

ROLE OF COMMON PROPERTY RESOURCES (CPRS) IN CONTROLLING TOBACCO CULTIVATION

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1. INTRODUCTION

This paper brings out the different dimensions of the potential that CPRs contain to benefit the rural poor. Studies have shown that CPRs directly provide means of livelihood to rural people and directly and indirectly contribute to agricultural growth and economic development, and also the quality of the environment. Besides the above-mentioned benefits, there are several unexplored possibilities in connection with CPRs. One such possibility relates to the role of CPRs in influencing farmers' choice of their farming system. Though it may sound unorthodox, yet it has been observed from a number of case studies that the choice of cropping pattern, the extent of investment in farming and the adoption of livelihood activities allied to farming are very much influenced by the access to CPRs that are functional (Panchamukhi, 2000; Jodha, 1990; Nadakarni, 1990). The present paper is based on the researcher's observation of practices of tobacco cultivation in about 50 tobacco cultivating villages in the Belgaum district of Karnataka State and the determining influence of CPWRs on such practices. The observations are based on the experiences obtained by the author while working in one of the research projects entitled "Economics of shifting from tobacco cultivation", conducted by the Centre for Multi-Disciplinary Development Research (CMDR), Dharwad.

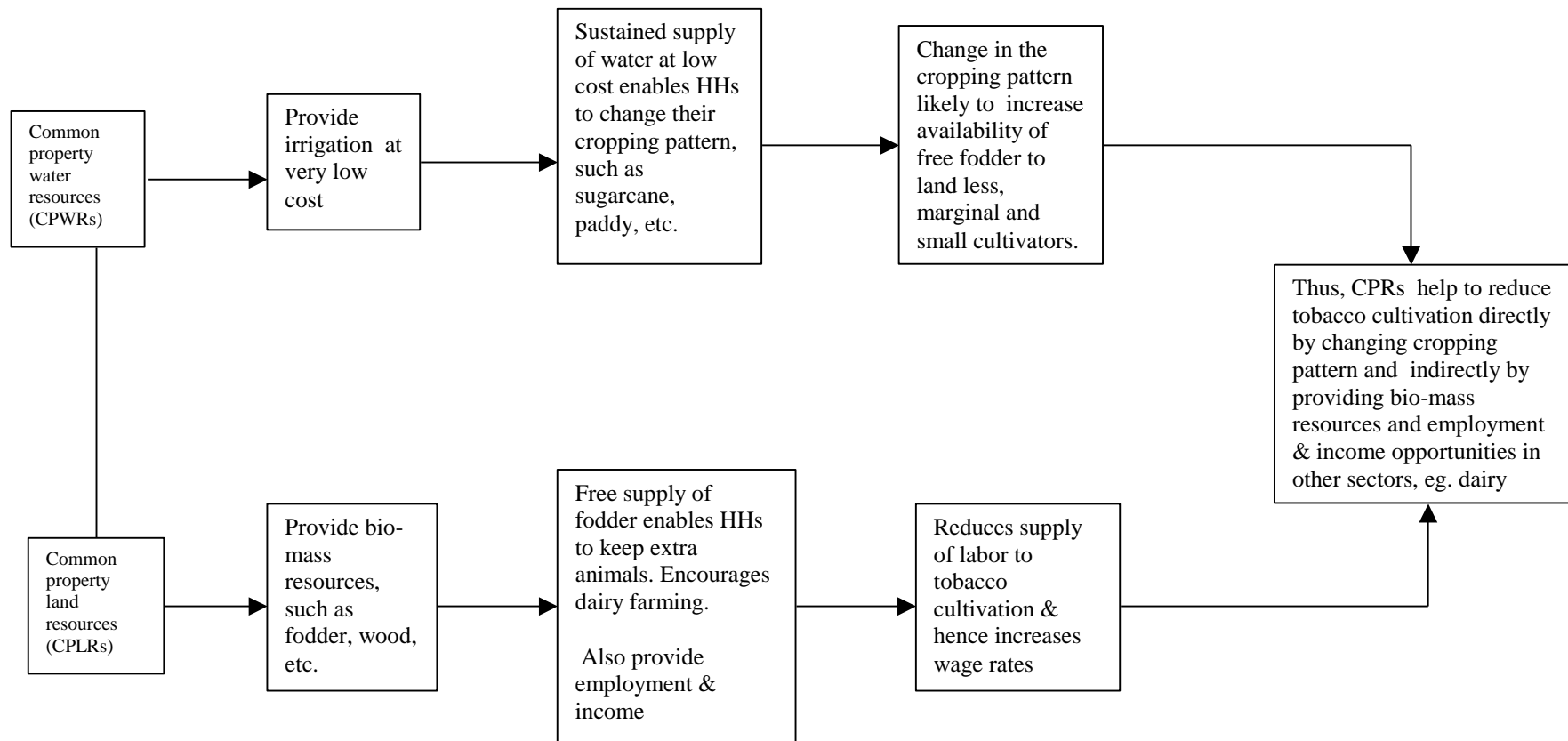
Tobacco is considered an important source of revenue for the government. However, it is also found that this is the single greatest cause of non-communicable diseases. WHO estimates that there are currently 4 million deaths a year attributable to tobacco and it is expected to rise to about 10 million by 2030. Out of this, about 70% of the deaths will occur in developing countries (Annigeri, 2000). Thus, it is found from many studies that costs associated with tobacco are more than the benefits of tobacco. Nearly five million hectares of land is devoted to tobacco in the world. The area under tobacco is expanding in developing countries, which are under the grip of poverty, hunger and unemployment. In India, 436500 hectares of land is devoted to tobacco. While many efforts have been made to control the consumption of tobacco, there appears to be a lesser concern for the control of the supply of tobacco. It is in this context that the present chapter highlights the potential contribution of CPRs in controlling tobacco cultivation. In this process, it sets free the farmers who are indebted to moneylenders, middlemen and tobacco traders. The present chapter is organized into four sections. The first section gives the introduction and frames a working hypothesis of the research issue. The second section identifies the role of CPRs in controlling tobacco

