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Agro-ecological Farming: Towards an Increasing Food Supply and Desired Nutrition for Africa in the Face of Global Ecological Crises

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Abstract

The conventional farming system, which adopts inorganic inputs towards increasing food supply, is one of the major factors that is jeopardising the ecosystem in Africa and some parts of the world. As a result of inputs such as fertiliser, pesticides, herbicides, etc. towards increasing farm produce, conventional is also notorious for depleting food nutrition. Interestingly, agro-ecology which is a system of farming that harnesses the components of ecosystem as an alternative to the conventional farming method towards ensuring food sufficiency and uncompromising food nutrition has been innovated. The practice of agroecology therefore discourages the use of inputs, efforts and practices necessitated by declining soil fertility, and challenges of pests and diseases which in turn lead to global warming and reduction of nutrition. However it was a matter of global concern and debate that a farming system without a support of chemical inputs may fail to meet the needed food supply, especially in Africa where population has continued to rise almost on a geometrical progression. Howbeit, this concern has been laid to rest by recommendations from many researches, policy papers, communiqués and its practice. Thus, this work seeks to evaluate how Africa can increase food supply and maintain its natural nutrition – through agro-ecological farming – without disturbing the ecosystem. To this end, the work adopts a library based research method, reviewing works of some existing authorities. Having observed that in Uganda, for instance, smallholder farmers have adopted agro-ecology and this has helped them towards increasing ecological resilience, food supply and nutrition, conservation of biodiversity, and economic stability. Hence, this paper argues that if African farming system would imbibe the current global approaches in agro-ecological farming, the fear of insufficient food supply in relation to her growing population and poor food nutrition would be laid to rest. However, since the work focuses on Africa, its generalisation may be possible but with further researches. Therefore, Africa and the world need to imbibe the practice of agro-ecological farming in order to increase food supply and nutrition and mitigate the current challenge of global warming.

Keywords: Africa, agro-ecological farming, conventional farming, ecosystem, food nutrition, food sufficiency, global warming