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Ceylon's Trade Relations With Coromandel During Early British Times, 1796-1837

VIJAYA SAMARAWEERA

1

From early times the trading pattern of the island of Ceylon with the outside world had been dominated by the commercial links which had been developed with the neighbouring coasts of Malabar and Coromandel. The commercial links with Malabar had been antedated by cultural contact which, by the time the British wrested control of maritime Ceylon from the Dutch, had been renewed and strengthened by the establishment of the Nayakkar dynasty in Kandy, the independent kingdom in the interior of the island. There had been cultural contact with Coromandel too. but the focal point of the relations between the two territories was commerce and it was this region which occupied the pride of place in the external commerce of Ceylon. The Coromandel trade was controlled by merchants drawn from the two coasts and it encompassed their numerous small ports and was in many respects an extension of the internal trade of the island. The merchants had succeeded in forging close economic ties between the two coasts and a strong community of interest between the peoples of the two regions had been built up over the years. There is no doubt that this trading relationship was of vital importance to the sustenance of the economy of Ceylon, and indeed, as it has been asserted, may well have been its "life-line".1

By the time the British arrived in Ceylon in 1795, the coastal trading pattern had undergone changes at the hands of the previous European rulers of its littoral, the Dutch East India Company. Unlike the Portuguese, the first Western power to rule the island, who had found little reason to disturb the traditional pattern of trading, the Dutch by necessity became directly involved in the Indo-Ceylon trade.² This stemmed from wider policy adopted in Asia: the development of the inter-port trade of the Indian Ocean to feed the annual major trade with Europe. In Ceylon there was a further consideration which moved the local authorities to pay particular attention to the island's trade with the neighbouring coasts. Cinnamon, the single most important source of revenue of the Dutch, was excluded from the balance sheet of the administration and its costs had to be covered by recourse to other avenues. The land revenues were inadequate for this purpose and the authorities looked towards the coastal trade to derive further income. Initially they sought only a share of the trade in competition with the established traders; but following an increase in their political power and the establishment of almost a total mastery over the coastline of

^{1.} S. Arasaratnam, Dutch Power in Ceylon, 1658-1687 (Amsterdam, 1958) p. 148.

This account is based on Arasaratnam, Dutch Power, pp. 145-180; S. Arasaratnam, "Dutch Commercial Policy in Ceylon and its Effects on Indo-Ceylon Trade", Indian Economic and Social History Review [hereafter, I.E.S.H.R.], IV (1967) 109-130. The Dutch succeeded the Portuguese as rulers of Maritime Ceylon by right of conquest in 1658.

the island with the extension of their authority over the ports which had been under the Sinhalese kings, the Dutch decided to secure for themselves the complete control of the trade. A monopoly over all major articles of trade (excepting rice, for special reasons) was declared in 1670 and they themselves entered the carrying trade. However, the nature of the trade was such that they were destined to fail. Arasaratnam has summed up the position:

[The trade] spread over a vast coastline, went into tiny creeks and shallow beaches and as such could not be operated from a few major harbours in India and Ceylon. It also took in a wide variety of articles of daily consumption, some of which could not be centrally marketed but had to be effectively distributed to every village where they were consumed. These conditions were not fulfilled by the Dutch who had disturbed the traditional trading ties but could not put anything in its place. ...The net effect of the decline of trade was to impoverish the community and in the long run to deprive them of the little purchasing power they had, thus contracting the volume of trade and business in the country.³

In the later years of the century the Dutch were forced to take steps to counteract these adverse effects and some degree of relaxation of the monopoly control over certain articles was undertaken. The traders proved to possess a remarkable resilience but there was only a partial recovery of the trade.

Conditions for a revival became more propitious with the establishment of British rule in Ceylon. Like the East-West seaborne trade, the trade between different ports in Asia tco came under the chartered privileges of the new masters of the Eastern seas, the English East India Company, but while maintaining a rigid monopoly over the trade between Asia and Europe it refused to monopolise the inter-port trading. "The Country-Trade", as the inter-port trade of the Indian Ocean was now called, was left open to the Asiatic traders who had traditionally dominated the field; they were of course soon to be joined by European competitors, who often received the backing of the Company.4 The newly conquered territory in Ceylon was placed under the Madras Presidency-in fact it became a dependency of Fort St. George⁵-and the new rulers took immediate steps to create more congenial conditions for trade between South India and Ceylon. In the formulation of its policies Madras had a distinct advantage over its predecessors. The Dutch never possessed a mastery over the South Indian territories with which Ceylon had close trading connectionsindeed, they had to face considerable competition from both native rulers and other European powers in the region.6 In contrast, the British held virtual suzerainty over the South Indian coasts. Unfortunately the measures which the Madras officials adopted with regard to the Indo-Ceylon trade were not allowed to mature. Their attitude and policies took a different turn when they found themselves ousted as rulers of maritime Ceylon within a few years.

4. C. N. Parkinson (ed.), The Trade Winds (London, 1948) p. 141.

6. T. Raychaudhuri, Jan Company in Coromandel, 1605-1690 ('S-Gravenhage, 1962)

pp. 15 ff.

^{3.} Arasaratnam, "Dutch Commercial Policy", I.E.S.H.R., IV (1967) 109-110.

^{5.} It was Madras which was responsible for the capture of the Maritime Provinces. Madras had shown a keen interest in initiating trading relations with Ceylon, in cinnamon in particular, from as far back as 1762 when it sent the first embassy to Kandy. For the political background of Ceylon during the period under review see, L. A. Mills, Ceylon under British Rule (London, 1933).

With the conquest of the Maritime Provinces of Ceylon, Madras saw no reason why a customs barrier should be maintained between the island and its territories. As early as September 1795, on their own initiative the Ceylon officials temporarily suspended duties on all articles of trade with the exception of those on arrack and opium. In July 1796, this decision was revised by Fort St. George and all duties, except on pepper and arecanut, were removed. The re-imposition of the duties on pepper and arecanut (and on certain other articles not involved in the Indo-Ceylon trade) was moved by fiscal considerations: these two articles held a dominant place in the coastal trade and Madras, which was primarily concerned about recovering the expenditure it had incurred on the conquest of Ceylon, was reluctant to forego entirely the revenue that could have been derived from customs. There was in fact a marked decline in the customs earnings, much to the concern of the officials. In January 1799 the first Governor of the colony, Sir Fredrick North (1798-1805), successfully persuaded Fort St. George to accept the revival of the customs structure of the Dutch. Within the short span of four years, therefore, the customs policy had taken a full turn.

In the changed political atmosphere brought about by the establishment of the Crown administration in the Maritime Provinces in 1802, the customs policies adopted by the governments of Ceylon and Madras were to assume a greater significance for the Indo-Ceylon trade. As far as Ceylon was concerned, "Sea Customs" proved to be of higher value from a revenue point of view than other forms of revenue (such as taxation) and they were also the only source of revenue which was "wholly commercial". Yet, the policies pursued by the colonial government in the first decades of British rule were haphazard and fluctuating and were inimical to the interests of the colony and its people. The position was worsened by the policies followed by Madras.

Over the years an obvious bias developed in the formulation of the customs policy of the Ceylon government towards the colony's trade with Europe as against the trade with India. In the early years this was explicable, for the import-export trade with Europe was largely in the hands of the state. By the mid-1820's, the European merchants of the colony secured for themselves a share of the trade, especially in the import trade, following the decision of the government to stop importing on its own account in 1824. Nevertheless, the trade with Europe continued to be favoured in the customs structure while the trade with India was heavily burdened. To take but one example, coffee, which found a market in England in the 1820's, was exported duty free whereas articles such as arecanut and arrack and other produce of the coconut tree, which were eagerly sought after in Coromandel, were subject to high duties ranging from 20 to 40 per cent. By all accounts the coastal trade held the larger andfrom the point of view of the inhabitants of the colony—the more important share of the external commerce of the island. The volume of the trade cannot be determined with any precision from the statistics consulted, but in the 1820's it was variously

Stuart to Dalrymple, 30 Sept. 1795, C[olonial]O[ffice records, Public Record Office, London] 55/1; R. L. Brohier, "Chronological Catalogue of Letters and Reports on Ceylon Affairs (1795-1800) in the Madras (Egmore) Record Office", Journal of the Royal Asiatic Society Ceylon Branch [hereafter, J.C.B.R.A.S.], IX (1964), 48; Proceedings of the de Meuron committee of inquiry, 3 Nov. 1798, in Historical Manuscripts Commission, Ceylon, Bulletin No. 1 (Colombo, 1937) p. 12.

A. Bertolacci, A View of the Agricultural, Commercial and Financial Interests of Ceylon (London, 1817) p. 226; Parliamentary Papers, 1828, XXIII (539) 90.

estimated between two-thirds and four-fifth the entire foreign trade. Important though it was, the trade with India attracted little attention from the government because, as Governor Sir Robert Wilmot Horton (1831-37) once confessed, it was almost entirely in the hands of native merchants.9 In the case of the European traders of the colony there was throughout a powerful lobby which actively looked after their interests. In the 1820's and the early '30's, when they had no formal organisation to represent their views to the government, they usually nominated one among them to act as the spokesman. 10 In January 1834 they founded a newspaper, the Observer and Commercial Advertiser (re-named the Colombo Observer a year later), which became their platform, and though they were not given any representation in the new Legislative Council established in 1833 owing to the actions of Governor Horton,11 they succeeded in influencing certain official members of the Council to speak on their behalf on matters which affected their interests. The contrast with the position of the merchants concerned with the Indo-Ceylon trade is striking. There was no pressure group and there was 'no advocacy in the public prints' of their interests; the only means they had of placing their views before the government was through petitions, but they were rarely given any serious consideration by the officials,12

The customs policy of the Madras Presidency was no less harmful to the interests of the coastal trade than the policies of the government of Ceylon. In the early nineteenth century, the East India Company was the single most important external agency which determined the pattern of Ceylon's foreign trade. As a colonial official observed at the time the placing of the Maritime Provinces under the Crown was being considered, in regulating its trade with the neighbouring lands the Ceylon government could not act as of right but only in consort with the Company in India, lest the latter's commerce suffered.13 Fort St. George, which was largely concerned with the colony in this respect, understandably placed its interests and the interests of the people under its rule above those of Ceylon whenever negotiations took place in the first decades. The Governors of the colony saw no reason why there should be a conflict of interest between the two governments: "I cannot help complaining", Governor Sir Robert Brownrigg (1812-20) wrote in 1815, "that there should be either in the instructions from the East India House to this country, or in the general policy of the Company's administration any ground for their Governments to consider the interests of their possessions as at variance or opposition with those of the Bengal colonies. It would be altogether superfluous to expatiate ... on the vexatious operation of such a principle with regard to this Island, surrounded as it is by the Company's Settlements or to urge the reasonableness of expecting in their territory all those facilities and privileges of commercial intercourse which are not refused by indepen-

9. Ceylon Government Gazette, 9 Nov. 1836.

^{10.} This function was usually delegated to W. C. Gibson and Co. of Colombo, one of the oldest European firms in the colony, cf. W. C. Gibson and Co. to Lusignan, 31 July 1824, C.O. 416/12-E7. It was only in 1839 that the merchants formed a formal organisation, a Chamber of Commerce, of their own.

On this issue see, V. Samaraweera, "Governor Sir Robert Wilmot Horton and the Reforms of 1833 in Ceylon", Historical Journal, XV (1972) 219-220.

^{12.} Ceylon Government Gazatte, 11 Jan. 1837.

^{13. &}quot;The Douglas Papers", Ceylon Literary Register, 3rd. s., I (1931) 11.

dent states to others on a good understanding with them, and such a relative arrangement of duties as might give the greatest possible moral encouragement to the commodities of each country".14 One after another of the colony's major exports to Coromandel suffered from the tariff policy of Madras. The reaction of the Ceylon government was to take counter steps to force the hand of Madras. The consequence was predictable: in the words of Colonel William Colebrooke, who inquired into the situation in Ceylon in 1829-31, "the inhabitants of Ceylon and the Continent are connected in a thousand ways and might carry on a most profitable intercourse, but they are cramped and restricted in a manner that proves injurious".15 Of the two regions, Ceylon certainly suffered more, for the coastal traders not only took away the produce of the people which found no market internally but also supplied several essential articles. An examination of the effects on the Madras territories falls outside the scope of the present paper, but in a worsening economic climate, 16 the constraints which were placed on trading would have no doubt left their mark there. It was only in the 1830's, when the loss of its chartered privileges were being sharply brought into focus, that the East India Company responded to the overtures of Ceylon to improve trading relations. As Colebrooke wrote, "It would be conducive to the welfare of both countries and congenial to the habits of the people, who are naturally connected, that the duties and restrictions which fetter the intercourse between them should, as far as possible, be removed in the ports of the East India Company and those of His Majesty and that they should cease to be governed as rival possessions".17

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The fortunes of the Coromandel trade in these years could be reviewed by examining in detail the position of the major commodities involved in the trade. Of the colony's export 'coastways'-the term used by the British to signify the Coromandel coast-the most valuable was arecanut. The produce of the areca palm, which grew in abundance in the interior of the island, arecanut (areca catechu) was in great demand in Coromandel where, in common with rest of South India, the chewing of betel with arecanut as a mild stimulant was a widely prevalent habit. Arecanut had for long been a most profitable article—it was monopolised by the Sinhalese kings as well as by both the Portuguese and the Dutch-and was a crucial commodity in the exchange trade between Ceylon and Coromandel, being often bartered for either grain or cloth. Knox had written in the seventeenth century, "money is not very plentiful in this land, but by means of these nuts ... they furnish themselves with all things they want".18 The Dutch monopoly adversely affected the trade in arecanut and by the mid-eighteenth century the profits of the Company had dropped considerably, but with the relaxation of the restrictions it seemed to have picked up. The Madras administration abolished the monopoly and instituted in its place an export duty of 5 per cent. The trade improved with this change and the exports which averaged about 12,000

^{14.} Brownrigg to Bathurst, 8 June 1815, C.O. 54/56.

^{15.} Parliamentary Papers, 1831/32, XI (735-III) 247-8.

See, P. J. Thomas and B. Natarajan, "Economic Depression in the Madras Presidency, 1820-54", Economic History Review, VII (1936) 67-75.

^{17.} Report upon the Revenues of Ceylon, 31 Jan. 1832, C.O. 54/122.

q. in S. Arasaratnam, "The Kingdom of Kandy: Aspects of its External Relations and, Commerce", Ceylon Journal of Historical and Social Studies [hereafter, C.J.H.S.S.] III (1960) 116.

ammams in the last years of Dutch rule reached 15,852 ammams in 1796-97. The duty was revised several times in the following years and was fixed at 10 rix-dollars per anumam in 1803, which remained in force until 1820. The exports predictably fell, fluctuating between 7,000 and 12,000 amunams over the years, but the government collected considerable revenue by way of duties, averaging-according to the authoritative Anthony Bertolacci-about 125,000 rix-dollars annually.19 In the meantime, within the colony the price fetched by arecanut began to fall from the high figure reached at the tail-end of Dutch rule. Arecanut was now purchased by itinerant traders from the interior at between 6-7 rix-dollars per amunam and sold at the coast for 15 rix-dollars. The export price fell further to about 11 rix-dollars per amunam with the conquest of the Kandyan Kingdom by the British in 1815: the royal monopoly of arecanut was abolished by the new rulers and the major source of supply became freely open to the merchants. In 1820 the export duty was revised and fixed at 4 rix-dollars per one hundred-weight but in the late 1820's it was gradually reduced until it came to 1s. 0d. per one hundred-weight in 1830; and, the exports increased to 50,139 cwt per year by 1836. The direct trade in arecanut, however, was no longer profitable. Ceylon produce was subject to a high duty at the ports of Coromandel, which correspondingly increased its selling price there. Consequently, though Ceylon arecanut was known for its fine quality, it found it increasingly difficult to face the stiff competition of the inferior, but cheaper, produce from Achin, which began to flood the South Indian market.20 However, within the context of the exchange trade with Coromandel, arecanut continued to hold its own in this period.

Elephants formed the other article which, together with arecanut, dominated the Coromandel trade prior to the arrival of the British. Elephants were sought by rulers of this region as well as elsewhere in India to serve in their warfare and were also used for ceremonial purposes. This trade too was monopolised by the Dutch, but the actual carrying was in the hands of the coastal traders, who bartered elephants for rice on the opposite coast. In British times they were no longer an important article, which perhaps reflected the changed military position of the Indian regions after the political expansion of the East India Company. As early as October 1795 an official in Ceylon dismissed this source of revenue as "uncertain and variable"; its average yield per year was less than 3,000 rix-dollars.²¹

The position held by elephants was taken by arrack. The trade in arrack in particular illustrates the adverse effects which the tariff policies of the governments of Ceylon and Madras had on trading relations between the two territories. Arrack, or "coconut brandy" as English writers termed it, was a liquor which was distilled from the unexpended flower spathes of the coconut tree. It had found a ready market in South India during Dutch times but it was only with the establishment of British

19. Bertolacci, Ceylon, p. 160. Bertolacci's work was often cited authoritatively by the Governors of the colony as well as by the Colonial Office during this period.

^{20.} Bertolacci, Ceylon, pp. 160-1; Ceylon Government Gazette, 9 Nov. 1836. The early British did not follow a uniform system of measures and their records refer to both the Dutch colonial (often based on the local system) and the British units. The resultant confusion was worsened by the use of the Dutch as well as British currency systems. One rix-dollar was valued at 1s. 9d.

G. Turnour, "Some Account of the Islands between Mannar and Jaffnapatnam", 12 Oct. 1795, in Bulletin No. 1, p. 24.

rule that it became, in the words of Governor Horton, "a staple article of manufacture of considerable importance to the Colony".22 This was due mainly to the demand created by the army and navy personnel at Madras-in fact, in the first decades of British rule though arrack was exported to England, Bonibay, Penang and Singapore, and the native population of Coromandel absorbed part of the exports, an estimated 5/6th of the purchases were made by the Company's commissariat at Madras. The arrack exported to Coromandel was exchanged with rice and cloth and when taken directly to Madras was exchanged with European manufactured goods. The trade received its first major setback when the Madras government decided in 1813 to impose an additional import duty, over and above the existing duty of 5 per cent, on liquor manufactured to the east of the Cape of Good Hope with the aim of promoting the production of patta arrack in its own territories. The coastal traders were already paying a duty of 10 per cent in the colony and this further impost hurt them considerably. Other factors too adversely affected the trade. Batavian arrack, which had been forced out during the Napoleonic wars, began to re-enter the Indian markets and a European firm in Madras was given a monopoly contract for the supply of arrack to the forces by the government in 1812. The consequence was a fall in the selling price of Ceylon arrack in the opposite coast and the exports were reduced from 6,000 leaguers in 1810 to about 3,750 leaguers by 1820. The Ceylon government at first sought to recoup the loss sustained in the revenue from the export duty by imposing a tax on the consumption of arrack within the colony but later in 1820 decided to take the further step of raising the export duty to 12 rix-dollars per leaguer. It is noteworthy that during these years the duty on arrack exported to England remained at 5s. per leaguer.28 The attitude that governed this fiscal policy emerged clearly when Sir Edward Barnes (1820-22 and 1824-31) wrote that it was "not a little provoking" that Madras raised from Ceylon arrack a revenue which was equivalent to one-fourth the colony's total revenue from the sea customs and that means should be found of "participating in this enormous gain".24 The colonial government seemed oblivious to the effects its measures had on the coastal trade. To the merchants, who were facing difficulties in the Coromandel ports because their limited capital did not enable them to pay the coast duties until their goods were sold, the new imposts in the ports of shipment came as a ruinous blow. They no longer found it profitable to carry arrack for sale in the open markets of Coromandel; the exchange trade, however, did not suffer greatly.25

Arrack was only one of the products of the coconut tree which found a market in Coromandel. There were several other of its products which were carried by the coastal traders long before arrack became an exportable item. The coconut tree grew luxuriantly along the south-western coastal belt of the island and, as successive writers on Ceylon observed, proved to be of immense value to the people. In the words of Colebrooke: "These [coconut] plantations contribute largely to the subsistence of the people, and are a great resource when [grain] crops are destroyed by innun-

^{22.} Ceylon Government Gazette, 9 Nov. 1836.

Bertolacci, Ceylon, pp. 150-4; Brownrigg to Liverpool, 21 Aug. 1812, C.O. 54/44: Collector of Customs of Galle to Colonial Secretary, 8 June 1836, C.O. 54/157.

^{24.} Barnes to Bathurst, 7 Nov. 1820, C.O. 54/77.

^{25.} Bertolacci, Ceylon, pp. 151-3; Colebrooke's Report upon the Revenues, C.O. 54/122.

dation. They also support several useful industries".26 Coir, ropes and coconut oil were the more important manufactures. These were the products of secondary occupations of the people and were one of the few means they possessed of obtaining cash since the coastal traders generally purchased them directly from the producers. Coir and ropes, which were made from the fibrous husk of coconut, had a considerable demand in Coromandel, especially from the native ship building industry. In particular, the manufactures of one region of the island centred around Beruwala, one of the small ports concerned with the coastal trade, were well known for its fine quality. The Dutch had monopolised the trade and exported cordage not only to Coromandel but also to the Cape of Good Hope and Batavia. The monopoly was abolished by the British who imposed an export duty of 5 per cent in its place. During the British times, though Coromandel continued to draw part of the exports, England gradually supplanted it as the principal market. Ceylon's place in Coromandel was taken by the Laccadive and Maldive Islands. Another significant development was the entry of the European merchant houses into the trade. Coconut oil too had for long been exported to Coromandel as well as to the rest of South India. Under the British the pattern of this trade also changed. Again England became the more important market and European firms began to dominate the carrying trade, and in the 1820's they began to invest in the production of coconut oil too. In the mid-1830's, when it was considering the revision of the whole customs structure, the government was faced with a problem in consequence; how best to balance the interests of the European merchants with those of the people.

Two other products of the coconut tree, copra and nuts, merit notice. Copra, dried kernals of coconut, were exported to Coromandel as well as to Malabar, and was subject to a duty of over 15 per cent in the early years of British rule. By 1830 it had been lowered to 2s. per one hundred-weight and there was a considerable increase in exports. The exports of nuts had a seasonal variation determined by the market price in Coromandel. Generally between July and August within the colony the price of nuts increased to £ 1.13.0 per hundred from the usual price of 15s., but in Coromandel the price increase was from the usual £ 1.10.0 to £ 1.16.0—£ 3.0.0. per hundred and exports rose sharply during the period. There was an export duty of 1s. per hundred nuts which was reduced to 4d. by 1828.²⁷

Pearls formed yet another important item in the trade between the two coasts. However, it found no regular place in the trading pattern, for pearl fishing was undertaken only when the oysters were deemed to have matured. The pearl fishery continued to be a monopoly of the state under the British and, excepting on a few occasions, it was rented out to speculators. When undertaken, as Madras realized when it ruled the Maritime Provinces, the pearl fishery was in the nature of a windfall to those who controlled it: in the three fisheries Madras conducted it earned a revenue of £ 396,000. The pearl fishery brought out the close links that had been established between the coasts of Ceylon and Coromandel. The pearl banks of Ceylon lay off its north-west

^{26.} Parliamentary Papers, 1831/32, XXXII (274) p. 6.

Ibid., 36; Collector of Negapatam to Board of Revenue of Fort St. George, 28 July 1836, C.O. 54/157; Barnes to Murray, 24 Aug. 1827, C.O. 54/105; Ceylon Government Gazette, 7 Nov. 1836.

coast, with the Mannar bank being the richest, and the fishing was in the hands of speculators from the opposite coast, where too pearl banks were found. In fact, the Raja of Tanjore and the Nawab of Carnatic had disputed the Dutch control over the pearl banks of Ceylon and they renewed the demands for a share of the fishery as of right when Madras rule was established. The demands were withdrawn only in consideration of a monetary payment.28 In the main the speculators were from the Nattukottai Chetti community and they seemed to have even formed a ring to control the renting in a fairly effective manner. The boats and crew for fishing were brought from Tuticorin, Negapatam and Karikal of the Coromandel coast, while the divers were mainly Maravas and Paravas of Tuticorin. Along with them came their families and others who were attracted by the prospects of petty trading; pearl fishing occasions were described by a contemporary as "as exciting to Indians as fairs, horseraces and regattas are to Europeans". 29 In 1833, on the recommendations of Colebrooke, the government monopoly was abolished in favour of a license fee for the right of fishing. The measure, however, failed to break the control gained by the Chettis and it was only in 1836 "the perfect success of the principle of throwing the trade open" was seen. This was largely due to the determined efforts made by Governor Horton: even the staid Madras Gazette was moved to congratulate him on his achievement.80

There were other products of the island which were taken to Coromandel by the coastal traders. Among these were chanks, ivory, tobacco, ghee, coffee, various handicrafts of the Kandyans, the produce of the palmyrah tree from Jaffna, and chaya root. None of these held an important place in the trade, however.

The principal article imported from Coromandel in return for these items was rice. The problem of the supply of rice, which was the staple food of the people of the colony, was to concern the British as it did the Dutch earlier. Ceylon as a colony never succeeded in producing its requirements in rice. The early British felt that the problem they faced since the inception of British rule would be eased with the conquest of the Kandyan Kingdom but they were destined to be disappointed. An estimate made in the 1820's amply revealed the position. On the basis of 6 parra as the average annual consumption of rice per person, it was calculated that a total of 6,111,640 parras would be required for the colony, but both the Maritime and the Kandyan Provinces succeeded in producing only an estimated 2,158,612 parras.³¹ Various steps were taken by the rulers to promote paddy cultivation but as a writer commented in 1849, "the results shows (I am speaking advisedly), to the everlasting shame of the British Government, that the island is not even self-sufficient in this particular".³² The gap in the supplies was filled by imports from India. In the period 1818 to 1828 alone the imports amounted to over £ 150,000 in value. Perhaps it is no surprise that

^{28.} Brohier, "Letters and Reports on Ceylon", J.C.B.R.A.S., IX (1964), 41, 46, and 55-6.

J. Steuart, Notes on Ceylon and its Affairs (London, 1862) p. 149; R. Percival, An Account of the Island of Ceylon (London, 1805) pp. 86-9.

^{30.} Horton to Glenelg, 21 May 1836, C.O. 54/148; Madras Gazette, 4 May 1836.

C.O. 416/2-A3. The accuracy of the figures is doubtful but they are indicative of the magnitude of the problem.

^{32.} C. Pridham, An Historical, Political and Statistical Account of Ceylon (London, 1849) ii, 368.

the inhabitants, especially of the Maritime Provinces, developed a marked preference for "coast rice". 88 Much of the imports came from Coromandel, which from the Dutch times had been the principal supplier.34 The quantity imported varied, being governed by the respective performances of the cultivators of the two regions; and therefore the price was subject to considerable fluctuations. In the interior Kandyan Provinces, for example, within the course of two weeks in February 1832 the price of coast (i.e. Coromandel) rice rose from 3s. 9d. to 4s. 6d. per parra on account of the poor maha harvest. Significantly at the same time at Puttalam the price remained constant at 3s. 4½d. per parra.35 It is relevant to note here that Puttalam constituted one of the ports which was concerned with the coastal trade. These fluctuations gave an opportunity to traders to draw large profits by manipulations. A correspondent to the Colombo Journal observed in January 1833 that they are "in the habit now, and at all times, to purchase [rice] in large quantities and store it up until very urgent demands for the same are made, to sell it at a very high rate". 36 The traders who were singled out for criticism were the Nattukottai Chettis. The high cost of rice reflected in the figures was due also to the import duties imposed by the government of Ceylon. The colonial government's customs policy was based on the view that, where possible, import duties should be raised and export duties correspondingly reduced in order to promote the export of the products of the island. Despite the urging of numerous officials, who pointed out that when import duties were decided upon a distinction should be carefully made between articles of the first necessity and others, the government continued to tax all imports on the same basis. The duty on rice varied over the years—in years of famine, as in 1813, it was reduced to a slow as I percent—but generally it amounted to 14 to 20 percent of the usual price of grain in the market of Colombo. In the mid-1830's the revenue from this duty was over £ 25,000 per annum, which was estimated to be 2/5th the whole revenue from customs, excluding cinnamon.37 The reduction of the duty was repeatedly demanded, for there was no doubt it was causing hardship to the people. The reduction was also called for on the grounds that it deterred the highly valued South Indian labour from coming to Ceylon: "the labourers who came to Ceylon from the continent to cultivate Coffee and Sugar subsist altogether on imported grain which they prefer to that grown in the Island and so heavy a tax on their subsistence increases the price of labour and retards the settlement and improvement of the island".38

Equally important as rice for the Coromandel-Ceylon trade was cotton cloth manufactured in Coromandel which too was controlled by the *Nattukottai Chettis*. Ceylon had imported cloth from Malabar and Madura as well as from Coromandel from early times, but Coromandel functioned as the main supplier throughout—indeed, under the Dutch cloth exports to Ceylon from Malabar and Madura were subjected to an embargo by the Company and Coromandel's share of the market

^{33.} Colombo Journal, 11 Sept. 1833.

^{34.} Raychaudhuri, Jan Company, pp. 51, 62 and 211.

^{35.} Colombo Journal, 16, 19 and 27 February 1832.

^{36.} Ibid., 16 Jan. 1833.

Ceylon Government Gazette, 23 June 1813 and 9 Nov. 1836; Executive Council minutes, 11 Sept. 1836, C.O. 54/157.

