



INTERNATIONAL FOOD  
POLICY RESEARCH INSTITUTE  
*sustainable solutions for ending hunger and poverty*  
Supported by the CGIAR

# Trends and Drivers of Agricultural Productivity in Nigeria

By  
Omobowale Ayoola Oni(PhD)  
Department of Agricultural Economics,  
University of Ibadan, Nigeria



# Methodology

## Description of the Study Area

- Three Principal zones
  - Dry Savannah(Northeast, Northwest and part of North Central)
  - Humid Forest (Parts of South west, southeast, North central, North East and mainly south south)
  - Moist Savannah(Some parts of south west ,North central and southeast).
- Midaltitude is mainly a small part of North central (IITA,2000).



# Methodology

- Source of Data: IITA.
- Panel & secondary data
- Collected across the 36 states and FCT between 1995-2006
- Data Limitations:
  - Livestock
  - Fisheries
  - Data Gaps also exist for selected crops over years.
  - Data used for labour productivity are not crop specific
- Data was analysed using frequency distribution/line graphs

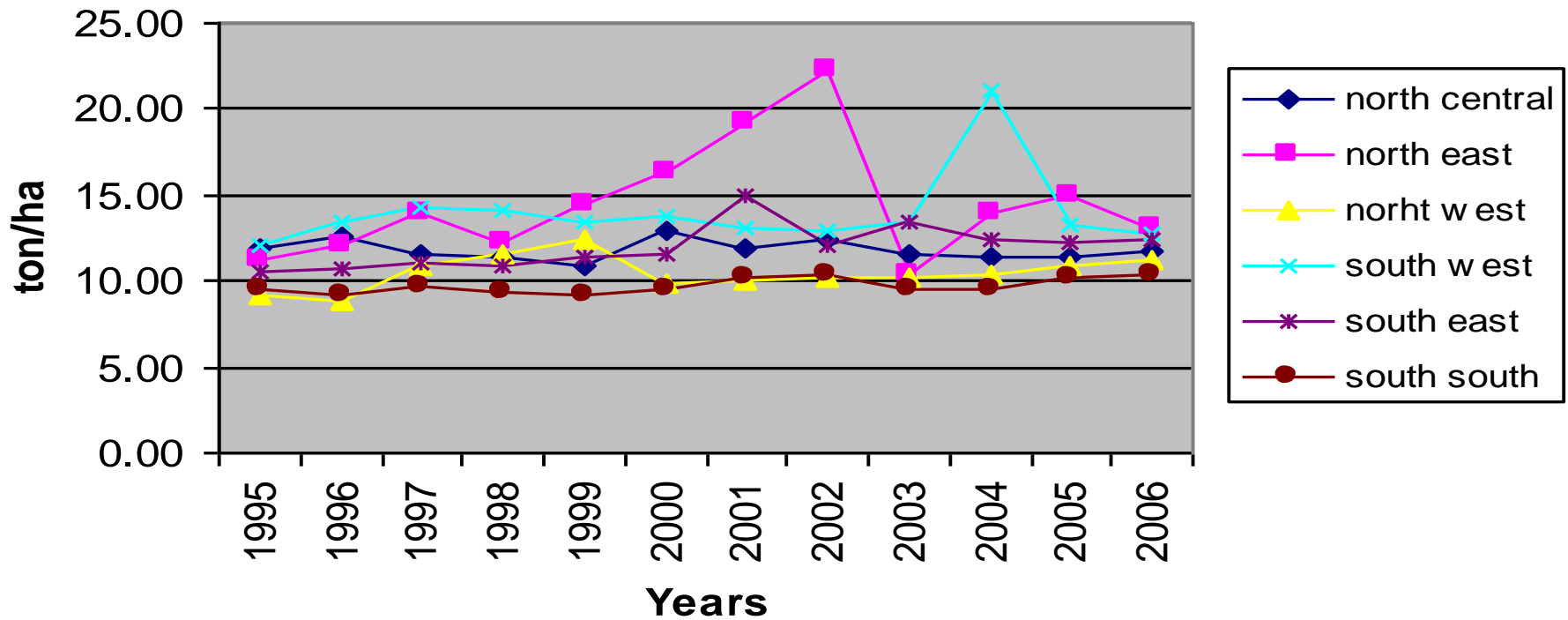


# Methodology

- Five Crops: Cassava, Yam, Maize, Rice and Millet
  - Presidential initiative crops
  - widely cultivated and consumed by Nigerians.

