

Urban agriculture in Addis Ababa: the importance of producers' cooperatives to sustainability

Dawit Ashenafi Ayalew, ID 47-096830

Graduate program of sustainability science, University of Tokyo

Supervisor: Prof. Makoto Yokohari

September 2011

Abstract

Practiced by more than 800 million people in the world, urban agriculture (UA) is significantly contributing to the sustainability of cities and societies both in the developed and developing countries alike. However in developing countries, particularly in Africa, UA is considered, by authorities, as illegal and quintessentially rural activity that does not fit with the modern day urban setup. Many urban farmers are therefore struggling to survive and continue sustainably. Farmers are often constrained by insecure land tenure, low productivity and lack of market, and lack of social/political acceptance due to alleged environmental externalities. Thus in this study the significance of urban farming cooperatives for addressing sustainability issues of urban agricultural phenomenon were investigated by taking the city of Addis Ababa as a case study. Data were collected from six cooperatives using a questionnaire comprising of several dimensions of sustainability. In order to have a clear picture ten non cooperative farming growers were also interviewed and contrasted against the cooperatives. Spatial change analysis of the cooperatives' farm land was performed, using aerial photos and satellite imagery of the period 1984 to 2008, for endurance or stability assessment of cooperative agriculture. Results revealed that cooperatively managed urban agriculture is highly productive (even fivefold higher than rural vegetable production) than individually managed ones due mainly to cooperatives' ability to procure inputs collectively and access to irrigation water. The land security and access constraints among farmers are comparatively lower in cooperatives than in individually farming groups. The Spatial analysis also showed that UA is not a short-lived or transitional phenomenon by the cooperatives; it is rather a stable and resilient practice. However, their informal nature and resulting lack of environmental orientation (particularly huge dependency on external inputs) should be addressed in order to make UA more comprehensively sustainable and appealing by authorities.

Key words: *Urban agriculture, cooperatives, sustainability, land security, Addis Ababa*