

## 1. Introduction to the Country

**Population:** Sri Lanka is an island in the Indian Ocean lying 29 km off the coast of India. It is located 7 degrees North of the Equator. The country has a total land area of 25,332 square miles (65,610 sq.km) and a population estimated at 19 mn in 2002. Of this total, 4 mn or 21% live in urban areas and about 15 million or 79% in rural areas. Annual population growth has now been reduced to 1.1%, and is regarded as one of the lowest among the developing countries. Owing to its success in regulating population growth, the population is expected to stabilize at around 25 mn in the year 2040.

The breakdown of population by gender reveals that 51% are female and 49% are male. The overall sex ratio is marginally in favour of a higher female population. The population comprises a number of ethnic groups: Sinhalese 74%, Tamil 18%, and Muslims 7%. The remaining 1% consists of smaller ethnic groups such as Burghers and Malays.

**Administration:** The country consists of 9 Provinces (two Provinces- the North and the East are temporarily merged), with each Province being administered by an elected Council. The Chief Minister is assisted by a Chief Secretary appointed by H. E. the President, and Deputy Secretaries with support staff.

Each Provincial consists of two to three Districts, there being 25 Districts in all. The District has a District Secretariat headed by a District Secretary, who implements the projects and programmes assigned by the Provincial Council in addition to performing national Government functions.

Districts are divided into Divisional Secretariat (DS) Divisions, headed by a Divisional Secretary. There are 308 such Divisional Secretary Divisions. Each DS Division contains a number of "Grama Niladari" (GN) or Village Officer Divisions. The GN Division is the primary administrative unit in the country and there are 14110 such units. Local Government functions are handled by Municipalities, Urban Councils and Pradeshiya Sabhas. These bodies are directly elected by the people at 5 year intervals.

**Democracy:** The democratic tradition in the country is vibrant. In the 50 years since Independence, two major parties, the United National Party and the Sri Lanka Freedom Party either by themselves or in alliance with smaller parties, governed the country. General and local government elections are scheduled to be held every five years. The April 2004 General Elections have been called free and fair by international observers.

## 2. Income and Millennium Development Goals

Although the average per capita income being approximately, US \$ 1,000 is closer to that of other countries in South East Asia, achievements in the social and human development sectors are on par with many developed countries. These social indicators have already surpassed almost all of the Millennium Development Goals. For example:

- life expectancy at birth is 70 years for males and 75 years for females, equal to many developed countries;
- primary, secondary and even tertiary school enrolment rates are equal for boys and girls, which are the targets for 2015;
- primary school enrolment is 100%, also the envisaged target for 2015;
- adult literacy rate is 93% infant mortality rate is 13 per thousand [target is 7.4], and the maternal mortality rate is 0.2 per thousand births, equal to middle income countries.

The country ranking is 96 in the Human Development Report for 2004.

### 3. Poverty

Although Sri Lanka has a good record in its demography and its social indicators, a significant segment of the population is still unable to afford a minimum set of consumption requirements. The Department of Census and Statistics, which is the official Government agency responsible for collecting and disseminating primary data on poverty, shows that about 23% of the total population lives in absolute poverty (2002). In comparison with corresponding data for 1990 and 1996, this incidence of poverty is quite low but it continues to remain a major socio-economic problem. Sri Lanka has a long tradition of caring for its poor and giving high priority to reducing and alleviating poverty.

**Poverty Over Time:** The poor benefited very little from the higher rate of growth. Over more than 20 years, from 1980 to 2002, the average income of the poorest 10% was stagnant and that of the poorest 20% increased by less than 6%. The income of the richest 10% and of the richest 20% increased around 2.5 times. In the last 10 years, the problem has been just as serious: from 1990/91 to 2002 the consumption of the poorest 20% increased by 2% and that of the second poorest group by 6%, while that of the richest 20% increased by 50%. This sharply widening gap between the rich and the poor is giving rise to social and political discontent.

**Regional Poverty:** Regional differences in poverty and growth pose yet another serious problem. The benefits of growth have mainly percolated to the poor in the areas around the commercial capital (Colombo) and in other main cities, like Kandy. These areas, which were already well endowed, have grown rapidly and at present have poverty rates as low as 6%, as in the Colombo District. On the other hand, the poorer districts with the highest percentage of poor have grown little and their poverty rates have actually increased. Several of these have been adversely affected by the conflict that has ravaged Sri Lanka since 1983 thereby increasing the incidence of poverty.

Low growth in most of the Provinces and high growth in the Western Province and the Districts surrounding, has created great differences in income per capita among the Provinces and Districts, as well as great differences in poverty rates. The table 1 and 2 reflect these disparities.

**Table 1**  
**Population, Per Capita GDP, Maternal Death Rate, Electrification & Road Density by Province in Sri Lanka**

Income and Growth	Province	Population-Million (2002)	Per Capita GDP \$			Maternal death rate (1996)	Electrification (2002) %	Road density (km/sq km) (1998)
			1996	2002	Change (%)			
<b>High</b>	Western	5.4	1,288	1,470	14.2	0.11	83	3.1
<b>Medium</b>	North Western	2.2	726	769	5.8	0.06	50	2.0
	Southern	2.3	522	698	33.6	0.18	64	1.6
<b>Low, slow or decline</b>	Central	2.4	603	637	5.5	0.28	59	2.2
	Sabaragamuwa	1.8	706	633	-10.4	0.20	48	1.7
	Uva	1.2	622	599	-3.7	0.30	46	0.9
	North Central	1.1	570	578	1.4	0.21	45	1.4
<b>Conflict affected*</b>	North and East	2.6	367	483	31.5	0.62	37	1.0
	<b>National</b>	<b>19.0</b>	<b>759</b>	<b>870</b>	<b>14.6</b>	<b>0.20</b>	<b>63</b>	<b>1.5</b>

\* Data is approximations as surveys could not be conducted in some areas and had to be estimated.

It is clear from the above data that less than one-quarter of the population is in areas with high incomes, low poverty and good access to the market [Colombo and Gampaha Districts, both in the Western Province]. Even in the small area of the two high-income Districts, there are pockets of poverty and poor connection to the rest of the economy. Over half of the population is concentrated in Provinces where incomes are less than one-half [at most 43%] of that in the Western Province. In the North and East and in the poorer Districts of most Provinces income is most probably less than one third of what it is in the Western Province. These areas account for almost half the population of the country. In the poorer District areas the incidence of poverty is around one-third of the population (probably more in the North and East), road density is low, with a substantial proportion of the population unable to grow high value crops due to lack of access to the market. Power is available to only 30-40% of households in the poorer Districts, compared to about 90% in the wealthiest Districts.

What is equally disturbing is that the wealthier regions have also been the faster-growing regions, so the differences have become even more stark. The exception is the North and East where the ceasefire brought about certain improvements from a previously war damaged situation. However, per capita income is still the lowest in the country in this region. While per capita income in the rich Western Province rose by over 2% a year, it actually dropped in two of the poorest Provinces and was essentially stagnant in the other two. As a result, per capita income in the Western Province was 1.8 times more than in the Sabaragamuwa Province in 1996, but the gap has widened to 2.3 times in the 6 years since 1996.

**Table 2**  
**Poverty Headcount Ratio by District**

Province	District	1990-91	1995-96	2002		
				%	Headcount mn. by District	Headcount mn. by Province
National	All	26	29	23	4.37	4.37
Western	<i>Colombo</i>	<i>16</i>	<i>12</i>	<i>6</i>	<i>0.14</i>	<i>0.58</i>
	<i>Gampaha</i>	<i>15</i>	<i>14</i>	<i>11</i>	<i>0.23</i>	
	<i>Kalutara</i>	<i>32</i>	<i>29</i>	<i>20</i>	<i>0.21</i>	
Central	<i>Kandy</i>	<i>36</i>	<i>37</i>	<i>25</i>	<i>0.32</i>	<i>0.62</i>
	Matale	29	42	30	0.13	
	N <sup>o</sup> Eliya	20	32	23	0.16	
Southern	Galle	30	32	26	0.26	0.64
	Matara	29	35	27	0.21	
	<b>Hambantota</b>	<b>32</b>	<b>31</b>	<b>32</b>	<b>0.17</b>	
North-western	Kurunegala	27	26	25	0.37	0.59
	<b>Puttalam</b>	<b>22</b>	<b>31</b>	<b>31</b>	<b>0.22</b>	
North-central	Anuradhapura	24	27	20	0.15	0.24
	Polonnaruwa	24	20	24	0.09	
Uva	<b>Baddulla</b>	<b>31</b>	<b>41</b>	<b>37</b>	<b>0.29</b>	<b>0.44</b>
	<b>Moneragala</b>	<b>34</b>	<b>56</b>	<b>37</b>	<b>0.15</b>	
Sabaragamuwa	<b>Ratnapura</b>	<b>31</b>	<b>46</b>	<b>34</b>	<b>0.35</b>	<b>0.60</b>
	<b>Kegalle</b>	<b>31</b>	<b>36</b>	<b>32</b>	<b>0.25</b>	

