

Nomadic pastoralism in Southern Iran

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Abstract

There is little information on the production system. Interviews were carried out with 30 Siahjel nomad families of Raen origin in proximity of about 20 km to Baft in 2010 to characterize the production system. The nomads move their livestock over large distances within the rangelands of the region from May to November and the majority migrates to south during winter and early spring. 87% of nomad families stay and manage their animals together with one or more other related families. Siahjel nomads mainly rely on goats and average proportion of goats, sheep and monodactyl per family are 89, 8 and 3 % respectively. Adult breeding females constituted with 44% the largest group within the goat herds, female yearling, bucks, male yearling constituted 12, 8 and 7% respectively. Diseases accounted for 57, % of adult and 88% of young animal deaths, The most prevalent diseases were Enterotoxaemia, Foot and Mouth Disease, Pneumonia, Agalactia and Diarrhoea. Animal sales, meat, cashmere and milk production are the major reasons for keeping goats. Rangeland is considered as the main source of feeding (85%); the remaining 15% are provided by stubble grazing.

Key words: nomad, livestock, rangeland, products, management

1. Introduction

Pastoral nomads of Iran are scattered over an extensive habitat of over 963000 km². General demographic dispersion pattern in nomadic societies of Iran indicate that the percentage of nomad population in various provinces of Fars, Kerman, Khuzestan and West-Azerbaijan are 12, 9.6, 9.2 and 8.6% respectively. Overall, nomads represent about 1.9% of total population of Iran (Emadi, 1995; Badjian et al., 2011).

Of the 25 million goats in Iran, 5 millions are cashmere producing (Ministry of Agriculture, 2004) and the remaining are meat and milk producing types 40% of all goats are kept by nomads (*Ashayer*) in a habitat of about 59% of the total area of the country.

Presently, data on the characteristics of nomadic pastoralist of Iran is very limited, in particular on the extensive Raeini goat systems of Kerman province. In order to facilitate the development of appropriate support services and policies to assist these farmers, this study characterizes the Raeini pastoralist system based on formal questionnaires and field observations.

2. Materials and methods

A total of 30 nomad settlements were chosen at random within \pm 20 km of Baft city in Kerman province. In this area most house holds belong to the Siahjel subtribe of the Raen

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٤٣ tribe. Information was gathered primarily through in depth interviews with men and women
 ٤٤ in Persian language from January to July 2010. Four 6-7 day periods of fieldwork were
 ٤٥ conducted within the Baft region, in autumn of 2010. A structured questionnaire was
 ٤٦ completed for each individual family of settlement heads including family composition and
 ٤٧ labour allocation structure; herd structure and management, nutrition, health, breeding, and
 ٤٨ reproduction. The responses to those questions were tallied and the percentages of the various
 ٤٩ responses were calculated.

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٥١ 3. Results and discussion

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٥٣ 3.1. Single and integrated families.

٥٤ According to the results 87% of the nomad families stay and move together with other
 ٥٥ mostly closely related families to support each other in different occasions. Young families
 ٥٦ often stay with their parents. Consequently the tent settlements of Raen nomads consists of
 ٥٧ two to six households (Table 1), and build a unit or “cluster”.

٥٨ **Table 1. Number of families moving together and livestock mobility**

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Characteristics	Percentage
Number of families	
Single	13
Two	47
Three	23
Four	10
Five or more	7
Livestock Mobility	
Nomadic	81
Transhumance	19
Sedentary	-

٦٠ 81% of nomad families use the Baft rangelands seasonally for grazing, and move their
 ٦١ livestock outside the region during winter. These nomadic pastoralist households have no
 ٦٢ fixed homesteads and cover great distances with their livestock even within Baft region,
 ٦٣ following pasture availability throughout the season. The other families show a regular
 ٦٤ seasonal movement between set areas within Baft region. These transhumant pastoralists
 ٦٥ usually stay as a single family and do not integrate with other families.

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٦٧ 3.2. Labour force and work sharing

٦٨ All household heads are male; 47% are between 31 and 60 years old, 30% are older than
 ٦٩ 60 years and only 17% younger or equally 30 years. In total 74% of the family members are
 ٧٠ between 15 to 65 years of age and only 6 and 20% are older than 65 or younger than 15 years
 ٧١ of age respectively. Male adult family members own most of the livestock while girls do not
 ٧٢ own any (Table 2).

