

INDIGENOUS CONSERVATION APPROACH TO INLAND WETLANDS OF NORTHERN GHANA

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Introduction

- Wise use of wetlands involves maintenance of ecological character, as a basis not only for nature conservation, but for sustainable development (Davis, 1993).
- Ghana is signatory to the Ramsar Convention since 1988.
- But what is most worrying is that, governments over the years have not ensured the strict implementation of policy guidelines for the sustenance of the functional state of our wetlands

Introduction Cont'd

- In spite of the setbacks of strict enforcement of Ghana's wetland policies, some conservation activities has taken place on coastal wetlands like Sakumo, Songor and Mukwe lagoons.
- These wetlands are known habitats for resident and migratory birds (Ntiamoa-Baidu 1991; Ntiamoa-Baidu & Gordon, 1991).
- The management of these coastal lagoons has traditionally been vested in the 'owners' of the lagoon, made up of local clans, fetishes or stools (Ntiamoa-Baidu & Gordon, 1991).

Major Inland Wetlands in N/Ghana

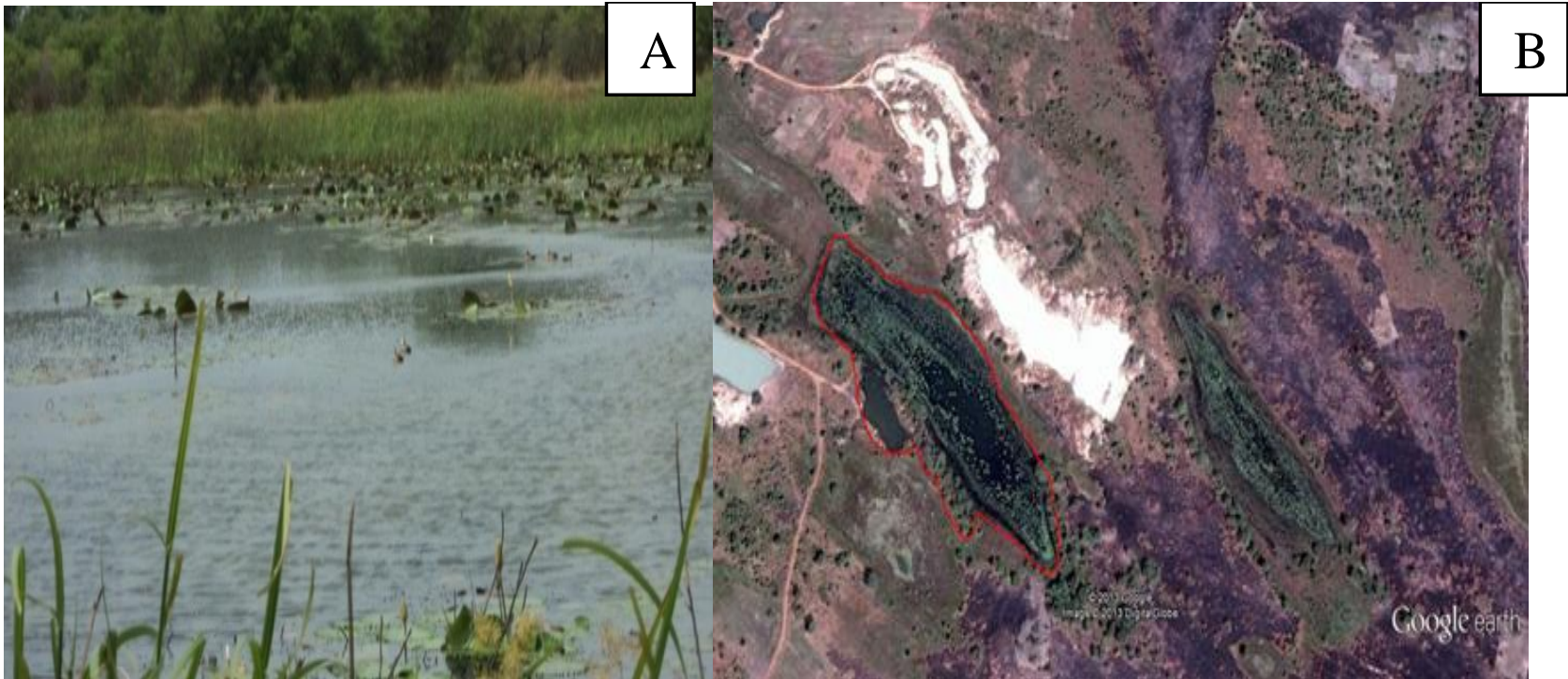
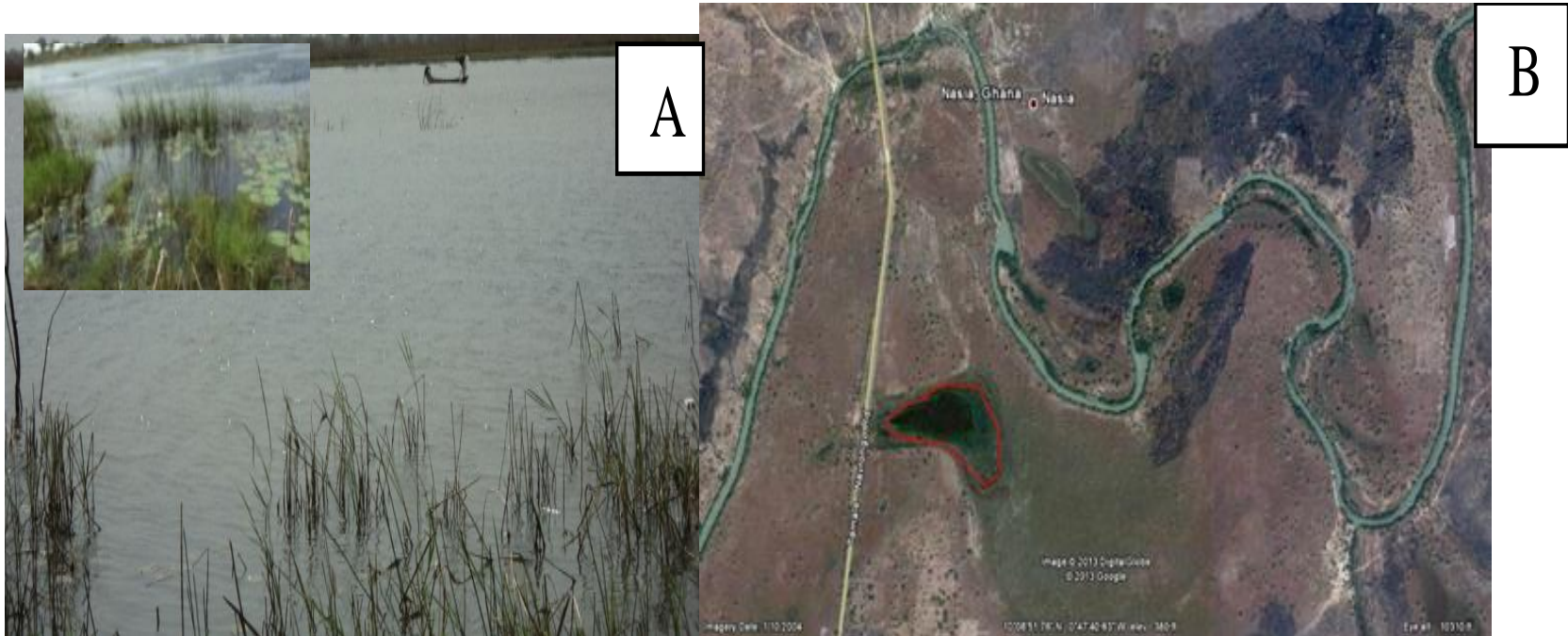


Plate 1: (A) Wuntori shallow marsh standing wetland (7.7 ha) (October, 2010) and (B) 2013 landsat image at Yapei in the Central Gonja District

