RETHINKING THE TECHNICAL EFFICIENCY OF SMALL SCALE YAM FARMERS IN NIGERIA USING CONVENTIONAL AND NON-CONVENTIONAL INEFFICIENCY PARAMETERS

Job N. Nmadu and James O. Simpa
AFFILIATION

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGERIA

WWW.FUTMINNA.EDU.NG
Yam: king of all the crops

- Sweet potato
- Maize
- Sorghum
- Groundnut
- Peppper
- Cowpea
- Tomato
- Irish potato
- Cassava
- Soybean
- Rice
- Coconut
- Cocoa
- Okra
Yam as king

- Worshipped
- Respected
- Revered
- Praised
- Restricted
- Etc.
  - In the form of practices, sacrifices, community actions
Yam as king

• How does the various practices and community actions affect technical efficiency?
Study conducted in Kogi State
The sample was:

- Igala-------Dekina LGA
- Okun------Ijumu LGA
- Ebira-------Okene LGA

Socio-cultural groups

- Sample size =180
Analysis

• Descriptions

• Stochastic Frontier production function (Full model, Restricted only conventional parameters, Restricted only non-conventional parameters
  – 10 conventional and 19 non-conventional inefficiency parameters

• Comparisons
Results

• estimated are significant in explaining the output and inefficiency of the farmers except Ebira (I)
• none of the models show any significant difference among themselves, even the Ebira.
• eight, three and six non-conventional and five, three and zero conventional variables exhibited expected, contrary and both signs respectively
• there is clear evidence of the over-bearing influence of the socio-cultural factors on TE of the full models
• TE of the male farmers were either positively or negatively affected by the socio-cultural practices in spite of the fact the female had the highest TE
Further results

• Ebira group had the highest number of negative socio-cultural factors affecting TE while the Okun group had the highest number of positive factors with equal number of negative factors also

• Significant factors are:
  – belief in oracle consultation before planting begins
  – belief in production of bigger yam for marriage rite
  – belief in purchase of seed yam production
  – belief in yam festival celebration before harvest commences
  – quantity of yam for rent on land
  – on-farm storage structures
  – nature of access road to the farm
  – aspiration to be master of yam producers
  – belief in sprinkling of domestic waste water on yam seeds
Recommendations

- Yam farmers should be provided with more comprehensive and adequate extension support to manage their farms in line with modern and improved production technologies, rather than basing their production decisions on factors alien to modern agricultural production.
- Women farmers, inheritance rights for widows must be strengthened.
- Production inputs should be provided through a special wallet to enhance their income and welfare.
- Policies and programmes should be farmer specific for effective Nigerian agricultural transformation agenda.
Thank you for listening