^{38.} Colebrooke's memorandum, 31 Dec. 1840, C.O. 54/185.

increased correspondingly.39 A high import duty on cloth was imposed by the British in Ceylon. Again the bias towards exports was reflected; further, it was also felt that, as in the case of rice, the manufacture of cloth within the colony would be encouraged by a high import duty. The duty was successively raised from 7½ per cent until it stood at 20 per cent ad valorem by 1836 and since it effectively varied according to the description of cloth, the actual imposition ranged between 15 to 50 per cent. By this time the collection of the duty had been simplified to some extent by formulating a table of fixed grades and values of cloth in place of the numerous varieties and grades which had to be valued earlier. In the early 1830's the revenue earned by the government from this amounted to about £ 13,500 per annum. Most of these imports were made up of the better types of cloth within each class, for the manner in which the duty was calculated favoured these rather than the coarser types. Coarse cloth was imported to be dyed by craftsmen in Jaffna and was often re-exported. 40 Although a considerable amount of cloth was imported, manufacturing was also undertaken within the colony. It was centred around Jaffna and to a lesser extent at Mannar. The Dutch had taken steps to develop manufacturing as well as dyeing of cloth in Ceylon. They were less successful on the manufacturing side than on the dyeing owing to restrictions of caste. 41 However, manufacturing continued well into British times though on a moderate scale. The attempts of the British officials to encourage this by means of high import duties failed. For, counter steps were taken by Madras to reduce the export price of Coromandel cloth by reducing the export duty imposed there. By 1836 it had been reduced to 21 per cent as compared with 8 per cent duty on other articles, with the exception of rice, which was subjected to a duty of only 3 per cent, and Coromandel was able to gain control of the market in Ceylon, almost to the exclusion of the products of Jaffna. As early as 1817 it was estimated that the manufacturing in Jaffna had declined by about one-half.42

Several other items of trade from Coromandel were brought to Ceylon but their place in the trade was slight. Among these were brass for brass manufacturing in Jaffna, steel, opium, grain other than rice, salted fish, sugar, spices and on occasion European manufactured goods from Madras.

In early British times it became increasingly clear that the little 'direct' trade (in contradistinction to 'barter' trade) that was carried on between Ceylon and Coromandel was no longer profitable. Indeed, if a statement of the merchants engaged in the trade is to be believed, they were actually suffering losses (see Appendix I). Apart from the adverse customs structure maintained by both the Ceylon and Madras governments, the trade was hampered by unfavourable rates of exchange which prevailed between the two territories. Many currencies were used in Ceylon-rix-dollars, various Indian coins, Spanish dollars-and the exchange rates were subjected to heavy fluctuations,

^{39.} Raychaudhuri, Jan Company, pp. 13, 51 and 137. In fact, over the years the Dutch Company's trade in Asia on the whole became heavily dependent upon the supply of Coromandel cloth. Ibid., p. 159.

North to Hobart, 20 Apr. 1803, C.O. 54/11; Evidence of Captain J.T. Anderson, 20 Sept. 1830, C.O. 54/121; Executive Council minutes, 11 Sept. 1836, C.O. 54/157. 40. 41.

Arasaratnam, Dutch Power, p. 161.

Bertolacci, Ceylon, pp. 226-7; Collector of Negapatam to Board of Revenue of Fort St. George, 28 July 1836, C.O. 54/157; Collector of Narasapur to Board of Revenue of St. George, 27 Oct. 1836, C.O. 54/157. 42.

invariably to the disadvantage of the colony. In 1825 the Lords of the Treasury in England decided to introduce into Ceylon, as elsewhere in the empire, a uniform monetary system based on the English shilling but as far as Ceylon was concerned it proved to be a failure. To obviate the difficulties that arose and in view of the close connections that existed between Ceylon and the East India Company territories, repeated demands were made for the introduction of the Indian coinage to replace the diverse currencies. Only in 1836 was a decision taken and that year Governor Horton made the 'Company's Rupee' the colony's monetary medium. The merchants concerned with the direct trade faced other difficulties too. Freight in the dhonies, which carried the trade, was scarce, for they were normally engaged for return voyages by traders who engaged in barter; and in any case their charges were high.

With the failure of the direct trade, a considerable smuggling trade developed, which by all accounts proved to be extremely profitable. As the Collector of Narasapur once advised his superiors at Madras, "a high rate of duty defeats its own end, by cramping trade, diminishing consumption and promoting smuggling". 46 Smuggling was especially marked in tice, cloth, arrack and arecanut and to a lesser degree in tobacco. The Ceylon Government could do very little to prevent this. The trade with Coromandel was intimately connected with the inter-port trade of the island and the same traders were generally engaged in both and consequently it was often difficult to distinguish between cargo destined coastways and cargo sent to the other ports of the colony. Furthermore, the customs staff of the government was stationed only at a few ports concerned with the coastal trade. As a measure to end smuggling, suggestions were made that owners of native crafts should be required to enter into bonds but it became obvious that these bonds could not be effectively enforced and that even if they were enforced it would lead to endless prosecutions. The government had no option but to close its eyes to smuggling. 47

The tariff policies of Ceylon and Madras affected the barter trade between Coromandel and Ceylon too, but not to the extent seen in the direct trade. In fact, the barter trade continued to generate profits. This was mainly due to the fact that the major articles brought from Coromandel, rice and cloth, realized exceptional profits in the colony. (For rice see, Appendix II. As for cloth, a colonial official claimed in 1836 that it was the "only means the Ceylon Dhonies have of making a trip to the coast pay" ⁴⁸). The degree to which the people of the colony depended on Coromandel for these essential items is amply borne out here. Further, it is clear that unlike in the case of the trade with Europe, where the merchants derived profits in both imports and exports, the coastal trade was profitable at best in one direction only.

Report of Colebrooke upon the Establishments and Expenditure of Ceylon, 28 May 1832, C.O. 54/122; Collector of Madura to Board of Revenue of Fort St. George, 6 Aug. 1836, C.O. 54/157.

^{44.} H. A. de S. Gunasekera, From Dependent Currency to Central Banking in Ceylon (London, 1957) pp. 4 ff.

^{45.} C.O. 416/12-E3.

Collector of Narasapur to Board of Revenue of Fort St. George, 27 Oct. 1836, C.O. 54/157.

Bertolacci, Ceylon, pp. 344-5; Collector of Customs of Galle to Colonial Secretary, 8 June 1836, C.O. 54/157.

^{48.} Collector of Customs of Galle to Colonial Secretary, 8 June 1836, C.O. 54/157.

The customs structure was revised from time to time by successive Governors but no significant shift in the principles underlying the policy took place until Horton became the Governor. By this time Colebrooke had made major recommendations regarding the revision of the customs policy which were accepted by the Secretary of State in England. The tariff relating to the trade with Europe of course took priority but soon after assuming office Horton initiated discussions with the Madras government with the intention of arriving at a consensus regarding the revision of duties imposed on the Indo-Ceylon trade. Throughout Horton seemed to have acted on the assumption that if Ceylon made concessions Madras would reciprocate and the results would be beneficial to both territories. 49 The formulation of a new policy dragged on from 1833 until 1837 when the Ordinance No. 7 of 1837 was enacted incorporating the decisions of the government. The delay was partly due to the financial difficulties faced by the government-there was a strong feeling that it was not the best climate to initiate a major change-and partly due to the long drawn out process of consultation which took place with the European mercantile community. Significantly, no attempts were made to consult the traders who were engaged in the coastal trade. There were several issues which were raised at this time, which reveal the attitude of the government and others towards the coastal trading activities. Of the provisions of the Ordinance, perhaps the most sharply disputed was that relating to the equalisation of the duties on English piece-goods and Indian cloth at 4 per cent. This was vehemently opposed by the European merchants. Their cause was canvassed within the Legislative Council with great vigour by the Chief Justice. He argued that "at present it was with great difficulty that British cloth could compete with [Indian cloth] in the market, and it was urged that they would so far suffer inasmuch as they were in a great measure supported by Merchants at home, and they would lose that support when it was found that the growth cf India was preferred to that of Great Britain".50 Horton justified the decision by pointing out that in 1835 alone the sale of cloth imported from England amounted to only £ 24,376 whereas the imports from India were valued at £ 90,558 (according to one estimate) or £ 104,754 (according to another): clearly the preference of the people was for Indian cloth and while taking some measures to support the British manufactures, it had to be respected. There were protests that any reduction of the duty on Coromandel cloth would deal a ruinous blow to the flagging cloth manufacturing in the north but they were ineffectual. Provisions concerning the products of the coconut tree too caused controversy. It was argued on behalf of the Europeans that they had invested heavily in the production of coconut oil and that if the duty on nuts was reduced, as it was intended, the cost of manufacturing would considerably increase, for the change would stimulate an increase in exports to South India. Horton admitted the validity of the argument but was of the opinion that since 9/10th of the land owners of the coastal belt were coconut growers, it was wrong to protect the European interest at their expense. A further provision which caused concern was the one relating to the duty on rice. It was argued by some that the duty should not be reduced in the interest of the cultivators in the colony but others pointed out the reality of the situation and deman-

^{49.} Horton to Glenelg, 21 Jan. 1837, C.O. 54/157.

^{50.} Ceylon Government Gazette, 11 Jan. 1837.

ded that it be drastically reduced to help the consumers. However, the deciding factor was fiscal: Horton felt precluded "by the serious amount of revenue which would be hazarded by the smallest reduction from attempting a reduction of duty at this moment". Nevertheless, a new rate of 7d. per bushel of rice was introduced by the Ordinance. On the whole there was much truth in Horton's claim that the Ordinance was beneficial to the coastal trade. The export duties on arrack and arecanut were reduced to $2\frac{1}{2}$ per cent. Watchoused goods for re-export at the ports of Colombo, Galle, Jaffna and Trincomalee were exempted from duty and the inter-port trade of the colony was to be given a full rebate of the dues. 51

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The trade between Coromandel and Ceylon was carried almost entirely by the light-draught vessels which were known to contemporaries as dhonies. They were ideally suited to traverse the narrow strait which separated Ceylon from the southeastern extremity of the Coromandel coast. Europeans were weary of making use of this passage—Pliny had long ago noted its dangers when he wrote that "the sea between the island of Ceylon and India is full of shallows not more than six paces in depth, but in some channels so deep that no anchor can find the bottom"52-and preferred the better known and safer waters along the eastern coast of the island to reach the Bay of Bengal, but to the seafarers of the two coasts who had from time immemorial used this passage, it possessed no special terrors. A distinct advantage of dhonies was their ability to reach the numerous small ports which dotted the coast lines. Unlike the European sailing vessels which had to go round the island, these touched the opposite coast in double-quick time and were able to offer substantially cheaper freight rates. However, dhonies suffered from one disadvantage: they were employed only during the north-east monsoon and were laid up during the contrary monsoon.58

The chief harbours of Ceylon were Galle, Trincomalee and Colombo. Galle and Colombo were used by the coastal craft as well as by European vessels but Trincomalee, which lacked a hinterland, was hardly concerned with the coastal trade. There were several other smaller ports along the coastline which offered shelter to the native crafts. The more important among them were Kottiyar, Batticaloa, Matara, Beruwala, Kalutara, Negombo, Puttalam, Chilaw, Kalpitiya, Mannar, Jaffna and Point Pedro. Some of these, like Beruwala, had had a long association with coastal shipping, but others like Negombo came into prominence owing to the activities of the Dutch. Negombo in fact seemed to have supplanted Kalpitiya, which held sway during the Dutch times, as the principal port concerned with the trade with Coromandel; a contemporary wrote of it as the "largest village in Ceylon, and for its size contains the greatest number of inhabitants".54 These several ports attracted not only

^{51.} Ibid., 9 Nov. 1836; Horton to Glenelg, 21 Jan. 1837, C.O. 54/157.

^{52.} q. in R. Moorkerji, *Indian Shipping* (London, 1912)p. 103. Several Governors gave serious consideration to plans to deepen the passage and provide for heavy shipping between the Gulf of Mannar and the Bay of Bengal but the estimated costs proved to be too great for the colony to bear; Cf. *Parliamentary Papers*, 1872, XLII (c. 611).

Bertolacci, Ceylon, pp. 18-9; Colebrooke's Report upon Revenues, C.O. 54/122. On dhonies see, H. Yule and A. C. Burnell, Hobson-Jobson (London, 1903) p. 323.

^{54.} Percival, Ceylon, pp. 108-9.

the *dhonies* which plied between Ceylon and Coromandel but also those engaged in the inter-port trade of the island. The inter-port trade was carried on in the main between the northern districts and the south-western coastal belt, which were the more populous regions of the colony. Again, barter was the chief characteristic: the inhabitants of Jaffna exchanged salt, tobacco and cloth for items like arecanut, cotton and bee's-wax of the south-west. Jaffna also functioned as a centre of export for produce collected from the other parts of the island.⁵⁵ Under the Dutch there had been a busy rice trade between Batticaloa and Trincomalee (to supply the garrison there), Galle and Jaffna, but during early British times rice cultivation in the Batticaloa region declined and its port no longer played an important role in the inter-port trade of the colony.⁵⁶

From these ports radiated trade routes to the interior of the island. The Dutch had built several roads and canals in the littoral and these had assisted the traffic of goods within the area. There were long-known land routes from the littoral to the Kandyan Kingdom but movements along them depended greatly upon the political relations which prevailed between the two territories.⁵⁷ The British rule, in particular the conquest of Kandy in 1815, brought about better facilities for the internal commerce. Perhaps the most crucial from this point of view was the network of roads the British began to construct during this time. Roads were primarily built for military purposes but their impact on the economy of the colony was incalculable: a contemporary wrote that roads had

afforded facilities of communication with the principal stations of the coast, and contributed materially to stimulate the exection of the inhabitants, by furnishing the opportunity of conveying the produce of their labours to markets, and enabling them to produce such comforts for themselves as they were previously unable to obtain; besides the incalculable benefits arising from intercourse with Europeans.⁵⁸

Equally important was the abolition of the land pass duties which were maintained at provincial bounderies in the littoral and the *kadavat* between the Maritime Provinces and Kandy. Both were legacies from the Dutch. The duties in the littoral were mainly enforced in the northern districts and the British standardised the rates at $7\frac{1}{2}$ per cent excepting in Jaffna, Mannar and the Vanni where it was fixed at 5 per cent. That these levies had "the effect of impeding the inland communication" there was little doubt. The effects of the *kadavat* were equally clear. As Governor Brownrigg wrote after the conquest of Kandy, they were "operating to cramp the natural trade by subjecting it to all the discouraging restrictions necessary to support a Pass Duty as a public form". The abolition of these duties meant a loss of considerable revenue—estimated to average about 16,000 rix-dollars per annum—but Brownrigg saw greater benefits accruing from the measure: they "will be in the shape of Export and Import customs, [which will] flow freely and voluntarily, from a profitable trade, and to a much more considerable amount". Accordingly, the internal duties were abolished

Evidence of Captain J. T. Anderson, C.O. 54/121; Collector of Jaffna to Colonial Secretary, 16 Dec. 1836, C.O. 54/157.

^{56.} Bertolacci, Ceylon, p. 33.

^{57.} See, Arasaratnam, "The Kingdom of Kandy", C.J.H.S.S. III (1960) 109-127.

^{58.} S. Casie Chitty, The Ceylon Gazetteer (Cotta, 1834) p. 43.

^{59.} Bertolacci, Ceylon, p. 347; C.O. A.O. 8/84.

^{60.} Brownrigg to Bathurst, 26 Sept. 1815, C.O. 54/55.

in 1815. At the same time he removed the bazaar tax, which had been introduced by Madras along the lines of the Indian levy, on the grounds that it was restricting and confining the internal trade. With these several measures the trade between the littoral and the interior began to be knit more closely, with consequent benefit to the trade between the colony and Coromandel. Nevertheless, some regions of the Maritime Provinces, especially the ports along the western and south-western coastal belt continued to maintain closer relations with the opposite coast than with the interior. 61 This was to break down only with greater improvements in the internal communications system. Although the development of the internal commerce benefited the Coromandel traders, it could be argued that eventually it affected the trade coastways in an adverse manner. For, improved facilities promoted the movement of European goods beyond the narrow confines of the more important towns, and the local producers (no doubt in a highly limited way) received opportunities to channel their produce to markets for cash sales rather than to depend on barter dealings; and, concomitantly, the use of money spread. By 1836, it was reported, "every article of British manufacture, which the natives might require or could afford to purchase, was hawked through the most remote hamlets".62 The exaggeration is obvious but supporting evidence shows that European goods were reaching a wider area in the colony and that the people were beginning to acquire a taste for European goods. It was perhaps the selling of their produce in the open market that enabled them to purchase the European goods. These developments and their effects have yet to be properly documented but it could be conjectured that one of the final results would have been the contraction of the barter trade of the colony with Coromandel.

The contemporary records are quite clear that the merchants who dominated the coastal trade during the period under review belonged to *Nattukottai Chetti* community, one of the several sub-castes into which *Chetti* caste had been divided. *Nattukottai Chettis* were numerous in the Coromandel country and have been described as "bankers, money-lenders and wholesale merchants". ⁶³ Already by Dutch times the *Chettis* as a group had begun to gain ground in the coastal trade against the Muslim traders who had held a larger share and by the mid-eighteenth century together with the *Komatties*, had even begun to dominate the trading activities along the Coromandel coast. ⁶⁴ As far as the Ceylon-Coromandel trade was concerned, by the turn of that century the *Nattukottai Chettis* certainly seemed to have eclipsed the Muslims as well as other Hindu traders who had up to then played an important role. Indeed, they seemed to have succeeded in obtaining a near monopoly control over certain articles involved in this trade, especially rice, cloth and pearls. Detailed information regarding their trading activities is not available but according to a report of a European merchant in the colony, they not only acted on their own but functioned as agents for other

^{61.} Colebrooke's memorandum, 31 Dec. 1840, C.O. 54/185.

^{62.} J. Forbes, Eleven Years in Ceylon (London, 1840) ii 16. See also, Beaufort and Huxham to Lusignan, 22 Nov. 1821, C.O. 59/27, which gives a list of European goods sold.

W. Francis, Madras District Gazetteers: Madura (Madras, 1906) i, 100, 131 and 152;
 J. H. Nelson, The Madura Country: A Manual (Madras, 1868), p. 68.

Arasaratnam, "Dutch Commercial Policy", I.E.S.H.R. IV, (1967) 113-4; S. Arasaratnam, 'Aspects of the Role and Activities of South Indian Merchants, c. 1650-1750', in Proceedings of the First International Conference of Tamil Studies (Kuala Lumpur, 1968) i, 587.

traders and speculators on the two coasts.⁶⁵ They were a very mobile people—by the end of the nineteenth century their activities had spread to Burma, the Straits Settlements and Natal—⁶⁶ and from Dutch times had begun settling in the main ports of Ceylon concerned with the coastal trade and, if we are to believe Knox, seemed to have even ventured into the Kandyan country and settled there.⁶⁷ In British times, the relaxation of the controls that had been imposed by the Dutch on the traders who entered Kandy would have enabled them to acquire a greater mobility. Further, by a regulation enacted in 1802, *Chettis* as well as Muslim traders from India who had settled in the colony were permitted to redeem by a capitation tax the compulsory services (*rajakariya*) they were liable to perform for the government. The significance of this lies in the freedom they obtained from a demand which could have had the effect of dislocating their trading activities; in this context it is relevant to note that in the case of the inhabitants of the colony, who were given no option of redemption, *rajakariya* demands adversely affected their agricultural activities.⁶⁸

There were traders from other communities too. Labbeis, who were said to have been descendents of Hindus forcibly converted into Islam, had a share in the cloth trade. The Muslims were known to have continued to be active both in the trade between Ceylon and Coromandel and in the internal trade of the colony. The coastal Sinhalese, especially those from the ports of Galle and Colombo, and Tamils of Jaffna-who had a special advantage in that they had no language barrier to surmount in the opposite coast-also participated to a considerable extent; Bertolacci estimated their share in the import-export trade of Ceylon at 5/12th of the whole in 1810-11 and 3/7th of the whole in 1812-13. (No figures are available for the later years). The inconsiderable capital required to engage in the trade would have doubtless facilitated their activities.⁶⁹ It is not known whether Europeans were involved in this trade. According to Captain J. T. Anderson, who invested in the tobacco trade of Jaffna with the Malabar and the Malay coasts and made a considerable fortune, not only the Europeans of Ceylon but also those settled in Madras, Pondicherry and Cochin made investments in the one time extremely profitable tobacco trade between Jaffna and Travancore, 70 but no such participation has been recorded in the case of the trade between Ceylon and Coromandel,

^{65.} Evidence of Rabinel, C.O. 416/12-E3. See also, Brohier, "Letters and Reports on Ceylon", J.C.B.R.A.S., IX (1964) 55 and 62; Percival, Ceylon, p. 72.

Francis, Madura, i, 100; E. Thurston, Castes and Tribes of South India, (Madras, 1909), V 249-271.

^{67.} Arasaratnam, "The Kingdom of Kandy", C.J.H.S.S. III (1960) 112.

^{68.} See, Colebrooke's Report upon the Compulsory Services to which the Natives of Ceylon were subject, 16 Mar. 1832, C.O. 54/145.

Evidence of Rabinel, C.O. 416/12-E3; Evidence of Captain J. T. Anderson, C.O. 54/121;
 Bertolacci, Ceylon, p. 139; Percival, Ceylon, p. 72.

^{70.} Evidence of Captain J. T. Anderson, C.O. 54/121.

APPENDIX I DIRECT TRADE IN ARECANUT WITH COROMANDEL

Cost per one hundred-weight	Rds. 5. 9. 0
duty at Negombo	1. 0. 0
freight	0. 6. 0
coast duty: Rs. 1 per cwt.	1. 0. 0
landing and storage charges at the customs house	0. 4. 0
total cost	8. 7. 0
sold at the coast per cwt.	6.11. 0
loss sustained	1. 8. 0
	A STATE OF THE STA

Source: Statement made by several traders at Negombo to the Collector of Customs at Colombo, 30 July 1836, C.O. 54/157.

APPENDIX II
BARTER TRADE WITH COROMANDEL

Original cost a	t Negombo		Sold at the coast on	barter
	Rds.			Rds.
105 amunams of arecanut at Rds. 11½ per amunam duty at Negombo	1207. 6.0 236. 3.0	1443. 9,0	loss sustained 2%	1415.0.0
3 % candies copra at Rds.19½ per candy duty at Negombo	75. 6.0 25.10.0	101. 4.0	loss sustained 35%	66.0.0
9050 coconuts at Rds.				
16 per 1000	144. 9.0			
duty at Negombo	20. 1.13	164.10.1	loss sustained 21 %	126.8.0
2702 lbs. coffee at 3f.	A STATE OF THE PARTY OF THE PAR			
per lb.		675. 6.0	profit obtained 6%	717.6.0
		2385. 5.1 1	average loss 3%	2285.8.0
received in lieu of the add—import duty	and the second second	ds 168½ parras	rice, including charges	2026.8.0 468.9.0
prime cost of	rice to the ex	porter		2495.5.0
rice sold at Rds. 1 deduct original cos		roduce gain by	the sale of rice	2531.3.0 2385.5.1 ½
balance of the Cey	lon produce	sold, paid in c	ash	145.9.2 ² / ₃ 299.9.2
profit of the e	xporter			445.6.233

Source: statement encl. in Collector of Customs to Colonial Secretary, 30 July 1836, C.O. 54/157.

The Impact of High Yielding Varieties of Rice on a Settlement Scheme in Ceylon*

NIHAL AMERASINGHE

1. Introduction

Following the discovery of the high yielding varieties (HYV) of foodgrains and their commercial application, a transformation in productive technology has been set in train in a vital area of agriculture. The increase in productivity generated by this technological breakthrough has led to the rapid diffusion of the new practices in certain areas. These changes have opened out the exciting prospect of making substantial profits in farming and the equally significant possibility of converting hitherto non-viable farms into viable ones. The new varieties of traditional foodgrains in particular have touched off a transformation in the growing of crops, and this development could be considered to be the basic factor underlying the so called "green revolution". The "green revolution" has attracted the universal interest of all those concerned, and helped to dispel the conventional wisdom with regard to change and development among farmers of the Third World. Strategies involving high yielding varieties of seeds for agricultural development have been adopted or are under active consideration by governments the world over. This paper examines the concerted efforts by the Government of Sri Lanka towards adopting such a strategy in order to bring about rapid changes in the levels of productivity in the island in general and in settlement schemes in particular. Settlement Schemes1 have been in existence for over four decades and have had a special significance in the history of alienation and development of crown land in Ceylon, (Ref. 4). At present there are 80 major colonisation schemes covering an area of 304,355 acres of irrigable and unirrigable land (Ref. 2). The average size of holding of paddy (rice) land is 3 acres while that of unirrigable highland is 1.8 acres (Ref. 7). Colonisation schemes have been under constant criticism due to their poor levels of performance. Following the recommendations of the I.B.R.D. in 1966 (Ref. 8), which was particularly critical of the colonisation schemes, a number of remedial measures were suggested. These recommendations which included methods for increasing productivity and economies in the use of irrigation water were introduced on a pilot basis in 1967 within one major colonisation scheme. Encouraged by the success of the pilot project, nine other colonisation schemes

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A short bibliography of references has been listed at the end of this article and citations are embodied in bracketed sections by reference to numbered items in the bibliography.

The terms Colonisation Schemes and Settlement Schemes are used synonymously, and refer to government sponsored settlement on crown land in an area away from settlers traditional villages.

were designated "Special Projects" in the following year. At present there are fifteen such projects. The objectives of the "Special Projects" were fundamentally to increase the yield of paddy which is the mainstay of the farming system, encourage the cultivation of other field crops, promote the adoption of improved farm practices and the development of farmer organizations (Ref. 9).

In this study an attempt is made to examine the impact of the agricultural intensification programme on a selected "special project". In this programme the high yielding varieties of rice (HYV) formed a vital facet. The economic and social consequences of the improved type of farming using HYV will be identified and estimated on the basis of a comparison of the organization of production and the livelihood of the different socio-economic sectors, prior to and after the initiation of the project.

2. Methodology

Any claim to identify changes affecting the production and livelihood of the rural population must be based on situations anterior to the initiation of programmes introducing HYV. Further, cognizance of the imminent socio-economic processes which had brought about changes in the locality even in the absence of a major government effort to induce technical advance should be taken into consideration if we are to realistically appraise the impact of HYV. The methodological approach clearly has to be positive and not normative as we are attempting to examine situations anterior and posterior to the introduction of HYV. The problem of data would be paramount in such an investigation. A production function approach would be limited by the lack of suitable time series data relevant to such an analysis. Moreover, the period involved is too short to permit the consideration of many variables. Further, the analysis being confined to a few variables defined independently would not permit a study in depth of the shifts in the condition and the conduct of rural people under the influence of the alteration of their economies and technological systems. This could only be achieved through a close scrutiny of the many dimensions of community life within the matrix of which conditions change and decisions are made. Therefore, the method of investigation had to be shifted to the conventional farm management survey approach of interviewing a sample of farmers. To obtain an insight into the impact of HYV on other members of the community a similar approach based on personal interviews was resorted to.

The choice of a "Special Project" for the study was largely determined by two factors, viz., representativeness and the availability of antecedent data. On this basis the Minipe Colonisation Scheme was selected. A random sample of 55 farmers and also seven non-farmers who resided in the community and derived their livelihoods from the farming community was selected for study.

The relevant antecedent information was obtained from official records, interviews with old residents of the locality and the farmers in the sample chosen for study. Another very valuable source of antecedent data was the benchmark survey conducted in the locality prior to the establishment of a "Special Project" in 1967

^{2.} This concept is analogous to the Intensive Agricultural Development Programme in India which was on a district basis.

(Ref. 5). Detailed questionnaires eliciting information on land holdings, tenure, production technology, expenditure, production, income, labour utilization, marketing, motivations and attitudes, diffusion and adoption of modern technological elements, credit and so on, were administered to the farmers in the sample. The information covered the period 1966/67 to 1970/71.

Great reliance was placed on the ability of farmers to recall the relevant information. However, this would not vitiate the credibility of the data as it concerned paddy cultivation which is the main source of livelihood of the farmers and it would be reasonable to assume that farmers would have a vivid recollection of the operations involved. Every effort was made to minimise the possible sampling and non-sampling errors of the investigation. In this regard the investigating groups familiarity with the locality enabled any inaccuracies to be easily detected and rectified.

3. Factors of Change

Some changes in the levels of production and livelihood of the community had taken place since the inception of the colony in 1941. Some of the more important variables which may have influenced the lives and the livelihoods of the farmers in the colony are, the declining land-man ratios, increasing capital-land ratios, improvements in general communications and the development of farmer organisations such as the co-operatives and cultivation committees. Another important influence was the extension service which existed in the colony from its inception. The milieu of socio-economic and political factors which had existed had not brought about any substantial development of the colony. It was reported in the socio-economic survey conducted in 1967/68 (Ref. 5), that the level of production was 37 bushels per acre, which was below the national average reported (Ref. 3).

The main reorganisation effected in the colonisation schemes designated as "Special Projects" were the intensification of the extension services and the appointment of a resident project manager whose duties were to co-ordinate the activities of the various government departments to ensure a better supply of the required inputs in time and form. A greater effort was made to encourage farmers to innovate. Awareness of the modern farm technology was achieved by demonstrations on farmers fields, distribution of mini-kits³ to farmers, and greater inter-personal communications between farmers and extension agents.

4. Impact on Production

The central feature of the economic change which may be anticipated by the successful introduction of HYV is a jump in productivity. But this could only be achieved and given permanence by radical changes in the organisation of the farm both in terms of resource use and husbandry practices. In this section an attempt is made to examine the changes, if any, which have taken place in the technological elements of production, cultivation techniques, farm reorganization and the levels of production as a consequence of the introduction of HYV of rice.

Mini-kits are small bags containing a few HYV of rice with the required complementary inputs. This enabled farmers to grow, observe and select varieties of their own liking.