Major Inland Wetlands in N/Ghana Cont'd



- Plate 2: (A) Kukobila deep marsh standing wetland (5 ha), ~200 m from the White Volta River and its (B) landsat image at Nasia in the Savelugu-Nanton Municipality

Major Inland Wetlands in N/Ghana Cont'd

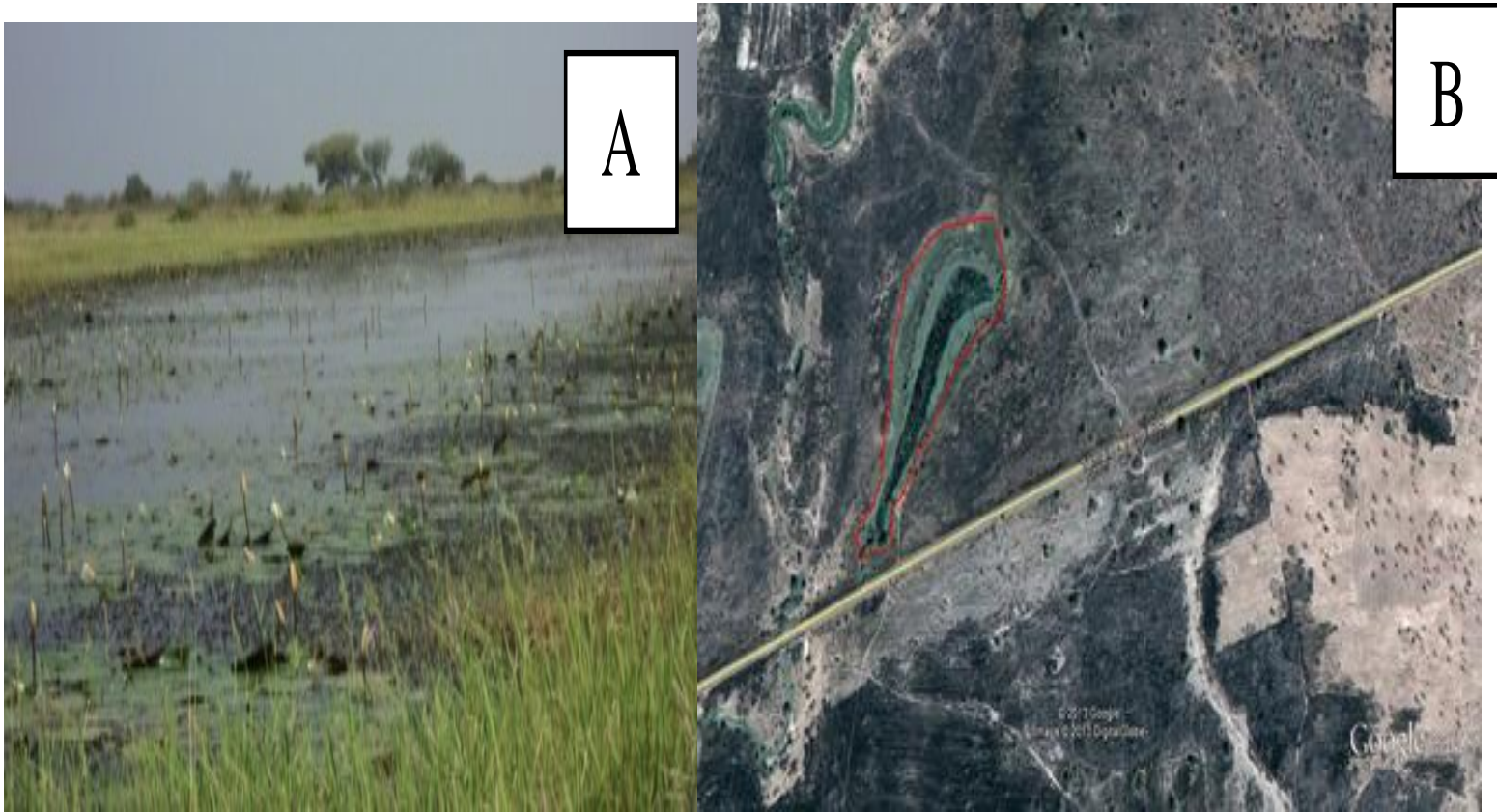


Plate 3: (A) Tugu shallow standing marsh wetland (2.7 ha) showing water Lily (*Nymphaea lotus* Linn.) and it's (B) 2013 landsat image in the Eastern part of Northern Region

