

Household Food Security Effects of Organic Export Production a gendered analysis

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Market development for tropical organic food & beverages

- High demand growth (1.5 – 5.0% per year in EU/US)
 - **Market deepening**
 - Global sales reached US\$ 33 billion in 2005
 - Product diversification
 - Rising demand for tropical products
 - **Organic standards suitable for African smallholders**
- Relatively low risk and low entry barriers for African farmers & businesses (e.g. compared to conventional fruits and vegetables exports)

Donor and business responses

- Emergence and rapid growth of certified organic food/beverage exports from Africa:
- **Some private investment**
 - African & multinational businesses
 - New or rejuvenated cooperatives
- **Limited but critical donor support**
 - Few schemes in SSA without 'start-up' donor support
 - EPOPA is the only serious programme in SSA
- **Government policy development**
 - lacking behind; due to lack of good advice?

Knowledge gaps

- High performance of organic sub-sector in terms of export value & volume
- **But what are the local impacts in terms of the economic and social welfare of small producers?**
- Studies of socioeconomic impacts of organic farming are few and of dubious quality
 - Poor basis for developing existing programmes
 - Future government & donor support at stake?
- **Research needed at the level of schemes, local communities, and farm households**

DIIS farm-level studies 2005 – 07

- **Conclusion of household income study:**
 - positive income effects of organic certification for coffee, cocoa & pineapple in Uganda
(Gibbon & Bolwig 2007)
- **This study: assess food security and gender effects of certified organic farming**
 - How will expansion of organic farming affect local and global food security (FAO-led debate)?
 - Who benefit and who bear the costs of organic conversion within the household?
(Bolwig & Odeke 2007)

Hypotheses on food security effects of organic conversion

1. ↑ Income is increased through premium prices, adoption of new cash crop, and/or reduced costs
2. ↓ Prohibition of synthetic inputs reduces yields that in turn reduce food self-sufficiency and cash crop income (reducing food access)
3. ↓ Intensified cash crop production diverts production factors away from food crops
4. ↑ Investment and technology spill-overs from organic cash crop to food crops

Hypotheses on gender issues related to organic conversion

- Gender relations influence the 'power' of each hypothesis and hence the 'net' effect of conversion on household food security
 - gender-sensitive analysis is a key method
- Women bear more of the labour costs and get less of the benefits from organic cash crop conversion
 - Equity concerns demand gender-sensitive analysis

Data and methods

- Two certified export schemes in Uganda
 - Kawacom Organic Arabica Coffee Project (Sipi)
 - Biofresh organic pineapple scheme
- Sampling of farmers for household survey
 - All 32 organic pineapple farmers
 - 114 coffee farmers randomly selected
 - Matching control group of conventional farmers in each case (for comparative analysis)
- Focus group interviews with male and female organic farmers (9 groups)
- Interviews with export scheme staff

Household Factor endowments

Production factor	Crop	Organic farmers	Conv'nal farmers
Area of whole farm (ha)	P/apple	3.5	2.7 (ns)
	Coffee	1.0	0.98 (ns)
Number of plants of organic cash crop	P/apple	29,647	26,367 (ns)
	Coffee	599	370 ***
Household labor (> 6 years)	P/apple	6.4	5.0 (ns)
	Coffee	6.0	5.0 (ns)

H1: Income and price effects

Variable	Crop	Organic farmers	Conv'nal farmers
Average price (UGX)	P/apple	370	355 (ns)
	Coffee	2,189	1806***
Sales revenue (million UGX)	P/apple	3.84	1.82***
	Coffee	0.59	0.34***

H1: Use of organic cash crop income

Expenditure item	Rank Pineapple	Rank Coffee
Education (school fees)	1	1
Invest in organic cash crop (expand pineapple farm / hire labour for coffee)	2	3
House construction	3	4
Buy livestock	4	-
Buy food	5	2
Buy clothing	-	5

H2: Yield effects of conversion

Variable	Crop	Organic farmers	Conv'nal farmers
Yield (kg / ha)	P/apple	N/A	N/A
	Coffee	836	630*
Volume sold (pieces)	P/apple	11,055	5,362**
Volume sold (kg)	Coffee	249	177**
Perceived change in food crop yields after conversion	P/apple	No change	-
	Coffee	Small	-

H3+4: Impact of resource reallocation and 'spill overs' on food production

Resource	Crop	Impact	Reason
Labour	P/apple	0	Women still focus on food production
	Coffee	-1/0	Women focus more on coffee
Land	P/apple	0	Low land use intensity Purchase of more land
	Coffee	-2	Scarce land reallocated to coffee production
Technology & investment 'spill overs'	P/apple	+1/0	SWC applied on food production
	Coffee	+1	SWC applied on food production

Division of work in organic pineapple

(% of activity, as perceived by women)

Activity	Men	Women	Hired labour
Planting	75	25	0
Weeding	37	13	50
Harvesting	100	0	0
Sorting	50	50	0

Work done by women in organic coffee

(% of activity, as perceived by men & women)

Activity	Male perception	Female perception
Weeding	40	80
Mulching	70	50
Manure appln	70	50
SWC	0	50
Harvesting	50	60
Carrying harvest	70	90
Pulping	50	50
Washing	100	100
Drying	70	80
Sorting	50	65

Conclusion - food security

- Organic farming has not reduced food security but rather improved it through higher income that has enhanced food access through the market
- Organic pineapple farmers had high levels of food self-sufficiency and organic conversion had not led to reduced food production
- Organic coffee farmers experienced reduced food production due to expansion of coffee on land previously used for food production, but enjoyed higher levels of food security

Conclusion – gender analysis

- Women always contribute labour to organic cash crop production, but how much varies with local conditions and type of commodity
- Organic conversion may increase women's work burden in cash cropping
- Women are rarely involved in decisions on how to spend the income earned from the organic cash crop
- Women nevertheless find that the household as a whole benefits from organic conversion
- Need for much more serious gender considerations in the design of organic export schemes

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Thank you for listening