



AMBITION AND PRACTICES: Advocacy for Policy Environment to Promote Agroecology in Tanzania

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INTRODUCTION

The Tanzanian government, in collaboration with various stakeholders, is committed to improve the agricultural sector and the livelihoods of farmers – especially small-holder farmers. Policies that influence the agricultural sector are therefore very important for guiding the whole process of agricultural development in Tanzania. However, it is noted that many of such initiatives tend to focus mainly on “modernization” of the agriculture sector. Despite variations in its interpretation, modernization often emphasizes, amongst other things, the use of chemical or industrial inputs to achieve high agricultural production. In contrast, agroecology focuses on principles of sustainability for agricultural production systems and encourages a minimal use of industrial inputs (Wezel et al.,

2015). Therefore, the inclusion of agroecology in national agricultural policies could also contribute to environmental sustainability (Lampkin et al., 2015). This brief provides a review of policy initiatives and also provides an overview of how existing policies are related to the implementation of agroecology. It also reveals some of the barriers and gaps between current policies and the implementation of agroecological practices, and recommends alternative ways, moving forward.

Based on the review of existing policy frameworks and agroecological practices, some key issues that require attention within policy and decision-making frameworks have been earmarked for further action towards agroecology.

MOTIVATION FOR POLICY REVIEW

Feeding the world is a top priority for sustainable development, which is reflected by the second Sustainable Development Goal (SDG) by the United Nations – to achieve zero hunger by 2030. Different sectoral policy and legal frameworks have to some extent stated ways through which ecological aspects related to agriculture will be addressed but there is

no specific policy, legal or regulatory framework that is specifically focused on agroecology in Tanzania. A review of policies, legislations, and other initiatives is presented in this document to stimulate discussion, identify gaps and pave the way towards inclusion of agroecology in agricultural policy frameworks in Tanzania.

Policies Relevant to Agroecology in Tanzania

In the context of this document, agriculture is defined as crop and livestock farming. In this case, the major policy documents that are of interest to agroecology are the National Livestock Policy (2006) and the National Agriculture Policy (2013). Other policies, programmes or legislations include the Agricultural Sector Development Programme (ASDP II), the National Fisheries Policy (2015), the Environment Management Act (2004). The Fertilizers Act (2009) and the Plant Health Act (2020). The review process aims to present a situation analysis of the existing policies and legislations and point to the need for policy review in order to accommodate strategies and practices that can facilitate agroecology in the country.

Legislative and Policy Gaps in Relation to Achieving Agroecology in Tanzania

The scenario being brought forward, with regard to existing relevant legislations and policies is the existence of apparent gaps in some of the existing statements but also gaps in relevant strategies and/or practices to support implementation of activities that can propel agroecological practices in the country. Evidence of the missing links is illustrated hereunder to justify the need for review of policy and/or implementation guidelines, where appropriate.

The Plant Health Act, 2020

This Act has a provision for licensing bio-input suppliers. However, at the time of preparation of this document (April 2022), this legislation had not yet become operational pending the completion and sanctioning of Regulations that would spell out details on procedures and processes for operationalization of the law.

National Environmental Policy, 1997

This policy which is on general environmental issues also includes statements on “.....promotion of mixed

farming to intensify biological process on farmland through multiple cropping, intercropping, crop rotation and agroforestry”. (pp 19) and “...Intensification and diversification of agricultural production” (pp 19). Both statements are conducive to Agroecology

National Agriculture Policy, 2013

The policy document has relevant statements that, if translated into action, would support agroecology. Much as the National Agriculture Policy does not specifically point on agroecology, it points on some aspects related to agroecology such as agro-biodiversity, agro-ecosystem, germplasm, and organic farming. The following policy statements serve to illustrate this orientation:

“...Initiatives aimed at arresting agro-biodiversity deterioration shall be supported” (paragraph 3.1.3, pp 13);

“... The Government shall protect in a sustainable way the productivity potential of crop germ-plasm and related biodiversity in the existing agro-ecosystem such that it is not endangered by the introduction of genetically engineered plants” (paragraph 3.3.3, pp 13);

“...Public awareness on sustainable environmental conservation and environmentally friendly crop husbandry practices (sustainable agriculture) shall be promoted” (paragraph 3.25.3, pp 29); and

“...Since Tanzania has different agro-ecological zones and abundant land suitable for production of various crops, organic farming is another window of opportunity that can be exploited towards enhancing national and farm incomes” (paragraph 3.21.1, pp 25).

In all the policy statements quoted above, none specifically points to agroecology, though there are some aspects related to agroecology such as agro-biodiversity, agroecosystems, and organic farming (Box 1).

Box 1: Key Agroecological Issues Identified in the National Agriculture Policy:

- (a). Focus on sustainable productivity potential of crop germplasm and related biodiversity in the existing agro-ecosystems.
- (b). Emphasis on protection from endangerment by the introduction of genetically engineered plants.
- (c). A window of opportunity for using organic farming to improve the national and individual farmers' incomes.
- (d). Strengthening of livestock early warning system for disaster management and forage shortage.

