
FARMERS PREFERENCES FOR EXTENSION TECHNOLOGIES UNDER SOCIAL FORESTRY AND FARM FORESTRY IN KARNATAKA

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The forest cover in India is dwindling at an alarming rate. The indiscriminate plunder of forests has reduced India's forest cover from 23 per cent of total land area in 1951 to 10.7 percent today, the reasons being the increasing population and that of cattle head and their pressure on forests for food, fuel and fodder.

Karnataka state, which has diversified agroclimatic conditions, is having a geographical area of 19.2 million hectares, out of which 3.86 million hectares of land is under forests. However satellite imageries have revealed that only 2.1 million hectares is under dense forest. The demand projections on requirements of forest by 2010 A.D. for the state is estimated at 50 million cubic meters of timber, whereas the present production including man made forests is assessed at 1.5 million cubic meters (Karnataka Forest Department Report, 1988). To halt the relentless deforestation and ameliorate the present environment, a massive programme involving people, became the need of the situation (Shepherd, 1984). Traditional development and management of forests will not succeed in meeting the rural and urban population's basic needs for forestry products, and therefore, development of forest resources outside the forest through active participation of local communities has assumed greater importance and hence the concept of social forestry (Pant, 1979).

The social forestry programme is envisaged to create an overall impact in the social and economic dimensions of rural life. Rural India, by and large, consists of farmers whose participation in the programme determines its success. Farm forestry, which is one of the components of social forestry

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programme, ensures the participation of farmers and makes them more “tree conscious”. Though a lot of research information has been generated in cultivation of different forest species, little has been done with respect to knowing farmers knowledge level about social forestry and farm forestry, their preferences for extensive technologies and sources for information, and to know the difficulties encountered by them. Further, the need for conducting research on these items was emphasized by Shah (1979).

Therefore, the present study was undertaken with the following objectives:

1. To find out the knowledge level of farmers regarding social forestry and farm forestry programme.
2. To identify the appropriate extension methods for transfer of social forestry and farm forestry technologies.
3. To locate the sources of information in respect of social forestry and farm forestry.
4. To identify the constraints in forestry expansion programme in private lands.

Methodology

This study was conducted during the year 1992 in Bangalore rural district of Karnataka state. One hundred and twenty farmers consisting of sixty each of big and small farmers, in whose field there was a forest crop species three year old and above, were selected randomly for the study.

After collecting benchmark information from the farmers, various extension methods were adopted to educate these respondents on forestry expansion programmes in a fortnight's duration, and once again information was collected to know the farmers preference for extension technologies. The data were collected by personally interviewing the farmers with a structured interview schedule. Simple percentages were worked out to analyze the data.

Results and Discussion

Knowledge level of farmers pertaining to social forestry and farm forestry programmes are summarized in Table 1.

Table 1. Knowledge of farmers regarding social forestry and farm forestry programme.

(n : Small Farmers = 60; Big Farmers = 60)

Sl. No.	Specific knowledge component	Knowledge level of small farmers						Knowledge level of big farmers					
		Low		Medium		High		Low		Medium		High	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1.	Knowledge about the programme and its initiation	48	80.00	12	20.00	0	0.00	20	33.33	31	51.67	9	15.00
2.	Knowledge about programme objectives	51	85.00	9	15.00	0	0.00	36	60.00	19	31.67	5	8.33
3.	Knowledge about cultivation aspects of popular farm forestry species of the region	14	23.33	40	66.67	6	10.00	9	15.00	40	66.67	11	18.33
4.	Knowledge about other tree species and their use	18	30.00	30	50.00	12	20.00	7	11.67	23	38.33	30	50.00
5.	Long term impact of social forestry and farm forestry on environment and economic development	22	36.67	28	46.67	10	16.66	0	0.00	18	30.00	42	70.00

As many as 48 and 51 small farmers had low-level knowledge about the initiation and objectives of forestry programmes, respectively. Crop production in marginal holdings is the only life line activity of a majority of small farmers and the limited access to mass media perhaps prevented them from knowing more about social forestry programmes, which is evident from the findings in Sinha and Parshad (1966) and Geetha Kutty (1982).

Majority of small farmers (66.67%) exhibited medium level knowledge in respect of cultivation of popular farm forestry species of the region. Similarly half the number of farmers reported, that they knew about other tree species and its use. Only ten small farmers had higher-level knowledge about the impact of social forestry and farm forestry on environment and economic development. It is likely that, during off-season, the resource poor farmers work on the farms of resource affluent farmers as labourers and in this process they might have gained better knowledge on the operations involved in cultivation of popular species and uses.

A majority of big farmers were in the medium knowledge category with respect to social forestry programme initiation and cultivation aspects of popular farm forestry species of the region. These findings are in conformity with the findings of Dixit (1988). A vast majority of big farmers had high-level knowledge about other tree species and their uses and long-term impact of social forestry programme on environment and economic development. This appreciation for forestry could have been the result of finding alternates for crop production, as access to mass media and surplus land overweigh in favour of labour scarcity as witnessed by the modernization trend.