*Source: Department of Census and Statistics*

*Italics: Poverty incidence declined by more than 25% from 1996 to 2002.*

**Bold: Poverty incidence increased by more than 10% from 1996 to 2002 or is above 30% in 2002.**

In terms of the incidence of poverty the picture is equally clear. In 2002 poverty is concentrated in two Provinces and six Districts, with rates above 30%. The poverty level in the two Districts of Moneragala and Badulla is six times higher than that in the Colombo District, which recorded the lowest ratio. Several of them have been affected by the fighting in the neighbouring North and East. Some of the poor comprise the IDPs [Internally Displaced Persons] and many have seen their wages fall as the hard-pressed IDPs also compete for jobs. The increasing gap in poverty between the small areas that have primarily benefited from growth and the large areas that have got poorer, also contributes to social and political tensions. Poverty in Sri Lanka is above all a regional problem.

**Poverty in the North and East:** A special regional poverty problem exists in the North and East as a consequence of the armed conflict. Most of the statistics given above relate to the remaining 7 Provinces as data on the North and East is sparse or unavailable. Since the cease-fire, some data is available and, according to the data, poverty is a serious problem in these Provinces. Unemployment and infant mortality rates are twice as high as

in the rest of the country; and maternal mortality is nearly four times the average. According to a rough estimate, the per capita income is only 60% of the average of the country. The 8 Districts in the North and East region need to be added to the other poorest 6 Districts (Hambantota, Puttalam, Badulla, Moneragala, Ratnapura and Kegalle) as indicated in table 2. The critical problem is slow or declining growth and rising poverty in these Districts.

**Women and Poverty:** In Sri Lanka, unlike in most other countries, there is no gap between the wages of women and men. Poverty among female-headed households is almost the same as among male-headed households. Gender balance is largely due to the preponderance of women in the garment industry and among foreign migrant workers particularly in the Middle East. Therefore, women workers would be particularly vulnerable to the vicissitudes of the garment industry following the abolition of the MFA in December 2004. They are also very vulnerable to any downturn in the price of oil, which would reduce the demand for their labour in oil-rich countries. There are also a significant number of widows in the North and East alone, who face specific problems.

The problem of open female unemployment exists, despite the growth of employment in the major sectors that principally employ women: tea, garments and household workers abroad. Since employment abroad and in the garment industry may not increase in the future, female unemployment may well increase with some 100,000 women entering the labour force every year.

The problem for men is principally one of underemployment – workers with part-time work and part-time incomes or casual work with low returns. To provide full time employment for men requires generating growth in less developed rural areas, in sectors such as agriculture, and agricultural processing, including supply of goods and services to consumers with increased incomes in these areas. The other major source of employment for men will be infrastructure development programmes, which are important catalysts of growth leading to poverty reduction.

#### 4. Key Problems

The major obstacles to growth, and poverty reduction, are a number of interrelated problems that need to be addressed in an integrated manner.

**Inadequacy in the Growth of the Economy:** The economy of Sri Lanka grew at a rate of 4.4% per annum between 1980 and 1990, 5.3% per annum between 1990 and 2000, and 3.4% per annum from 2000 onwards. Although a growth of this magnitude was regarded as a moderate one, it was not sufficient to provide full employment and meaningful incomes for the people.

The GDP of Sri Lanka has a highly volatile pattern. For the period 1985 to 2003, the coefficient of annual variation of GDP was 3.6 times higher than that of Thailand and 2.8 times higher than that of Malaysia. This has resulted in a significant fluctuation in the availability of resources for consumption and investment.

The future growth target is a minimum of 6% with a desired growth of 8%. A doubling of the recent growth rate is considered essential to employ productively the annual additions to the labour force [around 300,000 or about 4%] and to reduce the high rate of open unemployment of 6% for men and a very high 13% for women [average 8.6% in 2003 with the Northern area excluded].

**Lack of Job Opportunities:** Unemployment is a chronic problem in the country. Since independence (1948) it has never been recorded at levels lower than 8%. As of the 4<sup>th</sup> quarter of 2004, unemployment has been estimated at over 8%. It is largely a problem of educated youth seeking jobs for the first time. About 80% of the unemployed are between the ages of 15 and 29 years. About 59% unemployed have passed GCE (O/L) and examinations above. About 72% of the unemployed wait for more than 12 months to obtain a job. Unemployment among females is almost twice as high as that among males. In 2003, the rate of male unemployment was about 6% and the rate of female unemployment was over 13%.

An important implication of high unemployment is that resources which could otherwise be available for saving and investment, have to be spent on the maintenance of the unemployed by their parents or other family members, as 90% of the unemployed are supported by family transfers.

**The Economic Cost of the Ethnic Conflict:** According to government estimates, the size of the overall economy of the North and East shrank from US \$ 350mn to US \$ 250mn between 1990 and 1995, corresponding to a negative annual average GDP growth of 6.2% per annum. The Central Bank of Sri Lanka reports that the conflict is likely to have reduced the country's GDP by about 2 – 3 percentage points a year. The indirect costs of the armed conflict are also high. These costs represent the incomes lost as a result of forgone domestic investment, reduced tourism, the decline in foreign direct investment, out-migrations of a large number of skilled persons and human capital loss associated with death, injury, and displacement.

**Deteriorated and Inadequate Infrastructure:** In Sri Lanka, there is a strong link between poverty and lack of irrigation. Areas deprived of irrigation become gradually impoverished due to the adverse impact of drought and floods, that compel the use of reserves to prevent famine. Although there are more than 30,000 small reservoirs and dams in the country, they are largely unusable or not adequately effective for want of serious renovation or rehabilitation. As a result, more than 200,000 acres of land have remained uncultivated or abandoned creating a severe shortage of rice and loss of significant amounts of income that would have accrued from commercial agriculture. People living in these areas do not have access to safe drinking water, particularly during the dry season. Therefore, the incidence of water borne diseases has increased.

Many of the same areas also lack a decent feeder road system and access to main roads. Substantially large areas remain isolated and physically cut off from the mainstream due to lack of roads and bridges. People in these areas are discouraged from cultivating fruits or vegetables by the lack of access to markets. Electricity supply needed for most off-farm processing and other small plants is not available. Communication links are very

poor. Therefore, people have no access to market information that would encourage them to cultivate higher value crops or raise livestock [see Table 1 for data on infrastructure].

**The Budget Deficit:** The problem of the budget deficit needs to be addressed seriously if the government is to come up with resources to implement the pro-poor, pro-growth programmes to which it is committed. Infrastructure development and maintenance require substantial resources from the budget, as do provision of education and health services.

**Deteriorating Education and Health Services:** Expenditure on Social Services, particularly education and health, has declined from 4.5% of GDP in 1995 to 4% of GDP in 2004. A direct result is the declining quality of life, especially in the rural and less developed areas. The negative trend needs to be reversed if Sri Lanka is to compete in the world market by maintaining high levels of productivity.

**Limited Access to Vocational and Technical Education:** The present education system produces with specialized skills and with adequate technical training. This is a problem particularly affecting the rural areas and the less developed Districts. Vocational Training (VT) Centres are mainly located in the suburbs. The few VT centres accessible to rural youth are without resource persons and modern equipment. Course work offered in these centres, is obsolete and do not enhance the employability of trainees.

**Lack of Property Rights:** One of the key factors inhibiting rural income growth is lack of clear private property rights over land. Most of the poor farmers operate land parcels for which they do not have clear titles. The accompanying insecurity coupled with government restrictions on land use, destabilize the poor from making effective choices in land use and land allocation. Hence, they are unable to make optimal use of their land.

**Environmental Degradation:** This has become an increasingly serious concern. In rural areas, the key problems include deforestation and soil erosion and, encroachment on reserved land for agricultural purposes. These result in bio-diversity being adversely affected, water pollution and coastal erosion. Environmental stress also results from mining of riverbeds, and through use of firewood. The cost of such non-sustainable resource use is estimated to be 2.5% of GDP.

