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Constraints in the Adoption of Eco Friendly Conservation Practices

L. Murali Krishnan[1], H. Philip[2], M. Chinnadurai[3] and V. Ravichandren[4]

ABSTRACT

Adoption of Eco Friendly Conservation Practices requires strong attitude and good knowledge level. Further, the adoption of Eco Friendly Conservation Practices has put fourth many constraints. This study was conducted in The Nilgiris district to assess the constraints and suggestions to overcome the constraints in the adoption of Eco Friendly Conservation Practices. Thus, to analyse the constraints Garett ranking method was used (Garett, H.E. et al 1973*). The study revealed that the constraints of labour scarcity, Lack of skill about the eco friendly conservation practices, lack of credit facilities, high risk, Insect pest and diseases management, Lack of awareness of agro environmental problems and farmer's attitude towards the Eco Friendly Conservation Practices are the major constraints in the adoption of Eco Friendly Conservation Practices.The study suggests educational, extension & training strategies for fostering the adopted of ECO friendly Conservation Practices.*

The term "sustainability" becomes both ambitious and ambiguous. If the policies on food security and income generation fail to address the environmental conservation in the biosphere region, majority of the poor farmers through the application of eco friendly conservation practices remain incomplete. (FAO, 2005).

According to Sunitha Varghese (1998) among the constraints, technological constraints, socio-economic, personal, physical and communication constraints in the adoption of eco-friendly protection technologies. Increased labour and time involvement followed by high risk involved were the major technological constraints. High cost of labour followed by high cost of inputs was the predominant socio-economic constraints. Major personal constraints were lack of knowledge to identify bio agents and pests and diseases. Labour scarcity, lack of training and weak extension programs were the most seriously felt communication constraints.

METHODOLOGY

The Nilgiris district of Tamil Nadu was purposively selected due to the prevalence of wide biodiversity. All four blocks was taken for this study. The samples of 80 farmers were selected from each block. Totally, 320 respondents were selected from the district. The respondents have been selected based on the simple random sampling technique with the support of the state department of agriculture. Post stratification work was done

1-Ph.D., Research Scholar, Department of Agricultural Extension and Rural Sociology, TNAU, Coimbatore, 2-Director of Extension Education, Directorate of Extension Education, TNAU, Coimbatore, 3-Director, CARDS, TNAU, Coimbatore and 4- Dean, Vanavarayar Institute of Agriculture, Pollachi, Coimbatore District.

to categorize the farmers in to adopters of Eco Friendly Conservation Practices and non adopters of Eco Friendly Conservation Practices. The data were collected using a pre-tested interview schedule. And, Garett ranking method was used to analyse the constraints.

Physical constraints

Table 1 reported that with respect to physical constraints, the labour scarcity has emerged as the major constraint with the garrett score of 71.15 as it was ranked first. This is followed by non-availability of inputs had a garrett score of 60.50 ranked second, poor quality of the inputs with a garrett score of 46.73 and ranked third, application of inputs has a garrett score of 39.73 and ranked fourth and purchase of inputs to the Eco Friendly Conservation Practices with a garrett score of 30.17 and ranked fifth.

Labour scarcity in agriculture was due to the non-availability farm labourers in that area.

Personal constrsaints

The table 1 infers that among the personal constraints, lack of skill about eco friendly conservation practices as the major constraint with the garrett score of 52.03 and as it was ranked first. This is followed by inability to attend the training programmes had a garrett score of 51.79 and ranked second and lack of knowledge about Eco Friendly Conservation Practices with a garrett score of 45.30 and ranked third.

Most of the farm labours are not practicing skill oriented eco friendly conservation practices. Promotion of skill oriented training programmes helps to improve the farmers confidence in the Eco Friendly Conservation Practices.

Socio-economic constraints

The table 1 indicates that among the socioe-conomic constraints, high cost of labour to the Eco Friendly Conservation Practices as the major constraint with the garrett score of 58.35 as it was ranked first. This is followed by lack of credit facilities had a garrett score of 53.95 and ranked second, high cost of inputs with a garrett score of 46.10 and ranked third and lack of price policy has a garrett score of 42.07 and ranked number fourth.

High cost of labour was the main constraint. Thus, the issues could be addressed by possible social capital building and policy formulation. It will enable the farmer's community to tackle the issues of adoption of Eco Friendly Conservation Practices in a sustainable manner.

Lack of credit facilities was the second important constraint. Separate financial support from the government exclusively for Eco Friendly Conservation Practices are very much essential.