Though almost all the extension methods were popular among the small farmers, film shows and method demonstration were highly preferred extension technologies. It was obvious film shows provide entertainment in addition to information. Demonstrations were inevitable in teaching skills pertaining to nursery techniques, method of planting and pruning, while farm and home visit, video shows and method demonstration were the most preferred extension technologies among big farmers. Since they have ready access to electronic media, they might have preferred video cassettes to gain first hand information and call upon the extension workers for trying out a practice.

Table 2. Farmers' preferences for extension technologies under social forestry and farm forestry

(n : Small Farmers = 60; Big Farmers = 60)

Sl. No.	Extension technologies	Small farmers		Big farmers	
		No.	%	No.	%
1.	Farm and home visit	42	70.00	60	100.00
2.	Night discussion meetings	47	78.33	28	46.66
3.	Method demonstration	48	80.00	45	75.00
4.	Field visits	42	70.00	22	36.66
5.	Exhibition	45	75.00	40	66.66
6.	Film show	58	96.66	36	60.00
7.	Slide talk	45	75.00	36	60.00
8.	Video show	42	70.00	52	86.66

Table 3 revealed that most of the forestry expansion activities seem to take place with the information network available in the village itself among farmers irrespective of categories. Cent per cent of small farmers opined that village leaders were the most consulted sources of information. It is likely that big farmers act as formal or informal leaders by virtue of their socio-economic status. Access to mass media might have made the big farmers rate video cassettes favourably over other extension methods.

Table 3. Sources of information in respect of social forestry and farm forestry

(n : Small Farmers = 60; Big Farmers = 60)

Sl. No.	Information sources	Farmers' response			
		Small farmers		Big farmers	
		No.	%	No.	%
1.	Forest officer	32	53.33	28	46.67
2.	Agriculture Assistant	25	41.67	35	58.33
3.	Extension Guide	24	40.00	20	33.33
4.	Relatives	54	90.00	60	100.00
5.	Friends	54	90.00	53	83.33
6.	Village leaders	60	100.00	30	50.00
7.	Radio	35	58.33	30	50.00
8.	Television	10	16.67	50	83.33
9.	Leaflets/Folders	5	8.33	25	41.67
10.	Books and Publication	3	5.00	25	41.67

It could be evidenced from Table 4 that all the items listed in the schedule were rated as the constraints experienced in forestry expansion in private lands. However, subsistence farming, lack of capital and availability of bank credit were rated as the most important constraints. These results are in line with those of Keith (1986) and Dixit (1988). This trend is quite obvious, since majority of small farmers were leading a marginalized life and are not in a position to sustain the long gestation period to realize profits from forestry crops and simultaneously at the cost of growing their staple food crops.

Table 4. Constraints experienced by farmers in forestry expansion in private lands

(n : Small Farmers = 60; Big Farmers = 60)

Sl. No.	Constraints	Farmers' reporting			
		Small farmers		Big farmers	
		No.	%	No.	%
1.	Lack of capital	58	96.66	48	80.00
2.	Delay in realising profits	58	96.66	51	85.00
3.	Lack of market for produce	53	83.33	45	75.00
4.	Non-availability of bank credit	60	100.00	40	66.66
5.	Subsistence farming	60	100.00	25	41.66
6.	Lack of suitable land for growing forest trees	48	80.00	28	46.66
7.	Lack of adequate supply of seedlings	51	85.00	38	63.33
8.	Lack of proper technical guidance	50	83.33	30	50.00
9.	Sentimental attachment to field crop	53	88.33	58	96.66
10.	Fear of ridicule by others	20	33.33	50	83.33
11.	Lack of facilities for transporting produce to market	48	80.00	40	66.66
12.	Distantly located nurseries	50	83.33	45	75.00

However, big farmers expressed sentimental attachment to field crops. In India, crop husbandry is an age old practice and farmers have all devotion for field crops, they even worship agriculture produce after its harvest. Many of them would not be willing to forsake agriculture, as it is opposed to family tradition among resource affluent farmers. It is a matter of pride for the big farmers to identify themselves as the leading growers of field crops. Big farmers have the fear of ridicule by others, as they might be branded as inefficient farmers. These two constraints did not arise among small farmers, as crop husbandry was the only source of livelihood.

Implications

There is a pertinent need to educate farmers on forest technologies through appropriate extension strategies, which could be advantageously exploited through identification, training and utilizing the key communicators in the village. Since lack of capital is a major impediment in forest expansion the commercial banks should provide long term loans for forest crops as in case of loans advanced to field crops. The big farmers need to be encouraged to take up forest crops as intercrop and border plantation without sacrificing food crops.

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