Tropentag, October 5-7, 2011, Bonn

"Development on the margin"

Marginal Dryland Agriculture in Jordan: Forage Banking for Pastoralists?

Steven R. Woods[1], Raed Al Tabini[2], Hani Saoub[3], Timothy Finan[4]

[1] *University of Arizona, School of Natural Resources and the Environment, United States of America*
[2] *Jordan Badia Research and Development Programme, Jordan*
[3] *University of Jordan, Horticulture and Crop Science, Jordan*
[4] *University of Arizona, Anthropology, United States of America*

Abstract

Cultivation of agriculturally marginal drylands can have disastrous effects on ecosystems and livelihoods. Counter-intuitively, the customary rangeland access system prevalent in Jordan's arid Badia region may in some cases mitigate such effects and in certain respects render them beneficial.

Jordanian Badu pastoralists typically rely on open access rangeland and purchased grain to maintain flock sizes. Livestock are often the main source of household income, and drought and high grain prices are often-cited threats to their livelihoods. However, government feed subsidies appear to have contributed to high livestock numbers, chronic overgrazing and rangeland degradation, such that a return to non-market subsistence pastoralism is ecologically infeasible at present.

There is little pre-emptive livelihood diversification within pastoralist households. Forage banking is not customary, with access to rangelands for pasture generally being open except at sites under current cultivation.

Farmers often cultivate rain-fed barley in locations with mean annual precipitation as low as 200 mm, where harvests are only possible in above-average rainfall years. In below-average rainfall years, pastoralists may pay to graze the failed crop at the end of the growing season. In the meantime, the cultural prohibition against grazing another person's cultivated land remains in force even in the absence of physical barriers such as fencing.

Thus, barley cultivation of marginal land can protect against persistent overgrazing, provide valuable vegetation cover in a region vulnerable to soil erosion, and help maintain pastoralists' flocks during drought-induced livelihood crises. While these interactions constitute only a small part of the overall human-natural system of the Badia, they should be considered when assessing and attempting to enhance the resilience of this system with respect to drought.

Keywords: Arid, Badu, Bedouin, livelihood, pastoralist, rangeland, tenure

Contact Address: Steven R. Woods, University of Arizona, School of Natural Resources and the Environment, Biological Sciences East Room 325, 85721-0043 Tucson, United States of America, e-mail: srwoods@email.arizona.edu