## 5. Objectives and Priorities

The principal objective of the Government, and of the proposed Compact with the MCC, is to reduce poverty. In order to reach the Millennium Development Goal of reducing poverty to half the present level by 2015, Sri Lanka plans to focus on areas where poverty is most acute - mostly those Districts and Divisions that have been bypassed by development efforts and/or those that have been badly ravaged by the conflict. The Poverty Reduction Strategy, which the Government will soon announce, is predicated upon pro-poor growth through a strong focus on the poor and the less developed, low-income regions.

## 6. Policies and Strategies

### 6.1 Policies

The above strategy will not work or at least will not give the expected results, if it does not operate under an appropriate set of policies. These are being enumerated in detail in the NPAGS, but will be briefly summarized here.

**Macro-Economic Stability:** Private Farms and Firms find it difficult to function unless they know that policies will not be subject to sudden change and that their economic environment is reasonably stable: this means that inflation is unlikely to accelerate greatly, prices of services they buy will not greatly change overnight, the exchange rate remains reasonably stable. Of course, some variables are completely outside Sri Lanka's control – the surge in oil prices most notably. But the government will avoid sharp, unexpected changes in its policies, and will avoid contributing to rapid inflation.

**Reduce the Budget Deficit:** The budget deficit is perhaps the most serious problem facing the Government. The Government is committed to reducing it, despite its determination to increase spending on neglected areas and groups. This strategy would require reduced spending in areas that benefit primarily those with access to better facilities. The 2006 budget, now under preparation, will make a start on the difficult process of reducing the deficit while increasing spending on priority projects to accelerate growth and help the poor through a Medium Term Macro Fiscal Framework in which the deficit is to be reduced to around 5% of GDP.

**Increase the Efficiency and Reduce the Costs of Government Services:** One of the problems facing the private sector is the high cost of delivery and unavailability of services such as power, water, communications and transport. The Government will be using privatization to a limited extent to cope with these problems. It is committed to a strong effort to increase the efficiency of the SOE (State-Owned Enterprises) that are providing some of these services. This is no easy task, but it is being revisited in the budget under preparation. In the case of roads, what is needed is targeted investment and that is discussed below. Of course, often both are needed [see discussion on electric power]. A new Strategic Enterprise Management Agency (SEMA) has been set up to oversee and develop business for large State Owned Enterprises (SOEs).

**Participatory Approach:** The newly established National Council for Economic Development (NCED) has set up nearly 20 clusters comprising both private and public sector representatives to address and evolve specific sector strategies. This new public/private sector partnership arrangement in policy formulation and implementation is helping to promote a participatory approach in development. For instance, the apparel industry is working closely with the government in an NCED cluster to prepare for the post MFA 2005 period, focusing particularly on small and medium factories located in rural areas which are bound to experience adjustment difficulties in the quota free era.

**Targeted Programmes:** In its poverty reduction programme, the Government is moving away from general subsidies and grants to large numbers, where up to 40% of the

benefits presently going to the non-poor, to two approaches that are more carefully targeted:

- labour intensive employment programmes that shift emphasis from subsidizing consumption to employing the poor in income producing activities. The irrigation rehabilitation and feeder road programmes are examples;
- a limited programme of welfare for the extremely poor who usually cannot benefit from employment programmes because the family has no one capable of full-time work: the old, widows with young children, the sick and disabled. The aim is to provide productive job opportunities for all willing and able to work and to limit welfare grants to those who cannot work..

## 6.2 Strategies

**Higher Growth is a Necessity:** An essential objective of the Poverty Reduction Strategy is to generate a higher rate of growth. A GDP growth rate of 6% is the minimum needed to achieve the envisaged poverty reduction objectives. It would be much easier to reach with a growth rate of 8%. The broad policy framework towards this has been announced in the government's Economic Policy Framework – *Creating Our Future; Building Our Nation*.

The strategy and priorities outlined below are designed to achieve a higher growth rate as well as, to substantially reduce poverty throughout the country and among all groups. More details will be provided in the Poverty Reduction Strategy currently under preparation.

**Strategy for Higher Growth Policies and Investment Composition:** Higher growth will be impossible to achieve without macro-economic stability and policies that encourage production, investment and productivity and the willingness to invest and to take some risks. In view of Sri Lanka's high rate of unemployment and the even higher rate of underemployment, growth also requires investment and promotion of sectors and activities that can efficiently and competitively put idle labour to productive work. Plans to do so are discussed below and have been given in greater detail in the National Poverty Alleviation and Growth Strategy (NPAGS).

**Investment Strategy:** Since, creating demand for unskilled labour is key to reducing poverty, unemployment and underemployment are a waste of Sri Lanka's potential. This programme will encourage productive investment in sectors and activities that create demand for unskilled workers. Sri Lanka cannot afford to waste resources. It needs to be recognized that 8-9% of the labour force is unemployed and the larger proportion that is underemployed, consume but do not produce. Putting them to work in productive employment, particularly in the private sector, would be a net benefit to society. In addition to the increase in output, they will also contribute to stability when they become productive members of society.

The Strategy is based on the belief that for markets to work well, most areas and people need to have access to the market for the goods and services they produce and the goods

and services they consume. It will therefore, give priority to investments in infrastructure, skills development, institutions and facilities which in turn will make it possible for investment and production to flourish. A key part of this is to give neglected areas better access to markets by way of better roads and communications, to increase labour productivity by appropriate training and to make services –such as credit and technology- available to MSMEs [Micro- and Small- & Medium-scale Enterprises]. The Provinces and Districts where poverty is most prevalent are primarily agricultural areas.

The pro-poor strategy will therefore emphasize the revival of agricultural sector growth. The centerpiece of the investment strategy is to greatly increase the availability of irrigation, mostly by emphasizing local, small irrigation schemes. These schemes involve rehabilitation of existing structures. Their principal requirement is for unskilled, local labour, much of which is already available in these areas. They have a very low cost per acre benefit, especially in terms of the materials required.

The specific investments to be financed are described in detail below. What is central to all of them is that they are:

- designed to support private farms and firms, principally by supplying services that the government has traditionally supplied in Sri Lanka: irrigated water, extension services and technical support, credit for the smallest units not served by commercial banks and so on;
- with an emphasis on local control and local labor contributions;
- concentrated in the areas that have been left out of the development process, that have the greatest poverty, that have deteriorated rather than developed;
- supporting the small firms and farms that produce most of the goods consumed in Sri Lanka and a substantial share of exports, but that have also been neglected in the past.

However, for cultivators to produce higher value crops in the newly irrigated areas, and for agricultural processing to develop in these areas, they need to have access to motorable roads, to power, as well as to water. They also need to be well informed of market conditions, which means availability of rapid communication facilities. The programme, therefore, also includes substantial investment in infrastructure development.

## **7 Role of the Compact and MCA**

During the last 6 months, the Government has begun to reorient its development strategy from an almost exclusive preoccupation with growth to one emphasizing pro-poor growth, because of its commitment to poverty reduction, which is a top priority. This means focusing on neglected, low or no-growth rural areas with a high incidence of poverty. Support from the MCC is sought to increase the overall growth rate of Sri Lanka, mainly by helping change the rate of growth in poorer areas from stagnation or decline to a significant per capita growth in the next 4 years.

The Government is approaching the MCC for assistance rather than other, well-established, donors, primarily because of the expected flexibility and speed of action under the MCA. Donors active in Sri Lanka for many years have ongoing programmes to which they are committed. These are focused on growth and poverty reduction in the

country as a whole. Whilst most donors pay special attention to the North and East, their regional concerns have otherwise been limited. But the new Government's highest priority is growth in the poorer Provinces and Districts, because that is the surest and most rapid way to increase growth and reduce poverty where it is most widespread. Ours is a geographically focused programme: it is no longer satisfactory to have growth occur primarily in the Western Province, which already has a low incidence of poverty. What is needed is far more rapid growth in the 5 Provinces with low growth and much poverty, and in the Districts with the same characteristics, while at the same time providing growth in urban areas.

The Government appreciates the MCC's emphasis that the programmes be "home-grown", Sri Lankan in design and execution. Of course, this approach requires careful monitoring and reporting, which the Government wants to undertake, in any case, as the basis for any needed mid-course correction in the larger effort it will undertake in neglected areas.

Sri Lanka notes the change from conditionality to a performance-based approach. Our desire is to cooperate with the MCC in demonstrating that this approach can produce good results in countries where there is a free press, a strong opposition and periodic open elections.

