

# Institutional Change in the Syrian Rangelands

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## 1 Introduction

Bedouin pastoral communities in West Asia and North Africa have developed different mechanisms for coping with rainfall variability and seasonal feed resources (Masri 1991; Metral 2000; Nesheiwat 1991). Amongst these strategies, transhumance and nomadism were the most important production systems used by Bedouin communities to access feed and grazing resources in cropping areas and other rangelands located regionally, nationally or internationally. Each of these grazing niches was, however, governed by sets of access and use rules and regulations that helped the affected communities mitigate the effects of feed shortages in their local pastures and ensure their livelihoods (Ngaido 2000). As such, the reliance on reciprocal institutional access-options for seasonal grazing was the dominant feature of these livestock production systems.

Agricultural policy reforms favouring agricultural growth over sustainable livelihoods and traditional production strategies prompted the encroachment of cultivation on rangelands and the sedentarisation of traditional Bedouin communities. This process, which transformed Bedouin livestock production systems and weakened or even destroyed many traditional institutions, caused heightened ecological and livelihood uncertainties.

The diverse and rapidly changing policy and legal environments within which many rural communities and producers live call for a broader understanding of how these global issues affect production and livelihood strategies. In the past, Bedouin production systems were mainly perturbed by environmental crises such as droughts. They were able to determine the probability of occurrence of such phenomena, which were termed in Arabic as *khamsawi* (drought occurrence every five years) or *ashrawi* (drought occurrence every ten years). Today, pastoralists face feed shortages every year and their institutional structures and mechanisms, which allowed them in the past to ensure their livelihoods, are insufficient to respond to such processes.

State rangeland policies have contributed to the undermining of Bedouin resource management institutions. The article postulates that the changing national development paradigms contributed

to the heightening of parallel types of uncertainty which have challenged traditional Bedouin institutions and forced an increased reliance on individual market-access institutional options.<sup>1</sup>

The first section of this article discusses the different rangeland policies and their effects on Bedouin sheep production systems. The second section evaluates the present feeding systems and quantifies the effects of institutional and market access-options on feed costs. The final section offers some conclusions.

## 2 Rangeland Policies

During the past 40 years, the Syrian rangelands have been the focal point for government interventions, including the assertion of state ownership over rangelands, transformation of herding communities into agropastoral communities, and reorganisation of tribal-based systems into cooperatives. These different policies have had a huge impact on Bedouin livestock production and livelihood strategies. The following analysis will focus on the relations between land policies and rangelands, and assess the impacts of these different policies on the resource base during three main periods.

### 2.1 Land reform policies and settlement of pastoral communities (1958–69)

State appropriation of rangeland resources and sedentarisation of the nomadic population were major measures of land reform policies in Syria.<sup>2</sup> Land reform policies, which were geared towards settling Bedouin families and transforming them into agropastoralists, resulted in a loss of control over tribal lands (Nordblom and Shomo 1995). People were not able to resist national government's policies and many tribal leaders adhered to the 'plough the land and settle' policy (Masri 1991). During this period, the majority of pastures located in the arid zones (200–350 mm rainfall) were converted to crop production (Jaubert 1993). Moreover, the nomadic communities and institutions experienced many changes that affected their pastoral production strategies. The most important changes were the shift from camel to sheep (Masri 1991) and the transformation of their nomadic lifestyle to a more settled

life, with the integration of agriculture into their production system. This process of change was also accompanied by an extension of cultivation on the best pastures because very little land was confiscated from landowners, and rangelands were used to satisfy land demands of new settlers.

