GUARANTEED WORK FOR ESTATE LABOUR FORCE: IMPLICATIONS ON RUBBER ECONOMY

I N Samarappuli

A proposal has been made to provide 300 days of guaranteed work for all estate workers. Implementation of this particular policy may have various implications, *viz* social, political and economic, on the plantation sector. This paper attempts to investigate the economic implications of the above proposal on the rubber sector, in particular.

1. Background

Tea, rubber and coconut still form the inner core of the nation's economy particularly in terms of foreign exchange earnings, gross domestic product, employment generation and income distribution. However, Sri Lanka's plantation sector received a severe setback after nationalization in 1975. The poor performance in tree crops has been attributed to a number of factors including price distortions, inappropriate levels of taxation and subsidies and political interference in wage determination for the estate sector. The dominant reason, however has been the mismanagement of the two large state owned plantation corporations, the Janatha Estate Development Board (JEDB) and the Sri Lanka State Plantations Corporation (SLSPC) which were responsible for more than half of the nation's area of tea and one-third of its rubber hectarage (Asian Development Bank and GOSL, 1993a). By the year 1992, the cost to the state to pay the wages of workers and other connected expenses in running the two corporations accounted to Rs.400 million (Mn) a month in terms of treasury guaranteed loans from the State banks. One of the major structural changes effected during the year 1992 was the privatization of the management of tea, rubber and coconut plantations managed by the JEDB and SLSPC.

The prime objectives of privatization of the management were to increase productivity, improve quality and minimize overheads in order to facilitate the plantation sector to operate as a financially viable enterprise on its own. Hence, the management of 449 state owned estates was transferred to 22 managing companies (MCs) in June 1992. At the time of restructuring the plantation in June 1992, state had to take over the debts incurred by the state from two corporations amounted to a astonishing 13 billion rupees. In July 1993, 10 more estates which were considered to be non-viable, were also taken over by another MC. The balance of 43 estates continues under the administration of the JEDB and SLSPC. From January-June 1992, the JEDB and SLSPC registered a loss of Rs.1 700 Mn. However, during the same period in 1993, the combined loss of the JEDB and SLSPC as well as the MCs was only Rs.700 Mn of which the share of SLSPC and JEDB was 165 Mn. According to the latest figures for year 1993, the MCs have recorded a loss of only Rs.1300 Mn when compared to the monthly loss of Rs.400 Mn (Rs.4 800 Mn per year) registered by SLSPC and JEDB at the time of privatization. This substantial decrease in losses was achieved while bearing the burden of unexpected wage increase (30%), adverse whether conditions and unfavorable commodity prices all of which had a direct impact on the profit/loss equation.

The long-term existence of any business enterprise depends on its profit/loss equation; where the Net Sales Average (NSA) has to be greater than or equal to Cost of Production (COP), for its to be viable. Hence, viability of the plantation sector too, rests on these two vital factors, COP and NSA. Table 1 shows the heavy losses incurred by SLSPC and JEDB during the period 1989-1991. While the figures for rubber margins shown in Table 1 were foi the JEDB and SLSPC, the situation has changed a little with the privatization of management of the estates. The MCs have slashed COPs for non-labour costs but the effect of wage increases have eliminated any profit margin. Under the present price squeeze for tea and rubber, it is unlikely that MCs can generate profits, in the near future. Regardless of how attractive long-term benefits are made, there is little incentive for the MCs to either manage or own unless the profitability situation can be reversed. Yet, most MCs have been able to minimize their losses and two MCs have already shown profits during 1993 for which a separate study would be of immense value.

If the Sri Lankan rubber industry is to make headway to achieve a long-term stability, the pluses and vagaries this gigantic industry encompasses particularly the labour component which comprises the largest portion of the COP must come under microscopic scrutiny. Furthermore, bold and far-sighted policies must be implemented, if this industry is to survive into many more decades.

2. The Labour Constraint

There are nearly 400,000 workers (Asian Development Bank and GOSL, 1993b), almost 10% of the Sri Lankan labour force on the rolls of the 22 MCs. The plantation economy is therefore highly labour intensive. Moreover, approximately 70% of the COP consists of labour, both direct and indirect (Table 2). Hence, the single most important issue where the viability of the plantation sector is concerned, depends on the efficient management of its massive labour force. Yet, the MCs are already trapped with many constraints pertaining to the management of this vital input, for instance, surplus of labour, immobility of labour, low productivity of labour, high wage rates and the latest issue; to provide 300 days of guaranteed work for all estate workers.