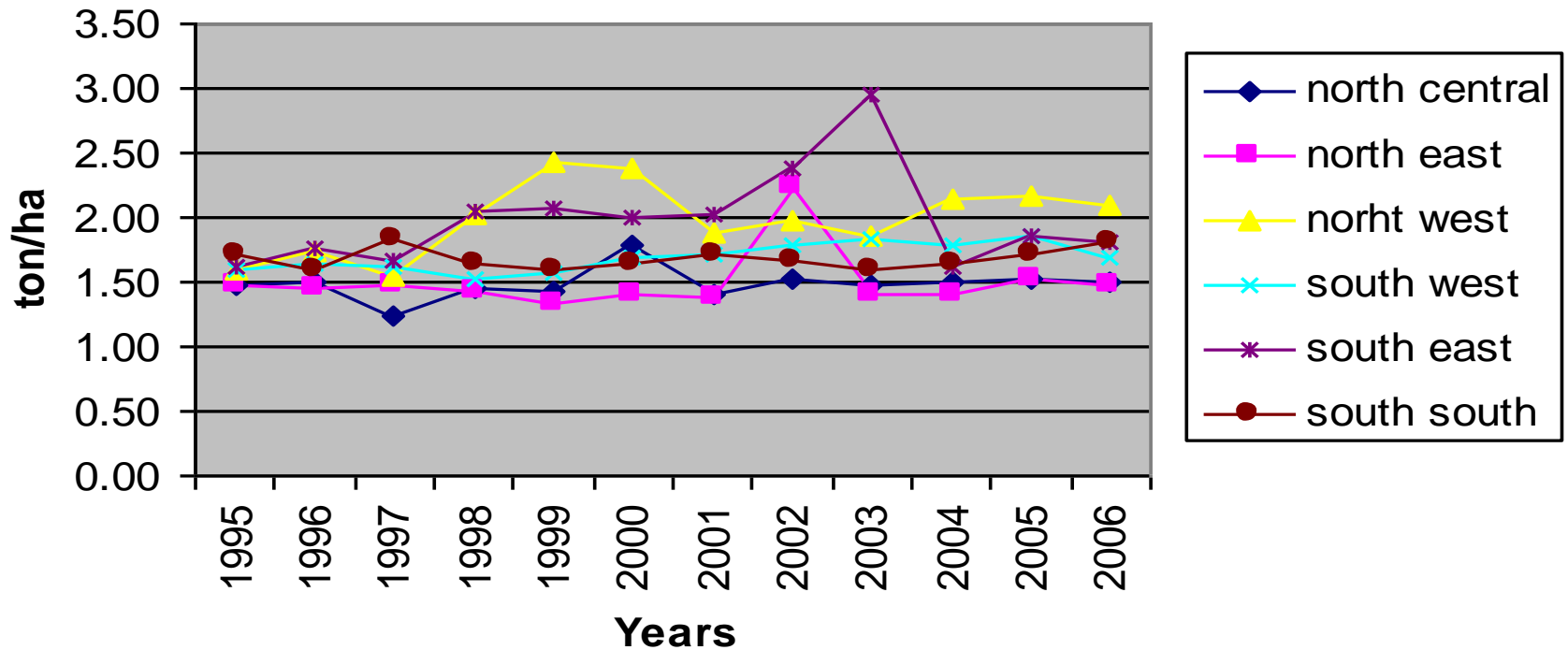
# Result

## Yield/Land Productivity of Yam



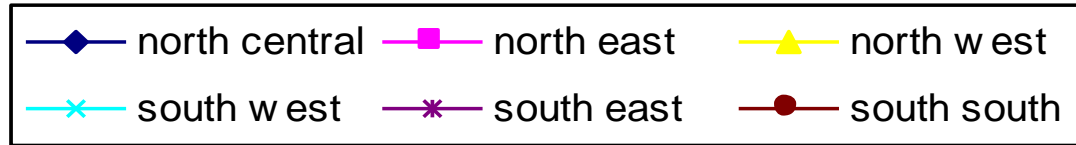
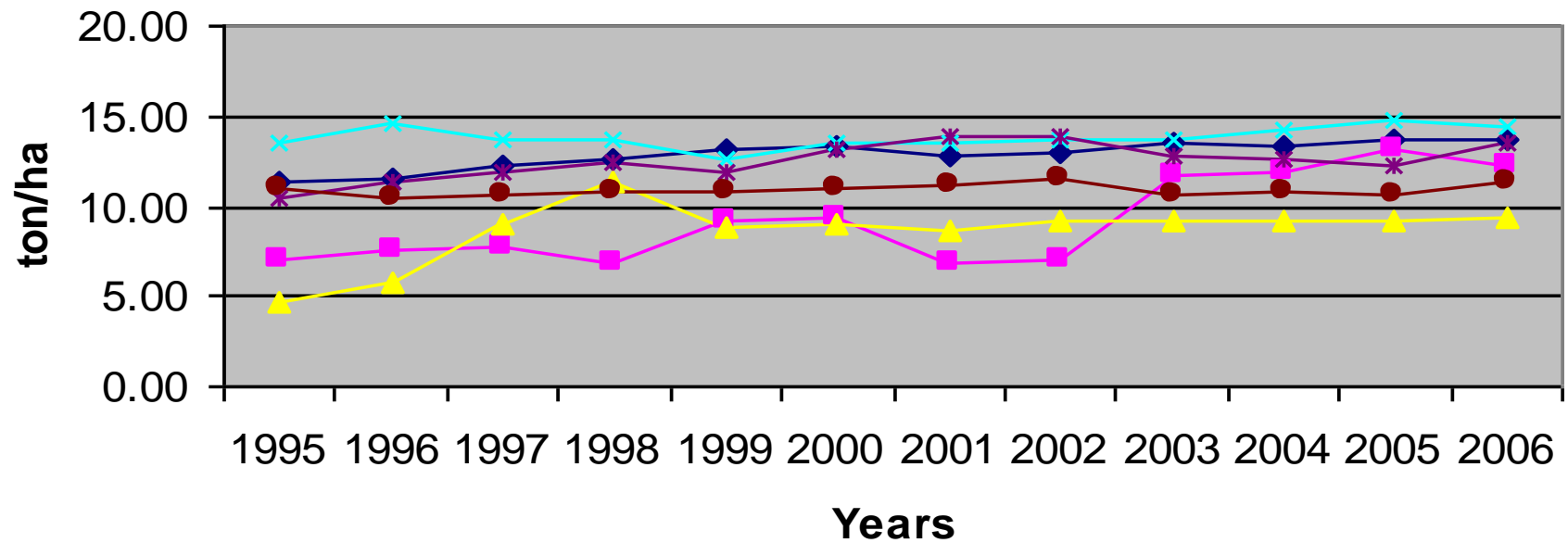
# Result

