

Inputs provided by: *(please provide the name of your organization)* Department of Biological Sciences, Ahmadu Bello University, Zaria-Nigeria

1. General description of mandates and objective(s) of your organization / associated network with institutional structure

(Please provide information on organizational mandates and objective(s) of the organization / associated network with organizational/institutional structure, as explicitly and/or implicitly relevant to addressing loss and damage associated with climate change impacts, including extreme weather events and slow onset events. Please feel free to expand the boxes as needed throughout the template.)

The mandate of my department is in area of teaching and research at both undergraduate and graduate levels. Principally employing the vegetable kingdom as a medium of mitigation against climate change loss and damage. Basic teaching is conducted at undergraduate and masters' levels exposing the students on the roles of plants in the mitigation efforts through serving as the primary producers. By this role, the plant ensures flow of energy in the ecosystem, regulating water cycles and other pertinent roles. Climate change extremes in water supply is well clear nowadays with attending consequences on safe drinking water supply to humans and livestock, infrastructural damages on roads affecting transport of goods and services, as well as destruction of human habitat. On the later events, governments are heavily burden in financial expenditures in reconstruction and provision of social amenities. The implication of unsafe water for drinking and domestic usage is attended by additional expenditures in treatment which if not met will results in water borne diseases.

2. Relevant operational framework(s)

(Please provide information on the relevant operational framework(s) (e.g. programming principles, resource allocation strategies, coordination mechanism for operations at different levels etc.) within your organization/associated network as relevant to implementing work related to risk management for loss and management associated with climate change impacts)

Approaches to operational frameworks are in the area of research output after accepted proposal. Students' project works are carried out under a supervisory team which ensures adherence to the outline framework of the proposals. In some instances collaborations are sought from other university around the world. For instance, the use of Moringa plant in water clarification is established and parameters to ensure its maximum utilization are approached through scientific research efforts. With the perfection of an approach like these consequences of unsafe water through flooding are thus minimize using a local resource which ensures improved income to farmers that grows the Moringa plant.

3. Focus areas of risk management for loss and damage associated with climate change impacts

(Please provide information on the areas of work in relation to the items included in decision 3/CP.18 as listed in the introductory note as well as any additional focus areas, that your organization/associated network has been mandated to address. These could include relevant institutional policy statements/operational guidance documents etc. Please provide web links where further details can be found.)

The vision and mission of my university is clearly stated in our web page thus: www.abu.edu.ng. Collaborative efforts also exist with other relevant institutions and centers research.

4. Geographic coverage

Northern Nigeria, West Africa

5. Key stakeholders

Faculty members, Students, University and the Federal Government of Nigeria.

6. Implementation modality / delivery mechanisms

Research outputs are publicized in reputable national and international journals. Newspaper articles are also published to create awareness for the public. Government is also contacted through relevant agencies e.g. Ministry of Science and Technology as well as Water resources

Please provide information related to the technical, financial and institutional support mechanism.

Self funding and bursary support to students. While staff are supported with research grants from the university and other government agencies.

Please provide information related to reporting, if any

Research outputs are publicized in reputable national and international journals. Newspaper articles are also published to create awareness for the public.

7. Key activities / outputs to date

- Teaching
- Research
- Publications
- International award by UNECA based in Addis Ababa, Ethiopia
- Establishment of collaboration with Chemical Engineering Department, Penn State University, USA providing lab space for further research on the use of Moringa seed in water clarification. However, funding is lacking to achieve this objective!

8. Any additional information and contact details

My area of climate change mitigation is in safe water supply using a natural resource. The adoption of this approach will in addition of ensuring safe water supply but, brings about planting of more Moringa trees for its product seeds. More vegetation cover stabilizes the climate and ensures seasonal rainfall through the water cycle.

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