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Impact of social forestry among the farmers of Jaunpur district (Uttar Pradesh)

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Abstract

The concept of social forestry is so far as it relates to conditions in rural India is not new. Only as far back as 6-7 decades when one reviews the economy of rural India, one comes across the basic fact that a large part of the rural population used to sustain itself on the availability of forest produce in one way or the other. In the past there used to be small village forests attached to practically every village or in some cases for groups of villages. These village forests were not necessarily classified as forest land. In fact they were classified as cultivable wastelands or tree-lands and miscellaneous growth. However, when the population started growing rather at a faster rate due to various health measures adopted by the Government, the forests which used to meet the requirements of the villagers in respect of firewood, small timber, grass, fruits and seeds, etc. were the first to be cleared for food production because food was definitely more important than any other produce. The situation in the thickly populated Indo-Genetic plain became so worse that in many of the districts now there are hardly any village forest lands. With the basic resource of firewood supply thus gone, the villagers were forced to burn cow dung as fuel. This led to reduction in the quantity of available organic manure in the agriculture fields leading to a gradual reduction in their productivity. Thus a vicious circle has been created in which, in many cases, even the normal food production became lower than before.

Keywords- Distribution of respondents, social foresty, benefit

Introduction

India is one of the important developing countries in the world, which is largely inhabited by rural poor and agriculture as their predominant occupation. Majority of Indian population lives in the villages. India, being a vast fertile country, situated in

the southern-part of Asia. India population in 2022 is estimated to be 1.40 Billion (140 Corers), According to Unique Identification Aadhar India, updated December, 2020, by mid of year 2020 the projected population is 1,370,508,600. With roughly one-sixth of the world's total population, India is the second most populous country, after China and US is the third populous country in the world. It's located in South Asia bordering with Bay of Bengal to the east, Arabian Sea in the west and Indian Ocean in the south. India is 7th largest by land and occupies 2.41% of the world's land area but supports over 18% of the world's population. 68% of population lives in villages and 32% lives in cities and towns. Currently population growth rate is 1.13% as on 2017 and expected to rise more than 1.5 billion people by 2030, and is set to reach 1.7 billion by 2050. The concept of social forestry is a part of cultural heritage of tree farming of local people and existed in ancient time also. The demand of fuel wood, fodder, timber and food for ever growing population has resulted in the clearance of trees even from the community lands. Fruits have special significance to human beings as a protective food, the well established and properly maintained orchard alone or grown with suitable tree inter-crops can offer better yield and income per unit area as compared with cereal crops some fruits are hardly and are best suited to wasteland, arid and semi-arid regions for getting higher income with minimum inputs. Fruits plants also provide aesthetic beauty, purify air arid and decrease pollution (https://www.populationu.com). In view of the importance of forests and with a view to protect them, a National Forest Policy was announced by the Government of India in 1952. The resolution which formed the basis of the policy proposed that the land under forests be steapdily increased to 33.3 per cent of the total area, 60 per cent in the hills and 20 per cent in the plains. Actually, good forest cover is only II per cent or so as this too is under heavy pressure.

The basic aims of Government's forest policy are (a) conservation of existing resources for safeguarding the environment, (b) Development and enlargement of the tree cover and resource-base to meet the basic needs of the people and the country. These needs arc for energy, small timber and fodder, (c) to develop minor forest produce for providing subsistence for certain communities living near forests. To maintain the ecological balance, the Government of India sponsored the forest (conservation) act of 1980, which, embodies a decision of the National Development Council. The act lays down that no state government or any other authority shall issue any order, without centre's approval, to permit forest land or reserve forest to be diverted for non-forest purposes. According to official data, the diversion of forest land during the five years 1980-1985 has been limited to 27,668 ha in unavoidable cases involving hydel and irrigation projects, power stations, mining, rehabilitation and oil exploration. The average diversity has been brought down from 1.5 lakh ha (before the enforcement of the act) to less than 6,000 hectares.

