

Is Organic Agriculture a Viable Option for Smallholder Farmers?



A Case for Tanzania

Merits of Organic Agriculture for Smallholder Farmers

Based on its Key Features:

- Environmentally, socially and economically sound and sustainable
- Based on Natural and Local conditions
- Reduced external input
- Crop Rotations
- Intercropping
- Biological Pest Control
- Resistant varieties
- Erosion Control
- Water Management
- Nutrient Recycling



Background

- The organic sector in Tanzania is predominantly export-oriented.
- The trade focus to commercialise smallholder organic agriculture carries some risks
- Large proportion of smallholder farmer are very low input and can qualify as uncertified organic agriculture.
- The formal organic sector in Tanzania is growing rapidly. Due to establishment of National organic movement and local certification body.
- Evidence of growing local organic market

Organic Agriculture as Viable option

- Capacity of organic agriculture to enhance productivity and improve access to food and income using low-cost, locally available and appropriate technologies without causing environmental damage
- There is evidence that organic agriculture can double or even triple the productivity of traditional systems, particularly when one considers total production of useful crops per area.



Organic Agriculture as Viable option

- Organic agriculture shows great potential to improve domestic food production with cheap, low-cost locally-available technology and inputs.
- Empirical data on the relationship between organic agriculture and family income and nutrition in sub-Saharan is limited

Organic Agriculture as Viable option

- Organic agriculture provides a more sustainable solution when it emphasises the localisation of the food system, knowledge-intensive production practices and the strengthening of social capital, whilst not precluding the possibility of marketing organic produce internationally once subsistence needs have been met

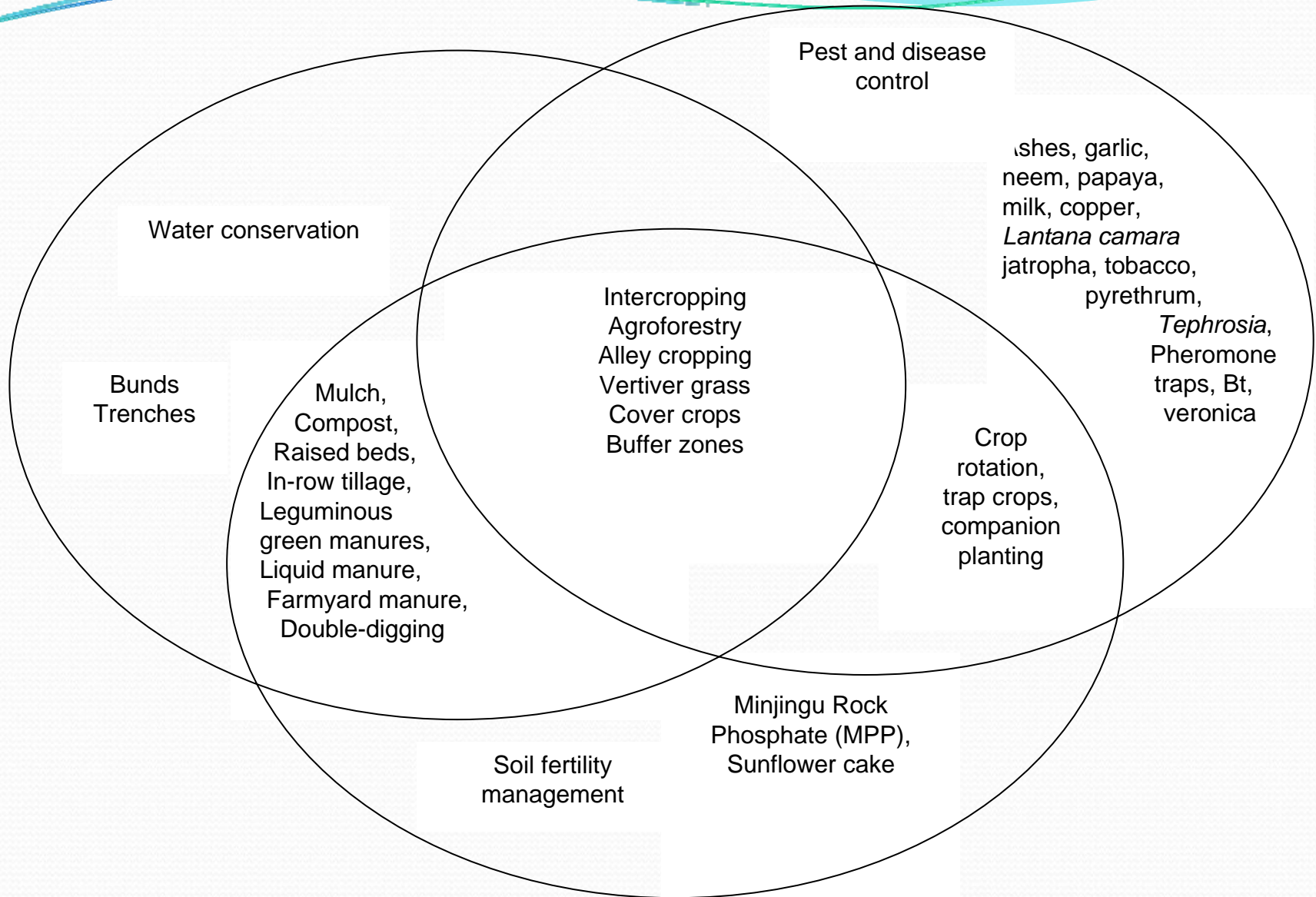
Organic Agriculture as Livelihood Strategy

