

The Relevance of Export Performance as the Priority Indicator of Development Effort For Sri Lanka

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An approach towards a Comprehensive Ratio for Export Promotion

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Introduction

In Economic literature, inadequate attention has been given to the analysis of the indicators of the development effort of countries, let alone the analysis of the most relevant indicators of efforts of individual countries, taking into account their peculiarities. The preoccupation of economists in identifying appropriate indexes to capture various aspects of the multi-dimensional development process has in effect, pushed the discussion on the development effort indicators, to the background of development economics.¹

However, for developing countries such as Sri Lanka, there is a continuing need for demarcating the most appropriate development effort indicators for a number of reasons. Among them are, the urgency to identify a suitable development effort indicator, which would represent the highest number of development variables and the need to have a guideline development measurement indicator to shift the development process periodically, to priority areas. It is also necessary for policy-makers and the public to identify a priority development effort indicator that is consistent with the country's long-term development objectives and the pressures resulting from research. Additionally, policy-makers need to identify an appropriate development effort index for international comparisons.

In Sri Lanka's case two specific developments in recent times have enhanced the validity of identifying the most appropriate indicator of development effort. Firstly, the recent concern of the political leadership for the alleviation of mass poverty calls for the use of an appropriate development indicator

to sustain development endeavours directed at achieving this objective. Secondly, the all-out "war" effort called for by the first National Export Development Plan for export promotion 2 and objectives of the second National Export Development Plan could only be realised by making available relevant development indicators.

On the other hand, the validity of an appropriate development effort indicator for any given country depends on the positive contribution exerted by the level of effort registered by that indicator to the macro policy variables in the economy and the specific importance of these variables to that country.

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The foregoing is the context in which the argument is presented that among the universally-accepted development effort indicators (UNCTAD 1970), export performance is the most relevant effort indicator for Sri Lanka in a consideration of other development effort indicators and macro policy variables. It is sought to prove that export performance plays a pivotal role in any examination of the efforts reflected in the other generally accepted partial indicators of efforts and macro policy variables in the country. This follows from a brief analysis of the global and country specific in-

dicators and macro policy variables. The approach adopted here could also be interpreted as an attempt to spell out a comprehensive rationale for export development in the country.

The discussion is organised in the following manner:

Section I analyses the cardinal role played by export performance for the success of generally recognised partial indicators of development efforts identified by UNCTAD (UNCTAD 1970), namely, the growth of agriculture, investment and savings, the efficiency of investments, mobilization of tax revenue and population policy.

Section II seeks to prove the importance of export performance by showing its importance in relation to the macro policy variables i. e. growth of national production/income, employment generation, solving the balance of payments problems, curbing inflation and reducing unequal distribution of income (among the population).

Section III seeks to justify the application of export performance as a measure of the development effort by showing the other country-specific reasons for the acceptance of this indicator.

In the last section, the findings of the earlier sections are summarised and the article concludes indicating that certain conditions are necessary for the successful application of this indicator to measure the development effort.

1. For a discussion on development measurement indexes see Justin Dias, "Development: Definitions and Measurements A Review" (Central Bank Staff Studies, Vol. 7, No.1)
2. Lack of the participatory approach has been identified as a major reason for the failure of the first Export Development Plan. (See Lloyd Fernando, 1985, "Planning and Structural Adjustment" - a paper presented to the Sri Lanka Association of Economists.)

The discussion in section II, however, is not based on an analysis of the comparative merits and demerits of the various partial indicators of the effort, as all these indicators necessarily show a specific measurement of development, which cannot be represented by other indicators. Therefore, the analysis concedes the importance of these effort indicators for the development process. However, a major limitation of the analysis is that, despite its proof of the relevance of export performance as a development effort indicator, it is not able to show that this indicator exclusively reflects the results of the internal effort at export development. It is commonly known that the success of export development also depends on exogenous factors such as world market conditions. However, it has to be said that every effort indicator is influenced by fortuitous elements of external origin, and the issue of how to relate "success" to effort remains an unsolved problem, in economic literature.

Significance of the Growth of Agriculture as an Effort Indicator

"The growth of agriculture" has been recognised as a development effort indicator owing to its central role in determining the rate of growth in the rest of the economy. It is argued that the marketable surplus of the agricultural sector is needed, inter alia, for the survival of the other sectors, which otherwise would exert pressure on the balance of payments. Moreover, it is the marketable surplus of this sector that determines the volume and rate of demand of that sector for the industrial products, and provides a market for manufacturing products in the pre-export stage. (UNCTAD 1970). In Sri Lanka's case, the large size of the agricultural sector itself, determines the growth of the rest of the economy.

Growth of Agriculture and Export Performance

The contribution of agriculture to GNP in recent times has been about a quarter of the total. However, as seen in the following table,

traditional export crops alone account for about one-fourth to one-third of the value of agriculture.