Table 1. *SLSPC and JEDB : Rubber Margins at Corporate Level (1989 – 91)*

(Rs/kg)

Year	SLSPC			JEDB		
	C.O.P	N.S.A	Margin (loss)	C.O.P.	N.S.A.	Margin (loss)
1989	27.31	24.87	–2.44	29.95	26.11	–3.84
1990	28.58	25.29	–3.29	29.38	26.04	–3.34
1991	29.62	23.85	–5.77	30.11	25.37	–4.74

Table 2. *SLSPC : Rubber – Breakdown of COP (1991)*

	Item	Rs/kg	%
01.	Direct cost of labour	17.46	58.9
02.	Staff salaries	1.32	4.5
03.	Energy	1.30	4.4
04.	Fertilizer	1.05	3.5
05.	Packing materials	0.25	0.8
06.	Transport	1.12	3.8
07.	Management fees	1.61	5.4
08.	Interest on loans	0.56	1.9
09.	Depreciation	1.65	5.6
10.	Others*	3.30	11.2
	Total	**29.62**	**100.0**

* includes cost of bought latex, Agricultural advisors fees, cost of materials, motor road maintenance, telephones, postages and stationary, commission on cash and cheques, audit expenses, cost of tools, cost of contingencies.

Source : JEDB and SLSPC

2.1 Surplus Labour

An important factor affecting the cost of labour in many MCs is the presence of excess labour which was inherited with the transfer of management from JEDB and SLSPC to the MCs. The actual distribution patterns of man power, extent cultivated and land : labour ratios in the plantation sector are shown in Table 3. The figures in Table 3 shows that the overall labour: land ratio prevails in the plantation sector is 2.01.

Table 3. *Distribution of Man Power, Extent Cultivated and Land : Labour Ratio at Estate Level (1991)*

	JEDB	SLSPC	TOTAL
Land Extent Cultivated (hectares)			
Tea	56908	49684	106,592
Rubber	24925	34830	59,755
Coconut	11523	5606	17,129
Total	**93356**	**90119**	**183,476**
Total Man Power			
Staff	11091	10000	21,091
Labour force	192886	175572	368,458
Total	**203977**	**185572**	**389,549**
Average Man Power Per Estate			
Staff	42	42	42
Labour	733	732	732.5
Total	**774**	**775**	**774.5**
Land:Labour Ratio	**2.07**	**1.95**	**2.01**

Source : SLSPC and JEDB

The agronomically and economically accepted land: labour ratios for major plantation crops are given in Table 4. It is evident that one hectare of rubber land can be managed by 0.75 labour units. The corresponding rates for Tea and Coconut are 2.25 and 0.25 respectively. Therefore, if we consider the entire plantation sector as a unit (consisting of tea, rubber and coconut estates) the weighted land: labour ratio falls in the region of 1.57. Hence, it can be stated that the total labour force required to manage the entire plantation sector should not exceed 1.57 times of the cultivated hectarage. However, the existing labour land ratio of 2.01 is much higher than the estimated figure of 1.57. This signifies the fact that the plantation sector is having close to 28% of excess labour. The consequences of operating the estates with excess labour are needless to be explained.

Table 4. *Economically Accepted Land:Labour Ratios by Plantation Crops (Labour/hectare)*

Crop	Accepted Ratio
Tea	2.25
Rubber	0.75
Coconut	0.25

According to a communique issued by the Planters' Association, the excess labour situation in the plantations is rapidly reaching crisis proportions, a situation where the existing labour and natural increase cannot be fully absorbed by the plantation monoculture. As a result, productivity norms are by necessity lower for the Sri Lankan estate sector than in competing countries (Table 5). Modern technology, specially in processing, tends to be greater capital intensive which is to the detriment of labour requirements. Therefore, in cases of existing labour surplus, the problem may be exacerbated with advances in technology. While such advances may lead to higher production and improved profitability, the introduction of advanced technology results in the need to find solutions for an ever increasing labour surplus.

