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Capital Transfers and Investments in Non-Farm Activities

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CAPITAL TRANSFERS AND INVESTMENTS IN NON-FARM ACTIVITIES*

Nimal A. Fernando

INTRODUCTION

About two decades ago it was strongly believed that agricultural development would over time considerably ease the problem of unemployment and underemployment in developing countries with large agricultural sectors. Development economists prescribed a "labour-intensive, capital-saving" strategy of agricultural development for them to achieve higher growth rates with equity.[1] While the prescription remains valid for many developing countries even today, a multitude of important constraints have emerged in the way of implementing this strategy. For a variety of reasons many developing countries have adopted agricultural development policies which depressed or decelerated employment growth. As a result, the performance of the agricultural sector in employment generation has been disappointing in a large number of developing countries.

A number of researchers have recently pointed out that the current trend towards low labour absorption in agriculture in the countries falling into the category of "late comers" is likely to be strengthened by the labour-saving agricultural innovations likely to come into the market on a growing scale and at a lower unit cost (Jayasuriya and Shand, 1986). It is increasingly realised, by both researchers and policy-makers, that employment opportunities will have to be found on a greater scale outside the agricultural sector to reduce unemployment and poverty and improve the distribution of income, which is one of the key development objectives in many developing countries today (Anderson and Leiserson, 1980; Meyer, 1983; Ho, 1986).

A parallel development over the last decade has been the better understanding of the role of non-farm economic activities in the process of economic development in these countries. The literature on various facets of non-farm activity has burgeoned and it points out that, if properly promoted, non-farm activity can contribute considerably to growth and development. Thus, much greater emphasis is placed today on non-farm activities as a source of employment and of growth and as a strategy which combines poverty alleviation and better distribution of incomes with growth.

Despite the important role that non-farm activities can play in development, very few studies have been undertaken on these activities in Sri Lanka. Furthermore, the available literature has failed to deal with an important aspect of their development, namely, capital transfers for, and investment in, such activities. In this paper an attempt is made to discuss the issues relating to this so far neglected area.

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1. See for details of such a strategy Johnston and Mellor (1961).

The paper consists of seven sections. Section 2 provides definitions of the key terms used in the paper. Section 3 discusses the methods and mechanics of capital transfers and the determinants of capital surpluses in general. In Section 4, this general discussion is applied to the specific case of Sri Lanka. Section 5 is devoted to a general discussion of several aspects relating to investments in non-farm activities while Section 6 examines non-farm investments in Sri Lanka together with factors affecting such investments. The concluding section presents a brief outline of a possible strategy for promoting non-farm investment in Sri Lanka.

2. DEFINITIONS

Since the three key terms used in the paper[1] "Capital transfers", "non-farm activities" and "rural sector"[1] may have different meanings for different people, it is necessary to outline the meanings given to them in this paper and thereby define the scope of the paper better in order to avoid any confusion or misunderstanding. In the literature on economic development a much-discussed concept has been "resource transfers" from the agricultural to the industrial sector. The term "resources" in such discussion often includes not only "surplus income" or "financial savings" but also labour, foreign exchange and sometimes food for the industrial labour force (Nurkse, 1953; Lewis, 1954). When the term capital is used, one has therefore to be clear whether it refers to non-monetized capital or monetized capital or both. There has also been frequent reference to the transfer of "agricultural surplus" to the industrial sector. This again contains a much broader meaning than capital transfers. For example, Lloyd (1970 : 39) has identified three different concepts of an agricultural surplus: "a surplus of food production over the consumption in the agricultural sector, a surplus of domestic production over domestic absorption of the output of this sector which is available for export, and saving out of agricultural income". In this paper the term "capital" refers to financial savings or surplus income and surplus of production over consumption requirements (expressed in monetary or physical terms) of households in the farm sector at one level and in the farm sector as a whole at the other level. By "capital transfers" we mean transfer of such capital from the farm sector in the economy to the non-farm sector[1]. Our concern is with gross transfers, not net flows. Non-farm activities are simply defined to include all economic activities other than crop and livestock production and fisheries. While such activities may extend from the rural to the urban sector, the emphasis in this paper is almost entirely on rural non-farm activities which in large part "lie on or between the boundaries of the usual rural-urban and agricultural-nonagricultural categories" (World Bank, 1978: 13). Following World Bank (1978), Ho (1986) and Anderson and Leiserson (1980), the term "rural sector" is broadly defined to include small towns whose economic roles and functions are closely linked to agriculture and provide numerous essential services to the rural population. We are not concerned about non-farm activities in urban towns and cities.

3. CAPITAL TRANSFERS AND SURPLUSES

Methods of Capital Transfers

Capital transfers from the farm to the non-farm sector may occur by various methods :

— Households in the farm sector may directly invest their surpluses in non-farm activities (voluntary direct transfer by farm households).

1. Resources for development may be mobilized or transferred from foreign sources as well. Such transfers are not covered in this paper.

— Surplus households may save money with financial intermediaries who provide credit facilities to deficit households for investment in non-farm activities. When the deposits mobilized from the farm sector exceed the credit granted for the use of the farm sector itself, the excess represents a transfer of capital. The excess may flow to the non-farm sector through credit facilities (indirect transfer by financial intermediaries).

— Payments of land rents and interest by farm households to non-farm sector households or households in the farm sector itself which then use them for non-farm activities (obligatory transfer).

— Governments can impose taxes on the farm sector (on output, exports, land, income, profits, etc.) and use the revenue to finance non-farm activities and/or infrastructural development relating to such activities (indirect transfer by government).

— The internal terms of trade between the farm and non-farm sectors may be changed in favour of the latter (invisible direct transfer).

These five methods of capital transfer are presented schematically in Figure 1.

Mechanics of Capital Transfers

Each method involves a somewhat different mechanism though the final outcome is the same. Also, the issues involved and the implications of each method are different.

Direct Investments by Farm Households — The mechanics involved in this method are relatively simple and the transfer is straight-forward. Farm households may invest a part of their surpluses in non-farm activities depending primarily on the perceived rates of return and on the educational status and occupational skills of their members. The quantum of investment depends largely on the size of the surplus and the relative profitability of the non-farm investment vis-a-vis other investments.

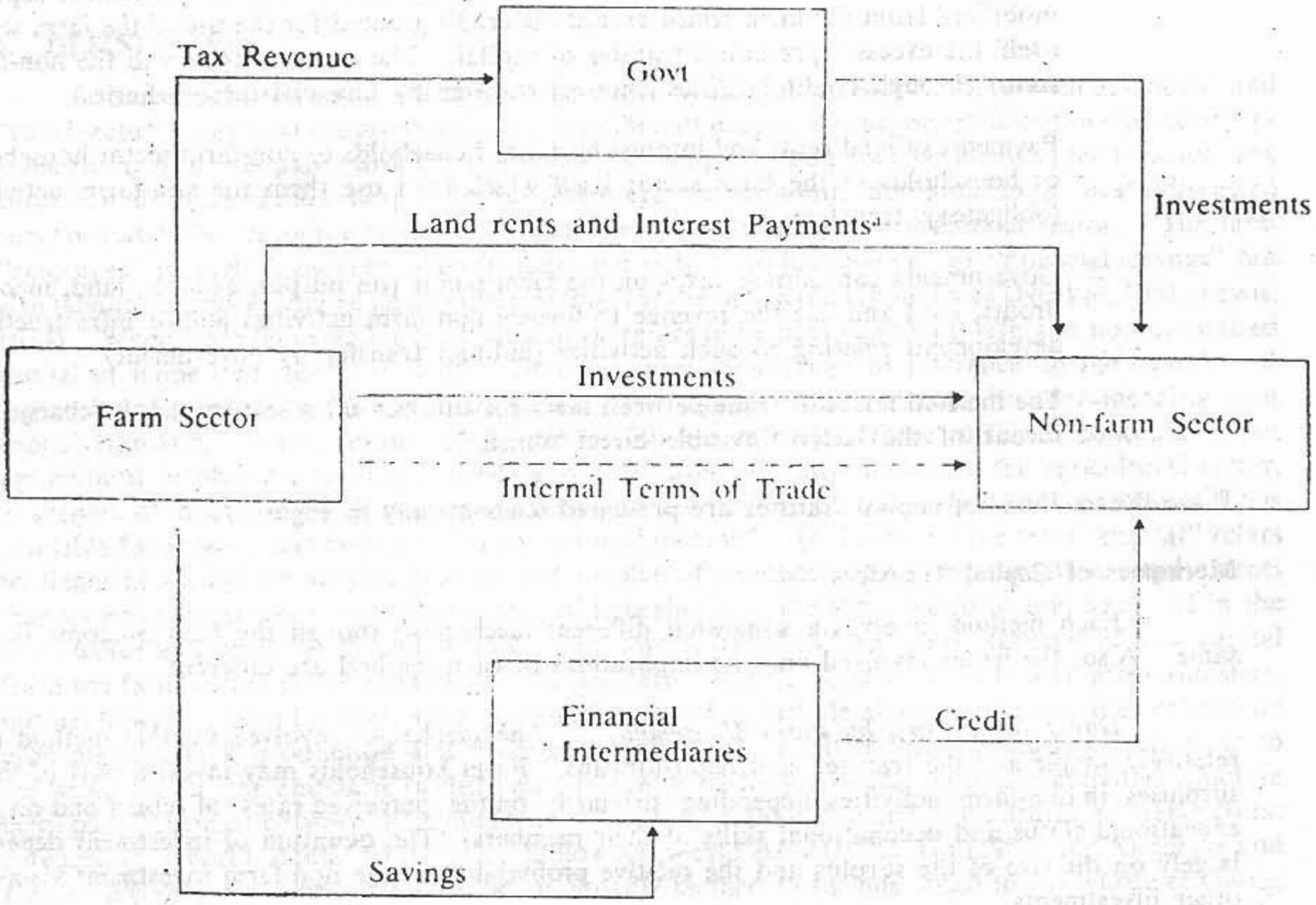
This kind of transfer is disintegrated in the sense that it may occur even when the farm sector as a whole does not have the objective conditions for an outward flow of capital. Some households may have surpluses even when the sector is, in effect, in need of a net inflow of capital.