National Livestock Policy, 2006

This policy has statements that are of relevance to agroecology on major commodities such as on beef cattle

“...Efforts will be undertaken to promote commercial production of high-quality beef in intensive and extensive (ranching, pastoral and agro-pastoral) systems...” (Paragraph 3.1.1, pp 7) and on rangeland utilization:

- (i).“The Government will promote incentivisation, identification, protection, management and use of rangeland resources.” (3.5.1pp 16);
- (ii).“Appropriate forage conservation practices for dry season feeding will be promoted.” (Paragraph 3.5.1, pp 16); and
- (iii).“The Government will strengthen Livestock Early

Warning System (LEWS) for disaster management and impending forage shortage.” (Paragraph 3.5.1, pp 16). Policy statements of the nature above do not specifically address issues in agroecology though they point out some issues of concern for agroecology such as:

- (a).Promotion of intensive and extensive (ranching, pastoral and agro-pastoral) systems for commercial beef production.
- (b).Emphasis on promoting inventory, identification, protection, and management and use of rangeland resources.
- (c).The need to improve forage conservation practices for dry season feeding.
- (d).Strengthening of livestock early warning system for disaster management and forage shortage.

GAPS IN PRACTICE

A review of the policy documents on agriculture (for crops/soils) and livestock indicates that both policies have statements that focus on organic crop and livestock farming, however, not much has been achieved in either sector given the challenges associated with requirements and costs for certification of organic produce. Agroecology, on the other hand, for which certification is not a requirement, has not been prominently featured in both policy documents which implies there is a window of opportunity to place emphasis on specific strategies or regulations in support of agroecology.

The Plant Health Act (2020) has provisions for licensing bio-input suppliers. As the relevant Regulations for implementation of this law has not yet been sanctioned, this should be considered as a window

of opportunity for development of Regulations that would spell out details on procedures and processes for assessment, registration and use of not only industrial but also bio-inputs. This is considered critical as the government has, from time to time, implemented programmes and projects to promote industrial inputs (for example the National Agricultural Input Voucher Scheme (NAIVS) introduced in 2009 for inorganic fertilizers and improved maize and rice seeds) but there have not been similar interventions to support the distribution and facilitation of access to bio-inputs such as bio-fertilizers, and bio-pesticides. This implies that the policies in place largely support conventional agricultural systems while paying very little attention, if any, to agroecology.

POSSIBLE POLICY AND/OR STRATEGIC INTERVENTIONS FOR THE PROMOTION OF AGROECOLOGY

This review has revealed the following points:

(i) There is a policy inclination towards conventional production systems. Especially in terms of policy incentives for production practices, plant and soil health, and external input use and supply. Agroecology is an alternative form of agricultural production system with considerable potential to support a wider sustainable agricultural transformation in Tanzania, and elsewhere in Africa. However, it requires far greater attention from policy and decision-making perspectives. There is a need for institutional support from government and non-government agencies to provide opportunities for those seeking alternatives to conventional agriculture.

(ii) There is limited data and evidence for increased agricultural productivity, environmental conservation, and resilience to climate change resulting from agroecology practices. In order to inform policy on the potential for agroecology to contribute to such needs, data is urgently required. The activities and resources of the AEHT should deliberate on this matter and determine how it can be addressed.

(iii) Strategic interventions are required for designing guidelines to support investments in the local production of bio-inputs. This will help improve and increase the supply and availability of bio-inputs to meet the rising demand in agroecological production.

Such guidelines are not in place, which could be a barrier in the establishment of bio-inputs production facilities. This is a disincentive for investors in bio-inputs production.

(iv) The Plant Health Act (2020) will hopefully inform and support the regulations and guidelines on production, quality assurance, and distribution systems to ensure availability of bio-inputs (e.g., fertilizers, pesticides) with minimum health and environmental impacts to users and the general public.

(v) Another area for policy intervention is related to knowledge gaps on agroecology among agriculture practitioners, including agricultural extension workers. The Ministry of Agriculture (MoA) has already taken steps to review the curricula for training of staff for extension services at Certificate and Diploma by a review that culminated in the inclusion of agroecology in the curricula for certificate and diploma in agriculture. However, much remains to be done to retrain in-service extension staff to consciously include agroecological practices in their day-to-day extension services. In this regard, it is suggested that the policy for extension and farmer training should not only focus on conventional production systems, but also agroecological intensification.

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BIBLIOGRAPHY

- Lampkin N.H., Pearce B.D, Leake AR, Creissen H, Gerrard CL, Girling R, Lloyd S, Padel S, Smith J, Smith LG, Vieweger A, Wolfe MS. (2015). The role of agroecology in sustainable intensification. Report for the Land Use Policy Group. Organic Research Centre, Elm Farm and Game & Wildlife Conservation Trust.
- United Republic of Tanzania (URT), (2006). The National Livestock Policy, Ministry of Livestock Development, Dar es Salaam, Tanzania.
- URT, (2013). *National Agriculture Policy*. Dar es Salaam: Ministry of Agriculture, Food and Cooperatives (MAFC)
- URT, (2014). *Public Expenditure Review: National Agricultural input Voucher Scheme (NAIVS)*. Dar es Salaam: Ministry of Agriculture, Food and Cooperatives (MAFC)
- URT, (2009). *The Fertilizers Act, 2009*. Dar es Salaam: Ministry of Agriculture. 32pp.
- URT (2013).. *The National Agricultural Policy, 2013*. Dar es Salaam: Ministry of Agriculture, Food Security and Co-operatives. 51 pp.
- URT. (2020). *The Plant Health Act, 2020*. Dodoma: Ministry of Agriculture. 45 pp.
- URT, (2020). *The Environment Management Act, 2004*. Dar es Salaam: Vice President's Office. 129pp.
- Wezel, A., Soboksa, G., McClelland, S., Delespesse, F., and Boissau, A. (2015). The blurred boundaries of ecological, sustainable, and agroecological intensification: a review. *Agron. Sustain. Dev.* 35, 1283–1295. doi: 10.1007/s13593-015-0333-y.



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