cultivation. The third section describes the study area and tests for the significance of the hypothesis. The last section makes a case for the development and proper utilization of CPRs as a policy option to control tobacco cultivation.

2 ROLE OF CPRS IN CONTROLLING TOBACCO CULTIVATION

CPRs constitute important natural resource systems for the farming community. They have been playing a major complementary role in farming. There is a high level of production complementarity between CPRs and PPRs (Nadakarni; 1989, Jodha; 1986, Kadekodi; 1998). In the rural areas, households own private property resources such as agricultural land, livestock, agricultural equipment and so on. The productivity of these private resources depends not only on the quality and quantity of such resources but also upon access to a number of common property resources such as forest, grazing land, rivers, streams and ponds, etc. Thus the cropping pattern of any region depends not only on the productivity of cultivable land but also on the CPRs. Figure: 7.1 shows the potential role of CPRs in controlling tobacco cultivation. Adequate and timely supply of inputs from CPRs at free of cost (or at least cost) enables farmers to abandon tobacco cultivation and induce to cultivate other crops or to engage in other activities, such as dairy farming, CPR based activities, etc. However, the farmers must have the willingness to shift from tobacco. Tobacco farmers utilize CPRs (fuelwood and irrigation) for the cultivation of tobacco free of cost. Community control on the use of these resources for tobacco would increase the cost of cultivation and reduce tobacco cultivation.