It has been pointed out that certain socio-economic categories in the farm sector show a greater tendency towards this type of direct transfer. At the early stages of development, according to some researchers, landlords tend to divert their surpluses into investments outside the farm sector (Jayawardene, 1986). In general, direct transfers are likely to be higher when the relative importance of the landed class is greater in the farm sector. In other words, inegalitarian distribution of land ownership and direct capital transfers may have a positive correlation. Thus, the objective conditions for this kind of transfer may not necessarily be in accord with broad development objectives.

Landlords are, however, not the only category which tends to transfer capital direct to non-farm activities. Though they may be quantitatively (in a relative sense) important at the early stages, at the later stages of development other socio-economic groups tend to invest more in non-farm activities. An economy where land distribution is highly inegalitarian is unlikely to reach a higher stage of development to witness a wider diversity in the categories which transfer capital direct. Such economies tend to stagnate rather than develop.

FIGURE 1

Capital Transfers from Farm Sector to Non-farm Sector



Note: [a]Land rents and interest payments collected by farm sector households themselves find their way out of the sector through direct investments in non-farm activites and savings in financial intermediaries.

Direct transfers may be greater at the higher stages of agricultural development at least for two reasons: more households may have surpluses for investment and the perceived returns on non-farm investments may be relatively larger. Farm land may also then be very much in short supply, compelling farm households to turn to non-farm activities. Thus, both "push" and "pull" factors contribute towards direct transfers of capital by farm households into non-farm activities.

From the point of view of income distribution within the farm sector, direct transfers tend to reinforce inequality as the benefits from the investments also accrue to the surplus households themselves. Yet, the movements in the overall distributional pattern within the rural sector are difficult to predict as it becomes an empirical question, the answer to which is dependent on such factors as the labour-intensity of non-farm investment and the degree of their decentralization.

Indirect Transfer by Financial Intermediaries — The literature on intersectoral or intrasectoral resource transfers rarely discusses the indirect transfer of capital through financial intermediaries. One of their crucially significant functions is to improve the allocation of capital by offering deposit facilities to surplus households and credit facilities to deficit households. This may result in a net transfer of capital from one sector to another.

In general, for a variety of reasons farm households borrow very much less from financial intermediaries than they deposit. As a result the loan-deposit ratio tends to be significantly less than one. The difference between deposits and loans represents a transfer of capital out of the farm sector. The non-farm sector becomes the beneficiary if the excess flows to it. However, the excesses are often used to finance urban-based activities — industry and trading — in the process described as "decapitalizing the countryside".

There are widely different views as to why financial intermediaries transfer capital out of the farm sector in this manner. Kato (1983: 39) asserts that the outflow "reflects the bankers" distaste for lending to peasants and their preference for making loans and investments in the non-agricultural sector". According to him, the depositing and borrowing strata of the peasantry are differentiated. Depositors are largely landlords and bigger farmers while those who desire to borrow are small scale operators and tenants. Since the peasants who wish to borrow are characterized by high risk, financial intermediaries lend very little to the agriculture sector as a whole. Yet the risk factor is only a partial explanation. The aggregate flow of funds will depend on the incentives provided by financial and non-financial policies. Here again, "push" factors such as the high risk of potential borrowers in the farm sector as well as "pull" factors such as the availability of lower risk potential borrowers in the non-farm sector contribute to the outflow.

It is interesting to note that often the very policies that aim to increase capital flows to the farm sector cause a reduction in loans to that sector. A large-body of literature on farm credit convincingly shows that concessionary interest rates (administered prices) are a primary factor for the low volume of credit to the farm sector (Gonzalez-Vega, 1983).

Land Rents and Interest Payments—Land rents and interest payments may also contribute to the transfer of capital from the farm sector to the non-farm sector. Johnston and Kilby (1975) estimated that in Taiwan up until 1940 about three quarters of the funds transferred out of the farm sector consisted of land rent and, to a much lesser degree, interest payments. In densely populated rural areas where agricultural land is in short supply relative to demand, rents tend to be extremely

high despite rent control measures introduced by governments. In such a context, land rents can become one of the most important component of capital outflows since landlords often divert their surpluses into investment outside the farm sector. In countries where genuine land-to-the-tiller-type land reforms have not been introduced, this can continue to be a major vehicle of capital transfer from the farm sector. When such land reforms are introduced this flow ceases to be important and its place is often taken by voluntary savings, as shown by the experience in Taiwan (Johnston and Kilby, 1975).

Interest payments by farm households may also form a significant element in the transfer of capital from the farm sector in developing agrarian economies. At the early stages of agricultural development, non-institutional sources of credit predominate over institutional sources. They often charge very high interest rates, given the high risk of loans to agriculture and the high opportunity cost of funds and in part due to market imperfections (Long, 1968; Bottomley, 1975; Fernando, 1988). The interlinkages between land market, product market and credit market (informal) enable non-institutional lenders to enjoy monopoly powers in determining interest rates on loans to small-holder owner operators and tenants in the farm sector (Lipton, 1976).

The relative significance of interest payments as a vehicle of capital transfer also declines with genuinely redistributive land reforms and agricultural development. Sound financial and non-financial policies relating to farm credit too tend to have a depressing effect on rural informal sector interest rates and thereby reduce their importance.

There is no reliable data on how the recipients of the interest payments utilize their surpluses. Undoubtedly, a part is used for investments in the non-farm sector. Often, informal sector money-lenders do not wish to plough back a substantial part of the surplus in money-lending activities because of the depressing effect it could have on interest rates and because the size of the market in which they can efficiently operate is limited.

Taxes on the Farm Sector — Taxes on the farm sector have been one of the most important methods of capital transfer from the farm sector in several countries. The classic example is Japan. As Ranis (1970) noted, agricultural taxation in Japan has been a standard reference in the literature on how to squeeze the agricultural surplus to further industrial development. Land taxes were used in Japan as a major tool for transferring capital to finance industry (Lewis, 1967). However, land taxes are not the only instrument which can be used for the purpose. Depending on the economic structure and the stage of economic and agricultural development, different types of taxes may be used.

Export taxes and compulsory sales of farm produce to state-owned marketing boards have been two of the most popular measures used by developing countries in Asia and Africa to squeeze the farm sector. These are particularly useful when the cultivators are mainly small-holders and administrative difficulties prevent the introduction of other types of taxes to collect revenue from them. From the point of view of economic efficiency, land taxes are much superior to export taxes (Bird, 1974). Nevertheless administrative convenience often leads many developing countries to resort to export taxes. Given the high price elasticity for agricultural exports in developing countries, export taxes fall mainly on the producers, resulting in their surpluses being transferred to the state. The state may use this tax revenue to finance infrastructure development in the non-farm sector causing a transfer of capital to that sector. Compulsory sales to state or quasi-state marketing boards lead to an invisible transfer of capital from the farm sector when the procurement prices are fixed below the border price or domestic market price. In such situations, the higher the volume of purchases the greater the capital transfer from the farm sector. This kind of procurement is generally introduced with a view to eliminating middlemen traders and also to collect sufficient farm produce to meet export requirements or state delivery obligations.

