

University of Kassel
Faculty of Organic Agricultural Sciences
M.Sc. Organic Agriculture

Master Thesis

Socio-economic and ecological changes in farming systems of Targa N'Touchka (Anti-Atlas, Morocco)

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Matriculation No. 35278913



Göttingen, 17th June 2021

Abstract

For many centuries Berber communities have settled in Moroccan mountains and practiced oasis agriculture combined with livestock husbandry. Traditionally, livestock husbandry provided a savings and risk mitigation strategy, year-round income, and a high contribution to covering the nutritional needs of the rural population. Currently, these few remaining mountain-oasis systems in Morocco experience rapid socio-economic and ecological changes, which affect the livelihoods of the communities depending on them.

To identify the ongoing transformations of the agricultural sector in a typical mountain oasis, 61 semi-structured interviews were conducted with farmers in Targa N' Touchka (29.886667, -9.204444). The survey allowed to characterize the current situation of agriculture and its contribution to household income, food security, and gender-specific task division. While traditional agricultural practices lose importance and only provide a supplementary income, migrants' remittances and other non-agricultural income sources are the main pillars of rural livelihoods, accounting for 81 % of the household income on average. Migration and off-farm work are male-dominated with a direct influence on the socio-economic conditions in the mountain oasis. Left-behind family members are mostly women, leading to an increasing importance of female labour in all agricultural tasks. The latter is reinforced by formal education of family members, of whom 80 % do not participate in farming activities (age group 0 to 20 years). In combination, the declining economic importance of agriculture and lack of agricultural labour lead to extensification of cereal crop farming or even an abandonment of fields. In contrast, cultivation of alfalfa as livestock feed has gained importance at the expense of other crops. While only 39 % of households are also herding their small ruminants, remaining animal dietary requirements are covered to a high extent by green fodder and by external fodder resources, purchased at the local market. The shift from cereal to green fodder cultivation points to the dwindling importance of food self-sufficiency. The targeted rearing of animals for consumption or sale at times of high demand during religious holidays seems to be a labor-saving adaptation to the new circumstances.