UNIVERSITY TEACHERS ASSOCIATION OF GHANA (UTAG)







A Rapid Assessment of the Impact of the

AKOSOMBO DAM SPILLAGE

in Selected Communities
of the Volta Region

November 2023

Executive Summary

1. The overflow of the Akosombo Dam has resulted in widespread flooding in communities along the Volta River, leading to the displacement of households
2. A crisis that has inflicted hardship and posed challenges for the people residing in the riparian zone
3. In response to this crisis, the University Teachers Association of Ghana (UTAG) assembled an expert panel to conduct a rapid impact assessment study in the affected communities.
4. The primary goal was to gather initial evidence for a more comprehensive longitudinal study that could effectively inform policy development and strategic interventions.
5. The team visited three severely affected communities, Mepe, Battor, and Sogakope, in the North Tongu District.
6. A combination of qualitative and quantitative data collection tools, such as observations, surveys, water quality tests, and anthropometric assessments, was employed.

7 Dimensions Covered

- Health
- Food and Nutrition Security
- Mental Health
- Support systems and coping strategies
- Water, sanitation and hygiene
- Infrastructure damage and shelter
- Agriculture and livelihoods
- Demographic and biophysical factors
- Teaching-learning environment and academic performance



0%

There were no immediate

physical injuries or deaths

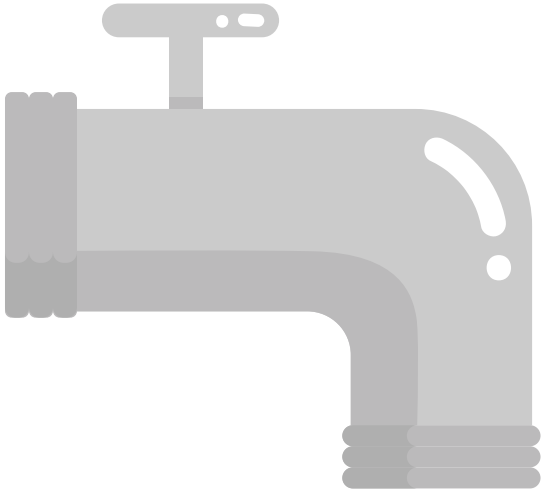
directly attributed to the floods

However, significant disruptions in accessing healthcare services were noted, as health facilities were submerged and rendered dysfunctional.



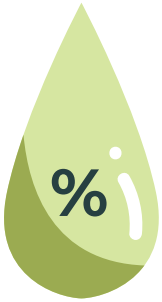
Clean drinking water was scarce, with water quality tests indicating contamination of pipes and boreholes. Victims resorted to drinking sachet water, and concerns were raised about potential waterborne diseases and cholera due to contaminated water sources.

The flooded roads further hampered mobility and access to facilities outside the affected communities.



Clean drinking water was scarce,

with water quality tests indicating contamination of pipes and boreholes. Victims resorted to drinking sachet water, and concerns were raised about potential waterborne diseases and cholera due to contaminated water sources.





Sanitation Problems

Sanitation challenges were evident, with limited access to toilets leading to open defecation in some areas



Anxiety

The floods also took a toll on mental and psychological well-being, increasing the risk of trauma, stress, insomnia, hypersensitivity, anxiety, and depression.





Food & Nutrition

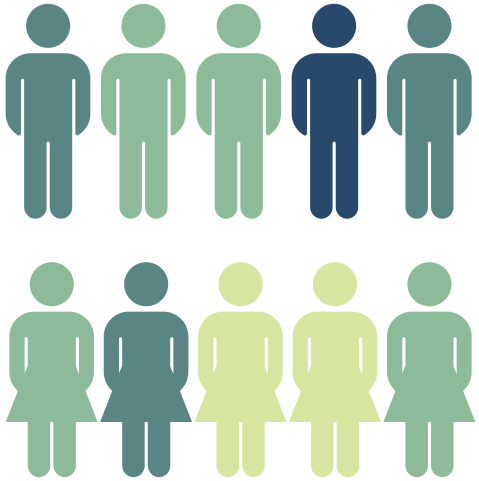
Food and nutrition security were compromised as households lost their reserves, and donated food lacked diversity. Thus, the risk of not meeting daily nutrition requirements, especially for children, pregnant women, and other vulnerable population is high.