The problem of having excess labour on estates will further aggravate the situation under decreasing yield trends as shown in Table 6. For instance, the average yields of JEDB estates has fallen from 1057 kg in 1980 to 890 in 1991. There is obviously an excess of labour; as productivity declines more labour becomes redundant.

Table 5. *Comparison of Sri Lankan and International Norms of Labour Productivity (workers/ha)*

Country	Tea	Rubber
Sri Lanka (estates)	3.2	0.90
North India	2.5	–
South India	2.7	0.75
Kenya	2.2	–
Indonesia	2.5	0.60
Malaysia (sabah)	2.4	0.55

Table 6. *JEDB and SLSPC : Total Rubber Production and Average yield (1980–91)*

Year	JEDB		SLSPC	
	Production (Mn.Kgs)	Ave.yield (Kg/ha)	Production (Mn.Kgs)	Ave.Yield Kg/ha
1980	22.8	1057	27.7	951
81	22.1	1128	28.0	1015
82	18.6	1117	23.3	965
83	18.2	1107	22.7	937
84	21.3	1179	25.2	993
85	18.9	1076	22.1	879
86	18.7	1064	23.3	936
87	17.5	1030	22.1	887
88	17.9	1039	22.1	894
89	15.1	872	19.4	784
90	17.1	998	22.0	894
91	16.1	890	21.1	855

Source: JEDB & SLSPC

2.2 Immobility of Labour

Many of the MCs have both labour surplus and deficit situations within and among their estates. The efficient management of the estate sector is hindered by the lack of mobility and prevention of induced mobility of labour between surplus and deficit labour areas. This fact is often ethnically justified although it appears much to do with preservation of political power bases. None of the MCs had success in moving labour within divisions, let alone among their various estates due to prevalent labour regulations.

Surplus labour in some estates and shortage in others, increases COP. In deficit areas additional costs arrived with overtime wages while in surplus areas labourers are paid to be idle. In deficit areas, the problem can be exacerbated when there is a low average out-turn of registered workers, in some cases as low as 60-70%. Generally, the low out-turn tends to occur during peak yielding periods when private surrounding holdings are also demanding the attention of the workers. This factor is related to an inherent lack of discipline which results from management's inability to enforce dedication by threat of termination[1].

2.3 High Wage Rates

Labour costs have risen significantly over the years due to both wage and non-wage factors. Much of the rise has been politically motivated and bears little, if any, relationship to either inflation or productivity growth. The average nominal growth rate of labour wages between 1982-1992 was 23%, whereas inflation averaged 12.7% over the same period. Since 1990, the rise in labour costs has been even more pronounced culminating with the mandated increase of Rs.20 per day provided for plantation workers in January 1993. The Table 7 shows the composition and increases in wages and labour costs since 1991.

As mentioned above, the decision for a wage increase was politically mandated essentially ignoring the authority of the Wages Board on these instances. It is essential that in future, the Government of Sri Lanka (GOSL) must refrain from mandating labour remunerations and allow the process of collective bargaining between labour and management to determine wage and benefit contracts. Unless such a procedure is adopted, there is very little hope for MCs to extract labour's

---

[1] The termination of employees act of 1977 requires employees to obtain permission either from affected worker or the Labour Department before a dismissal can be effect.

commitment to improve productivity to the standard prevailing in the private sector and necessary for international competitiveness.

Table 7. *Estate Labour Wages (Rs/day) 1991–1993*

Salary Component	1991	1992	Jan. 1993
Basic daily wage	33.00	33.00	45.00
Cost of living allowance	19.24	27.24	27.24
Total earnings (per day)	52.24	60.24	72.24
EPF (12% of daily earnings)	6.27	7.23	8.67
ETF (3% of daily earnings)	1.57	1.81	2.17
Total Labour Cost (per day)	60.08	69.28	83.08

2.4 Low productivity of Labour

Despite recent wage increases, the estate labour wage is still lower than most of the countries which Sri Lanka compete for a share of the international tea and rubber markets. However, of great concern is the low productivity of Sri Lankan estate workers. Work norms which were previously determined in conjunction with the trade unions are unacceptably low resulting in high labour costs. For example the average intake per tapper is merely 3–4 kilos per day in Sri Lanka whereas the international figure lies well over 10 kilos per tapper.