- As a means to healthier soils, plants, animals and people
- Livelihood benefits among local groups where emphasis is on first building human and social capital at local level E.g. Mkuranga women group
- System orientation and the level of livelihood diversity- providing a more varied and nutritious diet.
- Focus on both commodity and community

organic practices in use

- Soil and Water Conservation techniques such as bund and trench construction.
- Adoption of strip contouring in non-certified organic systems, resulting in slope stabilisation and reduced soil erosion.
- using the “Sunhemp system” to enhance soil fertility, with the added advantages of erosion prevention, fodder value, and weed, insect and nematode control.





Water conservation

Bunds
Trenches

Mulch,
Compost,
Raised beds,
In-row tillage,
Leguminous
green manures,
Liquid manure,
Farmyard manure,
Double-digging

Soil fertility
management

Minjingu Rock
Phosphate (MPP),
Sunflower cake

Pest and disease
control

Intercropping
Agroforestry
Alley cropping
Vertiver grass
Cover crops
Buffer zones

Crop
rotation,
trap crops,
companion
planting

Fishes, garlic,
neem, papaya,
milk, copper,
Lantana camara
jatropa, tobacco,
pyrethrum,
Tephrosia,
Pheromone
traps, Bt,
veronica

organic practices in use

- Increase in knowledge and skill set of organic farmers through training. This benefit more to certified farmers.
- Social capital improvements in organic systems are taking the form of more and stronger social organisations at the local level eg. Producer groups



organic practices in use

- local self-reliance by valuing the contribution of local knowledge to the production system.
- e.g. Organic mango production in Morogoro makes use of a local practice of planting Euphorbia around the base of the trees in order to limit damage by termites,.
- In the Coastal region the practice of transferring the nests of red weaver ants to cashew trees in order to biologically control the Helpelitus beetle.

organic practices in use

- Influencing social structures and decision-making processes. E.g. formation of producer groups
- Enhancing gender equity in some projects. - low external input practices suit the requirements of women farmers,
- Improving household nutrition, the benefits from organic agriculture accrue to the farming family as a whole.



Risks to Organic Agriculture for smallholders

- Implications of a market-orientation and weak institutional framework on farmer livelihoods.
- Processes acting at a national level including policy and legislation have implications for farmers acting locally.

Risks to Organic Agriculture for smallholders

- Pest and disease outbreaks present a substantial risk to those organic farmers without sufficient knowledge, labour or access to biopesticides.
- When the primary motive for converting to organic agriculture is the price premium, there is a risk of farmers reverting to conventional production if the differential decreases,

Limitations to Organic Agriculture option to smallholders

- ❖ Majority of smallholders are neither organic nor conventional
- *Market orientation*
 - Satisfying market demands in terms of quantity, quality and consistency of supply
 - The selectiveness of the organic market means that not all produce that has been grown and handled according to organic standards can be sold as organic. Eg market for organic cashews is restricted to “White wholes”.
 - Limited / underdeveloped local market access to take advantage of certified non exports

Limitations to Organic Agriculture option to smallholders

- Policy framework
 - Fertilizer subsidy
- Knowledge/ Information
 - Technical assistance to build capacity for organisational and legal skills needed for establishing reliable certification and accreditation programmes
 - Research and Extension- Based on both local and introduced knowledge tailored to smallholder
 - Market information
- Institutional relations
 - social justice is often a neglected dimension of organic production systems partly because of the challenge of enforceability.

Strengthening of Organic Agriculture for smallholders

- Production
 - Improve training and extension services
 - Increase availability and use of organic agricultural inputs
 - Strategic choice of organic commodity
 - Processing primary products
 - Internalization of control systems
- Market Development
 - Access markets for organic products
 - Promote regional cooperation

Strengthening of Organic Agriculture for smallholders

- Research and education
 - Educate farmers, consumers & policy makers on organic agriculture
 - Generate and disseminate technologies
- Policy and legislation
 - Lobby the government to give explicit support to organic agriculture in national policies
- Institutional development
 - Enhance networking and collaboration among stakeholders

What need to be done

- Support through training and research
- Change of the entry point (organic beyond export crops)
- Supportive policies to organic agriculture
- Information and knowledge sharing