Figure: 7.1 Process of Controlling Tobacco Cultivation By CPRs



3 STUDY AREA DESCRIPTIONS

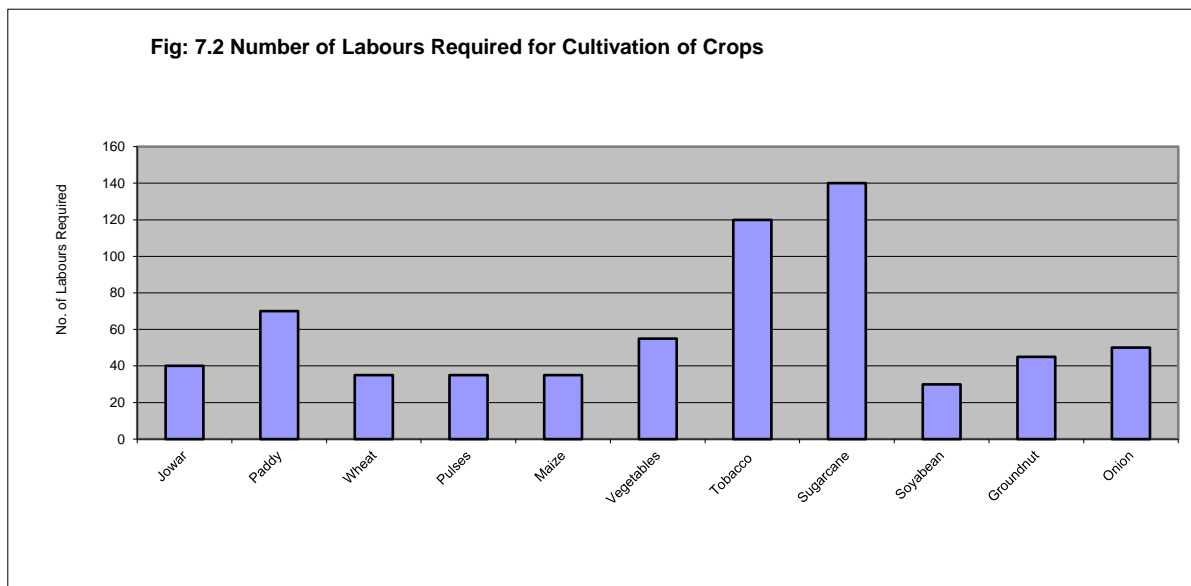
Belgaum district of Karnataka has the largest area under tobacco. Bidi tobacco is grown in this region. This tobacco has got demand throughout the country due to its quality, strong aroma and suitability for manufacturing bidis. Three taluks of the Belgaum district grow tobacco. They are Hukkeri, Chikkodi and Gokak. About 75 per cent of the tobacco area is in Chikkodi taluk. The district is located in the northwestern part of the state. It lies between 15 23 to 16 58 north latitude and 74 5 to 75 28 east longitude. The most elevated portion of the district lies to the west and south along the line of the Sahyadri hills. The district is between 450 to 900 meters above Mean Sea Level (MSL) and extends over an area of 13379 sq. km, which is 6.99 per cent of the total geographical area of the state and ranks fifth in the area among the 27 districts of the state. The district is surrounded by Maharashtra State in the north, Bijapur district in the east, Dharwad and Uttar Kannada districts in the south, Goa territory and Maharashtra State in the west. The districts of Maharashtra touching Belgaum district are, Vengurla to the northwest, Kolhapur to the west and the north and Sangli in the north. It measures about 160 km from north to south and 80 to 130 km from east to west and forms a large plain studded with solitary peaks broken here and there by low ranges of hills. Small but well-built forts crown many of the peaks. The lower hills are generally covered with brushwood but in some cases, their sides are carefully cultivated almost to the very summits. On the northeast, the district is open and well-cultivated but to the south, it is intersected by spurs of the Western Ghats, thickly covered in some places with forest, In the south and along the banks of the large rivers the Krishna, the Ghataprabha and the Malaprabha, the surface is pleasantly covered by trees, solitary and in groups.

3.1 Tobacco Cultivation in Belgaum District

Karnataka is one of the main tobacco-growing states in India. In Karnataka, the Belgaum district happens to be the most productive district from the point of view of tobacco production. It ranks first in the state so far as the area under tobacco cultivation, and production of tobacco are concerned. About 50 per cent of the area under tobacco in the state is part of the tobacco area in this district itself. More than 50 per cent state's tobacco production is grown in this district itself. Farmers in about 60-70 villages in the Belgaum district have been growing tobacco as a main crop for the last 200 years. The district receives an average annual rainfall of 748.7 mm. The amount of rainfall decreases as one moves from west to east. The average number of rainy days too decreases as one moves from west to east. About 68% of the annual rainfall precipitates during the southwest monsoon season, which lasts from June to September. July happens to be the month with the heaviest downpour. In the western portion of the district, the rainfall is reliable and seasonal conditions are fairly good and are helpful to agriculturists. Most of the tobacco cultivating villages are located in the eastern part of the district where rainfall and seasonal conditions are not fairly good.

Bidi tobacco is grown in the Rabi season in this region. Sowing is done during July-August. The crop generally takes 6 to 7 months to mature from the day it is sown. Deep ploughing is required before tobacco seeds are sown and nurseries are developed. More labour is required for tobacco for operations like preparation of nursery, tilling, topping, desukering, weeding leaf-cutting and harvesting, curing, etc. Figure: 7.2 shows the number of labourers required for the cultivation of different crops.