(a) Changes in the Technological Elements and Cultivation Techniques

The intensification of the extension activity and the methods referred to in creating awareness amongst farmers have indeed had salutary effects. All the farmers in the sample reported having tried out the new HYV (Ref. 1, p. 74). It would be evident from table Al that the initial resistance shown by farmers towards adopting the new varieties has been circumvented. For instance, while an intermediate HYV, H4, took four years before peak adoption was reported, the adoption of new HYV has exhibited a much shorter time lag. This behaviour of farmers could be attributed to the confidence placed in the new varieties based on past experiences and also to the confidence reposed in the recommendations of the extension personnel. More than 80 per cent of the area under paddy in now cultivated with HYV (Ref. 1, p. 71). A striking feature about the adoption of the new varieties is the large number of new seed varieties that are put to use. It is commonplace to find farmers growing more than one variety on their fields. This has been observed as a method adopted by farmers to hedge against the risk of adopting HYV. This divisibility of risk is indeed a very effective way of spreading a farmer's risk and screening the virtues of the different varieties. Another noteworthy feature was the small extents of traditional varieties which were continued to be grown despite a high level of adoption of HYV. This was to produce rice for domestic consumption since the coarse nature of most of the new varieties make them less desirable. Some farmers had given up the use of certain HYV due to problems of pests and disease (IR-8), poor threshability (Taichung Native-1), and lower yield potential (H-4). It would therefore be clear that farmers go through an informal process of continuous assessment of seed varieties and discriminately select those with preferred characteristics.

With the increase in adoption of HYV there has also been a concomitant increase in the use of complementary inputs and the adoption of improved cultivation techniques. It will be evident from table A2 that an increasing number of farmers have fertilized their crops at the recommended rates, transplanted, used weedicides and pesticides and other innovations after the introduction of the new varieties. It would be evident that a radical reorganisation of farm resources and husbandry practices have taken place in the post HYV period. In fact, 91 per cent of the farmers reported the need for the reorganisation of production (Ref. 1, p. 98).

A greater mechanization of farm operations was also observed (see table A3), in particular, in the ploughing and threshing operations and the usage of sprayers. It may therefore be postulated that there has been a definite shift towards capital intensive technology following the introduction of HYV.

(b) Labour Utilization

The adoption of HYV of rice has not only been capital intensive but also labour intensive. The labour requirements between the ante and post—HYV periods have changed from 51.34 to 68.44 man days (see table A4), which indicates a 31.3 per cent increase in labour use. A new feature of the post-HYV period has been the trimodal pattern in labour requirements vis-a-vis bimodal pattern observed in the pre-HYV period. In the pre-HYV period the peak labour demands were for preparatory tillage (42%) and harvesting (44%), while presently they account for 29 and 39 per cent respectively. A new dimension which has been introduced into the labour utilization

pattern has been the transplanting operation which accounts for approximately 17 per cent of the labour required.

A change in the type of labour employed has also been observed. More family and hired labour and less exchange labour are now employed. A more than 100 per cent increase in the use of hired labour and a 40 per cent decrease in the use of exchange labour has been noted between the ante and post HYV periods. The preference for hired labour vis-a-vis exchange labour may be an attempt to ensure greater punctuality in the operational schedule and to be more self-reliant. Such a development of attitudes could be largely attributed to the greater commercialization of production consequent to the introduction of HYV.

(c) Levels of Production

A significant jump in productivity has been observed after the introduction of HYV. The average yield per acre for the Maha season has increased by 59.84 per cent and the Yala season by 58.8 per cent during the period 1966/67 to 1970/71. This yield increase may be considered phenomenal as the increase in yield observed over the 25 year period 1941-65 was approximately 52 per cent (Ref. 1, p. 113). Yields of less than 30 bushels per acre which were common in the pre-HYV period are virtually non-existent at the present time (see table A5). Further, more than 45 per cent of the farmers report yields greater than 70 bushels per acre at the presenttime, yields which were non-existent prior to the introduction of HYV. However, the impact of HYV on the levels of production have not been uniform and have exhibited a distribution pattern that one might consider normal, i.e. with a wide range of variation as in the older seed varieties.

Another significant feature was the land augmenting nature of the 'new' technology. Although, the area sown had declined by 18 per cent due to the fragmentation of holdings, the total production and gross returns per farm have increased by 56.49 and 60.13 per cent respectively during the period 1966/67 to 1970/71 (see table A6).

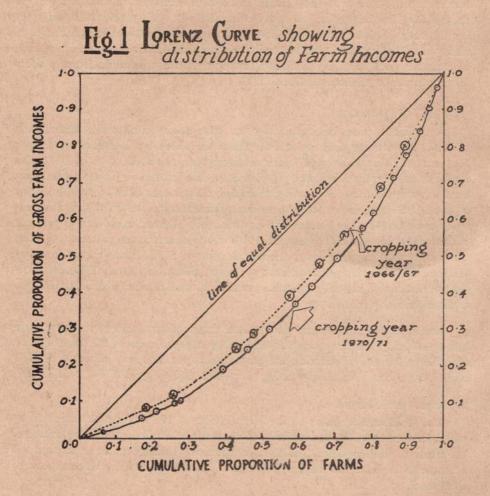
5. Impact on Livelihood

The social consequences of the introduction of HYV could be examined by making before and after comparisons of the levels of livelihood, the composition of the means of livelihood and livelihood expectations. In this section an attempt will be made to evaluate the changes which have taken place in these three aspects of livelihood.

(a) Levels of Livelihood

It may be anticipated that a productivity jump would make the average level of livelihood rise but the effects on different sectors, defined by their form of participation in the productive or distributive process, are bound to show discrepancies, with some groups being more advantageously placed. It will be clear from table A7 that the distribution of gress incomes has widened after the introduction of HYV. The scale of incomes range between a lower limit of Rs. 1001-1500 and an upper limit of

These values are 91.9% and 84.6% for the Maha and Yala seasons respectively if the yield figures from the Socio-Economic Survey of 1967/68 are used.



Rs. 16,001-16,500. It is evident that in the ante-HYV period the incomes were more clustered and the upper limit was Rs. 11,501-12,000. The benefits of the new varieties have been inequitably distributed with the gap between the rich and poor farmers growing wider. In the ante-HYV period, 26 per cent of the farmers operated below the poverty line, 6 (Ref. 6), while in the post HYV period this number has been reduced to 16 per cent. A significant feature is the emergence of a 'new elite' amongst the farmers who have achieved an income level much higher than the maximum obtained in the ante-HYV period. This category amounts to as much as 33 per cent of the sample population. These farmers have clearly benefited most by the HYV. The Lorenz Curve depicted in Figure 1 also demonstrates the widening inequality of the income levels. Another noteworthy feature is that farmers with the smallest acreages seem to have benefited least from the "green revolution". No conclusive evidence was available as to the intensity of cultivation between the different land holdings. Considering the high cost of production, it is postulated that the economic position of farmers is decisive for the adoption of the modern farm technology and consequently farmers with very small holdings will not be able to derive the maximum benefits of HYV.

In general 96.4 per cent of the farmers reported that they were better off while none reported being worse off, although 3.64 per cent reported no change. The net income per farm and per acre for the Maha season in the post-HYV period amounts to Rs. 1826.34 and Rs. 512.63 respectively (see table A8). The corresponding figures were Rs. 1269.50 and Rs. 116 in 1967/68 (Ref. 5). Between these two periods the cost of production had increased from Rs. 181.006 to Rs. 482.00. Thus, net income per acre had increased by more than tour fold despite the fact that the cost of prodution had increased appreciably.

The production levels on lands rented were much below those on owner operated farms (see table A9). However, even on these lands the levels of production were significantly better than those reported in the pre-HYV period. Further, the levels of production on lands which were rented on a share-cropping basis were less than those on a fixed rental. This clearly indicates the greater disincentive effect of a share-crop tenurial arrangement. Landlords now provide both seed and fertilizer, while only seed was provided in the pre-HYV period. Despite the additional contributions made by landlords in the post-HYV period, their share of the net income has increased more than proportionately to that of the tenants (see table A10). The net incomes to landlords have increased by 94.4 per cent while that of tenants by 80 per cent between the periods under consideration. Landlords have therefore benefited more than the tenants by the 'new' technology.

Other members of the community such as traders, tractor hire and repair agents etc., have also benefited by the improved technology. An increase in business turnover was reported by them, particularly during the harvesting and immediate post harvest periods. Agricultural labourers also reported more work days and higher wages.

^{5.} Defined by an income of Rs. 2400 per annum.

^{6.} Figure derived from the socio-economic survey of the Minipe Colonisation Scheme 1967/68.(5).

(b) Means of Livelihood

Paddy cultivation forms the main source of livelihood (see table A11) and constitutes approximately 70 per cent of the farm income. The cultivation of all other crops accounts for only 13.7 per cent, livestock production for 4.77 per cent and off-farm incomes for 12.2 per cent of the average gross income. The means of livelihood shows a slight change under the impact of HYV of rice. In the 1967/68 socioeconomic survey (Ref. 5), paddy accounted for 52.5 per cent of the total gross income, other crops 2.7 per cent, livestock production less than 1 per cent and off-farm income 19.8 per cent. It would therefore be clear that the contribution of farm production to total gross farm income has increased in the post-HYV period. A decline in the off-farm income component reflects the ability of farms to be self sustaining under the influence of the new farm technology, particularly the HYV of rice.

It would be evident from table A12 that the marketable surplus of paddy has increased approximately 76 per cent during the period 1966/67 to 1970/71. This increased commercialization of paddy production brought about by the HYV seems to have had spill over effects on other farming activities. The farmers are now more market oriented and have shown an increasing trend towards the diversification of production.

Changes in the consumption of other cereals and the extent to which these cereals were cultivated were also observed. Food crops other than paddy are almost entirely cultivated for domestic consumption and the declining trend observed clearly reflects a change in consumer preference from coarse grains to rice. It is also likely that farmers now prefer to specialize in the production of rice at the expense of the other cereals due to the enhanced opportunities offered by the HYV.

(c) Livelihood Expectations

Livelihood expectations could be affected both by the visible productivity jump and by the increased opportunities brought into view by contact with the ampler ways of life. It will be clear from tables A13 and A14 that, since 1968, there has been an improvement in farm and domestic technology. It may be surmised that the livelihood expectations of farmers have been influenced by the HYV of rice. Impressionistic observation from the data presented in the tabular appendices supported the implications of the statistical data in indicating that the purchase of durable consumer goods such as radios, bicycles, sewing machines etc., have increased in the post-HYV period. This reflects both an improvement in the financial position of farmers as well as their expectations to improve their quality of life.

The farmers were apparently content with their ways of life and were desirous of improving their lot through farming (Ref. 1, p. 146). A noteworthy feature was that the majority of farmers' sons (65.4%) aspired to take to farming with only 14.5 per cent indicating their preference for white collar jobs. This may be attributed to the satisfactory levels of living prevailing in the colony at the present time.

Conclusions

Many changes in the lives and livelihoods of the farmers in the settlement scheme have taken place since the initiation of the agricultural intensification programme in 1968. It would be dubious to attempt to quantify the contribution made by the

different components of the programme using the analytical framework employed. However, it may not be unreasonable to attribute these changes in the main to the HYV of rice, since the other variables influencing production had existed prior to the introduction of the new varieties without influencing production in any tangible way.

A reorganization of production with greater commercialization of both the demand and supply aspects was noted. More capital inputs are used and also some of the traditional husbandry practices have been replaced. The new technology has not only been capital intensive but also labour intensive.

A more than 50 per cent increase in productivity was observed but the benefits were inequitably distributed. Although, the cost of production had increased more than twofold the returns had increased more than proportionately. It is postulated that the economic position of farmers was a decisive factor in determining the scale of benefits that could be derived from the modern farm technology and that the farmers with the smallest acreages have benefited least. The new technology was also found to be land augmenting in nature.

The landlords have benefited more than tenants as a consequence of the improved technology. Other members of the community deriving their livelihood indirectly from farming have also benefited. Less reliance on off-farm incomes and a greater specialization in rice production were observed. Improvements in farm and domestic technology and livelihood expectations in general have also taken place.

We may therefore conclude that HYV of rice have had important economic and social consequences on the community under study. However, the benefits have been inequitably distributed and it is imperative to introduce some policy measures to ensure a better distribution and minimize such disparities in order to avoid the social tensions that could arise as a result of such polarization.

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TABLE A1: Farmers in sample reporting adoption of HYV of Rice

					YEA	ROF	YEAR OF ADOPTION	LION					
VARIETY	Before 1960	1960	1961	1962	1962 1963	1964 1965	1965	9961	1967	1966 1967 1968	1969	1761 0761	1971
Patchaperumal	11	3		Supplied to		No. of Street, or other Persons and Street, o	1						
H4 (1959)	2	11	1	16	-	4	2	5	7	-	-	-	
Н8 (1962)					-	4	7	14	m 1	7		7	
Taiwan (1966)								-	0	7	7	7	-
IR-8 (1968/69)										16	71	13	4
IR-262 (1969)											7	0	- :
BG-11-11 (1970/71)												-	32
LD-66 (1970/71)													11
MI-273 (1971)													3

Note: The years in parentheses represent the year of introduction of the variety.

TABLE A2: The Adoption of Modern Technology in Paddy Cultivation

National Commence and Commence		Name and Address of the Owner, where	-	YFAR	OF ADC	NOLLAN	-	Name of Street	-	- Control	
INNOVATION		1955	1956	1961	1961 1961 1961	1961	8961	6961	1970	Total No.	
		and	1960	1965					after	Surroda	per cent
Tractor Ploughing		22	18	8	1		1	2		52	94.5
Use of Iron Ploughs for Buffalo							2	3	5	11	20.0
Seed disinfection							-			-	1.82
Row seeding			,	1	9	4	16	- 5	12	53	1.82
Pow Transplanting			1		, -	. 71	3	-	4	=	20.0
		1	1	7	2	4	17	∞	12	52	94.5
Use of Irrigation Pump	:					c1 +			7-	200	9.09
Row weeders Chemical Weed Control	:			6	2	- 61	1	0 00	7	30	54.55
Use of Insecticides and Fungicides			2	10	4	9	16	5	2	51	92.73
Use of Winnowing Fan			4	500	m	· ·	4 4	-		22	81 07
Tractor Inreshing			07	4	00	STATE OF THE PARTY		1	1	17	30.10
Rice milling	: :	16	36	5.		· · · · · · · · · · · · · · · · · · ·			The second	54	81.86

			Farmers No.	Reporting Per cent	Av. No. of days per Reporting Farm per season	Av. Price Per Acre in Rs.	Av. Total Cost per Reporting Farm per season in Rs.
IM	4-Wheel Tractor		31	56.36	1.64	50	165
HY	First Ploughing Second Ploughing and	• •	31	30.30	1.04	30	105
er	Puddling Puddling		10	18.18	1.25	35	165.50
After	Threshing		39	70.91	1.5	30	97.58
YY	4-Wheel Tractor	1.53					
HY	First Ploughing	***	29	52.73	1.30	35	108.30
	Second Ploughing and					25	87.46
0	Puddling		9	16.36	1.22	25	69.43
Before	Threshing		34	61.82	1.5	15	09.43
	Use of 2-Wheel Tractors	100					
	after HYV		3	5.45	1.68	50	145
	Use of 2-Wheel Tractors					20	30
	before HYV		1	1.82	A Landing	30	
	Use of Sprayers after HYV		40	72.73	2.30	2	11.50
	Use of Sprayers before HYV		16	29.09	1.33	1	2.63

^{*}Compiled from data reported for Maha 1970/71.

TABLE A4: Labour Requirements for Paddy Production in man days per acre in pre-HYV and post-HYV Times*

	-	PERATION		nily		red		hange	100010000000000000000000000000000000000	Man
		TERATION	Pre HYV	Post HYV	Pre HYV	Post HYV	Pre HYV	Post HYV	Pre HYV	Post HYV
	(a)	Preparation of								
0		bunds & cleaning channels	3,48	3.87	1.51	2.37	1.79	1.83	6.78	8.07
ate	(b)	1st Ploughing	2.98	3.04	1.60	1.23	1.55	0.72	6.14	5.00
parato	(c)	2nd Ploughing	2.78	2.27	0.81	0.85	0.75	0.39	4.34	3.51
Preparatory Tillage	(d)	Puddling &					an man			2.45
4		Levelling	2.60	2.28	0.81	0.91	0.71	0.26	4.12 0.31	3.45 0.32
	(e)	Other	0.31	0.32	W = 1			- Total		
		Sowing	0.78	0.19	-	-	- 1	1	0.78	0.19
ng	(a)	Nursery Prepara-							0.01	0.71
nri	1000	tion	0.01	0.71	-	0.01	-	-	0.01	0.71
pla	(b)	Removal from	0.00	1.02		2.08		0.24	0.08	4.24
lsu	(c)	Nursery Planting Out	0.08	1.92		4.51		0.24	0.15	6.19
Transplanting	(c)	Flaiting Out	0.13	1.31	And the same	7.51		0.5		
	We	eed Control	1.87	2.96	1.33	3.64	0.57	0.54	3.77	7.14
Cultural Operations	Fe	rtilizer								
Cultural		plication	0.40	1.18	-		-	No.	0.40	1.18
ult		raying and	0.15	0.40		0.41			0.15	0.89
00		isting	0.15 2.18	0.48 2.71		0.41		N 37(8)	2.18	2.70
	III	igation	2.10	2.71		376			2.10	2110
ar-	Ha	rvesting and								
H		llection	6.27	7.55	2.96	3.83	2.67	1.69	11.91	13.07
ost		eparation of	0.70	0.01					0.82	0.81
& Post Ha		reshing Floor	0.72	0.81	1.26	1.46	0.98	0.59	5.75	6.36
20		reshing innowing and	3.49	4.32	1.20	1.40	0.90	0.55	3.13	0.50
rest		gging	1.94	2.24	0.68	1.11	0.22	0.12	2.84	3.47
Harvest & Post Harvest Operations		ansport	0.73	0.92	0.08	0.22			0.81	1.14
H					***	22.62	0.05	6.00	51.24	CO 11
	TO	TAL	31.03	39.06	11.05	22.63	9.25	6.75	51.34	68.44

^{*}Calculated for the Maha Season 1970/71.

TABLE A5: Paddy Yields per acre 1966/67 to 1970/71

YEAR				Id	STRIBUTA	ON OF YIL	ELDS IN B	DISTRIBUTION OF YIELDS IN BUSHELS PER ACRE	ER ACRE		
		Average Yield Bu. per acre	<30	31-40	41-50	09-15	01-19	71-80	81-90	91-100	> 100
1966/67 Maha Yala		44.10*	7.41 %	40.74% 61.11%	31.48%	18.52%	1.85%	11	11	i ı	M
1967/68 Maha Yala	::	50.92 (14.38%) 36.18 (9.18%)	1.85% 18.52%	22.22% 61.11%	31.48%	29.64%	11.11%	3.70%	11	1.1	11
1968/69 Maha Yala	::	60.32 (34.42%) 41.38 (23.76%)	9.26%	14.81% 50.0%	18.52% 11.11%	18.52%	27.78%	16.67%	1.1	1.85%	1.85%
1969/70 Maha Yala	. ::	68.24 (53.42%) 48.37 (43.46%)	3.70%	5.56%	18.52%	18.52%	18.52%	24.07%	11.11%	5.56%	1.85%
1970/71 Maha Yala	::	70.96 (59.03%) 55.42 (58.84%)	3.70%	3.70%	12.96% 25.93%	12.96% 25.93%	24.07%	27.78%	12.96%	5.56% 1.85%	1.1

*Indicates the base year on which the percentages have been calculated.

TABLE A6: Total Lowland Paddy Production 1966/67 to 1970/71

The state of the s	961	19/9	1967/68	89/	59/8961	69/	01/6961	02	0261	171
	(Pre-t Maha	(Pre-HYV) Maha Yala	Maha	Yala	Maha	Yala	Maha	Yala	Maha Y	YV) Yala
Area Sown in Acres	3.60	3,60 3,53	3.60	3.56	3,50	3.42	3,46	3.42	3,46	3.38
Amount of Seed used in bushels	7.17	7.06	6.50	86'9	5.07	6.54	4.06	5.89	3.85	5.03
Av. Production per farm in bushels	158.50	118.15	183.87	128.83	210.85	141.57	235.98	165.50	245.51	187.52
Gross Returns in Rs.	2193.52	1655,65	2516.52	1801.37	2914.43	2151.70	3313.19	2294.83	3442.56	2721.30

TABLE A7: Income Strata of Lowland Paddy Cultivators

Income Group in '000 Rs.	(Cropp	HYV ing Year 6/67)	(Cropp	it-HYV ing Year 70/71)	Acreage
	No.	Percent	No.	Percent	
1,001 — 1,500	3	5.65	1	1.85	1.0
1,501 - 2,000	7 .	12.96	2 6 2	3.70	2.75
2,001 - 2,500	4	7.41	6	11.11	2.0
2,501 - 3,000	9	16.67	2	3.70	1.75
3,001 - 3,500		5.56	3	5.56	2.17
3,501 - 4,000	5	9.26		1.85	2.50
4,001 — 4,500	4	7.41	6	11.11	2.67
4,501 — 5,000	4	7.41	4	7.41	2.88
5,001 - 5,500	5	9.26	3	5.56	2.67
5,501 - 6,000	4	7.41	4	7.41	3.38
6,001 - 6,500	4	7.41	2 2	3.70	3.50
6,501 - 7,000	1	1.85	2	3.70	4.00
7,001 - 7,500					
7,501 - 8,000			2	3.70	4.5
8,001 - 8,500			3	5.56	5.0
8,501 — 9,000			2	3.70	4.5
9,501 - 10,000			2 3 2 2 1 2 2 2	3.70	5.0
0,001 - 10,500			1	1.85	5.0
0,501 - 11,000			2	3.70	5.0
1,001 - 11,500			2	3.70	5.0
1,501 - 12,000	1	1.85	2	3.70	5.0
2,001 - 12,500					
2,501 - 13,000				1.85	5.5
11 31					
)2					
**					
**					
,, ,,					
,, ,,			1	1.85	10.0
5.001 - 16,500					

TABLE A8: Income from Paddy Cultivation-Maha 1970/71

					Value per Farm in Rs.	Value per Acre in Rs.
1.	Gross Income				3,442.55	994.96
2-	(a) Cost of Production				1,616.21	482.03
	(Without imputing a value for	family la	ibour)			
	(b) Cost of Production (With imputed cost of family	labour)			2,065.52	596.97
3.	Net income under condition (a)			EMP. IR	1,826.34	512.93
	Net income under condition (b)			**	1,281.41	397.99
4.	Net income from a bushel of paddy	under co	ndition (a)		Rs. 7.2	22
	Net income from a bushel of paddy	under co	ndition (b)		Rs. 5.6	0

Note: Cost of Production includes only purchased inputs.

TABLE A9: Production on Lands Rented/Leased/Mortgaged 1970/71

			MAHA 1970/71	YALA 1971
	Area sown in acres per reporting farm		1.94*	2.03* 2.75†
	Amount of seed used in bushels per reporting farm	n	2.75† 2.42* 3.63†	4.14* 4.75†
3.	Production in bushels per reporting farm		108.39* 158.75†	88.50* 122.50†
1.	Average Yield in Bushels per acre		55.87* 57.73†	43.60* 44.55†
5.	Disposal of Produce Seed for next cropping year in bushels		4.87* 4.17†	4.29* 5.00†
5.	Sales per reporting farm in bushels		49.83* 156.25†	38.75* 120.0†
7.	Share to landlord in bushels Share to landlord in cash		52.50* Rs. 225.00†	42.39* Rs. 241.67†

Note: * indicates lands rented on a share-cropping basis.

† indicates lands leased or mortgaged.

TABLE A10: Share of Incomes to Landlords/Tenants per acre in Rupees

	Pre-HYV 1966/67	Post-HYV 1970/71
T. A.	 853.23	1392.10
***	429.11	671.29
**	 68.83	53.01
	-	19.24
	 57.57	71.54
	 306.72	596.34
	125.72	225.99
	 	1966/67 853.23 429.11 68.83 57.57 306.72

^{*} The cost of production in the two periods has been assumed to be Rs. 181.00 and Rs. 512.93 respectively in the Pre-HYV and Post-HYV periods.

TABLE A11: Composition of the means of Livelihood for an average Farm-Maha 1970/71

Source of Livelihood	7	Activities or Enterprises	erprises			4	Av. Gross Income in Rs.	Perce	Percentage Share of Total Incomes	ire
1. Crop Production Paddy Other Cereals	(a) Lowland Paddy (Ownland) (b) Highland Paddy (Chena and Ownland) Rent Income as a tenant (Income as a landlord Maize and Kurakkan	Ownland) (Chena and Ow int dlord	nland)			£,,	3442.56 213.05 97.29 24.24 20.69	69.29 4.29 1.96 0.49 0.42		
Subsidiary Crops Root Crops Legumes Vegetable Crops Cash Crops Permanent Crops	Green chillies, Dry chillies, B.onions, R.onions Manioc, Sweet Potatoes and Yams Gingelly, Cowpea, Groudnut, Green gram All types Tobacco Murunga, Bannana, Coconut, Mango, Orange	illies, B.onions, es and Yams oudnut, Green oconut, Mango	R.onions gram				99.78 8.00 16.52 53.45 38.18	2.01 0.16 0.33 1.08 0.77 2.26	13.73	23
2. Livestock Production	(a) Egg production (b) Milk production (c) Sales of Animals (Neat Cattle, Buffaloes and Poultry)	(Neat Cattle, B	uffaloes and	Poultry)		71(-31	57.28 79.25 99.80	1.16	4.77	1
3. Off-Farm Income	(a) Transport (b) Trade (c) Hiring (d) Activities involving capital investment (e) Other occupations	ng capital invest	ment			23	52.73 145.45 238.09 92.73 77.27	1.06 2.93 4.79 1.87 1.56	12.21	
	Total Average Gross Income	Gross Income				49(4968.41	100.00		
	TABLE A12	TABLE A12: Disposal of Farm Produced Paddy 1966/67-1970/71	arm Produce	d Paddy	966/67-19	11/07				1
		1966/67 Maha Yala	1967/68 Maha Y	/68 Yala	1968/69 Maha Ya	(69 Yala	1969/70 Maha Y	170 Yala	1970/71 Maha	Yala Yala
Seed for next season in bushels	ushels	9.82 9.61	16.91	68.6	9.41	9.30	61.6	8.94	9.26	8.96
Sales in bushels			7				134.65		185.04 1	133.06
Subsistence Requirements in bushels Given to Friends and Relatives	s in bushels	57.78 55.55	- 1 38.69	37.43	5.00	38.49	44.24	41.15	46.07	43.59
								-	STREET, SQUARE,	Ì

TABLE A13: Changes in Fixed Capital in Farming

Type of Fixed Capital	Purchased or Constructed	Percent of Reporting Farms	Average of All Farms	Before 1960	1961-63	1964-66	964-66 1967-69	1970 and after
Draught Power	Purchased Shared Inherited	40.00 5.96 7.27	2.49	21.82	727	5.46	60.6	7.27
Mammoties	Constructed Purchased	9.00	3.69	100.0	1.82	1.82	5.46	60.68
Wooden Ploughs	Constructed Purchased	53.36	1.51	100.0	1	1	27.27	45.46
Metal Ploughs	Constructed Purchased	5.46	0.51	1	1.82	1	12.73	20.0
Disc Harrows	Purchased	7.27	0.07	1	1	1.82	1.82	3.64
Carts	Constructed Purchased	5.46	60.09	1.82	1.82	1.82	3.64	1
2-Wheel Tractor	Purchased	10.91	0.11	1	1	1	3.64	7.27
4-Wheel Tractor	Purchased	5.46	90.0	1	1.82	1	3.64	1
Crop Sprayers	Purchased	5.46	90.0	1	1	1.82	1.82	1.82
Weeders	Purchased	72.7	0.07	1	1	1.82	5.46	1
Seeders	Purchased	1.82	0.02	1	1	1	1.82	1
Gunny Bags	Purchased	98.18	54.55	PU	PURCHASED	ANNUALLY	TLY	
Winnowing Fan	Purchased	14.55	14.55	1	1	1.82	60.6	3.64
Trrigation Wells	Constructed	54.55	0.58	34.5	3.64	9.19	60.6	1.82

TABLE A14: Domestic Technology

continuency, just employed to be a property

Item	Percent Reporting at Present	Before 1950 Percent Reporting	1951-60 Percent Reporting	1961-63 Percent Reporting	1964-66 Percent Reporting	1967-69 Percent Reporting	1970 and after Percent Reporting
Sewing Machine	43.64	1.82	18.18	1	7.27	7.77	0.00
Radio	41.82	1	7.27	1	10.91	7.77	16.36
Petrol Lamp	80.00	1	18.18	16.36	23.64	18 18	3.64
Kerosene Cooker	1.82	1	1	1	1.82	07:07	+0°°
Lanterns	85.66	1	1	1	777	20.00	0 0 0
Wrist Watch or						20.00	20,10
all Clock	78.18	1.82	12.73	7.27	16.36	29 00	10.01
Bicycle	34.55	1	1	1.82	10.01	0000	16:01
Coal or Electric					10:01	60'6	17.73
n n	32.73	1	7.27	5.46	3.64	10.01	6.46
Hand Pump	1.82	1	1	1		TOTAL	0.40
Automobile	1.82	1	1	١	1.83	1	79.1

Environmental Influences on an Industrial Organisation in Ceylon*

SUSANTHA GOONATILAKE

This paper describes a research study of an industrial organisation in Ceylon. The object of this study was principally to describe the relation of Western organisational methods officially adopted in the organisation to the methods actually in use, and also to trace the influence which the environment had on the working of the organisation. These two questions are intertwined, and the answers to these were set out in a set of models. The description which follows has a brief overview of the literature on non-Western organisations specially as they relate to conditions familiar to Ceylon. The findings of the study are discussed in relation to this literature.

Western Studies on Non-Western Organisations

Sociological interest in cross-cultural organisations goes at least as far back as Weber, but these early writings are not of direct interest to us as they deal with organisations of the modern-type only in the Western context and do not deal with modern-type organisations in non-Western settings. For example, to use Weberian terminology, the existence of legal-rational organisations in traditional settings is not considered. Only organisations and authority structures consistent with, and arising out of, their environmental contexts are considered in these early writings, whether they be traditional, rational or charismatic (Weber, 1947, p. 157).