٧٣ **Table 2. Family structure and livestock population.**

Age groups (year)	Family members				Livestock ownership			
	male		female		male		female	
	%	Range	%	Range	%	Range	%	Range
<15	11	0-50	10	0-45	3	0-50	0	-
15-65	36	7-86	38	7-93	77	0-100	20	0-50
>65	3	0-20	2	0-20				

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3.3. *Livestock species and management*

Siahjel nomads of Raen origin rely mainly on goats but keep a small number of sheep. Average proportion of goats, sheep and monodactyl (mainly mules and a few donkeys) per family are respectively 89 (71-100), 8 (0-29), and 3 (0-27) percent. Bucks and male yearling constituted 8 and 7 percent of the herds, respectively.

Table 4. Total number, percentage of goats and sheep of different age and sex. Words in *Italic* are local terms.

Age groups	Proportion/herd (%)		Population/herd (Head)	
	Average	Range	Average	Range
Goat				
Buck (<i>Nari</i>)	8	3-29	22	4-90
Doe (<i>Torshiz</i>)	44	30-65	122	80-240
Castrated male (<i>Akhte</i>)	5	0-16	14	0-100
Male yearling (<i>Chavosh</i>)	7	0-20	19	0-90
Female yearling (<i>Gise</i>)	12	6-20	32	15-60
Male kid (<i>Kare</i>)	10	0-19	28	0-75
Female kid (<i>Kare</i>)	14	5-38	39	13-110
Sheep				
Ram (<i>Ghooch</i>)	6	0-14	3	0-10
Ewe (<i>Meesh</i>)	45	0-64	25	0-100
Male yearling (<i>Shishak</i>)	4	0-14	2	0-6
Female yearling (<i>Kavor</i>)	18	0-25	10	0-50
Male kid (<i>Barre</i>)	7	0-29	4	0-10
Female kid (<i>Barre</i>)	20	0-30	11	0-40

3.5. *Livestock and health management*

Disease, predators and poisoning accounted for 57, 36 and 5% of adult animal deaths and only 2% of deaths were for unknown reasons (Table 6). Disease, predators such as wolves and coyotes and accidents accounted for 88, 11 and 1% of young animal deaths. Among the losses of young animals caused by diseases the most prevalent diseases were Diarrhoea (58%), Pneumonia (40%) and Foot and Mouth disease (2%); and the most prevalent diseases among adults were Enterotoxaemia (49%), Foot and Mouth disease (26%), Pneumonia (23%) and Agalactia (2%).

Table 6. Causes (%) and distribution of losses in adult and young livestock.

Factor/Age group	Adult		Young	
	Average	Range	Average	Range
Distribution				
Male	30	0-80	46	0-70
Female	67	0-91	52	0-80
Castrate	3	0-40	2	0-34
Cause of Death				
Diseases	57	0-100	88	0-100
Predators	36	0-100	11	0-100
Poisoning	5	0-50	0	0
Accidents	0	0	1	0-33
Unknown	2	0-50	0	0

96 3.4. *Livestock products*

97 Nomad goat farmers in Baft are more commercially oriented than nomads in other parts
 98 of Iran, as cashmere, milk and meat are given more priority for production than breeding
 99 purposes and social status and activities (Table 7).

100 **Table 7. Ranking in descending order of importance of keeping goats.**

Reasons	Male goats	Female goats
Cashmere production	5	6
Milk production	-	5
Meat production	4	4
Breeding purposes	3	3
Wealth, status and saving	2	2
Social activities	1	1

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102 3.7. *Feeding*

103 Rangeland is considered as the main source of feeding (85%) and grazing stubbles
 104 contributes about 15% to the nutrition (Table 9). Stubble fields are mainly available in
 105 autumn. Bucks, does, yearlings and kids are supplemented mainly during winter season when
 106 feed is scarce in rangelands.

107 **Table 9. Sources of feed, type of grazing land and grazing system of goats.**

Grazing systems	Percentage
Source of feed	
Range	85
Stubble	15
Type of grazing land	
Open grass land	38
Tree covered	23
Bush/Shrub	31
Stone covered	8
Grazing	
Goats alone	67
Together with other species	33

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