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# Shifting Cultivation in Tripura

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### Abstract

As Millions of indigenous people are dependent on shifting cultivation practice, with majority households for subsistence living. In Tripura more than 10% of tribal families are dependent on Jhum cultivation for their livelihood. Jhum cultivation practice have some positive and negative effect. In jhum cultivation, Burning and slashing method is followed to control of weeds, soil-borne pathogens and other diseases of crops in those areas.

### Introduction

Another name of shifting cultivation is 'slash and burn' agriculture. It is an agricultural system that involves clearing a section of land and using it for farming activates for a relatively short time before abandoned it. Within NE states 3% area of shifting cultivation comes under Tripura. In Tripura commonly practiced shifting cultivation is known by 'Jhum' cultivation and those who practice it are called jhumias. It is an age old practice done by tribals of Tripura, it's not just the source of income; it is a survivable supplier of them. Shifting cultivation involves cleaning of forest and then slashing and burning the plant parts (Tripathi and Barik, 2003). All the tribal peoples engaged in jhum cultivation are not pure jhumias. Some of them have taken to settle plough cultivation and some are in process of become sedimentary but both these categories peoples are doing some amount of jhum cultivation. There are three types of jhum cultivation like tribals those have permanent land to do jhum they are called jhumias by choice, tribals those who have reclaimed some amount of land for jhum cultivation they are initial jhumias and those who do not have any plain land for settle cultivation, fully depend on jhum for food they are known as pure jhumias. At the time of jhum cultivation they use to enjoy the cool mountain breeze, singing and dancing. It is not a strange matter that many of them refuse to come down in valleys for settled life on the paddy field. Earlier the jhum cycle was 20-30 years, thereby permitting the land return to natural vegetation but now a days due to reduction in jhum cycle to 2-3 years, area comes under shifting cultivation leads to heavy soil erosion & nutrient losses, as a result of it ecosystem is being destroyed and the land is increasingly deteriorating (Sati and Rinawma, 2014).

### Impact of Shifting Cultivation in Tripura

Peoples who lived in hilly areas who do not have plain land, they have only one option for crop production which is shifting cultivation. It has both good and bad

impacts, which are as follows.

### Positive Impact

Shifting cultivation allows the tribal people of Tripura to preserve their rich cultural traditions and diversity as jhum cultivation is interwoven into the cultural and tradition of nearly 19 tribes those lived basically in the hilly parts of Tripura especially in Dhalai and North Tripura district. In this process it cannot be possible to carry out modern agricultural package of practices and the crops are grown fully under organic system. Burning and slashing method used in the system helps in control of weeds, soil-borne pathogens and other diseases of crops in those areas.

### Negative Impact

Jhum cultivation practices start with cutting and burning of trees and as a result degradation of forest land or deforestation in the hilly areas where they used to do jhum. Due to deforestation it creates direct negative impact on the environment which ultimately leads to climate change. Now-a-days it is a matter of global concern. Deforestation leads destruction of bio-diversity and losses of huge amount of soil and the ultimate result; soils become unfertile. Continuous deforestation leads to less average rainfall. Shifting cultivation also causes air pollution due to burning practices. Burning of slash reduces the soil acidity, organic matter and total nitrogen content, but increases the amount of phosphorus and cation into the soil. Crop productivity under shifting cultivation is very low compare to other system of crop cultivation due to reduction in crop yield, the families start moving from existing place to other virgin areas which again leads to forest degradation, loss of bio-diversity in the hilly parts of Tripura.

### Improvement of Shifting Cultivation by Adopting Different Approaches

- Agro-forestry i.e. cultivation of crops with forest trees
- Sowing of crops across the slope not along with slope.
- Cultivation of cover crops like cowpea, green gram, black gram which helps increasing the amount of organic matter and total nitrogen content.

### Conclusion

Shifting cultivation is not only the major source of livelihood, it the way of life to support the socio-economic status of the people who are engaged in shifting cultivation and living in the hilly areas to carry out their livelihood although the production comes from shifting cultivation is not sufficient. Gradually increasing population puts tremendous pressure on land where shifting cultivation is going on. The extension of crop land on the marginal mountain and high intensity and frequency of shifting cultivation for increasing overall production also reduces the forest and grassland area and resultant of high soil and land degradation.

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