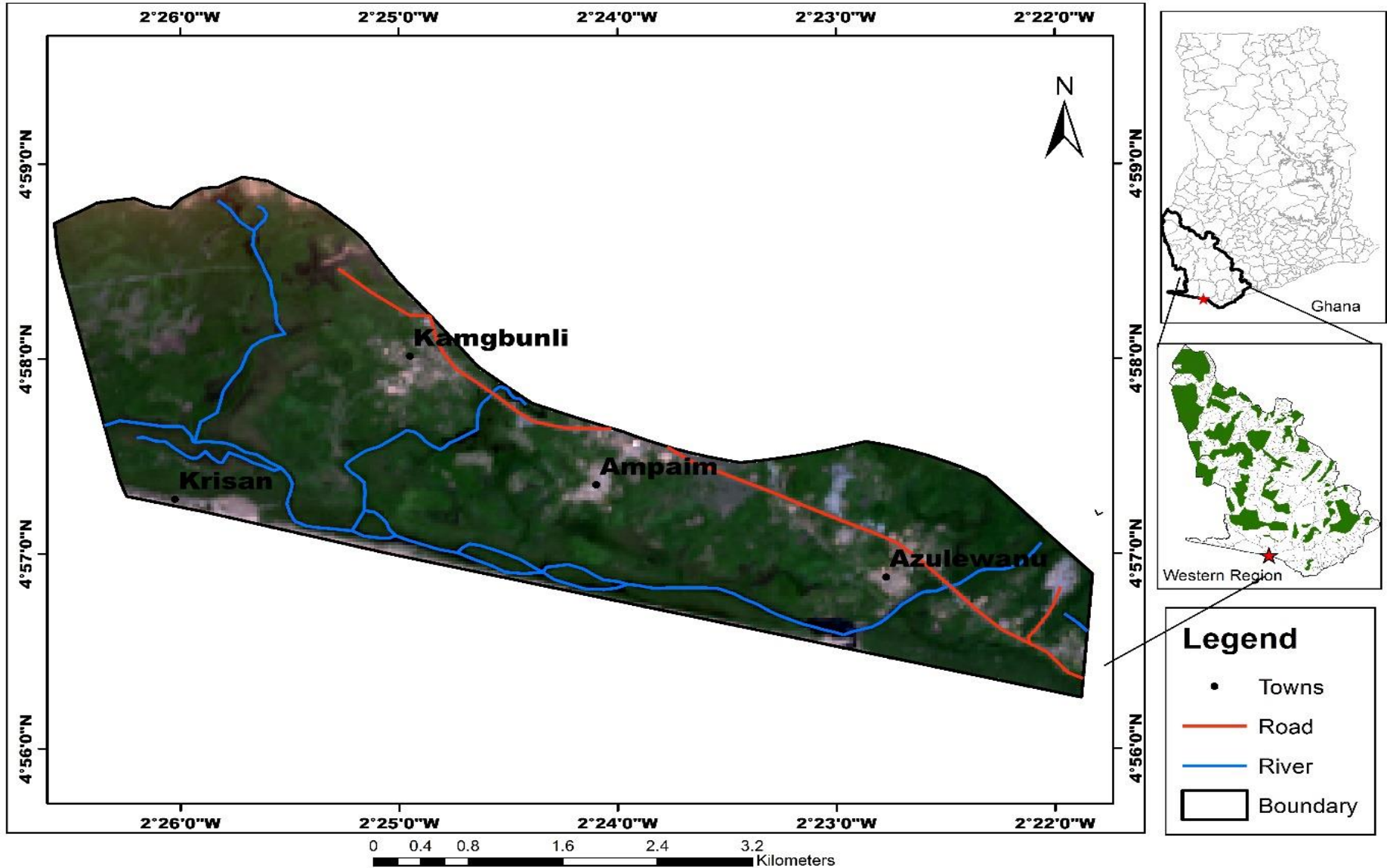


SPATIAL MAPPING OF CARBON STOCK IN MANGROVES IN THE ELLEMBELLE DISTRICT.



