

# COMMON LAND RESOURCES - THE SOURCE OF LIVELIHOOD OF POOR VILLAGERS: A HOUSEHOLD STUDY

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## ABSTRACT

Land resource is the source of livelihood of majority of India's population. But in our country larger section of agricultural dependents are landless. They earn either by working as agricultural labourer or by utilizing or depending on such lands which are common and not owned by individual i.e., Common Land Resources (CLR). Besides landless, small farmers also utilize it for different purposes. The CLR are being utilized for pasture and grazing, forest wood collection, crop cultivation and other purposes like temporary shelter for animals, manure pits and storage of fodder and agricultural produces. In view of the above philosophy, the present investigation is an attempt to analyse both quantitatively and qualitatively the role of CLR on the livelihood of rural poor of sampled village (Morthal) of Aligarh district. It is evident from the intensive field study and data analysis that more than 82 percent of the landless households depend on CLR mainly for pasture and grazing and crop cultivation, followed by small size landholding households (62.12 percent). However, 25 percent of large size landholding households use CLR for pasture and grazing, storage of fodder and agricultural produces, and construction of sheds for animals on CLR for maintaining family expenditure, or it is the basic source of livelihood of larger section of rural people in our country.

**Keywords:** landless, small farmers, Common land resources (CLR), livelihood

## INTRODUCTION:

India is basically an agricultural country where a major part of its population lives in rural areas with agriculture as the main economic activity. Thus the livelihood of the people is highly dependent upon the land resource (Agricultural Statistics at a Glance 2008). As the population is continuously increasing there is an immense pressure on the land resources of the country, specially the agricultural land (Jodha, N, S. 1985). The share of landless and small farmers is largest among the total farmers. As their land resources are insignificant they rely upon the "common property resources" (CPR's) for their livelihood. The continuous and unchecked use of these resources leads to degradation and depletion of these resources. Hardin (1968, 1998) has rightly stated that "ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons".

The term "*Common Land Resources*"(CLR's) is used to refer to property owned and defended by a community of resource users, to property owned by no one, and to property owned by a government to which the people have "common access" (Jodha N S 1986). In India there are variety of CLR's such as forests, pastures and grazing lands,

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threshing grounds, manure pits, cemeteries, cremation grounds, fallow lands, barren land uncultivated lands, etc (Mohammed N. 1981).The common land resources are common to all and no one has any exclusive right upon it. They are generally utilized by the landless and small farmers in various ways for economic gains The forests provide timber, the pastures support the livestock of the farmers and the uncultivated and barren lands are utilized for construction of houses, poultry farms and animal husbandry. The CPR's and CLR's are a source of livelihood for the rural poor (Thomson et. al.2001).Considering the role of Common Land Resources on the livelihood of the landless and small farmers the present study was undertaken.

### **AIMS AND OBJECTIVES:**

The present study has been undertaken with the following aims and objectives:

- 1) To analyse the common land resources of the study area.
- 2) To analyse the role of common land resources upon the livelihood of the landless and small farmers

### **DATABASE AND METHODOLOGY:**

The study is based on the primary data collected through field surveys and secondary data collected from various sources. Individual observation of the candidate while doing field survey is also considered. The study was undertaken in a sampled village Morthal, in Dhanipur block of Aligarh District. The total number of houses in the village was 334. Thus a sample of 50 per cent was taken and thus 167 houses were surveyed .A questionnaire was used to generate the data regarding the socio-economic profile, land use pattern, mode of utilization of the Common Land Resources and the income generated from them by the respondents.

The secondary data regarding geographical background of the area, climatic conditions including soil characteristics, rainfall, vegetation, land use pattern including general and agricultural land use, demographic characteristics and social structure characteristics have been obtained at national, state ,district and block level. The data regarding the population of the sampled village and the social structure was obtained from the village pradhan. The data has been obtained from various government departments. The data collected through the field survey have been thoroughly checked and finally the data has been processed using simple statistical techniques and represented using suitable maps, tables and diagrams.

