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**Uganda: Project lessons and experience**

By

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



**Republic of Uganda**

**PROMOTING COTTON BY-PRODUCTS IN EASTERN  
AND SOUTHERN AFRICA –  
Project lessons and experience  
by George Wilson Ssekisambu**

**PRESENTED AT:**

**UNCTAD /COTTON SOUTH AFRICA REGIONAL WORKSHOP**

**28<sup>TH</sup> – 29<sup>TH</sup> MAY 2019**

**JOHANNESBURG, SOUTH AFRICA.**

# Presentation outline:

- Introduction
- Project Lessons and experiences
- Conclusion

# 1. Introduction:

Lessons and experiences being shared arise from the following Project activities:

- Multi-stakeholder National Capacity Building Workshop held at Golf Course Hotel, Kampala, Uganda between 14<sup>th</sup>- 16<sup>th</sup> March, 2018.
- Study visit to the Central Institute for Research on Cotton Technology (CIRCOT), Nagpur, India between 14<sup>th</sup> -18<sup>th</sup> January, 2019.

Areas being focused on are in line with the Uganda National Action Plan agreed to by consensus during the National Capacity Building Workshop .

## 2. Project Lessons and Experiences:

- a) Cotton Seed Cake (CSC) contains Gossypol which is toxic to non-ruminant livestock.
- b) There are two forms of Gossypol - Free and Bound.
- c) Gossypol can be removed from CSC thru a process called De-gossypolisation.
- d) Research has been carried out on Gossypol by Brazil, CIRCOT, etc.
- e) Acceptable levels of Free Gossypol) is 0.06% (UNFAD/WHO -2014)

## 2. Lessons and Experiences cont'd:

- f) CIRCOT has developed a Microbial Method for de-gossypolising CSC.
- The technology is in process of being commercialized.
  - It reduces Gossypol to acceptable levels.
  - It is cheap and more efficient compared to chemical methods.
- g) De-gossypolised CSC is a perfect replacement for Soy bean as source of protein in livestock feeds.
- h) A lot of Agro-biomass that is wasted in Uganda can be converted into pellets and briquettes.

## 2. Lessons and Experiences cont'd:

- i) Cotton stalks are the best raw materials for pelleting and briquetting.
  - Briquettes and pellets are for both industrial and domestic use
  - They are a cheaper source of energy in firing boilers compared to electricity, firewood and thermal fuel.
  - Environmentally user friendly
  
- j) CIRCOT has developed the Technology of making particle boards from cotton stalks.
  
- k) Utilization of cotton stalks will directly increase farmers' incomes through sales of stalks for pellets and briquettes.

## 2. Lessons and Experiences cont'd:

- l) Cotton stalks can be used to produce substrates for domestic and commercial mushroom growing.
- m) Utilization of cotton stalks reduces the spread of diseases and pests.
- o) The ideal cotton for both surgical and absorbent cotton wool, would be that with high micronaire and short staple.
  - Revival of Uganda's SATU variety with above characteristics is in progress.



# CONCLUSION

Uganda appreciates that experiences and lessons learnt will help in:

- Developing ideas on investments in the Promotion of Cotton by-products.
- Creating partnerships for sourcing technology, information, capacity building, etc. from the already practicing Institutions (e.g. India)
- Information transfer to other Cotton growing countries in Africa