The Government forest development programmes lay emphasis on productive forestry and social forestry. Productive forestry seeks to raise man-made forest to meet the long term requirements to forests products in general and material for wood-base industries in particular. The Union Government encourages the formation of State Forest Development Corporations with central participation. These corporations arc assured long term loans internally as well as from the World Bank and its associates whenever possible.

Mateials and methods

Study was carried out in the state of Uttar Pradesh, which was purposively selected in view of the acquaintance and conversant of area and people especially on their language, culture, cropping system etc. The present study being the academic and time bound research, therefore, it was not possible to select the all district of Uttar Pradesh. Mango, the social forestry programme was being seen all over the state of Uttar Pradesh. The present investigation had required to have constant touch with the respondents and frequent visits of study area as well as the collect background data from the officials of the Department of Forests, therefore Jaunpur district of Uttar Pradesh was selected purposively with following reasons.

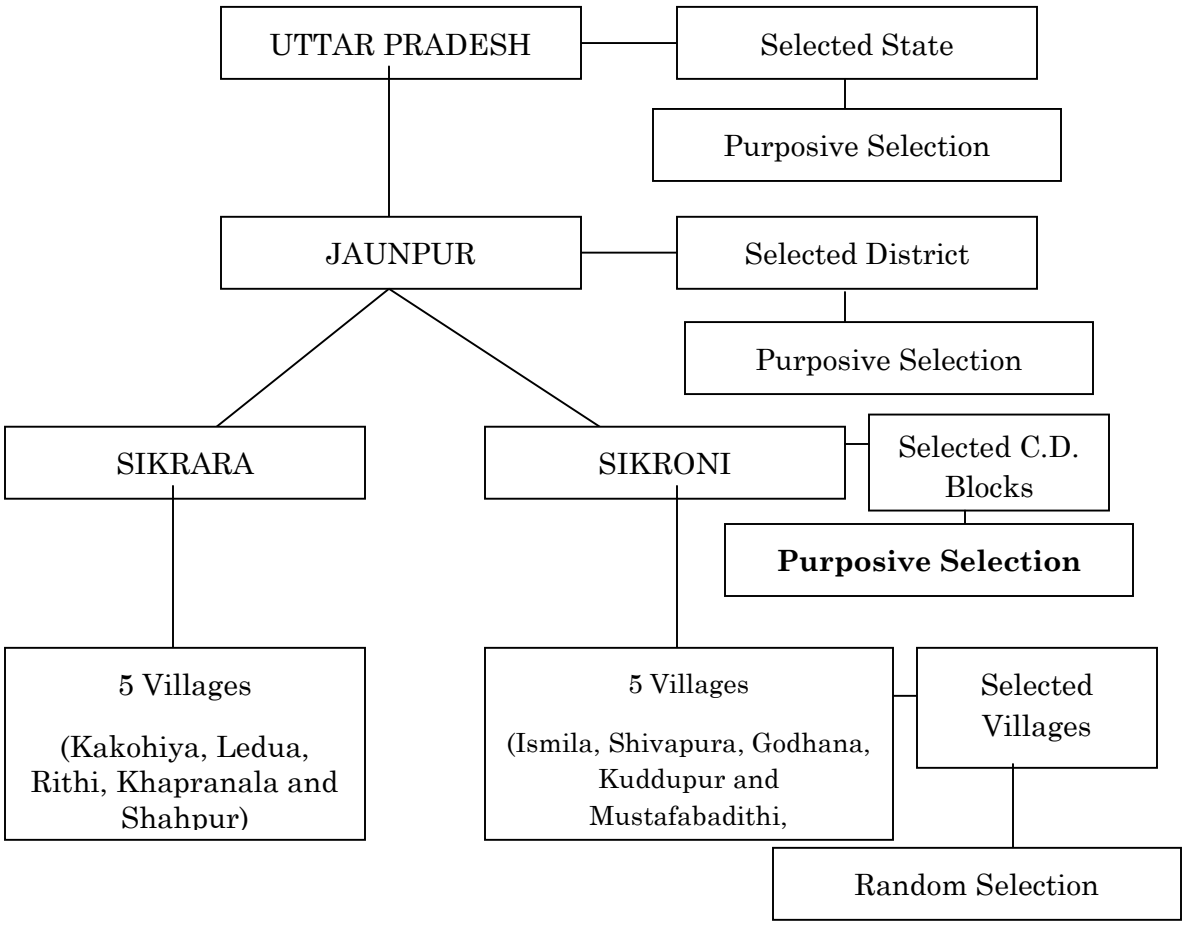
(i) Scholar being local of the district Jaunpur was conversant with locale, people, culture, and language, direct and rural life, which helped in many ways to collect the data authentically and smoothly.