## Yield/Land Productivity of Maize



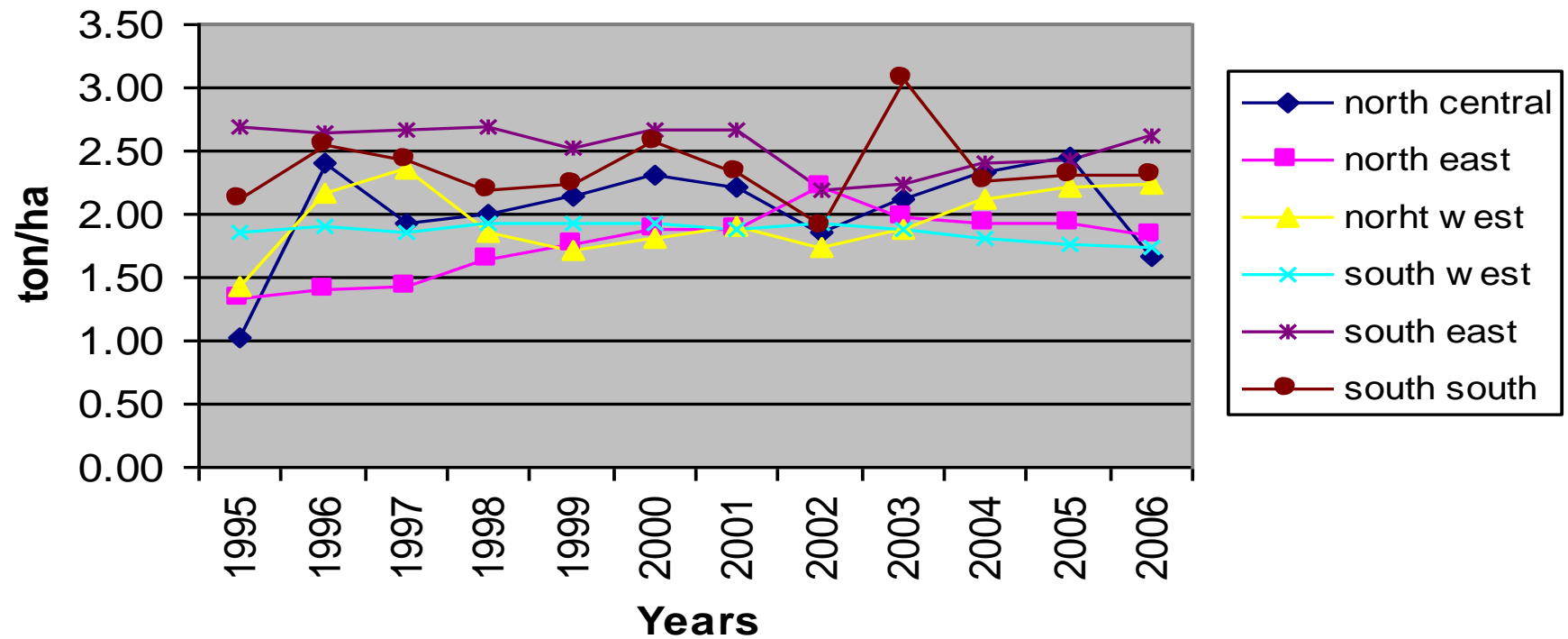
# Result

## Yield/Land Productivity of Cassava



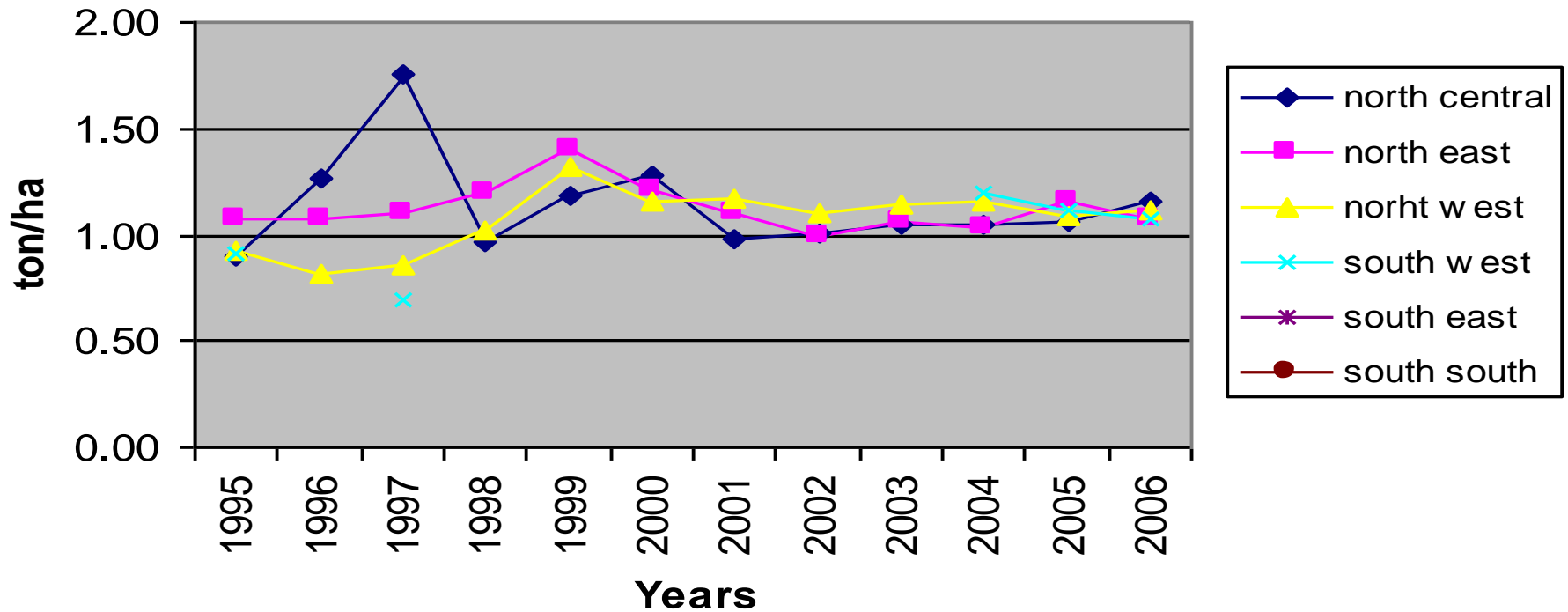
# Result

## Yield/Land Productivity of Rice



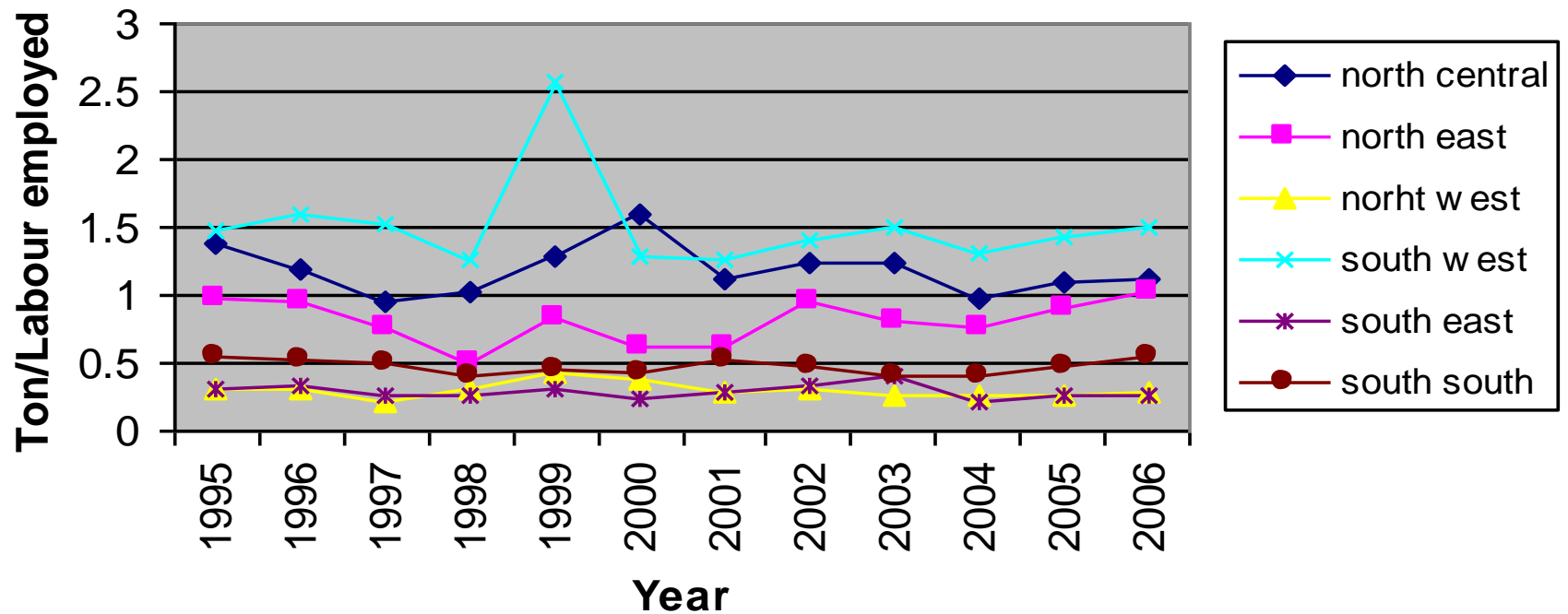
# Result

## Yield/Land Productivity of Millet



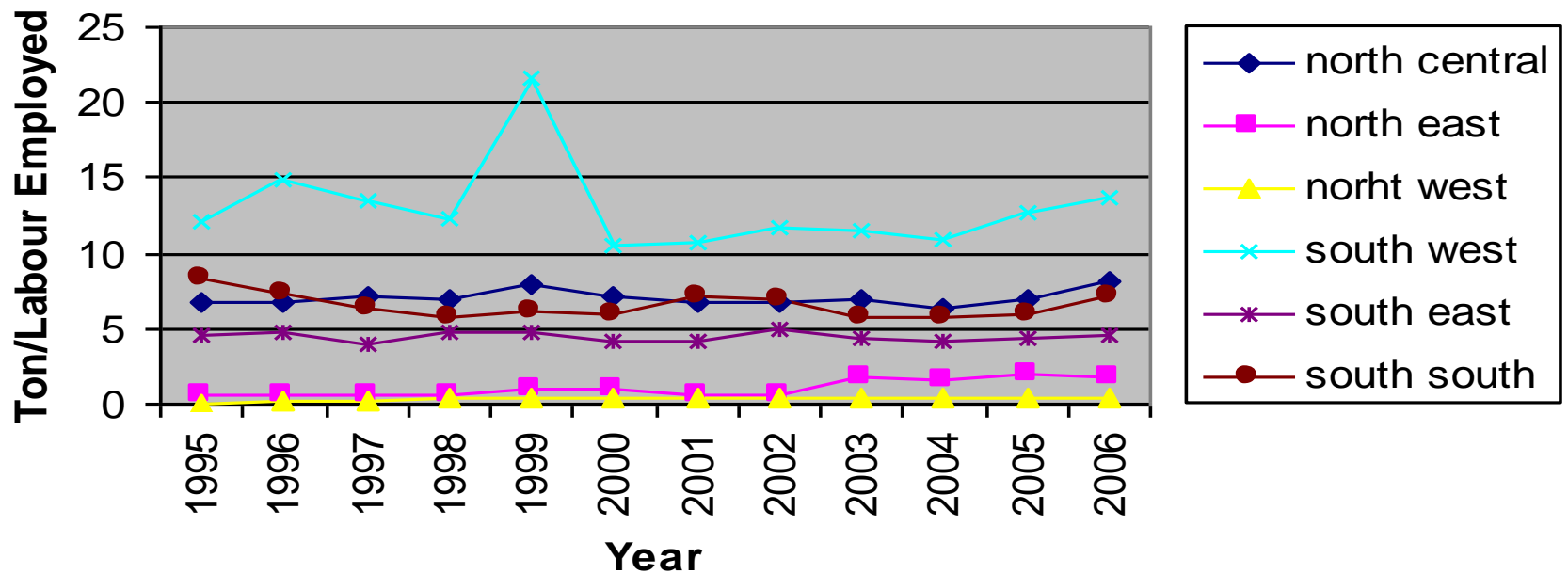
# Result

## Male Unpaid Labour Productivity for Maize by Geopolitical zone



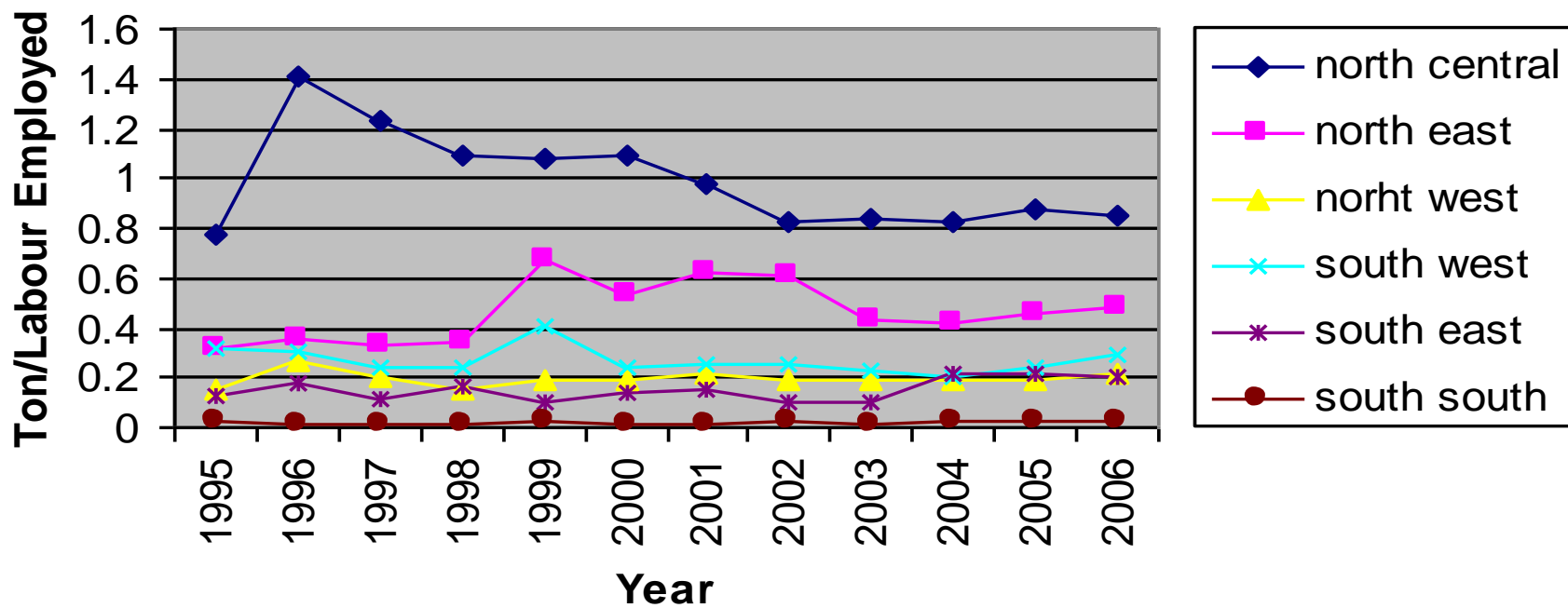
# Result

## Male Unpaid Labour Productivity For Cassava by Geopolitical zone



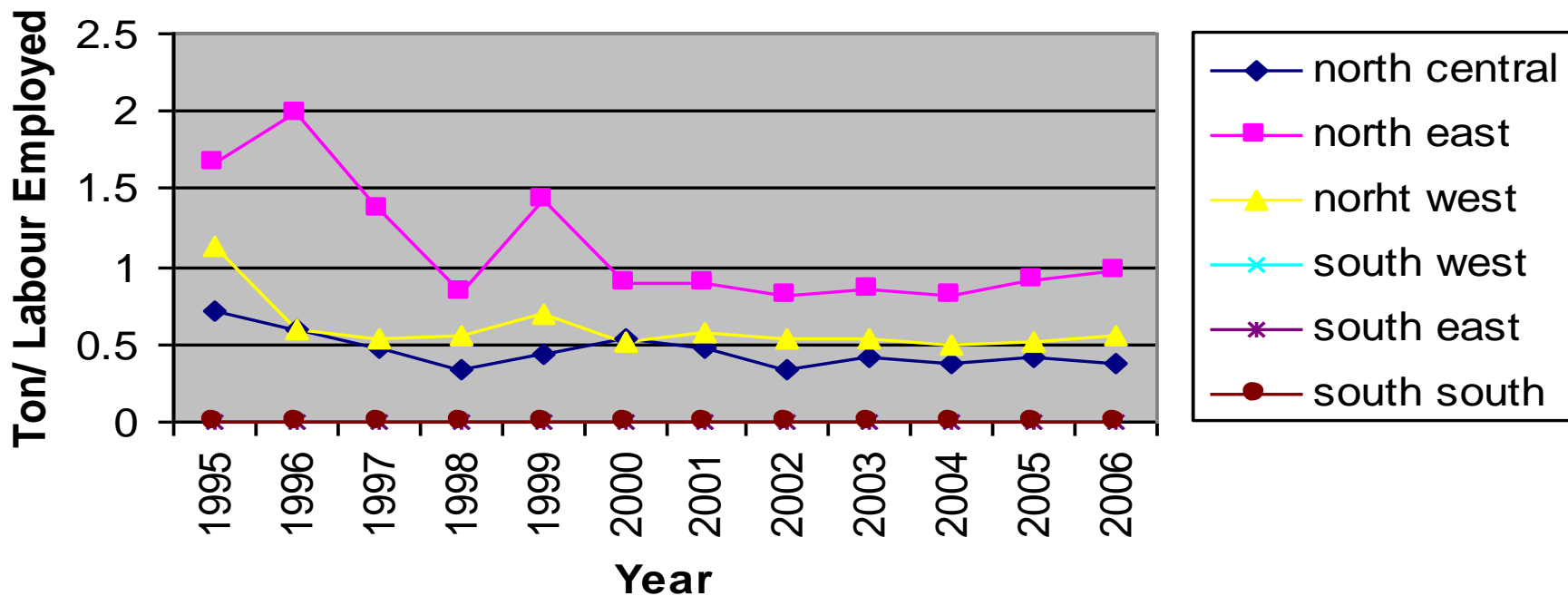
