

RESEARCH PAPER

Management of common property land resource in zone IV of Rajasthan

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Received : 30.01.2015; Revised : 24.02.2015; Accepted : 12.03.2015

ABSTRACT

The study was conducted during 2014 in Zone IV of Rajasthan. Availability of Common property land resource (CPLR) in Zone IV *vis-a-vis* Rajasthan has been assessed by using secondary data on fallow land other than current, cultivable wastes, permanent pastures and grazing lands, barren and uncultivable lands, forest land and human population for the year 2001-02 and 2011-12. The results of the study revealed that the percentage of common property land resource available as total geographical area was higher in zone IV (58.32) than that of Rajasthan (37.50). Around 3 per cent reduction over last decade was observed in common property land among all the districts of zone IV and Rajasthan. Per capita availability of CPLR has also declined from 0.30 to 0.23 hectare and 0.25 to 0.19 hectare in zone IV and Rajasthan, respectively, during the study period. The grazing land as a percentage of geographical area was more than one and half times in Zone IV (8.24) as compared to Rajasthan state (4.94). Overall percentage of grazing land to total geographical area in Rajasthan was negligible decreased over last decade, while reverse trend was observed in the case of Zone IV.

KEY WORDS : Common property, Grazing, Forest, Geographical area, Per capita availability

How to cite this paper : Meena, G.L. and Meena, Phool Chand (2015). Management of common property land resource in zone IV of Rajasthan. *Internat. J. Com. & Bus. Manage.*, 8(1) : 70-74.

The common property resources (CPRs) are important part of natural resources. They are useful for almost all sections of the society. Especially tribal poor people with less owned land resource depend largely on these resources for their livelihood, fuel wood and fodder needs. Consequently they also depend to access such as crop waste, weeds, organic manure, building materials, fruits and vegetables, herbs and fibre from the CPRs. Water for drinking

and irrigation is collected from community ponds, lakes and rivers. Common property resources also provide income and employment opportunities to them. Most common types of the CPRs available in rural areas are common grazing lands, community pastures and forests, wastelands, common dumping and threshing grounds, watershed drainages, village ponds, rivers, tanks, other common water bodies and non-timber forest products etc. These resources are jointly utilised and accessed by the members and they cannot be divided between the members. In other words, access and utility in the case of common property are not limited to a person and a user group or community that enjoys them. So a community gets to enjoy CPRs without the permission of any. Certain conditions imposed by the village community generally determine the use of these resources.

CPRs are an important component of natural resource endowment. In spite of providing so many benefits, it's still on the verge of reduction. This has been caused primarily by

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increasing biotic pressure, commercialization of the rural economy, and the consequent breakdown of conventional rules and regulations of use and management. Due to their importance and contribution, reduction of CPRs has become an issue of concern all over the country. The depletion of CPRs was a matter of great concern not only for Rajasthan but also for Maharana Pratap University of Agriculture and Technology service area *i.e.* Zone IV of the Rajasthan state.

Sub-humid southern plains and Aravalli hills and humid southern plains (Zone IV) consists of seven districts lying in the southern part of Rajasthan which is mainly tribal dominated. Zone IV accounted for 14.28 per cent of geographical area of the state. There is a sizeable area of 7.87 lakh hectare under barren and uncultivable land which is 16.09 per cent of geographical area of Zone IV. This land resource has option to be put under economic/environmental friendly uses. There is about 4.03 lakh hectare area under pasture and grazing land in this zone posing the need to adopt scientific pasture management techniques to make this category of land more productive. The size of culturable wasteland is 5.39 lakh hectares. Though putting this land for productive purposes is a great challenge, it is a major resource for land based agricultural activities in this region.

Therefore, keeping above background in mind, present study was carried out with the specific objectives to assess status of common property land resource (CPLR) in Zone IV of Rajasthan. The two types of CPRs are land resource and water resource. Present study is related to first one.

METHODOLOGY

There are total ten agro-climatic zones in Rajasthan. The Zone IV of Rajasthan was purposively selected for the study purpose because this is the service area of Maharana Pratap University of Agriculture and Technology (MPUAT), Udaipur. The study was conducted in Zone IV of Rajasthan which comprising Banswara, Bhilwara, Chittorgarh, Dungarpur, Pratapgarh, Rajsamand and Udaipur districts of the state. Here, we are simply analyzing the extent and changing scenario of

CPLRs. All the estimates in this paper are based on secondary data of many publications of Government of Rajasthan. Secondary information were collected on various aspects such as fallow land other than current, cultivable wastes, permanent pastures and grazing lands, barren and uncultivable lands, forest land and human population for the year 2001-02 and 2011-12.