An early, although not a very systematic, contribution to the problems of non-Western legal-rational organisations is set out in an article "Persia-China" written by Engels at Marx's request (Avineri, 1965, pp. 175-186). In this article, Engels refers to the defeat of the Persian army by a very much smaller Anglo-Indian force. The defeat, which was surprising in that the Persian Army was well equipped with the latest weaponry and its army had been trained by European instructors, was explained by Engels (and Marx) by the fact that the mere introduction of European techniques into a society will not guarantee its effective use; and led to the observation that there has to be a total change in attitudes and ways of life, and of their total 'Weltanschaungen' by the participants in the organisation. "The main difficulty is the creation of a body of officers... totally freed from the old national prejudices and reminiscences... and fit to inspire life into the new formation. This requires a long time" (Avineri, 1965, pp. 177). The implication of this analysis is that the type of organisation developed in Europe is intimately related to its culture, and in a cultural context different from where it sprang up, these organisational methods would not be very effective.

Both Weber's analysis of authority and organisational structure (rational, traditional, charismatic) and Engels' analysis are views of the organisation from a societal perspective. These views of organisation from a societal perspective have been continued by the new theorists of social evolution that have arisen in the development

^{*}Editor's Note: This article reached the journal in mid-1973 and represents the preliminary views of the author. Since then his theoretical perspectives are being re-examined.

field. These theorists follow more in the footsteps of Weber's rational-traditional dichotomy rather than in Marx's historical determinism in their evolutionary scenarios. (Although at the substantive level of organisation analysis, both the Marxian and Weberian analyses are very similar). Among the new theorists we may include Parsons, Moore and Smelser.

Smelser (1969) describes the modernisation process as one of structural differentiation, being the establishment of more specialised and more autonomous social units replacing the more generalised ones of traditional society. Transitional societies may be classified on a scale depending on the respective distances that they have moved along differentiation. Migratory labour in the organisational sphere is a compromise resulting in both a wage-labour force and a traditional community life. On the road to modernisation, various organisational problems arise because of the discontinuities arising from the increasing differentiation and the earlier attitudes of traditional society. Compromise solutions of this problem are found, say in Japan, where a mixed form combining family ties and modern organisation provides stable solutions.

Moore (1965) divides the effects of industrialisation into first order and second order consequences. One of the first order consequences is change in the work relationships in productive organisations. The required work relationship in the industrial setting is functionally specific, impersonal and affectively neutral; positions are filled on merit and employer-employee relationships are contractual and specific in nature. In developing countries, the crucial problems in industrial organisations are the occasions for compromise with traditional canons of conduct and the effect they have on efficiency. In transitional organisations participants have to adjust to a new form of authority. They had been earlier used to the notions of authority and to degrees of hierarchical level, but the basis of authority was traditional and it was not restricted as in the modern organisation. There are many examples of compromises with delimited authority relationships, the use of 'native' intermediaries as supervisors being one of these. The intermediaries provide a wider authority relationship than that of a strictly modern organisation. A slow transition to the new industrial order could provide considerable compromises between the old and the new, an example being the quasi-feudal landlord tenant relationship directly transferred to similar relations between factory employers and employees.

Udy (1970) has used a developmental scale of societies, dividing societies from the most primitive to the industrial-modern into five categories, to develop a sociotechnical scheme for organisations. The data on which he bases the study are those pertaining to 125 societies taken from the Human Relations Area files. His basic data fit the model but his findings are not of direct use to us, as they deal only with organisations that are a cultural product of their societies, but do not deal with organisations developed in alien cultures and transplanted into traditional cultures.

The main interest in cross-cultural organisations grew after the period of the Second World War, concurrent with the growth of many independent nations and development programmes. Some of the attempts to evaluate administrative systems in the developing countries have arisen within the Comparative Administration Group affiliated with the American Society for Public Administration. A considerable

literature has developed in the field, and the principal workers in the school are Heady (1957, 1959), Diamant (1964), Riggs (1957, 1962, 1964), Presthus (1962), Waldo (1964), Siffin (1966) and La Palombra (1963). The most influential among these is Riggs.

Riggs has, through the years, developed a series of ingenious models based on the observed differences between Western and transitional societies. One of his first schemes drew inductively on the known characteristics of agricultural nations (China) and industrial ones (the U.S.). The resulting scheme of Industria-Transitia-Agraria took into account the transitional societies under the label Transitia. The inductive images he drew up for these societies and their bureaucratic organs were elaborate and did attempt to explain most of the observed characteristics of organisations in the three settings (Riggs, 1957).

In a later attempt at theoretical formulation (1962) he rejected this earlier inductive approach and proposed a deductive model that has, since its publication, been widely quoted. In this formulation he uses an approach that has been taken by certain sociologists such as Talcott Parsons who have arranged societies on a developmental scale (Riggs, 1964, pp. 19-27). The more traditional and less developed the societies are, the more they tend to be largely ascriptive, particularistic, and diffuse. That is, these societies tend to give status on the basis of birth rather than achievement, tend to favour a narrow base for social decisions rather than a larger one, and their social structures would tend to perform a large number of functions rather than a few. The developed societies in contrast tend to be achievement-oriented, universalistic and specific. (These dichotomies of ascription-achievement, etc. being the wellknown pattern variables of Parsons).

Riggs takes one of these dimensions, namely, specificity-diffuseness, and uses it to develop a societal evolutionary scheme. A structure that is functionally diffuse performs a large number of functions, a functionally specific one a limited number. Traditional society is functionally diffuse, and modern society is specific, and corresponding to these two prototypes and using an optical analogy, Riggs proposes a classification where traditional society is termed 'fused' (diffused) and modern society 'diffracted' (differentiated). The optical analogy is a prism and the traditional societies and modern societies are arranged on opposite sides of the prism; transitional societies are located within the prism itself and hence are termed 'prismatic'. Corresponding to these societal prototypes exist three organisational types which he terms, respectively, 'Chamber', 'Bureau' and 'Sala'. The observed characteristics of the organisations in the three societal situations agree generally with his deductive scheme.

The principal characteristic according to which the transitional 'prismatic-sala' bureaucratic model is different from the other two, is power. The scope of power (meaning the number of values affected in its use) is narrow in diffracted settings and wide in the fused setting. In the prismatic-sala model, power is bifocal (keeping to the optical imagery) as it refers in turn to formal and informal power. Where the bureaucratic structure had been imposed on a society from an external source (the exo-prismatic model) formal power is low but informal power is high. In the reverse case where the bureaucracy grew from within the society (the endo-prismatic model), the situation is reversed, informal power being low and formal power high.

In both fused and diffracted society, the weight of bureaucratic power, meaning the degree of participation in decision making, is low, but in prismatic society it is high. The heavy weight gives rise to a number of dysfunctions; formalism, low efficiency, unequal distribution of services, institutional corruption, wastefulness and nepotism characterise the 'prismatic-sala' model. A strong emphasis in Riggs' model, repeated with greater emphasis in another paper of his (Riggs, 1963), is the recurring theme of the appropriation of political function by the bureaucracy, the bureaucracy ruling over the political arena and not the other way round.

Diamant (1964), another student of comparative administration, has developed another typology based on the political environment of administrative systems. He deals principally with one political type which he terms 'development movement regimes' and he analyses administrative systems in these 'regimes'. The type of political system designated 'development movement regimes' are those developing countries having one-party political systems committed to development.

Heady (1966, pp. 73-97) also classifies administrative systems according to the political regime and he identifies six categories. His scheme places Ceylon in the category of a 'Polyarchal competitive system' where there are political alternatives in the form of competing parties and which are similar to the political systems of say, the U.S. or the U.K. The main characteristic of administrative systems in these regimes, in contrast to other categories, is the subordination of the bureaucracy to the political arm of government.

Thompson (1964) admitted to the dysfunctions of organisations in non-Western countries as reported by other workers in the field, but he differed in his analysis of the causes. His diagnosis was that a wrong form of organisation had been used. He saw the main requirement of transitional organisations as an ability to adapt to rapidly changing conditions; often the organisations themselves are the chosen instruments of change in these societies in addition to the fact that they themselves are subject to change. The organisations of the West have been built for more static conditions and emphasise control as opposed to change. Thompson's view is that organisations of the developing countries should be so designed as to handle innovation and change. An organisational form that could handle change and innovation is described in the work of Burns and Stalker (1966) who, after a comparative study of organisations among certain industrial situations in England, suggested two organisation prototypes which they termed 'organic organisation' and 'mechanistic organisation'. The former type of organisation is suitable to conditions of change and innovation and is characterised by the fact that tasks are not distributed among specialist roles within a clearly defined hierarchy; instead, duties and responsibilities are redefined continually by interaction with other participants in the organisational task. Interaction among participants occur laterally as well as vertically and omniscience is not imputed to the head of the organisation. Thomson's prescription for developing countries is the adoption of an organisational form similar to the organic form of Burns and Stalker (Thompson, 1964 and 1965).

Milne (1970) has taken Thompson's ideas and subjected them to criticism in the light of empirical work by others. He notes that one of the findings of the Burns and Stalker study is that participants of organic organisations are subject to anxiety and feelings of insecurity and hence they must have a high degree of trust among themselves. Yet, trust among officials in transitional societies is one feature that is extremely lacking, a fact noted by many workers in different lands. An extreme lack of personal security, distrust and suspiciousness prevails in transitional organisations. Milne concludes that organic organisations will be as ineffective as the more normal ones in developing countries (Milne 1970).

Apart from the theoretical studies on transitional organisations which we have been so far considering there are many case studies of individual organisations in various societal contexts that bear mention. Some of these studies have highlighted interesting facets of organisation that have a bearing on Ceylon organisations. Among these studies we would draw attention especially to those by Bendix (1956), Abegglen (1956), Rice (1958), Presthus (1962) and Willner (1963).

Bendix studied the transition from traditional to modern in industrial organisations of the West and the East (the European East) as examples of ideologies of management. In his study he gives two examples of successful strategies that were adopted in the West and the East respectively in work relations during the transitional period. In England the theory of dependence ensured that elements of the old order were carried through to the new industrial setting so that workers found it familiar. Foremen were used who would recruit from their relatives and friends or through them, and who would then act as intermediate supervisors between the owner and the workers. In this latter function they would use their personalised relationship with the workers effectively and this relationship was stable and adaptive to the situation. In Russia, the use of a dual hierarchy, consisting of two separate strands belonging respectively to the Party and to the normal managerial hierarchy, allowed the organisation to adapt to revolutionary changes. The normal managerial hierarchy looked into the relatively static problem of control, and the Party hierarchy looked after the problem of motivation and adaptation to rapidly changing conditions (Bendix, 1956).

Abegglen's study of Japanese factory organisations gives another example of a successful strategy. The firm is actively modelled after the family and has many of the characteristics of the latter, like membership for life, an attitude of welfare on the part of employers and one of loyalty on the part of employees, etc. In the Japanese factory, elements of modernity and tradition are combined in correct proportions to provide for a successful transition strategy (Abegglen, 1958).

Rice describes three problems tackled successfully by him as a consultant to an Indian textile manufacturing firm. One of his problems centered around the fact that, in spite of the introduction of modern machinery, the output of a certain section remained static at the pre-automation level. His analysis of the problem was that the imposed management system, which was also imported, was not suited to Indian concepts of group relations. He consequently adjusted the work group structure to fit Indian concepts resulting in a dramatic increase in production. The other two problems studied by him were likewise problems of adjusting organisational form (Rice, 1958).

Presthus' study of the coal industry in Turkey led him to postulate that Turkish bureaucracies show basic differences in the notions of time, motivation, economic incentives and educational values when compared with Western organisations (Presthus, 1962). Willner studied an industrial organisation in Indonesia before and after independence and her study revealed how traditional modes of interaction, which were kept suppressed during the colonial period, emerged after independence and invalidated the proper functioning of the organisation. Her study also revealed how, later, a change of management form and style more suited to the Indonesian environment gave rise once again to effective organisation control (Willner, 1963).

Studies on Caylon organisations are tew in number. Harris and Kearney (1963) did a comparative study of the administrative organs of Ceylon and Canada from an environmental viewpoint as advocated by Riggs (1962). The three environmental variables they looked at were the geographic and economic environment; the social environment; and the political environment. On the geographic dimension, they found that a large proportion of government employees were clustered around Colombo, a situation opposite to the Canadian parallel. In Ceylon, the concept of equal pay for equal work does not apply and there is a considerable variation in salary for persons performing the same function.

On the social dimension, they found that over 80% of the officials were lower service personnel, an elite 1% being occupied by University graduates drawn principally from a narrow social stratum of the wealthy English speaking elite. The class structure, caste affiliations, and kin groups affect the Ceylon system much more than stratification systems affect the Canadian bureaucracy.

In the political sphere the Ceylon system is liable to intense political pressure to appoint relatives or political supporters to posts, specially at the lower levels. At the higher levels, it was felt that the government officials tended to run their departments without paying much heed to ministerial directives. A cultural conflict was also perceived between politicians, who were largely Sinhala educated, and the top bureaucrats, who were English educated (Harris and Kearney's study was based on data collected in the early 'sixties).

La Porte (1970) studied a similar situation in one individual government corporation and came to conclusions similar to those of Harris and Kearney. His main conclusion was that the organisation was hampered by bad administrative organisation and practice, arratic political support and social tensions and conflicts. A large factor in the organisation studied, the River Valleys Development Board, contributing to its mixed success, was the constant political interference and appointments based on a political spoils basis (La Porte was writing nearly ten years after the Harris and Kearney report).

Apart from the studies referred to here, there are also brief references to aspects of Ceylon organisations in various other publications. It is unnecessary however to refer to them here.

Summary Conclusions of Case Study

The present case study has brought into question the relevance of some of the observations of the writers on transitional organisations referred to earlier, when their conclusions were applied to Ceylon conditions. Whilst confirming Presthus' findings

in Turkey of the existence of space and time concepts different from Western ones, it has questioned the validity of some of the findings of Moore, Udy, Riggs and Thompson. Moore's view that 'modern' administrative theory is inapplicable in transitional settings has been proved correct, but his deduction that flatter participatory structures do not appear in these settings is not borne out. Thompson's prescription of a flatter participatory structure, leading to innovation and more adaptive behaviour, has likewise not been borne out. Riggs' views on the weight of power in transitional organisations as well as his contention that a spoils based bureaucracy would lead to greater efficiency has not been proved. A more important conclusion of the study is that some facets of modernisation like political democracy, industrialisation and 'modern' organisational forms may generate contradictory and dissonant features when transferred to a setting like Ceylon.

The Plant and the Setting

The industrial organisation studied belongs to a government corporation and is in the category of heavy industry. It is situated in a village on the outskirts of a large town (population over 50,000). The town is a market town for the adjacent, largely agricultural, province; in addition to this commercial activity, the town has a few privately owned small to medium industries, as well as five government owned commercial-industrial enterprises.

The plant studied employs about 250 persons. About 35 of these consist of workers (principally unskilled) recruited from families displaced by the siting of the plant, the recruitment being a partial compensation for loss of residence. The other employees of the plant are from the surrounding town (mostly unskilled workers and clerks). The technical personnel, executives and skilled workers in the plant are largely drawn on an all-island basis.

The plant is new, construction of the plant having begun in 1962 and operations beginning by 1965. The period under discussion in this paper extends from the period 1962 to the end of 1970, but the period 1969-1970 is treated more extensively as this was the period during which participant observation of the plant was carried out.

A Note on the Methodology

Data for this study was collected by participant observation from January 1969 to September 1970 as an executive in the plant studied. To obviate the observer bias that arises from observation at any single position in a hierarchy, participant observation was augmented by data given by respondents and informants along the entire hierarchy. Further, access was had to all the records of the plant. On the basis of the information obtained, a questionnaire was filled on every employee, giving such data as age, marital status, membership in groups in and outside the plant, significant incidents relating to the individual, etc. Where these sources did not yield sufficient data to fill a particular part of the questionnaire, other sources of data were sought after to meet these deficiencies.

Analysis of the data was principally by the method of grounded theory generation as proposed by Glaser and Strauss (1968). The collected data was written as a set of 'cases', which could be descriptions of significant incidents, important individuals (formal and informal) in the organisation, various institutions, etc. The collected

cases were 135 in number and varied in length from 10 typewritten pages to half a page depending on the particular subject matter described. These 'cases' gave a more or less complete description of the plant as viewed from different perspectives. These cases were then subjected to the method of "constant comparative method of qualitative analysis" as described by Glaser and Strauss. The model described here arising from this analysis, therefore, is, in the words of Glaser and Strauss, grounded and directly induced from the data.¹

The Organisation and the Environment

The principal dimension on which the organisation studied (which we shall call by the pseudonym "Rajya Karmantha") differed from Western organisations was the manner in which the external environment entered the organisation. Both Western organisations and Rajya Karmantha operate in an external environment which could be considered to have three aspects, namely: (1) a legal framework that sets limits to the operations of the organisation; (2) a market on which the organisation operates and in turn is operated on by; and (3) a social-cultural matrix consisting of such patterns of structure as class, caste and kin in the environment.

Generally, in the ideal-typical rational organisation only the first two of the above aspects, namely the legal framework and the market situation, affect its operations; the organisation is assumed to work without class, caste, or kin bias and, generally speaking, without the external social-cultural matrix intruding into the organisation. In the Rajya Karmantha situation, the social-cultural matrix not only enters the organisation but it also interacts with the other two environmental aspects, distorting thereby the legal framework as well as the market situation. The social cultural matrix distorted all three away from behaviour expected from the ideal-typical model of an organisation. Of these three it was the entry of the social-cultural matrix into the organisation that affected the latter's functioning profoundly.

The environment, in the form of the social-cultural matrix, enters the organisation of Rajya Karmantha in three ways: namely, co-optation, direct mapping of the external structure and indirect mapping through political channels. Co-optation was the process by which a group from the village which was displaced by the siting of the plant entered the organisation as a bloc, because of an undertaking given by the plant that persons displaced by its siting would be given preference in employment. The co-opted members attempted to maintain their traditional authority ties to persons outside the organisation concomitantly with the authority ties demanded by the rational organisation of the plant. These members, before the introduction of the plant, held ties of economic and social dependence to a powerful family in the immediate environment of the plant. The establishment of the plant, by changing the previous economic and dwelling patterns, changed the substratum on which the dependence relations rested. The intrusion of environmental factors into the organisation occurred when the powerful family attempted to re-establish the patterns of dominance.

^{1.} In the thesis where this research was first presented the cases were attached as an appendix and the analytical interpretative material was contained in the main body, the analytical interpretative chapters constantly referring to the cases as supporting material for a particular theoretical standpoint (Goonatilake, 1971).

The attempts of the former environmental power structure to re-establish earlier patterns of dominance took the form of attempting to influence the award of minor contracts, using the co-opted group as an internal pressure group within the plant, 'planting' its members as key officials in the unions and other secondary organisations, etc. This co-optation results in the distortion of the formal organisations in the plant as co-opted members attempt to hold dual roles with respect to authority; firstly a role orienting them to the new authority, namely, to the plant and, secondly, one to the traditional (i.e. previously existing) authority.

The second process by which the social-cultural matrix entered the organisation was by direct 'mapping' of the external power structure within the plant. This mapping is done usually by particularistic pressures applied at the moment of entry into the organisation by powerful elements in the environment on behalf of their nominees, usually their kin. Arising partly from this, there are networks of family and kin ties in the plant at the officer level. Thus, the leadership in the outer environment is partially mirrored within the organisation. It is only partially mirrored, as formal requirements of entry into the organisation preclude entry into the organisation by every powerful element in the environment. Sometimes the mirror is inverted, as weak elements in the environment occupy relatively strong positions within. But such inversion is not helped by the environment, there being no direct external pressure to appoint them.

Another way in which the external power structure attempts to intrude into the organisation is by attempting to influence action within the plant by the exercise of traditional authority vested in members of the external power structure. This may be done by cajolement, appeal and threats to go to higher levels, either within the organisation itself, or in outside politics.

A third, and perhaps the most significant, manner in which the environmental social-cultural matrix enters the organisation is by a process of indirect mapping, whence environmental pressures are channelled into the organisation by politicians. A study of the areas in which political influence was attempted shows a wide spectrum of organisational matters ranging from the siting of the plant, employment, dismissal and transfer of personnel, and sales of product to award of minor contracts. Employment is by far the largest area of concern to politicians. The main target of political pressure is the higher hierarchy of the plant, although unions too come under frequent pressure.

The politicians are only channels of transmission for the pressure applied. Detailed study of the points of origin of the political pressure in the external social structure showed that these were largely points of influence within the external structure, which the politicians could later tap for votes. The pressures that were channelled into the organisation by the politicians were therefore largely pressures arising from the external power structure. The result was that the external environment was again mirrored within the organisation. The external power structure here was not a static one but a changing one with new power elements arising, for instance, from new entrepreneurs supplementing and sometimes supplanting the traditional (previous) power structure.

Sometimes the points of origin of political pressure lay within the organisation. Recourse to political channels was more frequent at the lower levels of the hierarchy, presumably to counteract the relative lack of power within the lower levels. In this function the political channel acted as a countervailing power to the authority of the formal organisation. This was in addition to the more normal countervailing force of labour unions. The political countervailing power acted screetimes in unison with the unions, sometimes with no regard to it and sometimes in opposition to it.

The Environmental Inflow into the Organisation

The three modes by which the environment flows into the organisation, namely by co-optation, direct mapping and indirect mapping through political channels, have profound effects on the internal working of the organisation. Before discussing these internal dynamics it is useful to trace the sociological reasons for the environmental inflow.

We can conceive of the external social structure of any organisation in two ways. It can consist of authority centres interconnected by traditional bonds of fealty (or of the 'sacredness' of the traditional authority relationships); in short, the external social structure can be a traditional authority structure in the Weberian sense. Or, it can be a 'modern' social structure where there is affective neutrality in interactions within the social structure (using Parsons' pattern variables; vide p. 5, above), and where social relations are governed by more impersonal criteria.

If a formal rational organisation is introduced into a social environment as defined respectively by the above two types of social structures we find the following possibilities. If the introduced formal organisations were kept socially separate from the environment, then no interaction between the two would occur. This could be done, for example, by a no-fraternising rule in the case of an occupying army in a conquered land. A similar aura of aloofness from the native social structure and of a coccon-like sheath of coercive protection surrounds a colonial bureaucracy in a colonized country. We could say that the organisation of government institutions in Ceylon before 1956, by and large, conformed to this general pattern: the bureaucracy was alo of from the surrounding social structure, was self-contained, and generally followed in its internal structure the imposed rational criteria.

A second instance of non-interaction between the environmental social structure and the organisation which does not lead to distortion of the latter occurs in the case of an environmental social structure of the 'mcdern' type. Here there is a very loose social structure; no strong bonds of kinship and of traditional ties govern human behaviour. If a rational organisation was introduced into such an environment even without a protective "cocoon" there would be no great interaction between the two so as to distort the organisation. Both the environment and the organisation would be operating on criteria of affective neutrality and would therefore be matched in the ideal-typical case to each other.

In a third case if we consider a traditional work organisation (as for instance those studied by Udy, 1970) in a traditional setting, we would again see the organisational structure and the environmental social structure as matched to each other. The positions in the work organisation would be chosen not by work criteria but by

social criteria. So that the work organisation is then but an extension of the social structure, the one reinforcing the other.

In the case of Rajya Karmantha we have a case that is outside the three possibilities considered above. It is a rational organisation imposed on a traditional social structure. The protective cocoon that would have prevented interaction between the two during colonial times was ereded as a result of the 1956 "cultural revolution". The events of 1956 and of subsequent years resulted in an increased social awareness in the general population and in a polity directly responsive to social pressures (Wriggins, 1960; Singer, 1964; Woodward, 1969). The development of this social responsiveness has resulted in the penetration of aspects of the external environment into governmental organisations as has been the case at Rajya Karmantha.

We could summarise the cases discussed here in a table as below:-

	Traditional Organisation	'Modern' Organisation
Traditional	Traditional Organisation in traditional setting	Modern Organisation in traditional setting
Social Structure	No distorting	(a) Organisation and social structure separated: no interaction effects.
	interactions.	(b) Organisation interacts with traditional social structure: interaction effects.
Modern Social Structure	Traditional Organisation in modern setting. Case not considered here.	Modern Organisation in a modern social structure. No distortion effects.

Structural Effects

In the third case we have seen that a traditional work organisation in a similar social setting is a projection of this (traditional) social structure (Udy, 1970), the social structure being mapped one to one in the organisation structure. In the mixed case at Rajya Karmantha where the external social structure flows into the organisation, we would expect at least a partial mapping to take place.

The numerous instances of social relationships prevalent outside the plant which intrude into the organisation are examples of such mapping of the external structure within it. The networks of family, caste and other primordial ties that operate within the plant are examples of this. Thirty eight such examples of internal mapping of the external structure have been noted in the case study. This authority structure operates in addition to the normal rational authority structure. Sometimes it aids the rational structure, sometimes hinders it, and sometimes it is neutral to it.

For instance, a visiting monk praises a subordinate official publicly for the latter's Buddhist activities and labels him a good and honourable official, but ignores mentioning the official's superior. The subordinate official's authority is legitimated according to non-organisational criteria in the eyes of the employees and the supe-

rior official perceives the situation as a reversal of their formal authority relationship, and this results in a long-standing feud between the superior and subordinate official.

Or to take another example, traditional strong families in the vicinity try to exert their strength within the organisation by 'planting' their relatives in positions of power within the organisation. Sometimes formal authority is strengthened by this process, as for instance when both the supervisor and worker belong to a caste with a strong sense of common identity.

Although this internal mapping of the external power structure occurs at all levels within the plant, the overtly accepted authority structure is the formal rational one. There are many instances where the encroachments of the external structure have been resented and protested at. Collective bodies like the trade unions have been in the forefront of these protests. Generally, acts of particularism and decisions that go against the official rational ethos are subject to criticism by members. This is criticism in the form of gossip, snide remarks, etc. or even of written complaints by unions against alleged partiality, etc. These feelings against traditional bases of legitimacy are also publicised during times of strife between union and management; for instance, during a wild-cat strike many placards were carried by the picket lines protesting against "family power" within the plant.

Although the overt ethos is that of the rational organisation and of universalistic criteria, traditional and particularistic actions are in fact carried out by many members of the organisation, so that there is a second and equally important framework of action.

However, the rational framework is overt and openly recognised while the traditional one is covert and its legitimacy denied in public. The latter could thus be considered an 'underground' frame of reference. An indication of the pervasiveness of this frame is the fact that even union leaders, who are often vociferous in their condemnation of this 'underground' framework for action, have in their activities on a face to face level with management resorted to such criteria. For instance Kalu, a union leader who was interdicted for using violence on a supervisor, an incident which sparked off a wild-cat strike, used powerful elements in the environment to intercede on his behalf with the management. The behaviour of individuals entering the organisation through personal ties or through patronage (which we have noted is largely a process of channelling traditional ties) are exercised in this underground ethos. But, true to this underground nature, no one openly admits to having entered the organisation using particularistic criteria. Because of the underground nature of the traditional structure, actions taken on the basis of tradition and particularism are overtly legitimated by rational criteria to give the impression of rational legality. For instance, employees taken in on particularistic bases are marked on rating forms like others, but their marks are inflated by use of subjective categories of assessment such as marks for 'Sports', 'Social activities', 'Personality', etc. The selection has then been actually on particularistic criteria, but it is presented in official records as being based upon universalistic rational criteria.

But both the structures are indirect reflections of the wider social structure in Ceylon. The 'modern' rational structure is a reflection of the need to modernise and is in effect partly the result of decisions taken by Parliamentarians collectively. The underground structure, in turn, is partly a reflection of the sources of power of the Parliamentarians (in cases of particularism channeled through M.P.s); these sources being traditional sources of influence in the M.P.'s home seats away from Colombo—in this case the traditional authority structure at Navapura, the town adjacent to the plant.

Behavioural Effects

This duality within the organisation is reflected not only in the structure of the organisation but also in its behavioural aspects.

Relations between members in a rational-legal organisation are assumed to be impersonal and functionally specific. Generally, at Rajya Karmantha, the overt organisation behaves in this fashion. But there is a very strong element of personal and diffuse interaction within the organisation that overrides these formal aspects.

Interaction between members tends to be personal, either in the positive sense or the negative sense. Relations between colleagues, which are in an ideal typical rational organisation assumed to be limited to polite exchanges, are often replaced by personalised relations of friendliness or of bitterness. In assessing subcrdinates, personal relations between the superior and subordinate are often a deciding criterion. Management-union agreements are sometimes reached by means of personalised 'deals' between union leader and manager on a personal, even secret, basis, as for instance the settlement of one strike or the settlement of a job evaluation impasse. Such 'deals', it was seen, were specially likely to occur with leaders from traditional non-urban backgrounds. Sometimes, especially with workers of rural origin, the subordinate-superior relationship is the personal, paternalistic traditional one of master-servant. Personal loyalty to superiors in the traditional manner of somewhat exaggerated civility is sometimes an instrument of personal advancement. In cases where a new superior has replaced a superior who had had a personalised relationship with the subordinate and where the new supervisor adopts a universalistic impersonal stand it has been noted that the subordinate feels spurned and turns the former positive relationship into a negative personal relationship. That is, the subordinate feels bitter and resentful.

Conflict in an ideal typical (Weberian) organisation would presumably take place in an impersonal setting without the personalities of those involved playing a part.

Yet in real life Western organisations too, personal conflicts do occur, as has been documented by, for example, Dalton (1959) and Burns and Stalker (1966). These conflicts are played out in two forms, either by direct personalised interaction or by proxy. In the latter, personal conflict is channelled through the rational organisation and is projected by the combatants to matters affecting official affairs, like say disagreements on the budgetary allocations or on reasons for a drop in production. The emphasis is more on conflict through proxy than on personalised conflict.