Income or profit taxes may also be used to transfer capital from the farm sector. Almost by definition, these taxes do not assume a significant place at the early stages of agricultural development. They begin to become important at the advanced stages when the farm sector approaches a high degree of commercialization and becomes organised in a manner convenient for imposing income or profit taxes. However, in a dualistic agricultural sector where export crops are produced in company-owned plantations, objective conditions for the use of such taxes may exist even at early stages, as they were in many under-developed economies under colonial rule.

Internal Terms of Trade — Movements in the informal terms of trade also lead to capital transfers. If the terms of trade between the farm and non-farm sectors move against the former it will, in effect, lead to an invisible transfer of capital to the non-farm sector. A decline in the relative prices of farm products (vis-a-vis non-farm products bought by the farm sector) may come about, as Johnston and Kilby (1975) pointed out, because growth in productivity in the farm sector exceeds the growth of demand for farm products or as a result of government pricing policies. For example, in Taiwan the internal terms of trade turned sharply against the farm sector after 1950 due to productivity growth; in Pakistan, government policies during the early 1950s turned the terms of trade against agriculture (Lewis, 1970). It has been pointed out that many governments have adopted pricing policies which changed the internal terms of trade against the farm sector (Brown, 1978). Johnston and Kilby (1975), Lewis (1967) and many others hold the view that capital transfers through terms of trade movements can be substantial. Mellor (1967 : 33) noted, however, that "given the probable co-efficients, the domestic terms of trade are not likely to turn against the agricultural sector in early stages of development even if agricultural development is unusually successful". He concluded that a capital contribution from the agricultural sector was not likely to arise from a change in the terms of trade and, therefore, reliance must fall upon other means of drawing such a contribution (Mellor, 1967 : 33). However, what Mellor was referring to is the change that may occur due to productivity growth. While his conclusion is valid on this point, it should be borne in mind that significant changes in the domestic terms of trade may result from government pricing policies, even when agricultural productivity stagnates or declines.

The internal terms of trade, as a means of capital transfer, in fact, present a dilemma for policy-makers in developing countries. Improved terms of trade for the farm sector have invariably been a "component of the policy package proposed" in the literature (Bacha, 1977 : 11). Brown (1978), Hayami and Ruttan (1974) and many others have proposed favourable internal terms of trade for the farm sector to induce faster growth of agricultural output. Yet, as Mitra (1977) had pointed out with reference to India, such policies may benefit only the large farmers. On the other hand, if the internal terms of trade are used to transfer capital out of the farm sector, it should not be done at the expense if productivity growth. It is precisely because of this that many do not favour manipulation of the internal terms of trade against the farm sector for transferring capital out of it.

Determinants of Capital Surpluses

Given a particular agrarian structure, potential for increasing farm productivity, commodity composition of farm products and their market destination, one can broadly identify several factors influencing the quantum of capital surpluses in the farm sector. As has been evident from other countries which experienced a rapid outflow of capital from the farm sector, increases in agricultural productivity are one of the basic factors which produces capital surpluses among farm sector households.[1] Japan experienced sustained and rapid increases in agricultural productivity in the early

1. In centrally planned economies the farm sector has been squeezed even when farm productivity was not increasing. This has been done in several market economies as well.

stages of her industrialization. These made available a capital surplus which could be transferred in various ways to finance industry (Lewis, 1967 : 462). In Taiwan too, rapid increases in farm productivity during the 1960s contributed to capital surpluses (Johnston and Kilby, 1975).

It is important to bear in mind that the pattern of agricultural output and productivity growth is as important as the rate of growth in output and productivity. In fact, in Japan, farm output expanded in the framework of the existing small-scale agriculture with "remarkably small demands on the critically scarce resources of capital and foreign exchange" (Ohkawa and Johnston, 1969 : 277). The increases in productivity were more diffused in the small-holder sector owing to the nature of the technological package and the land tenure system. This enabled the farm sector to perform the role of a net contributor of capital. Conversely, productivity increases under a capital-intensive strategy are unlikely to produce a surplus. As Bacha (1977 : 9) pointed out, "if the modernization of agriculture requires heavy initial investments it is not possible a priori to anticipate the direction of intersectoral capital flows between agriculture and industry in a process of concurrent economic growth". The type of agricultural development strategy therefore has a significant bearing on the quantum of capital surplus available for outward transfer. As Johnston and Kilby (1975) noted, Taiwan's experience is significant in this respect: "It demonstrates conclusively that a labour-intensive pattern of agricultural development is not incompatible with high rates of growth in output and the generation of substantial financial resources for non-farm investment" (Johnston and Kilby, 1975 : 321).

Productivity increases at the early stages of agricultural development are unlikely to depress farm prices as the growth rate in demand is likely to surpass that of productivity. Therefore, if sound pricing policies are followed the likely growth in farm incomes may be significant.

Another important variable influencing the capital surplus is the marketed surplus of farm output. Lewis (1967 : 462) pointed out that this was a more important variable than total agricultural production. The greater the marketed surplus, in general, ceteris paribus, the greater the capital surplus. Nevertheless, for sustainable capital contributions from the farm sector, increases in productivity and in total agricultural production are necessary as only they will enable the farm sector to sustain an enhanced outflow.

Subject to the market orientation of farm output, another factor with a considerable bearing on capital surpluses is the movements in the external terms of trade. The stronger the export orientation of agricultural output the greater the influence of the external terms of trade on capital surpluses in the farm sector. If the external terms of trade move in favour of the farm sector, a greater capital surplus results. Improvements in the prices of agricultural exports often tend to raise farm incomes though the primary markets of agricultural crops in developing countries are not fully integrated with their secondary markets. Chen (1979 : 130) noted a strong positive correlation between the growth of export earnings and the level of savings. There is a great deal of empirical evidence to support this hypothesis (see, for example, Maizels, 1968). The effect of favourable export price movements on the farm sector savings level is, however, influenced by the export taxation system. If much of the favourable effect of the price increase is absorbed by export taxes, the final effect on household savings may, of course, be less.

The import content of export crops is another significant influence on the capital surpluses in the export sector. A greater import content means a greater vulnerability of the export sector to changes in import prices. It results in a larger outflow of resources from the export crop sector and exerts a depressing effect on surpluses.

In the case of financial intermediaries, the capital surpluses are the difference between the savings mobilized from, and the credit extended to, the farm sector. So, the higher the amount of savings mobilized from, and lower the credit extended to, the farm sector, the greater will be the surplus. This simply means that the surpluses are influenced by the incentives provided by financial intermediaries to the farm sector for saving money with them and the disincentives provided for obtaining credit. However, this is a static view of the surpluses with financial intermediaries, as lack of access to institutional credit facilites may have a significantly adverse effect on farm income and, thereby, savings from a dynamic point of view. In other words, financial intermediaries can continue to transfer capital out of the farm sector only if lack of institutional credit does not constitute a significant bottleneck on the farm sector's development. Since, under normal circumstances, the ratio of savings to credit tends to be greater than one, financial intermediaries will often have surpluses with respect to farm sector activities.

4. CAPITAL TRANSFERS FROM THE FARM SECTOR IN SRI LANKA

The Farm Sector in Sri Lanka

Sri Lanka's farm sector comprises mainly tea, rubber, coconut and paddy cultivation, with paddy being the main food crop. It also includes a wide variety of subsidiary food crops such as manioc, chillies and green gram and several minor export crops such as cinnamon and cardamom. A salient feature is the high degree of differentiation between the crop sub-sectors. A number of factors are important from the point of view of capital transfers :

— In 1982, there were about 1.2 million acres of paddy land. Small-holdings of 1 to less than 5 acres accounted for 44% of the extent. About 16% was in holdings of 5 to less than 10 acres, with about 12% in larger holdings. Subsidiary food crops are grown almost entirely in small-holdings.

— Virtually all paddy lands are in private ownership.

— Scattered evidence tends to indicate that the ownership distribution of paddy land has moved towards greater concentration due to various factors (Shanmugaratnam, 1985; Wickramasekera, 1985).

— Of the nearly 511,000 acres under tea, 81% is in holdings over 20 acres in size and the balance in small-holdings. The state owns 55% of the tea acreage. Nearly 90% of the tea output is exported.

— About 65% of the extent under rubber is in holdings over 20 acres. The state owns about 30% of the rubber lands. About 80% of the rubber produced is exported.

— In the coconut sub-sector about 25% of the land is in holdings over 20 acres in size, State ownership amounts to about 10% of the acreage. Unlike in tea and rubber, only about 25% of production is exported.

— Most of the state-owned tea, rubber and coconut lands are managed by two public corporations organized into several regional bodies; their activities remain under the direct influence of the government.

