

African Economic Conference 2014 : Knowledge and innovation for Africa's transformation

Discussion of the paper : Diversification towards high-value export production, farm household productivity and efficiency in Senegal (By Senakpon Dedehouanou)

Comments of Alassane DRABO

Fondation pour les Etudes et Recherches sur le Développement International (FERDI)

Summary

object

Analyse how the involvement in the high value export production like green beans is related to farm household agricultural productivity and efficiency in the region les Niayes.

Methodology

- First, computes and compares total factor productivity, technical efficiency, and scale mix efficiency using the data envelopment analysis (DEA) method.
- Second, the contribution of some factors to TFP and efficiency are estimated through OLS, Fixed-effects, Hausman-Taylor, tobit, and random-effects techniques.
- Third, the author used rich household level three-year panel dataset.

Results

Being involved in green bean export production has a significant and positive effect on productivity, technical and scale mix efficiencies.

Conclusion

Involvement in the production intended to international food markets may enforce households to manage more efficiently the entire farm household production.

Interest of the paper

- Interesting research question through its value additions : combination of export+production+contracting+diversification, rich panel data, and relevant policy responses.
- Well structured and written paper. Its reading is smoothy and clear. Easy to understand
- The study is clearly developed in the majority of the sections.

Context and methodology

- The context : More geographical explanations of les Niayes, probably some illustrations with maps.
- The methodology : Regarding the DEA methodology used, it would be better to implement stochastic frontier analysis too, since as you stated in the paper both methods have their advantages and their drawbacks.
- Important inputs are absent from the estimation such as fertilizer use.
- You could also test channel variables : access to resource, farming practices, better management,...

Interpretation and conclusion

- Better productivity does not mean better solution, since it can be done at the cost of environmental quality with the over-use fertilizers, pesticides, or insecticides (see Drabo (2011))
- You should give more attention to the interpretation of explanatory variables. Some of them have unexpected signs : Age of head, education of the head, female head. Others have signs changing from one column to other.
- More policy responses on how to take advantages of the contracting you developed in the paper. How to encourage it ? How to develop it ?

Thank you for your attention