At Rajya Karmantha, the reverse process often occurs. Cenflict on the official plane is often played out on the personal level. Failings in the official function of an employee are often interpreted according to personalised criteria. Actions of unions are similarly seen sometimes as being not motivated by impersonal criteria, but are attributed to the personal requirements of its leadership. Similarly, ineffective management action is viewed not in impersonal terms as a failure in terms of efficiency, etc., but as arising from bad intent and maliciousness. (For a similar situation in Iran, see Westwood, 1965.)

Traditional leadership patterns in Ceylon are characteristically broad in scope and diffuse, that is, they cover a range of values (after Riggs and Laswell, Riggs, 1964). A holder of traditional authority exerts influence over large areas of life. This has been observed by many students of transitional organisations and is one of the key concepts in the various models of such organisations which Riggs has constructed. We have seen earlier that the traditional leadership in the community outside the plant has this multiscope character and that in fact this external leadership attempts to extend its power into the organisation.

But within the organisation of Rajya Karmantha, authority does not generally have a large scope. Persons in authority cannot extend their power over a wide spectrum of their subordinates' activities. Attempts to make the specific leadership relationship more diffuse (for instance, by an executive, Diaz, who having married into a feudal family of the area attempted to establish a traditional multiscope leadership pattern over his subordinates), have been unsuccessful. In this limitation of power of the formal leadership the nature of authority at Rajya Karmantha differs from most organisations in transitional societies hitherto studied.

The reason for this is that, as shown below, legitimacy for action by a superior is based on two frames, an overt rational-legal one and an underground traditional one. Now, the former is by nature limited. The latter, traditional, personalised frame is actually not one unitary frame but provides, in the context of contemporary Ceylon, many frames.

Let us elaborate. The social structure external to the plant which is partially mapped inside is not a harmonious structure. It has social groups that are in competition with each other. For instance, new entreprencurs like Dharmasena, a regular customer of the plant, provide a challenge to the old established power centres. The external social structure is itself in a state of flux, and has lost its harmonious unitary character which it would have presumably possessed in more static times. Mapping of this external social structure internally creates various sub-groups having correspondingly different frames of reference. Any superior who operates on the underground organisational structure would act in response to one of these groups, by using its criteria of legitimacy for his action. But in the presence of competitive groups having opposing criteria, such actions would be looked upon with disfavour by these latter groups.

The latter aspect implies that any action taken by a superior on the basis of the underground organisation would not have universal legitimacy throughout the organisation. In fact, in the context of conflicting groups such acts would tend to reduce the

legitimacy of even the other, rational based actions, by bringing into question the correctness of the action by imputing illegitimacy. For instance, the recruitment of a cashier under particularistic criteria due to external pressure reduced the legitimacy of management's action as this action was criticised by many other groups. In fact, because the prevailing overt ethos is the legal-rational one, any action by management on the underground frame would automatically evoke criticism. Yet, as we have seen, because of the particular position management is placed vis-a-vis the external forces such covert action is often taken.

Thus at Rajya Karmantha the scope of power is narrow and limited, although the basis for some managerial action is on parochial legitimacies supplied by a wide variety of groups. In such a situation of conflicting groups where legitimacy of action is always under question even 'correct' action taken under rational criteria is brought into question, so that the scope of power is narrower even than that of a rational-legal bureaucracy. For instance, in the case of a "Service Break" of unskilled workers, where workers were being discontinued for regular routine reasons, the action was represented as being due to the management being 'reactionary'.

This narrow scope of managerial authority is in contrast to many observations made of other transitional organisations (Riggs, Diamant, Heady, for instance). In these studies it has always been emphasized that managerial authority had a large scope and covered areas outside those strictly defined by the formal organisation. We can account for this difference by noting that these studies have been done in countries where the external authority structure is still traditional and unitary and the organisation is either an intruding organism akin to a colonial civil service (like Pakistan), where the organisation and the immediate social structure are kept apart, or where the organisation is merely a pure reflection of the external unitary social structure (Thailand).

The formal organisation has rules of conduct and other social mechanisms which help to make it an integrated whole. The traditional elements that are super-imposed on the formal organisation at Rajya Karmantha have sometimes an integrative function and sometimes a disintegrative function. Buddhism is the religion of the majority of the employees at Rajya Karmantha, and Buddhist activities undertaken by the plant as a whole, in which both the management and employees participate, help to integrate the plant into a community. Quite often, however, the incursions of traditionalism create disintegrative characteristics. For instance, antagonistic feelings have developed towards co-opted groups among other members of the organisation.

The intrusion of the external environment into the plant also creates status inconsistencies and hence disintegrative behaviour patterns among employees. An employee with high traditional status outside the plant who fills a low-status role in the plant brings in such problems, specially when he has to associate with persons from his immediate external environment now placed in roles which carry different, relatively elevated, statuses. The attempted suicide of a toilet cleaner Jinasena was due to such reasons. Or, the indefinite nature of relative status within the plant may also create similar situations. The many quarrels that trade apprentices, both individually and collectively, have been having with clerks indicate such situations: for the

trade apprentices, although they are under training to become skilled manual workers, are of the same educational level as the clerks.

Again, the traditional underground organisation at Rajya Karmantha operates according to different concepts of space and time from the western organisational model. The overt formal organisation operates on definitely laid down time intervals for various activities in the plant. Time and its use is defined rigidly in the formal organisation. Although these time constraints are followed more or less exactly, there are often instances where traditional concepts of time emerge. In traditional village life, time is not a tightly controlled commodity. At Rajya Karmantha traditional time concepts emerge in leave of absence, intervals and punctuality. Many workers absent themselves from work without notification and are missing from their work places for considerable lengths of time, severe fines and suspension of increments having no effects on their behaviour. Similarly during the intervals for tea and lunch employees tend to linger a while in the canteen and only gradually stroll back to their work. During the lunch interval executives take longer lunch breaks, usually combining it with a siesta.²

Areas like the canteen, mill house, and laboratory are places where definite groups in the organisation meet and gossip and discuss problems. These areas tend to be more than just the places of recreation and relaxation which they would be in a Western plant. They serve in the plant a very similar function as the tea house and other similar meeting places do in the village. Information is exchanged in these places by means of gossip; innuendo and snide remarks used in these places provide also a form of social control.

Generally, in a rational legal organisation, control is by application of the rational rules (although there are exceptions to this). In Rajya Karmantha gossip and innuendo, both traditional forms of control, provide another channel for communication and control. For instance, the rumour that an executive had entered the organisation through particularistic pressures without having adequate qualifications (proved to be false) lessened his capacity to exercise control. Management has also employed gossip and rumour to promote their own ends.

Conflict of the Dual System within the Organisation

The legal-rational organisation and what we have called the underground organisation are often in conflict with each other. The authority structure reacts to these pressures in various ways. Management may bend the official rules of the legal-rational organisation to fit the demands of tradition. To fit the traditional concept of time which prevails so pervasively, management would often ignore the official rule that leave of absence should be notified without delay. Or to prevent escalation of personal conflict between employees, the rule that all correspondence be filed is ignored and personal complaints of employees against others are not recorded or, action on such complaints may be purposefully delayed for similar reasons. Or during recruitment, ratings of interviews would be deliberately adjusted to fit the external requirements.

^{2.} See also Gurvitch (1964) on social time.

Sometimes both the cross-pressures are strcng and it is not possible for either one or the other to prevail. In such instances, management action is governed by caution, fear, indecision, uncertainty, and a posture of playing safe is adopted. In incidents where management was subjected to strong pressures from within, as well as from environmental forces channelled through politicians, caution was a keyword in the actions taken.

The underground organisation as well as the formal organisation have been used in various combinations by supervisory personnel, with varying degrees of success in effecting control. In traditional Ceylonese society, the role of a person in a supervisory position is not delimited or specified. He is addressed by the honorific "Mahattaya", and a mahattaya in traditional society carries his high status to every role he plays. His manner is authoritatian and his form of address to his subordinates would be "Umba". At Rajya Karmantha, the various supervisors are called 'Mahattaya'. The elements of tradition and modernity they brought into the superior-subordinate relationship varied from person to person. The following examples illustrate various combinations of tradition and modernity used by supervisors and the relative effectiveness of these mixed styles.

Only one of the supervisory staff used "Umba" in addressing his subordinates. The overt ethos in Rajya Karmantha is democratic and the use of "umba" is resented, especially by the younger workers. The supervisor who used "umba" was Hassan, a senior supervisor. The workers excused his use of "Umba" because he was a Muslim and hence unfamiliar with Sinhalese and because of the fact that he was old. In spite of the strict authoritarian control he exercised, Hassan maintained a coherent work force.

Younger officers who have tried to establish authoritarian patterns have met with mixed success. Wickrama, for instance, is a strict disciplinarian who supervises his workmen very minutely and strictly. His style of supervision has met with failure and, as a consequence, management has moved him from section to section with the same negative results. Ratnaweera, another supervisor, also exercises authoritarian control, but he does it by the use of two intermediary workers whom he has picked among the workers. The two intermediaties hold a strong position as informal leaders in the work group and one is also involved in the formation of a self-help society in the plant. One of the two belongs also to the same caste as his supervisor (a caste with a very strong sense of identity). The supervisor Ratnaweera is a believer in strict control of his subordinates and he maintains this by use of the two intermediary workers, who have strong personal ties to him and who in turn are accepted by the work group.

Diaz, an executive, is married to a feudal family in the area and he has attempted to exercise the strict and diffuse authority patterns of feudalism inside the plant. However, because his attempts have been very direct and the overtly prevailing ethos in the plant is a more democratic one, his strict disciplinarian attitudes have been resented and have not met with success. Perera, another senior supervisor, has met much success in his control function, his authority being rarely challenged. This is probably because he holds relatively high status in both the traditional scale and the more modern one.

The Control Function

We have seen how the control function at Rajya Karmantha, which in the ideal model is exercised through rational rules, is sometimes also carried through the underground system of gossip, innuendo, etc. The control function at Rajya Karmantha differs from that of a Western plant in another dimension. Management in a Western plant largely involves the control of variables inside the plant. Many of these internal variables are expressed in measurable terms like tons output, cost per ton, etcetra and relate fundamentally to the product that is turned out in the plant. Human behaviour that is subject to control within the plant also relates to production. Absenteeism, discipline, motivation, etc. are all formally related to daily production. Other matters on the behavioural plane which are only indirectly related to the production process, like annual wage deals and conditions of employment, are decided jointly by unions and management periodically, allowing the day-to-day affairs of the plant to be carried out on production related criteria. Also, the environmental inputs for the plant, like raw materials, finance and personnel, are generally impersonal matters that could be expressed as numbers and controlled as such.

In Rajya Karmantha there is a large behavioural element unrelated formally to production which bears on the authority structure. These behavioural aspects and the behavioural patterns and relations which bear on the authority structure are those brought about by the network of intense interpersonal relationships which exist on a group basis within the plant. These exist outside the formal work groups within the plant and their existence provides centrifugal pulls which interfere with the coherence and effectiveness of the work groups. Besides, the existence of these underground personal relationships distorts the normal rational lines of communication and control, often by questioning their legitimacy. Examples have been given earlier.

We have shown that many of these internal sub-groupings are the result of the mapping of the external social structure within the plant. And as the result of this mapping is the creation of relationships in the underground organisation which bear on the production process, control of the production process implies control of the behaviour arising from these relationships. For instance, a situation at a customer lorry queue where local customers attempt to jump the queue by extra legal means affects the daily sales; or the relations which outsiders have with packers on a personal basis affect the output of the packing section.

This brings out an important difference in the control function between a Western plant and Rajya Karmantha. In a Western plant, the behavioural aspects that have to be controlled by management generally are those within the rational-legal framework and relate to such aspects as motivation, assessment, promotion, etc. At Rajya Karmantha, a significant part of the control effort is directed at attempting to control behavioural aspects arising outside the rational-legal framework. If behavioural control in a Western plant is restricted within the plant, at Rajya Karmantha behavioural aspects that have to be controlled for the efficient running of the plant extend outwards to environmental relationships.

We have, however, shown that the authority of the management at Rajya Karmantha is narrow and not multiscope like that of other situations (as in Thailand). Because the social structure outside the plant is in a state of flux, the subgroups which

are mapped within the plant provide a variety of frameworks of legitimacy on which to judge managerial action. We have shown that the effect of this is to make the scope of managerial authority even narrower than in a Western rational legal organisation. So that, although the presence of environmental relationships within the plant demand their control by a multiscope authority structure, the fact that these same relationships result in a diminishing of the scope of the authority structure prevents this happening.

There is, of course, one method of exercising multiscope leadership without reducing the legitimacy of action, in that these actions are made covertly and in secret. For instance, the management appeals to politicians to control environmental forces like Dharmasena, a politically influential customer who often intimidated other customers; but this is kept secret. A case where such recourse to the political channel had been made public was when the management approached the M.P. to settle the dispute with the inhabitants of the site before the plant was built. This action was considered legitimate because at that time there were only a few people employed by the corporation, all of whom had a unitary frame of legitimacy, in that they were all from the same residential group.

Thus, generally, control of behavioural factors affecting production is incomplete; more production decisions are left to random or uncalculated factors than would be the case in a Western plant. In assessing job evaluated scales of pay, the procedures have been criticised by different personnel on particularistic criteria; and the settlement of a crisis created by the job evaluated scales being not acceptable to some was likewise reached by the use of particularistic personal 'deals'.

This brings into question the direct applicability of formal rational controls such as operations research, job evaluation, etc. The fact that the underground structure sometimes abets, sometimes is indifferent to, and sometimes obstructs the rational framework implies that such techniques would not necessarily be, by themselves, successful if applied at Rajya Karmantha. Success or failure of these formal techniques would depend on the particular interplay between the formal and underground structure.

It may be possible to trace the significant underground factors that affect the plant, but this knowledge would not necessarily provide a universal prescription for control. The control function itself depends on the legitimacy of the person exercising authority. Even if details of the underground forces were known and such knowledge applied in the control function, in view of the many overlapping sub-groups with varying frames of legitimacy, it is possible that such actions would be questioned by some subgroups on grounds of legitimacy, thereby making the control ineffective. A further point is that particular underground forces are particular to one organisation so that a universally codified set of rules, in the manner say, of those covering union-management relations in the West, could not be formulated to apply to all such organisations. It would further appear that a search for an effective control system, if such were feasible under the circumstances, should begin with the fact of multiple frames of legitimacy.

Implications

It is fruitful at this stage to review the literature of transitional organisations and see how they bear on the conclusions of this study. Four writers referred to earlier, Moore, Udy, Riggs and Thompson, have theoretical frameworks that do not agree with the situation at Rajya Karmantha. Discussing the pyramidal authority structure and modern problems of co-ordination, of communication and of morale tied basically to the problem of how 'steep' or 'flat' the organisation pyramid should be, Moore notes that modern theorists advocate a flatter, participatory structure. This, he asserts, is a culture-bound concept; newly recruited labour in transitional societies is unskilled and unfamiliar with the rules of the industrial environment, so that a flatter participatory pyramid would not be appropriate. The particular administrative mode that would be valid would depend on the education of the workers, both general and specialised, the legitimacy of their mode of employment and the incentives used in the organisation. This means, Moore concludes, that most modern theories of administration would be inappropriate in a transitional setting.

We have seen that the last statement of Moore is correct in our observation of the control system at Rajya Karmantha. But his remarks about the flatness of the authority structure is not borne out. For, as we have seen, in the organisation studied, multiple frames of legitimacy of authority exist. The existence of these multiple frames implied that a particular action legitimated on one frame could well be considered illegitimate on any of the other parallel frames; and in fact, was often so considered. The result was that, in effect, the pyramidal authority structure took a form more flat and participatory than that arising from the purely legal-rational organisation. So that, although Moore considers a flatter pyramid unsuitable for transitional organisations, a flatter pyramid has unintentionally come into being at Rajya Karmantha.

Udy (1970) in his study of socially determined traditional organisations notes that such organisations have more rungs in the pyramidal structure than is forecast from purely physical criteria. The society around Rajya Karmantha fills Udy's requirements of traditional society. Rajya Karmantha is, however, not a traditional work organisation, but, as its members are from a more or less traditional society, we would expect the authority structure at Rajya Karmantha to be steeper than that of a similar one in a Western country (which according to Udy would be an organisation based on more or less purely physical criteria). Yet, the actual situation is that the Rajya Karmantha organisation is effectively flatter than a comparable Western one, presumably because the traditional authority structures Udy studied, unlike that at Rajya Karmantha, were unitary structures having only one frame of legitimacy.

Thompson (1964) has recommended a flatter participatory, innovative, adaptive and organic organisation to overcome the dysfunctions of traditional organisations. Although Rajya Karmantha has a flatter structure and is in a sense participatory in that there are many rival seats of decision, the organisation does not have innovative and adaptive characteristics. This is evidently because it lacks the other prescriptions of Thompson, namely, the sharing of goals and the minimization of parochialism, due to the existence of many parallel frames of reference within the organisation.

Of the many observations Riggs (1962, 1963) has made on transitional societies, two stand undemonstrated at Rajya Karmantha. First, his contention that the weight of power in transitional organisations is small is not true of the present case, the incumbents of authority at Rajya Karmantha having less power than their formal positions prescribe. This disagreement is due to the fact that Riggs' theoretical model is induced from the bureaucracies of such countries like Thailand where traditional patterns of power still hold intact and where popular democracy is absent.

A recommendation flowing from Riggs' concept of high bureaucratic power is the need for a weaker, political-spoils based bureaucracy on the American pattern. His recommendation is purely on the economic grounds of increased efficiency. The experience of Rajya Karmantha, where political influence is high, seems to negate this view. From the somewhat different viewpoint of social control of the organisation by the larger environment, the Rajya Karmantha experience might be a useful pointer for other transitional organisations.

Further Implications of the Study

The region around the Rajya Karmantha plant is subject to the same socioeconomic-cultural changes that are rapidly transforming the island. In discussing these changes we would like to isolate three factors that bear on each other, and have a not inconsiderable effect on the direction and the speed at which these changes are occurring.

The first factor is the base from which these changes are occurring, that is, the base of a more or less 'traditional' society (useful ideal-typical models for such societies are those of Weber, Parsons and Riggs). The second factor is that a large number of these changes are a result of a political commitment at the highest level to such change. These politically defined macro goals (as opposed to the micro goals of politicians operating in the town in which Navapura is situated) are a commitment to industrialisation and 'modernisation' generally (meaning here the striving for a host of socio-economic objectives like high literacy, social security, amelioration of high disparities between incomes, etc.). The third factor is the occurrence of these political decisions in a political democracy which has had adult suffrage since 1931 and which constitutes a politically conscious electorate aware of its ability to change its rulers, a right which it has exercised by changing governments with every election since 1956.

Let us now examine the interplay between these three factors, namely, the two factors of commitment to industrialisation (and modernisation) and to political democracy; and the third factor of the base from which these commitments elicit changes, namely, a traditional society.

The commitment to industrialisation and modernisation, coupled with another political goal, that of socialism and state ownership, has created the institution of government-owned corporations, one of which is the corporation which owns Rajya Karmantha. The commitment to modernisation has further resulted in Rajya Karmantha officially adopting western organisational methods and creeds.

We have seen that the combination of political democracy working in a traditional social environment siphons into the organisation factors that threaten the legitimacy of its legal-rational basis. We have also seen how these environmental social

factors in the organisation create many parallel frames of legitimacy, so that at times no frame of legitimacy holds universally. The result is that the more or less unitary control structure, which is the framework through which the organisation's objectives are reached, is subverted. It would appear, then, that 'modern' organisation methods adopted as a part of the modernisation commitment come into conflict with political democracy, supported as the latter is by a strong political commitment.

The implication of this process is that the particular development of economic organisations and the rapidity and direction of their development, as well as their internal characteristics, are dependent on the interplay between the variables of political democracy and the traditional base from which industrialisation takes off. In such a setting as that represented by Rajya Karmantha this leads one to speculate that the development process could take different forms from the Western experience.

One result emanating from the existence of multiple frames of legitimacy at Rajya Karmantha is that the lower members of the hierarchy have a greater say in the decisions taken within the organisation than would be the case of a legal-rational unitary authority structure. The effect is that decision making is spread more horizontally along the organisation structure (though perhaps not the responsibility for such decisions). The ensuing situation is that the organisational structure is in effect flattened and made more participatory because of these parallel reference frames. These maltiple, underground, frames of reference, and the many rival seats of decisionmaking these create, evoke a comparison with a Western situation, the case of unions and management.

If one compresses the development of unions in western industrial organisations into a brief paragraph, one could say that unions were the institutionalisation of an underground frame of reference that had been used by workers as opposed to that arising from the management philosophies used by owners. Because of the inherent conflict between owners and employees in a social context which emphasised equality (Bendix, 1956) a frame of reference denying the legitimacy of the owners' actions was often used by workers. The rise of unions and their acceptance by management as a legitimate countervailing force is the institutionalisation of this underground frame.

One result of the institutionalisation of this underground frame has been to make a certain amount of conflict overt and acceptable, freeing the day-to-day running of the organisation from the worst results of such conflicts. Any conflict arising from the dual frames of reference are settled in management union confrontations and/or negotiations, which take place at intervals.

The multiple frames of reference at Rajya Karmantha have not been made overt by a process of institutionalisation, so that there is no legal mechanism by which conflicts can be acknowledged and resolved.

A formal recognition of the existence of the underground frames at Rajya Karmantha would have another important effect on the control function in the organisation. As has been mentioned, most of the overt managerial ideology at Rajya Karmantha is that brought in by a direct formal transfer of Western managerial knowledge. Most of this managerial equipment consists of a battery of techniques, like job

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evaluation, work study, incentive payments, operations research, etc., which operate according to such market factors as men, machines and money (in the three-fold division of the organisational environment into the legal framework, market, and social-cultural matrix (see above, p. 43). As a market factor, men are considered in these management techniques to exist as purely impersonal, mobile, legal-rational, "economic men". Rarely, specially in numerical techniques, are social factors taken into account.

But in the Rajya Karmantha situation the existence of a preponderance of such social bonds, has been one of the significant characteristics observed. The formal recognition of the existence of the underground frames would imply that such social factors are taken into account in the control situation, and would mean that managerial control is no longer a mimetic exercise which follows techniques suited to a non-existent Western type organisation.

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Agricultural Growth Through "Decentralization and Popular Participation": A Survey of DDC Farm Projects in Kandy District, 1971-1973

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1. The Divisional Development Council Programme

1.1 The Conceptions and the Objectives

Some of the basic concepts of the Divisional Development Council (DDC) programme are found in their embryonic form in the Common Programme and the Joint Election Manifesto of the United Front parties.1 The Common Programme declared that "machinery will be set up to associate the people at all levels in the drawing up and the implementation of the National Development Plan",2 The Manifesto, issued in April 1970, pledged to "transform the administration thoroughly, make it more democratic and link it closely with the people".3 The main features of the DDC Programme were introduced in a more tangible form by the Minister of Finance when he presented the first budget of the United Front Government in late 1970. He said, "an entirely new structure for planning is being established (within which) each local authority area will be the focus for development planning and plan implementation. Popular participation will be secured through Divisional Development Councils in which the elected organs of the village, the co-operative society, the cultivation committees, the village council, will have a planning and co-ordinating role in the overall development of their area".4 Thus, the I.L.O. Mission to Sri Lanka in 1971 found "democratisation, popular participation and the development of social responsibility among the people" one of the "most thoroughly worked out objectives the government is committed to".5

These concepts and objectives are not recent innovations. The need for re-orienting and re-structuring the administrative systems inherited from colonial rule has for

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The United Front is composed of the Sri Lanka Freedom Party, the Lanka Sama Samaja Party and the Ceylon Communist Party. The Front was formed during the regime of the United National Party (1965-70) when these parties were in the opposition in Parliament. At the general elections held in May 1970, the United Front was returned to power with a massive parliamentary majority.

^{2.} The Common Programme, Sri Lanka Freedom Party, Lanka Sama Samaja Party and the Ceylon Communist Party, 1969, p. 2.

^{3.} Joint Election Manifesto of the United Front, Colombo, 1970, p. 4.

^{4.} Hon. Dr. N. M. Perera, Budget Speech, 1970-71, October 25, 1970, Colombo, p. 29.

International Labour Organisation, Matching Employment Opportunities and Expectations, a programme of action for Ceylon, Technical Papers, Geneva, 1971, p. 17.

long been recognised as vital in many developing countries.6 Democratic decentralization of development administration is one of the principal themes of the Community Development Programme of India begun in the late 1940s. The Indian programme has served as a model for the Village AID Programme of Pakistan, the PACD programme of the Philippines and similar (but less ambitious) programmes in countries like Afghanistan, Indonesia, Iran, Thailand, the UAR and Vietnam. Much the same concepts and objectives are seen in similar programmes in many countries of tropical Africa and Latin America. In Sri Lanka too, these ideals have prevailed at least since the 1930s. For example, they are found embodied in the speeches of S. W. R. D. Bandaranaike who repeatedly urged the setting up of new institutions at the regional level to undertake developmental tasks.7 Again, the Rural Development Service established in 1947 which, according to Ursula Hicks, anticipated the Community Development Programme of India, was one of the early attempts in Lanka "to provide the conditions for development from below".8 Hence, what is new about the DDC programme even in the context of Lanka's recent history is that it is in conception an integrated programme for the whole country which has been incorporated in a national development plan.

Specifically, the DDCs which were set up throughout the island in 1971 had the twin objectives of decentralization and co-ordination.9 Decentralization was believed to be necessary not only for a fuller utilization of the country's physical and human resources but also for obtaining popular participation and engendering popular interest in the development effort. The DDCs (and the District Councils which were to be set up later) were also intended to perform the function of co-ordinating the activities of different government departments at the District, Division and village levels. It was held that the existing tendency for government agencies to function more or less independently of each other has resulted in confusion and waste and that, apart from the necessity to correct this tendency, the very decentralization envisaged by the Programme makes it vital to set up co-ordinating machinery at all levels in the regional hierarchy.10

The formulation of the DDC programme was almost contemporaneous to the drawing up of the current Five Year Plan. The plan which accorded an important place to the programme was described by its authors as an attempt to translate into concrete action the mandate which the people gave the government "to lay the foundation for a further advance towards a socialist society". 11 It should also be recalled that the programme was drawn up at a time of deepening political crisis in the country

^{6.} To refer to a few of the more general works on this subject, Ursula K. Hicks, Development from Below, Clarendon Press, Oxford 1961; United Nations Department of Economic and Social Affairs, Decentralisation for National and Local Development, New York, 1962; Henry Maddick, Democracy, Decentralisation and Development, Asia Publishing House, 1963; Albert Waterson, Development Planning—Lessons of Experience, chapter titled "Administrative Obstacles to Planning", Oxford University Press, 1966, pp. 249-292.

Department of Information, Government of Ceylon, Towards a New Era, Selected Speeches of S. W. R. D. Bandaranaike, pp. 229-232, 233-246, and 247-252.

Ursula K. Hicks, op.cit., p. 161.

Ministry of Planning and Employment, Five Year Plan, Colombo 1971, pp. 130-131.

Division of Regional Development, Ministry of Planning and Employment, Circular titled "District Planning Offices", of 9 December 1971 (mimeographed).

Ministry of Planning and Employment, op.cit., p. i. 10.

^{11.}

which culminated in the uprising of April 1971. This uprising emphasised in an unprecedented manner the need to transform the old order. Placed in the context of these ideas and events, it seems clear that what the programme envisaged was not merely an administrative reform involving a spatial re-distribution of economic planning and a rationalization of bureaucratic activity. It is fair to infer that the decentralization and the coordination which the programme aimed at was also an initial attempt to facilitate the dispersal of social privilege and economic power in society and to mobilise the active support of the people so as to set in motion a process of rapid change.

1.2 The Composition and Functions of DDCs

The area of operation of a DDC usually corresponds to the area of authority of a local government body. The Councils are composed of official representatives from different government departments as well as 'people's representatives'. The latter category includes the member of the National State Assembly for the area, all members of the local government authority and the key office bearers of such bodies as the co-operative society, the cultivation committees, rural development societies, Janatha (People's) Committees and other village level organisations. It is usual for a Development Council to have a membership of over seventy-five.

The Councils so formed were entrusted with specific tasks, the chief among which was the formulation and operation of an integrated development programme for their areas. Within such programmes, the DDCs were called upon to devise projects in agriculture, industry, irrigation and infra-structure. Once these plans and projects were set in motion, the DDCs concerned were expected not only to exercise constant vigilance over the working of the projects but also to ensure people's participation in them.12

1.3 Formulation of Projects

The sequence of action followed by the DDCs once they were set up might have varied from district to district. Within Kandy District, the present area of study, the DDCs never took up the task of formulating integrated regional development programmes.13 No sooner were they established, they set out to draft specific project proposals.

Instructions on the formulation of projects within the DDC programme sent out by the Ministry of Planning stated that "a project will arise out of an idea proposed by any member of the DDC".14 Most projects now in operation in Kandy District did, in fact, formally originate in this manner. Once a project idea was accepted by a DDC, a detailed project plan was prepared. This was invariably done by a sub-

12. These tasks have been outlined in Ministry of Agriculture and Lands, Agricultural Development through DDC Projects, Colombo 1971, p. 26; Plan Implementation Division of the Ministry of Planning and Employment, Circular titled 'Organisation of DDCs'

of 1 March 1971 (mimeographed) para 2.

13. 'Graduate Trainees' (480 had been recruited by August 1971), some of whom later became 'Development Assistants' of the DDC programme, were attached to various government offices during their period of training. Some of the Divisional Revenue Officers who were in charge of their training (the DRO at Harispattuwa, for example, had 44 trainees) engaged them in haphazard field surveys in their respective areas. These were not systematic surveys, and the data so collected were never processed.