# Result

## Male Unpaid Labour Productivity For Rice by Geopolitical Zone



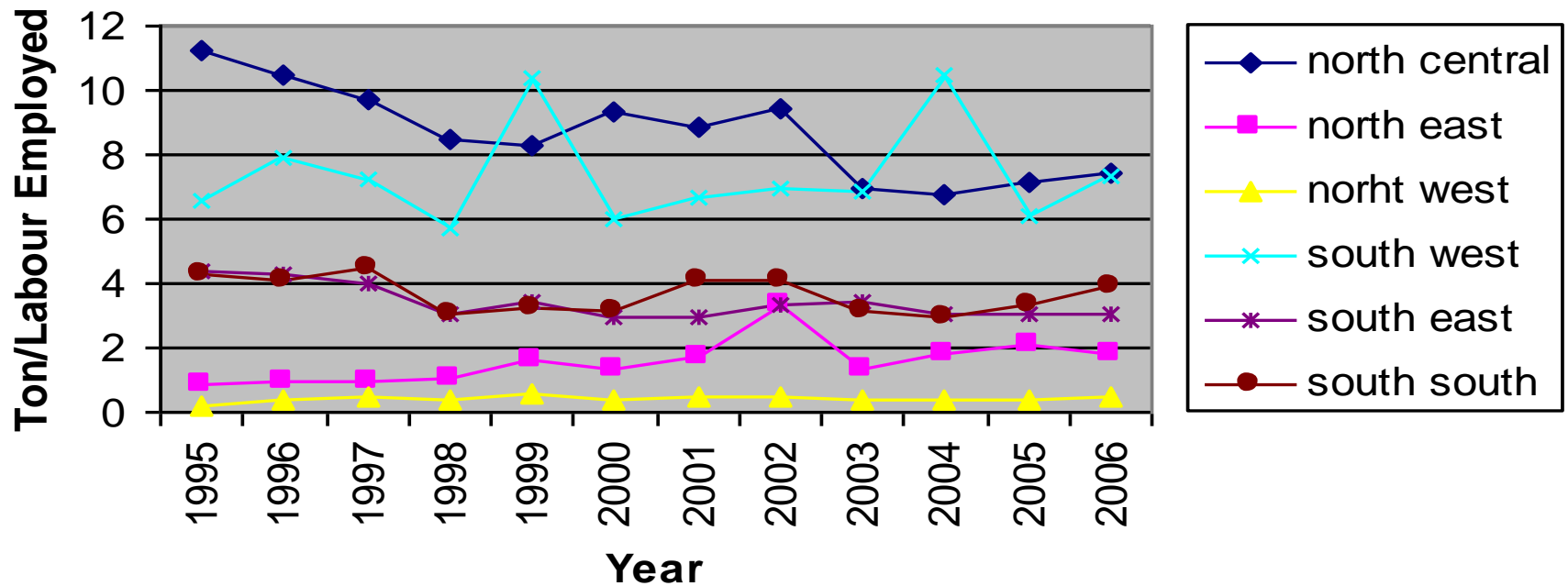
# Result

## Male Unpaid Labour Productivity For Millet by Geopolitical zone



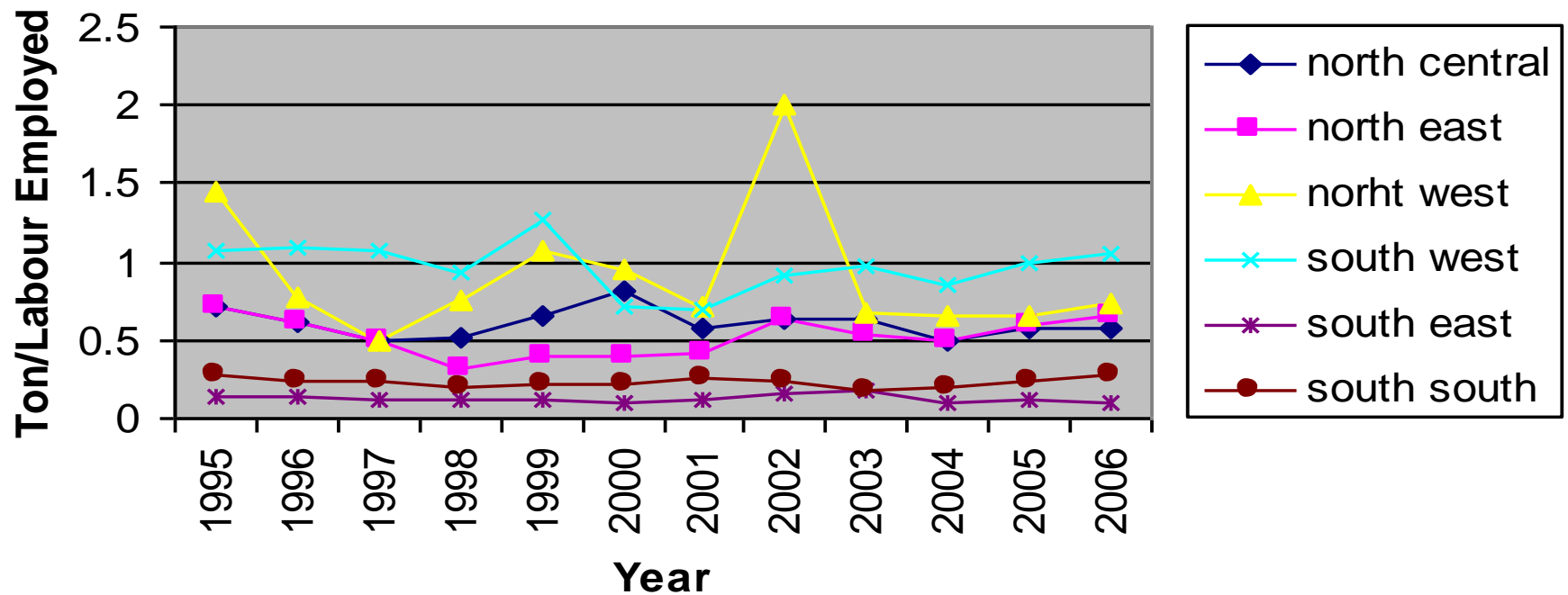
# Result

## Male Unpaid Labour Productivity For Yam by Geopolitical zone



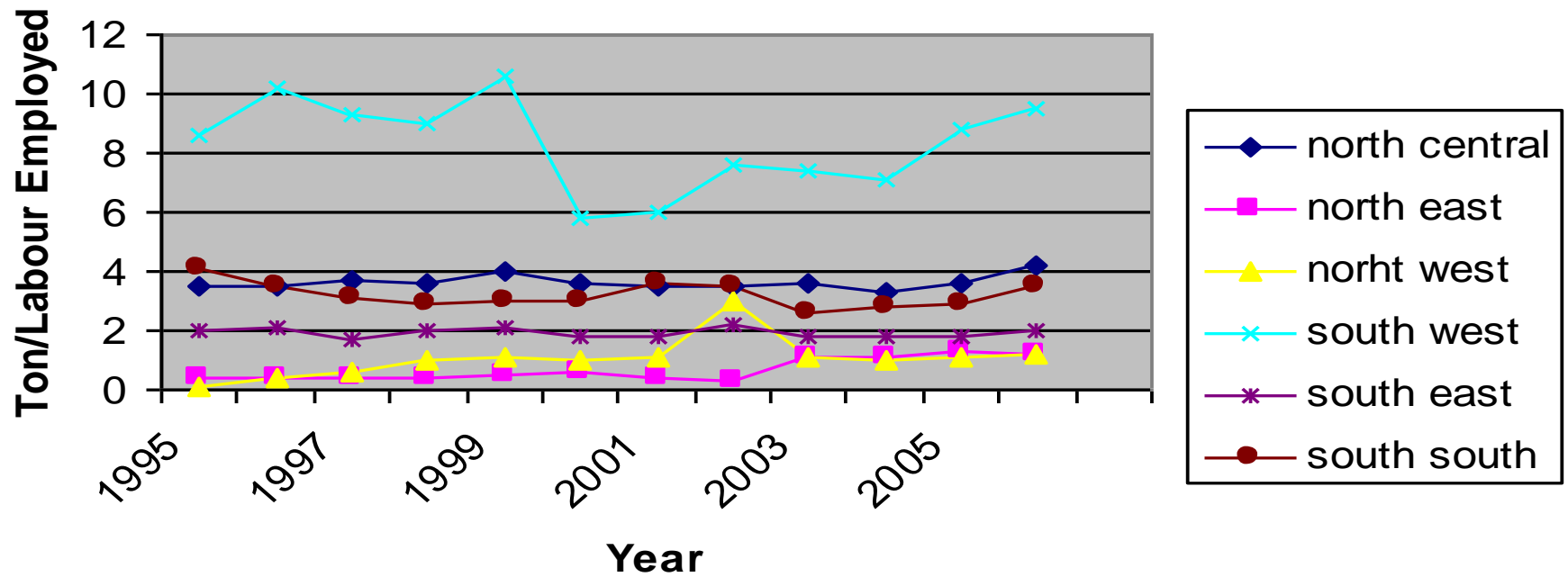
# Result

## Female Unpaid Labour Productivity For Maize By Geopolitical zone



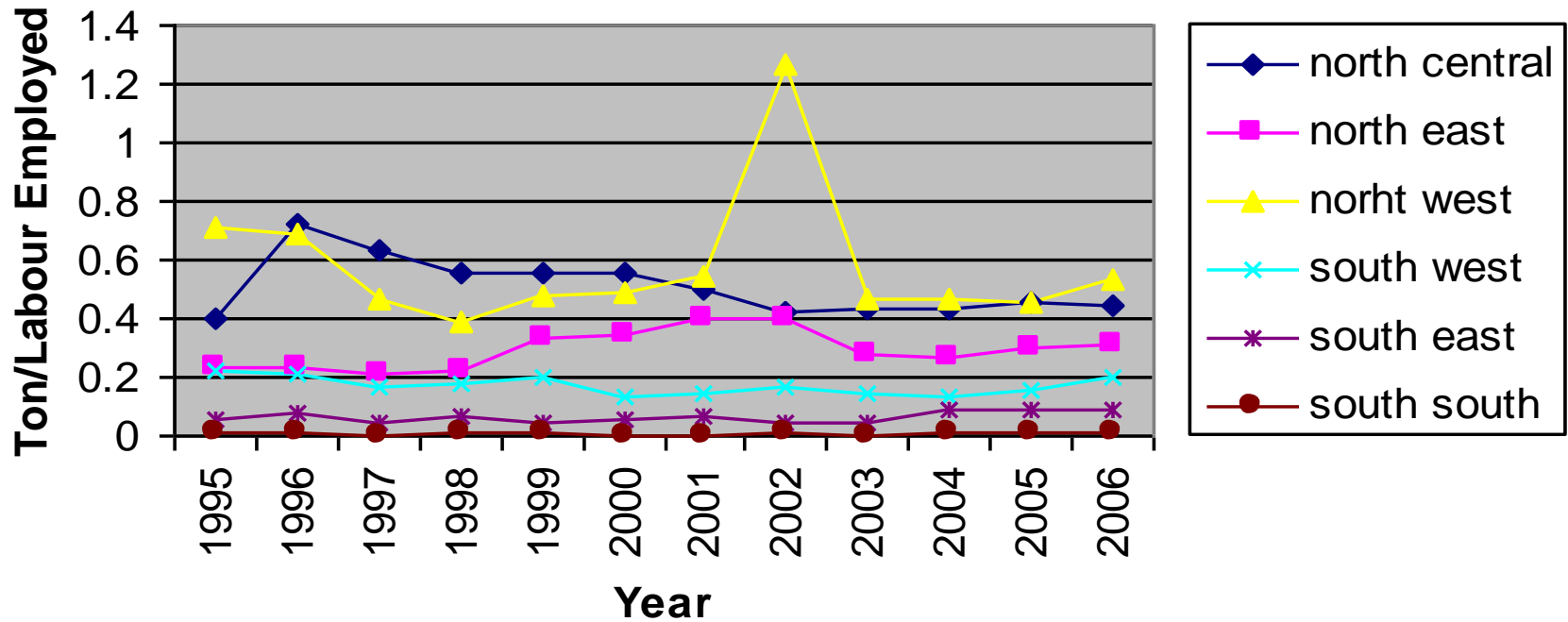
# Result

## Female Unpaid Labour Productivity For Cassava by Geopolitical zone



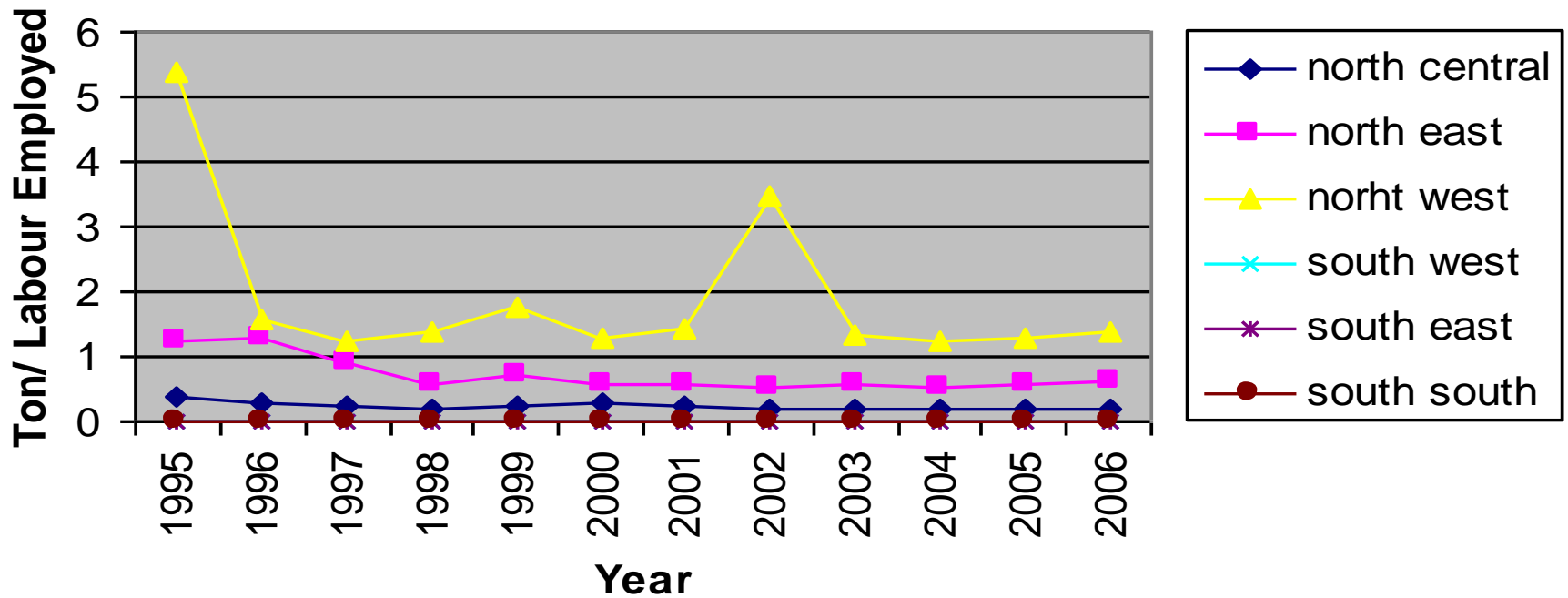