— Available evidence indicates that a significant proportion of farmers has multiple sources of income and the proportion with non-farm incomes is substantial (Tilakaratne, 1984; Jayasena and Herath, 1984; Fernando, 1986). Therefore, the income from a given crop or from farming activities tends to underestimate their total household income.

— Another factor significant for the purpose of this paper is that there exists a considerable gap between potential and realized productivity in the country's farm sector at the existing level of technology (Central Bank, 1982; Fernando, 1986).

Determinants of Capital Surpluses in the Farm Sector

In Sri Lanka the farm sector is characterized by a high degree of duality in terms of production organization, market destinations and several other factors. Partly as a result of this, the factors influencing capital surpluses in the export crop sector and the food crop sector have been different, making it appropriate to discuss these two sectors separately.

In the food crop sector at least two factors have had a significant bearing on the level of capital surpluses. One is productivity movements and the other the government's pricing and procurement policy for paddy. In addition, the land tenure system has some bearing on the surpluses.

In paddy, the average yield has grown at a rate of 3.5% per season in Maha and 4.8% per season in Yala during the 1976-86 period. While production during the same period grew by an average rate of 4.3% in Maha and 7.5% in Yala, 70% of the Maha increase and 59% of the Yala increase resulted from the growth in yield (Fernando and Gunaratne, 1987). A significant aspect of the yield growth has been, as evident from Table 1, its diffused pattern over different zones and sub-zones. The rate of increase in average yield as well as the pattern of growth helped to generate a significant capital surplus in the food crop sector during this period.

The government's paddy pricing policy enhanced the effect of productivity growth on the capital surpluses. During the early 1970s however, pricing and procurement policies considerably depressed prices in the open market and thereby capital surpluses as well (Fernando, 1987-a). These policies underwent fundamental changes in 1978. Open market prices rose significantly due to these changes and to the increase in demand for paddy resulting from the revision of the rice subsidy scheme in 1978. The upward trend in prices was evident until about 1983. Higher prices coupled with improved productivity therefore had a significant effect on the capital surpluses in the paddy sector.

To some extent the ande tenancy system and the apparent polarization of land ownership also had a positive effect on the surpluses. The ande system diverted an increasing amount of paddy from the tenants to the landlords in the context of rising yeilds. This was particularly significant in the wet zone where nearly one third of the paddy land is cultivated under this system (Fernando, 1987-c).

On the other hand, scattered evidence tends to show that paddy land ownership in certain regions is becoming more concentrated. The number of paddy cultivators declined by about 7% between 1971 and 1981 despite a significant increase in the extent cultivated (Department of Census and Statistics, 1986 : 191). In the major settlements in the dry zone, the problem of hidden tenancy has increased; this has been the case even in newly settled and irrigated Mahaweli areas (Siriwardana, 1984; Wickramasekera, 1985). Tractor owners in particular as well as various other non-cultivator

Table 1.

AVERAGE PADDY YIELDS AND GROWTH RATES — 1976 – 86

(Yields in kilograms per hectare)

Zone/Sub-zone	*MAHA*			*YALA*		
	Yield		*Growth Rate (%)* 1984-86 *over* 1976-77	*Yield*		*Growth Rate (%)* 1984-86 *over* 1976-77
	1976-77[a]	1984-86[b]		1976-77*a*	1984-86*b*	
Wet Zone	2,313	3,033	37.1	1,848	2,658	43.8
Low-country Wet Zone	1,850	2,723	47.2	1,604	2,381	48.4
Mid-country Wet Zone	2,794	3,595	28.7	2,402	3,181	32.4
Up-country Wet Zone	3,028	3,574	18.0	2,799	3,530	26.1
Dry Zone	2,723	3,510	28.9	2,540	3,637	43.2

[a] Two-season average

[b] Three-season average

Source : Author's calculations.

categories such as boutique keepers appear to have enlarged their land ownership over time (Farrington et., al., 1980; Farrington and Abeyratne, 1984 : 124). This pattern may also have raised capital surpluses in the paddy sector.

In the export crop sector a somewhat different set of factors has apparently been operating. Here perhaps the most notable phenomenon has been the stagnant or poor productivity growth. This appears to be true with respect to the mid-grown tea areas in particular and to the tea sub-sector as a whole in general. In rubber and coconut too the available data do not clearly show a rising trend in productivity. Thus, unlike in the paddy sector, from a macro sense, productivity has not played a significant role in the export sector in generating capital surpluses during the last decade. Yet, from a micro point of view, in the low-grown tea areas improvements in productivity appear to have made a major contribution to capital surpluses. These areas reported the highest and rising average yields during the last decade, generating a greater quantum of capital surpluses.

It is the sporadic price increases which contributed towards capital surpluses in the export crop sector. Since prices have fluctuated widely, the volume of surpluses has followed a similar trend in the absence of a major contribution from productivity growth. The best example is perhaps provided by tea. Tea export prices rose sharply from about mid-1983 until about the end of 1984. As shown in Table 2, the tea export price index (1981 = 100) rose from 99 in 1982 to 147 in 1983 and 218 in 1984. Mainly as a result of this, export value rose dramatically in 1983 and 1984. This rise in prices filtered down to the farm gate level as well, with the price of green tea-leaf going up by about 100% between December 1982 and December 1984.

Rubber export prices also improved markedly in 1984, 1986 and 1987 relative to the prices in 1981. As a result, rubber export value rose in these years. The prices for coconut exports (kernel products) too rose significantly in 1984 and 1985. In the local market, the average annual price of fresh coconuts registered a sharp rise in the 1980-85 period relative to 1977-79.[1]

It is recognized that output price increases are by themselves not adequate to prove that capital surpluses grew in the farm sector. Yet, in the absence of data on farm gate prices and the cost of production, one has to make inferences from the available fragmented data. The price increases of farm products have been so high in certain years, that it is safe to assume that they would have resulted in capital surpluses.

There is some indirect evidence as well to assume an increase in capital surpluses in the rural sector at least in certain years during the last decade. Macro-data show that the domestic savings ratio went up moderately in 1983 and sharply in 1984. This movement can be explained to a large extent in terms of the tea price boom. Time and savings deposits with the National Savings Bank rose considerably during the post-1977 period. More importantly, total deposits with the Co-operative Rural Banks (CRBs) went up dramatically from Rs. 175.5 million at the end of 1977 to Rs. 434 million in 1981 and Rs. 1295 million at the end of 1986. Although these increases may have been partly due to larger surpluses in the non-farm sector, it is reasonable to assume that improvements in farm sector surpluses too had an effect. The increase in deposits at the CRBs in particular tends to suggest that at least certain socio-economic groups in the farm sector had higher capital surpluses.

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1. Though coconut is classified as an export crop, nearly 75% of production is consumed locally. As a result, capital surpluses are influenced more by local than export price movements. However, it is important to note that the local prices are positively correlated with the export prices.

Table 2.

AGRICULTURAL EXPORT TRADE INDICES (1981 = 100)

Category	1981	1982	1983	1984	1985	1986
Tea						
Export price	100	99	147	218	167	123
Export volume	100	99	88	112	111	117
Export value	100	98	129	245	186	144
Rubber						
Export price	100	81	101	119	97	108
Export volume	100	99	98	96	91	84
Export value	100	80	98	114	89	91
Coconut products						
Export price	100	80	101	171	127	89
Export volume	100	130	132	86	165	171
Export value	100	104	134	147	210	15
Minor agricultural products						
Export price	100	110	130	137	141	148
Export volume	100	92	81	71	61	68
Export value	100	101	106	97	87	101

Source : Central Bank of Sri Lanka (1987).

Further indirect evidence of larger surpluses in the farm sector comes from the data on housing. The stock of occupied housing units in the rural sector rose by 34% between 1971 and 1981, surpassing the population growth rate of 23% during the same period. Permanent housing units rose by 58% and semi-permanent units by 23% (Department of Census and Statistics, 1986). The proportion of rural households having radios rose from 51.5% in 1978/79 to 61% in 1981/82 and of those having bicycles from 23.9% to 33.4% during the same period.[1] (Central Bank, 1984 : 91; 1983 : 45).

Mechanics of Capital Transfer from the Farm Sector

It was noted earlier that there were several methods for the transfer of capital out of the farm sector, with their relative significance depending on the stage of development and numerous other factors. In this section we briefly examine how capital has been transferred out of the farm sector in Sri Lanka in the past.

Voluntary Direct Transfers — The direct investment of surpluses by farm households in non-farm activities is one form of gross capital transfer. Since data on farm household savings and the pattern of their utilization are not available, it is difficult to discuss to what extent direct investments of this kind have been important but some tentative hypothesis may be presented.