14. Circular of 1 March 1971, para 6.

committee appointed for the purpose by the DDC. In the case of farm projects, usually the expertise for project formulation was provided by the officials of the Department of Agriculture.

A plan thus formulated and once approved by the Government Agent for the District, was forwarded to the Ministry of Planning for final approval and allocation of funds. The "approval by the Ministry of a well founded plan", according to a circular sent to the DDCs by the Director of Regional Planning, was to be "a mere formality",15

1.4 Project Management

The architects of the DDC Programme considered Co-operative Societies to be the most suitable organization for the management of projects. The Programme provided for projects to be either affiliated to existing primary co-operative societies or operated by newly constituted "Special Co-operatives". During the early stages of the Programme, the Ministry of Planning appears to have preferred the former arrangement under which the management of projects was incorporated into the spectrum of activities of existing primary co-operatives.¹⁷ Facilitating "collective ownership" of projects by those participating in them, retaining economies of scale in project operation and securing popular interest in the projects were among the reasons adduced for entrusting the management of projects to co-operative societies. It was also thought that since co-operative societies are statutory bodies, the managerial aspects of the projects being handled by them would ensure close governmental supervision of their financial transactions

1.5 Financing of Projects

A total budgetary provision of Rs. 100 million was made for the DDC programme for the period up to the end of 1972.18 This provided for a maximum allocation of Rs. 200,000 for each DDC. Thirty-five percent of the total finances made available was ear-marked for agricultural projects. This amount works out to an average of Rs. 70,000 for agricultural plans within each DDC area. These funds became the main source of finance for capital expenditure in the projects that were approved.

In the allocation of money for the approved projects, the Ministry of Planning made a careful distinction between capital expenditure and working expenditure. While the Ministry's allocations were intended exclusively for the former, the management of each project was expected to find other sources of finance for working

Division of Regional Development, Ministry of Planning and Employment, Circular titled "Some Hints for the Preparation and Implementation of Projects Proposed by the DDCs", August 1971 (mimeographed) para 9.

^{16.} ibid., para 6.

^{17.} Circular of 1 March 1971, para 7, iii. A reorganisation of the cooperative movement in the country was begun in 1971. This was, to some extent, based on the recommendations of the Royal Commission on the Cooperative Movement of Ceylon (Sessional Paper II of 1970, Government of Ceylon, 1970). The Co-operative Societies (Special Provisions) Act Nos. 34 and 35 of 1970 provided for the reorganisation under which the major change which has been implemented so far is the liquidation of certain societies and a correlessment of certain others to form sconomically visible units. The "primary of the cooperative of certain others to form sconomically visible units." and an amalgamation of certain others to form economically viable units. The "primary cooperatives" referred to here are the recognised Multi-Purpose Cooperative Societies.

Ministry of Agriculture and Lands, op. cit., p. 27; Additional Secretary, Ministry of Planning and Employment, Circular of 13 January 1971, para 2.

expenditure. These were bank loans, and in the case of projects affiliated to existing primary co-operative societies, funds lying to the credit of such societies. As we shall presently see, the distinction made between capital and working expenditure in the allocation of government funds had far reaching effects on the performance of farm projects in the District.

The funds allocated by the Ministry were first deposited in margin bank accounts of co-operative societies operating the projects. The release of money from their margin accounts to current accounts has been done in stages, either in accordance with the progress of capital development work in the projects or, less frequently, as advance payments for intended expenditure relating to capital development. In either case, the Government Agent of the District who was vested with the authority to release funds was instructed to exercise extreme care.¹⁹

2. The Scope and the Method of the Present Study

By the end of the second quarter of 1973, financial allocations had been made under the DDC Programme for 974 projects. Of these, 69 were in Kandy District. The total number of approved projects in the District consisted of 27 agricultural projects, 38 industrial projects and 4 'public works' projects.²⁰

All DDC agricultural projects within Kandy District are co-operative ventures. Among them there are 8 'service co-operative' projects in which only the supply aspects have been integrated. In these, production is carried out in scattered plots of privately owned land and marketing is done individually by the producers. These have been excluded from the present study. The other agricultural projects are (or, were intended to be) fully integrated co-operative farms where the land is communally owned and all activities relating to supply, production and sale are conducted on a collective basis. Some of these projects, though approved by the Ministry, have not begun yet. There also some which were started recently. The present study includes only those co-operative farms that by 30 June 1973 had a history of operation of at least one year. There are 11 such farms in the District.

The physical setting of these 11 farms and their location in relation to roads and towns of the area are shown in Figure 1. Some salient features of each farm are also presented in summary form in Appendix I. The information provided by the map and the Appendix shows that the 11 projects investigated have a wide range of variation in such aspects as scale of operation, physical setting, natural assets, accessibility and the relative emphasis on different lines of agricultural activity.

Despite this variation, obviously, no claim can be made that these farms are representative of the DDC farm projects in the entire country. The facts presented and the features discussed are exclusively about the projects which have been studied. Yet, the generalisations drawn from them may well have a wider applicability. Indeed, the very frequency with which certain phenomena occur among the farm projects

See, Director of Regional Development, Circular titled "Financing of DDC Projects" of 22 October 1971 (mimeographed); also Circular of August 1971, para 10.

The figures given here are from the Quarterly Progress Report (April-June 1973) prepared by the Division of Regional Development, Ministry of Planning and Employment, dated 14 August 1973 (mimeographed).

within the district points to the probability that such phenomena are not unique to the present area of study. The projects covered by this study are treated here as experiments both in planning at the 'grass roots' and in co-operative farming. In evaluating the results of this study, however, the limits of these experiments in both space and time must not be overlooked.

The study is based on data obtained from several sources. It began in informal discussions with certain officials of the Ministry of Planning and of the DDC programme in the district. Following this, the official files on the farm projects maintained at various offices were perused. Information obtained from these files enabled the reconstruction of the history of each project. They contained the original plans of the farms. Correspondence between different government departments and between them and project personnel, which are also maintained in the files, provided valuable insights on the attitudes and responses of various individuals associated with the programme. At the next stage of the survey, field investigations were conducted on the farms. These investigations included interviews of farm workers (see the Notes on Field Survey, Appendix II), discussions with those who have acted in an advisory, managerial or supervisory capacity to the farms and a study of various records (log-books maintained by the officials, attendance registers, etc.) maintained at the farms. Data on income and expenditure of the projects were gathered from the offices of the respective cooperative societies. Since the field work involved repeated visits to the farms during August to November 1973, it was also possible to observe their working in late Yala and early Maha, the two cultivation seasons.

3. Planning and Financing of the Farm Projects

3.1 The Project Plans

The plans of the projects that fall within the scope of this study were formulated and forwarded to the Ministry of Planning during the second half of 1971 or in early 1972. Their main aspects are shown in Table 3.1.

TABLE 3.1-Farm Plans formulated by the DDCs in Kandy District

			Prop	osed		Esti	imated
Farm		Extent of the site (acres)	Area under crops (acres)	Size of poultry (number)	Size of dairy (number)	Capital expenses (Rs.)	Working expenses for one year (Rs.)
Gohagoda		29	14	1000	20	65,500	34,400
Etakelle		11	31		12	29,305	11,414
Kundasale	10.	35	35	4000	15	108,020	228,616
Kirimetiya	10.12	50	10	7800	20	58,950	190,315
Kosgahalanda		50	10	4000	20	65,550	34,400
Wendaruwa		35	35			110,100	72,300
Ulpothagama	4.0	32	22	1500		31,500	34,356
Piligalla		31	21	1000		14,313	18,245
Wattappola		1		2000		12,625	30,240
Nelligolla		19		2400	24	48,640	133,837
Uda-Peradeniya		50	10	4000	20	65,100	159,675

^{*}Some of the minor branches of proposed activity have been excluded.

The farm plans referred to above conformed to the general guidelines which had been set earlier by the Ministry. At least superficially, some appear well thought out. In plans that were drawn up in consultation with those who possessed the know-how costing has been done in a reasonable manner. However, there are certain features in the plans that are of interest to this study which need special mention.

One of these is the arbitrary manner in which the choice of the site, and thereby the scale of operation, had been determined. The sites were decided upon, not after a survey of the needs and the resource-potential of each area but on the basis of convenience and expedience of acquisition. Some of the sites so chosen have obvious disadvantages. For example, if such factors as employment potential and costs of management and supervision were given adequate consideration, Piligalla and Wattapola would never have been selected (see Table 3.1). Similarly, the problems of the site relating to factors like terrain, soil and water supply at Etakelle, Kosgahalanda and Uda-Peradeniya came to be appreciated only after the projects had begun. At least in certain instances, the failure on the part of some of the planners to consider this aspect was a result of their haste to get the projects started. On the few occasions when queries arose regarding the suitability of the proposed sites, the invariable reply was that there were no other suitable sites. While the truth of such replies can itself be subject to doubt, one may ask why, if no suitable sites were available, the plans were not withdrawn or rejected.

Another remarkable feature about the plans is that most of them proposed a wide spectrum of agricultural activity. The planners invariably thought of dairying and poultry farming as well as a host of field crops, including those requiring a high level of experience on the part of the farmer. During the field investigations inquiries were made as to how and why the particular lines of activity were decided upon. A reasonable explanation was rarely obtainable. The question of having an optimum combination of productive activity based on the resources of the site does not seem to have ever arisen. Besides this, there is also the related point that most plans were drawn up in disregard of the probability that those who will be working on the farms would have little experience in farming and that it would not be feasible to provide them day-to-day guidance in their work. This somewhat haphazard approach on the part of the project planners at the grass-roots can be accommodated without much damage to the economy only if, as in the DDC Programme at present, their projects are few and far between.

A third feature of interest frequently seen is that the local planners have set about their task in a spirit of negotiation with the Centre. On many occasions a plan has been looked upon not only as a blue-print for a project, but also as a request from the government for funds to be used locally. Hence, the costs of certain items were estimated unrealistically, no doubt, in the hope of striking a satisfactory compromise with the Ministry of Planning. Needless to say, this kind of planning too has obvious limitations.

Some of the plans also show some degree of carelessness in formulation. To cite some examples, the initial project proposal for Kundasale made no allowance for water supply. The Kosgahalanda plan envisaged providing gravity irrigation (against the relevant laws of nature) at a cost of Rs. 2,500, but a few months after the project

began, the Territorial Civil Engineering Organisation estimated the cost of water supply there at Rs. 150,000. The plans for the poultry projects at Gohagoda and Ulpothagama omitted to make provision for feeding the chicks. Piligalla farm with barely 3 acres of crops and a tiny poultry section was planned to provide full employment to 15. The plan for Wendaruwa provided for the purchase of a four-wheel tractor, overlooking the fact that the farm's only access to a motorable road is along a 4-mile long foot path. The presence of these features suggests that expert advice or even common sense was not universally used in the formulation of the plans.

3.2 Funds for the Projects

The broad outlines of the project proposals were rarely altered at the stage of approval and allocation of funds by the Ministry of Planning. Where the plans lacked clarity, in certain instances, there were perceptive queries. But, usually, approval was granted without hesitation and delay.

The funds allocated to the different projects are given in Table 3.11 where it may be observed that there were substantial differences between plan estimates of capital expenditure and the allocations which were actually made. These differences arose largely due to the fact that the Ministry followed a standard per acre/per unit system of calculating its grants. In fairness it must be mentioned that at this time the Ministry had to deal with an enormous flood of project proposals from all over the country and that with the facilities that were available it was not possible to examine in detail the specific requirements of each project.

In the release of funds which were allocated to each project, the officials at the district level had to adhere to a strict procedure. Funds had to be released in stages, in accordance with the progress of work. Certain restrictions were also set on the transferability of funds from one item to another. Above all, the demarcation between capital expenses and working expenses (referred to earlier) had to be carefully maintained.

TABLE 3.11—Expenditure as Estimated in Project Plans and the Allocated Grants

Farm		Estimated Capital Expenditure (Rs.)	Estimated Working Expenditure (Rs.)	Grant allocated by the Ministry (Rs.)
Gohagoda		65,000	34,400	32,150
Etakelle		29,305	11,414	22,335
Kundasale		108,020	228,616	77,870
Kirimetiya	-	58,950	190,315	58,900
Kosgahalanda		. 65,550	34,400	59,500
Wendaruwa		110,100	72,300	36,500
Ulpothagama		31,500	34,356	27,500
Piligalla		14,313	18,245	8,000
Wattappola		12,625	30,240	20,400
Nelligolla		48,640	133,837	31,250
Uda-Peradeniya		65,100	159,675	45,600

This arrangement did not create formidable problems of finance to those projects that were being managed by co-operative societies with large reserve funds (e.g. Uda-Peradeniya, Gohagoda and Wattappola). Once the Ministry's approval was given—

and in one case even prior to such approval—these cooperatives embarked upon project operations. For the others, however (i.e. those affiliated to the less affluent primary cooperatives like Piligalla, Etakelle and Ulpothagama or those handled by newly instituted Special Cooperatives like Kundasale, Kirimetiya and Kosgahalanda) the position was entirely different. For working expenditure, they had to depend on bank loans. But it appears that there was no definite undertaking at any stage by the banks to provide loans to DDC projects. In any event, such loans were never made available.

Thus, at the very start, several farms within the District were placed in a curious position. On the one hand, they had access to funds with which to lease the lands and clear, fence and irrigate it. They could purchase implements. Since labour cost were included in some of these items, they could also afford to pay allowances to the project participants as long as funds for these activities lasted. On the other hand, they had no means of purchasing seed, fertilizer, agro-chemicals, livestock and livestock feed with which they could begin those activities which would enable the farms to yield an income and eventually make them financially self-sufficient. The projects concerned had either to proceed with capital development as planned and approved by the Ministry in the hope that, somehow, money for working expenses would be forthcoming, or to cut back on capital development and channel a part of the funds earmarked for capital expenditure for working expenditure.

The projects which were faced with this dilemma invariably resorted to the latter course of action. They used whatever initial advance payments they were able to obtain from the Ministry's grant for capital expenses and for working expenses. This of course meant that capital development work could not proceed as intended. When such work did not reach the specifications, the district level officials whose responsibility it was to regulate the release of funds became increasingly stringent (see Table 3.111). These officials or the Ministry had to be cajoled or pressurized even to obtain further instalments of unspent money earmarked for capital expenditure. Meanwhile, when the ill-managed crops and the under-fed livestock failed to yield the expected returns, further deterioration took place. Finally, there were no funds with which to pay the workers, to cultivate fresh crops or to feed the livestock. Activities on these farms thus came to a full or partial halt.

The inadequacy of finances appear to have been the main cause for the dismal record of projects like Kirimetiya and Kundasale. But in the general picture, as we shall see in later sections of this study, it has been only one of many causes. It will be seen that even projects such as Gohagoda and Uda-Peradeniya, which evidently had no problems of finance, have performed far below expectations.

TABLE 3.111—The Release of Government Grants and	the Actual Expenditure on the
Farm Projects (up to 30 June 1	1973)

	Villa II		Amounts	released		The Lines
Farm		Total Government Allocation (Rs.)	as grants for capital expenses (Rs.)	as loans for working expenses? (Rs.)	Capital Expenditure1 (Rs.)	Working Expenditure1 (Rs.)
Gohagoda	-	32,150	30,000	_	109,180	106,624
Etakelle		22.335	12,850	_	29,308	29,447
Kundasale		77,870	19,150	15,110	26,329	32,507
Kirimetiya		58,900	24,150	3,280	10,450	22,055
Kosgahalanda		59,900	13,350	_	4,855	12,037
Wendaruwa		36,500	23,000		23,747	8,461
Ulpothagama		27,500	5,825	_	1,731	6,025
Piligalla	**	8,000	6,000	_	6,851	11,213
Wattappola		20,400	8,400	12,000	24,307 8	45,9538
Nelligolla		31,000	15,012	_	32,452 4	35,465 4
Uda-Peradeniya	4.4	45,600	8,353	-	46,897	49,861

- Notes. 1. The figures given in these columns are estimates. For details, see Table 4.1, Appendix III.
 - Recently, loans have been given from the government grant, under exceptional circumstances, to be used for working expenses.
 - 3. Expenditure up to 31 July 1973.
 - 4. Expenditure up to 31 August 1973.

4. Performance of the Projects

4.1 Production: Profits and Losses

Expenditure and income on each farm from their inception up to the end of June 1973 are summarised in Tables 4.1 and 4.11 (Appendix III). There are limitations both to the reliability of this data as well as to the extent to which they could be used for making accurate estimates of profits and losses. One such limitation is that there has been no uniformity in the system of accounting. There are differences from project to project and also from time to time in each project. In compiling Tables 4.1 and 4.11 problems relating to the former have, to some extent, been overcome by adjustment and extrapolation. The latter feature creates more formidable difficulties. Its presence does not appear to be entirely due to a lack of knowledge in accounting procedure. In certain cases at least, the records of income and expenditure have been so maintained as to conceal rather than reveal what was happening. It is possible to discern in these records attempts to conceal the fact that monies released by the government were not being used for their specifically intended purposes and also to camouflage various other malpractices.

There are other problems in the way of any attempt to draw up comparative profit and loss accounts of the farms with the data available. For example, different branches of activity on each farm were not begun simultaneously. Hence it would be meaningless to take the statistics relating to all such activities in aggregate in a balance sheet covering their entire existence. At the same time, it is difficult to examine the different branches of activity on each farm individually because the data obtainable on such items of expenditure as labour, management, travelling and transport are common to all branches of activity. Hence, what is possible here is to base our discussion on data as they are presently available and also to rely on estimates where there are gaps in the data.

The main items of expenditure on the cultivation of crops during the *Maha* season (September to April) of 1972-73 are tabulated below. This season has been chosen for study because, with one exception, all the farms have operated throughout the season and cropping during the season has been roughly contemporaneous in the different farms. The main defect of these data is that, unlike costs of material inputs, costs of labour are mere estimates made on the basis of the extents cultivated and the rates of payment on each farm and an arbitrary assumption of an uniform rate of labour input of one worker per acre cultivated.

TABLE 4.111—Estimated Costs and Returns from Crops during Maha, 1972-73

	Exte	nt cultivated	Costs	(Rs.)	Returns
Farm		(acres)	Material inputs	Labour inputs	(Rs.)
Gohagoda	 The second	101	3,952	8,894	5,079
Etakelle	 The same	51/2	1,556	3,993	3,662
Kundasale	 	71	1,009	5,264	4,126
Kirimetiya	 	7 <u>1</u> 8 <u>1</u>	3,285	6.171	2,233
Kosgahalanda	 	8	1,823	5,808	1,066
Wendaruwa		6	2,807	5,082	2,460
Piligalla	 	2	278	1,694	1,496
Velligolla	 	1	257	484	156
Uda-Peradeniya		1/2	291	363	425

Note: Data for Ulpothagama are not available.

Even if my estimates of labour costs are rejected as being unrealistic (in relation to the actual payments which were made to the workers, some of the figures given are, in fact, over-estimates), the date given above show that crop cultivation during the season in most of the farms has not been commercially profitable. It is seen that, while on four of the farms the returns have been less than even the costs of seed, fertilizer and agrochemicals, on several others these costs have only been barely covered by the returns. Similar data available for other crop seasons for the farms which have had a relatively longer record of operation suggest that in this respect the *Maha* season of 1972-73 was in no way exceptional.

Yields have been uniformly low in spite of the relatively high expenditure on fertilizer and agrochemicals. For example, on three farms which possess tracts of paddy, the average per acre yield has been about 14 bushels. Crops like potatoes and onions which require some experience on the part of the cultivator were, for the most part, total failures. Surprisingly, the same is true of vegetables on many farms. The only redeeming feature has been that chillies, which, due to the high prices that prevailed was a popular crop, yielded satisfactory returns.

In most of the farms, those who were interviewed during my field investigations attributed the poor performance of crops to adverse weather conditions. It was claimed that an unusual drought which prevailed during the season caused crop failures. For the district as a whole, the rainfall pattern during the season was indeed somewhat unusual in the sense that while in the early part of the season monthly totals of rain exceeded the average monthly rainfall, the rain during the months of January, February and March were below the averages (indicated respectively by positive and negative deviations from the monthly means as shown on Figure 2). However, taking into consideration the fact that rain during the early part of the season is more crucial to

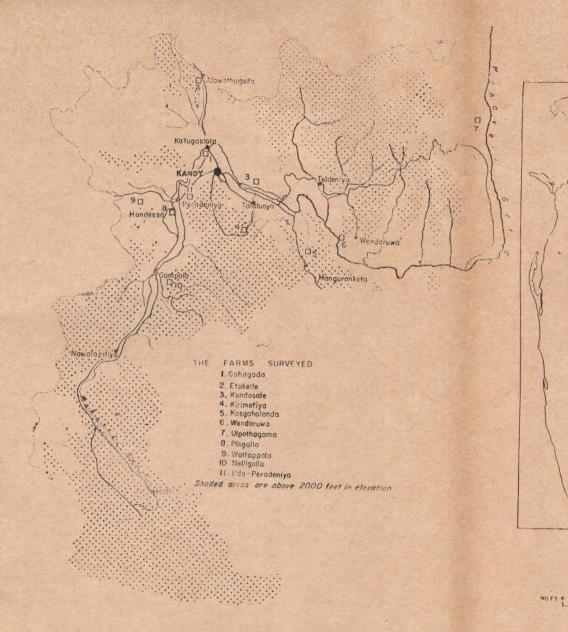


Figure - I KANDY DISTRICT - LOCATION OF DDC COOPERATIVE FARMS

Uda-Peradeniya (30.6.73)

4,665

18,324

405

8,043

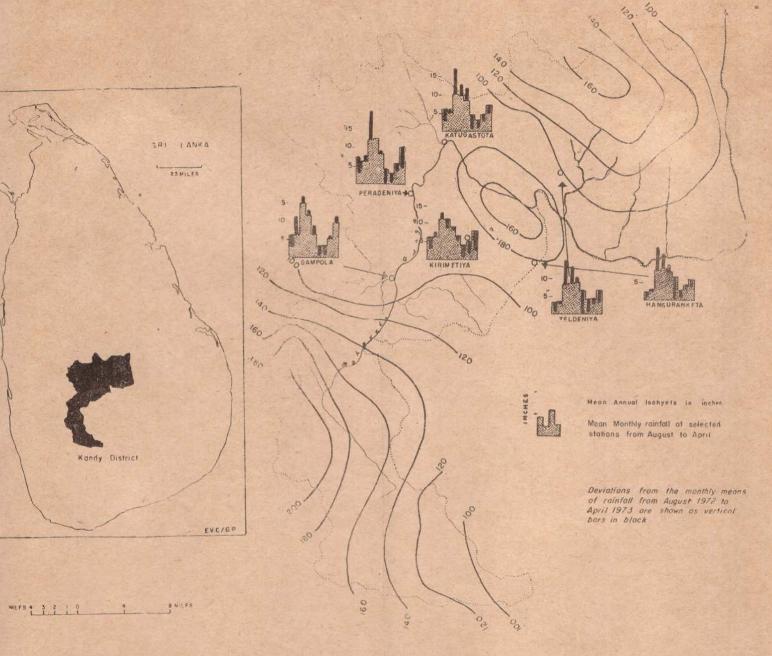


Figure - 2 KANDY DISTRICT - RAINFALL DISTRIBUTION

the success of crops than rain during the latter part, it could be said that although the possibility that there were problems of water supply on some of the farms cannot be ruled out, adverse weather conditions were not an important cause for the poor results obtained from crops.

Some of the farms appear to have been affected by an absence of proper channels for marketing the produce. There has been no order and no system in the sale of what little the farms were able to produce, leaving room for various irregularities.

On the expenditure side, there is reason to doubt whether all the material inputs purchased (or reported to have been purchased) were, in fact, used on the farms. The recorded expenditure on seed and fertilizer on most farms exceed the accepted norms (see Table IV, Appendix IV) by several folds. This fact, taken in conjunction with the poor performance of the crops, points strongly to the widespread presence of ignorance or fraudulence.

The main items of costs and returns in poultry farming, which has been an important branch of activity on 8 farms covered by this study, are shown below in Table 4.V. Figures relating to some of the items in the Table are my own estimates and, therefore, need clarification. At four of the farms (Kirimetiya, Kosgahalanda, Piligalla and Uda-Peradeniya) poultry farming has been abandoned and the stocks remaining at the time of abandonment have been sold. Incomes derived from such sales have been included in the returns. Where poultry farming is still being done, the current value of stock has been estimated at a uniform rate of Rs. 10 per unit of stock. Depreciation of capital assets has been calculated at the rate of 3 percent per annum, except in the case of three farms (Kirimetiya, Kosgahalanda and Piligalla) where, since the termination of this line of production, poultry sheds and equipment have also been destroyed. In these 'depreciation' represents the total initial expenditure on capital assets. Labour costs, relating to which no definite data are available, have been left out.

Despite these limitations in the accuracy and coverage of the data in Table 4.V., they leave little room for doubt that poultry farming on DDC farms within Kandy District has been a hopeless failure. Relatively large sums of money have been spent on the purchase and maintenance of stock with little regard for the persistently low returns. It is true that during the period under review poultry farming in Sri Lanka experienced unfavourable conditions of operation due to the sharp upsurge in the price of poultry foods. However, even if allowance is made for this, the record of poultry farming has clearly been a record of mismanagement.

TABLE 4.V—Estimated Costs and Returns from Poultry Farming

				Costs (Rs.)	Retu	rns (Rs.)
Farm			Purchase of stock	Mainte- nance	Deprecia- tion	Sale of produce	Current value of stock
Gahagoda (8.9.73)			4,000	21,490	506	7.826	6,150
Kundasale (31.8.73)			2,160	14,974	435	5,125	7,450
Kirimetiya (30.6.73)			945	4,362	3,108	1,580	_
Kosgahalanda (30.6.73)			639	3,067	921	1,579	_
Piligalla (30.6.73)			200	442	150	459	_
Nelligolla (31.7.73)		11000	1.193	29,057	466	10,571	4.910
Wattappola (31.8.73)		***	3,849	32,848	698	15,414	15,870
Uda-Peradeniya (30.6.7	3)		4,665	18,324	405	8,043	

Note: The dates of assessment are shown within brackets.

Although provision for dairy farming has been made in six of the projects under review, at the time of this survey it had commenced on only four. In these too, dairying is of relatively recent origin. Hence the data available on this aspect of farming cover too short a period to attempt anything more than a few brief comments. The farms have been supplied with some of the best breeds of cattle (mostly the varieties of Aireshire, Jersey and Holstein Freisian). Yet, the yields have been low. At the three farms which, during the recent past, have had milch cows in lactation, the average yield per cow has been less than 12 pints per day. Besides the low yields, some of the farms have also faced other problems such as the inadequacy of facilities for proper sanitation and channels for marketing the milk.

As for other productive activities on the farms, they have been relatively unimportant, but they too show the same characteristics of bad planning and bad management. The flock of goats purchased for Rs. 1,830 in August 1972 at Kosgahalanda was sold for Rs. 1,015 three months later. No records are available and no traces can be found of the ducks and the fresh water fish introduced to the lake at Kirimetiya. The four pigs at Nelligolla, now occupying a section of its cattle shed, are a mere diversion.

I have gone into somewhat tedious details of the different aspects of production on the DDC farms within the district not because of their intrinsic importance. On the present scale, the losses that have been incurred can perhaps be borne by the country. But, here again, the crucial issue is whether this type of unproductive activity can be extended further in their present form without grave repercussions for the future of the economy.

4.2 Employment and Earnings

Generating employment was one of the objectives which received high priority in the DDC programme.²¹ In agriculture the programme sought to place emphasis on unemployed and under-employed rural youth. At the early stage of implementation of the programme, project formulators at the regional level were told that one of the four main criteria upon which the approval of a project proposal would rest would be that of employment potential.²² They were also told that "each project should aim at a net monthly income of Rs. 150 to 200 per individual".²³

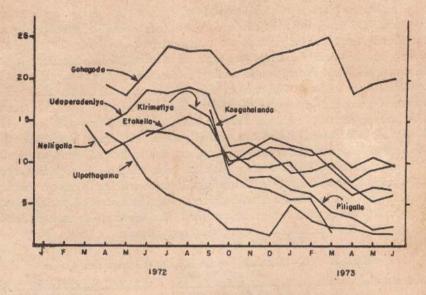
As Table 4.VI. shows, most of the project proposals sent up from Kandy District had definite targets of employment. Although in relation to their size and nature of proposed activity some of these targets were unrealistically high, in fixing them there was probably an underlying assumption that productive activity on the farms would be labour intensive. Further, it was probably the tacit acceptance of this assumption that explains the approval of the project proposals by the Ministry of Planning.

The numbers recruited to the farms at their inception were invariably below the planned targets. This again could be explained with reference to the necessity to leave a quota for future recruitment when activities on the farms expand. However, what happened subsequently was contrary to all expectations. Those who were recruited

See Ministry of Agriculture and Lands, op. cit., p. 29; also The Five Year Plan, op. cit., p. 31.

^{22.} Circular of August 1971, para 8.

^{23.} Ministry of Agriculture and Lands, op. cit., p. 31.



Flowre - 3 Daily attendence of farm workers - average per working day

dropped out gradually so that during the time of the present survey, the total number of employees in the registers of all 11 farms was about 80, or around 20% of what was anticipated at the stage of planning.

TABLE 4.VI-Employment on the Farms

Farm		Plan target	Number recruited initially	Number in the farm registers on 1.7.73
Gohagoda		27	12	18
Etakelle	4.6		18	11
Kundasale	0.1	50	20	9
Kirimetiya		60	38	9
Kosgahalanda	100	55	22	0
Wendaruwa		60	24	0 3 2
Ulpothagama		22	21	2
Piligalla		15	17	3
Wattappola		10	5	4
Nelligolla		-	15	12
Uda-Peradeniya		55	20	2

Note: After about August, 1973 some of the farms have made fresh recruitments of workers on a casual basis.