### 2.2 Regulating cultivation in the rangelands (1970–92)

In the 1970s the government introduced new regulatory measures to stop the degradation of rangeland resources. The first attempt was to prevent appropriation of rangelands and prohibit cultivation of non-irrigated steppe lands (*Badia*).<sup>3</sup> Land ownership of non-irrigated rangelands was limited to owners who registered and titled their lands before 20 July 1970, and farmers who obtained land through appropriation, possession or transfer according to the 1958 land reform law. These different dispositions granted private property to some Bedouin households. Farmers and families who cultivated on their village or city boundaries before 1970, or planted trees of at least five years old on their rainfed lands, were allowed to cultivate the land.<sup>4</sup> However, the priority given to cropping by the government in its agricultural plan pushed the cultivation frontier into more marginal areas.

In addition, different measures were taken to formalise the use of non-irrigated rangelands by issuing licenses that required owners to grow cereals on 80 per cent and shrubs on 20 per cent of their lands.<sup>5</sup> The issuing of new cultivation licenses and new extensions on non-irrigated steppe lands was stopped in 1988,<sup>6</sup> although Bedouin households were given the option to rent state non-irrigated steppe lands for a minimum of 10 SYP<sup>7</sup> per ha on rainfed lands, 150 SYP per ha on irrigated, and 100 SYP per ha for lands planted with fruit trees.<sup>8</sup>

In general, this period was marked by an extension of cultivation into the rangelands and the individualisation of common range resources. These different policies transformed Bedouin communities into agropastoralists with short transhumance to the cropping areas. Most of the tribal grazing networks were disrupted and unused, and barley production was implemented

to generate additional household income, the remainder going to animal feed.

### **2.3 Protecting rangeland resources (1992–present)**

The extension of agriculture into more marginal areas and the increasing degradation of rangelands prompted the government to prohibit crop production under rainfed conditions. For example, the Prime Minister requested governors to observe strictly the prohibition of cultivation on non-irrigated steppe lands, which would be used for natural grazing and shrub plantations. It was argued that preventive measures would be taken against transgressors according to existing laws and by-laws. The main objective of the conservation policies was gradually to replace barley cultivation with shrubs. The government doubled the charges on appropriated lands from 10 SYP per ha to 20 SYP per ha on rainfed agriculture,<sup>9</sup> although in practice these new fees did not prevent people from appropriating and cultivating large areas of land. Finally, the government took major decisions to ban cultivation on rainfed lands in 1994 and on irrigated lands in 1995.<sup>10</sup> The ban on cultivation was a clear indication of the prioritisation of rangeland conservation.

Over a period of forty years, Bedouin communities have been asked to change from their transhumant and nomadic production systems to agropastoralism and from agropastoralism back to transhumant and nomadic production systems. The recent demands, which call for a return to traditional uses of rangelands, do not account for the depth of transformation that these communities have undergone. The perception of common tribal pastures is lacking in many communities, as each extended family considers appropriated lands as their private grazing site. Even after the ban on cultivation, informal site boundaries continued to dictate access and use of rangeland resources. A major impediment to returning to traditional livestock production systems is the fragmentation of most of the institutions, mechanisms and practices that were the mainstay of transhumant and nomadic production systems in the past. The following section presents a case study of the Jub-Jamaa community and the strategies used by community members to access additional feed resources.