Many experts in the Rubber Sector say that during the period of management of estates by the State agencies, norms of work were arbitrarily reduced. For instance a rubber tapper finished his assignment by noon. Workers engaged in manuring and cutting holes to replant rubber were frequently back in their line rooms before noon after the day's task. Thus, while wages were paid on the basis of 8 hours of work per day, the actual output of work was very much less.

Low yields, coupled with these comparatively low work norms, have resulted in Sri Lanka's COP in both tea and rubber being amongst the highest of its major competitors. The low average daily out-turn of Sri Lankan tappers and high labour days allocated per hectare by international standards have a significant bearing on COP and the whole estate sector in general. A comparison of COPs in relation to wage rates as at 1990 is shown in Table 8. In spite of the much higher wage rate (nearly 5 times that of Sri Lanka), the Malaysian COP was only slightly higher than that of the Sri Lankan estate sector. With the rise in Sri Lankan wages over the past two years the current situation is surely reversed.

Table 8. *Rubber Estate Sector COP and Wage Rate Structure by Different Countries (1990)*

Country	COP ($/MT)	COP Index	Wage rate ($)
Malaysia	837	110	6.26
Indonesia	466	61	1.09
Sri Lanka	764	100	1.30
Cote d'Ivoire	920	120	2.63
Nigeria	466	61	-
Zaire	563	76	-

Source : World Bank

3. The Proposed 300 Days Scheme

Let's now consider the issue of providing 300 days of guaranteed work for every single estate worker within the above context of excess labour, immobility of labour, low productivity of labour and high wage rates, all of which have resulted in high level of COP; greater than the NSA. This particular phenomenon implies that the MCs are obliged to offer 300 days of guaranteed work even if an estate has excess labour and making losses, and there by have to keep-on increasing its losses by employing more and more of excess labour. The contents of this remaining sections have therefore been arranged in the following manner. It begins with a brief historical evidence pertaining to the issue of providing guaranteed work. Secondly an attempt has been made to compare the utilization of labour resource between different sectors of the economy in terms of man hours per month. Finally the study analyses its implications on the rubber sector in particular.

3.1 Historical Evidence

Inability to provide work throughout the year in the agricultural sector is not a new problem. Even in the past industrial courts have accepted that work offered must fluctuate according to management needs. Moreover, a 300 day scheme would imply a standard salary and this sort of procedure is not visible in any other agricultural country.

It is worth mentioning that when the late Dr Colvin R de Silva was the Minister of Plantation Industries he introduced a law, which guaranteed 108 days of work in a period of six months. But, after sometime, he repealed this as he found it to be impracticable. An intellectual giant of the calibre of Dr de Silva did so, not because he did not have the interest of the workers, but because he realized it was not workable. He correctly considered the welfare of his country as a whole is more important than that of a certain section only.

3.2 A Comparison of Working Hours per Month in Different Sectors

The average monthly hours of work provided by certain sectors of the economy for months of March and September during 1987–1990 is given in Table 9. The average working days given by the Rubber growing and manufacturing sector appear to be relatively higher when compared to other agricultural sectors, *viz* Tea, Coconut and Paddy hulling trade. It is also evident that the employment provided by the rubber sector is much higher than some of the industrial sectors in the economy such as hotel and textile trade.

3.3 Implications

Providing 300 days work regardless of its demand may have serious implications on the rubber economy. For convenience, these implications have been explained in the following manner, *ie* implications linked with weather and seasonality factor, implications on; financial viability, economic efficiency, competitiveness in the world market, tea sector and the society.

3.3.1 Weather and Seasonality Factor

Plantation activities are generally affected by the weather and work cannot proceed if the weather conditions are adverse. As far as rubber in concerned tapping cost consists of nearly 70 percent of the total labour cost. During rainy periods, tapping can't be undertaken in rubber plantations, which means no employment for 70 percent of the labour force. Therefore, due to vagaries of climatic conditions such as spells of inconsistent rains in rubber areas, as there is no tapping possible, it is common sense that workers cannot be provided with work every day. Otherwise, workers have to be paid regardless of their efforts. Obviously this is a crucial factor bearing heavily on productivity and COP on the estates.

