The Impacts of Changing Patterns in Traditional Chena Cultivation in Sri Lanka: A Study with Reference to the Monaragala District

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Introduction

The Sri Lankan economy has been constructed around 'agriculture' for a long period. Agriculture can be divided into two sections: Subsistence and Plantation (commercial) agriculture. The subsistence agricultural sector can again be divided into two sections as "Chena cultivation" and "Paddy cultivation".

There is evidence to prove that the livelihood of the ancient people of Sri Lanka was formed by chena cultivation, which is mainly done in the Maha season. Chena cultivation is based on shifting from place to place and using primary methods of cultivation which do not use water supply methods and chemical fertilizer like in wet paddy cultivation.

In the past, chena farmers had cultivated various crops in the chena for food requirements of their families. After that chena farmers have cultivated several crops especially for the market, as well as to meet their family requirements. In the recent three decades chena farmers had tried to change the chena cultivation to become a profitable enterprise given the market oriented economy. To meet these objectives the farmers had given more attention to use of new technical methodology to increase the yield of the chena. As a result, present chena cultivation in Sri Lanka has shown vast differences compared to traditional chena cultivation.

Most of the farmers use machines to cut the forest. Tractors are used for land preparation. Imported seeds and chemical fertilizers are also used. After preparation of the land they cultivate only one or two crops such as Maize and Ground nuts as commercial crops. In addition paddy is also cultivated in the chena.

Objectives of the study

The main objective of this study is to examine recent trends of chena cultivation and the factors responsible for these trends.

The second objective is to examine the economic and social benefits related to these trends of chena cultivation.

The third objective is to analyse the adverse impacts of these trends.

Research methodology

To achieve the set of objectives, primary and secondary data were collected. Primary data was obtained through a questionnaire survey, field observations and focus group interviews in two villages in the Buttala D.S. Division in the Monaragala district. Secondary data were collected from different government agencies such as Buttala D.S. office, Agricultural extension office and the relevant Grama Niladhari offices in the Buttala D.S division.

Findings

The study identified several reasons for recent trends in Chena cultivation in Sri Lanka, their benefits and adverse impacts.

Reasons

- i. Increased demand in the local market for chena products, especially for maize, ground nuts, paddy, and gingelly (sesame).
- ii. Lack of family labour to carry out chena cultivation as a traditional system.
- iii. There are many facilities to use machines for chena cultivation such as Chain saw, bush cutters, Tractors (4 wheel), Chemical spray machines, Combined harvesters etc.
- iv. As a government policy a decision was taken to allow the Fertilizer subsidy for all cultivation and to buy the chena products at a high price in the market.

Benefits

- i. The farmer gains a higher income from the one or two crops cultivated, rather than merely from paddy because there is a reasonably high price for these products from the government and also the private sector.
- ii. Farmers do not shift from their chena plot annually to a new chena plot, because they try to develop the same land. That results in reduced slash new forest area for chena cultivation. Therefore it is an opportunity to protect the bio-diversity of the area.

Adverse effects

- i. Reduces the natural soil fertility process because over 95% chena farmers cultivate the same chena plot every year without allowing for a fallow period.
- ii. Pollution of water bodies and soil because over 95% chena farmers have used chemical fertilizers, herbicides, and insecticides.
 - iii. Badly affects the fauna because over 95% chena farmers have used chemicals in chena cultivation.