## **3 Transformation in a Bedouin Community**

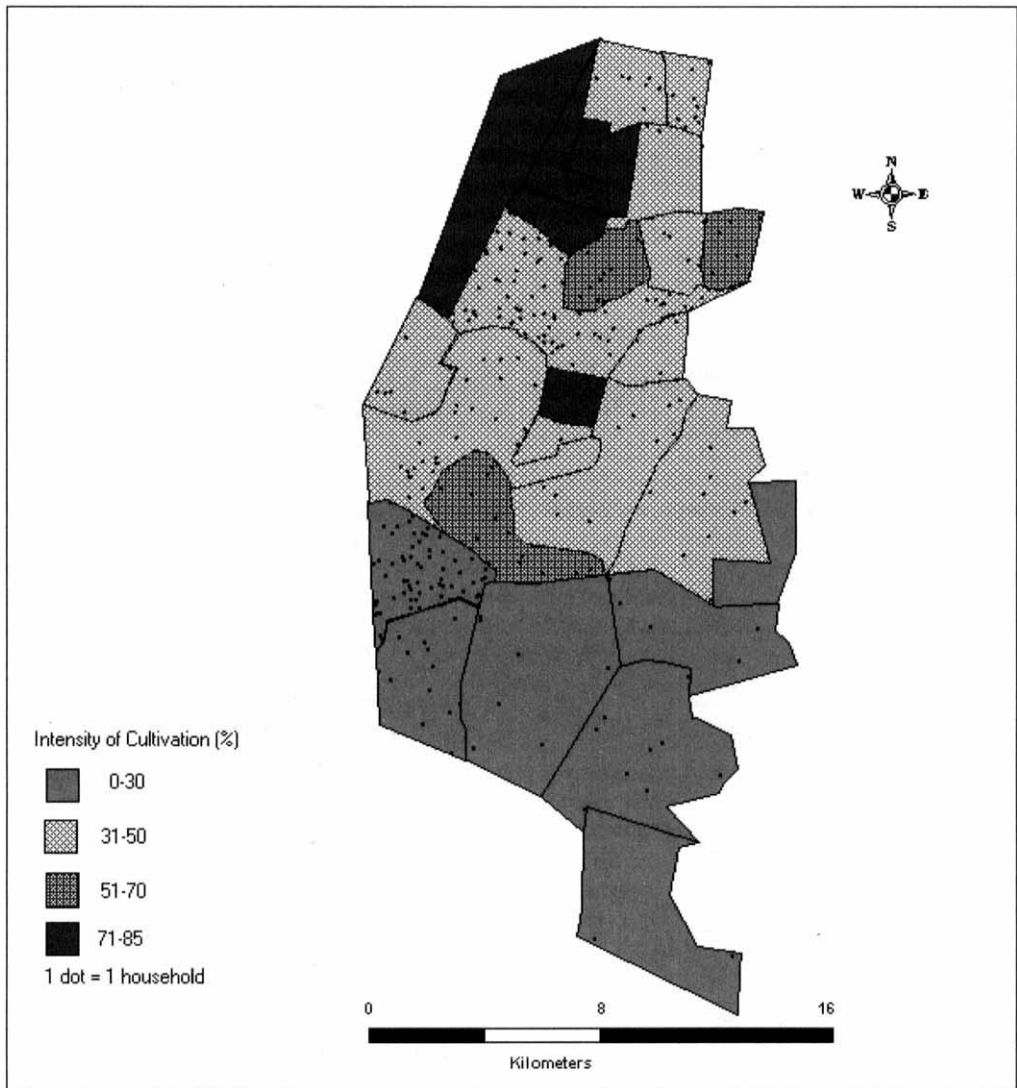
Government policies have favoured the individualisation of the Jub-Jamaa area into family controlled grazing and cultivation sites (Figure 1). The community pastures were divided into 26 sites ranging from 238 to 3424 hectares, with 38 per cent of the 31,283 ha of the community lands being continually cultivated. The community is composed of 352 households (2,918 people) owning around 53,500 sheep. Large disparities were found in sheep ownership and land-holdings.<sup>11</sup> These disparities in capital assets have important implications for the capacity of households to cope with the ban on cultivation.

A sample of 69 households was selected to assess household production strategies. Households were clustered into three groups according to their flock size. The first group (Group I) was composed of 35 households (51 per cent) owning less than 110 sheep; the second group (Group II) was composed of 25 households (36 per cent) owning between 110 and 300 sheep; and the third group (Group III) was composed of 9 households (13 per cent) owning more than 350 sheep.