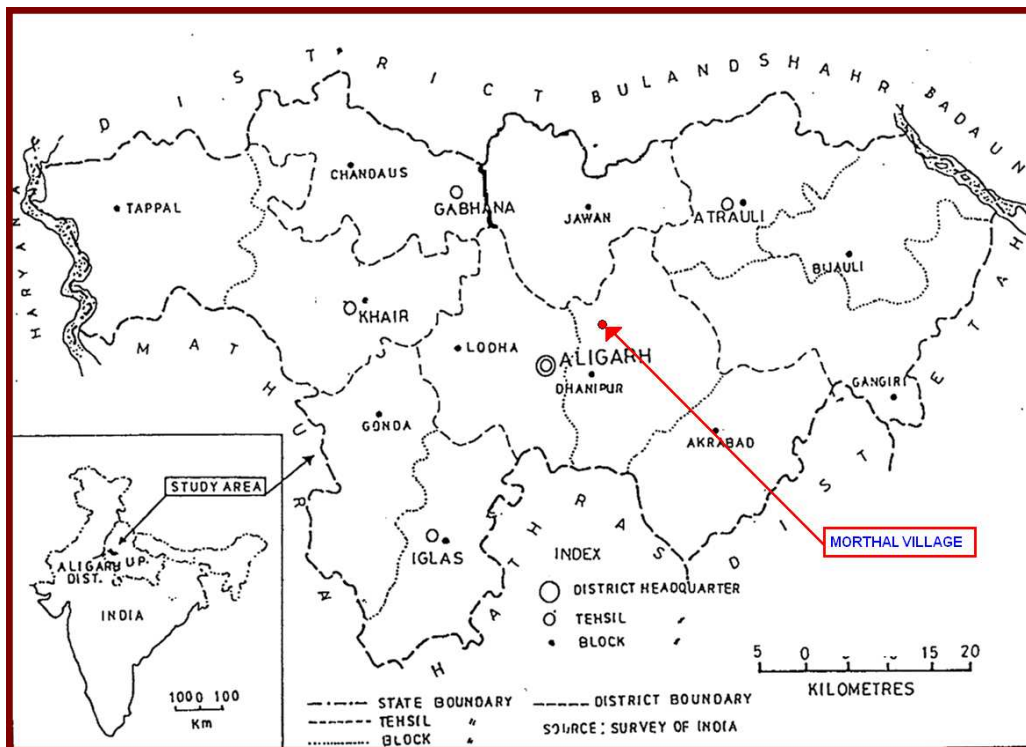
### **GEOGRAPHICAL OUTLINE OF THE STUDY AREA:**

The study area selected for the present study was district Aligarh located in the western part of Uttar Pradesh at a distance of about 126 kms. from Delhi. It lies between latitudes 27 °33' N to 28° 11'N and between 77 °29' E to 78°38'E longitudes in the central part of Ganga-Yamuna Doab. The district has a total area of 3696.94 sq. Kilometres with a population of 32, 95,982 persons. From administrative point of view,the district has been divided into 5 tehsils and 12 developmental blocks whic include 1211 villages. The Ganga, the Yamuna, the Karon, the Kali and the Neem

are important rivers of the district. River Ganga and Yamuna form the eastern and western boundaries of the district for small distance. Besides these rivers, there is artificial drain which facilitates the drainage system of the district. The soil of the district is alluvial in nature and mostly loamy in texture. These are known by different names according to the proportions of sand present in them. They are the Khadar soils or newer alluvium and the Bangar soil.

**Sampled Village Morthal:**

The Morthal village lies in the Dhanipur Tehsil of the district and is located on the Ramghat road about 14 Kms. away from the Aligarh city. It is about 2.5 Kms. away from the small town of Harduaganj and about 5.5 Kms from the Upper Ganga Canal. The Kali Nadi is about 6.5 Kms. away from the sampled village. The village is well connected with Harduaganj town, Aligarh city and the nearby village with metalled and un-metalled road. The total population of the village is reported to be 2,125 and the number of households is about 334. The village is having two major communities the Hindus and the Muslims living in harmony.