ANALYSIS AND DISCUSSION

The findings of the present study as well as relevant discussion have been presented under following heads :

Status of common property land resource (CPLR):

The district wise common property land resource available in Zone IV of Rajasthan for the year 2011-12 is depicted in Table 1. Total common property land in Rajasthan was 12851022 hectares which accounted for 37.50 per cent of total geographical area of Rajasthan. Total common property land resource in Zone IV was 2853823 hectares which was 58.32 per cent of its total geographical area. It varied from 46.54 per cent in Banswara district to 73.15 per cent in Rajsamand district during 2011-12. A clear cut difference was observed in the extent of common property land resource among these districts. The percentage share of common property land resource was found higher in Zone IV than that of Rajasthan.

Changes in common property land resource :

Change in the magnitude of common property land, both as a percentage of the total geographical area and per capita availability was estimated to know the direction of change. Table 2 gives the changing scenario of CPLR in Zone IV of Rajasthan for the year 2001-02 to 2011-12. A close examination of the table revealed that CPLR in Rajasthan was declined from 40.61 per cent in the year 2001-02 to 37.50 per cent of total geographical area of Rajasthan in the year 2011-12. It was also declined in Zone IV from 61.35 per cent to 58.32 per cent during the same period of time. Overall 3.03 per cent and

Table 1 : Status of common property land resource in study area (2011-12)

Sr. No.	District	Common property land resource (CPLR) in hectares	Total geographical area (TGA) in hectares	CPLR as per cent of TGA
1.	Banswara	211083	453587	46.54
2.	Bhilwara	515078	1050885	49.01
3.	Chittorgarh	385451	750761	51.34
4.	Dungarpur	218541	385593	56.68
5.	Pratapgarh*	219947	411736	53.42
6.	Rajsamand	331185	452726	73.15
7.	Udaipur	972538	1388255	70.05
	Zone IV	2853823	4893543	58.32
	Rajasthan	12851022	34267252	37.50

*Pratapgarh is newly created district of Rajasthan; Source: Statistical Abstract (2011-12) DES, Government of Rajasthan

3.11 per cent reduction was observed in CPLR in Zone IV and Rajasthan, respectively. A considerable decline in the extent of CPLR has also been recorded in all the districts. It varied from 0.72 per cent (Rajsamand) to 4.93 per cent (Bhilwara) in these districts. Further, it was found that common property land has decreased in all the districts of Zone IV. This decline in CPLR is to be taken care by the administration and proper vigilance is required to manage this resource by the local people. Similar decline in common property resources were also observed by Jodha (1985), Shah (1991), Prasad (1994), Yanagisawa (2008), Joshi *et al.* (2009), Marikkani (2012), and Prakash and Mohapatra (2012).

Per capita availability of CPLR :

It was evident from Table 3 that per capita CPLR in Rajasthan has declined from 0.25 hectare to 0.19 hectare between the period from 2001-02 to 2011-12. It was also declined in Zone IV from 0.29 hectare to 0.23 hectare during the same period. About 0.07 hectares and 0.06 hectares of per capita availability of CPLR was declined in Zone IV and Rajasthan, respectively. Similar observation was made by NSSO (1999) and Joshi *et al.* (2009). Overall decline in per capita CPLR in Zone IV of Rajasthan was reported to 23.33 per

cent over 2001-02. Further, it was observed highest in Banswara (30.95%) followed by Dungarpur (25.07%), Bhilwara (23.68%), Udaipur (20.74%), Chittorgarh (19.49%) and Rajsamand (15.90%) districts. Over growing population and illegal encroachment of common property land resource by the private individuals have decreased the extent of availability of per capita common property land. A rapid increase in population is an important factor, which adversely affects quality and quantity of CPLR. Further, it was observed that there was no considerable difference in per cent reduction of per capita availability of common land in Rajasthan as well in Zone IV.

Extent of grazing land :

The grazing land is a component of common property land resources. Over-exploitation of common grazing lands is a matter of great concern for Rajasthan as well as for Zone IV of Rajasthan because overgrazing causes many adverse affects. The net effect of overgrazing is a degradation of common grazing resource. Table 4 presents the extent of grazing land in the Zone IV and Rajasthan state. Total grazing land in Rajasthan was 1693790 hectares which was 4.94 per cent of total geographical area of Rajasthan during 2011-12. It

Table 2 : Decrease in common property land resource in Zone IV of Rajasthan (2001-02 to 2011-12)

Sr. No.	District	CPLR as per cent of TGA		Decrease
		2001-02	2011-12	
1.	Banswara	50.75	46.54	4.21
2.	Bhilwara	53.94	49.01	4.93
3.	Chittorgarh	54.41	51.34	3.07
4.	Dungarpur	60.04	56.68	3.36
5.	Pratapgarh	-	53.42	-
6.	Rajsamand	73.87	73.15	0.72
7.	Udaipur	71.68	70.05	1.63
	Zone IV	61.35	58.32	3.03
	Rajasthan	40.61	37.50	3.11