In Sri Lanka, most of the rich farm households invest their surpluses in non-farm activities. This is true in respect of households in the paddy sector as well as those in the tree crop sector. Paddy farm households appear to have a greater tendency to invest in rural non-farm activities while tree crop sector households tend to prefer investments in the urban sector. A significant proportion of rural non-farm enterprises are owned by non-farm households. The small repair shops, retail stores, light engineering enterprises, metal and brick enterprises, furniture making units, coir industries and numerous other rural non-farm enterprises, with the possible exception of rice mills, are owned mostly by non-farm households. This perhaps indicates that historically the surpluses among farm households have not been substantial due to low productivity. Also, farm households have less mobility due to the nature of their farming operations. This prevents them from investing directly in non-farm enterprises, which tend to cluster around small towns within the farming areas.

Other indirect evidence also tends to support the view that farm households do not invest their surpluses mainly in non-farm enterprises. Many researchers have pointed out that farmers in colonization schemes have a greater propensity to spend their seasonal surplus incomes on certain types of consumer durables, particularly bicycles, radios and sewing machines. Estimates show that the income elasticity of consumer durables and jewellery is as high as 3.56 in Sri Lanka (Central Bank, 1984 : 270). Rural farm households prefer to invest in jewellery as such assets can easily be converted into cash when needed. Jewellery has also been one of the most acceptable collaterals among informal as well as formal money lenders. The rising trend in jewellery prices and the importance and social status attached to the possession of jewellery are other factors which have influenced investment in jewellery.

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1. There is also a series of social and economic indicators which shows an increase in poverty in the rural sector during the last decade (Gunaratne, 1987; Fernando, 1987-b). Yet, such data do not contradict the point we are making here. It is possible that some rural farm households experienced a deterioration while others experienced an improvement. In fact, the income distribution data available for the period suggests a greater concentration of income in the upper deciles. But we are not directly concerned with income distribution and equity issues per se in this paper.

Housing improvements are also given priority in the use of surpluses by farm households. Many farm families, having begun life with very poor housing, often devote a part of their surplus to housing improvements, which are completed piecemeal over a long period if their seasonal surpluses are small.

On the whole, it appears that direct investments by farm households in non-farm enterprises do not constitute an important component of capital transfers from the farm sector, though a limited number of large farmers may use their surpluses for such investments. This is not surprising given that Sri Lanka's farm sector has not reached an advanced stage of development.

Capital Transfers through Financial Intermediaries — There is no data on the farm sector's savings with, and borrowings from, financial intermediaries, making it difficult to determine whether capital has been transferred from the farm sector through financial intermediaries. There is however a popular belief that the activities of financial intermediaries have aroused such a transfer of capital.

Despite the unavailability of the required data we can hypothesize on the basis of proxies that such transfers have taken place. The first set of data supporting this hypothesis refers to deposits with, and advances by, the Co-operative Rural Banks (CRBs), most of which are located in the rural sector. At the end of 1977, the excess of CRB deposits over advances amounted to Rs. 64.6 million and, as evident from Table 3, this has increased substantially over time.

Table 3.

CO-OPERATIVE RURAL BANKS — EXCESS OF DEPOSITS OVER ADVANCES

(In million of Rupees)

	1977	1979	1981	1983	1985	1986
Excess *	64.6	141.8	162.5	326.4	512.7	637.8

* Refers to year-end position.

Source : Central Bank of Sri Lanka.

Since the excess is large and the bulk of the deposits is likely to have come from the farm sector, we may assert that these excesses represent an outward transfer of capital from the farm sector.

Farm households also save with other banks such as the Peoples' Bank, the Bank of Ceylon and the National Savings Bank. The volume of savings with these banks rose sharply during the last decade. Since the National Savings Bank did not grant any loans to the farm sector until 1987, the farm sector's savings with it clearly represented an outflow. In the case of the Peoples' Bank and the Bank of Ceylon, except in Maha 1977/78, the quantum of loans to the paddy sector (excluding marketing advances made to the Paddy Marketing Board) was small. Before 1986 only a very small amount was lent to the rubber and coconut sectors. In 1984 and 1985, for example, these two sectors together received only Rs. 135 million and Rs. 140 million, respectively. In the tea sector, the loans were comparatively high — Rs. 392 million in 1984 and Rs. 787 million in 1985 — but only a very

small amount was lent to small-holders. Much of the credit to the tree crop sector went to the Sri Lanka State Plantations Corporations and the Janatha Estates Development Boards. This data indicate that a transfer of capital had taken place from the paddy and the small-holder tree crop sectors through financial intermediaries.[1]

Land Rents and Interest Payments — Owing to the land tenure structure, the scarcity of agricultural land and the low stage of development in the financial market, land rents and interest payments appear to be a significant method of capital transfer from the farm sector in Sri Lanka. In the wet zone, nearly one third of the extent under paddy cultivation is under the share-tenancy system. In the dry zone too, share tenancy is important in the districts of Hambantota, Matale, Polonnaruwa, Moneragala and Kurunegala. Altogether about one fifth of the paddy lands is under share tenancy. Rental payments by farm households may therefore be crudely estimated using the rents stipulated under the Agrarian Services Act of 1979. The estimates presented in Table 4 reveal that farm households in the paddy sector pay a considerable amount as land rentals.[2] However, these estimates are not sufficient to determine the outflow of capital as we do not know how much of the rentals accrues to households in the farm sector itself. However, if we assume that land rentals accrue mainly to rich households and they use this income for non-farm activities, then the outflow can be considered significant. In the tree crop sector, share tenancy is almost totally absent and rent payments cannot be significant.

Interest payments also represent a significant outflow from the farm sector. The bulk of the small-holders obtain much of their credit from non-institutional sources such as money lenders, boutique keepers and produce dealers, all of whom belong mainly to the non-farm sector. Institutional sources meet only very small share of their credit needs. Non-institutional lenders charge comparatively high interest rates, particularly from high-risk poor farmers. At household level, therefore, interest payments absorb a considerable share of gross farm income.

In 1981/82, the Consumer Finance and Socio Economic Survey, which included a sample of 5,900 rural households, indicated that they had paid about Rs. 33,680 as interest payments during a one-month period. The same survey revealed that interest payments constituted 0.4% of income in the rural sector. Although the data are not detailed enough, it may be assumed that interest payments transfer a significant amount of capital out of the farm sector.

Taxes on the Farm Sector — Agricultural taxes have been one of the most widely used methods of capital transfer from the farm sector in Sri Lanka. However, they have been used almost entirely on the export crop sector do minated by tea, rubber and to a lesser extent coconut and the

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1. It is interesting to note that in 1980, a FAO mission noted the following with respect to capital transfers from the rural sector :

   * "The meetings which the mission held with the Governor of the Central Bank, the Chairman of the Peoples' Bank and the Chairman of the Bank of Ceylon and their senior officials confirmed our view that a major instrument of surplus value mobilization and accumulation is the banking process in its present form". (FAO, n.d. : 20).

   * ".....in effect the rural surplus is extracted by the banking process mainly for use outside the rural sector (viz. urban and rural elite consumption, industry, trade, services, etc.), leaving the rural sector in a chronic and worsening condition of rural under-development": (FAO, n.d. : 21).

2. Share tenants had to pay very high rents even in the 1960s. See Annex Table 1.

paddy and minor food crop sectors have been free from them. Export and sales taxes have been used to transfer a significant part of the surpluses from the tea sector, which accounted for the bulk of the revenue from the tree crop sectors. Altogether, tree crop taxes contributed about 20% of total government recurrent revenue during the past decade.

In the 1950s, the tax incidence on tea exports was about 20% of the f.o.b. price of tea. This rose sharply in 1978 to 54% after being 27% in 1977.[1] In 1979 it was 50%, with half the f.o.b. value of tea being transferred to the government through export and sales taxes. Since 1984, the tax incidence has been reduced substantially with a view to improving tea producers' margins (Fernando, 1987-a : 68-75).

Similarly, the government has transferred a significant amount of capital from the rubber sector through export taxes. The average tax rate on rubber exports which stood around 27% during the 1973-77 period, was 51% during 1978-81. Within a very short time-span, the government had nearly doubled the tax rate and increased the quantum of capital transfers from the rubber sector (Fernando, 1987-a : 101-102). As in the case of tea, since 1984 the tax rate has been reduced to improve producer margins.

In the coconut sector export taxes were not used as a major instrument of capital transfer until 1978. While they assumed a greater significance for a few years afterwards, only a relatively small amount of this sector's surpluses has been transferred through the tax mechanism.