Mobility was one of the major features of livestock production in Syria until the settlement of the nomads and the growth of barley production (Bahaddy 1980; Nordblom and Shomo 1995). Surveys were conducted in 1999 to monitor the migration patterns of all community members (Figure 2). Transhumance patterns were very different from traditional ones. In the past, transhumance was a collective decision, and traditional institutions played an important role in negotiating access to resources. Currently, each household head makes his/her own arrangements on when and where to go. For example, households from the Jub-Jamaa community generally move to the Aleppo province, but during drought years they move to the coastal area and mountains, where they can find crop residues, natural pastures and working opportunities as labourers (Figure 2).

Livestock feed includes native pasture, crop residues and hand-feeding materials (concentrates, straws, etc.). Such feed resources can be accessed through

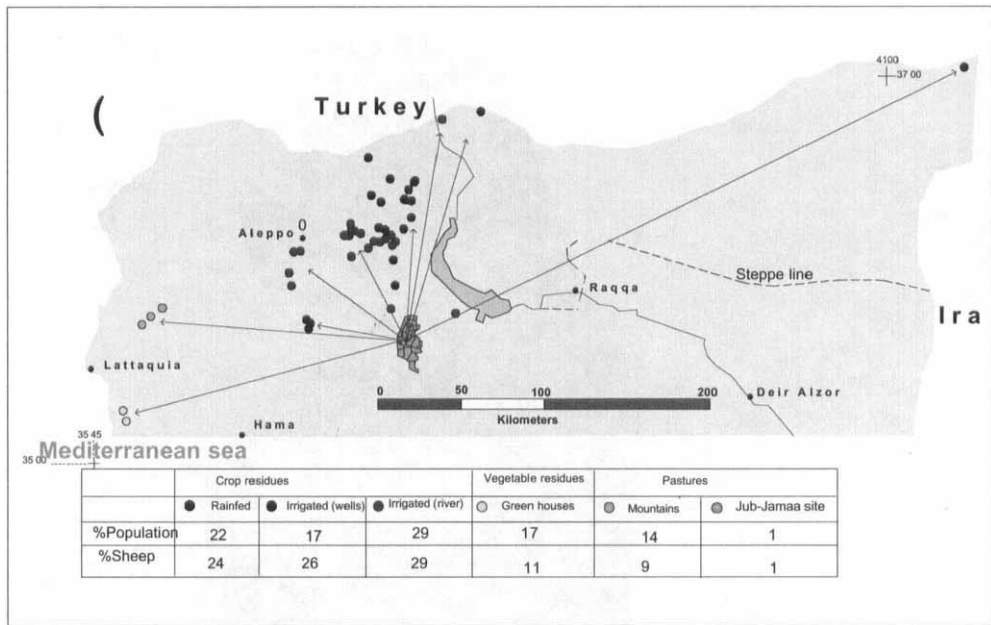
Figure 1: Level of Cultivation and Sheep Pressures in the Jub-Jamaa Community before 1996



markets and local institutional arrangements and social networks. All sheep breeders use concentrate feeds, which constitute the bulk of the market feed resources, to supplement their animal diets at different times of the year. The main sources for concentrates and other hand-feeds are livestock cooperatives and local feed markets. The high costs of concentrate feeds push many households, which cannot afford to feed their sheep with mainly concentrate, to rely on other feeding alternatives. In

spring, for example, many households move to agricultural areas to rent crop residues. The selection of the place depends on the social relations with the farming communities, quality and price of crop residues, distance from home base, water availability and proximity of markets. Generally, each tribe has traditional cropping areas to which they move each year (Bahhady 1980). One member of the migrating group would first visit the areas to assess the quality of the residues and negotiate the grazing contract.

Figure 2: Transhumance Sites for Households of the Jib-Jamaa Community, Aleppo Steppe, Summer 1999



Depending on their relationship, however, farmers may permit herders to defer payment until they sell their fattened sheep.

