

EFFICIENCY IN SMALL SCALE SUGAR CANE CULTIVATION

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IN SRI LANKA

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A THESIS SUBMITTED TO THE UNIVERSITY OF SRI JAYEWARDENEPURA (Sri Lanka)

IN PARTIAL FULLFILMENT OF THE

REQUIREMENTS FOR THE

DEGREE OF MASTER OF ARTS (Economics)

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APRIL 1985

ACKNOWLEDGEMENTS

My thanks go to Mr.D.C.Galapitage, my supervisor for spending his valuable time with me in sharpening my thinking and analysis and in guiding me in the presentation of the material. His advice and encouragement is greatly appreciated.

I am greatful to Dr.W.A.Jayatissa for his guidance, comments and suggestions in preparing the final draft of the thesis.

I am thankful to Prof.S.Tilakaratne and Dr.P.Wilson, the present Head of the Department of Economics in the University of Sri Jayewardenepura for their support and encouragement.

My thanks are also due to Mr.K.P.V.Karunaratna, Dr.P.D.Kannangara and Dr. Nelson Vitanage in assisting me throughout the preparation of this thesis.

I am indepted to the sample farmers for their corporation in helping me to collect my data. I am also very much thankful to Mr.B.A.E.G.Balasooriya and his friends who have helped me in the collection of data.

My thanks are extended to Mr.J.W.D.Somasundara, Mr.A.Kurundukumbura, Mr.H.M.Abeyratne and others who helped me during various stages in the preparation of this thesis.

I am very much thankful to my beloved wife, Sakunthala, daughters, Uthpala and Wathsala for the tolerance and sacrifices which they have undergone during the preparation of the thesis.

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CHAPTER I

INTRODUCTION

The Agricultural Sector and the Economic Development in Sri Lanka

The agricultural sector is the largest contributor to the Gross Domestic Product of Sri Lanka. Its contribution to the G.D.P. is approximately one-third of the total.¹ This indicates that the growth of the economy is closely related to an increase in agricultural production. It also presents the highest scope for providing employment opportunities. Moreover, by intensive use of land and labour, proper management of water resources and the introduction of new techniques of production and so forth, agricultural output can be substantially increased. Far more important is that the development of this sector is not totally constrained by foriegn exchange problems.² Another factor is that the greatest opportunities for the domestic production of important commodities is found in the agricultural sector. In this respect, an increase in agricultural production will lead to easing the balance of payment problems.

^{1.} Central Bank of Ceylon. Annual Reports; 1970-1982, (Colombo).

^{2.} Robinson, J., Papers by Visiting Economists, (Government Press, Ceylon, 1959) P.59.

It was these factors that were responsible in shaping the agricultural policies of successive governments in postindependent Sri Lanka. In the agricultural sector two trends were visible. Pirstly, positive steps were taken to increase the yields of the three major export crops - tea, rubber and coconut - rather than on expanding the area under cultivation, while in the peasant sector considerable steps were taken to increase the yield and expand the area under paddy cultivation. Secondly, since the mid-sixties there was a growing emphasis on crop diversification.³ However, experience has shown that crop diversification is more effective and practicable in the small holdings including the peasant sector than in large plantations.

It is not possible for the small holdings in Sri Lanka to depend entirely on paddy cultivation and on traditional export crops. Since the income from such crops is not sufficient to completely satisfy the needs of the population, more income generation activities will have to be created. Besides, if the problem of unemployment is to be solved it is essential to extend and diversify activities in the agricultural small holdings. The activities should be in the direction of persuading the small holders to grow crops which have a high demand in the domestic and foriegn markets.

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^{3.} Wijesinghe, M.E. The Economy of Sri Lanka 1948 -1975.(Ranco Printers and publishers Ltd., Colombo, 1976), pp.1-15.

In planning such activities emphasis should be given to cultivation of new crops which can provide raw materials for industry such as sugar cane, cotton, mulberry, cashew, castor,tobacco and sun flower, the expansion of the horticulture programme and animal husbandary. Such a plan to extend and diversify small scale agriculture will have to be accompanied by a massive programme for providing the farmers with institu--tional, organizational, monetary and technical services.⁴

The present study however, is restricted to the analysis of sugar cane cultivation as this crop can be considered to be of great economic importance in a diversification programme.

Role of the sugar cane industry in the economy of Sri Lanka

Sugar cane cultivation is not new to Sri Lanka. Its cultivation probably dates back to the Dutch period. Available evidence suggests that as late as 1842, there were about a dozen sugar factories in operation and that the country was self-sufficient in sugar.⁵

The sugar industry however, collapsed at the turn of the 19th century and until recent times efforts to revive it has proved to be unsuccessful. The cultivation of chewing cane survived right through this period and it is still cultivated

^{4.} Government of Ceylon. The Five Year Plan; 1972-1976. (Ministry of Planning and Employment, 1971), pp.205-206.