If one considers the contribution of minor export crops, which is not included in the above table, the value of export agricultural crops is higher. Hence, considering the size alone, one can conclude that increased export performance can have a detrimental impact on the growth of the agricultural sector. The real value of the cash crops' contribution to the economy is more than the value of these figures owing to cash crop generated foreign exchange ability to create multiple spread effects on the economy, inter alia, by increasing aggregate demand in the economy.

Additionally, the growth of agriculture is also linked to the export performance of the country owing to the dependence of the agriculture sector production on imported inputs and machinery. One can discuss this dependence in relation to the country's food crop sector and export tree crop sector separately.

characterised by the low income of agricultural output per unit of labour, and its inability to supply cheap wage goods to other sectors. (Senanayake, 1988). A major breakthrough in optimizing the performance of the sector could, in the main, come through increasing its major crop sector's (paddy) yield from its present level of around 30 tons per hectare. ³ (ARTEP 1986).

However, the past experience of the paddy sector clearly shows that its higher performance was connected with the "package of material inputs, mostly imported, essential for the better performance of HYV" (High Yielding Varieties variation) (Hewawitharana 1981-p22). For example, owing to the use of this package between 1966 and 1970, the average annual rate of growth of paddy yield increased to 12.6%. The following table compares growth rates of output and yield during the period 1966-1970, with that of the earlier periods.

Among the imported inputs, fertilizer has a direct effect in increasing production

Table 2

Performance in the Paddy Sub-Sector, 1952-1970 (Rates of Growth)

	Period 1952-1960	Period 1961-1970	Period 1966-1970
Yield	2.1	3.0	12.6
Output	5.0	5.0	12.6

Source: Hewawitharana 1981, Central Bank Annual Reviews.

NOTE: Growth rates represent average annual rates.

Food Crop Sector - Its Dependence on Imported Material/Machinery

Although the food sector provides well over 35% of the GDP, and in recent times, has emerged as the most dynamic sector after having been stagnant for a long time, it has performed between one-third to half of its capacity so far (ARTEP 1986). This sector is also engulfed in a "Ricardian trap", which is

(Ranaweera 1983). It is pertinent to mention here that despite the clear possibility of using organic manure, the country's major thrust in increasing paddy yields since the fifties, has relied on the use of imported chemical fertilizer. (ARTEP 1986). In recent times, the use of imported fertilizer increased progressively from 123,000 metric tons in 1977 to 262,000 metric tons in 1988 (Public Investment 1988-P.39). Hence, there is a clear need to maintain or increase imported chemicals for this sector. Despite the controversy on the economies of using tractors, it was shown that mechanization of paddy in the Dry Zone is essential to increase the output of that Zone (Sirisena 1976 - P.218). Even in recent times, imported fertilizer, agro-chemicals and machinery accounted for 70-77% of the cost of production paddy. (See ARTI 1974). Therefore, given the present policies, it is clear that the imported package of materials is indispensable for the increased production of paddy.

In addition to paddy, imported fertilizer will also play a key role in increasing the per hectare yield in the subsidiary food crops sector, which has remained considerably below potential, registering a decline in per

Table 1

Traditional Export Crops' Contribution to Agriculture

Year	1982	1983	1984	1985	1986	1987	1988
Value of Agriculture in GNP (Rs Mn)	20,771	27,110	35,051	35,599	37,889	40,579	45,557
Value of the Traditional export crop sector (Rs Mn)	6,451	8,506	11,483	9,775	8,074	10,579	13,118
Traditional export crop contribution as %	31	31.3	32.7	27.4	21.3	26.01	28.7

Source: Annual Report of the Central Bank, 1988.

3. This breakthrough is important as paddy cultivation accounts for about three-fourths of the annual crop area harvested, and provides over 50% of the per capita calorie needs of the people in addition to being an important source of employment. (Public Investment 1989 - Page 36)

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capita yield in some crops in recent years. (ARTEP 1984 op cit and CB 1986, 1987 & 1988). Hence the country has to make available a certain amount of foreign exchange for imported inputs to maintain and increase the production level of the food crop sector in the foreseeable future.

Tree Crop Sector and Its Dependence on Imported Inputs

The dependence of the tree crop sector on imported material is crucial, in that these inputs have helped to arrest the decline of output, which has been identified as a major characteristic of this sector over the decades (Fernando N. A. 1988). Tea production exceeded the 1967 level only in 1988.