Major Inland Wetlands in N/Ghana Cont'd

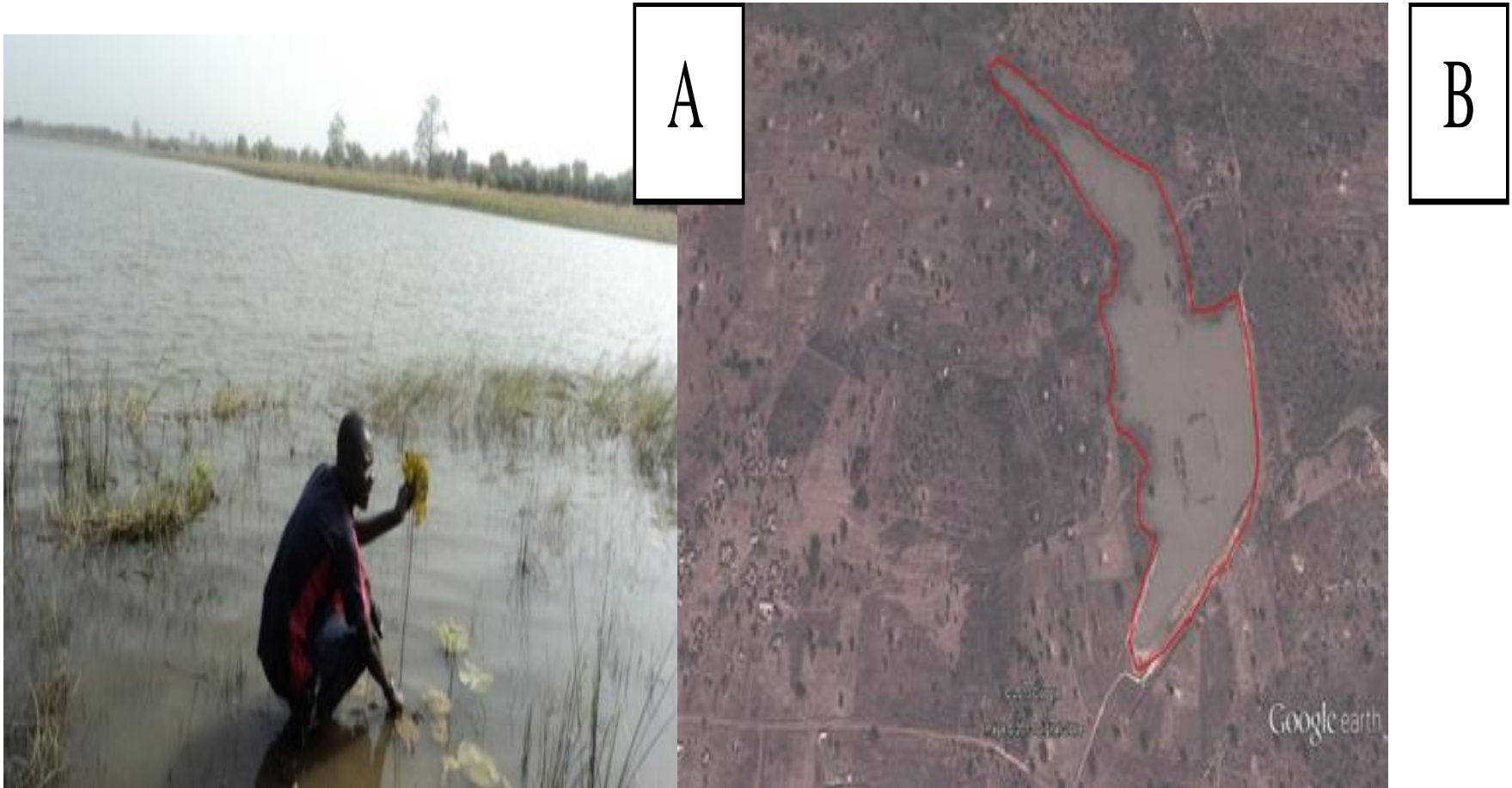


Plate 4: (A) Bunglung man-made flowing wetland (11.5 ha) in the Savelugu-Nanton Municipality and its (B)2013 landsat image

Major Inland Wetlands in N/Ghana Cont'd



Plate 5: (A) Nabogu riparian wetland (7.9 ha) and its (B) 2013 georeferenced landsat image in the Savelugu-Nanton Municipality

Benefits derived from wetlands by community members

Economic/domestic	Ecological/hydrogeological	Tourism
1. Harvesting of grass as thatch materials for roofing their houses and fuel wood for sale to community members	1. Flood attenuation in the peak of the rainy season, water purification, nutrient recycling.	1. Recreational sites for bird watching
2. Harvesting of food fish and game on commercial quantities for the domestic market and household consumption	2. Promotion of conducive microclimate within community catchment area	
3. Source of extracting plant materials for treating tropical diseases and ailments (e.g., malaria, typhoid fever, convulsion, jaundice etc.) 4. Source of water for irrigation 5. Grazing grounds for livestock. 6. Source of domestic water	3. Gene pool for keystone species 4. Increase in ground water recharge	

Domestic and commercial use of water from wetlands



Fish harvested from wetlands



Identified threats to wetland conservation

Indigenous approach to wetland management

Cutting of grass, shrubs and trees

- All trees and shrubs found within 1 kilometer radius of the wetlands should not be cut/fell.
- One type of grass species such as *Schyzachyrium sanguinum* should be harvested at a time as thatch material. Also, harvesting of grass should be rotated from one section of the community to another.
- This is to ensure that other grasses are allowed to grow and replace those harvested.

Farming practices

- Farmers should re-locate about a kilometer away from the wetlands.