**Figure 1: Study Area**

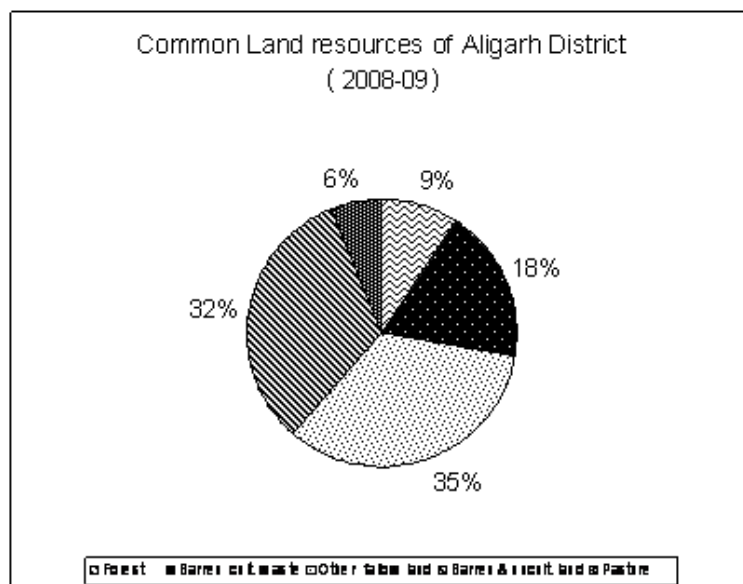
The total population of Scheduled Castes is 420 persons comprising 19.76 per cent of the total population. There are many castes of Hindus residing in the village. The major ones are Thakur, Brahman, Jaat, Kayast, Harijan, Baghel etc. The people are generally illiterate and a large number of the residents do not have any land. A large number of people are having small or marginal farms and few of them have big land holdings.

## LAND USE PATTERN OF ALIGARH DISTRICT:

The major occupation of the people of Aligarh is agriculture and thus most of the area of the district is under agricultural use. The largest share of the land is devoted for agriculture. Still 18 percent of the land is being utilized for other purposes. The next major part of the geographical area of the district after agriculture is devoted for land put to non agricultural uses. The share of forests in the district is only 1 percent of total area and the share of barren land and fallow lands is 12 and 3 percent respectively. The land under miscellaneous uses and under groves is negligible of the total area of the district. The variation in the land use pattern in the Aligarh district is seen at the Block level also.

### **Common Land Resources of Aligarh District:**

The total area other than cultivated area in the Aligarh district is 18 percent. The total area under the Common Land Resources is calculated to be 8 percent of the total geographical area of the district. This 8 percent area include forests, pastures and grazing lands, culturable wasteland, barren and uncultivated lands other than current fallow and fallow lands.



**Figure 2: Common Land Resources of Aligarh District**

**Source:** Statistical booklet of Aligarh district 2008-09

### **Social Profile of the respondents:**

The respondents included Thakur, Kayast, Brahman, Jaat, Scheduled Caste and Muslims, the largest share being of Muslims (39.3 per cent) and Thakur (28.0 per cent) followed by Scheduled Castes (19.76 per cent). The respondents were of different age group and the maximum belonged to high age group i.e. more than 45 years of age. This clearly shows the presence of aged people in the village and their will to involve in the survey. Majority of the respondents were having a "combined family". The respondents had variable family size and it varied from 5 to 12. The respondents of the Morthal village were generally illiterate. The people are not inclined towards education and are interested in earning as soon as possible.

### **Economic Profile of the Respondents:**

Although the major economic activity of the people of Morthal village was found to be agriculture but other activities like, private shop or marketing of goods etc is also done. Those who are educationally better were found to be involved in clerical jobs or in teaching and supplement their income from agriculture also .The people who are landless are involved in activities like rickshaw pulling, labour, agricultural labour, private business and shop keeping etc. On further analysis it was found that the families which have very large land holdings are enjoying the benefits of mechanization of the agriculture and smaller number of persons is able to manage large pieces of land. As the land holdings are very large the income is sufficient for the family and there is no economic pressure on the other members of the family to earn for themselves.