Lily Lisa Yevugah
Dr. E.M. Osei Jnr
Rev. John Ayer

Mangroves



Benefits of Mangroves

- **Mangrove protect the coastline .**
- **Provides a perfect breeding habitat through its roots system for countless fish , crabs and shrimps.**
- **Have high density wood – good for timber for boats, firewood, fences.**
- **Nowadays used for charcoal production.**
- **Used for dyeing leather... Tannins.**
- **The extract from the bark of mangroves is very good medicine.**

What is happening to our mangroves?



Deforestation

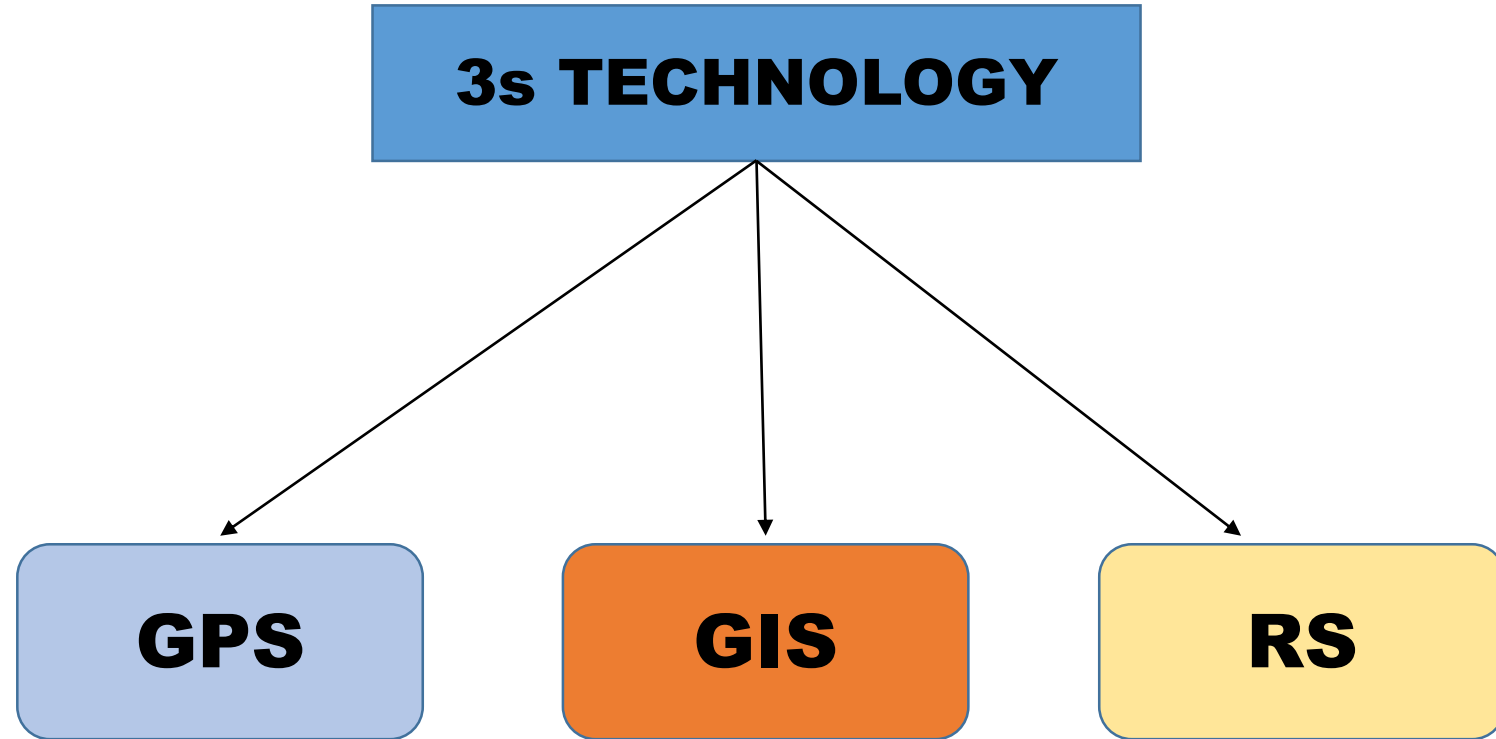


Afforestation

Method

AIM

- 1. To map out mangrove and determine the rate of change of the areal extent of mangrove.**
- 2. To determine the amount of carbon sequestered in mangroves**



This Presentation concentrates on the 1st Aim.