(ii) The forest cover in Jaunpur district was 63 hectares during 2006-07 whereas during 1985-86 and under forest cover was 216 hectares. Therefore the growth of area under forests has been sluggish and negative.

(iii) District Jaunpur is Gateway of Eastern part of Uttar Pradesh which is identified as backward part of the state.

Our country being with full of diversity—therefore, to select the representative sample, multistage sampling technique was used for the selection of respondents. In light of this selection technique following steps and approaches were followed. A purpose sampling procedure was followed for selection of C.D. Blocks in order to get the representative sample of respondents for the present investigation. The Jaunpur district is administratively divided in 21 C.D. Blocks; there from only two were purposively selected viz. Sikrara and Sirkoni C.D. blocks where land under forest cover was 5 hectares and nil respectively. This selection was done to incorporate the highly progressive and least progressive blocks of the district so that implementation of social forestry programme could be judiciously estimated. Thereafter, five villages from each selected C.D. Block were selected randomly making a total of ten villages as the study area. The names of selected villages were Kakohiya, Ledua, Rithi, Khapranala and Shahpur of Sikrara C.D. Block and Ismila, Shivapura, Godhana, Kuddupur and

Mustafabad of Sirkoni C.D. Block. The system chart of selected locale of study is as here under:



To conduct the comprehensive study as per the formulated objectives the selection of respondents was made on the basis of stratified random sampling method. The strata of respondents were made according to their possession of land area. Therefore in the first stage village wise lists of farmers who had adopted the social forestry programme with special reference to micro planning technique were collected from the Social Forestry Division of Forest Department of Jaunpur district. Thereafter the farmers of each list were prepared according to the possession of land and further been classified and categorized as big, medium and small as per the Government of India classification. Thereafter, overall 12 farmers in the ratio of 03, 03 and 06 farmers of big, medium and small categories, respectively were selected from the each village wise list, where 35, 35 and 50 farmers of big, medium and small categories were selected as respondents making the total sample of 120 respondents.

Results and discussion

Distribution of respondents according to their age

Age is an important factor in the society which has definite role in the process of decision making. The maturity of age affects the role of reception, acceptance and adoption of any information/innovation. The age of respondents was categorised in three groups in view of their maturity, viz. young (below 35 years), middle (36-50 years) and old (above 50 years). The table 1 presents distribution of respondents according to their age categories.

Table 1. Distribution of respondents according to their age

S. No.	Age category	Number of respondents	Percentage
1.	Young	28	23.33
2.	Middle	45	37.5
3.	Old	47	39.16

The Table 1 reveals that majority of 39.16 per cent respondents were of old age followed by 37.5 per cent respondents of middle age and remaining 23.33 per cent respondents were of young age category.

Distribution of respondents according to their Caste

Caste is an important attribute to get an image or general description of individuals, their participation in different activities and so on. The caste system has deep roots in Indian society. Each caste maintains and enjoys own social system and pattern of life. Each individual is identified with his/her caste in the society. However, Indian Government is trying to cast out the caste but even after 63 years of efforts the caste plays a significant role in many ways in the society. Therefore the variable was selected to study its state of influences on communication behaviour and interest pattern of various categories of farmers. The selected respondents were grouped in four categories on the basis of their caste. The frequency distribution of the selected respondents according to their caste is presented in table 2.

