

Promoting cotton by-products in Eastern and Southern Africa National Capacity Building Workshop Zambia

Increasing seed cotton production

Lusaka, 6-8 December 2017



Figure 1: Average yield trends in different regions

kg of lint per hectare



Source: ICAC

Figure 2: Average yield by region in Africa

kg lint per hectare





Figure 3: Trends in seed cotton production and lagged seed cotton prices in Zambia

Sources: Central Statistics Office (CSO) - production indicators, Cotton Board of Zambia - prices

Extension Service (1)

- ✓ scarcity of capacity to effectively transfer knowledge and skills to the smallholder farmers
- Existing capacity for extension in smallholder cotton systems in Zambia is not only thin but also extremely scattered in the form small private sector (individual ginners) teams
- The current extension model has a number of weaknesses: minimal outreach, logistically wasteful, confusing to the farmers, promotes disharmony amongst ginners and could be a cause of sidebuying/ selling
- Sourcing experts by individual ginners is not only unsustainable but also very expensive

Extension (2)

- ✓ Unfavorable agent : farmer ratios
- ✓ Absence / lean public extension
- \checkmark Inability by ginners to attract qualified field agents
- ✓ Ginners limited budgets' –funding gaps
- ✓ Poor/negative attitudes of extension agents

- ✓ Multi-ginner synergy: Centralize training
- Advocate multi-ginner extension to reduce the cost per cotton company
- ✓ Inclusion of a ToT module to improve extensionistfarmer-relationship
- Policy intervention to make it mandatory for every ginner to develop a staff development plan;
- ✓ Multi-ginner sourcing of experts lowers per gin costs;
- Establish a centralized mechanism for agents / farmer training

Inputs

- ✓ Seed quality and quantity used
- ✓ Deteriorating characteristics of the older cotton variety
- ✓ Minimal use of mineral fertilizer if any
- \checkmark Deviation of cotton inputs for other crops
- ✓ Poor quality of pesticide inputs
- ✓ Possible development of pesticide resistance
- ✓ Poor knowledge in pesticide use and application
- ✓ Poor crop husbandry
- ✓ Labor shortage

Inputs

- ✓ Revise pesticides regulatory framework
- ✓ Phasing out old pesticides
- ✓ Rotation of pesticides to avoid resistance
- ✓ Training in application techniques
- Strengthening research to continue the search for and optimize alternative options for the control of cotton pests
- Ensuring adequate input and delivery to farmers in terms od quantity and quality
- ✓ Strengthening research on cotton breeding
- ✓ Introduction of new varieties from other countries

Economics

- \checkmark Fluctuating of seed cotton producer price
- ✓ Fluctuating exchange rates
- ✓ Competition from other crops, e.g. soybean, groundnuts
- ✓ Opportunity costs for farm labor
- ✓ Decreasing investment in farmer trainings (loyalty of farmers, side selling)
- Decreasing pre-financing of inputs (loan recovery)
- ✓ Low investment in environmental programs (CA)

Economics

- ✓ Contract sanctity
- \checkmark Development of a price setting mechanism
- ✓ Set up a price smoothing fund
- ✓ Pre-planting prices (?)
- ✓ Improving cotton industry data collection
- ✓ Mechanisation
- ✓ Set-up of agricultural credit systems
- \checkmark Levelling the playing field

Climate change

- ✓ Unpredictable weather pattern
- Crop husbandry techniques not yet adapted to the new climatic conditions
- ✓ Lack of available adapted varieties

Possible way forward

- Development and research on new agricultural managing practices
- ✓ Strengthening research on cotton breeding

Policy Framework

- ✓ No or low interference by the MoA or MoTCI in the cotton sector
- ✓ Weak governing bodies
- ✓ Cotton Act out dated
- ✓ Price setting discussions between Ginner Association (ZCGA) and Producer Association (CAZ) not allowed
- ✓ Price setting transparency
- ✓ No stringent conditions of market entry

Stringent conditions of market entry to ensure that:

- Companies applying for operating licences shall fulfill the following:
 - ✓ Provision of adequate inputs (seed and chemicals)
 - Effective extension provision (ratio: farm to extension agent, qualifcation of extension staff, training material and approach)
 - ✓ Having an own operational gin
 - Before starting to submit proven record of contracted farmer
 - If a company is found involved in side trading to revoke the operating licence
- Development of a price setting mechanism
- Enhance multi-stakeholders representation
- Change of cotton sector model

What could be the way forward to increase cotton production in Zambia

- Fostering a good extension-farmer relationship given the strategic role of extension agents in delivery of productivity enhancing innovations for a sustainable increasing cotton production?
- Ensuring adequate input and delivery to farmers in terms od quantity and quality?
- Scaling-up of GAP/CA/IPPM training to farmers by improving extension service delivery?
- Strengthening research in terms of cotton breeding and pest management?
- Re-visiting the policy framework?
- Stringent conditions of market entry of new companies?

Thank you very much for your attention!



Wolfgang Bertenbreiter Program Director COMPACI wolfgang.bertenbreiter@giz.de