### **Size of Land Holding:**

The table no.1 shows the status of landholdings of the total 167 respondents comprising 47 landless and 120 landholders. The table reveals that the share of small farmers is maximum (46.70 per cent) followed by medium (14.38) and large farmers (10.78 per cent).All the respondents were not found to use CLR's. The share of Common land users .The respondents using the CLR's were found to be 112 (67.06 per cent) among the total respondents. The table 2 shows landholding wise share of respondents using CLR's. Out of the 112 respondents the share of landless (19.64 per cent) and small farmers (34.82 per cent) combined was found to be was 54.46 per cent. The maximum use of CLR's was found to be undertaken by small and holders.

**Table 1: Status of landholdings of the Respondents**

<b>Category</b>	<b>Landholding (hectares)</b>	<b>No of Respondents</b>	<b>Percent of Total respondents</b>
<b>Landless</b>	---	47	28.14
<b>Small</b>	0-8	78	46.70
<b>Medium</b>	8-12	24	14.38
<b>Large</b>	>12	18	10.78
<b>Total</b>		167	100.00

**Source:** Field Survey 2008

**Table 2: Land holding Wise Share of Utilization of CLR's**

<b>Status of Landholding</b>	<b>Number of respondents</b>	<b>Percent of Total</b>	
<b>Landless</b>	22	19.64	54.
<b>Small</b>	39	34.82	46
<b>Medium</b>	30	26.79	45.
<b>High</b>	21	18.75	54
<b>Total</b>	112	100	

**Source:** Field Survey 2008

### **Mode of Utilization of Common Land Resources:**

The respondents were found to utilize the CLR's in various ways. A single respondent may be utilizing CLR's in more than one ways also. The most favourite mode of utilization of CLR's was for grazing and Pasture land (43.95 per cent) followed by Agro forestry (29.50 per cent) and Crop cultivation (13.95 per cent). There were some other ways of utilizing the CLR's like manure pits, cemeteries, storage grounds, playgrounds, temporary construction of sheds for animals, storage of fodder and agricultural produce etc. The field survey has revealed that the modes of CLR's utilization in the Aligarh district is in confirmation to the other parts of the State as found in other studies (Mohammad N 1998) Table no.3 gives the percentage share of the respondents under various modes of CLR, s utilization.

**Table 3: Modes of Utilization of Common Land Resources**

<b>Modes of Utilization</b>	<b>Number of Respondents</b>	<b>Percent of Total</b>
<b>Grazing/Pasture</b>	107	43.85
<b>Agro forestry</b>	72	29.50
<b>Crop cultivation</b>	34	13.95
<b>Other modes</b>	31	12.70
<b>Total</b>	244	100

**Source:** Field Survey 2008

### **COST-BENEFIT ANALYSIS:**

As the agricultural activity in India is no longer a subsistence one rather it has become an economic activity where the farmers are more concerned with cost benefit analysis of the agricultural produce. Thus an attempt was made to calculate the land holding wise cost -Benefit analysis as shown in the Table 4.

**Table 4: Land holding wise Cost-Benefit Analysis (Agriculture)**

<b>Category</b>	<b>Land holding (Hectares)</b>	<b>Average Input Rs./Hect. (I)</b>	<b>Average Output Rs./Hect. (O)</b>	<b>Average Income Rs./Hect. (In)</b>	<b>Benefit From Agriculture (Per cent/Hectare) <math>B=(O-I)/I</math></b>
<b>Small</b>	0-8	6800	17400	8600	126.47
<b>Medium</b>	8-12	8470	20423	9853	116.32
<b>Large</b>	12-15	8080	16960	8880	109.91

