An Assessment of Livelihood Transitions Triggered through Conservation Agriculture in Different Vulnerable Productions Systems in Central Mozambique

Peter Nkala1, Jemimah Njuki2, Michael Hauser1

1University of Natural Resources and Applied Life Sciences Vienna (BOKU), Department of Sustainable Agricultural Systems, Working Group on Knowledge Systems and Innovations, Austria
2International Center for Tropical Agriculture (CIAT), Harare, Zimbabwe,

Abstract

Poor people worldwide are blamed for unsustainable use of natural resources, especially in agrarian communities. In Mozambique about 80% of the population comprises subsistence farmers living in rural areas largely depending on natural resources and very often their activities lead to soil erosion, deforestation, siltation of rivers and pollution. Seventy percent of the population lives on less than US$1 per day. Drastic weather changes confront many farmers leading to sudden harvest losses and this is a common problem in vulnerable production systems. As consequences, an increasing number of farmers have become food insecure. Agricultural scientists and the Government of Mozambique have suggested conservation agriculture as an alternative system to replace rotational cultivation, fallow periods and other “resource mining” systems. It is argued that conservation agriculture has a huge potential to improve livelihoods in this country. Although the concept of conservation agriculture has been introduced by public and civil society organisations, the adoption by farmers is slow and its impact on livelihoods is yet to be realised. Against this background, a livelihood transition study is being conducted to explore livelihood pathways triggered through conservation agriculture in different vulnerable production systems in Mozambique. The key question is whether conservation agriculture contributes to asset accumulation and more sustainable livelihoods in future. The sustainable livelihoods framework model focusing on the social, human, natural, financial and physical capitals existing among farmers will be applied in this study. Rather than focusing on the problems and what needs to be done for the farmers, this approach seeks to establish both the explored and unexplored development potentials that exist among farmers. Data collection technique will include individual interviews, focus group discussions, qualitative interviews, community mapping, photography, livelihoods and institutional support assessments in Manica and Sofala provinces. This approach enhances support and empowerment through involvement of the community members at every stage of the research process including the dissemination of research findings. Results from this research will help policy makers in designing appropriate agricultural policies that could help unlock the livelihoods potential of conservation agriculture in central Mozambique. This paper presents insights gained from the first research phase.

Keywords: Conservation agriculture, livelihood contributions, livelihood transitions, livelihoods, poverty, vulnerable production systems

Contact Address: Peter Nkala, University of Natural Resources and Applied Life Sciences Vienna (BOKU), Department of Sustainable Agricultural Systems, Working Group on Knowledge Systems and Innovations, Lorenz Muller Gasse 1A, 5217, 1200 Vienna, Austria, e-mail: peter.nkala@boku.ac.at