Such flexibility is very important for sheepowners, because it allows them to sell their fattened lambs at better prices. Large sheepowners were the dominant group that used crop residues, and spent 53 per cent of their time grazing crop residues, while small and medium sheepowners spent 40 per cent and 38 per cent of their time, respectively. The average daily rental cost of crop residues per flock was 92 SYP for small, 184 SYP for medium, and 460 SYP for large sheepowners.

Bedouin households and communities had in the past developed a large array of reciprocal access arrangements allowing members of neighboring tribes to use their pasture and water resources. These reciprocal arrangements were well respected because they confirmed tribal claims and strengthened traditional social networks (Ngaido *et al.* 1998). These reciprocity arrangements were important risk-sharing devices for overcoming environmental variability (Behnke *et al.* 1993; Metral 2000; Oram 1995). These institutional

access-options enhanced access and use of resources in other areas, and maintained and sustained nomadic and transhumant pastoral systems, especially during drought years.

Survey results showed that 70 per cent of small sheepowners used social networks and spent on average 64 days free-grazing in other rangeland areas and pastures. Fifty percent of medium sheepowners used such arrangements, spending on average 34 days. Large owners, by contrast, did not use their social networks to gain access to free grazing. This suggests that access to other pastures is an important element of small and medium breeders' production strategies, because they do not always have readily available cash to purchase feeds.

#### 4 Conclusions

Rangeland policies have transformed Bedouin livestock production systems and Bedouin institutions that, in the past, managed rangeland resources and helped sustain Bedouin livelihood strategies. These changes have altered the capacity of Bedouin communities to manage their resources

and limited the capacity of collective action institutions.

In the community of Jub-Jamaa, every sheepowner thinks primarily about their own strategy. Small and medium sheepowners used both market and traditional institutional options to reduce feed costs, while, besides the use of their site pastures for grazing, large sheepowners mainly relied on purchased feeds and rented crop residues. These different strategies suggest that networking is an important tactic for gaining additional grazing resources, particularly for poorer sheepowners.

Over a period of 40 years, successive government policies have transformed the institutional basis of Bedouin range-management systems. Sedentarisation, accompanied by increased reliance on agriculture, has resulted in new institutional arrangements for accessing livestock feed resources, based on a mix of market mechanisms and reciprocal relationships between communities. Such a swing has increased the array of uncertainties that Bedouin people must deal with to include not only ecological uncertainties, such as drought, but also other uncertainties relating to market conditions, social networks and government policy. Different social groups – in particular contrasts between richer, larger flock owners and small and medium flock owners – face and respond to such uncertainties in different ways. The attempt to introduce a reversal in policy, encouraging a return to those more nomadic forms of traditional pastoral livelihood, have introduced yet more uncertainty that existing institutional arrangements are ill-equipped to deal with, suggesting the urgent need to rethink institutional and policy approaches in the Syrian rangelands.

## Notes

1. The study draws from research conducted by the M&M project in the Jub-Jamaa community, which is located in the rangelands of the Aleppo province. The study, which started in 1998, included community mapping using Geographic Information System (GIS) to delimit the community boundaries and evaluate the level of cultivation. This was subsequently followed by a complete census of the community to determine household wealth indicators (sheep, land, tractors, etc.).
2. Law No. 161.
3. July 20, 1970, Decree No. 140.
4. March 19, 1973, Decision No. 13.
5. November 11, 1987, Decree No. 96/T.
6. September 17, 1988, Notification No. 15.
7. 1 US dollar is equal to 46 SYP (Syrian pounds).
8. May 1, 1992, Circular No. 9.
9. September 20, 1993, Circular No. 2/MD.
10. December 6, 1994, Circular No. 4553/1 and December 3, 1995, Decision No. 27.
11. Large sheepowners (38 households), which had more than 350 heads, owned on average 614 sheep and previously cultivated 36.5 hectares. Medium sheepowners (83 households), which owned between 150 and 350 sheep, had on average 215 sheep and 24.75 hectares. Small herd owners (231 households) owned under 150 sheep and had on average 54 sheep and 15 hectares.

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