Before the second phase of the land reform programme began in 1975, company taxation also contributed to the transfer of capital from the tea sector and to a lesser extent from the rubber sector. While this ceased to be important from 1975, a part of the income of the State Plantations Corporation and the Janatha Estates Development Board has been transferred by the state through various measures.

Since export taxes on tea, rubber and coconut fall mainly on producers and tend to depress their margins, the government has accepted in principle the need to lower the export tax burden. A phased programme is now being implemented towards this end. The resource transfer through export taxes will therefore decrease considerably in importance over the next few years.

Internal Terms of Trade between the Paddy and Non-Agricultural sectors — Capital appears to have been transferred out of the paddy sector through the internal terms of trade in the past. Whether a gross transfer has taken place or not is indicated by the movements of the internal terms of trade. If one compares the price movements of paddy with those of goods purchased by the paddy sector, one can determine the direction of this transfer.

Thorbecke and Svejnar (1984) who analysed the resource transfers between the agricultural and non-agricultural sectors using two different price indices — cost of living price index and implicit GDP price deflators — showed that when 1970 is taken as the base year, the internal terms of trade had moved in favour of the agricultural sector during the 1973-82 period, indicating a gross resource transfer to it from the non-agricultural sector. (See Table 5).

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1. This does not take into account the implicit tax incidence resulting from the overvaluation of the exchange rate during the pre-1977 period. Since a highly overvalued exchange rate was applied for tea exports, the implicit incidence was significant. The exchange rate unification in late 1977 reduced the implicit tax incidence.

Table 4.

AN ESTIMATE OF LAND RENTS PAID BY SHARE TENANTS IN THE PADDY SECTOR, 1982 CULTIVATION YEAR

District	*Extent under Tenancy (Acres)*	*Estimated Net Extent Harvested † (Acres)*	*Rent per acre § (To the nearest bushel)*	*Total Estimated Rent Payment (Bushels)*	*Average Farm Gate Price (Rs./bushel)*	*Total Estimated Rent Payment (Rs. '000)*
Wet Zone						
Colombo	3,571	4,817				
Gampaha	9,581	10,913	15	235,950	73.50	17,342
Kalutara	10,848	16,422	15	246,330	71.90	17,711
Galle	11,430	14,205	15	213,075	72.03	15,348
Matara	18,586	24,182	15	362,730	68.29	24,771
Kandy	12,660	16,048	16	256,768	65.85	16,908
Ratnapura	15,952	22,414	15	336,210	68.80	23,131
Kegalle	6,354	9,425	17	160,225	65.27	10,458
Nuwara Eliya	4,038	3,313	22	72,886	65.00	4,737
Badulla	8,006	7,928	15	118,920	70.04	8,329
Sub Total				2,003,094		138,735
Dry Zone						
Ampara	10,181	13,768	20	275,360	66.19	18,226
Anuradhapura	15,500	10,395	16	166,320	68.32	11,363
Batticaloa	9,735	7,927	15	118,905	71.22	8,468
Hambantota	20,812	24,966	19	474,354	68.55	32,517
Jaffna	4,799	4,459	17	75,803	80.12	6,073
Kurunegala	30,960	43,623	17	741,591	70.47	52,260
Mannar	2,060	1,752	15	26,280	78.38	2,060
Matale	8,734	9,457	16	151,312	68.32	10,338
Moneragala	4,869	5,139	32	164,448	69.71	11,464
Polonnaruwa	12,964	16,548	21	347,508	67.72	23,533
Puttalam	4,143	2,821	15	42,315	69.62	2,946
Trincomalee	6,015	6,448	18	116,064	71.77	8,330
Vavunia	3,288	2,681	15	40,215	78.32	3,150
				2,740,475		190,728

Notes : † Refers only to lands under tenancy

§ Under the provisions of the Agrarian Services Act of 1979.

Source : Author's Estimates.

Table 5.

INTERNAL TERMS OF TRADE BETWEEN AGRICULTURE AND NON - AGRICULTURE (1970=100)

Year	*Based on Cost of Living Price Index*	*Based on Implicit GDP Price Deflator*
1970	100.0	100.0
1971	98.0	97.6
1972	97.3	94.1
1973	102.1	105.0
1974	109.0	134.0
1975	111.6	126.2
1976	105.1	120.1
1977	103.2	121.3
1978	115.5	124.4
1979	115.8	110.7
1980	123.6	118.2
1981	122.6	120.8
1982	128.9	119.5

Source : Extracted from Thorebecke and Svejnar (1984).

The estimates of Thorebecke and Svejnar refer to the entire agricultural sector including tree crops. A set of calculations prepared for the paddy sector using different price indices[1] is presented in Table 6. This indicates that, when compared with 1978, the internal terms of trade between the paddy sector and the non-agricultural sector moved against the former, pointing to an outward transfer of capital from the paddy sector, during the 1979-86 period.[2] This appears to be in line with both the general view of the relative movements of producer prices of goods generally bought by the paddy sector and the findings of several other researchers (see Gunasinghe, 1986). Since the capital intensity of paddy production has increased during the past decade, some researchers have pointed out that more resources are now transferred out of the paddy sector to the external sector and less surplus is available for use in the non-agricultural sector (Gunasinghe, 1986 : Fernando and Gunaratne, 1987).

Table 6.

INTERNAL TERMS OF TRADE BETWEEN PADDY SECTOR AND NON - AGRICULTURAL SECTOR

(1978=100)

Year	1979	1980	1981	1982	1983	1984	1985	1986
Internal Terms of Trade	85	79	81	82	73	70	72	72

Note : Open market paddy prices were deflated by the index of intermediate goods in the Central Bank's Wholesale Price Index to arrive at the internal terms of trade.

1. It is better to compare the internal terms of trade between the entire food crop sector and the non-farm sector. However, owing to the lack of reliable data on prices of food crops other than paddy, it is not possible to compute a meaningful series of internal terms of trade between the two sectors.

2. It must be noted that these estimates are highly sensitive to the base year and the type of index chosen to represent the price movements of non-agricultural goods. What is presented here should, therefore, be taken to show only directions of transfer rather than their magnitude.

5. INVESTMENTS IN NON - FARM ACTIVITIES

The availability of capital surpluses in the farm sector and investment in non-farm activities are not necessarily related as surplus capital can be reinvested in the farm sector itself or even remain idle. Similarly, surpluses in the urban sector may be invested in the rural non-farm sector depending on the incentive structure. However, in the rural sector, farm sector capital surpluses and investment in non-farm activities appear to have a close relationship. Often very little of the urban surpluses flows into the rural non-farm sector.

Non-farm activities include a wide array of economic pursuits in manufacturing as well as services. Most of these activities in developing countries have close backward and forward linkages to the farm sector. Also, several researchers have pointed out that a considerable proportion of farm sector households in these countries are engaged in non-farm activities, deriving a significant part of their household income from them. (Anderson and Leiserson, 1980; Binswanger, 1983 ; Ho, 1986).

If capital resources are allocated efficiently, investment in non-farm activities implies that at the margin, the social rate of return from additional investments in them is greater than from farm activities. In practice, however, investments may be made even when relative social returns dictate a different course. To say that investments in non-farm activities would be made (abstracting from risk and uncertainty considerations) depending on the perceived relative rates of returns on such investments does not offer much help, particularly to policy-makers who aim at a greater level of employment in the rural sector. Some of the important issues involved are : What factors have an important bearing on investment in non-farm activities? What is the nature of the relationship between the farm sector and non-farm investments? What kind of policies would induce non-farm investments?

Factors Influencing Non–farm Investments

There are several key factors which influence non-farm investments in a country. Some of these are referred to as initial conditions (World Bank, 1987 : 59). The size of the market particularly the domestic market, and physical infrastructural facilities such as roads and electricity may be included in this category. Of these, market size is dependent upon the growth rates and the income distribution pattern in the economy. For instance, a higher growth rate in agriculture and a more egalitarian distribution of income would create a greater demand for simple, labour-intensive manufactures and services. At low per capita incomes, demand is relatively higher for food and light manufacturers. Non-farm sector goods may be sold in the urban sector as well as in export markets. The market size in these sectors is largely influenced by trade and exchange rate policies. Similarly, services in the non-farm sector may be sold both in the farm sector and the urban sector.

Physical infrastructural facilities, mainly roads and electricity, are significant incentives for investment in non-farm activities. If public investment programmes develop such facilities in the rural sector, there will be a stronger tendency to invest in non-farm activities. Conversely, urban bias in the pattern of investment lowers the propensity to invest in non-farm activities.

