

NATURE AND EXTENT OF PROBLEMS OF AGRO-GRAZERS IN BHAWALPUR DISTRICT, PAKISTAN

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ABSTRACT

Studies on nature and extent of problems faced by agro-graziers were carried out in Bhawalpur district of Southern Punjab, Pakistan during 1991. Non cooperative attitude of government departments and farmers for not allowing agro-graziers to graze their animals along canals, forests, rangelands, irrigated plantations and agricultural fields was a very common problem. Due to poverty, agro-graziers were unable to purchase costly concentrates and cultivated fodders to feed their animals. They could not buy veterinary medicines to cure their animals against different diseases. Moreover, no loan subsidy, financial assistance or credit was granted by the Government for the alleviation of poverty of agro-graziers. In addition, 30 and 35% agro-graziers in the district faced problems of shortage or non availability of forage and water, respectively.

Key words: Agro-grazing, agro-graziers, underfeeding, malnutrition, forage and water scarcity.

INTRODUCTION

Grazing of crop residues has great potential for livestock production (Quraishi, 1994). According to Quraishi *et al.* (1993), 17.40 million animal units depended upon agro-grazing which was equal to 23% of the total livestock wealth of Pakistan. The agro-grazed wealth of Punjab alone was almost equal to the total livestock wealth of Balochistan. Sindh (29.2%) and Punjab (26.4%) have a relatively higher percentage of agro-grazing animals than those of NWFP (17.9%) and Balochistan (10.4%). Among livestock species, goats constituted the highest (38.5%) percentage of agro-grazing animals, followed by buffaloes (24.4%) and sheep (23.2%), whereas cattle and camels combined were nearly 21% of the agro-grazing animals. These workers also reported that agro-grazing alone contributed annually Rs.205.5 million to the GDP of Faisalabad division.

Previous work has revealed that there is acute shortage of green fodder in the country (Sarwar *et al.*, 2002; Khan *et al.*, 2003a,b; Khan *et al.*, 2004a,b; Ali, 2005). Exploration of new sources to meet the forage requirement of livestock is the need of the day. Natural vegetation grown here and there is the best substitute of cultivated green forage for livestock production (Quraishi, 1994). Khan *et al.* (2004a,b) highlighted the importance of agro-grazing and strongly recommended to promote it for livestock production in the country. Another study conducted by Shahbaz (1993) pointed out the problems of agro-grazing along rivers in district Jhang. It was the unanimous opinion of all research workers that agro-grazing is a very valuable but an ignored source having high potential of livestock

production, although the production performance is not the same as in intensive feeding system (Munir *et al.*, 2008). Hence, the present research project was designed to find out the relevant situation in Bahawalpur district of Southern Punjab, Pakistan.

MATERIALS AND METHODS

The study was conducted in cultivated areas of Bahawalpur district located in Southern Punjab, Pakistan. A questionnaire was designed for interviewing the agro-graziers. Research area of the district was divided into four grazing sites viz. (i) Agro-grazing areas adjoining rivers, (ii) Agro-grazing areas adjoining canals, (iii) Agro-grazing areas adjoining range and forest areas, and (iv) Agro-grazing areas located in interior villages.

A total of 80 villages were selected at random from the four grazing sites. These included 30 villages adjoining river, 15 villages adjoining canals, 15 villages adjoining range and forest areas and 20 villages from the interior of the project area. About 1-3 agro-graziers were randomly selected from each village for interview. Thus, a total of 100 respondents (Agro-graziers) were interviewed. The data was transferred to telly sheets and tabulated to bring into a comparable form.

RESULTS AND DISCUSSION

It was observed during the course of the study that non availability of bank credit or other financial facility, malnutrition, underfeeding of animals, non cooperative attitude of farmers and officials of government departments to allow the agro-graziers to

Table 1: Number of agro-graziers (%age) of different grazing sites in Bahawalpur district facing the problems of agro-grazing

Grazing sites and agro-graziers (No. of respondents)	Problems of agro-grazing									
	Shortage of forage for grazing-browsing (during drought conditions)	Shortage of drinking water for grazing animals	Presence of unpalatable and noxious forage plants	Prevalence of grazing animal diseases	Lack of accessible veterinary facilities (distance covered on foot)	Non availability of veterinary consultancy	Non availability of veterinary medicines	Lack of accessible marketing facilities (distance covered on foot)	Hostile attitude of farmers	Below line of poverty + lack of govt. assistance
Grazing areas adjoining river (40)	15.00	25.00	30.00	100.00	100 (20.0 km)	40.00	80.0	100 (25.0 km)	87.50	100.00
Grazing areas adjoining canals (20)	25.00	25.00	40.00	100.00	100 (22.5 km)	40.00	80.00	100 (24.10 km)	90.00	100.00
Grazing areas adjoining range and forest (20)	90.00	90.00	25.00	100.00	100 (25.0 km)	50.00	85.00	100 (27.0 km)	85.00	100.00
Grazing areas located in the interior (20)	30.00	10.00	35.00	100.00	100 (19.0 km)	40.00	80.00	100 (22.0 km)	90.00	100.00
Average value	40.00	37.50	32.50	100.00	100.00 (21.51km)	42.50	81.50	100.00 (24.52 km)	88.12	100.00

graze their animals and high prices of cultivated green fodders and concentrates were the major problems faced by all agro-graziers, as 100% respondents of all the grazing sites had these problems. Due to poor and miserable socio-economic conditions and lack of financial subsidy, agro-graziers had no money to buy cultivated fresh green fodders in scarcity period and concentrates as supplementary feed to improve animal health. As a result, animals remained underfed and were victimized of malnutrition and diseases. Officers of agricultural bank also revealed the fact that the poor agro-graziers were very reluctant to apply and receive the credit/loan because they found themselves helpless and unable to return loan in the stipulated period and also were afraid of its ever increasing interest. The poor socio-economic conditions of agro-graziers in other districts of Punjab were also reported previously (Quraishi *et al.*, 1993; Ashraf *et al.*, 2001; Khan *et al.*, 2003a,b; Ali, 2005; Quraishi *et al.*, 2006).

Water and food is an unavoidable need of human, as well as animals. Unfortunately, majority of the agro-graziers faced the acute shortage of water and forage (Table 1). The water shortage or non availability was the biggest problem of agro-graziers of the villages adjoining range and forest areas (90%), whereas it was not a serious problem for agro-graziers of the rest grazing sites because only 25, 25 and 10% agro-graziers of the villages adjoining rivers, canals and located in the interior, respectively, faced this problem. Same trend was noted for the problem of shortage of natural forage available for grazing and browsing. Maximum (90%) number of agro-graziers faced this problem in grazing sites adjoining range and forest area, while minimum number of agro-graziers (15%) faced this problem in grazing site located along river (Table 1). This seems to be due to the availability of grazing and browsing vegetation in the bela areas adjoining rivers.

The prevalence of animal diseases and non availability of veterinary medicines were also common problems found in the study areas. Data revealed that all graziers of all grazing sites were faced with the problem of animal diseases. They had to cover average distance of 21 Km and almost half of them succeeded to contact veterinary doctors or stock assistants and only 20% agro-graziers could get veterinary medicines for treatment against diseases (Table 1). The same problem was also reported by Shahbaz (1993) and Malik (1997) for Jhang and Chakwal districts, respectively.

The presence of unpalatable and noxious plants in the grazing sites for animals was another problem for agro-graziers of Bahawalpur district. But it was not too much extensive like other problems. This fact was also reported by Khan *et al.* (2004a,b) for Khanewal district.

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