**Source:** Based on field survey 2008

It was observed that the farmers having small landholdings get a benefit of 126.47 per cent over their input cost per hectare while the farmers of medium and large sized land holdings get a benefit of 116.32 and 109.91 per cent respectively. Here we can easily see the trend of decreased income per hectare as the size of the land holdings is increased. The probable reason for this seems to be the different land use

pattern among the various farmers in different categories. The farmers of small land holdings tend to cultivate wheat and rice only and other crops are not cultivated much while the farmers having large land holdings cultivate sugarcane, bajra, maize, potato etc. The farmers having medium size of land holdings have to employ agricultural labours whereas the farmers having small size of land holdings do not require any labour and generally work in their fields themselves. The small farmers often involve their family members in various agricultural activities from sowing to marketing thus their per hectare input cost is much lower than other farmers. The farmers having large size of land holdings generally use tractors and other machines during the agricultural production thus their input cost per hectare is less than farmers having medium sized land holdings.

### **Cost-Benefit Analysis of Use of Common Land Resources**

The Cost-Benefit analysis for the CLR's was also done considering the per hectare input and output. The input and output was found to be different in different modes of utilization and so was the percentage of profit from various uses of the CLR's as shown in table 5.

**Table 5: Cost-Benefit Analysis of Use of Common Land Resources**

Category	Average. Input/Hect.	Average. Output/Hect	Average. Income/Hect	Per cent of avg. Input/Hect.
Pasture	850	2400	1550	182.35
Agro-forestry	2000	5200	3200	160
Crop Cultivation	6700	16500	9800	146.26
Other	0	1000	1000	100

Source: Field Survey 2008

### **Cost-Benefit Analysis of Total Income:**

The income generated from the use of Common Land Resources is additional income over the agricultural income. Thus cost benefit analysis of the total income from agricultural and use of Common Land resources was attempted to find out the share of income from CLR's in the total income. Thus the average income per hectare of landless, small, medium and large farmers was calculated separately on the basis of the following formulas:

#### **1. Benefit from Agriculture –**

**TLa** = Total land holdings under agriculture of all the respondents under a category farmers

**Tla** = Total input cost (in Rs.) in agriculture of all respondents under one category of land holders

**TOa** = Total output obtained (in Rs.) from agriculture by all respondents under one category of land holders

Total Benefit from Agriculture **TBa = TOa – Tla**

Average Input /Hectare **Ala = Tla /TL**

Average Output /Hectare **AOa = TOa /TL**

Average Benefit/Hectare **ABa = TBa/TL**

## 2. Benefit from CLR Utilization-

**TLc** = Total CLR utilized by all the respondents under a category of farmers

**Tlc** = Total input cost (in Rs.) in CLR of all respondents under one category of land holders

**TOc** = Total output obtained (in Rs.) from CLR by all respondents under one category of land holders

Total Benefit from CLR's **TBc = TOc-Tlc**

Average Input /Hectare **Aic =Tlc /TLc**

Average Output /Hectare **AOc =TOc /TLc**

Average Benefit/Hectare **ABc =TBc/TLc**

## 3. Total Benefit -

Total Benefit/Hect. **TB=ABa+ABc**

Per hectare Percentage share of total benefit from CLR's

**PBcl = (ABc/TB)\*100**

**Table 6: Per Hectare Cost-Benefit Analysis of Agricultural and C.L.R Utilization**

Category	AGRICULTURE (In Rs.)			CLR (In Rs.)	TOTAL BENEFIT (In Rs.)	
	Avg Agri. Input/Hect (Ala)	Avg. Agri. Output/Hect (AOa)	Avg. Ag. Benefit/Hect (ABa)	Avg. CLR Benefit/Hect (ABc)	Total Benefit/Hect (TB)	Percent Benefit from CLR Utilization (PBcl)
<b>Landless</b>	0	0	23100	33000	52800	62.50
<b>Small</b>	17556	38808	21252	10780	28072	38.40
<b>medium</b>	83875	181610	86229	10604	91333	11.61
<b>Large</b>	133320	273240	139920	8923.2	143343	6.23