^{5.} Editorial ("Sugar Cane in Ceylon", Tropical Agriculturists, Vol. CVIII, No.4., Pp.205-6.

on a sizable scale in the low country wet zone. Since independence an attempt has been made to cultivate sugar cane on a commercial basis and for this purpose two high quality varieties of sugar cane, CO.527 and CO.453 were introduced.⁶ The modern sugar industry in this country is young. Sugar production started in the late fifties and the technical know-how came from neighbouring India and Australia where sugar cane was cultivated mainly for its cristalizable sugar cane (sucrose) and its byproducts including mollases.⁷ After nearly 25 years of progress the country today produce only about 10% of its total annual sugar requirements.⁸

The Agricultural Plan of 1958 estimated the annual sugar requirement of Sri Lanka to be 140,000 tons. The Agricultural Department estimated a yield of 30 tons of millable cane per acre per each of successive crop seasons which includes plant cane and two ratoon crops. They assumed that 47,000 acres would be adequate to attain self-sufficiency in sugar in Sri Lanka.⁹ Later studies however; indicated that these estimates

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^{6.} Samararathna, K.D. "An Accelarated Programme for Multiplication of Sugar Gane Varieties for Commercial Adoption in Kantalai". <u>Paper read at the Annual Convention of Sri Lanka Sugar Canu</u> <u>Technologists Assosiation</u>, (Jan.1980).

^{7.} Senevirathna, S.T. and R.R.Appadurai. Field Crops of Ceylon, (Lake House Investment Ltd. Colombo, 1966), Pp.65-66.

^{8.} Central Bank of Ceylon. Annual Report 1982 (Colombo), P.43.

^{9.} Government of Ceylon. <u>Agricultural Plan 1958</u> (Ministry of Agricultural and Food), Pp.65-66.

needed revision. The Short Term Implementation Programme of 1962 estimated the islands annual requirement of sugar to reach 230, 000 tons by 1964.

Presently, the sugar cane cultivation in Sri Lanka is spread over the regions of Kantalai, Amparai, Udawalawe, Monaragala, Buttala and Haldummulla. Almost the entire culti--vation of sugar cane in Kantalai, Udawalawe and Amparai is in the hands of the Sri Lanka Sugar Corporation (SLSC). There are large scale factories in these areas and they produce sugar, mollages and other by-products. In addition to the SLSC farms there are private cultivators sponsored by the SLSC. The private sector sponsored by the SLSC can be classified into two groupsthe middle class cultivators who were given over ten acres by the SLSC and the small holders who got less than ten acres. Both these groups are supplied, by the SLSC, with technical assistance and with the necessary machinery on hire for the preparation of land and so forth. The total output of sugar cane is bought by the SLSC. The private growers who cultivate sugar cane in the Districts of Monaragala, Badulla, Ratnapura and Galle are independent of the corporation. Their main products are jaggary and syrup.

Upto 1962, all attempts to embark on sugar cane cultiva--tion on a large scale have been beset with several difficulties

^{10.} Government of Ceylon. <u>Short Term Implementation Programme</u> 1962, (Ministry of Agricultural and Food).

such as the short falls in output, high cost of production, shortage of labour and low productivity of labour. The progress on a 16,000 acre plantation at Galoya and a 6,000 acre plantation at Kantalai had also been slow. By 1962 only a total of 8,200 acres had been brought under cultivation in the Kantalai and the Galoya schemes. The yield per acre also had been considerably below the original estimates, average yield obtained amounting to only 22 tons per acre. Therefore, the estimated local production was expected to be only 7.5% of the islands requirement.¹¹

In 1970 the total capacity at the two factories, at Kantalai and Galoya was approximately 50,000 tons whilist production was only about 8,000 tons.¹² The failure of this industry can be attributed to three main reasons. Firstly, the target with respect to the land area was never reached. Secondly, the yield of sugar cane per cultivated area has been low and thirdly, the recovery of sugar has not been satisfactory. Poor yield has been due to a number of factors; inadequate irrigation facilities in Kantalai, poor drainage in Galoya and the absence of a well conceived programme of research for development of high yielding varieties. Recovery of sugar has been unsatisfac--tory because of the poor maintenance of machinery and equipment.

11. Ibid.

12. Government of Ceylon., op. cit., p.34.

Subsequently, the government promised to device a complete programme to rehabilitate the industry. It was planned that the acreage under sugar cane would be increased by the opening up of lands under the Udawalawe project and further under the Divisional Development Council Programme. This increased acreage was to consist of small scale sugar units for the cultivation and processing of sugar cane. They were to be set up in areas such as Badulla, Monaragala and Galle which are agro-chemically suited for the crop.

Certain steps taken by the government in 1973 which were necessiated by the increase in the import prices of sugar helped to encourage the small scale sector in the sugar cane industry. Upto 1972 both locally produced and imported raw and white sugar were sold at the same retail prices and there was no price disparity among different quality classes of sugar. In 1973 the government introduced two-tier price system for sugar whereby a certain queta was issued to households at a subsidized price while the rest was sold at open market prices. At the same time a quota restriction was introduced on import of sugar. The result of these steps was a decline in sugar imports and an increase in the local production of sugar. However, as shown in Table I there was a noticeable decline in the domestic consump--tion of sugar. The unsatisfied demand for sugar during this period stimulated the production of jaggary and syrup which were substituted for sugar.