

Organic Agriculture and Food Security in East Africa

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- Improvements in availability of food
- Improvements to natural capital
- Improvements to social capital
- Improvements to human capital



- Improvements to physical capital
- Improvements to financial capital

Increase in food availability

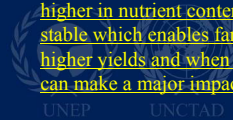
- Yields from organic systems tend to be **stable**
 - Organic conversion in tropical Africa is associated with yield **increases** rather than with yield reductions. (Gibbon and Borlag, 2007)
- Organic farming increases access to food on the following levels
- Increased quantity of food produced per farm leads to household food security
 - The production and selling of food surpluses at local markets means that farmers benefit from extra incomes increasing their purchasing power,
 - Fresh organic produce is available to more people in the wider community.
 - Organic farming enables new and different groups in a community to get involved in agricultural production and trade where previously they were excluded for financial reasons.



Benefits to the natural environment

- Improvements to the natural capital base - their local natural environment, with 93% outlining benefits to soil fertility, water supply and flood control and biodiversity.
- Improvements in water retention in soils, improvements in the water table (with more drinking water in the dry season), reduced soil erosion combined with improved organic matter in soils, leading to better carbon sequestration, and increased agro-biodiversity.

As a result soils are healthier, more able to sustain plant growth, higher in nutrient content, better able to hold water and more stable which enables farmers to grow crops for longer, with higher yields and when conditions are marginal. This of course can make a major impact on reducing food insecurity of a region.



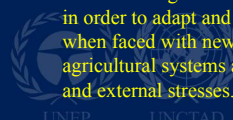
Benefits to social capital (community, co-operation and partnerships) CBTF

- new rules and norms for managing collective natural resources, and better connectedness to external policy institutions.
- from all the cases in this study, 93% cited improvements to social capital as integral to their success.
- formation of farmers' groups and co-operatives and less formal community collaboration has lowered the costs of working, led to increased knowledge transfer amongst farmers, reduced the costs of organic certification and led to increased food security.



Increase in human capital (education, skills and health) CBTF

- All cases have some element of education, increasing the knowledge of organic farming methods and the skills of farmers.
- Many cases have shown direct improvements to the health of individuals and communities as a result of increased knowledge, the increase in food yields and improved access to food.
- The ability of farmers to use their increased understanding of the holistic nature of organic farming in order to adapt and change their farming systems when faced with new challenges has meant that these agricultural systems are more resilient to environmental and external stresses.

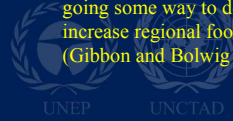


• 40% of case studies examined reported improvements to the physical infrastructure and improvements in markets. Access to markets has increased both for farmers who have been able to sell surpluses at domestic markets and for farmers who have been able to sell certified organic produce to international markets.



Poverty is a major contributing factor to food insecurity and organic farming has a positive impact on poverty in a variety of ways.

- certified organic farms involved in production for export were significantly more profitable than those farmers involved in conventional production (in terms of net farm income earnings).
- 80% of cases showed increases in farmer and household incomes as a result of becoming organic, going some way to decrease poverty levels and to increase regional food security. (Gibbon and Bolwig 2007)



THANK YOU

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