## **8 Specific Goals**

It is the goal of the Government with the support of the MCA to raise the rate of growth of output to a minimum of 7%, from less than 4% achieved in the last 5 years and 5% since 1991. We have set the goal at a realistic 6% and aim to exceed it. In per capita terms the differences are greater: from less than 4% in the last 5 years to 6% in the next 5 years.

Equally or more important is that this growth rate be reached by turning around the Districts and Provinces whose per capita incomes have been stagnant or declining.

The specific goal is reduce the number of poor people from about 4.4 million to 3 million over the next 5 years, which implies that the poverty rate would decline from 23% to 15%. In view of the fact that in the last 12 years poverty was reduced only by 3% (from 26% to 23%, Table 2) this will be a major achievement.

## **9 Duration**

The FY 2005 budget has commenced in January 2005 and therefore, it does not include the MCA programme. We propose that the MCA programme begin early in Fiscal and Calendar year (the same in Sri Lanka) 2006.

## **10. The MCA Proposal**

The MCA Proposal is determined by the government objective of achieving a high rate of growth, with growth focused on the regions and the sectors where poverty is

concentrated: the rural areas and the identified districts with widespread poverty. In addition, there is need for attention to the industries that employ large groups entering the labour force, or currently unemployed or under-employed, for whom there are no productive jobs in agriculture or agriculture-dependent industries.

The objectives of higher growth and poverty-reduction are not incompatible in Sri Lanka. Not only is higher growth a necessary condition to reduce poverty but the poor rural areas have some of the greatest potential for rapid growth at relatively low cost investment. This is the case particularly with respect to rehabilitation and expansion of infrastructure in the poorer, rural areas.

**An integrated Programme:** The proposed MCA grant will play a key and catalytic role in an integrated development programme, concentrating on the poorer rural regions.

- (i) The cornerstone is a substantial expansion of the irrigated area by constructing medium scale irrigation schemes to expand agricultural production. This programme will be a solution to the problem of recurring droughts. The cost is low and labour intensive and the benefits significant, including provision of water for livelihood and industries as well.
- (ii) Combined with the second element is a substantial programme for rehabilitating and improving the rural road network. The expanded irrigation system will make it possible to produce high value crops, particularly fruits, vegetables and flowers, that need to be brought to the market speedily. A new rural road rehabilitation programme has already commenced.
- (iii) Expansion of rural electrification is another element in the programme. Electricity at present has a high cost and is available to less than 65% of the households in the less developed areas. Since availability of low cost electricity is also important for the development of the country, for enhancing the competitiveness of existing exports and for more rapid development of the less developed areas, rural electrification schemes are part of the Proposal.
- (vi) Agriculture cannot create the additional productive employment that Sri Lanka needs. Industry will also need to expand. Therefore a scheme to develop infrastructure for industries has been included.

## **11. Consultation**

The compact of proposals has been prepared based on a thorough process of consultation as set out in the guidelines of MCA. It consisted of two stages.

In stage one, the trade chambers, non-governmental organizations, academics, and government agencies were requested to submit project proposals. This request was made to develop a concept paper to be forwarded to MCA. Simultaneously, the following two steering committees were established to identify issues in connection with the preparation

of the concept paper, take remedial action, and monitor the progress of the tasks assigned to these agencies-

- (a) Minister Level Steering Committee co-chaired by the Minister of Finance and Planning and Minister of Foreign Affairs
- (b) Secretary Level Steering Committee chaired by the Secretary, Ministry of Finance and Planning

The Project Management Unit (PMU) of the Department of Development Finance of the Ministry of Finance and Planning received 7562 proposals from various agencies and individuals. All these proposals were classified into 7 categories. They were incorporated in the Concept Paper and forwarded to MCA on 18<sup>th</sup> October 2004 for its observations. The Concept Paper was also published on the website of the Ministry of Finance and Planning.

Stage two of the consultation commenced after receiving observations from MCA in February 2005. Accordingly, a number of meetings were organized in all the Provincial Councils of the country. At these meetings, the objective of the MCA inclusion of Sri Lanka in the programme, mode of the preparation of proposals, and funding procedures were explained in detail. A Steering Committee was set up in each Provincial Council to prepare project proposals to address the poverty issues in the region through the acceleration of the growth of the economy and to liaise with the Project Management Unit to finalize the compact of proposals. The Steering Committee consists of trade chambers, non-governmental organizations, community based organizations, academics, religious organizations, and government offices. In the mean time, details of MCA and inclusion of Sri Lanka for funding under it was published in newspapers and announced through the electronic media.

Details of the consultation undertaken in stages 1 and 2 are given in the document on “Consultation Process – Part 1” which has already been forwarded to MCC.

The Provincial Steering Committees submitted their proposals to PMU on time. Based on these proposals PMU prepared a draft compact of proposals. A workshop was conducted on 23<sup>rd</sup> June 2005 in Colombo with the participation of the members of the Provincial Steering Committees to prioritize the projects and finalize the compact of proposals to be forwarded to MCC.

## **12. Project Implementation**

The Government has recognized that implementation of the projects funded by MCA requires the service of competent professionals with a supporting staff and equipment. Therefore a separate Project Office will be established under the purview of the Ministry of Finance and Planning. Professionals and staff identified by MCA to carry out activities connected with fiscal accountability, monitoring, procurement, and other related activities will be recruited.

**Table 3**  
**Summary of Costs and Proposed MCA Contribution (US \$ Million)**

Sector	Priority	Project	Total Cost	Source of Funds	
				Govt. & other	MCA
<b>Irrigation</b>	<b>1</b>	<b>Construction of Reservoirs and Feasibility Studies</b>	<b>113.20</b>	<b>21.20</b>	<b>92.00</b>
		<b>a). Construction of Three Medium –Size Irrigation Projects</b>	<b>103.20</b>	<b>19.20</b>	<b>84.00</b>
		• Weheragala Reservoir	18.20	4.20	14.00
		• Deduru Oya & Mee Oya	65.00	10.00	55.00
		• Rabukkan Oya Reservoir	20.00	5.00	15.00
		<b>b). Irrigation Projects for Feasibility Study</b>	<b>10.00</b>	<b>2.00</b>	<b>8.00</b>
		• Yan Oya Reservoir	2.00	0.50	1.50
		• Uma Oya Diversion	4.00	0.50	3.50
		• Urawa Diversion	2.00	0.50	1.50
		• Heda Oya Reservoir	2.00	0.50	1.50
<b>Roads</b>	<b>2</b>	<b>Rehabilitation of Rural Roads</b>	<b>140.00</b>	<b>20.00</b>	<b>120.00</b>
<b>Industry</b>	<b>2</b>	<b>Infrastructure for Industrial Development</b>	<b>57.00</b>	<b>3.00</b>	<b>54.00</b>
<b>Electricity</b>	<b>3</b>	<b>Rural Electrification</b>	<b>42.00</b>	<b>4.50</b>	<b>37.50</b>
<b>SME</b>	<b>-</b>	<b>Technology &amp; Enterprise Development</b>	<b>658.00</b>	<b>48.00</b>	<b>20.00</b>
<b>Admin. Cost</b>	<b>-</b>	<b>-</b>	<b>30.00</b>	<b>5.00</b>	<b>25.00</b>
<b>Total</b>	<b>-</b>	<b>-</b>	<b>450.20</b>	<b>105.70</b>	<b>344.50</b>

### **13. Rehabilitation and Construction of Irrigation**

#### **13.1 Construction of Three Medium-scale Irrigation Projects**

About 65 percent of the country’s population depends on agriculture for its livelihood. In this process irrigation has been the most important strategic sector and it plays a pivotal role in the reduction of poverty. However, the growing scarcity of water resulting from vagaries of weather and environment have become a constraint on the sustainability of irrigation and as a result put the poor at great risk. The conservation of the existing dams and construction of new dams have therefore become a national requirement in order to tackle the problem of poverty and shift the poor from subsistence agriculture to wealth creating high value market driven crops. The objective of this proposal is to fulfill these tasks through the erection of medium scale irrigation schemes in the area where the poverty is high.

### 13.1.1 Weheragala Reservoir Project (Menik Ganga)

**Summary:**

Estimated cost: \$ 18.2 million; Proposed MCA funding: \$ 14 million  
Executing agency: Department of Irrigation  
Benefits: 6,300 ha. double cropped land, hitherto uncultivated. Supply of water for humans and animals in the dry seasons in towns and wildlife sanctuaries.  
Status: Feasibility study and EIA have been completed.

