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## Strengthening MDGS Progress through Collaborative Research Efforts: Some Lessons from Oat Project in East Mau Catchment, Kenya

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### Abstract

Food insecurity, poverty, lack of water (quantity and quality) and diseases continues to be perverse in many Sub-Saharan countries. Destabilisation of the natural resources especially forests and soil is the main culprit. Worst affected are smallholders who rely entirely on natural resources. Coincidentally, these resultants are the core of the MDGs. This was the driving force for the initiation of the collaborative research effort- OAT (Organic Agriculture with Trees) between one European University, BOKU, Vienna, World Agroforestry Centre, Nairobi and Egerton University, Kenya from which the East Mau catchment provides the research test bed. It was aimed at identifying strategies to re-establish trees in smallholder farms and to contribute in developing of low input organic systems and perspectives for the marketing of organic products. Results are presented from this cooperative research endeavour. The project was conceptualised into three research themes; farming systems, social systems and marketing systems. A quantitative analysis of 300 sampled smallholder farms indicates that there is a decline in agricultural productivity. The use of externally purchased inputs is on a downward trend due to their rising costs coupled with wearing incomes. However, there exists a high potential for the development of low external input organic systems due to high crop diversity and the mixed systems. There is a high farmer co-operation through the common interest groups which facilitates ease of knowledge transfer. This is a good entry point dissemination of low input technologies for the farmers. Results from consumers' analysis indicate that there is a large market potential for of organic products in the urban cities in Kenya. Other tangible outputs were the development of a tree manual in cooperation with local farmers as well as agricultural advisors and researchers. The establishment of an organic demonstration farm with a tree component at Egerton University. Various farmer outreach trainings on composting and tree planting in the region. Finally with the integration of several faculty members, research scientists and students from the three institutions there was an intensive knowledge exchange and transfer. Recommendations: further collaboration with extension advisors on the dissemination of organic technologies and formation of farmer groups.

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