Distribution of respondents according to their Education

It refers to the formal education and degree the respondents have acquired through systematic schooling. The education of farmers is not only plays role in increasing socio-economic status but also responsible to increase the extension contact, mass media exposure and communication behaviour of farmers. Therefore the education variable was taken into account to study its relationship with dependent variables as above. The table 3 reveals the distribution of respondents according to their level of education as per the SES (R) scale Trivedi (1963).

Table 2. Distribution of respondents according to their caste

Sl.No.	Categories	Number of respondents	Percentage
1.	General	47	39.16%
2.	Scheduled Caste	31	25.84%
3.	Scheduled Tribe		_
4.	OBC	42	35.00%

The Table 2 reveals that majority of 39.16 per cent respondents were of general caste category followed by 35.0 per cent and 25.84 per cent respondents were from other backward caste and scheduled caste categories, respectively.

Table 3.Distribution of respondents according to their education

S. No.	Category	Number of respondents	Percentage
1.	Illiterate	13	10.83%
2.	Primary	30	25.00%
3.	Junior High School	27	22.50%
4.	High School	25	20.83%
5.	Intermediate	15	12.5%
6.	Graduate and above	10	08.33%

Table 3 reveals that, majority of 25.00 per cent respondents had education up to primary level followed by 27 22.50 per cent, 20.83 per cent and 12.50 per cent respondents who had education up to junior high school, high school and Intermediate levels, respectively. There were 10.83 per cent respondents, in the sample, had no schooling. However, 08.33 per cent respondents who had education up to graduation & above.

Distribution of respondents according to their Occupation

It refers to the nature of job or activity persuaded by the respondents for their livelihood. The occupation plays an important role not only for the determination of socio-economic status of farmers but also plays an important factor to nurture the communication behavior.

Table 4.Distribution of respondents according to their occupation

S. No.	Category	Number of respondents	Percentage

1.	Cultivation	77	64.18%
2.	Cultivation and Service	23	19.17%
3.	Service	07	05.83%
4.	Cultivation and Business	13	10.83%

Table 4 reveals that majority of 64.18 per cent of respondents who were engaged in cultivation profession followed by 19.17 per cent and 10.83 per cent of respondents who were engaged in cultivation and service and cultivation & business, respectively. There were 05.83 per cent respondents who were engaged in service.

Distribution of respondents according to their Social Participation

Social participation refers to the activities of individual in the society and its organization. The state of social participation reveals the association responsibility and concerned of individual towards the society welfare. The social participation of individual also indicates high state of interpretation, understanding and acceptance of knowledge. The Table 5 shows the state social participation among the respondent.

Table 5. Distribution of respondents according to their social participation

S. No.	Category	Number of respondents	Percentage
1.	Not the member of any organization	76	63.33%
2.	Member of organization	44	36.67%

The Table 5 reveals that majority of 63.33 per cent respondents had no association with any social organization. There were 36.67 per cent respondents who were the member of local organization.

Distribution of respondents according to their Social Status

The social participation is a phenomenon of community living. Social participation at village level primarily includes active participation in the affairs like, Gram Panchayat, the Yuvak Mangal Dal, the Ramleela Committee and like The People who have social interaction in local organisation and leadership attitude, do participate in developmental process, other villagers simply become followers. It is observed that farmers who have interest in social activities are more prone to change and give care to the innovations.

Table 6. Distribution of respondents according to their social status.

S.No.	**Categories**	**Number of respondents**	**Percentage**

1	Low	44	36.66 %
2	Medium	50	41.67 %
3	High	26	21.66 %

Table 6 shows that 41.67 per cent of respondents had medium social status followed by 36.66 per cent and 21.66 per cent respondents had low and high social status. The data supports the earlier findings that even after 63 years of independence majority of farmers are not in the main stream of country. They are still ignorant of development, traditionalist, and hardliner and shy in nature. They hesitate to participate in the social activities.

