


Household food security effects of organic export production

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Kampala, December 2008*


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Background (1): two recent trends

- Expansion of certified organic export farming in Africa in response to increased demand in EU and US markets
- Food price increase (2006 — ?), globally and within Africa, prompts critique of organic farming as a possible contributor to food insecurity

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Background (1): research question

How does conversion to certified organic export production by African smallholders affect food security at the household level?

“A household is food secure if it can gain access to a sufficient quantity and quality of food for all household members to enjoy a healthy and active life. The term ‘access’ implies that food may be sourced from one’s own farm, through the market or through social networks”


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Hypotheses on food security effects of organic conversion

1. Adoption of an organic export crop diverts household resources away from food production, thereby reducing food self-sufficiency (-)
 - Family labour, land and cash


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Hypotheses (II)

2. Organic conversion prevents use of synthetic inputs, which reduces yield for both food and export crops (-)
 - Based on observed yield loss after conversion in developed countries

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Hypotheses (III)

3. Spill overs from organic export crop raise food security (+)
 - Investment of organic revenues in food production or off-farm activities
 - Application of organic methods in food crop farming

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Hypotheses (IV)

4. Organic export production increases ability to access food through purchase by increasing cash income (+)

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Case studies and methods

- Biofresh Organic Pineapple scheme
- Kawacom Organic/Utz Arabica Project
- 9 focus group interviews with scheme members, 3 hours duration
 - Large and small
 - Male (5) and female (4)
- Interviews with organic project staff

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Results

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Effect on food production (labour)

Crop	Impact	Reason
P/apple	0	Women responsible for food production and their time spent in pineapple farming is unchanged Hired and male labour provides additional labour inputs in pineapple farming
Coffee	0 (-1)	Women spend more time on coffee, at the cost of leisure and own economic activities rather than at food crop farming Men & women increased total time spent on farming

-2 Major decline, -1 Minor decline, 0 No impact, +1 Minor increase +2 Major increase

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Effect on women's labour inputs

Activity	% of work done by women
Weeding	80
SWC	50
Harvesting	60
Carrying	90
Pulping	50
Washing	100
Drying and	80
Sorting	65
Selling coffee	0

- Women do most of the work in coffee
- Men receive the cash and decide on its use
- ICS payment system increases transparency of coffee revenue

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Effect on food production (land)

Crop	Impact	Reason
P/apple	0	Farmers rented or bought new land to plant pineapple and did not reduce food crop acreage Landholdings are large (3.6 ha)
Coffee	-1	Landholdings are small (1.1 ha) Where coffee farms have expanded, it has been at the expense of maize and sweet potatoes. Maize has shifted to the valley Beans can now be grown as an intercrop in coffee, due to improved weeding

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Effect on food production (technology)

Crop	Impact	Reason
P/apple	+1	Promoted SWC practices also applied on food crops
Coffee	0 / +1	Promoted SWC practices also applied on food crops Promoted coffee tree management practices means less space for <i>matooke</i> as intercrop

- No change in food crop yields observed by focus groups
- Use of synthetic inputs in food crops rare before certification
- Yield of organic export crop *increased* (coffee)

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Effect on food production (cash investment)

Crop	Impact	Reason
P/apple	+1	Limited investment of pineapple revenues in food crop farming (land and labour)
Coffee	+1	Limited investment of coffee revenues in maize and vegetable farming

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Effect on food access through purchase

% of surveyed coffee farmers (N = 112)

Higher coffee revenue	More stable coffee revenue	Better timing of revenue (early)
84%	85%	74%

- All focus groups observed an increase in household income as a result of organic conversion
- This had increased their ability to access food through the market

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Consumption effects

Expenditure item	Rank Pineapple	Rank Coffee
School fees	1	1
Food	5	2
Hire labor on coffee	-	3
House construction	3	4
Clothing	-	5
Buy or rent land	2	-
Buy livestock	4	-

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Effect on quality of food

"We can buy more and better food compared to before organic conversion"

Food items purchased from coffee revenue	Rank *
Sugar/tea	1
Cooking oil	2
Maize flour	3
Vegetables	4
Meat	5
Rice	6

* Average of ranking made by two male and one female focus groups of organic coffee farmers

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Conclusion

- Organic conversion did not reduce food security but rather improved it through higher cash income that enhanced the ability to access food through the market
- Improved access through purchase more than compensated for the decrease in food production experienced by coffee farmers
- Improved access through the market important due to disease in *matooke*

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Acknowledgements

- Kawacom, Biofresh, Esco, Ibero and Gumutindo
- EPOPA
- DANIDA