team interactions with opinion leaders of the community (assembly member, chief fisher, etc.) revealed that:

- Population is about 6000 people having increased from about 4000 in 2010 comprising mainly Fantes (Ahantas) and few members of other tribes such as Ewe. Coastal erosion and annual tidal floods between July and September, remain major challenges, however, a sea defense is being constructed. Other issues include the sanitation menace caused by seaweeds, a general concern for Western Region. There is one skip container for waste disposal and limited household waste containers; one functional 44-seater public toilet with about 10% of the population with toilets at home. Open defecation is high particularly among men (about 25%) resulting in poor sanitary conditions. The community has one Community Based Health Planning and Services (CHPS) Compound and other nearby health facilities. Diarrhoea cases are minimal due to the efforts of the CHPS Compound that intensified preventive education. A visit to the CHPS compound at New Amanful confirmed that diarrhoea cases have been decreasing over the past 5 years, currently receiving about six or seven cases weekly. The cases recorded this year are January (30), February (28), March (10), April (26), May (11) and June (33). The peaks of infections are in the rainy season. At the New Takoradi CHPS Compound, about 40 diarrhoea cases are reported monthly, majority of residents in the nearby community of Akubrom (urban slum) tend to use other health facilities within the Municipality.



Figure 1: C2R-CD members preparing for reconnaissance trip in Fanko (Ahanta West Municipal)

2. Mumford, Central Region

- Community made up of 30,000 inhabitants with the main ethnic groups being the Fanti, the Ewe community is located in Twioyi. Most parts of the community are elevated. Floods not a major issue, though some low-lying areas tend to be affected by high tides, a landing site for canoes is under construction to provide a safe landing space free from tides for the fisher folks. There is only one 12-seater public toilet and a skip container, a health center, a CHPS compound & the nearby Apam hospital. Poor sanitation & waste management, improper waste disposed e.g., disposal at the shore and ODF are some of the sanitation issues in the community.



Figure 2: An image of one of the dumping containers in Mumford.



Figure 3: An aerial view of the landing site in Mumford.

3. Keta, Keta Municipal Assembly - Volta Region

- The officials suggested that erosion and flooding issues have been minimized due to the presence of the sea defense. Drought is a concern but not in the immediate environs of the coastal area. Open Defecation (ODF) is still a challenge in some communities such as Dzelukope and Wetakope but it is being minimized through the efforts of the Community Led Total Sanitation (CLTS).
- Waste management is unsatisfactory despite the presence of Zoomlion; one dump site in the municipality, however, a number of households have individual waste bins, there are skips in the communities for waste disposal. They suggested the Team considers selecting Kedzikope, Dzita, Dzelukope or Abutiakope for the study.



Figure 4: C2R-CD members in Keta Township (Keta Municipality).



Figure 5: An image of the Kedzikope township (Keta Municipality)

4. Dzita, Anloga Municipal Assembly-Volta Region

- Flooding not a major issue. There is pipe-borne water and wells. Sanitation is improving due to monthly clean up every last Tuesday, which is supported by the Assembly. About 50% have individual toilets leading to reduction in ODF. No health facility in Dzita but in nearby communities (Anyanui & Atorkor).



Figure 6: An image of the coastal defense structure along the Akplowotorkor-Dzita stretch

5. Atiteti, Municipal Assembly-Volta Region

- Pipe borne water available. Poor sanitation, ODF is still practiced in communities such as Fuveme/Agorkedzi/Akplowotorkor ODF.

6. Anyanui Health Centre, Anloga Municipal Assembly, Volta Region

- Malaria and anemia most prominent cases. Diarrhoea now about 6th or 7th important ailment. There are limited diarrhoea cases due possibly to the availability of pipe borne water (eliminating water and food borne sources). Most causes include malaria induced sources. The only pharmacy in Dzita also indicated low number of cases in recent times. Another pharmacy at the Anloga junction also confirmed the assertion of reduction in cases that the pharmacist believes links to the reduced rainfall, as cases are predominant in rainy seasons.

7. Lower Prampram, Prampram District Assembly –Greater Accra Region

- The area is quite elevated and there are no concerns over tidal flooding, coastal erosion is the key climate change related challenge. Sanitation is a challenge in the community especially, the landing beach environment in terms of waste management and ODF. There are two functional public toilets, the third opens soon. A visit to a pharmacy nearby shows an average of 3 cases/week, but showing a reduction in infection rate.



Figure 7: Discussion among project members in lower Prampram (Prampram District Assembly)

8. Old Ningo, Ningo District Assembly –Greater Accra Region

- Possible areas in the area for the study include villages in Ningo and Akplabanya; cholera cases here are normally through food contamination from ODF. Cholera and typhoid cases are the main ailments reported at health facilities



Figure 8: Community entry in Old Ningo (Ningo District Assembly)



Figure 9: An image of Coastal defense structure in Ningo experiencing toe failure.

9. Glefe/Gbegbeyise, Greater Accra Region

- Fishing activities are undertaken at Faana, dominated by Ada and Ewe fishers who are in the community purposely for fishing activities. The community has access to pipe borne water. No tidal flooding cases in recent times due to the sea defense wall. However, heavy rains cause some flooding in the low-lying parts of the community due to choked drains and lagoon overflows. No flooding recorded this year, as there was some desilting of the drains and some improvements in the sanitation situation. There are many privately owned public toilet facilities in the community but there is some level of ODF ongoing though cholera cases are on the decline.

3. Conclusion

The field visit provided the research team with an overview of the issues that constitutes essential elements for consideration in determining the sites for the study. Generally, flooding and erosion issues are declining due to the construction of sea defense; also, the team observed that most of the coastal communities have access to portable water. Despite the observed decline in cholera cases, ODF remains a challenge in many communities.