Table 9. *Average Monthly Hours Worked by Different Sectors of the Economy (1987 – 90)*

Sector	1987		1988		1989		1990		Average
	March	Sept	March	Sept	March	Sept.	March	Sept	
Tea Growing Manufacturing									
Male	185	181	198	172	183	154	195	176	181
Female	199	185	205	181	178	156	187	178	177
Rubber Growing & Manufacturing									
Male	213	217	197	185	202	151	202	174	193
Female	203	202	180	182	202	156	205	N.A.	190
Coconut Growing Male	183	204	196	197	162	182	183	189	187
Female	175	195	174	192	146	172	185	173	170
Paddy Hulling Trade									
Male	136	187	135	154	164	163	177	177	162
Female	156	152	174	141	200	189	182	235	179
Hotel Trade Male	138	206	206	N.A.	N.A.	N.A.	N.A.	N.A.	183
Female	133	211	205	N.A.	N.A.	N.A.	N.A.	N.A.	183
Garment Manufacturing Trade (Grade 1A)	177	184	198	202	N.A.	N.A.	251	197	202
Textile Trade (Grade 1)	207	198	197	220	205	221	213	206	185

N.A. : Not Available.
Source : Statistical Abstract of the Democratic Republic of Sri Lanka - 1992. Department of Census and Statistics

Plantation work is also seasonal and it is not possible to provide work uniformly throughout the year. This rule may lead to over-plucking of tea and over-tapping of rubber. As a matter of fact, the general experience of the Superintendents had been the high incidence of absenteeism, when there was work in the estates which coincides with religious festivals and cultivation work in private holdings. This underlines the fact that although there is excess labour during unproductive rainy periods, a seasonal shortage of labour is evident particularly during high yielding months.

3.3.2 Financial viability

Presently the privately managed companies operate at a loss and are funded by commercial banks. How long this funding will be possible, has to be taken into account. It has also been estimated that the state and company managed estates require at least Rs.1 500 Mn annually as investment capital. The operational capital can be as high as Rs.1 000 Mn a year. Since a long-term capital market has not been developed in Sri Lanka, it is impossible to profitably invest in plantation crops at interest rates which are as high as 22% when the initial income from a newly planted field takes 4–6 years from the date of planting. Hence, the amount burrowed will at least be doubled by the time the first produce is harvested and loan repayment commences. Therefore, MCs would confront with severe financial difficulties if they were compelled to provide guaranteed work of 300 days particularly in the process of trying to make the estates economically viable.

3.3.3 Economic Efficiency and Allocation of Resources

Latest statistics show that the MCs have made a some what remarkable improvement in the plantation sector and have minimized losses to a great extent. Yet, the economic theory clearly postulates that economic efficiency cannot be achieved if resources are not allocated in optimal manner according to the needs of the firm. It is therefore evident that the MCs should have the freedom to allocate its resources appropriately, the labour input in particular to maximize the net revenues, *ie* the economic optimal cannot be achieved if the allocation of labour, the most vital input in the plantation sector, stays beyond the direct control of the management concerned.

3.3.4 Competitiveness in the World Market

It is apparent that the ability to influence the rubber prices in the world market is fairly remote largely due to two reasons. *ie* the smaller market share and competition from synthetic substitutes. It can therefore be argued that the future of Sri

Lanka's export raw rubber industry lies not only in price, but to a great extent in her productivity and COP.

The MCs are all market oriented in their output. Hence, executives of plantation MCs have made a plea to the authorities not use the plantation industry merely to create jobs and increase wages. It has to be kept in mind that the MCs should not be taken on the heritage of employment to satisfy political needs instead of long-term economic goals. Otherwise Sri Lanka may become uncompetitive in the world market and thereby could create adverse consequences on the entire plantation industry.

3.3.5 Impact on the Tea Sector

Sri Lanka is the only tea producing country in the world where COP is higher than selling price. The state sector which comprises around 50 percent of Sri Lanka's tea hectarage (now managed by new companies) is the main offender in this regard. The COP of this sector for 1993 was Rs.68-70 per kilo whereas the country's NSA for the year was Rs.68.80. In 1992 the COP and NSA were Rs.68/= and Rs.62/= respectively. Thus the tea plantations operated at a loss of Rs.6 per kilo in 1992 when the wages of a tea plantation worker was Rs.60/= per day.