Technical constraints

The table also revealed the technical constraints. Among thus, the identified high risk involved in Eco Friendly Conservation

Table 1.
Major Constraints faced by the Farmers in the Adoption of Eco Friendly Conservation Practices in The Nilgiris district of Western Ghats

Sl. No.	Constraints	Garrett Score	Rank
I	**Physical constraints**		
1.	Labour scarcity	71.15	I
2.	Non availability of inputs	60.50	II
3.	Poor quality of inputs	46.73	III
4.	Application of inputs	39.73	IV
5.	Purchase of inputs	30.17	V
II	**Personal constraints**		
1.	Lack of knowledge about Eco Friendly Conservation Practices	45.30	III
2.	Lack of skill about Eco Friendly Conservation Practices	52.03	I
3.	Inability to attend the training programmes	51.79	II
III	**Socio-economic constraints**		
1.	Lack of credit facilities	53.95	II
2.	High cost of labour	58.35	I
3.	High cost inputs	46.10	III
4.	Lack of price policy for eco friendly agricultural products	42.07	IV
IV	**Technical constraints**		
1.	Lack of technical guidance	53.51	II
2.	High risk involved	55.53	I
3.	Complexity of tools and techniques	46.96	III
4.	Lack of easy monitoring method	43.24	IV
V	**Environmental constraints**		
1.	Rainfall and other meteorological constraints	45.78	III
2.	Attack of insect pest and diseases	59.65	I
3.	Management of pest and diseases	55.44	II
4.	Soil erosion and drainage	39.55	IV
VI	**Extension constraints**		
1.	Lack of awareness of agro environmental problems	58.83	I
2.	Lack of local technical expertise	56.82	II
3.	Lack of success stories of Eco Friendly Conservation Practices adoption	48.62	III
4.	Lack of demonstrated impacts on Eco Friendly Conservation Practices	35.38	IV
VII	**Psychological constraints**		
1.	Culture	42.52	III
2.	Attitude	65.10	I
3.	Perceptions	50.51	II
4.	Lack of motivation from officials	41.15	IV

Practices as the major constraint with the garrett score of 55.53 as it was ranked first. This is followed by lack of technical guidance had a garrett score of 53.51 and ranked second, complexity of tools and techniques with a garrett score of 46.96 and ranked third and lack of easy monitoring method observed a garrett score of 43.24 and ranked number fourth.

Adoption of Eco Friendly Conservation Practices would naturally lower the risk status.

Environmental constraints

Attack of insect pest and diseases in Eco Friendly Conservation Practices has emerged as the major constraint with the garrett score of 59.65 as it was ranked first. This is followed by management of pest and diseases had a garrett score of 55.44 and ranked second, rainfall and other meteorological constraints had a garrett score of 45.78 and ranked third and lack of easy monitoring method observed a garrett score of 39.55 and ranked fourth.

To address these constraints, planting of native species as well as traditional varieties, long duration pest and disease resistance varieties and application of organic herbal pesticides improves the adoption of Eco Friendly Conservation Practices.

Extension constraints

Among the extension constraints, lack of awareness of agro environmental problems in eco friendly conservation practices was identified the major constraint with the garrett score of 58.83 as it was ranked first. This is followed by lack of local technical expertise had a garrett score of 56.83 and ranked second, lack of success stories in the adoption of Eco Friendly Conservation Practices with a garrett score of 48.62 and ranked third and lack of demonstrated impacts observed garrett score of 35.38 and ranked fourth.

Lack of awareness might be due to the poor recognition of the extension services and lack of sufficient publicity through different media. Thus, the adoption of Eco Friendly Conservation Practices could be achieved through Farmer Field Schools and Farming System Research and extension strategies.

Psychological constraints

Among the psychological constraints, farmer's attitude towards the Eco Friendly Conservation Practices as the major constraint with the garrett score of 65.10 as it was ranked first. This is followed by perception of the farmer had a garrett score of 50.51 and ranked second, farmers culture in the adoption of eco friendly conservation practices with a garrett score of 42.52 and ranked third and lack of motivation from the officials observed garrett score of 41.15 and ranked fourth.

Farmer's attitude, perception and cultural constraints reduces the motivation level from extension officials.

Thus, psychological mind set of farmers facilitate adoption of eco friendly conservation practices. The efforts from extension, research, supply of inputs, marketing agencies

were needed to facilitate the successful adoption of Eco Friendly Conservation Practices by the farmers.

CONCLUSION

In The Nilgiris district, restriction of the practices like introduction of high yielding varieties, exotic crop varieties, increased use of chemical fertilizers, pesticides and fungicides and identified tillage practices which reduce the considerable damage to the soil, water and the environment.

Farmers cooperation, cluster approach, participatory farmer first approach, farming systems based extension strategy are much required for successful implementation of the eco friendly conservation practices.

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