# Result

## Female Unpaid Productivity for Rice by Geopolitical zone



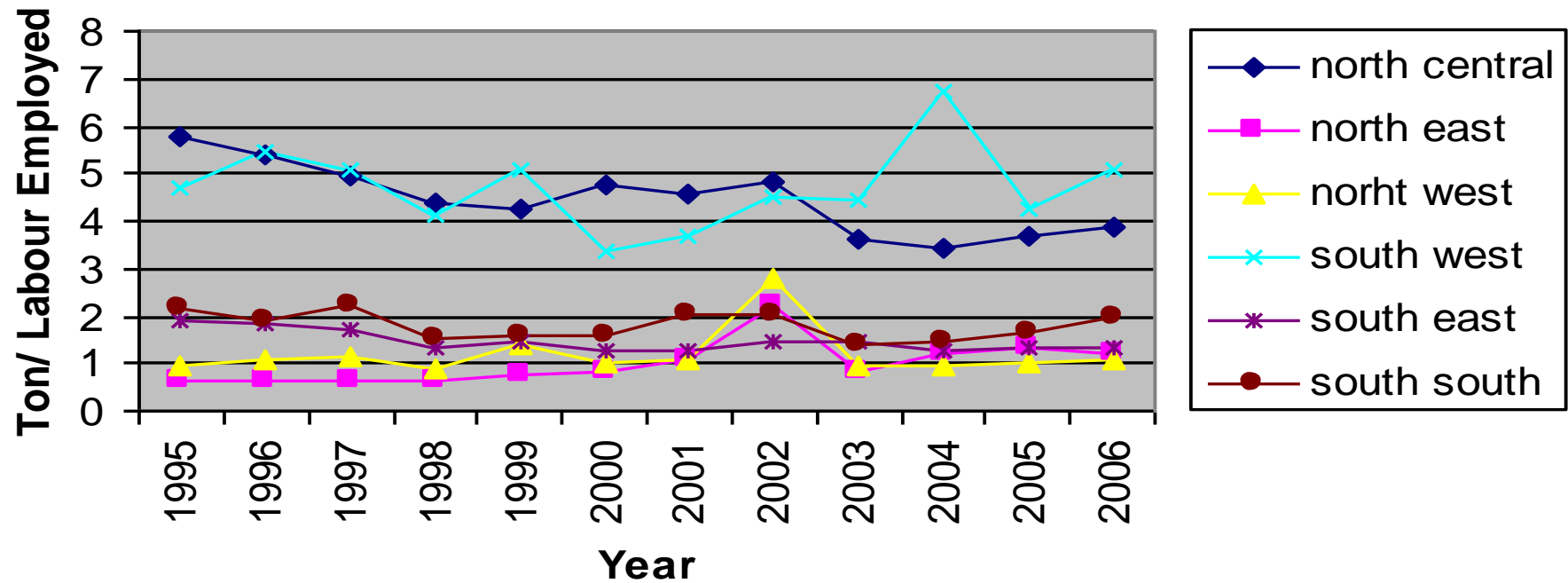
# Result


## Female Unpaid Productivity For Millet by Geopolitical zone



# Result

## Female Unpaid Labour Productivity For Yam by Geopolitical Zone





# Result

- North central zone: rank tops in output and area planted
- Agro-ecological zone - comparative advantage in land use
  - Humid forest zone: yam, maize and cassava
  - Moist savannah region: rice production
  - Dry savannah agro-ecological zone: millet



# Result – Gender

- Agro-ecological zones