**Present Status:** Menik Ganga is one of the 17 major rivers in Sri Lanka with more than 1000 sq. kms of catchment area. It has, in the east, the Kirindi Oya, on the west the Kumbukkan Oya and on the south the Mahaweli River. It originates on the southern slopes of the Passara Mountain in the Uva Province and has a total length of about 112 km to sea outfall. It drains a total basin area of about 1287 sq.km. and discharges about 279 MCM of water to the sea at Yala sanctuary annually. About 85% of the Menik Ganga basin lies in the flat terrain of the dry and intermediate zones and the remaining 50 % lies in the wet zone.

Sri Lanka's largest wild life reserve, Yala reserve, and the newly formed Lunugamwehera reserve are located in the lower basin of Menik Ganga (Hambantota District). The available water resources in these two areas cannot be fully utilized for cultivation and set apart for wildlife reserves though lands are relatively flat and suitable for agriculture. As a consequence the buffer zone communities of Yala and Lunugamvehera reserves have been subject to a degradation in their quality. Killing of animals for meat, removal of rare faunal species, timber poaching, removal of medicinal plants and grazing of cattle are few of the activities which have led to the degradation in quality. The incidence of poverty in the Hambantota District has been estimated at 32% and this shows the extent of poverty, particularly in this area.

**Target and Cost:** The main objective of the proposed Weheragala Reservoir Project is to improve and develop the economic condition of the buffer zones community in the lower basin of the Menik Ganga located in the area of Yala and Lunugamwehera. The Menik Ganga will be dammed at Weheragala, impounding a reservoir with a capacity of 75MCA. The water stored in the reservoir will be taken up to the Kirindi Oya through a 23 km. long trans-basin canal and will augment the water in the Lunugamwehera reservoir by 60 MCA annually. It will also maintain at 1.5 to 2 m<sup>3</sup>/sec the flow in the Menik Ganga down stream of the reservoir and rehabilitate the associated irrigation schemes of the minor tanks at Kohombagas, Digana, Kukulkatuwa, Akkarawissa, Goyagala, Karawila, Milagama and Gestupana. The location map is given in annex 01.

The total cost of the project has been estimated at US \$ 18.2 mn of which US \$ 14 mn is expected from MCA. The Government of Sri Lanka will fund the remaining US \$4.2 mn.

**Benefits:** By augmenting the Lunugamwehera Reservoir it is planned to improve the cropping intensity of the irrigable area of 5300 ha from 1.40 to 1.86 benefiting more than

5000 farmer families. In addition, the project will ensure irrigation water to about 1000 ha. of land under the minor tanks.

It is also planned to provide demand for drinking water of Kataragama township and Thanamalwila in the Uva Province, Lunugamwehera in Southern Province and the people around the area of the minor tanks. The greatest benefit is the availability of water during the dry season, which is of particular significance to the poor. When the wells run dry, because the water table is not replenished from the reservoir and canals, water for human consumption needs to be purchased, at considerable expense to the poor. Water for drinking and other needs has to be brought from great distances, placing a particularly heavy burden on women and children from poorer families who customarily carry the water. The risk of drought is particularly hard on the poor because they have fewer reserves of food, less savings and less assets to help them tide over.

It is expected to cultivate inland fish in all reservoirs encompassed by the project. It has been estimated that about 1160 metric tons of fish per annum will be produced which will generate an additional income of about Rs. 116 million for the poor in the area. It will also substantially reduce malnutrition, particularly among their children.

About 300 elephant herds with nearly about 50 species of animals trapped in Handapangala area will migrate to a new habitat closer to the Weheragala reservoir with the completion of construction of the dam. This will lead to a reduction of damage to the sugar plantation at Pelawatte and paddy and other crops in the Handapangala area. The provision of a habitat for elephants and animals around the reservoir will improve the tourism industry in the area and will generate employment and income for the unemployed youth through the setting up of micro enterprises. This has been proved by the statistics collected from the project office of the Udawalawe Sanctuary. In 2003 the Department of Irrigation constructed the Galamuna Anicut scheme close to the sanctuary. As a result, tourism to the sanctuary has increased from 5000 to 25,000 between January and December in 2004. Details are given in annex 02.

45 km of road network within the Lunugamwehera park area will be rehabilitated under the project and it will improve the accessibility to remote parts of the park for tourists, and for wildlife officers for better supervision. In addition, new pastureland will be identified away from the park area which will be developed for cattle which at present use the park area for grazing.

The economic analysis incorporated in the pre feasibility study of the project indicates an Internal Rate of Return of 15.63 and Benefit Cost Ratio of 1.49. Details are given in annex 03.

**Implementation:** The project will be implemented during 2006 – 2008. The implementation plan is given in annex 04.

### 13.1.2 Deduru Oya and Mee Oya Development Project

#### Summary

Estimated cost:	\$ 65 million; Proposed MCA funding: \$ 55 million
Executing agency:	Department of Irrigation
Benefits:	Irrigation of 11,500 ha of cultivated land (double output) and 3,200 ha. of uncultivated land (two crops). Feeding of 54 existing tanks. Generation of 8 GWh of electricity.
Status:	Feasibility study and EIA have been completed.

**Present Status :** The Deduru Oya and Mee Oya are two adjacent river basins located in the Northeastern Province. The Deduru Oya is the fourth largest river basin in Sri Lanka and has a drainage area of 2620 sq.km. Its annual discharge of water to the sea is more than 1000 MCM and this large quantity of water is yet to be harnessed. The adjacent Mee Oya, which has a drainage area of 1500 sq.km is in comparison in a drier climatic condition and at present discharges about 40 MCM to the sea annually. Most of the water in the Mee Oya basin has been exploited mostly for agricultural purpose in contrast with the Deduru Oya basin.

**Targets and Cost:** The Deduru Oya reservoir project envisages the construction of a 75 MCM capacity reservoir across the Deduru Oya at Ridiya Bendi Ella near the Kurunegala-Padeniya- Annuradhapura Road. After the completion of the dam it is expected to improve the productivity of the existing agricultural land under the existing minor irrigation schemes and to develop new land in the Mee Oya and Deduru Oya basins. The location map of the project is given in annex 05.

It is planned to construct a hydro power plant just down stream of the proposed reservoir. The powerhouse will be incorporated into the spillway structure. The last bay of the spillway at the end of the right bank, adjoining the spillway abutment, will be used for this purpose. The power generation by the proposed plant has been estimated at 7.921 GWH. Details are given in annex 06. In these circumstances it is expected to have three units of 0.5 mw Kaplan type turbines for the powerhouse. Details are given in the feasibility study.

The total cost of the project is about US \$ 65 mn. Of this sum US \$ 55 mn is expected from MCA. The remaining US \$ 10 mn will be borne by the Government of Sri Lanka.

**Benefits:** The reservoir will provide supplementary irrigation for about 9515 ha. of existing land under the existing 50 minor tanks and 4 major reservoirs and about 1600 ha. of new land. Irrigation water to this land will be diverted through a 64 km. long LB canal in the Deduru Oya basin. The reservoir will also augment the present supply to Magalla tank, which has a command area of 2400 ha. of existing land and 600 ha. of new land located on the right bank of the Deduru Oya. A 33 km long trans-basin canal in the Mee Oya basin will also be constructed under the project. This canal will transfer 80 MCM water annually to Inginimitiya and Thabbowa reservoirs augmenting the water supply to 1000 ha. of existing land. In total approximately 15,000 ha. of lands will be cultivated with paddy during the Maha season and paddy with other high value

commercial crops in the Yala season under the project. The number of families to benefit through the project has been estimated at 30,000.

In addition, this project will improve drinking water availability in the major towns such as Wariyapola, Mahawewa, Nikaweratiya and Anamaduwa in the Northwestern Province in addition to the families directly covered by the project. Details are given in the feasibility study.

At present tourist arrivals in the Tabbowa sanctuary in the Puttalam district are very low due to non-availability of safe drinking water. It is expected to increase tourist arrivals substantially, providing a source of income for the poor in the vicinity of the sanctuary and people living along the Colombo-Puttalam Road.

Inland fish production could be developed, as a somewhat large fishing community is available in the region. According to information from the Ministry of Fisheries, a minimum of 200 kg./ha. yield of inland fisheries could be expected from the reservoirs in the project. Therefore, total fish production of the project can be estimated at 2800 mt tons per annum with a value of about Rs.280 mn.

