



ORGANIC AGRICULTURE RESEARCH NEEDS IN AFRICA: A CASE OF UGANDA



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Introduction

- Organic Agriculture offers a wide range of economic, environmental, social, and health opportunities
- It has a very big potential to contribute to poverty alleviation and environment conservation with minimum investment

Introduction contd.

- General practice of agriculture in Uganda is based on OA principles of crop diversity, soil health and fertility and recycling of nutrients
- Traditional agricultural practices were based on cultural practices more adapted to organic than conventional agriculture

Introduction contd.

- Research on OA is still very minimal
- Most of the previous research activities by research organizations have been based on conventional agriculture
- OA offers a virgin area of research that can be explored for development of agriculture in Uganda

Organic Agriculture Research Needs

- Uganda's Organic agriculture research needs are diverse and require an integrated approach to address two major issues:
- 1. Increasing productivity and raising incomes with low-cost and locally available technologies and inputs
 2. Increasing production without causing environmental degradation

Research Needs Assessment by NOGAMU

- NOGAMU commissioned a Research Needs Assessment (July-August 2006)
- Major objective of the assessment was to identify and prioritize researchable technical constraints in organic agricultural systems of selected organic commodities
- Findings would enable streamlining of future research initiatives and laying strategies to guide and prioritize research in organic agriculture

Research Needs Assessment by NOGAMU contd.

- The selected commodities included cotton, sesame, Arabica coffee, Robusta coffee, cocoa, vanilla, pineapples, passion fruits, dessert bananas, capsicum and ginger.
- The assessment covered all regions of Uganda (north, east, west and central) and involved a survey of farmers' groups in the production and marketing of organic products

Major Identified Research Needs

1. Pest and disease management strategies in organic agriculture
2. Soil fertility improvement strategies
3. High yielding varieties suited to organic production systems
4. Intercropping combinations

Pest and Disease Management Strategies (details)

- Cotton (Aphids, lygus, Boll worm) (diseases- Fusarium wilt)
- Sesame (pests- Golden midge, webworm)
- Coffee (pests- stem borers, antestia bugs, mealybugs) (diseases- coffee wilt, coffee leaf rust)
- Cocoa (pests- thrips, aphids, capsids) (diseases- Black pod, Die back, Pod rot)
- Pineapple (pests- Mealybugs, termites) (diseases- Bacterial heart rot, wilt disease, marbled fruit disease)

Pest and Disease Management Strategies (details) contd.

- Vanilla (pests- scales) (diseases- rust)
- Banana (pests- banana weevil) (diseases- banana wilts)
- Passion fruit (pests- aphids, mealybugs) (diseases- woodiness virus, collar rot)
- Ginger (diseases- wilt disease)
- Capsicum (pests- fruit flies) (diseases- wilts)

Constraints to Organic Research

- Limited human resource knowledgeable on Organic Agriculture
- African researchers' lack of interest in organic research
- Limited opportunities for publishing OA research findings

Constraints to Organic Research contd.

- Organic Agriculture research is not considered fashionable in modern days
- Organic Agriculture promoters have not created appropriate personal relations with researchers
- Organic Agriculture is seen as a trade rather than an alternative farming system
- Lack of funding for Organic Agriculture research
- Lack of stakeholder participation in research planning

Conclusions and Recommendations

- Addressing the identified research needs will require overcoming the constraints that have limited research in organic agriculture over decades
- Organic agriculture practitioners must participate actively in resource mobilization and planning for organic research
- Involvement of Research Institutes (NARS) in OA research
- Adopting participatory research methods to ensure high technology uptake rates

THANK YOU

