

SMALLHOLDER AND ESTATE LEVEL RUBBER GROWERS: AN ECONOMIC DEFINITION

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INTRODUCTION

Natural rubber production units are referred to as either estates or smallholdings. The most common definition entails holding size: estates are *big* (usually defined as over 4 hectares), smallholdings are *small* (often below 4 hectares). This categorization is an arbitrary one. Different rubber growing countries have their own demarcations (appendix 1). Apparently this categorization is mainly useful for administrative purposes. However, this definition does not necessarily provide an insight into the economic differences between the two sectors.

Smallholders or Estates: An Economic Definition

Economists and farming system researchers usually define smallholders and estates according to their management and resource endowment. It can be that producers have other objectives than solely the economics ones.

Public estates are sometimes established with national or regional development mandates such as the generation of employment, the opening of under developed areas or self sufficiency in natural rubber.

Smallholders also pursue social goals such as raising their position within the rural society.

By considering the main economic objectives, smallholdings and estates could be defined in the following way.

Estate

Estates would be considered as production units held by individuals or commercial companies whose main economic objective is to maximize their return on investment. In addition to their own capital, estate companies make use of land, hired labour and borrowed capital, all of which they are usually able to obtain in volume at a given market price plus procurement cost.

Smallholdings

Smallholdings are held by the farmers whose main economic objective is to maximize their family income. In addition to their land, family labour and own cash resources they might also use hired labour and borrowed capital. However, in contrast to estates they often have limited access to these resources dependent on local conditions.

GENERAL DISCUSSION

Under Sri Lankan conditions most of the smallholders coming under land size of less than 4 hectares are comply with the economic definition given above. However, in some situations the land size categorization may not indicate the real economic situation of the rubber grower. There may be complex situations. This is mainly because the land size is not taken into account in economic definition.

At present according to the land size categorization, around 33 percent of the land area belong to about 70 percent of smallholders (fig 1). Land area coming under 4 ha is around 65,000 ha, land area between 4-40 ha is 46,000 ha and area above 40 ha is 95,000 ha. However, present situation in rubber economy is such that most of the rubber holdings coming under the size group of 4-40ha also can be considered as smallholdings in economic terms. Hence, in real economic terms the number of smallholders and the land area coming under smallholders may be higher than the figures indicated in land size grouping.

Rubber sector provides employment both directly and indirectly to about 500000 persons engaged in 160000 smallholdings, 7000 small estates and 800 large estates, and also in various stages of processing upto final export (Central Bank, 1980). These data, according to land size categorization also indicate the high involvement of smallholder level growers in rubber industry. These figures may be higher in real economic terms of smallholder rubber growers. Hence, the data indicate that the number of dependents on smallholder rubber industry is considerable in real economic terms.

Smallholder production per hectare is much less than that of the real estate plantations. The average rubber yield range from 700 Kg/ha in smallholder level to over 900 Kg/ha in estates (Rubber Control Department., 1991). The lower yield of the smallholder areas has been attributed to the traditional practice of using low input systems of production, the planting of low yielding varieties, prevalence of old and unproductive trees, lack of facilities for upgrading processed rubber, low labour productivity and lack of proper marketing facilities. These problems coexist with the economic state of growers. In contrast to estates they often have limited access to resources like land, labour and capital. The most important factor to be concerned is