Similar to rubber, 70% of the labour in tea industry too, absorbs into harvesting activities. Considering the recent trends of decreasing tea prices and increasing COP levels largely due to higher wages, the financial situation in the tea sector would have further deteriorated. Hence, the implications of providing 300 days of work is obvious.

3.3.6 Social Implications

Apart from the financial implications involved, which the MCs will find it virtually impossible to deal with at this particular juncture, this can lead to other forms of social implications as well. For instance, it is crystal clear that the MCs will never be able to operate their estates as viable units, if they are required to provide 300 days of guaranteed work per year for their work force when there is no productive work to be given for such number of days. Only an irrational entrepreneur would agree to manage the estates under these conditions. In these circumstances if no one is wiling to manage the estates without outside financial assistance, the country's economy would be ruined particularly in a time of war in one part of the country. This would create a situation (another demand) where all estates have to be parcel out and converted into colonies of plantation workers as there want be any other option left for the state to implement at that particular stage to rectify the situation. The terrible social implications of such an eventuality are too obvious to need elaboration.

As the estates are owned by the state, ultimately, its the tax payers, who include a large portion of the poor, may have to pay the taxes to bear the losses.

4. Possible Solutions and Prerequisites

There is no doubt that the MCs should give maximum days of work to their work force whenever there is work available. However, the underline theory should be that all additional days of work must be linked and justified by an increase in production or cutdown in COP.

The productivity of labour can be increased by various means such as;

a) transfer of excessive labour to areas where there is a shortage
b) use of rainguards to maximize the tappable days and
c) shift from monocropping to multiple cropping systems where all crops benefit from a symbolic relationship and thereby enhance more economical usage of land under rubber.

While wage levels must ensure a socially acceptable minimum, management must be free to negotiate and deal with labour on issues such as wage rates, work norms, mobility of labour, work days offered in order to sustain a commercially viable entity. Yet, if the plantations are to achieve any hope of improved productivity and margin of profitability, an agreement on certain basic concepts are required between the MCs and the labour unions in particular. For instance, the following agreements could provide a workable platform for all parties concerned.

1. Adoption of mutual agreements between the MCs and the unions
2. Establishment of Standards of Conduct and Codes of Ethics for staff and labour as prevalent in other tree crop producing countries.
3. Mobility of labour to enable efficient reallocation of workers within and between the estates.
4. Allow the Wages Board to handle wage issues in the plantation sector.
5. Link all financial benefits to improved productivity.

5. Conclusions

One should not forget the fact that the MCs came to the rescue of the state and took on the daunting task of turning the estates around to profit making ventures. The MCs have managed them for only 18–24 months as compared with 18 years of state administration. The plantation sector is still confronted with some serious issues. For instance; higher COP than NSA, expensive, immobile and surplus labour, decreasing productivity, high lending rates associated with non existence of a long-term capital market. As a result the MCs find it practically impossible to earn profits even in the long-run since there is no foreseeable guarantee in securing a workable NSA.

Nevertheless, the MCs have adhered to the rules of the game by ensuring that the production process including cultivation practices are environment friendly and the workers are given a fair deal. The government has also committed to share 10% of the shares of the profits of the plantations with the employees. The employees therefore should take a keen interest to increase the productivity of the estates in order to get their respective shares when the profits are realized.

The study clearly reveals that the management is not in a position to grant 300 days of guaranteed work especially in view of the heavy losses already incurring by the MCs. How can the MCs find the money to sustain such recurrent losses ? The study also suggests that all forms of employee benefit schemes must be associated with and linked to gains in productivity. Hence, it is the duty of all policy makers not to put additional burden on MCs, but to give them a fair chance to prove that the private sector MCs are the country's biggest hope and that they will deliver the goods to rescue the plantation sector from the present economic crisis.

REFERENCES

Asian Development bank and Government of Sri Lanka (1993a). Sustainable Development of Tree Crop Plantation Project : Interim Report.

Asian Development bank and Government of Sri Lanka (1993b). Sustainable Development of Tree Crop Plantation Project : Financial Appendices (Vol. 3)

Statistical Sources

Department of Census and Statistics :- Statistical Abstracts of the Democratic Socialist Republic of Sri Lanka.

Ministry of Plantation Industries :- Plantation Sector Statistical Pocket Book

World Bank :- Price Prospects for Major Primary Commodities