Rubber production has more or less progressively declined from the level of 159.2 mtr. kg in 1970 to 122.4 mtr. kg in 1988. Coconut output has stagnated around 2,500 m nuts since the sixties. However, as the major research studies on this sector have repeatedly pointed out, it is primarily by increasing the productivity of the land that there could be any significant increase of crop production (Fernando, Ibid and Public Investment 1988). Therefore, imported fertilizer is essential for this task. In the early seventies, it was shown that increased fertilizer use could increase the productivity of tea, rubber, and coconut by 50%, 40% and 75% respectively (Richard et al 1971). The past association between fertilizer application and higher productivity in this sector also clearly shows that the continued increase of productivity in the future as well would depend on the increased use of imported fertilizer. It has to be mentioned that increased yields would also mean increased foreign exchange earnings because 85-90% of tea, 80-85% of rubber and 25-30% of coconut production is exported (Fernando 1988). Therefore, given the present policies in the agriculture sector, there is a clear need to depend on the package of imported inputs and machinery at least in the short run to step up production. However, this dependence could be sustained only if there is sufficient foreign exchange released from the export sector. The agriculture sector's dependence would further increase, pari passu, with the increased prices of imports. Increases in the prices of fertilizer, agro-chemicals and farm machinery by about 4% a year in the 1990s have been forecast by food and agriculture researchers and the Economic Forecasting Association of the US. This fact calls for a greater effort to generate foreign exchange from exports.

There is another compelling reason to maintain the present levels of imported materials for the food crop sector at least in the short run. This is the sector's ability to bridge the food deficit directly, and thereby save a substantial amount of foreign exchange now being

spent on the import substitutable foods, by using the imported materials package to increase production in the short run. In the past, the annual increase of food demand was about 4% and was sustained by resorting to food aid and cereal imports (Senanayake 1984 op cit). Table 3 shows the potential for foreign exchange savings by import substitution of food.

Thus, it is reasonable to conclude that export performance will play a pivotal role in the sustenance of agricultural growth as a development indicator owing to the major contribution of the cash crop sub-sector in the agriculture sector performance. The foreign exchange earned by cash crop sub-sector has a direct bearing on the performance of other agricultural sub-sectors through imported inputs and machinery, and the availability of import food substitution potential in the country.

successful functioning of this indicator owing to the capacity of export earnings to finance savings and foreign exchange gaps in the country.

Savings and Export Sector Performance

The existence of the saving gap is a conspicuous feature of the economy of Sri Lanka. The ambitious targets set in past development plans, for increasing domestic savings ratios were a failure. For example, although the Ten-Year Plan aimed at 21.4% domestic saving ratio, the actual domestic savings recorded in the last year of the Plan was 15.4% (Hewawitharana, 1980). Even in the most recent years, an average of 45% of the country's investments were financed by foreign resources owing to the shortage of local savings. The relevant figures are given below:

Thus, given the persistent savings gap there

Table 3
Foreign Exchange Cost of Some of the Import Substitutable Agricultural Products

	1982	1983	1984	1985	1986	1987	1988
1. Rice	589.2	919.3	153.8	923.1	976.0	486.1	1,677.3
2. Flour	58.8	104.7	24.9	202.9	67.9	93.3	302.0
3. Wheat & Maize	1,316.0	1,623.3	1,835.3	2,894.3	2,003.7	1,410.3	2,914.5
4. Chillies	58.3	163.3	235.1	116.1	97.8	66.2	386.2
5. Potatoes	-	5.7	1.5	-	-	-	0.3
6. Onions	37.0	48.5	207.0	354.1	324.3	301.2	66.7
Total Imports			46913.3	49068.5	51281.5	59749.7	70320.4
7. 1-5 as % of 7			10.70	9.15	6.80	3.97	7.64

Source: Annual Trade Statistics of Sri Lanka - Department of Commerce various issues.

Significance of Increased Investments and Savings as a Developmental Effort Indicator

Orthodox theories identify capital as the main factor of economic development and there has been general acceptance of the Keynesian identifies of $S = I$ over the years. Consequently it is held that in developing countries capital investments are a major factor of growth (UNCTAD 1970). Therefore, investment/savings can be considered as yet another indicator of the development of a country. In Sri Lanka this indicator assumes special significance owing to the relative scarcity of capital (Sirisena, 1977), employment of the Harrod-Doma model which assumes a constant relationship between capital stock and the level of output in planning exercises, and the ambitious capital development projects in the recent past (Wijesinghe, 1986). However, satisfactory export performance has become essential to maintain higher levels of savings/investments needed for the

is a need to fill it by a substantial savings flow. The export sector being the highest foreign-exchange earner right throughout, it is export earnings that have the greater potential to fill the savings gap and generate the required savings than any other source. In fact, national savings are extremely sensitive to fluctuations of export earnings. (Public Investment, 1989). The significance of this close relationship between national savings, export performance and the need to augment savings from exports arises from a number of limitations in the variables of the savings function in expanding savings. Therefore, a brief analysis is warranted on the nature of these limitations. For this purpose, one could treat Private Disposable Income, Government Savings, Marginal Propensity to save among the Community Inflation and Interest Rates as the main variables of the saving functions other than export earnings. (See Rasaputhram 1974, Hettiarachchi 1970; Sanderatne 1984, Jayatilake 1982, Jayamaha 1976, Hewawitharana 1981 and Kegalle 1977).

4. However, the regression study results on the nature of the relationship between growth and investment are not yet conclusive. (See Casan, 1988).

(To be continued in the next issue)