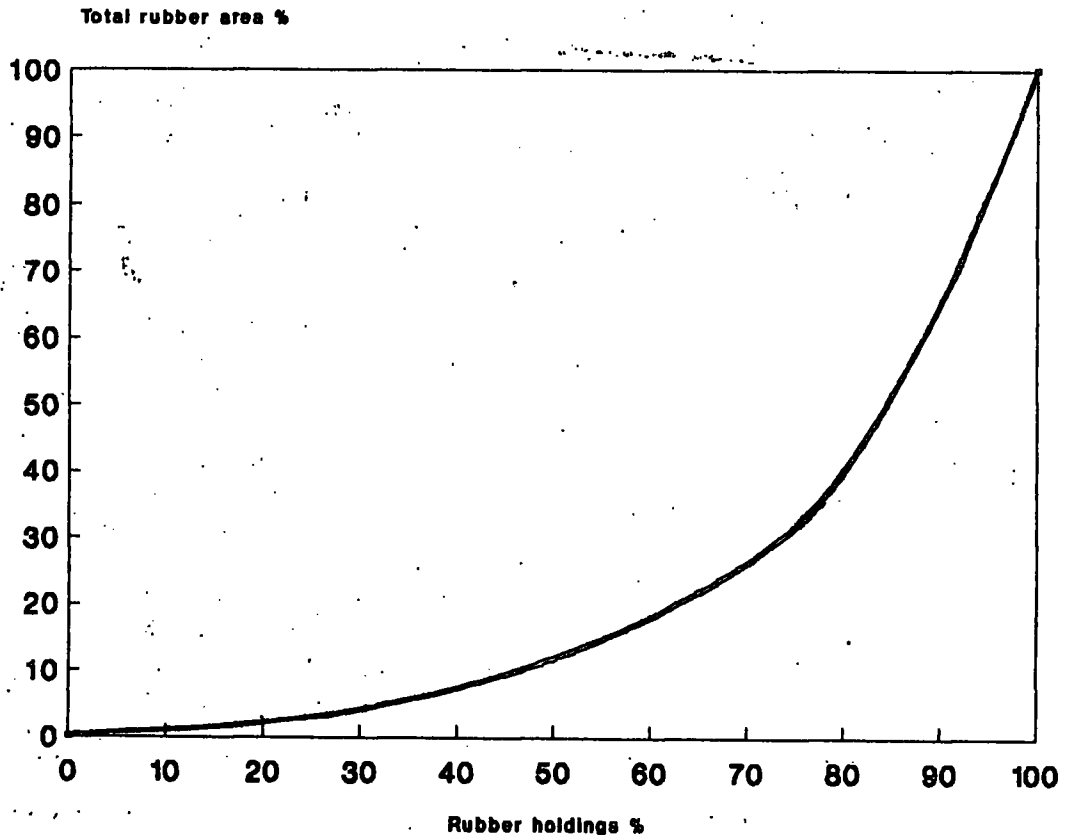


Fig. 1 Lorenz curve on land area distribution among growers in rubber sector Sri Lanka

that in real economic terms this group is gradually increasing under the present economic state of the industry.

CONCLUSION

Considering the stage poor situation of the smallholder rubber sector in our social and economic system more attention should be paid on smallholders in real economic means. Unless a systematic programme is established and evaluated continuously this sector will be collapsed gradually. In consequence direct monetary and other indirect losses to the industry will be unestimatable. As this group is economically unstable, specially the indirect damage caused to the environment and the society will be aggravated if their economy is further deteriorated.

Therefore, research and policy measures should be formulated according to economic objectives and resource endowment of the smallholder and estate sector. In

this regard, methodological and efficient adaptive research programmes at smallholder levels is one of the important factors useful to fulfil smallholder requirements. As farmers adapt new technologies as long as they allow them to reach their specific socio economic goals in a better way than the existing technology.

Adaptive research programmes should be effectively managed in accordance with resource endowment and economic objectives of smallholders hence, the most relevant technologies for smallholders. Also policy makers should pay more attention on left skewed distribution of the holding size. Planned group activities to improve the land and labour productivity of small holdings will be very effective. About 60% of the holdings are less than 1 hectare. This factor alone indicate the possible negative trend in economies of scale of these production units. The most important fact is, the number of dependents on these are fairly high though the land area covering is comparatively low.

In contrast to smallholders, estate sector producers are more concerned about the rate of return. Hence, there is a possibility of making indirect damage to environment as well as direct damage to the industry in the profit making process. Hence, proper attention should be paid on relevant policy measures according to economic objectives of estates and smallholder growers to make the rubber production system more sustainable.

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Appendix 1

Demarcation of rubber smallholders and estates in some countries

Sri Lanka

Estate: Lands not less than 4 hectares in extent which are planted with rubber.

Smallholdings: Lands less than 4 hectares in extent which are planted with rubber.

India

Estate: Lands contiguous or non-contiguous aggregating more than 20.23 hectares planted with rubber and registered with the rubber board of India under a single ownership.

Smallholder: Lands contiguous or non-contiguous aggregating 20.23 or less and registered with the rubber board of India under a single ownership.

Indonesia

Estate: Lands which exceed 25 hectares in size of long term lease in nature i.e. 35 years and above being managed by non individuals.

Smallholdings: Lands owned by individuals not exceeding 25 hectares.

Thailand

Estate: Lands of more than 40 hectares in extent which are planted with rubber

Smallholdings: Lands of less than 40 hectares in extent which are planted with rubber.