Educational Implications

Schools faced closures for over three weeks, with facilities transformed to accommodate displaced families, disrupting teaching and learning. The flood also impacted the psychological well-being of students. Teaching and learning materials were destroyed, further hindering academic progress.



The overflow of the Akosombo Dam has resulted in widespread flooding in communities along the Volta River, leading to the displacement of households



36,000

At least 36,000 people have been displaced

150

Rural communities are submerged

8-9 Districts

The flood-affected areas reportedly span 8-9 districts across the Volta, Eastern, and Greater Accra Regions

Study Area

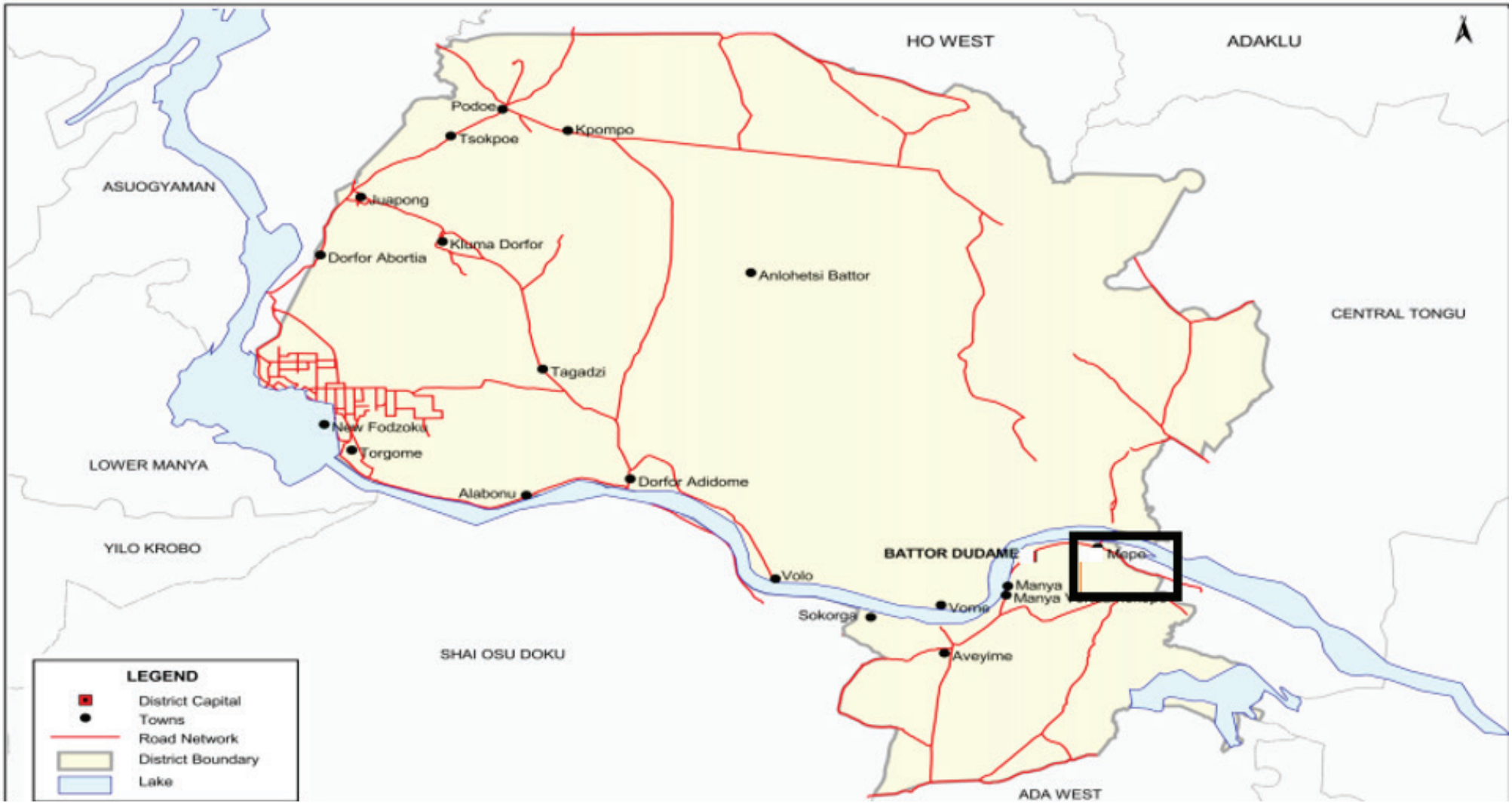


Figure 1: Map of North Tongu District showing Mepe.