Another factor influencing investment in non-farm activities is macro-economic stability. If macro policies do not foster such stability, the investment climate tends to get distorted and investors will favour investment in real estate and various other non-productive activities which

promote neither growth nor productive employment. This underlines the importance of macro policies to hold inflation down to a moderate level. Higher rates of inflation encourage consumption and influence investments away from productive labour-absorptive activities.

The exchange rate policy also has an important bearing on investment in non-farm activities. An overvalued exchange rate makes competing imported products relatively cheap and redirects demand away from locally produced goods. This reduces the market for domestic products, discouraging investment in their production. An overvalued exchange rate also adversely affects the production of exportables. A wide variety of non-farm labour-intensive products have export potential within an appropriate policy environment. The products are made more expensive and their ability to penetrate new markets and expand existing markets is hampered by an overvalued exchange rate. Since many labour-intensive non-farm products have a low import content, a realistic exchange rate is unlikely to raise their costs of production.

We have so far focussed attention on macro-economic factors with a bearing on investment in non-farm activities. A different set of factors influence the availability of finance for such investment and the choice of techniques, both of which directly affect the level of employment creation. Whether profitable investment opportunities can be exploited or not depends, for most potential investors, on whether they are able to obtain the necessary finance through capital markets, financial intermediaries or other sources.

6. NON - FARM INVESTMENTS IN SRI LANKA

Owing to the paucity of data it is difficult to measure the relative importance of the non-farm sector in rural Sri Lanka in terms of income generation. It may, however, be measured in terms of employment criteria. In 1971, about 39% of the employed persons in the rural sector were in non-farm activities, this had risen to 44%[1] by 1981 (Department of Census and Statistics, 1986). Such activities consist of manufacturing, construction and various types of services. Within manufacturing, food processing, textiles, furniture, general carpentry and building materials account for the major share. In services, the retail trade in farm products as well as numerous non-farm processed consumption goods predominates. In construction, house building, road work, irrigation-related construction work and the building of schools and other public buildings are important.

Most of these activities are oriented towards the domestic market within the rural sector itself and the demand arises from a relatively low level of general economic development. These activities also appear to have a close positive correlation with the level of agricultural development, with construction-related activities as perhaps the only exception.

Factors Affecting Non-farm Investment

In Sri Lanka, as in other developing countries, a number of macro-level as well as micro-level factors influence investment in non-farm activities. Following HO's (1986) general classification, these may be grouped into "push" and "pull" factors. The most important "push" factor appears to be the limited capacity of the farm sector to increase productive employment within itself. Partly

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1. It is important to note that in 1981/82, employment in the public sector (including local government, corporations and boards) accounted for only about 17% of the total number employed in the rural sector (Central Bank, 1984 : 126).

because of the shortage of arable land (reflected in very high land prices), relatively well-to-do farm and non-farm households invest their surpluses in rural non-farm activities. The low level of technological development in the farm sector excluding the paddy sector, and high land prices resulting from non-agricultural demand have also been important "push" factors. The fact that most of the rural unemployed are educated youth may also have had a bearing on investment in non-farm activities. On the other hand, the much greater relative rates of return on investments in certain non-farm activities, particularly in the services sector, have acted as an important "pull" factor. Another "pull" factor has been the relatively low capital requirements of a range of non-farm activities.

Market size is one of the most crucial factors influencing non-farm investment in rural areas which in turn is determined largely by movements in agricultural incomes.[1] In fact, the underlying reason for the apparent expansion in such activities during the recent past has been the growth in agricultural incomes. Theoretically, a significant proportion of incremental income at relatively low levels of income is spent on consumer goods. Therefore, increases in agricultural income generate a rising demand for a variety of consumer goods, some of which are provided by the non-farm sector. In Sri Lanka's rural sector an average spending unit spends about 33% of its expenditure on non-food non-durable items and perhaps another 10-15% on foods requiring substantial processing.[2] Of the total non-durable expenditure, 21% is spent on clothing, 16% on fuel and light, 13% on housing and about 11% on transport (Central Bank, 1984 : 224). The data suggest that rural sector demand for non-farm goods and services can be a powerful stimulant to investment in rural non-farm activities.

Rising farm household incomes evidently generate a considerable demand for furniture and building materials. In field visits in the low-country tea growing areas during the boom period for tea in 1984, it was clearly visible that a large proportion of tea small-holders were spending a considerable part of their increased incomes to improve housing purchase more and better furniture.[3]

As Wimaladharma (1982 : 31-34) points out, the case of Galnewa in the Mahaweli area illustrates, in part, the potential impact of income growth in the farm sector on non-farm investments. Within a very short span of time farmers in the Galnewa region achieved comparatively high productivity and income levels. This in part induced — with some infrastructural support from the government a range of non-farm activities in the region. In contrast, in many other major settlement schemes in the dry zone, non-farm investment activities expanded very slowly owing to sluggish growth in agricultural incomes. Wimaladharma concludes that "increasing the level of farm incomes and the per capita incomes of farm employees seems to be imperative" for inducing non-farm investment for the purpose of improving employment.[4]

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1. Binswanger (1983 : 39) notes that the limitation of final demand is a more important impediment to growth in the non-farm sector than the commonly perceived constraint of a shortage of skills.

2. About 61% is spent on all food items (Central Bank, 1984 : 228).

3. The income elasticity estimates based on all-island data too showed that the income elasticity of housing was 1.74 (Central Bank, 1984 : 270).

4. Statistical studies of economic growth have indicated that per capita income is a key variable in growth. As consumer incomes rise, the structure of demand changes mostly from food products first to industrial products and then to services and leisure. At low per capita incomes, the demand for manufactures is concentrated almost entirely on food and light manufacturers. It is this changing pattern of demand which stimulates investment in different types of non-farm goods and services. (World Bank, 1987 : 52).

To the extent that non-farm activities are oriented to markets outside the rural sector, the significance of agricultural income improvements for investment in such activities in the rural sector declines. Yet, in reality, outside markets are for several reasons less important for a variety of non-farm activities. This is particularly true at the early stages of development.

It has been found that sources of demand, or the market, vary considerably between different types of non-farm activities. In a recent survey it was found that though the rural sector itself was a major source of demand in general, there were several activities for which tourists constituted a significant source of demand (see Table 7). For certain other activities, inter-industry demand was important (ILO/ARTEP, 1987); this tends to underscore the importance of mutually reinforcing concurrent growth of certain activities in inducing non-farm investment. Though an improvement in agricultural incomes will in general have a favourable effect on such investment, certain types of activities will grow only if export markets expand or the tourist industry recovers, while the growth of certain other activities is dependent on the strength of demand generated by some other small-scale non-farm enterprises within the rural sector itself.

The heavy reliance of rural non-farm activities on the farm sector also points to a major constraint on their financing. This is the high volatility of demand for non-farm goods and services. In a preceding section it was shown that increases in agricultural incomes, with the exception of the paddy sector, are influenced largely by price increases rather than productivity improvements. So, price declines invariably tend to depress agricultural incomes and thereby the demand for non-farm goods and services, which in turn creates problems for the investors in such activities.[1] The high risk resulting from the unstable demand increases the difficulties in obtaining finance as well as its cost. It also discourages investments in such activities. This has considerable implications for strategies to promote non-farm investment.

The greater availability of capital also has an important bearing on non-farm investment in the rural sector. A general observation regarding the financing of non-farm activities in Sri Lanka as well as other developing countries has been that lack of institutional finance acts as a serious constraint on their establishment and development (ESCAP, 1986 : 67; ILO/ARTEP, 1987). Available evidence indicates that many non-farm rural enterprises depend largely on self-finance and loans from relatives and friends (ILO/ARTEP, 1987 : 84-85; Senanayake and Fernando, 1985). As evident from data presented in Table 8, institutional finance plays only a very small role at present in non-farm activities. The agricultural sector can be seen to play a twin role therefore, in the promotion of non-farm activities, generating demand for non-farm goods and services, as stated earlier, and making funds available for investment in these activities. In fact, the extent of reliance on self-finance and loans from friends and relatives indicates the investors' poor access to institutional finance rather than a preference for non-formal sources. This is confirmed by the fact that as many as 86% of the rural enterprises covered by a recent survey identified that lack of capital or lack of access to credit had been a major constraint in the setting-up of enterprises (ILO/ARTEP, 1987: 83).

A related problem is the high cost of loan funds in the informal sector. Since many potential investors have very poor access to formal sources of finance, there seems to be very little competition between informal and formal sources in the financial market, as far as financing non-farm activities is concerned. Coupled with the high risk of certain non-farm activities, this tends to push up the price of loan funds in the informal market. As a result, many potential investors fail to exploit investment opportunities in this area.