Even this data does not reveal the true position of employment on the farms. As Figure 3 illustrates, the daily attendance of those who have nominally continued to be farm workers has been very irregular. The general trend of attendance has been a fluctuating downward trend. In some of the farms these fluctuations could be related to seasonal variations in demand for agricultural labour outside. A pattern which could be observed often is that during times of planting and harvesting of paddy, farm attendance drops, and conversely, during the intervening slack seasons, attendance improves. This suggests that even for many of those who have remained in employment on the farms, such employment has essentially been a source of off-season income.

This brings up the question of incomes derived from the farms by those employed on them. DDC farms were not intended to be worked with hired labour. Although provision was made for the payment of allowances to workers during the initial stages of a project, the workers' incomes were expected to be in the form of sharing of profits. But since none of the farms have yet realised profits, the practice of paying wages has continued to be followed. The rates of payment have varied from Rs. 2.50 to 5.00 per working day, enabling the highest paid workers to earn around Rs. 125 per month. The average monthly earnings, however, have been far below this level (Table 4.VII). At Kundasale, Kirimetiya and Kosgahalanda there have been spells which at times lasted for several weeks, when, due to lack of funds, the workers were not paid at all. Piligalla farm which has been incapable of providing regular employment to its workforce, which numbers 3, has been hiring them on a rotational basis. When placed in a similar situation, several other farms have followed the practice of periodically suspending some of their workers. The high rate of absenteeism referred to above has also contributed to the low average earnings.

TABLE 4.VII—Estimated Average Monthly Earnings per Worker (January to June, 1973)

	Rs. Cts.			Rs. Cts.
Gohagoda	51.60	Wendaruwa		30.50
Etakella	79.50	Piligalla		38.00
Kundasale	31.00	Wattappola		58.25
Kirimetiya	24.10	Nelligolla	100	78.30
Kosgahalanda	14.00	Uda-Peradeniya		68.00

Note: Data for Kosgahalanda, Wendaruwa and Uda-Peradeniya do not cover the entire period. Ulpathagama has been excluded.

Data on age, family background, education and vocational experience of those who were recruited to the farms were collected during my field investigations. These are presented in summary form in Table 4.VIII. Observations which can be made on these aspects are as follows. First, although there is a wide range of variation in age among those who were employed by the farms, the emphasis in recruitment, at least initially, was on youth. Secondly, a majority of them have been drawn from poor, agricultural families, possibly from among the lowest economic strata of the Kandyan peasantry. Thirdly, most farm workers had received a formal education at least up to the secondary level and about 37 percent of their total had reached G.C.E. Ordinary Level grades. Fourthly, most of them have had no regular employment until their recruitment to the farms.

Although the initial recruitment pattern conforms to the DDC Programme's emphasis on providing employment to youth, in some of the projects significant changes have since been made in the composition of the workforce, so that at present there is no preponderance of youth among the farm workers. For example, the average age of the workers at Gohagoda at the start was approximately 22 years. During the past 18 months most of them have either dropped out or were discontinued and fresh recruitments have been made. At the time of my survey the age of the workforce averaged 31 years. At Uda-Peradeniya, those recruited initially were all below 26 years. Since then, the original workforce has been discontinued, and when the farm was re-opened after several months of inactivity for the Maha season of 1973, about

40 workers, whose average age is around 36 years, have been hired. A similar change has also occurred at Wendaruwa. Generally, there seems to be an increasing preference among those managing the farms for elderly workers. They claim that such workers are more regular in attendance and are more hard working. It is also possible that one of the attractions of older workers is that they tend to be more amenable to authority than youth.

TABLE 4.VIII

A Summary of Information on a Sample of Farm Workers
(August to November 1973)

numbers falling into each category

		GOHAGODA	ETAKELLE	KUNDASALE	KIRIMETIYA	KOSGAHALANDA	WENDARUWA	PILIGALLA	WATTAPPOLA	UDA-PERADENIYA	NELLIGOLLA	TOTAL
To AGE	tal number interviewed i. 20 years or less ii. 21 to 25 years iii. 26 to 30 years iv. 30 years or more	15 2 6 2 5	8 4 4 0 0	10 4 4 0 2	8 0 5 3 0	10 1 1 2 6	12 6 4 0 2	3 0 1 1 1	4 1 3 0 0	12 2 7 2 1	7 0 1 1 5	89 20 36 11 22
	i. Grade 5 or less ii. Grades 6 to 9 iii. Grade 10 & above cultural vocational erience	5 4 6	1 3 4 4	3 2 5 3	0 3 5 2	7 3 0	2 6 4 2	2 1 0	0 1 3 2	1 6 5	3 3 1 2	24 32 33 26
ESTIMATED MONTHLY FAMILY INCOME	i. Below 100 rupees ii. Rs. 100 to 200 iii. Rs. 200 to 300	9 3 3	4 3 1	8 2 0	4 4 0	5 5 0	4 5 2	3 1 0	2 1 1	2 6 4	4 3 0	45 33 11
PRINCIPAL SOURCE OF FAMILY INCOME	i. Cultivation of own land ii. Tenant/Agric. labourer iii. Other	2 10 3	2 4 2	2 5 3	1 5 2	7 2 1	7 5 0	0 3 0	1 3 0	5 3 4	3 4 0	30 44 15
STATUS BEFORE JOINING FARM	i. Unemployed ii. Partly/Periodically employed	4	3 5	4 - 6	2	1 9	1 11	0	2 2	6	1 6	24 65

Note: Samples from Gohagoda, Wendaruwa and Uda-Peradeniya include ex-farm workers. All workers interviewed at Kosgahalanda were former farm employees.

4.3 Co-operative Farming

Though nowhere has it been explicitly stated that co-operatives would be the only form of organisation for agriculture in the DDC programme, various statements found in official writings relating to the programme suggest that it sought to foster co-operative farming in Lanka. Of course, 'co-operative farming' can mean various

degrees of integration of agricultural activity in a community.²⁴The programme is somewhat flexible regarding the form and the degree of integration it prescribes. But, both from the programme itself as well as from the context in which it was drawn up, it appears that 'private property individualism' in farming was looked upon with disfavour and a high degree of integration involving communal ownership of the land was desired. Applying the terms used by Otto Schiller,²⁵ it is perhaps fair to say that what the programme aimed at was the promotion of "agricultural production cooperatives" rather than the "co-operative promotion of agricultural production".

The idea of planning agricultural development on a co-operative basis did not have to be imposed on the DDCs from above. At least the slogans and the cliches, if not the principles, of co-operative farming were known at the village level. Among those who sponsored the projects, the mood and the desire to promote co-operative farming were also probably there. Thus the agricultural projects proposed by the DDCs were all co-operative projects, most of which aimed at the total integration of farming activity. Enabling self-employed farmers to own, manage and work the farms collectively and share their profits was the ideal aimed at by most of the project proposals. At the start, 3 of the projects within the district went to the extent of attempting to facilitate a communal life to the project participants. It is also significant that the Sinhala equivalent of "collective farm" (samooha govipala) has always been used in referring to the farms. The workers too have continued to be referred to as "members".

The principles of co-operative farming, however, are rarely evident in the manner in which these farms have operated so far. The eight projects that are affiliated to primary co-operative societies have become farms that are "owned" and managed by these societies and worked with hired labour. In these, apart from the fact that workers do not participate (and are rarely, if ever, consulted) in decision making, a majority of them have not even been made members of the societies. Work programmes, apportionment of funds, emoluments, recruitments and dismissals of workers have been decided in each case by one or two individuals who directly or indirectly control the co-operative society. In the projects that are operated by "Special Co-operatives" too, most of the workers hired to fill vacancies resulting from the reductions in the original membership (where such hiring of workers has occurred) have remained wage labourers. Even the use of the term "co-operative farm" to refer to this type of organisation, as Schiller points out, is a misnomer. 26

^{24.} Mcst modern authorities do not accept the narrow definitions of 'Cooperation' given by earlier writers like C. R. Fay (Co-operation at Home and Abroad, Vol. II, London 1948, pp. 32-63, first published in 1908), Leonard Woolf (Co-operation and the Future of Industry, London 1918), Charles Gide (Consumer Cooperative Societies, New York, 1922) and James Warbasse (Problems of Co-operation, New York 1946). The widely held view at present is that 'Cooperation' implies a wide range of variation in the degree of integration of production and consumption, such variation in the context of agriculture falling between the totally collectivised state farm on the one extreme and the highly individualistic peasant farm on the other. See, Margaret Digby, The World Cooperative Movement, London 1948, pp. 7-9 and Cooperatives and Land Use, F.A.O. Agricultural Development paper No. 61, Rome 1957, pp. 1-6; Otto Schiller, Cooperation and Integration in Agricultural Production, Asia Publishing House 1969, pp. 2-13; Peter Worsley (ed.) Two Blades of Grass, Manchester University Press 1971, Introductory chapter, pp. 1-40.

^{25.} Otto Schiller, op.cit., pp. 2-13.

Otto Schiller, op. cit., p. 14; and "Two Ways of Cooperative Farming" Indian Journal
of Agricultural Economics, Vol. XII, No. 2, 1962, p. 47.

Why did the programme fail to promote co-operative farming? In the present context, the most obvious answer is that no serious attempt was made to promote cooperative farming while implementing the projects. Whether an attempt, if made, would have succeeded has to be left an open question. But it is relevant to note the widely recognised tendency of institutionalised co-operative activity, particularly in agriculture in what are referred to as traditional societies, to deviate from the basic co-operative principles. In such societies the presence of certain social and cultural obstacles to the development of co-operative agriculture has been recognised by many writers.27 Ronald F. Dore, who says that it is those societies that are both egalitarian and cohesive which provide the best potential for modern forms of co-operation, regards the presence of authoritarian leadership and factionalism in society as obstacles to the emergence of effective co-operation of the modern type. 28 Since this study centres on a small number of spatially scattered phenomena, the issues relating to the applicability of the terms used by Dore in their exact connotation to the present area of study has to be avoided. However, it is possible to show that authoritarianism and factionalism are both evident in the operation of DDC farm projects within the district. The manner in which they are exemplified has been left for discussion in the next section of the essay.

5. Programme Personnel

The projects which were begun under the DDC programme have involved the collaboration of individuals drawn from diverse social strata. The resulting interaction of varying notions, attitudes and interests have, to a large extent, fashioned the manner in which the projects have operated so far. This aspect of the present study, though vital, is one in which generalisation is difficult, and comment, for the most part, can only be impressionistic. Nevertheless, in the sections which follow, an attempt has been made to spotlight features relating to this aspect which are either important in their own right or sufficiently frequent in their occurrence to merit special attention. As a preface, it is necessary to emphasise the limitations inherent in the type of generalisation and comment attempted, particularly the element of subjectivity which might be present in the attempt.

5.1 The People's Representatives

In spite of an early edict that "DDCs shall meet at least once a month", 29 with only two exceptions, the Councils that fall within the scope of this study have not met on more than four occasions during the past two years. The failure of the DDCs to meet more frequently has been ascribed to the increasing disinterest shown in their affairs by a majority of their membership. I have already made reference to the fact that Development Councils are large bodies. The very size of the councils appear to have made systematic discussion of specific issues difficult. Their records show that on the few occasions when they have met the usual tendency has been for speech making rather than for discussion, and that too, on general topics like landlessness, cost of

For a generalised discussion of these obstacles, see Ronald F. Dore, "Cooperatives in Traditional Communities", Worsley, op. cit., pp. 43-60 and J. Leonard Joy, "The Analysis of Existing Social Factors favourable to successful Modern Cooperatives", Worsley, op.cit., pp. 61-65.

^{28.} Ronald F. Dore, op. cit., pp. 48-52.

^{29.} Circular of 1 March 1971, para 4 a.

living or bureaucratic inefficiency. However, among the People's Representatives of each DDC, there have been the obvious leaders—the more articulate, the more influential or the more powerful persons. It is they who have had a strong impact on the projects.

The member of the National State Assembly (NSA) is invariably the most important People's Representative in each of the DDCs covered by this study. He could therefore wield considerable influence over the affairs of the DDC project. Of course, the actual extent of involvement of different members of the NSA varies widely. Such variation, which ranges from total lack of interest to active participation even in certain matters relating to routine project operation, seems to be accounted for by their respective affiliations and interests, their stature in the national and local political arena and, also, their character and temperament.

In the records of farm projects within the district, one could come across occasions on which the member of the NSA has intervened in an useful and constructive manner. At times, he has been able to accelerate decision making, to form a channel of communication between project personnel and higher authority and, as the chief spokesman for the interests of his electorate, to by-pass the local officials and obtain adjustments and concessions to suit specific project needs. At the same time, there have been occasions on which such interventions appear hasty, ill-informed and partisan.

Most members of the NSA in the area have had a decisive say in such aspects of the farm projects as selecting the land to be acquired (and thereby the location and scale of the project), the appointment of at least some of the other People's Representatives to the DDCs and to the committees of project management, and the selection of farm workers.

In the farm projects which have been studied, it is the power to influence the selection of project personnel that most members of the NSA appear to have used frequently. In the selection of non-official members to committees of project management, political links and loyalties have been the principal criteria. Such members, once appointed, could themselves exercise an influence which is proportional to their own stature in the area and to their political usefulness to the member of the NSA. The appointment of farm members (workers) has usually been done through interviews conducted by panels appointed by the DDCs. But here too, the approval of the members of the NSA has been sought prior to the appointment of those selected. Where the member of the NSA has himself not intervened, the final selection has invariably been determined by others who enjoy his confidence.

In defence of this system, which has prevailed widely in the appointment of project personnel, one could say that the loyalty of individuals is a condition of paramount importance to the success of this types of venture, at least at the pioneer stage, and that the elected representative of the people is more suited to perform this function than any other. Whatever validity this point of view may have, it is necessary here to recognise some of the adverse effects of the system as it has operated in practice. The criterion of loyalty, when it overshadows all others, has frequently led to the emergence of the incompetent. The authority of the officials responsible to the government tends to be undermined. The inefficient and the corrupt find refuge in political patronage.

Above all, the projects have tended to exclude a large section of the people in each area who have no links with, or who are unacceptable to, the reigning local political elite. The projects have thus become identified with the political parties in power. Paradoxically, due to this very reason, the loyalists suffer from a sense of insecurity and uncertainty about the future.

Among those who have been labelled 'People's Representatives', office bearers of co-operative societies (the elected and the appointed officials or the salaried managers) have also played an important role in the affairs of farm projects in the district. Many of them are politically important in their respective areas. Often, they have membership in local government bodies. Political links can also be traced between many of them and the members of the NSA30. Furthermore, as shown earlier, in the projects managed by primary co-operative societies, a greater share of the expenditure has so far been borne by the co-operatives themselves, and the financial control of the projects concerned are now almost entirely in their hands. These factors have enabled certain officials of co-operative societies to make the farm projects a domain of their authority, encroaching, on the one hand, into the powers and functions of DDCs and, on the other, into the rights of farm employees. To quote a few examples, in one project, the management of the co-operative society has refused to provide the DDC officials access to records of income and expenditure maintained by the society. In the same project, the sending of a petition by a section of the farm workforce resulted in the immediate dismissal of the workers concerned prior to an inquiry being held. In two other projects, the Development Assistants associated with them have repeatedly complained that the co-operative societies do not facilitate their participation at meetings of the committees of farm management. There is a fourth case in which the chairman of the co-operative society, while frequently absenting himself from meetings of the official committee of farm management, has been summoning an unofficial committee of his own to take decisions on the running of the farm. Admittedly, these are only specific examples. But they illustrate a feature which one comes across more often in a more subtle form: that is, an unwillingness on the part of co-operative officials to concede the authority and the rights of the others. It is often reflected in the tone of their correspondence. At times it is also seen in their disregard of collective decisions.

Irrespective of the organisation that manages the farm, the presence of one or two persons who dominate the actual process of project operation is a recurring phenomenon. In each case, a few prominent People's Representatives have the effective control. Usually, neither the officials nor the workers question their authority. In the case of one farm the extent of authoritarian control has reached such ludicrous proportions that it is now like a private family owned business venture.

People's representatives from other village level organisations were rarely seen to figure prominently in affairs of the farms which have been investigated. The lack of interest on the part of many of them is reflected in the irregularity of their participation

^{30.} Under the reorganisation of the cooperative movement begun in 1971 (see footnote 15), temporary Boards of Directors were appointed to each society. These boards were usually composed of 5 official members and 4 unofficial members. The latter category of directors were appointed on the recommendation of the Minister in charge of the Department of Cooperative Development. In practice they were mostly nominees of members of parliament. Recently, the by-laws under which permanent directors were to be set up have been amended so as to accommodate 8 ministerial nominees out of a total of 15 in each board.

at meetings of DDCs and the inertness and passivity they show when they do participate. Occasionally, however, some of these individuals belong to the in-groups that dominate the DDCs and their subsidiary bodies.

Discussions which I have had with some of the People's Representatives who have been actively associated with the farm projects in the district indicated that many of them are dissatisfied with the officialdom. Some of them went to the extent of placing the entire blame for the poor performance of the projects on "bureaucratic inefficiency". Excessive adherence to rules and regulations, preoccupation with impracticable ideas, and ignorance of conditions in the villages were among the specific criticisms that were made against the officials at various levels. These criticisms however were rarely supported with definite evidence. They seem to be based largely on prejudice and also on an impatience on the part of the individuals concerned with bureaucratic procedure and red tape. Comments on some of these criticisms will be made in the section of this essay devoted to the officialdom.

During my interviews with workers and others associated with the farm projects, allegations of corruption were often made by them against certain People's Representatives holding positions of responsibility in relation to the farms. Persons so accused were few in number, but the feature itself was common to most of the farms surveyed. These allegations ranged from misuse of authority, favouritism and nepotism to misappropriation and theft. It was not within the scope of this survey to probe deeply into them. However, where it was possible to check their veracity, either against the relevant financial records or with evidence from mutually unrelated sources, they sometimes appeared to be well founded. In certain instances, the financial losses which have resulted from such fraudulent practices cannot, in relative terms, be dismissed as insignificant. Perhaps more important is the fact that, where they have prevailed, they have generated cynicism, frustration and dishonesty at other levels. Furthermore, the very fact that such allegations were frequent seems to indicate an absence of confidence and mutual trust between different groups which have been brought together by the DDC programme.

5.2 The Officialdom

The administrative set-up directly concerned with the implementation of the DDC programme within Kandy District is headed by the Government Agent for the district. Working with him are two Assistant Directors of Planning to whom, in practice, much of the Government Agent's authority in relation to the programme has been delegated. These officials head the District Planning Unit, the function of which is the overall supervision of DDC projects in the district. At the level of the Division, Revenue Officers (DROs) who are chairman ex-officio of the DDCs are the chief government officials. Development Assistants appointed by the Ministry of Planning occupy the lowest level in the official hierarchy. Their duties have been defined in general terms, as assisting the DROs in serving the Development Councils³¹.

In commenting on the main government officials of the DDC programme in Kandy District it is necessary at the outset to focus attention on what appears to be

^{31.} Circular of August 1971, para 4.

a contradiction relating to their position in the programme. The regional officials were expected to provide leadership and guidance at their respective levels of operation. They were also expected to show imagination, inventiveness and enthusiasm in their work³². But, at the same time, the programme restricted their authority and their flexibility of action, not only by the role it assigned to the People's Representatives serving in the DDCs, but also through numerous rules and regulations.

Hence, neither in the formulation of the projects nor in their implementation did these officials have much scope to exhibit leadership talent and originality. The projects had to be based on impromptu proposals made at meetings of DDCs. Such proposals were stereotyped and (at least in agriculture) rarely provided an opportunity for innovation. Since the general tempo was one of haste in getting as many projects as possible off the ground, it is likely that the delays which might have ensued in obtaining the Ministry's approval for project proposals if novel ideas were incorporated in them, also discouraged originality. Project models drawn up at the centre and circulated to the district to serve as guides in project formulation also had the unforeseen effect of preventing departures from a set pattern. Further, in the release of funds once the projects began, although in one set of instructions the district officials were told that "only in the event of a major deviation (from the approved norms) need the (Ministry's) Division of Regional Development be consulted",33 other instructions laid down restrictions which in effect discouraged any kind of deviation. Apart from these features, it is generally seen that de facto authority in the operation of DDC projects is, by the very nature of the programme, so dissolved, that when confronted with various irregularities and malpractices, the officials at the regional level have been unable to provide the necessary checks. In short, the programme placed an onerous responsibility upon the regional officials but gave them little power and authority to carry such responsibility effectively.

As one would expect, there is much variation in the interest and efficiency shown by the officialdom. There are many, even among the less experienced, who obviously possess the qualities and talents for the role assigned to them. But there are also the ill-equipped and the incompetent. In general it can be said that whatever enthusiasm there was during the early stages has, with the passage of time, waned considerably. A measure of disenchantment and cynicism is now evident particularly among the more seasoned bureaucrats. For them, there are many features within the set-up that discourage an overt personal involvement.

The observations made here are not intended to imply that the officials referred to have neglected their duties in relation to the programme. Matters such as summoning or participating at meetings of DDCs and Committees of management, holding periodic inspections of projects, compiling reports and many other duties relating to the programme have all been attended to in routine fashion. Nevertheless, with a few exceptions, these officials do not, and, in the context of circumstances described above.

^{32.} The role of the officials in DDCs, especially that of the GAs and the DROs, is discussed in the Circular of August 1971, para 8 and the Circular of 9 December 1971, p. 3.

^{33.} Circular of August 1971, p. 4.

cannot play the positive and dynamic leadership role assigned to them by the formulators of the DDC programme.

While our attention is focussed on the officialdom, it would be relevant to comment upon the nature of co-ordination and collaboration between government departments (one of the declared objectives of the programme) exemplified by the record of farm projects in Kandy District.

Besides the officials to whom reference has already been made, others from various governmental agencies were drawn into the DDC programme. In the case of agricultural projects, officials from the Department of Agriculture have had an important role in providing advisory services. Since co-operative societies which are in charge of projects come under the direct control of the Department of Co-operative Development, officials from this department have also been associated with the projects. Among other public sector agencies which have had varying degrees of contact with the DDC farm projects are the People's Bank, the Territorial Civil Engineering Organisation and the local government bodies of each area.

In a review of the DDC programme's "co-ordinating role" it is justifiable to raise an issue relating to the degree of collaboration between governmental agencies at the apex of administration and policy making during the stages of formulating and implementing the programme. If the objective of the programme was to achieve a systematic departure from the traditional pattern of administration, there are features which illustrate the inadequacy of such co-ordination even at the apex. To cite some examples, at the stage of allocation of grants to projects, the management of each project was instructed to apply to the People's Bank for loans with which to meet working expenses. But it appears that at no stage were there definite arrangements for the Bank to provide such loans to DDC projects. Even the Department of Agriculture does not seem to have been quite prepared for its role in the DDC programme. The Director of Agriculture replying to a request for special advisory services by the Director of Regional Development in November 1971 (i.e. several months after the programme began) said, "we would like to formulate a policy regarding such services after consultation with the Permanent Secretary, Agriculture".34 The presence of unresolved conflicts between the co-operatives and the officials in charge of the DDC programme at the regional level is also at least partly due to the fact that the position of cooperative societies in relation to the DDCs has not been clarified by the Centre. Besides these specific examples, another phenomenon which is becoming increasingly evident and which points to an absence of co-ordination at the Centre is that there are other government agencies (some of them newly instituted) which undertake developmental work, similar in nature to those of the DDC programme, quite independently of the existing DDCs.

As for co-ordination between governmental agencies at the regional level, there have been undeniable improvements; some achieved as a result of the DDC programme, but mostly achieved independently of the programme. Officials from many

Letter from Director of Agriculture to Director of Regional Development dated 7 November 1971.

governmental agencies serve in the DDCs. Certain departments, especially the Departments of Agriculture and Co-operative Development, are also represented in commit tees of project management. With one or two exceptions, the farm projects covered by this study have had easy access to extension services provided by various departments. In a few instances, short-cuts have also been established across the traditional lines of communication. But despite these, there are examples, too numerous to be quoted here, which make it clear that the close co-ordination and collaboration envisaged by the programme has not become a reality.

5.3 The Farm Workers

Some comments have already been made on the failure of farm projects in Kandy District to fulfil the expectations of the DDC programme relating to employment. Here, our concern is with those who were engaged for work on the farms, either of the respective co-operative societies or as hired labourers. Interviews of farm workers conducted during my field investigations involved the gathering of information on their general attitudes and aspirations and also on their expectations at the time of their recruitment to the farms. Some of this information is shown in classified form in Tables 5.1 and 5.11. The discussion which follows is based both on these Tables as well as on my own impressions.

Only in one farm project within the District (Kundasale) was there a spontaneous formation of a group with a view to undertaking a farming venture. In all others, the procedure followed in the formation of the work forces has been similar to recruitment processes in many other fields of employment in the public sector. The jobs were advertised. Invariably, large numbers applied (Wendaruwa and Kosgahalanda were exceptional in this respect). Interviews were held. Those finally selected (not necessarily through the interviews) were appointed.

Among those selected to work on the farms, there are many who have been attempting, both before and after being so selected, to secure employment elsewhere. Many of them, since leaving school, have repeatedly applied for jobs and have been on the constant look-out for jobs. It was also evident that the jobs which they have been interested in are mostly outside agriculture. Table 5.1 which classifies the workers according to certain 'indices of occupational aspirations' does not reveal this feature in its full significance because in 6 of the farms, the samples of workers interviewed do not include those who have left the farms. The general picture which emerges is that a majority of those recruited for work on the DDC farms in the district did not aspire to become farmers permanently and that, by and large, it is either those with relatively low educational qualifications or those who are relatively old that fall into the small minority which has not sought other forms of employment.

During my interviews a series of direct and indirect questions were posed in order to find out what these workers expected by being recruited to the farms. Their answers varied widely, but lend themselves to some generalisation.

Their principal expectation appears to have been that of gaining a regular income. At the inception of at least some of the projects, the workers were told that they would get regular allowances only during the initial phase when their labour would be utilised for capital development work, and that their subsequent income would depend

TABLE 5.1 Indices of Occupational Aspirations among the Farm Workers

TOTAL	42	47	59	30	57	32
ligolla	4	3	4	m,	4	6
Uda-Peradeniya Ila Nel	7	5	6	60	6	60
illiga	1	2	-	2	-	. 2
attapola	3	1	*	1	4	1
ndaru	7	10	8	7	5	1
sgahalan	2	80	4	9	4	9
Kirimetiya	9	7	9	74	9	7
Kundasale	9	4	∞	2	7	3
Ftokelle	2		~	1	00	1
Gohagoda	9	0 01	100	10	0	9
09	have made formal	applications for jobs have not made formal applications for jobs	have searched for information about jobs before joining farm	have not searched for information about jobs before joining farm	have searched for information about jobs after joining farm	have not searched for information about jobs after joining farm

Note: Samples from Wendaruwa, Gohagoda and Uda-Peradeniya include ex-farm workers. The entire sample from Kosgahalanda consists of ex-farm workers.

entirely on their own efforts. It is doubtful whether the implications of this arrangement were fully appreciated. Whether they were or not, an expectation seems to have prevailed that, even if their production efforts failed, the government would continue to pay them a living wage. For many workers, this expectation was probably strengthened by their belief that their being chosen for employment on the farms was a reward for their support for the political parties presently in power.

Another aspect of the farm projects, the implications of which do not seem to have been properly grasped, is that of communal ownership of the land. Detailed probing frequently revealed that although the communal basis of farm organisation was often made known to the workers, many of them felt that, somehow, eventually, they would come to own the land on an individual basis.

Several examples can be quoted to show that there has been some confusion regarding the concepts of communal farming. At Kirimetiya, the workers appear to have been given the impression at the time of their recruitment that each of them will receive a private plot and a house within the farm. At Wendaruwa the workers claimed that a responsible offic al declared at the opening of the farm that after the initial phase of development the farm would be theirs on an individual basis. A similar claim was made by some of the youth interviewed at Uda-Peradeniya. Certain workers at Nelligolla expressed an (unreasoned) belief that when the project developed fully a section of the farm would be partitioned out among them. The project proposal at Kundasale fixed its target of employment at 35 in the crops section "so that each person may have one acre". At other farms too there were workers who mused that distributing the farm land among the workforce would be a just and rational way of winding up the project.

The expectations which these features portray is not as unrealistic as it might appear. There is the recognised desire among the landless peasants to become owners of land (note from Table 4.VIII that nearly 50 percent of the workers are from the 'tenant cultivator' or 'agricultural labourer' sectors of the community). There is also the fact that land alienation schemes are the most common form of governmental aid to peasants in most parts of the country. Thus, to expect the conversion of what began as a co-operative farm to a land alienation scheme is, in fact, to expect in a modified form governmental assistance with which they have been most familiar. It is interesting to note that this conversion has already taken place at Kosgahalanda where the land has been re-distributed among about 40 villagers of the area who were seen, in early September 1973, to be preparing it for the Maha season.

At my interviews with the farm workers, I attempted to find out the conditions under which they would like to work if they are to remain in or (in the case of former farm workers) regain farm employment. Having explained the different types of farm organisation possible, I asked them to indicate their preference for any one or two types. Their replies have been tabulated below (Table 5.11). Only those who were able to provide clear and reasoned preferences have been included in categories 1 to 5 of the Table.

Table 5.11 shows that the form of farm organisation most preferred is the State or Co-operative Society owned farm with regular wages for the workers. Wages expected were invariably between Rs. 5 and 10 per day. A large number have also indicated a preference to own plots of land within a co-operative farm. Here it appeared that "co-operative farming" was often associated in the minds of those interviewed with a high scale of governmental aid and that what was actually desired was farming on individually owned and privately operated plots of land with governmental assistance in the supply of material inputs. There was a high "frequency" of this preference among those who have been working in farms that are sited on fertile and/or welllocated land such as Gohagoda, Kundasale and Uda-Peradeniya. These preferences are consistent with what I have discussed above as the main expectations of the workers. It is noteworthy that only a small minority have indicated a preference for fully integrated communal farming. This was probably due to the fact that apart from their positive preference to become wage earners or land owners, many of the farm workers now associate communal farming with their past experience in working at their respective "communal" farms.