The economic analysis in the pre-feasibility study of the project shows an Internal Rate of Return of 17.6 percent and Benefit Cost Ratio of 1.52. Details are given in annex 07.

**Implementation :** The project will be implemented during 2006 – 2008. The implementation plan is given in annex 08.

### 13.1.3 Rambukkan Oya Reservoir Project

#### **Summary**

Estimated cost: \$ 20 million; Proposed MCA funding: \$ 15 million  
Executing agency: Department of Irrigation  
Benefits: Irrigation 2162 ha. of land.  
Status: Pre-feasibility study and EIA have been completed.

**Present Status:** The proposed Rambukkan Oya Reservoir and irrigable area of the project are located in the Mundeni Aru river basin in the Ampara district in the Eastern Province. The large portion of the drainage area of this basin falls in the Maha Oya, Padiyathalawa, and Eravurpatthu Divisional Secretary divisions in the district. A minor portion of the drainage area of the reservoir is located in the Bibile and Madulla Divisional Secretary divisions in the Uva Province. The location map is given in annex 09.

The project area is one of the most underdeveloped areas in the country with hardly any facilities or public utilities compared with the rest of the country. According to the statistics more than 70% of the people are either unemployed or partially employed and 85% of those who are employed are engaged in agriculture.

Large scale investment has been made by the state in the adjacent Gal Oya and Maduruoya basins in the recent past and as a consequence the living standards and

income levels of the farming community in these areas are much higher than those of their counterparts in the Muddeni Aru basin.

**Targets and Cost:** The proposed project will be located across the Rambukkan Oya which is a tributary of Muddeni Aru, mid way between Pollebedda and Kurunduvinna villages just within the Maha Oya Divisional Secretary division. The dam will rise to a height of about 81 feet at the maximum and will be 3700 ft. long. The gross storage at full supply level is 40, 000 ac.ft. The dam will have a 16 ft wide roadway on the crest.

Construction of 7 miles of main canal and 14 miles of branch canal to carry 200 cusecs and 100 cusecs respectively is envisaged under the project. These canals will provide irrigation for 2162 ha. of land on both banks of the Rambukkan Oya.

The access road to the dam site is about 8 miles along the cart track to Kurunduvinna commencing from the Badulla-Batticaloa highway. This 8 miles of cart track has to be improved to accommodate heavy traffic that will operate during the construction stage. Details of the infrastructure development of the project are given in the feasibility study.

This project will cost US\$ 20 mn. Of this total US\$ 15 mn will be obtained from MCA. The remaining US\$ 5 mn will be borne by the Government of Sri Lanka.

**Benefits:** The project will provide benefits to about 10,000 families located in the above 2162 ha. of land. During the Maha and Yala seasons 1029 ha. of this land will be utilized for paddy cultivation. The remaining 1133 ha. of land will be utilized to cultivate groundnuts for commercial purposes in the Maha season. In the Yala season this 1133 ha. of land will be utilized for the cultivation of high value commercial crops such as chillies, soya bean, and red onion. The total revenue to be generated through the cultivation has been estimated at Rs. 216,271 per hectare. Without the project the revenue has been estimated at Rs. 78,830 per hectare.

It is planned to provide pipe borne water to the Maha Oya township, Dambadeniya, Kekirihena, Tappalpola, and Samagipura Grama Niladari Division. This will cover about 1400 families or about 30 percent of population of the Maha Oya Divisional Secretary division. In addition, tube wells or dug wells for the remaining Grama Niladari divisions in this area will be provided.

The alternate roads to reach Bibile and Ampara towns and the internal road network in the Maha Oya division will be developed. This will improve the marketing of produce and products of the project area. The marketing facilities will be further developed by constructing a market complex in Maha Oya town and the fair markets in the area.

In addition to the direct benefits a number of indirect benefits will also be provided by the project. These include development of hospitals and schools in the area.

The economic analysis contained in the feasibility study of the project shows an Internal Rate of Return of 18.16 percent and benefit cost ratio of 1.17. Details are given in annex 10.

**Implementation:** The project will be implemented during 2006 – 2008. The implementation plan is given in annex 11.

## 13.2 Irrigation Projects for Feasibility Study

### 13.2.1 Yan Oya Reservoir Project

#### Summary

Reservoir Capacity	: 45 MCM
Benefits	: Development of 5210 ha of the existing land Development of 1500 ha of new land Settlement of 6000 families
Cropping Intensity	: from 0.75 to 1.80
Cost of the feasibility study	: US\$ 2 mn, MCA funding US\$ 1.5 mn

**Present Status:** The Yan Oya originates in the hilly areas of Dambulla (North Central Province) and runs about 120 km. before it reaches the Indian Ocean, south of Pulmoddai. It has a catchment area of 1520 sq.km. and two major reservoirs are located in the upper catchment viz. Hurulu Wewa and Wahalkada Wewa. Hurulu Wewa has a catchment area of 200 sq.km. while Wahalkada Wewa has one of 90 sq.km. Therefore out of 1520 sq.km. of the catchment surface, run off is regulated only in 290 sq.km. The Yan Oya is essentially a flashy river. The bulk of the inflow comes during the northeast monsoon, and the river practically dries up during dry periods. This characteristic of the river suggests the need for regulation of reservoirs in the catchment for developing the water resources. The location map is given in annex 12.

Padaviya Reservoir is located in the Northeastern part of the North Central Province in the Ma Oya Basin adjacent to the Yan Oya Basin. Padaviya Reservoir has a command area of 5587 ha. but experiences such a shortage of water that the cropping intensity in the area is barely 0.86. In order to redress this problem in November 1991, the Central Engineering Consultancy Bureau (CECB) was directed to carry out a pre-feasibility study for diversion of water from the adjacent basin of Yan Oya to the command of Padaviya Reservoir to augment irrigation water supplies. After completing the pre-feasibility study in 1992, CECB was directed to complete the feasibility study of the project. It was completed in 1994.

The feasibility study has suggested the construction of a 45 MCM capacity reservoir at Pangurugas Wewa across the Yan Oya.

**Benefits:** The project will provide irrigation for 5210 ha. of existing land consisting of 2200 ha. in Padaviya, 140 ha. in Wahalakada, 750 ha. in Lower Yan Oya Anicut Scheme, 620 ha. in the Mee Oya Basin and also 1500 ha. of new land. 480 ha. of land will be inundated for the reservoir and the project will facilitate double cropping for 1500 ha. of new land. The cropping intensity of 3725 ha. of existing land will improve from 0.8 to 1.8. The project will benefit about 6000 families in the project area.

The economic analysis contained in the feasibility study of the project shows a benefit cost ratio of 1.25 and the Net Present Value of Rs. 1132 mn.

**Targets and Cost:** At present, the people on the Yan Oya right bank also request water from the proposed Yan Oya Reservoir. This request has not been incorporated in the feasibility study conducted in 1995. Therefore a fresh feasibility study is now required based on the current needs of the people in the area.

The cost of the proposed feasibility study has been estimated at US \$ 2 mn. Of this amount US \$ 1.5 mn is expected from MCA. The remaining US \$ 0.5 mn will be borne by the Government.

**Implementation:** The project will be implemented during 2006.

### 13.2.2 Uma Oya Diversion Project

#### Summary

Reservoir Capacity:	150 MCM
Benefits:	Generation of 90 MW hydro power Cultivation of 8,000 hectares in two seasons Provision of drinking water for 4000 families Settlement of 10,000 families
Cropping Intensity:	from 0.8 to 1.80
Cost of the feasibility study:	US\$ 4 mn, MCA funding US\$ 3.5 mn

**Present Status:** The Uma Oya is a major tributary with a catchment area of 600 Sq. km. which is located in the wet zone of the country and joins the Mahaweli river between the Randenigala and the Rantambe reservoirs. The exploration of the hydropower potential of the Uma Oya as an in-basin development had been considered in the Master Plan for the Electricity Supply of Sri Lanka in the late 1980's and this had been recognized as one of the most economically viable proposals for the future.

As there was a need to develop the agricultural potential of the southeast dry zone and in particular to meet the acute water shortage experienced in the newly constructed Kirindi Oya Irrigation Settlement Project (Lunugamwehera Project), it was decided to consider the possibility of diverting the water of the Uma Oya to the Kirindi Oya basin, developing hydropower in preference to the above mentioned in-basin development. Details are given in annex 13.