  - Humid forest zone : males and female farmers have comparative advantage in producing yam, cassava & maize
  - Dry savannah area Male and female farmers comparative advantage in rice and millet
- Gender differentials exist in resource productivity estimates
- Male gender is more productive in all the crops across the geopolitical zone **except** in the use of labour for production of millet.



# Result: Drivers of Efficiency for Crop Production

- Southwestern Nigeria
  - High level of education; farming experience; availability of storage facilities; ownership structure; high level of previous year income
- Others:
  - improved access of farmers to extension services & technical assistance.
- South southern Nigeria
  - well drained soil, high level of education and farming experience, crop rotation, use of fertilizer and hybrid seed.
- Others:
  - reduction of oil spillage, gas flaring, effluent discharge/disposal and membership of farmers association



# Result: Drivers of Efficiency for Crop Production

- **Northeastern Nigeria**
  - wise use of labour
  - high level of education
  - access to extension agents
  - high crop diversification
- **North Central Nigeria**
  - availability of traction
  - large family labour
- **Southeastern Nigeria**
  - wise use of capital
  - land
  - access to agric service facilities
  - female labour contribution



# Policy Issues

- Human Capacity development
- Infrastructure provision
- Technical assistance policy for farmers
- Environmental friendly policy that reduce oil pollution and spillage.
- Land reform policy.
- Gender friendly policy
- Labour saving technology policy
- Favourable input price policy

**Thank You for your Time**

**Canada**

**Canadian International Development Agency**