

# CURRENT STATUS OF COTTON RESEARCH AND PRODUCTION TRENDS IN UGANDA

### Presented by:

Lubwama Damalie
Cotton Development Organisation

# STATUS OF COTTON RESEARCH

### 1. Introduction:

- Agricultural Research has undergone major reforms aimed at:
  - making it more competitive and
  - more responsive to farmers' and market requirements.
- The reforms resulted into the formation of the National Agricultural Research System (NARS) under the NARS Act of 2006.

# 1. Introduction cont'd:

- Under NARS, Agricultural Research can be conducted by:
  - Public Agricultural Research Institutes
  - Universities or tertiary institutions
  - Private sector & civil society organizations
  - Farmers' groups
  - Any entity with appropriate capacity to handle research
- The mandate for public cotton research is held by the National Semi-Arid Resources Research Institute since 1994.

# 2. Structure of Public Agriculture Research: Ministry of Agriculture National Agriculture Research Organisation (NARO) For guidance and coordination of all ogricultural research activities Public Agricultural Research Institutes (PARIs) National Agricultural Research Institutes (PARIs) For strategic research National Semi-Arid Research Institutes (NARIs) For strategic research National Semi-Arid Research Institutes (NASARRI) Technology Verification Centers (TVCs) For multi-location & multi-seasonal testing of technologies

# 3. Sources of funding for Cotton Research:

- Annual budgetary provisions by the Government of Uganda (GoU) to NARO.
- Grants from pooled "basket" funding by Government and Development Partners accessed through competitive research proposals.
- · Loans from Development Partners.
- Bilateral projects on Cotton funded by GoU and Development Partners e.g. ATAAS.
- Regional Research Projects funded by Common Fund for Commodities (CFC) through ICAC.
- Support from the International Trade Centre through the South-to-South Cooperation along the Cotton Value Chain.

# 4. Research agenda at NaSARRI:

- Breeding for variety improvement and seed multiplication
- Agronomy for development of crop management packages
- · Entomology for pest management
- · Pathology for disease control
- Other disciplines include:
  - Mechanization animal traction
  - Biotechnology Confined Field Trials

### 5. Research coordination:

Coordination of cotton research follows a bottom-up

- Scientists and the NaSARRI management Committee periodically meet with the cotton industry stakeholders draw priorities for the future research.
- The research agenda is incorporated into the NaSARRI research programme for a given period.
- NaSARRI research programmes are incorporated into the National Agricultural Research Agenda after scrutiny by NARO Directorate of Research Quality Assurance and then approved by the NARO council.
- NARO research Agenda is further scrutinized by the MAAIF Top Management and fitted into the MAAIF annual work plan and budgets.

# 6. Work done so far:

- Five varieties have been developed and released with resistance to bacterial blight, Jassids and with improved lint quality parameters.
- Recommendations for spacing and seed rates have been developed for optimum plant populations.
- Pre-emergence and post emergence herbicides have been tested and recommendations made.
- Threshold levels for Aphids, Lygus, bollworms and Stainers have been worked out to guide IPM strategies.

# 6. Work done cont'd:

- Several organophosphate and pyrethroid insecticides have been tested and approved for use on cotton.
- Studies have been conducted on Fusarium and Verticillium wilts to determine distribution and impact.
- Testing of seed treatment products has been conducted.
- Ox-drawn implements have been designed including ploughs, seeders and cultivators.

# 7. Challenges:

- · Low levels of staffing in the Cotton Research Program.
- · Inadequate laboratory equipment for ginning and conducting spinning tests for new varieties.
- Difficulties in acquiring germplasm for variety development.
- Emergence of new pests and diseases and in some cases breakdown on resistance to certain pests and diseases especially under major climatic changes at hand.

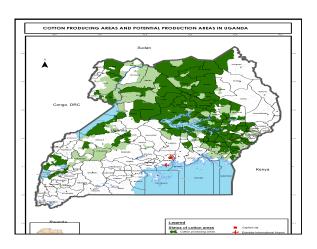
# **COTTON PRODUCTION TRENDS**

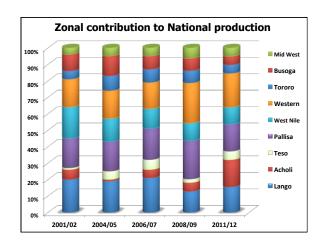
# Introduction:

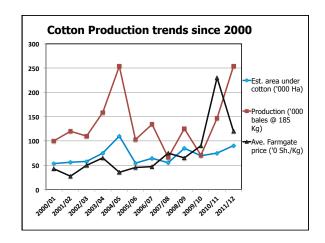
- Cotton in Uganda is grown by small-scale farmers in about  $^2\!/_{\rm 3rd}$  of the country.
- Production is characterized by annual fluctuations influenced mainly by:

  - Price movements

  - Weather patterns
  - Prices of competing crops
  - Competition for family labour with other crops
- Government and the private sector (ginners) have teamed up to support production through provision of planting seed, pesticides, pumps, ox-ploughs, tractor hire services and extension services for training farmers using demonstration







# **CONCLUSION**

- Cotton is regarded as one of the important traditional cash crops which contributes to poverty alleviation through provision of employment and household incomes.
- As such, it is one of the crops identified for support under the Ministry of Agriculture's Development Strategy and Investment Plan (DSIP).
- Improving the performance of the Cotton sub-sector through increased production and productivity will contribute to the DSIP objectives of increasing rural incomes and food security.