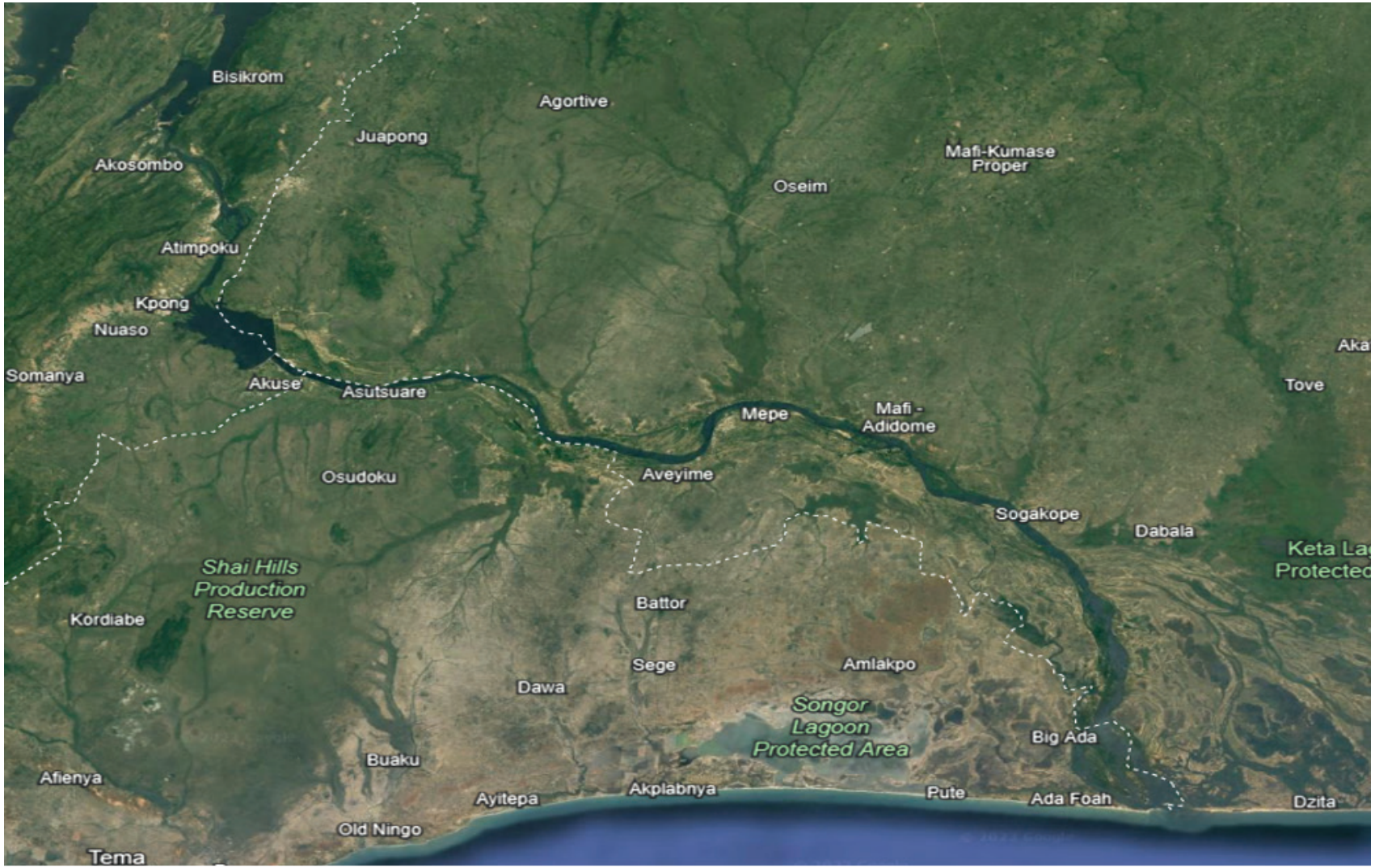


Figure 2: Google Earth view of the Lower Volta