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1. Meyer (1983 : 115) emphasized this point : "The success of small-scale non-farm enterprises may be inextricably tied to the fortunes of farming : when harvests are good, farmers have income with which to pay old bills and contract for new goods and services, but when yields or prices are poor, so is the market for non-farm firms."

Table 7.

SOURCES OF DEMAND FOR PRODUCTS OF RURAL INDUSTRIES

(Percentages)

Activities	*House-holds*	*Small Non-agri-cultural Enter-prises*	*Farmers*	*Govern-ment Offices*	*Large Enter-prises*	*Tourists*	*Don't know*	*Total*
Food processing	41.12	47.06	5.88	5.88	—	—	—	100.00
Plastics	36.36	27.27	—	—	9.09	27.27	—	100.00
Light engineering	43.08	23.08	27.69	—	—	—	1.54	100.00
Kandyan crafts	38.46	—	—	3.85	15.38	38.46	3.85	100.00
Furniture	60.00	20.00	20.00	—	—	—	—	100.00
Garments	40.91	18.18	4.55	—	9.09	27.27	—	100.00
Coir Products	37.21	48.84	2.33	—	11.63	—	—	100.00
Bricks	53.85	15.38	—	—	15.38	15.38	—	100.00
Leather	40.00	20.00	—	—	—	40.00	—	100.00
Chemicals	57.14	—	28.57	—	—	—	14.29	100.00
Musical instruments	28.95	2.63	—	15.79	15.79	36.84	—	100.00
Brassware	45.10	1.96	—	1.96	13.73	36.27	0.98	100.00
Others	39.19	10.81	2.70	5.40	18.92	22.97	—	100.00
All activities	41.11	15.47	6.00	3.27	11.78	21.48	0.92	100.00

Source : ILO/ARTEP (1987 : 69)

On the suppliers' side, a different set of factors prevents them from expanding finance for such activities. Among these, interest rate controls appear to be the most important. Since the major element of government strategy in the promotion of rural economic activities has been "Concessionary loans" (as in many other developing countries), formal sector lenders do not have sufficient incentives for expanding the provision of finance. They have also, to a large extent, become risk avertors. The existence of interest rate controls also leads them to use non-price mechanisms to eliminate high-risk borrowers. As a result, the flow of formal finance to non-farm activities in the rural sector tends to be minimal.

7. A STRATEGY FOR PROMOTING NON - FARM INVESTMENTS IN SRI LANKA

Since non-farm activities are, among other factors, linked to the rate and pattern of agricultural growth and the stage of development of the agricultural sector, it is difficult to outline a general strategy for increasing non-farm investment. Areas in which agriculture is not well developed may require a different strategy from other areas. It is possible, however, to indicate several broad measures which may contribute towards greater investment in non-farm activities. The major theme of the measures outlined below is that it is much more productive to improve the overall environment for non-farm investments than to focus attention on selected activities within the non-farm sector and provide direct assistance.

Measures to Improve Agricultural Productivity

Measures to improve agricultural productivity in the paddy sector, the minor food crop sector and in particular the small-holder tree crop sector would certainly have a considerable positive effect on non-farm investments. At present, non-farm activities grow only in those areas where agricultural productivity has risen substantially. The greater dynamism observed in non-farm activities in certain Mahaweli areas owes much less to the planners' interest in promoting them than to productivity increases. Without more diffused improvements in farm productivity, a strong upsurge in non-farm investments cannot be expected as the farm sector itself is the major consumer of non-farm goods and services. The growth strategy in the agricultural sector has to be as labour-intensive and capital-saving as possible. A capital-intensive strategy would increase the capital requirements of the farm sector and reduce its potential contribution towards capital transfers for non-farm activities. More productive use of inputs within the agricultural sector is likely to exert little pressure on demand for capital and will have significant growth effects. The tremendous potential available in major colonization schemes including Mahaweli areas for productivity improvements needs to be harnessed, if non-farm activities are to burgeon.

The manipulation of the internal terms of trade should not become a major plank in the strategy to raise farm incomes as it tends to be counter-productive in the long run. Nor should the terms of trade be turned against agriculture through state intervention to transfer resources from the farm sector for ambitious non-farm development programmes. Resources can be transferred on a sustainable basis only if productivity increases. Attempts to transfer resources out of the farm sector prematurely are likely to kill the goose that lays the golden eggs. The issue is not farm sector vs. non-farm sector; it is how a concurrent growth process can be stimulated and sustained in the long run.

Table 8.

DISTRIBUTION OF RURAL ENTERPRISES BY MAIN SOURCE OF WORKING CAPITAL AND FIXED CAPITAL, 1986

(Percentages)

Source of Funds	*Working Capital*	*Fixed Capital*
Own savings	51.8	33.3
Friends and relatives	8.4	2.5
Own savings and friends and relatives	14.2	2.5
Money lenders	6.2	0.5
Inheritance	—	24.7
Own savings and inheritance	—	25.3
Established credit agencies	1.8	—
Other (including combinations of the above)	17.6	2.5
Total	100.0	*a*

*a*Owing to an error in the Table in the original source the figures do not add up to 100.

Source: ILO/ARTEP (1987 : 84).

Development of Rural Infrastructure

Perhaps one of the most significant incentives the state could provide for non-farm investment is the development of broad-based infrastructure in the rural sector. It has been observed in many other developing countries that raising the extent and quality of rural infrastructure tends to strengthen growth in both the farm and non-farm sectors. Better infrastructure facilities enlarge the market for non-farm sector goods and services, reduces the risk of investments in non-farm activities and improves their rates of return. Linking rural farming areas with small towns in the rural sector itself through better roads and bridges and linking small towns with urban centres through improved roads and communication networks will have far-reaching effects on investment in non-farm activities.[1]

In the same area, greater emphasis is required on the development of educational facilities within the rural sector itself. The poor educational facilities in many remote villages keep potential investors out of them. The brain-drain from the rural to the urban sector takes potentially high quality entrepreneurs and skilled workers out of the rural sector, depressing its growth potential — particularly the non-farm sector's growth potential. It is true that in Sri Lanka migration to cities has not been a significant phenomenon. Yet, in qualitative terms, the resource flow has been considerable. It is the educated, most talented, most skilful and most innovative who have left and who will continue to leave the rural sector. Low levels of infrastructure have a considerable bearing on this outflow which has depressed investment in non-farm activities.

Changing the Rules of the Financial Game

The extensive literature on the financing of rural economic activities through formal sector credit strongly shows that in many developing countries the very same policy acts as a constraint on their promotion (Meyer, 1983). Sri Lanka's experience appears to be no different from that of many other developing countries. Successive governments have used the financial sector as an instrument of industrial policy to promote non-farm investments by providing credit at well below market prices, often at negative real rates of interest. These government interventions have led to a greater fragmentation of rural financial markets and created an environment in which formal financial institutions are discouraged from playing a dynamic role in financing rural economic activities. Non-farm enterprises vary widely in terms of risk and growth potential and regulated, inflexible interest rates keep the profit margins of lenders at substantially low levels in catering to such enterprises. As a result they tend to shun extending credit to these activities whenever possible. A greater freedom for lenders to operate in rural financial markets would be much more effective than attempts to direct capital flows through administrative measures. However, it must be noted (to avoid possible misunderstanding) that the deregulation of financial markets is not a sufficient condition for the promotion of non-farm investment.

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1. It may be useful to analyse to what extent the Integrated Rural Development Programmes financed with foreign loans have contributed to rural infrastructural development.

Annex Table 1.

LAND RENTS PAID BY TENANTS, 1966/67 MAHA

(Bushels per acre)

Zone/District	*Average yield*	*Landlord's share*	*% share of landlord*
Wet Zone			
Colombo	25.0	11.8	47
Kalutara	24.3	6.3	26
Galle	23.5	4.5	19
Matara	19.2	5.2	27
Kandy	36.6	17.6	48
Ratnapura	25.6	9.0	35
Kegalle	35.8	16.8	47
Nuwara Eliya	31.1	14.6	47
Badulla	47.9	22.0	46
Dry Zone			
Amparai	30.5	No record	—
Anuradhapura	38.3	18.4	48
Batticaloa	27.2	No record	—
Hambantota	44.1	11.9	27
Jaffna	21.9	11.8	54
Kurunegala	31.4	13.2	42
Mannar	40.3	—	Not reported
Matale	34.8	17.4	50
Moneragala	37.1	—	No record
Polonnaruwa	48.9	24.4	50
Puttalam	27.0	10.0	37
Trincomalee	32.4	5.8	18
Vavuniya	40.8	9.0	22

Source : Computed on the basis of data in (Central Bank, 1969).

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