Impact of social forestry

As it is apparent from what has been stated earlier pares that the special feature of the social forestry programme was primarily to meet the day to day demand of firewood, grass, fodder etc. and to assist in providing the opportunity of regular additional income. The impact of social forestry programme as a ground relating understudy was worked out with following dimensions.

2.1- Indirect Benefits 2.2-Direct Benefits

2.1. Indirect Benefits

The reactions of farmer respondents were recorded to study the impact of various social forestry schemes on fodder and fuel wood supply, employment and income generation in rural areas. The summary of responses is presented in table 7.

About 61.66 per cent of the respondents had informed that there was no change in the fodder supply situation while 21.67 per cent of them felt that the fodder availability was improved since the initiation of social forestry schemes. About 69.17 per cent farmers were of the opinion that there was no change in the price of fodder and only 2.5 per cent felt that the fodder price has decreased after initiating social forestry" schemes. The villagers have been using agricultural waste, tree branches, twigs and leaves, dung cake, biogas and electricity as energy for cooking. It was difficult to estimate the proportion of different sources of this energy, but most of the respondents did not consider the supply of fuel wood as a serious problem. People did cut the trees grown on road sides, but did not feel the urge for planting fuel wood species in their own field. Under such a situation, 60.0 per cent respondents observed no change in fuel wood availability while only 15.0 per cent beneficiaries have felt that the availability has improved since the initiation of social forestry schemes.

Table 7. Indirect Benefits of Social Forestry

Indirect Benefits	Opinion of the respondents				Total
	No Effect	Increase	Decrease	Not Aware	
Fodder availability	74 (61.66)	26 (21.67)	2 (1.67)	18 (15.00)	120 (100.0)
Fodder price	83 (69.17)	3 (02.50)	5 (04.16)	29 (24.17)	120 (100.0)
Fuel-wood availability	72 (60.00)	18 (15.0)	4 (3.34)	26 (21.66)	120 (100.0)
Fuel-wood price	63 (52.5)	15 (12.5)	4 (3.34)	38 (31.67)	120 (100.0)
Employment situation	03 (2.5)	99 (82.5)	03 (2.5)	15 (12.5)	120 (100.0)
Wage rate	08 (6.66)	94 (78.33)	5 (4.17)	13 (10.84)	200 (100.0)

About 52.5 per cent of farmers observed no change in the price of fuel wood, while about 12.50 per cent and 3.34 per cent respondents have felt that there is increase and decrease in fuel wood price after the introduction of social forestry schemes, respectively. Most of the participants of community plantation and recipients of seedlings informed that the social forestry schemes did not affect either the availability or price of fuel wood and fodder in their villages. Similar observations were made by Lele (1988) and others while studying the impact of community plantation in rural areas. While the community plantations could not make significant impact on fodder and fuel wood supply due to coverage of smaller areas and poor rate of survival, most of the plantations established on private lands were yet to be harvested.

2.1.1 Employment Generation

About 82.50 per cent respondents had expressed that the employment opportunities have increased after introducing social forestry schemes, while only 2.50 per cent felt a decrease. Similarly, 78.33 per cent respondents have felt that the wage rate has increased with better employment opportunities. The beneficiaries of community plantation and other Development Schemes have also felt that such schemes could provide additional employment and higher wages. However, this view was not endorsed by a majority of the recipients of seedlings. This may be because most of the farmers except the participants of farm forestry schemes had planted saplings only in a small area and carried out the operations during their spare time, without engaging labourers as reported by Muranjan (1988). The employment potentials of afforestation schemes were yet to be tapped because neither the trees had reached the stage of harvest nor any efforts were being made to organise post-harvest processing of both wood and minor forest produce in these villages.

2.1.2 Other indirect Benefits

Other indirect benefits such as reduction in stray movement of livestock, decrease in the incidences of floods, increase in agricultural production and improvement in micro« climate and environment could neither be estimated nor realised by the people in these villages.

