



Farmers' Perception towards Transformation of Rice-based Cropping System into Tea Garden

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ABSTRACT

Transformation of agricultural lands into non-farm lands or plantations has got tremendous ecological chaos and ripples. Northern part of West Bengal is undergoing rapid changes in rural areas where new opportunities are emerging in the form of demand-driven and market-driven agriculture. Due to persistent low returns from traditional rice cultivation, the transformation of paddy fields into tea gardens has been a recent trend for this part of West Bengal. The present study has been conducted by selecting purposively three blocks from Alipurduar district and sixty respondents through random sampling, those who have already transformed their crop field into tea gardens from these blocks. The farmers' perception towards transformation is taken as dependent variable along with a score of fourteen independent variables. The responses are collected through a structured interview schedule. The study envisaged that the farmers' education level, number of family members engaged in the garden, their economic motivation, sources of information, risk orientation behaviour and distance from the tea processing factory showed significant contribution towards the transformation behaviour. The future impact of such transformation on the ecological dynamics in terms of livelihood, biodiversity restoration and ecological resilience can be brought under policy frameworks.

INTRODUCTION

Agricultural transformation has been a powerful approach to eradicate poverty and promoting economic stability over a few decades. Farming sector has evolved from a subsistence based labour intensive economy to a modernized, capital and knowledge intensive system. The transformation of traditional agricultural lands into plantation viz., coffee gardens, tea gardens, cardamom gardens (Sreeja et al., 2021), rice-shrimp or grass-cattle based integrated farming systems and a move from on-farm to more off-farm or non-farm incomes (Thanh et al., 2021) has got tremendous ecological chaos and ripples.

Since the earlier few decades, rice-based farming experiences a drastic reduction in yield loss which increases urban migration of the labour and shifting towards other non-farm activities. This trend

has gone up with the gradual decline of income from agriculture, non-availability of labour for farming, an increase of cost of input in agriculture, and rising expectations for an occupation that will be away from agriculture. It becomes important to promote the rural transformation to create more employment opportunities in the local situation which helps in improving the social condition of the local people (Haque et al., 2020a) and to check the migration (Ge et al., 2020).

Tea gardens have a distinctive ecological behaviour and produce a promising return. It increases biological activity including addition of organic matter, changing biodiversity (Haque et al., 2020b), and improves the quality of surface and groundwater by reducing erosion and salinity (Wenner, 2011). Although increasing numbers of tea garden can hamper the supply of some ecosystem services with a risk of threat to sustainability and human well-being and economic