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PERCEPTIONS OF FARMERS CONCERNING SOIL AND WATER CONSERVATION PRACTICES – A CASE STUDY

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ABSTRACT

Farmers' perceptions have a crucial role in their decision-making. As a result, it is necessary to understand farmers' attitudes toward soil and water conservation and the socio-economic factors that influence them. This study evaluated farmers' perception of Soil and water conservation measures adoption in Anthiyur village of Erode district, Tamil Nadu, India, in 2018. The results revealed that about 87% of farmers were aware of soil erosion problems. Furthermore, almost all farmers acknowledged the presence of soil conservation measures, and 72% participated in conservation activities voluntarily. Hence, it is recommended a watershed development programme may be initiated in the area to provide continuous training and advice farmers to follow up on their land.

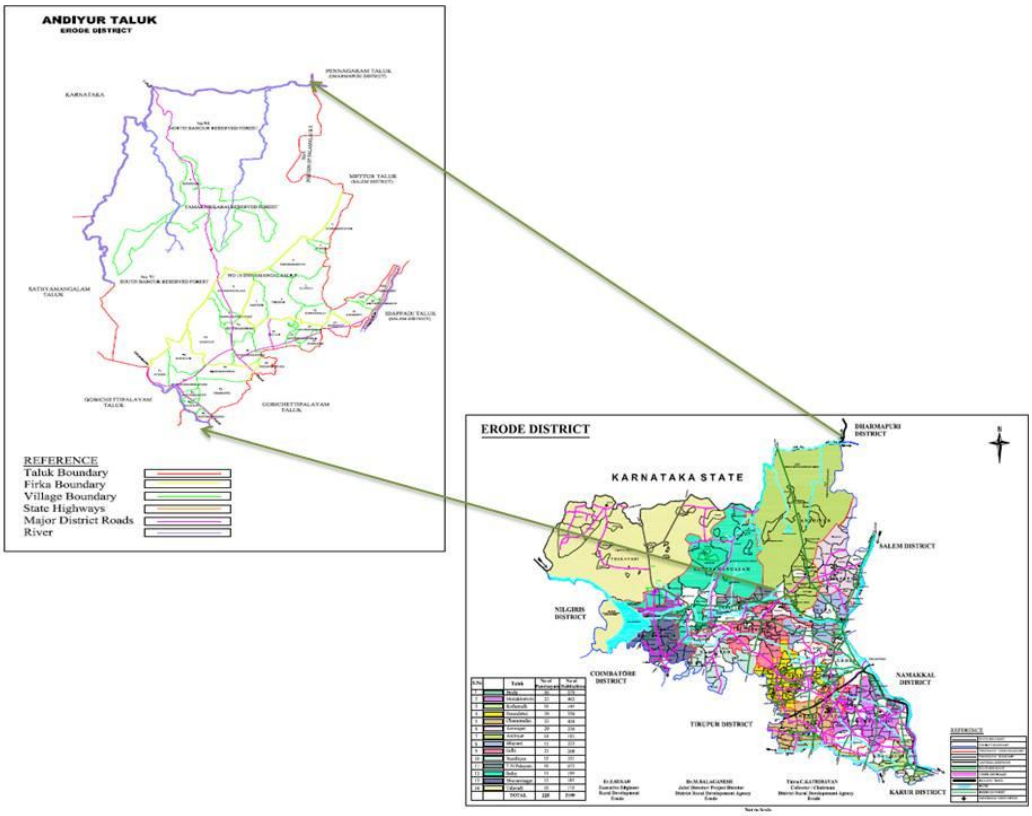
INTRODUCTION

Agriculture is the main part of most economies in the world most of the population depends on agriculture. But nowadays, the field is becoming a non-profitable and full of problems, especially land degradation due to soil erosion. Farmer's perception of soil erosion and alleviating this problem is a key social factor that plays a great role in their decision-making on land management practices for controlling soil losses. It affects soil conservation practices' selection and continued use (Pulido and Bocco, 2014). Hence, better understanding the factors that influence the adoption of SWC technologies has become an important concern which has stemmed from the high rate of land degradation. Therefore, the objective of this study was to assess farmers' perception of soil erosion and adoption of soil and water conservation technologies in Anthiyur village of Erode district, Tamil Nadu, India