2.2 Direct Benefits

The direct benefits of social forestry schemes were receipt of wages, supply of inputs and income generated in the form of outputs. It was observed that wages were paid to the participants of schemes such as community plantation, establishment of farm forestry under the Western Ghats Development project and Gramayan. Partial wages were paid to the participants of 'kisan nursery' scheme. Other inputs like seeds, fertilizers, pesticides and watering equipment were also provided under the Western Ghats Development scheme. However, a majority of the respondents who had participated in other schemes had received only seedlings either free or at a subsidised price. It was observed from the data presented in table 8 that all the respondents had received seedlings of different tree species, out of which 80.5 per cent had received free of cost, 19.5 per cent had procured at a subsidised price.

Table 8. Number of Seedlings Received by the Respondents under Different Social Forestry Scheme

No. of Seedlings	No. of Recipients		
	Free of Cost	At subsidized price	Total
Up to 50	36 (30.00)	5 (04.17)	41 (34.16)
51–200	25 (20.83)	7 (05.83)	32 (26.67)
201–500	16 (13.34)	3 (2.5)	19 (15.83)
501–1000	8 (06.66)	2 (1.67)	10 (08.33)
1001–2000	04 (03.33)	2 (1.67)	06 (05.00)
2001–5000	06 (05.00)	3 (2.5)	09 (07.5)
5001 and above	(0.0)	3 (2.5)	03 (2.5)
Total	95 (79.17)	25 (20.83)	120 (100.0)

The number of seedlings received by the beneficiaries ranged between 10 and 5000. About 34.16 per cent beneficiaries had received up to 50 seedlings followed by 26.67 per cent, and 15.83 per cent respondents had received 51 to 200 seedlings and 201 to 500 seedlings, respectively. Remaining 23.33 per cent respondents had received 501

seedlings to more than 5000 seedlings, whereas 2.5 per cent respondents had received more than 5000 seedlings on subsidized rates.

Conclusion

Indirect benefits - The social forestry programme did not create any impact either on employment generation or on fodder and fuel supply situation. Other anticipated indirect benefits such as reduced movement of livestock, improvement in environment reduction in incidences of flood, draught and soil erosion which in turn benefit agricultural production were neither estimated nor realized by the community.

2. Direct benefits-The direct benefits of social of social forestry programmes where labour wages were paid to the participants of community plantations and special farm forestry schemes initiated for SC/ST families, seedlings were made available to all the interested farmers free of cost or at subsidized price. There were 79.17 per cent respondents who were supplied seedlings free of cost and only 20.83 per cent were supplied at a subsidized cost. It was too early to estimate the income generated from these trees as many of the plantations were established only 3-5 years ago.

References

1. Perdana, A., Roshetko, J. M. and Kurniawan, I. (2012). Forces of competition: smallholding teak producers in Indonesia. International Forestry Review, 14(2): 238 248.
2. Pirard, R. and Irland, L. C. (2007). Missing links between timber scarcity and industrial\ overcapacity: Lessons from the Indonesian Pulp and Paper expansion. Forest Policy and Economics, 9(8): 1056-1070
3. Pirard, R., Petit, H. and Baral, H. (2017). Local impacts of industrial tree plantations: An empirical analysis in Indonesia across plantation types. Land Use Policy, 60: 242-253
4. Sood, K.K. (2006). The influence of Household Economics and Farming Aspects on Adoption of Traditional Agroforestry in Western Himalaya. Mountain Res. And Dev., 26(2): 124-130.
5. Singh, D.V. and Sikka, B.K. (1993). Impact evaluation study - National Forestry Project - Himachal Pradesh, Agro-Economic Research Centre, Himachal Pradesh Univ., Shimla.
6. Sayamni, P. (1994). Agro-forestry adoption patterns in three selected integrated social forestry projects in oriented Mindoro, The Phillippines, College, Laguna: 201.

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