



Traditional Agricultural Practices followed by Tribals in Pachaimalai Hills

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ABSTRACT

Indigenous knowledge in the systematic body of knowledge acquired by local people through the accumulation of experience, informal experiments. The study was undertaken to identify various traditional operations by the tribal farmers of pachaimalai hills in Trichy District of Tamil Nadu. A sample of one hundred tribal farmers was selected from the respective hamlets and using Proportionate random sampling techniques. Nearly Ten indigenous agricultural practices were identified in various common indigenous agricultural practices. The data were collected with the help of well structured and pretested interview schedule majority of the respondents have been adopting almost all the identified indigenous agricultural practices.

INTRODUCTION

The term indigenous knowledge denotes a type of knowledge, that has evolved with in the community and has been passed on from one generation to another. This knowledge is generated and transformed through systematic process of observing local conditions, experimenting with solutions and readopting previously identified solutions to modified environmental, socio-economic and technological situations. [2].

In recent years indigenous knowledge is gaining significance and a number of scholars have sown considerable interest in the indigenous technical knowledge of rural people. It is also shown that in many cases these indigenous knowledge systems have Sophisticated technical component which enable people to deal with survival of the natural and cultural environments. [1]

In Tamil Nadu the total tribal population is rather small and scattered all over the state. Like the rest of India, The tribal population in the state is found to occur in and around hilly tracts. The tribal population in Tamil Nadu state is about 5.2 lakhs, representing 1.10 per cent of the total population of the state. The tribal farmers living at the "Pachaimalai Hills" of Trichy District of Tamil Nadu have their main occupation as agriculture. Keeping this in view the present paper focused on determining the traditional common agricultural practices.

MATERIALS AND METHODS

The study was conducted in Pachaimalai Hills of Trichy District. A sample of one hundred tribal farmers was selected from the tribal hamelets using proportionate random sampling technique. Nearly ten common indigenous agricultural practices were identified. The data were collected from the respondents with the help of well structured interview schedule.

RESULTS AND DISCUSSION

The extent of adoption of various common indigenous agricultural practices are presented in Table 1. The findings in Table 1 reveals that, almost all the common indigenous agricultural practices were found to be adopted by more than 80.00 per cent of the respondents except two practices viz., 'fumigation in closed containers for ripening of fruits' and 'displaying crow's carcass to scare away the birds' were adopted by 65.00 per cent and 61.00 per cent of the respondents respectively. Among the individual practices namely 'summer ploughing' was adopted by the 100.00 per cent of the respondents followed by 'tying of polythene sheets to scare away the birds' (97.00 per cent). 'shallow ploughing after summer

rain' (91.00 per cent), 'dusting of ash to control pests' (89.00 per cent), 'adding organic waste in FYM in the soil' (87.00 per cent), 'sheep penning and cattle penning' (86.00 per cent), 'digging the field burrows to kill the rats' (83.00 per cent), 'beating drums to scare away the birds' (70.00 per cent), 'fumigation in closed containers for ripening of fruits' (65.00 per cent) and 'displaying crow's carcass to scare away the birds' (61.00 per cent).

Table 1. Extent of adoption of various common indigenous agricultural practices. (n=100)

S. No.	Common indigenous agricultural practices	Total No. of respondents	Per cent
1.	Tieing of polythene sheets to scare away the birds	97	97.00
2.	Beating drums to scare away the birds	70	70.00
3.	Displaying crow's carcass to scare away the crows	61	61.00
4.	Summer ploughing	100	100.00
5.	Shallow ploughing after summer rain	91	91.00
6.	Dusting of ash to control pests	89	89.00
7.	Digging the field burrows to kill the rats	83	83.00
8.	Sheep penning and cattle penning	86	86.00
9.	Adding organic waste and FYM in the soil	87	87.00
10.	Fumigation in closed containers for ripening of fruits	65	65.00

It may be inferred that, almost all the respondents adopted the summer ploughing practices in main field. It may be due to the fact that summer ploughing helps in moisture conservation, eradication of weeds and control of soil erosion during off season. Further it was found that more than 97.00 per cent of the respondents followed the practices namely 'tieing of polythene sheets to scare away the birds' in field. It involves only less expenditure and it controls the bird damage during the maturity stage of the various crops in the hilly tracts. Because of these benefits, most of the farmers would have adopted this practice. The results are in accordance with the results Sivasankaran [6].

The Practices namely 'shallow ploughing after summer rain' was adopted by 91.00 per cent of respondents may be due to the advantages like moisture conservation control of the pest and disease and to tuning of soil properties in their field. The fourth important common indigenous practices namely 'dusting of ash to control pests' was adopted by 89.00 per cent of the respondents. Dusting ash to control the pest is a simple no cost technology and effective in controlling all kinds of pest. These advantages would have enabled them to adopt more. These findings are supported by the findings of Rajasekaran [5]. The table indicates that 86.00 per cent of the respondents were found to adopt the practices namely, 'application of sheep penning and cattle penning in the field'. Most of the respondents believed that the application of sheep and cattle penning improve the fertility of soil that leads to additional yield in their cultivation. Also, most of the respondents were having cattle and sheep in their homes and their manures are easily available and cost effective, when compare to chemical fertilizers. Hence, most of the respondents might have followed the above said practice. This findings is line with the findings of kanagasabapathi [4].

Adding organic waste and farm yard manure in the soil enriches the fertility of the soil and it is economical and easily available. This may be the reason for majority o the respondents (87.00 per cent) to adopt this practice. 'Digging the field burrows to kill the rats' was adopted by 83.00 per cent of the respondents. Digging the burrows is the common practice followed by all the respondents in their field before planting. It helps to control the rats, crabs effectively and it saves the water effectively. In addition it can be practiced very easily. Therefore they would have adopted this practice in their cultivation. The results are in accordance with the results of Kanagasabapathi [3].

The other two practices namely 'beating drums to scare away the birds' and 'displaying crow's carcass to scare away the birds' were followed by 70.00 per cent and 61.00 per cent of the respondents. These two practices are common and well established among the tribal farmers. Most of the respondents opined that beating the drums and displaying crow's carcass in their main field would result in scaring away the birds a low cost technology. Hence most of the respondents could have adopted this practice.

'Fumigation in closed container for ripening of fruits' was adopted by 65.00 per cent of the respondents, Since most of the respondents reported that this practice is being followed traditionally and it leads to earlier ripening of fruits.

CONCLUSION

If conclude that Nearly 10 common agricultural practices identified and almost all the common Indigenous agricultural Practices were found to be adopted more than 80.00 per cent of the respondents.

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