**Benefits:** In 1991, the Central Engineering Consultancy Bureau (CECB) was directed to carry out a pre-feasibility study of the trans-basin diversion. The study has found the following benefits:

- (a) An estimated annual power generation of about 450 GWh, with an installed capacity of 150 MW.
- (b) Transfer of 290 MCM of irrigation water annually for about 3800 ha. of land in the

Kirindi Oya basin and for about 4000 ha. of new and existing land in the Handapanagala, upstream of Lunugamwehera reservoir.

The base cost of the project has been estimated at Rs. 11 bn by the study.

In order to decide between the options of in-basin development and trans-basin development, SNC-LAVALIN, a Canadian Consultancy Group, was directed to carry out a feasibility study in 2003. According to Phase I of the feasibility study, SNC-LAVALIN recommended trans-basin development after considering the available in-basin and trans-basin development options and finally optimizing the best in-basin and trans-basin schemes. The recommended trans-basin development option has the following benefits:

- (a) An estimated annual energy generation of about 312 GWh, with a installed capacity of 90 MW.
- (b) Transfer of 192 MCM of irrigation water annually for about 2400 ha. in the Lunugamwehera Project and for 2600 ha. of new and 400 ha. of existing land in the Handapanagala, upstream of Lunugamwehera Reservoir.

The map of the project showing the locations of reservoirs and powerhouse, and tunnel alignments is given in annex 14.

In the SNC-LAVALIN proposal, the size of reservoirs is small compared with that of suggested by CECB, and both hydro schemes are run-of-the-river projects with pondage to regulate flows on a daily basis. In the SNC-LAVALIN proposal it is not intended to carry out seasonal regulation of flows in the Uma Oya and Maha Thotilla Oya which would increase the primary energy from the scheme. Inundation area will also be reduced greatly in this proposal to 11.8 ha. from a total of 54.8 ha. According to the SNC-LAVALIN proposal the cost of the trans-basin project is approximately Rs. 13.5 bn with a benefit cost ratio of 1.132 and economic Internal Rate of Return of 11.93.

**Targets and Cost:** It is necessary to carry out stage II of the feasibility study. Its total cost has been estimated at US \$ 4 mn. Of this amount US \$ 3.5 mn is expected from MCA. The remaining US \$ 0.5 mn will be borne by the Government.

**Implementation:** The project will be implemented during 2006.

### 13.2.3 Urawa Diversion Project

#### Summary

Reservoir Capacity:	16 MCM
Benefits:	supply of water to Muruthawela scheme to increase the cropping intensity of 3950 ha. and provision of domestic water of 1.8 MCM
Cropping Intensity:	Increase up to 1.50

Cost of the feasibility study: US\$ 2 mn      MCA funding US\$ 1.5 mn

**Present Status:** The existing Muruthawela Reservoir commands about 6433 ha. of paddy land located in Urubokka Oya and Kirama Oya basins in the southwestern quadrant of Sri Lanka, with low cropping intensities. Nilwala Ganga too, located in the same region though not in the same meteorological zone, has surplus water causing flood problems in the lower valley, as it is entirely located in the wet zone of Sri Lanka. The location map is given in annex 15.

Under the Urawa Diversion Project, it is proposed to augment the Muruthawela Reservoir from Urubokka Ganga which is a tributary of Nilwala Ganga. This project envisages the construction of (a) a 16 MCM capacity reservoir across the Urubokka Ganga, 1.7 km. upstream of the Rotumba Bridge site and (b) a 7.6 km. long tunnel with a capacity of 4.0 cusecs connecting Urawa Reservoir and a tributary of Urubokka Oya to augment water to Muruthawela Reservoir. Details are given in annex 16.

**Benefits:** (a) Augmentation of the Muruthawela Reservoir by 30 MCM of water annually to improve cropping intensity up to 200% from the existing cropping intensity of (i) 100% in 3151 acs. of paddy land under the Muruthawela LB Main Canal, (ii) 180% in 5589 acs. of paddy land under Urubokka Anicut Scheme and (iii) 100% in 750 acs. of paddy land under Muruthawela RB Main Canal respectively. (b) Provision of 1.8 MCM of domestic water annually from Muruthawela Reservoir through pipe borne water supply to Weeraketiya, Middeniya and hamlets in the Muruthawela Reservoir Scheme.

**Targets and Cost:** A pre-feasibility study on the Urawa Diversion has been carried out by the Irrigation Department in 2002. This study has indicated that the Urawa Diversion Project is technically feasible, economically viable and holds promise of improving cropping intensities of agricultural land in Muruthawela and Urubokka Oya Schemes and provides domestic water requirements of Middeniya, Weeraketiya and hamlets of the Muruthawela Reservoir Scheme. It is necessary to carry out the feasibility study very early. The cost of the proposed feasibility study has been estimated at US \$ 2 mn. Of this amount US \$ 1.5 mn is expected from MCA. The remaining US \$ 0.5 mn will be borne by the Government.

### **Implementation**

The project will be implemented during 2006.

## **13.2.4 Heda Oya**

### **Summary**

Reservoir Capacity:	45 MCM
Benefits:	cultivation of 6,000 ha of new land and 1,500 ha of existing lands Provision of drinking water for 6000 families
Cropping Intensity:	1.80

Cost of the feasibility study : US\$ 2 mn, MCA funding US\$ 1.5 mn

**Present Status:** The Heda Oya is located in the southeastern dry zone of Sri Lanka (annex 17) and the water resource is not developed except in Meeyal Oya tributary where the Muthukandiya Reservoir is located. The Heda Oya basin covers an area of 236 square miles and enters the Indian Ocean at Arugam Bay on the East Coast of Sri Lanka. The river basin is one of the under developed areas in the island. The area is sparsely populated and could sustain a much larger population, if it could be developed agriculturally. The uneven pattern of rainfall requires storage reservoirs for productivity improvement of land and water resources.

A feasibility study on this project was carried out by the Department of Irrigation in 1966. This study suggested the construction of a reservoir across the Heda Oya downstream of Siyabalanduwa just before the Moneragala District boundary. Details are given in annex 18.

**Benefits:** The proposed reservoir will provide irrigation for 6042 ha. of new land and 1667 ha. of existing paddy land in the Ampara District.

**Targets and Cost:** There is a complaint by the people of the Moneragala District that though the catchment area is in the Moneragala district, the project will serve the irrigable areas of the adjoining district of Ampara. Therefore, it is required to explore the possibility of having an upstream reservoir in the Heda Oya basin, which will provide irrigation water to land both in the Moneragala and Ampara districts.

In addition to the irrigation needs of the Heda Oya basin, it has been found that the project should essentially consider the other needs of the area such as domestic water, tapping industrial resources, and protection of environment. For these reasons it is urgently necessary to carry out a new feasibility study.

The cost of the proposed feasibility study has been estimated at US \$ 2 mn. Of this amount US \$ 1.5 mn is expected from MCA. The remaining US \$ 0.5 mn will be borne by the Government.

**Implementation:** The project will be implemented during 2006.

### **13.3 Executing Responsibility**

The Department of Irrigation will execute the Weheragala, Deduru Oya, and Rabukkan Oya projects as it is the sole agency in the country with the required technical and managerial skills to carry out projects of this nature, complexity and geographical coverage.

A Programme Implementation Unit (PIU) headed by a Programme Director with support staff will be established in the Ministry of Agriculture, Land, Irrigation, and Livestock. A Project Office (PO) will be established in each project to coordinate activities at the field level and liaise with the PIU in order to execute the project in an effective manner. This PO will be headed by the Regional Director-Irrigation (RDI) in the region.

The feasibility studies will be conducted by the Department of Irrigation in collaboration with an agency, which is conversant with this subject.

#### **13.4 Monitoring**

The programme will be monitored at Local Authority Level, District Level, and Ministerial Level. The Provincial Steering Committees will be actively involved in the process of monitoring. The progress of work and issues will be reported to the Secretary, Ministry of Agriculture, Livestock, Land, and Irrigation and the Project Management Unit in the Ministry of Finance and Planning to be forwarded to MCA. In addition, an independent monitoring will be undertaken by a non-governmental agency for MCA.

#### **13.5 Future Maintenance**

Maintenance of three reservoirs included in the proposal will be undertaken by the Ministry of Agriculture, Lands, Livestock, and Irrigation with support of its regional staff. Funds required for this purpose will be released by the Treasury on an annual basis.