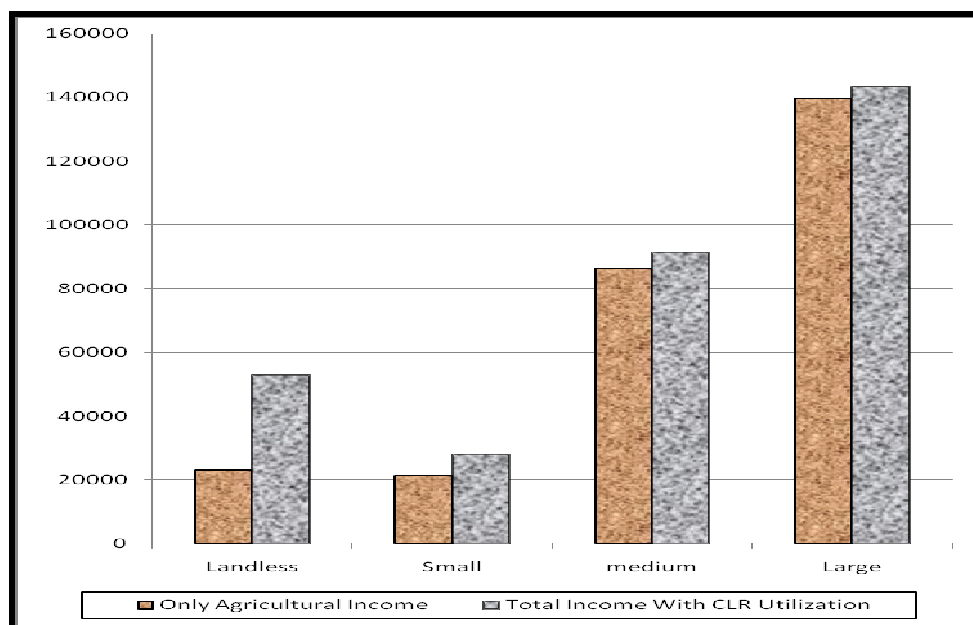
**Source:** Based on field survey 2008

The landholding wise cost-benefit analysis for CLR users given in table 6 reveals that the maximum benefit by CLR utilization is being experienced by the landless people followed by small, medium and large land holders.

## COMPARATIVE ANALYSIS:

Figure 3 clearly indicates that the total per hectare income of the farmers of different categories is increasing with the utilization of the CLR's. The maximum benefit is realized by the landless and the small farmers and it forms a major share of their total income. Figure No. 2 clearly shows that the per hectare income of the landless villagers is doubled with the utilization of CLR's and the income of small farmers is increased by 38.40 percent. Thus the CLR's significantly affecting the livelihood of the landless and small farmers.





**Figure 3: Comparative per Hectare Landholding Wise Agricultural and Total Income**

#### **SUGGESTIONS FOR OPTIMAL USE OF COMMON LAND RESOURCES:**

The study regarding role of CLR's on the livelihood poor villagers revealed that CLR's have a significant impact upon the livelihood of landless people and small farmers. Thus the optimal use of the CLR's is necessary for sustainable development. There are few suggestions as follows:

- Proper survey of the CLR's should be undertaken by the government to analyze their present state.
- The poor and landless people of any area should be allotted these lands for small period of time.
- The forests and pastures should be protected from misuse/ overuse.
- The government should encourage social forestry and Agro forestry for conserving the CLR, s.

#### **CONCLUSION:**

The study revealed that the CLR's are being used by 67.06 per cent of the total respondents. The maximum users were landless people followed by people having small, medium and large land holdings. The most profitable activity was found to be grazing as it gave a profit of 182.35 per cent over the input cost. The next one was Agro forestry with 160 per cent benefit followed by crop cultivation (146.26 per cent) and other uses (100 per cent). The maximum profit is obtained by the landless people and the share of CLR income is 62.50 per cent followed by farmers with small landholdings whose benefit from CLR's constitutes 38.40 per cent of their total income. Thus it becomes evident that there is a significant role of CLR's upon the livelihood of poor villagers.

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