The crop requires very careful treatment of the seedbed and the field. Harvesting, drying, heaping, stocking and curing require considerable skill and attention. So, more number of family labour is engaged



in tobacco cultivation. Tobacco stands in the field for about five months. It is most important that rains do not fall at this stage, otherwise, the entire crop is destroyed. With the uncertainty of the monsoon tobacco plant always faces the risk of a complete loss. Farmers are aware of this risk. But still, they continue to grow tobacco being guided by the traders who provide them credit. When the rains destroy the tobacco crop the farmers fall into the debt trap of the traders. There is a practice of sharecropping in this region. Since tobacco is considered as the cash crop, all types of farmers grow this regardless of the size of their landholdings. Marginal and small farmers have small cultivable land and more family labourers to work for tobacco. Large farmers have large cultivable land and fewer family members to work for tobacco. People in this area are depending more on agriculture because of the non-availability of other employment opportunities in the region. Sharecropping helps to adjust factor proportions (i.e. adjusting labour and land resources) among landowners and sharecroppers. Large farmers provide a piece of land and other required inputs to a family (who is usually a marginal or small farmer) and this family have to work in the tobacco field. This system has prevailed for long years. The sharecropper family gets 1/4th of the produce as labour charge. Such sharecroppers are many in this region and their position in the society is like bounded labour. The problem of disguised unemployment in agriculture has a greater incidence in the case of marginal and small farmers than in the case of large farmers. This suggests that labour, particularly family labour, is

likely to face exploitation as no monetary value is attached to it. When such family labour is supplied to compete with the hired labour, the predominance of family labour might lead to lower-wage payment for hired labour as well. This means exploitation of hired labour also.

Right from the stage of sowing and plant breeding tobacco is found to be a costlier plant to cultivate than other crops, though these costs are not visible since farmers with small holdings and maintaining subsistence agriculture, do not have the practice of keeping accounts for all the items of cost, both direct and indirect. Though irrigation is not required for tobacco, in practice farmers use irrigation facilities quite intensively for tobacco also in the interest of earning more income. Farmers depend on financial institutions and money lenders for meeting the heavy cost of cultivation. The quantum of loans that could be advanced depends upon the extent of the cultivation of tobacco. If the farmer has not sown tobacco then he would not get any loan either from the banking sector or from the money lenders/ tobacco traders. It is interesting to note that farmers with larger holdings have taken assistance from the banking institutions rather than these informal sources. On the other hand, small landholders have sought financial assistance more from informal sources. This might be because small landholders are not able to fulfil the loan conditionalities and hence they are compelled to depend upon informal sources. Thus, tobacco farmers, especially marginal and small cultivators, are under the clutches of money lenders.

Harvesting of tobacco is done after the leaves mature. All leaves do not mature simultaneously. Once harvesting is done, the drying process is initiated which is called curing. After curing, tobacco is packed in 'Bodhs' (i.e. bags) and then they keep it for sale. Bidi tobacco does not have any regulated market facility. There are many problems associated with the marketing of tobacco. The majority of the farmers sell their produce to the middlemen or commission agents (for easy disposal of tobacco) many of whom are also traders.

3.2 CPRs and Tobacco Control in Belgaum District

Grazing lands and river beds constitute important common property land resources in the tobacco cultivating region. Rivers and ponds are important common property water resources. CPRs, in this region, have been playing a complementary role in farming. Dudhganga and Vedganga are the important rivers flowing in the tobacco belt. The river Dudhganga rises in the Western Ghats near Bhola Karavadi in Maharashtra and flows northwards. It receives numerous streamlets and starts its good course from Shidhanerli, about 10 km west of Poona-Bangalore trunk road and forms the boundary between the Kolhapur and Belgaum districts for about 20-km. It enters the district from Vandoor of Chikodi taluk near the national highway number-4 from the west and travels about 109 km in the eastern course in the district. It receives the water of Vedaganga from the north at Bhoj/Barwad and joins the river Krishna near Yedur from the south. The Vedaganga River rises in the Sahyadrian main range near Pallegave of Maharashtra State. It has a north-eastern trend with a narrow valley and a meandering course. The river enters the district northwest of Budihal/Kurli/Yamgarni. Here, it receives the water of the Kapshi stream from the south. It runs almost in an easterly and north-easterly course for about 26 km and joins the river Dudhganga from

the south at Bhoj/Barwad. Apart from these two rivers, there are a good number of tanks and streams in the area. The area under irrigation from CPWRs has been increasing substantially in recent years. Farmers have formed irrigation co-operative societies and they have been getting financial support from the banking sector. Irrigation from these sources is found adequate and less costly. The area under tobacco has been declining with the extension of irrigation facilities in this area. In some of the villages like Sondalaga, Akkol, Sidnal, Karadaga, and Mangur tobacco was the main crop (about 10 years ago) but now villagers have completely stopped growing tobacco. It is heard that 10 years ago about 50-60 villages were growing tobacco, but now the number of tobacco growing villages has declined mainly due to the extension of irrigation by CPWRs. If we compare total irrigated area and tobacco area across the villages, it is found that the villages having more extent of irrigation have a lesser area of tobacco and vice versa. The area under tobacco has declined from 30000 hectors to 22000 hectors in about 20 years (1980 to 2000). Tobacco is a rain-fed crop. It requires water at a few intervals. Too much water is harmful to the plant. Those who have irrigation facilities cannot use it for tobacco. With the help of assured irrigation, farmers are now able to grow sugarcane, vegetables, banana, and other horticulture crops. These crops are more profitable than tobacco. Table: 7.1 shows the cost of cultivation and net return of different crops. Thus, the provision of irrigation discourages tobacco cultivation and promotes the cultivation of other alternative crops /other activities.