METHODOLOGY

STUDY AREA

The study area (Anthiyur taluk) is located at 11.58°N 77.60°E it has an average elevation of 251 metres (823 ft). It is located in the extreme north of Tamil Nadu with a boundary of Karnataka. The temperature is moderate throughout the year except during summer. The study area is benefited by Northeast and Southwest monsoon seasons since it receives rainfall during both these seasons and scanty rainfall during winter and summer seasons with a mean annual rainfall of 830 mm (PWD)



(Source: Erode nic.in)

Fig.1. Location of the study area

This study conducted a survey on soil and water conservation to collect the details about farmers to conserve soil and water. A prepared questionnaire was used to collect the data. All parts of the questionnaire used open-ended questions. The survey instrument was developed based on previous research on this topic (Alemu et al., 2019). Items were designed to assess perceptions regarding issues in soil and water conservation and the usefulness of various sources of information. Respondents were encouraged to give written comments on the questionnaire. The questionnaire includes the questions such as the details about the farmer the land details, steps taken by them to conserve water, the cultivation methods and techniques

adopted in the cultivation, land tillage practices, fertilizers and nutrient management, based on the answers we provide rank to the farmers.

RESULT AND DISCUSSION

The farmers in the study area have been used to practice both indigenous and introduced soil and water conservation measures to conserve and maintain their farmland. Conservation measures like organic mulching, bunding, and multipurpose biological measures viz., vetiver grass (Vetiverial zizanioides) are practised. Out of the conservation measures, 13% of farmers practice advanced measures and tillage practices (cultivator, rotavator, disc plough). In water conservation and other parameters, 30% of farmers practice advanced techniques, 63% of farmers practice good techniques and 7% of farmers are in moderate level

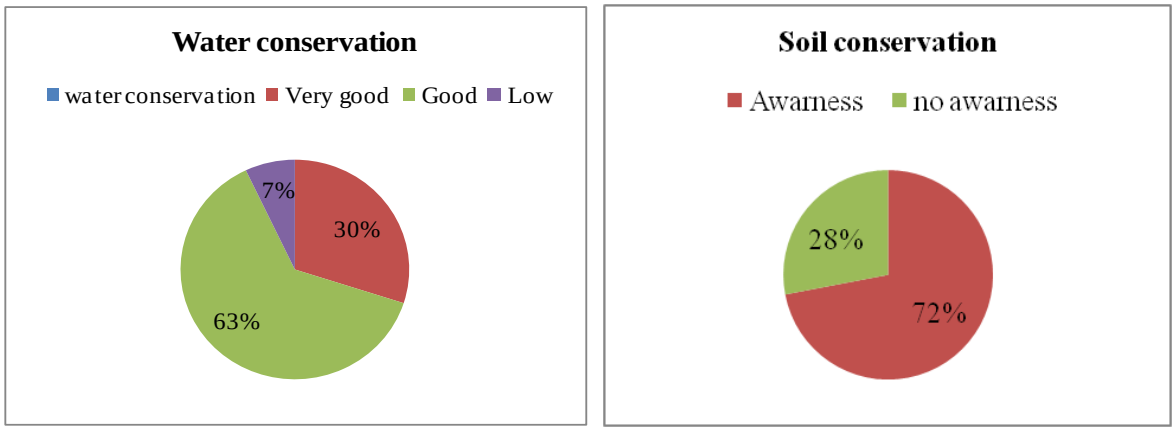


Fig 2. Soil and water conservation measures in the study area

CONCLUSION

The study assessed farmers' perception of adopting soil and water conservation technologies in Anthiyur village of Erode district. From the study, it was observed that many farmers are aware of soil and water conservation technologies. Hence, it is recommended a watershed development programme may be initiated in the area to provide continuous training and advice farmers to follow up on their land

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