What was used for the Research?

Satellite Image---(USGS → earthexplorer.usgs.gov)

- **Landsat Imagery**

1991

2000

2015

Landsat 4

Landsat 7

Landsat 8

- **Software**

- ❖ **ArcGIS Software**

- ❖ **IDRISI Kilimanjaro**

- ❖ **R Studio**

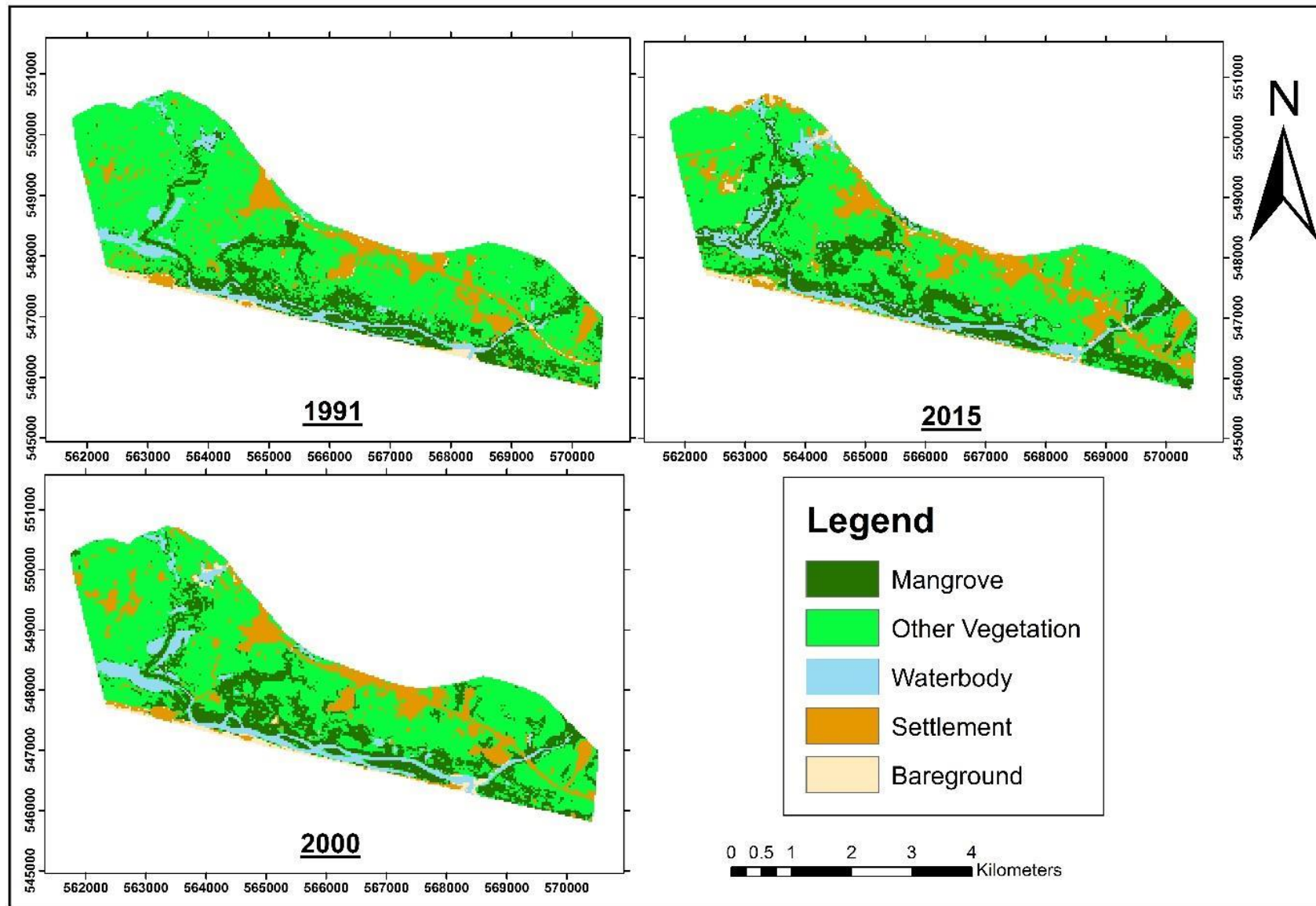


1991

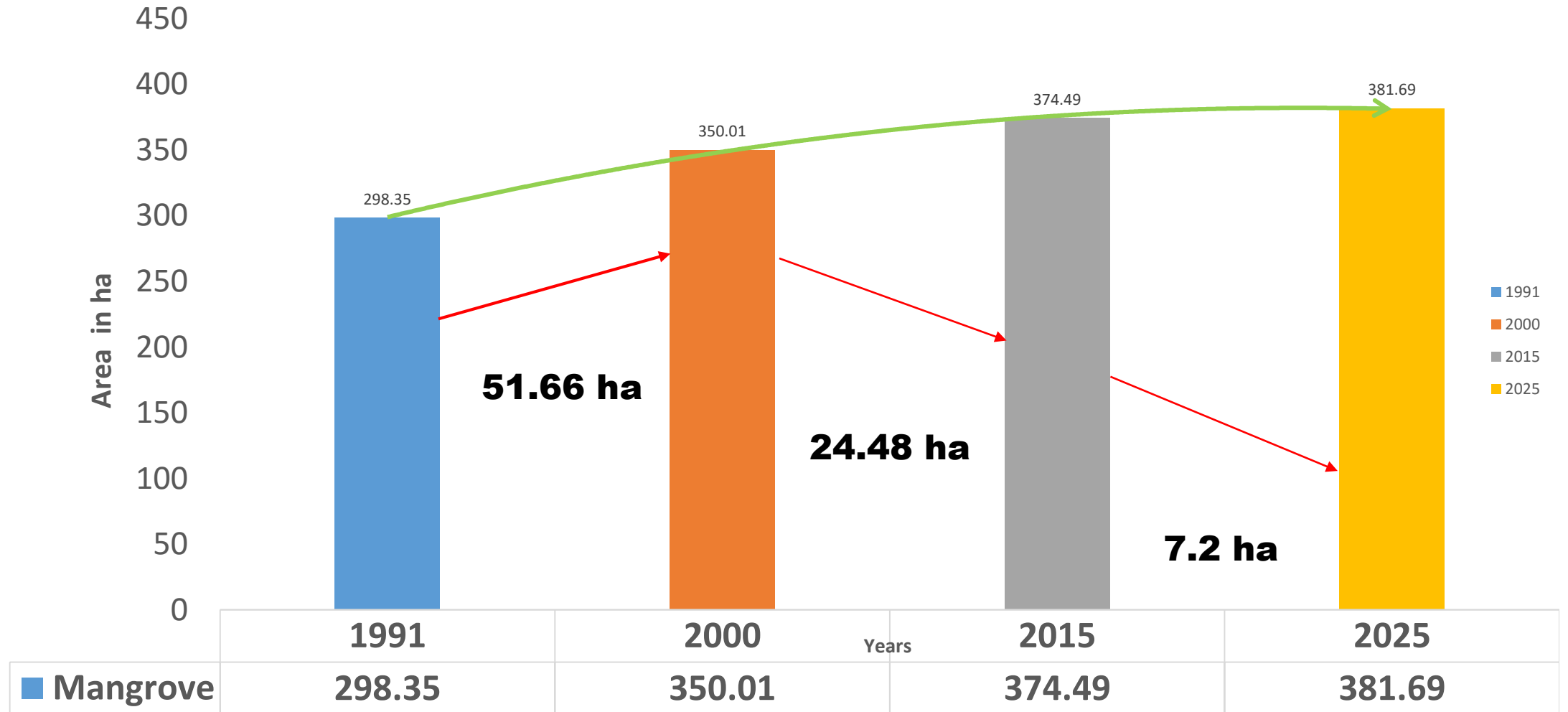


2000

Classified images



Rate of change of areal extent of mangrove



Further Research

- Salinity also has an effect on growth of mangrove.
 - Increase in the salinity of the mangroves can affect the growth rate of mangroves.
- There is more room for research on mangroves in Ghana.

Thank you