Table: 7.1 Cost of Cultivation and Net Return of Different Crops

Crops	Cost of Cultivation/ Acre (Rs)	Total Value of Produce/ Acre (Rs)	Net Return/ Acre (Rs)
Jowar	2500	4000	1500
Paddy	5000	7000	2000
Wheat	2800	4400	1600
Pulses	2500	3800	1300
Maize	2000	4000	2000
Vegetables	6000	15000	9000
Tobacco	7000	10000	3000
Sugarcane	10000	30000	20000
Soybean	2400	5400	3000
Groundnut	3000	7000	4000
Onion	3000	10000	7000
Source: Obtained from discussion with farmers			

It is observed from the field visits that with the assured irrigation most of the farmers have shifted to the sugarcane. After the harvesting of the sugarcane, leaves and some portion of the stalk are left on the field. Agricultural labourers, marginal and small farmers collect fallen leaves and stalk for feeding their

cattle. There is no restriction on the collection of these materials. The households collect fodder from the field that could be enough for three to four days. Another interesting thing observed in this region is that the fodder available on the CPLRs is distributed among landless and poor households equally. The free supply of fodder helps these households to keep extra animals. With a buffalo, one can earn Rs.60 to 70 per day whereas he can only get Rs.25 to 30 for working as a labour in the tobacco field. Thus, dairy farming is profitable activity than working for tobacco. Dairy and tobacco cultivation are highly labour intensive and hence farmers cannot undertake both with limited supplies of agricultural workers. Adoption of dairy farming activity reduces the households' dependency on tobacco cultivation. It is known that many of the sharecroppers have left the tobacco cultivation and started the dairy activity in recent years. As a result of this their economic status has improved and they are getting more leisure. This shift in the occupation of the landless, marginal and small farming households reduces the total supply of agriculture labour and increases their wage rate. The higher wage rate further increases the total cost of cultivation of tobacco. Many tobacco cultivators have left tobacco cultivation because of the high cost of production and provision of irrigation. Thus, CPRs help directly and indirectly to reduce the cultivation of tobacco. Table: 7.2 shows reasons for not cultivating tobacco.

Reasons	Percentage of Farmers
1. Labour Problem	10.8
2. High cost of cultivation	25.7
3. Risk involved	2.7
4. Low Price of tobacco	1.3
5. Irrigation Available (facilitating other crop cultivation)	36.9
6. Disease of the tobacco plant	2.7
7. Maintenance of plant is time-consuming and costly	2.7
8. Others	17.6

Source: Panchamukhi, 2000

4 CONCLUSION

The role of CPRs is considered only in mitigating failures of other resource provisioning systems. They are seen as providing a safety net for those who may not have access to products and services through conventional markets. CPRs provide for the subsistence needs of such asset poor individuals and groups and are thus seen to be important for policy alleviation. In some way, this is a negative view of the contribution that CPRs make to the developmental process. In such a perspective, CPRs are useful because they prevent people from falling further into deprivation. However, a more positive approach to development requires a focus on providing people with the means with which to lead better lives. So CPRs need to be seen not only as a safety net but also in terms of their contribution to positive opportunities for social and economic development. In this direction, the role of CPRs in controlling tobacco cultivation

would be one of the important contributions of CPRs to society. Adequate and timely supply of CPR products would induce farmers to cultivate 'other' crops which are more profitable than tobacco. CPRs could help to avert all the problems associated with tobacco cultivation, viz., labour exploitation, indebtedness, lot of risk and uncertainties, etc. Thus, the development and proper utilization of CPRs would be a good strategy to control tobacco cultivation in this region. The following measures could be taken in this direction. 1) The free supply of fuelwood, fodder, water, etc from CPRs should be stopped to tobacco growers 2) Efforts should be made to improve the status of CPRs in the tobacco cultivating regions 3) Government may have to take initiatives to provide irrigation facilities with suitable financial assistance to the shifters from tobacco.

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