Besides what could be recognised as the main expectations of the workers discussed above, certain farm workers, specially those with prospects for better employment, seem to have expected to gain 'recognition' by accepting, in the first instance, employment that was offered to them on the farms. Some of them claimed that they have promises of assistance to find better employment from those who enabled them to secure their present positions. The opportunity which, it was thought, the farm would afford for frequent contact with influential People's Representatives and government officials was also looked upon as an advantage which might be useful to them in the future.

To sum up, then, a majority of those recruited as farm workers had neither a genuine interest in pursuing farming as a permanent vocation nor an appreciation of and a preference for the principles of communal farming. Understandably, what most of them have looked for is either a government job with regular wages and the other advantages attached to such a job, or the acquisition of some agricultural land.

These features as well as others which have been discussed earlier are reflected in several facets of activity and non-activity on the farms. One such feature is the absence of cohesion and harmony among the workers. On most of the farms surveyed, some sort of factionalism was discernible. In some (e.g. Kirimetiya, Wendaruwa and Piligalla), at various times, factionalism had given rise to formidable problems.

The presence of factionalism could be accounted for by a complex of factors. As at Kundasale, caste difference was one factor. Plurality of caste, however, had not always produced factions (e.g. Nelligolla) and, conversely, caste uniformity has not made factionalism absent. At Kirimetiya (where, as far as it was possible to ascertain, there were no recognised differences in caste among an overwhelming majority of the workforce) the main factions were seen to broadly coincide with the differences in the village of origin of the workers. An interesting variation of the same feature was

TABLE 5.11

Farm Workers classified according to their preference to type of Farm Organisation

(number falling into each category)

		GOHAGODA	ETAKELLE	KUNDASALE	KIRIMETIYA	KOSGAHALANDA	WENDARUWA	PILIGALLA	WATTAPPOLA	UDA-PERADENIYA	NELLIGOLLA	TOTAL
First	Preference											
1.	Wage earner in State/Coop. Soc. owned farm	2	4	3	2	1	6	1	3	5	3	30
2.	Resident member of communal farm	2	1	2	2	0	1	0	0	0	1	9
3.	Non-resident member of fully integrated coop. farm	1	0	0	1	0	0	0	0	0	1	3
4.	Member of farm coop. with private plots	7	3	5	3	2	3	2	0	6	2	33
5.	Owner of private plot with no formal cooperation	0	0	0	0	1	0	0	0	0	0	- 1
6.	No opinion	3	0	0	0	6	2	0	0	1	0	12
Secon	nd Preference											
1.	Wage earner in State/Coop. soc. owned farm	7	3	4	3	0	4	1	0	7	2	31
2.	Resident member of communal farm	0	1	0	2	0	0	0	1	0	0	4
3.	Non-resident member of fully integrated coop. farm	0	2	2	0	0	1	0	1	0	1	7
4.	Member of farm coop. with private plots	3	2	3	3	2	5	1	0	2	4	25
5.	Owner of private plot with no formal cooperation	1	0	0	0	2	0	0	0	2	0	5
6.	No second preference	4	0	1	0	6	2	1	1	1	0	16

found at Wendaruwa where there has been intense animosity between two factions, both belonging to the same caste, but each drawn from different parts of the village (Uda Gammedda and Palle Gammedda). When, due to their poor attendance for work on the farm, a few workers were temporarily recruited from outside, both factions appear to have resented their presence. At Uda-Peradeniya, where almost the entire workforce recruited at the inception of the farm belonged to the same caste

and were drawn from the same village, rivalry developed between two groups. These groups seem to have centred around two youths, both of whom were from prominent families in the village and were acknowledged leaders among the workforce. At Etakelle, where the workforce had representatives from 3 caste groups there was factionalism cutting across caste differences between those who had membership rights in the co-operative society and others who were only wage labourers. Variations in loyalty to different persons from whom different sections of the workforce had received patronage tended to coincide with and strengthen factionalism based on such factors as caste and village of origin.

Factional antagonism among workers has had several adverse effects. Foremost among them is that each faction has tended to be so preoccupied with constant bickering that very little work has been done. In certain farms, rivalry between factions had brought about problems of maintaining discipline. It has also made rational division of labour difficult to achieve. Further the lack of unity and cohesion among the workers has contributed to the failure of co-operative and collective activity.

The absence of a high degree of honesty among the workers is yet another phenomenon that can be related to certain features discussed earlier. There is ample evidence to suggest that pilfering and petty thieving has been rampant. Much of this evidence was presented by the workers themselves. In the context of such factors as the very low income which the farms have generated for those working on them (see Table 4.11), their poverty, their lack of a permanent interest in the farm, and the presence of fraudulence at other levels, the prevalence of this type of dishonesty is perhaps not surprising.

On the DDC farms within the district one seldom comes across evidence of enthusiasm and hard work. With one or two exceptions, the recurrent atmosphere is one of lethargy and disinterest. Even if allowance is made for all the problems and disincentives to dedicated effort, it is difficult to escape the unsavoury conclusion that those recruited for work on the farms have failed to fulfil their obligations.

The fact that the blame cannot be placed entirely on the workers is implicit in certain points which have already been discussed. To recount them briefly: recruitment procedures were unsatisfactory; the workers were made to expect much more than they have been given; their earnings have been low, and other conditions of employment unsatisfactory; principles of co-operative farming have been inoperative; there have been no models, either in enthusiasm or in honesty, for the workers to emulate.

6. Conclusions

The projects dealt with in this study have fallen short of fulfilling the principal expectations of the DDC programme. This conclusion would be valid if they are assessed from the point of view of what may be termed 'general objectives' of the programme such as decentralisation and co-ordination. It would also apply when the performance of the projects is measured against the 'specific objectives' of the programme relating to agriculture. For their contribution to an overall increase in agricultural production and employment has been negligibly small. They have also failed to foster co-operative farming.

Taken in isolation, the performance of the projects is perhaps unimportant. Many of their problems and shortcomings probably reflect those that are found in society at large. As for the specific projects, it is reasonable to expect that those among them that would fail to become economically viable in the near future would wither away. Further, if what is taking place now in Kandy District reflect island-wide trends, it also seems that the DDC programme as it was originally conceived might recede to the background in developmental activity, particularly in agriculture. Yet, the objective of the programme and the concepts underlying them are likely to remain in the forefront of strategies of development. Present trends indicate that much emphasis will continue to be placed on decentralisation of responsibility, if not in planning, at least in implementing various programmes of development. There is also the widespread belief that in agricultural development and rural reconstruction current measures of land reform should be followed up with other institutional changes in which co-operative activity would play a key role.35 Hence, although the specific findings of this study cannot (and were not intended to) form a basis of judgement of the DDC programme in its entirety, it would be pertinent to base some general observations on them which relate to the concepts and objectives of the programme.

Considering first the objective of decentralisation, an issue may well be raised regarding the adequacy of the initial efforts which were made to prepare the ground for passing on responsibility from the Centre to the Districts and Divisions. It is evident from this study that the basic preparation and planning which went into the DDC programme was, in this respect, inadequate. Although the programme expected its projects to arise out of integrated regional plans, machinery to undertake such planning was never set up. Projects themselves were, for the most part, extemporaneously conceived. Even at the stage of formulation and approval of the projects, a casual and cursory approach seems to have been adopted, especially in such aspects as the availability of finances and managerial talent and the vesting of authority and accountability. What these features make clear is that if decentralisation is to be meaningful and effective, the institutional and administrative set-up at the District and Division levels must necessarily be stronger than that brought into being by the DDC programme.

The decentralisation which the DDC programme envisaged was a means of achieving greater democratisation and greater collaboration of the people in the development effort. The manner in which the representatives of the people were recognised as well as the place accorded to them in the programme indicate that in order to accomplish its task of enthusing and activising the people, the programme relied heavily on existing village level institutions and on the rural elite which dominate such institutions. Here we come across another crucial issue; namely, the extent to which such institutions and those who control them could be expected to provide leadership to a process of transformation which involves a break away from traditional societal relationships and which is intended to culminate in the creation of a new social order. In the present field of study there is no evidence to suggest that this could be a realistic expectation. On the contrary, within our area of study the DDC

^{35.} See, The Land Reform Law No. 1 of 1972.

programme has in its limited way tended to strengthen the very forces that are anathema to an effective dispersal of social and economic power in rural society.

It was stated above that within the programme's broader objective of decentralisation, the projects covered by this study had as a specific aim the promotion of co-operative farming. Our earlier discussions have also shown that among village level institutions that were drawn into the DDC programme, it is the primary co-operative societies that have played the most prominent role. Hence a corollary to the issue which had been raised above and which deserves to be highlighted here is whether the existing co-operative societies could be used as an instrument of promoting co-operative farming in the country.

In Lanka as well as in many other developing countries, co-operative societies often tend to be dominated by cliques and petty power blocs and to be subjected to excessive political interference. The Royal Commission on the Co-operative Movement of Ceylon (Lanka), 1970,36 viewed these as some of the cardinal defects of the local co-operative movement. Certain findings of the present study substantiate this view to the extent that the projects managed by such societies have been infected by the same maladies. In this context it becomes clear that to promote genuine co-operative farming in the country one has to look for other institutions and a different leadership. This is not to say that it is either possible or desirable to separate politics from any of the major spheres of development and change. Indeed, in the emergence of the type of co-operative farming which the projects originally aimed to foster, political ideology could provide the all important ingredient of motivation in the same way as commitments and ideologies have achieved in countries like China and Israel. Dynamic institutions providing such motivation are perhaps difficult to find at present. Until such institutions are built up, however, such objectives as democratisation, decentralisation, popular participation and collectivisation may have to remain mere conceptual abstractions.

Report of the Royal Commission of Inquiry into the Co-operative Movement of Ceylon 1970

APPENDIX I

Miscellaneous Information on the DDC Farms Investigated

Farm	DRO Division	Electorate	Managerial Organisation (F	Approximate Elevation (Ft. above m.s.l.)	Approximate Avr. Annual Rainfall (inches)	Distance from nearest motorable road (miles)	Distance from nearest omnibus route (miles)
Gohagoda	Harispattuwa	Akurana	Kulugammana Coop. Society	1300-1350	79	0	1/8
Etakelle	Harispattuwa	Akurana	Udagampaha-Palle Gampaha North	2100-2300	8	0	- 1
Kundasale	Patha Dumbara	Kundasele	Special Cooperative	1275-1300	2 %2	0	0
Kirimetiya	Patha Hewaheta	Hewaheta	Special Cooperative	3500-3700	95	0	31
Kosgahalanda	Patha Hewaheta	Hewaheta	Special Cooperative	1600-1900	80	2	2
Wendaruwa	Meda Dumbara	Teldeniya	Teldeniya Coop. Society	1100-1150	9/	4.5	43
Oipothagama	Hasalaka	Mahiyangana	Hasalaka Coop.	400	74	0	প্ৰথ
Piligalla	Udunuwara	Udunuwara	Gangapalatha Coop. Society	1600-1650	101	- (a	-44
Wattapola	Udunuwara	Udunuwara	Kandupalatha Coop. Society	1600	104	0	0
Nelligolla	Udapalatha	Gampola	Atabage Coop. Society	2000-2200	112	0	-400
Uda Peradeniya Four Gravets	Four Gravets	Kandy	Mahanuwara Coop. Society	1800-2000	91	0	-400

APPENDIX II

Notes on the Field Survey

- This study was restricted to DDC farms in Kandy District mainly due to the fact that, with the facilities that were available, it was not possible to extend the survey over a wider area.
- 2. In all, 126 persons were interviewed during the field investigations. Among them were 91 farm workers, 18 government officials, 11 officials of co-operative societies and 6 others who have been un-officially associated with the 11 projects which have been studied. All interviews were conducted by me.
- 3. The interviews of farm workers were originally designed to cover a random sample of the workers. However, as the field survey proceeded, it became apparent that the random sample initially drawn could not be covered comprehensively. This was due to recurrent changes that had occurred in the composition of the workforces at the farms and also because the whereabouts of many ex-farm workers in the original sample could not be traced. Thus the 91 workers finally interviewed constitute no more than an "purposive sample". Since only two of the workers from Ulpothagama were interviewed, Tables 4.VII, 4.VIII and 5.I. do not include data on this farm.
- 4. The statistics given in this paper in tabulated form have been gathered from a variety of sources. The principal sources are (a) files relating to the projects maintained at various government offices in the District, (b) records of income and expenditure maintained by the cooperative societies that are managing the projects, and (c) data obtained through interviews conducted during my field-work. On account of the diversity of my sources, it has not been possible to specify these on each occasion on which such data has been used in the paper.

APPENDIX IV

TABLE IV-Costs on Seed and Fertilizer

as estimated by the F.A.O. Mission to Ceylon in 1966

			Cost p	er acre
		Hall Ellis	Seed	Fertilizer
Paddy			28	84
Chillies	F2.639	TA SECTION	28 20	126
Red Onions			360	168
Vegetables			Part -	168
Green Gram		160 S	7	42
Maize			2	63

These are rough assessments of cost based on normal or optimum rates of seed and fertilizer inputs. The costs of these materials would have risen by about 10 to 15 percent by 1972-73. (see F.A.O./I.B.R.D., 1968, Report of the Irrigation Programme Review—Ceylon, Colombo, p. 9).

Compare the above estimates of costs with the following per acre costs on material inputs incurred at the DDC Farms in Kandy District during Maha 1972-73; Gohagoda—Rs. 376; Etakella—Rs. 285; Kirimetiya—Rs. 139; Kosgahalanda—Rs. 228; Wendaruwa—Rs. 468; Piligalla—Rs. 139; Nelligolla—Rs. 514 and Uda-Peradeniya—Rs. 582.

APPENDIX III
TABLE 4.I
Estimates of Capital & Working Expenditure

(from inception up to 30 June 1973)

(in Rupees)

-: 61

					The second second			OCCUPATION AND PERSONS IN	SCHOOL SECTION S.			
Capital Expenditure	ture	Goha- goda	Eta- kella	Kunda- sale	Kiri- metiya	Kiri- Kosgaha- Wen- Ulpotha- metiya landa daruwa gama	Wеп- дагима	Ulpotha- gama	Pilli- galla	Wattap- pola	Nelli- golla	Uda-Pera- deniya
Land development		13,674	5,392	4,500	2,500	2,400	15,709	415	2,766	1	4,754	6,926
Buildings, sheds and supply	and water	79,763	22,190	19,494	5,554	1,231	7,065	1,178	1,811	20,660	27,063	28,937
Furniture, equipment implements	nent and	9,043	1,627	2,285	2,396	1,204	873 100	138	2,121	3,647	235	10,934
TOTAL .	:	109,980	29,308	26,329	10,450	4,855	23,747	1,731	6,851	24,307	32,452	46,897
Working Expenditure	nditure											
Salaries, wages, allowances and other payment	allowances	19,803	11,241	718,6	11,647	3,130	5,232	3,676	7,685	6,446	3,003	19,819
Seed-fertilizer and agro-che- micals	agro-che-	4,307	1,857	1,116	3,459	1,823	2,807	2,312	1,934	11	425	3,985
Purchase of chicks		3,400	1	1,384	1,210	119	1	1	449	3,849	1,193	4,665
Maintenance of livestock (material only)	estock	55,849	3,610	10,557	4,362	3,067	1)	11	200	32,847	29,057	18,324
Other animals Travelling and Transport Miscellaneous	nsport	1,535	3,094	860	572	766	422	35	360	1,040	1,104	2,801
	:	106,624	29,447	32,507	22,055	12,037	8,461	6,025	11,213	45,953	35,465	49,861
Sources: D Notes: It III III III III III III III III III	Data obtained from Co-operative Societies (Primary & Special) that are managing the projects. All figures given in bold lettering are estimates based on such data. Item 1 — includes costs of clearing, fencing, construction of roads and all activities relating to soil continuous includes labour costs on these items. Item 5 — excludes labour costs for capital development work. Item 9 — consists of costs of food, drugs and other material requirements for dairy and poultry Wattappola accounts are for the period ending on 31st July 1973 Nelligolla accounts are for the period ending on 31st August 1973 Kosgahalanda was closed down in early March 1973 and re-started on 1.7.73.	ned from Co-operative Societies (Primary & Special) that are managing the projects. given in bold lettering are estimates based on such data, includes costs of clearing, fencing, construction of roads and all activities relating to soil conservation. It also includes labour costs on these items. excludes labour costs for capital development work. consists of costs of food, drugs and other material requirements for dairy and poultry. a accounts are for the period ending on 31st July 1973 accounts are for the period ending on 31st August 1973 and a was closed down in early May 1973 and re-started on 1.7.73.	operativo old letter is of clea udes labo costs of costs of cast of are for the e for the sed down in	e Societie ing are e ring, fencour costs s. for cap food, dr he period period period e n in early in early in early	s (Primar stimates ing, cons on these oital deve ugs and ending or March	based on truction of tems. Items. Items. on 31st July 131st Au 1973 and re-	such da of roads a of roads a work. terral re- tury 1973 gust 197 started o	re manag ta. ind all aci quirement 3	ivities re ivities re s for da	lating to:	soil conse	rvation.

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9

APPENDIX III

TABLE 4.II Estimates of Income

(from inception up to 30 June 1973)
(Rupees)

li- Uda-Pera-		2,003 2,003 71 8,043
- Nelli- golla	15,012	110,51
Wattap- pola	8,400	14,994
. Pili- galla	0000'9	1 1 459
Ulpotha- gama g	5,825	11211111
Wen- daruwa	23,000	2,460
Kosgaha- landa	13,350	174 1,066 1,579 1,015 329
Kiri- metiya	24,150	292 354 2,578 1,580
Kunda- sale	19,150	5,230 4,701 3,646 —
Eta- kella	12,850	23 3,348 4,626 — 392 71
Goha- goda	30,000	7,567 13,158 17,315 3,881 2,134 768
	capital	shares
	Gove	ss and
	Government gran expenditure) Loans from Grant	Enrolment fees Old crops New crops Dairy Poultry Other livestock Seed and seedlin Miscellaneous sc
	1.	.4.4.9.9.9.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0

Sources: Co-operative Societies (Primary and Special) that are managing the projects.

Item 4 refers to income from tree crops which were in existence before the inception of the projects. Wattappola amounts are for the period ending on 31st July 1973. Notes

Nelligolla accounts are for the period ending on 31st August 1973.

A short-term loan taken by the management at Kosgahalanda has been excluded from this table. The interest paid on this loan has been added on to the 'Miscellaneous expenditure' of the farm. This farm was closed down in early March 1973.

BOOK REVIEWS

BIRGER MOLLER: Employment Approaches to Economic Planning in Developing Countries, with special reference to the Development Planning of Ceylon (Sri Lanka), Scandinavian Institute of Asian Studies Monograph series No. 9, Stockholm, 1972.

Most less developed countries experiencing considerable unemployment (and underemployment) are confronted with the enormously difficult task of employment creation on a substantial scale. Employment creation policies in recent years, more than in the past, are given a much greater emphasis in development planning and policy in most developing countries. Employment goals and their realisation in the context of developing economies involve complex problems. Employment goals will have to be both explicitly formulated and properly integrated with the whole set of socio-economic policies, such as those relating to the modernisation of peasant agriculture, industrialisation, choice of techniques in production, income distribution, population policy, etc.

Moller's work is an attempt to study the main implications of employment creation policies in the context of overall development planning and policy. The study is focussed on the main question, namely, in what ways and to what extent the presence of a high level of unemployment (and under-employment) in the less developed context, and the attempts to deal with them, can influence the formulation of development plans and policies. This question is studied with particular reference to Sri Lanka's experience in development planning and policy during 1957-1968. In this respect the book should be of considerable interest to readers in Sri Lanka as well as specialists elsewhere. In many ways Sri Lanka illustrates vividly the complexities involved in employment creation policies as well as the failure of development policy to respond adequately to the employment problem.

The first part of the book—in addition to the chapter presenting adequate macroeconomic data on Sri Lanka as a background to the period-is devoted to a critical look at some of the more technical and theoretical aspects (chapters 3 and 4), which will be of interest mainly to the specialist, underlying employment goals and policies within the context of overall development programme or strategy. Plan formulation, man-power budgets, shadow pricing, choice of techniques and labour intensive methods, industrialisation and intersectoral transfer of labour, possible conflicts and 'trade-offs' in policy aims, etc., are analysed in some detail. In the second part of the book (chapters 5-8) the author undertakes a study of Sri Lanka's experienced in development planning and policy during the late 50s and 60s, and attempts to find out to what extent employment aspects did or did not influence the formulation of plans and policies. In his study of Sri Lanka's planning experience, the author observes that "the principal emphasis is laid on the declared and implicit aims on which the plans are based, on the methods used in their preparation and the degree to which they were implemented—all with particular reference to employment aspects" (p.277). The various plans are analysed against the background of the changing economic situation, major policy issues and other socio-economic problems that dominated the period. Moller's study of the various plans or plan documents that came out in the 50s and 60s is thorough and comprehensive. Such a close and systematic study of them has never before been undertaken-particularly from the employment standpoint. The author's study of planning experience begins with the early 'plans' of the immediate post independence period. The author himself admits that these were no plans in the strict sense but a mere collection of projects put together from the various Ministries. Nevertheless they are treated briefly as they constitute—according to the author—the preparatory phase for the later planning efforts. The central parts of the book dealing with Sri Lanka's planning efforts are devoted to a very detailed study of the Ten Year Plan (1958-1968) and the Short Term Implementation Programme (1961/62.1963/64). This is followed by an equally detailed evaluation of the 'annual plans/programmes' or 'project/sector plans'—and the underlying policy approaches—during the latter part of the sixties; the study ends substantially with 1968.

In Sri Lanka the first serious attempt at plan formulation began with the Ten Year Plan. As an exercise in long-term macroeconomic planning the Ten Year Plan is an excellent document. The long-term perspectives of development, the interrelationships among the key macroeconomic variables, the role of industrialisation in long-term strategy and that of the agricultural sector, employment goals and policies, and population policy, are all examined in the Ten Year Plan, presenting a coherent macro picture of the economy as envisaged. This plan as a policy document also answers some of the questions raised by the author. The author's concluding comment on the Ten Year Plan, after a thorough and careful study of its various aspects, is worth recalling, particularly from the point of view of employment policy:

"Ceylon's Ten Year Plan thus had an unusual marked orientation towards employment creation: this was openly declared as one of the objectives; it influenced the working methods used in the formulation of the Plan; and it was an essential factor in the long-term development strategy, in which industrialisation and family planning were considered corner stones" (p. 278). Nothing tangible came out of the Ten Year Plan as it never became fully operational. The Short Term Implementation Programme, largely based on the general strategy outlined in the Ten Year Plan, though less specific about employment goals, suffered the same fate as the Ten Year Plan. With this ended Sri Lanka's experimentation with longterm/medium-term macro or 'comprehensive' planning during the period. In the subsequent period (roughly between 1964 and 1968), one witnesses an altogether different phase characterised largely by annual plans/programmes or sector/project plans, designed partly for the purpose of external aid programmes. During this latter phase, while comprehensive planning diminished in importance, some significant improvements were effected with regard to the technical aspects of project formulation and planning and organisational aspects of plan/ project implementation. In analysing such developments in considerable detail and depth Möller shows that not only did planning (of the earlier type) diminish in importance, but also that employment considerations were pushed to the background or were not explicitly formulated in development policy and programmes. The absence of any positive role assigned to employment goals vis-a-vis development plans is best summed up in the words of the author: "it is an actual paradox that the interest of the country's political leaders in employment creating measures diminished as soon as unemployment was believed to have risen steeply; the greater the degree of unemployment that existed was known about the less important it became for economic planning" (p. 211). This observation, which is substantially true, refers to the sixties. For the 'seventies, however, employment creation has been given explicit recognition in development programmes at the policy making level. Whether the goal will be achieved (at least by the end of the current decade) remains to be seen.

Two most important questions emerge from Möller's study of Sri Lanka's experience during the 50s and 60s: one is concerned with the failure in the implementation of the plans; the other is concerned about the failure of development policy to fully reflect the urgency and seriousness of the employment problem, when 'open' unemployment was reported to have been around 10-12 per cent of the labour force at the beginning of the 'sixties. Möller's study provides some of the answers, but they are inadequate particularly with regard to the second question. In this respect the book falls short of one's expectations. In explaining the failure of plans to be implemented the author refers to various factors, such as lack of political support or commitment to plans, fixing of unrealistic targets, inability to impose the necessary restraints on consumption and to mobilise domestic resources, uncertainty and deterioration of foreign trade and exchange situation, and administrative and organisational deficiencies. The real implications of what appears to have been a crucial factor, namely, the lack of political commitment to plans and planning, are not brought out very well by the author, despite his attempt to link up 'nolitical processes' and economic planning. Plan implementation is considerably tied up with the efficiency and adaptability of the country's administrative set-up. In Sri Lanka the whole field of 'development administration' and its problems still remain largely unexplored. Möller's treatment of this aspect touches only the surface of the problem.

It is true, as Möller shows, that development policy in the sixties did not fully express concern about the unemployment situation in the country. But the author does not succeed in explaining fully this somewhat strange and paradoxical situation. Partly, the difficulty arises from the author's attempt to interpret and evaluate the many facets of development policy largely from plan documents (and allied reports) which were subsequently greatly modified or totally abandoned. Development policy in Sri Lanka during the sixties was dominated by the interplay of several factors. Notable among them were the following: concern over the steady deterioration in the terms of trade and foreign exchange situation, pre-occupation with balance of payments, import substitution in industry and agriculture (particularly domestic food production), problems in domestic resource mobilisation, competing claims on resources and pressures from the rapidly expanding social needs of the population. Against such a background employment considerations became a marginal factor. It was also believed, to some extent, that the development of the key sectors through maximising output would provide employment outlets. Given the basic resource constraints, no government could possibly have undertaken any massive full employment' programme. Another factor should be taken into consideration, namely, that the continued commitment to 'social welfarism' provided some measure of 'relief' against unemployment and poverty (it also served the purposes of income redistribution). A fuller understanding of such basic factors, issues and constraints that dominated the period would provide a much better insight with regard to the question raised above. No doubt Möller's study shows awareness of such issues and their implications, but it does not go very far in this respect; the main issues and their implications are not pursued effectively and fully.

Möller's work is very well documented and carries extensive footnoting, while giving much valuable information on Sri Lanka's economy; in all matters the author is very meticulous and methodical. Reading through the book it should be obvious to any one that the author has consulted in considerable detail the numerous documents, reports and other sources for the purpose of writing this book. In short, it is a well researched piece of writing.

In recent years foreign scholars and agencies have shown considerable interest in and awareness of Sri Lanka's current social, political and economic problems. Several studies relating to such fields have already been published. Möller's book is a valuable addition to the bookshelf in this field. It is a book for the specialist and others alike.

N. Balakrishnan, University of Sri Lanka at Peradeniya,

ROBERT N. KEARNEY: The Politics of Ceylon (Sri Lanka) [Cornell University Press, Ithaca N.Y. and London (1973) pp. xvii + 243. \$. 12.50].

The Politics of Ceylon (SriLanka), Professor Kearney's third book on this country, is a volume in a series on South Asian Political Systems, designed in the main for American undergraduates. It arrives at a time when the literature on the politics of Sri Lanka is becoming increasingly plentiful if not yet abundant.

This book provides a brief review of the functioning and development of Sri Lanka's political system since independence, and a neat summary of the available material on many of the significant themes in Sri Lanka's politics. The complexitics of the island's political structure are outlined with commendable clarity. The author's judgements on issues and personalities reveal a sophisticated understanding of the mechanics of the country's political processes, and are based on an easy familiarity with recent research. Though the book is designed for the American undergraduate, the local reader too will find it a compact introductory survey which discusses a wide range of topics and provides useful insights into Sri Lanka's political system. Beginning with an introductory survey of Ceylonese Society and History, the book contains a discussion of five main themes: the structure and process of government; political parties; elections, voting and campaigns; communal loyalties and groups in politics; and a concluding chapter on challenges to the political order.

For all the positive merits of this book there are some surprising gaps in it. Perhaps the most notable of these is the author's treatment of the economic situation in the island. This, in my opinion, should have been treated as one of the central issues in the discussion of the island's politics, but it is reviewed briefly, almost perfunctorily, in a dozen pages tucked away in the final chapter. Secondly, there is little or no discussion of foreign policy. And thirdly, the introduction to the book (Chapter I), of crucial importance to the American undergraduate and general reader alike, is far too sketchy and simplistic. Many of the problems discussed in this book can only be understood against the background of the recent past, and Professor Kearney's survey of this historical background is lacking in depth and acuity.

The book, on the whole, is more descriptive than it need have been. In his preface the author argues that a descriptive approach seemed "unavoidable and not without usefulness since Ceylon's political structure and processes have been subjected to relatively little scholarly examination, even of a merely descriptive variety". The fact, however, is that there is no paucity of scholarly articles and monographs on the politics of Sri Lanka, and there is much less justification today for a descriptive survey of the island's politics than there was in the early 1960's.

A short text-book is not the easiest thing to write. It calls for special skills, among which is the art of compressing a number of themes into a comparatively few pages, and making sure that no salient feature has been ignored or not given due prominence. Judged by the special requirements of this genre Professor Kearney's achievement is substantial, and his book deserves a warm welcome as a lucid, sound and attractive introductory work on the politics of Sri Lanka.

K. M. de Silva, University at Peradeniya.

ASIAN SURVEY

Asian Survey is the leading American monthly devoted to current developments in Asia. It covers political, economic and social trends in such societies as China, India, Japan, Pakistan, Korea, Indonesia, Thailand and Burma.

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published by The University of Ceylon: 1973

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