Source: Statistical abstract (2001-02 and 2011-12) DES, Government of Rajasthan

Table 3 : Change in per capita availability of CPLR in Zone IV of Rajasthan (2001-02 to 2011-12)

Sr. No.	District	Per capita availability of CPLR (in hectares)		Absolute decrease	Percentage decrease
		2001-02	2011-12		
1.	Banswara	0.17	0.12	0.05	30.95
2.	Bhilwara	0.28	0.21	0.07	23.68
3.	Chittorgarh	0.31	0.25	0.06	19.49
4.	Dungarpur	0.21	0.16	0.05	25.07
5.	Pratapgarh	-	0.25	-	-
6.	Rajsamand	0.34	0.29	0.05	15.90
7.	Udaipur	0.40	0.32	0.08	20.74
	Zone IV	0.30	0.23	0.07	23.33
	Rajasthan	0.25	0.19	0.06	23.96

Source: Statistical abstract (2001-02 and 2011-12) DES, Government of Rajasthan

was 403169 hectares in Zone IV which contributing 8.24 per cent to total geographical area (TGA) during 2011-12. It was observed highest in Rajsamand (12.42%) followed by Bhilwara (11.50%), Chittorgarh (9.88%), Dungarpur (8.96%), Udaipur (5.99%), Pratapgarh (5.51%) and Banswara (2.54%) districts. Further, it was observed that grazing land as a percentage of total geographical area was higher in Zone IV (8.24) than Rajasthan (4.94).

Change in the area of grazing land :

The percentage of grazing land to total geographical area is presented in Table 5. Overall percentage of grazing land to total geographical in Rajasthan was negligibly decreased (0.02 hectare) during last decade. It was slightly increased (0.23 hectare) in Zone IV of Rajasthan. A perusal of the table revealed that percentage of grazing land to total geographical has decreased in Banswara, Dungarpur, Rajsamand and Udaipur districts while it has increased in Bhilwara, Chittorgarh and Pratapgarh districts during 2001-02 to 2011-12.

As findings of present study indicated that despite an immense contribution of common property land to rural community, CPLR was declining in Zone IV as well as in

Rajasthan. It may be due to rapid growth in human population, increasing livestock population and changing composition and structure of livestock animals, privatization and encroachment of common property land and commercialization of rural economy. To protect the CPRLs, it is essentially required to prevent the encroachment by the local people through empowering and educating the local bodies about the long term benefits of these natural resources. The decrease in grazing land over the decades was observed by Jodha (1985), Prasad (1994), Sharma *et al.* (1998), NSSO (1999), Joshi *et al.* (2009), Marikkani (2012), Kannan and Ramar (2013), Government of India (2013), and Sharma and Singh (2014).

Conclusion :

CPLR has played an important role in the life of all section of society, especially for rural people. It is evident from the results of the study that total common property land resource and per capita availability of common land were decreasing continuously in Zone IV as well as Rajasthan during the study period. There was not only a single factor responsible for the depletion of common property land resource but many other factors have also contributed to it. The availability of common property land per capita has gone down due to rapid human

Table 4 : Extent of grazing land in Zone IV of Rajasthan (2011-12)

Sr. No.	District	Grazing land (ha.)	Total geographical area (hectare)	Grazing land as a percentage of TGA
1.	Banswara	11509	453587	2.54
2.	Bhilwara	120865	1050885	11.50
3.	Chittorgarh	74146	750761	9.88
4.	Dungarpur	34539	385593	8.96
5.	Pratapgarh	22705	411736	5.51
6.	Rajsamand	56219	452726	12.42
7.	Udaipur	83186	1388255	5.99
	Zone IV	403169	1388255	8.24
	Rajasthan	1693790	34267252	4.94

Source: Statistical abstract (2011-12) DES, Government of Rajasthan.

Table 5 : Change in the area of grazing lands in Zone IV of Rajasthan (2001-02 to 2011-12)

Sr. No.	District	Percentage of grazing land to TGA		Increase (+) or Decrease (-)
		2001-02	2011-12	
1.	Banswara	2.54	2.53	- 0.01
2.	Bhilwara	11.48	11.50	+ 0.02
3.	Chittorgarh	7.33	9.88	+ 2.55
4.	Dungarpur	8.98	8.96	- 0.02
5.	Pratapgarh	0.00	5.51	+5.51
6.	Rajsamand	12.74	12.42	- 0.32
7.	Udaipur	6.16	5.99	- 0.17
	Zone IV	8.01	8.24	+0.23
	Rajasthan	4.96	4.94	- 0.02

Source: Statistical abstract (2001-02 and 2011-12) DES, Government of Rajasthan

population growth and declining common property land resource. The depletion of common property land resource is a matter of fear for economy of Zone IV and Rajasthan. In future, the common property land resource should be used, improved and managed in such a manner so that the poor communities may use the resource for securing their livelihood for long time on a sustainable basis.

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