- This is to prevent the continuous clearing of vegetation to expand farmlands that in the end, makes it easier for applied chemical fertilizers to be washed back into the wetlands, during heavy rains.
- This phenomenon could lead to an increase in nutrient load in wetlands, as well as create a turbid condition.

Bushfires

- All herdsmen and hunters within the communities must uphold the ban on indiscriminate bush burning.
- For any form of burning to take place, it must be under the principle of selective or control burning.
- This type of burning is done by considering the amount of fuel load, the direction of wind speed, day temperature and section of the wetland to be burnt.

Bush burn of Kukobila wetland



23 September 2014

Erosion

- Stone bunding technique: This entails the use of stones arranged in a contour form or horizontal (terracing) parallel to the wetland and against the flow of water during rainstorm.
- Construction of gabions across the riparian wetlands, in order to correct channel incision.

Conservation efforts through indigenous approach (Taboos): The role of chiefs and clan heads

- Ban on fishing during the wet season (July-October), in order to prevent disturbances during the breeding/spawning season.
- Pouring of libation by the chiefs' to invoke the spirits of the ancestors for a bumper fish harvest and peace in the community.
- It's a taboo to harvest fish, before the chiefs' taste the first fish catch.
- Chiefs' draw fish harvest timetable, detailing when each section in the community can go fishing.
- Chiefs assign section heads to protect the wetlands in turns, against intruders'.

Policy Recommendations

- Ghanaians should be made aware of the benefits of wetlands and committed to their conservation.
- National policies, local knowledge, regulations and activities that contribute to the wise use and management of inland wetlands through capacity building should be encouraged.
- Inland wetlands in Northern Ghana should be listed among wetlands of international importance.

THANK YOU

