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"Can agroecological farming feed the world? Farmers' and academia's views"

Evaluation of the transition potential of farms towards agro-ecology in two African regions

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Abstract

A major challenge of West African agriculture to ensure food security is to promote the agro-ecological transition of farms and its amplification on a territorial scale. The present study aims at assessing the potential for the evolution of cereal and market garden farms towards more ecological practices in two regions from different countries but with similar pedoclimatic conditions. A typology based on soil fertility management and conservation practices was carried out from surveys of 650 farmers in six areas of the Atacora (Benin) and Houët (Burkina Faso) provinces. In neither region exclusively organic or agroecological farms are currently found. The typology made it possible to define types of farms on the basis of their acreage, the intensity of use of mineral and organic fertilisers and pesticides, the density of livestock and the intensity of implementation of agro-ecological practices. A greater diversity of agro-ecological practices is observed on farms in Burkina Faso compared to farms in Benin. Vegetable crops benefit more from organic fertilisation compared to cereal crops. Livestock farming is extensive and characterised by traditional production systems. Moreover, these farms present common assets but also specific challenges to be met in terms of the use of synthetic pesticides and reasoned fertilisation, the use of crop residues and the integration of agriculture and livestock for an agro-ecological transition. Strengthening the capacity of farmers to embrace agro-ecological principles and implement agro-ecological practices at the territorial scale must be a priority for public authorities and development partners to develop strategies to support farms towards a dynamic agroecological transition.

Keywords: Agroecology, Benin, Burkina-Faso, survey, typology

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