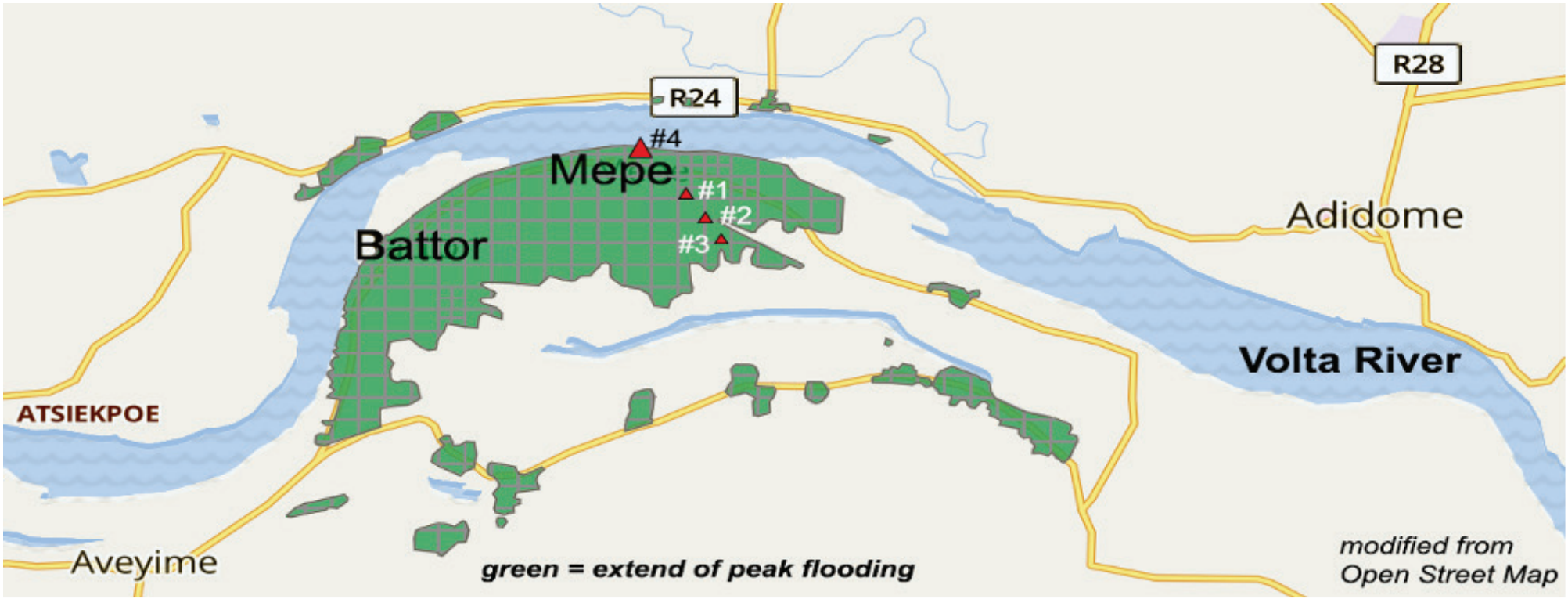


Figure 3: Extent of peak flooding (green) in Mepe and Battor in October 2023).



Figure 6: Flood map of Mepe showing the points of entry, the direction of flood flow, and flooding.

References

Arneson, M. (2022). The Twisted Logic of Remote Work: A Qualitative Study on employees' perceptions and experiences of working Remote in the presence of COVID-19.

Grasley-Boy, N. M., Gage, N. A., Lombardo, M., Anderson, L., & Rila, A. (2022). School-Wide Positive Behavior Interventions and Supports in Rural and Urban California Schools: Effects on Fidelity of Implementation and Suspension Outcomes. Rural Special Education Quarterly, 41(2), 84-94.

GSS (Ghana Statistical Service). (2012). Final report on population and housing census.
Accra: Sakoa Press.

Owusu-Sekyere, E., Yakubu, A, R. and Wedam, E. (2017). The Central Medical Store Fire Disaster: A Test for Institutional Compliance in Disaster Prevention in Ghana, SAGE Open. 1-11

The Expert Team

Prof. Victor Mogre, Health and Nutrition University for Development Studies.

Prof. Chris Gordon. Limnology, Freshwater Macroinvertebrates Ecotoxicology, Climate Change Adaptation, IWRM, ICZM, Wetlands, Mangrove Ecology. Institute for Environment and Sanitation Studies, University of Ghana.

Prof. Heiko L Schoenfuss, Aquatic Toxicology, aquatic Resource Management, Environmental Health. US Fulbright Scholar, Institute for Environment and Sanitation Studies University of Ghana

Prof. Ebenezer Owusu -Sekyere Disaster Risk management, Sanitation, Regional Planning, University for Development Studies

Rev. Prof. Ing Eric Ofosu Antwi, Hydropower and Dam Safety Expert. University of Energy and Natural Resources.

Dr. Owusu Fordjour Aidoo, Agriculture, University of Environment and Sustainable Development.

Ing. Dr. Edward Kofi Ackom, Civil/Water Resources Engineer. University of Ghana.

Ing. Dr Maxwell Anim-Gyampo, Water resources management and engineering, Water and Environmental Sanitation. University for Development Studies.

Dr. Andrew Manoba Limantol, Climate Change and Water Resources; Soil and Water Engineering; and WASH (Water, Sanitation, and Hygiene). University of Environment and Sustainable Development

Dr. Isaac Abekah-Koomson, Growth, Productivity and Efficiency. University of Environment and Sustainable Development

Dr. Michael Karikari Appiah, Social and Economic Impacts. Actors providing relief on the ground and the effectiveness of relief efforts. University of Environment and Sustainable Development.

Dr. Felix Nyande, Nursing and Midwifery, University of Health and Allied Sciences

Dr. Maximillian-Robert Selorm Doku, Geohazards, University of Environment and Sustainable Development

Dr Kwaku Appiagyei, Team lead, Health Team Volunteers/front liner health workers North Tongu, University of Health and Allied Sciences

Dr. Emmanuel Dziwornu, Clinical Psychologist, University of Health and Allied Sciences

Dr. Joseph Osarfo, Clinical Epidemiology/Public Health, University of Health and Allied Sciences

A Rapid Assessment of the Impact of the

AKOSOMBO DAM SPILLAGE

in Selected Communities of the Volta Region

Support Team

Dr. Ibn Kailan Abdul-Hamid, University of Professional Studies, Accra

Dr. Mohammed Sadat University of Professional Studies, Accra

Mr. Anthony Arthur University of Ghana

Mr. Ibrahim Jamfar University of Health, and Allied Sciences

Mr. Emmanuel Ansah University of Ghana

UTAG NATIONAL EXECUTIVES



Prof. Mamudu A. Akudugu
NATIONAL PRESIDENT



Prof. Victor Mogre
NATIONAL VICE PRESIDENT



Dr. Eliasu Mumuni
NATIONAL SECRETARY



Dr. Sulemana Nashiru
NATIONAL TREASURER



Dr. Ibn Kailan Abdul-Hamid
ADMINISTRATIVE SECRETARY