The minor reservoirs fed by these three reservoirs will be maintained by Tank Committees which have already been established at grass roots level. The President of the Committee, the Secretary of the Committee, and the majority of members are the beneficiaries of the reservoirs. All the beneficiaries of the area are charged a fee to raise the funds required for the maintenance of the reservoir. The Tank Committee will report to the Provincial Steering Committee on the status of the reservoir, issues, and the remedial actions.

### **14. Rehabilitation and Extension of Rural Roads**

#### **Summary:**

Estimated cost:	US\$ 140 mn.; Proposed MCA funding: US\$ 120 mn.
Executing agency:	Local Government Authority and Road Development Authority.
Benefits:	Rehabilitation of 19330 km. of rural roads in eight Provincial Councils. Large savings in time and cost of transport, opening of new areas to commercial production, expanding production of high value, perishable or time-sensitive products.
Status:	Preliminary reports have been completed.

**Present Status:** Sri Lanka has a road network of about 92,700 km, comprising 11,600 km of national highways (class 'A' and 'B'), 16,500 km of provincial roads (class 'C', 'D' and 'E') and 65,600 km of rural roads or local authority roads. Rural roads are 75% of the total road network. Over 90% of these are gravel and usually cannot be used during the rainy season. Of the 65,000 km of such roads over 9,000, or 15% have deteriorated to such an extent that buses no longer use them. The rural road network is not as widespread and effective as it should be. Specifically, many rural areas do not have optimal roads services because they are poorly connected to the network. Also, even if they are connected, the condition of the road infrastructure is extremely poor. As a result, a distressingly large proportion of services has been discontinued: 30% of rural services and 35% of school bus services. Transportation of produce has also become expensive. Agricultural input prices are high because of transport costs. Even industrial goods are

made uneconomical for the same reason. Virtually all of the remainder of the rural road network has deteriorated over the past 50 years.

Moreover, there are significant areas that are not connected to motorable roads, due to bridges and culverts having been washed away. Since rural people on average need to travel nearly 6 km to hospitals and markets, this is a serious problem.

The Government allocates substantial funds for roads in each budget for Class A and B roads (Rs. 8 bn = US\$ 80 mn). But this amount is inadequate to prevent further deterioration of these roads and it does not help rural roads.

**Table 4**  
**Proposed Rural Roads for Rehabilitation**

<b>Province</b>	<b>Total Distance (km)</b>	<b>Distance to be rehabilitated (km)</b>	<b>Approx Cost (US\$ mn)</b>
Western	11295	580	8
Southern	9484	1900	16
North Western	4447	1790	15
North Central	7253	2090	18
Central	8283	710	12
Sabaragamuwa	8201	1060	13
Uva	5485	2000	20
North and East	10210	9200	38
<b>Total</b>	<b>64658</b>	<b>19330</b>	<b>140</b>

Source: Ministry of Highways

**Targets and Cost:** The core target of the programme is to repair 19,330 km of rural roads that need urgent repair/ rehabilitation countrywide. Details are given in table 4. The total cost of this project has been estimated at US\$ 140 mn. Of this total, US\$ 120 million is expected from MCA. The remaining US\$ 20 mn will be funded by the Government. The location of the roads is given in the map in annex 19.

**Criteria for Selection of Roads:** The roads will be selected on the basis of improvement of connectivity and the project portfolio will be designed on a district basis. This would help minimizing the number of projects in operation and also expediting the process of implementation and better monitoring. The project must benefit the poor with immediate effect. In this context the following criteria will be adopted for the selection of roads.

The level of the incidence of poverty will be the prime criterion to identify the needy areas. Accordingly, the Divisional Secretariats will be divided into 3 categories.

Category 1 - most needy – Poverty Headcount 51.9% - 28.5% - 73 Divisional Secretariats.

Category 2 - average needy – Poverty Headcount 28.4% - 16.8% - 136 Divisional Secretariats.

Category 3 - less needy – Poverty Headcount 16.7 % - 2.6% - 115 Divisional Secretariats.

Within Division Secretariats the following criteria will be adopted to select the roads that need rehabilitation-

- a) Provision of connectivity to and between provincial and other major roads.
- b) Facilitation of access to infrastructure.
- c) Connecting a minimum of 2 –3 villages.
- d) Access roads to agricultural hinterland areas and industrial sites.
- e) Access roads to housing settlements or new housing sites.
- f) Having at least 100 houses on both sides of each road.
- g) Provision of connectivity to health, education, recreation, cultural, and other social service facilities of the community.

Funds will be allocated for repair/rehabilitation work as follows:

- |            |   |
|------------|---|
| Category 1 | - Rs. 20 mn per Divisional Secretariat Division |
| Category 2 | - Rs. 16 mn per Divisional Secretariat Division |
| Category 3 | - Rs. 12 mn per Divisional Secretariat Division |

The HDM Model is not appropriate for selection of rural roads for rehabilitation as it identifies roads for rehabilitation on the roughness of the road and the volume of traffic. This concept is generally used by Key Donors such as ADB for the selection of roads in categories A and B.

**Benefits:** Rural roads are an important means of access for the rural economy; in the absence of other means of transportation, they are often the only means available. These roads are vital for agriculture and getting other rural products to markets, and the movement of inputs to farms and other production units. Urban–rural connectivity is the most vital aspect of rural roads development and it mobilizes the new technology towards rural areas. Furthermore, a good rural road network helps rural communities to access education, health facilities, communication, and trade activities etc. The total programme will generate synergetic effects in a positive way, helping the acceleration of economic growth, creation of productive employment, and reduction of poverty in a most cost effective manner.

#### 14.1 Executing Responsibility

The rural roads development project will be implemented by the Ministry of Highways in collaboration with the Provincial Councils. A Programme Management Office (PMO) headed by a Programme Director with supporting staff will be established in the Ministry. PD's (Provincial Director's Offices) of RDA will implement the programme by using their respective staff in all provinces. The Provincial Director is primarily responsible for the implementation of this programme while the Chief Engineer and the Executive Engineer will undertake different responsibilities in its implementation. All project units will be packaged on a district basis to minimize the complexity resulting from having a large number of projects.

The sustainability of post maintenance will be the responsibility of Local Government Authorities with also their active participation. Beneficiary involvement in post maintenance work will undoubtedly facilitate the maintenance of these rural roads in a

sustainable manner. The Government intends to set up a fund for the maintenance of roads in the near future.

## 14.2 Implementation

The project will be implemented as given in the following matrix.

Stages	Activity	Approx Cost US\$ mn	Time frame
1	<b>Preparatory stage</b> In phase 1 re-selecting and prioritizing of roads will be carried out. In Phase 2, preparation of estimates, designs and procurement will be completed.	US\$ 2 mn – immediately	3 months for each phase (total of 6 months)
2	<b>Implementation Stage.</b> This will have two (2) phases. In Phase 1, 50% of total roads will be rehabilitated. The remaining 50% will be rehabilitated in phase 2.	Initially US\$ 70 mn to commence Phase 1. US\$ 68 mn to be released to commence Phase 2	Funds should be released after 3 months from the commencement of stage 1. Phase 1 and Phase 2 will be completed in 4 years.

## 14.3 Monitoring Criteria

The programme will be monitored at Local Authority Level, District Level, and Ministerial Level. The Provincial Steering Comities will be actively involved in the process of monitoring. The progress of work and issues will be reported to the Secretary, Ministry of Highways, and the Project Management Unit in the Ministry of Finance and Planning to be forwarded to MCA. In addition, an independent monitoring will be undertaken by a non-governmental agency for MCA.

The project portfolio will be designed on a district basis. This will help minimizing the number of projects in operation and also expediting the process of implementation and better monitoring.

## 14.4 Future Maintenance

Maintenance of rural roads is a special issue because the Local Authorities receive minimal funds from the Government and Provincial Councils and there is virtually no tax base in the rural areas. The Government is in the process of setting up of a fund for the maintenance of rural roads in the future but the expected revenue from this endeavor will not be sufficient for the upkeep of the entire road network. Therefore, it is expected to expand the tax base of Local Authorities and provide matching funds from the government.

## 15. Infrastructure for Industrial Development

**Present Status:** The Small and Medium Enterprise (SME) sector accounts for about 70 percent of industrial establishments and 31 percent of employment in the country. Its contribution to the total output in the manufacturing sector has been estimated at 30 percent. The majority of SMEs are concentrated around the Western Province. The Central Bank Annual Report for 2003 reports that of 3902 registered industrial establishments, 2104 enterprises (54%) are located in the Colombo District and 796 (24%) are in the Gampaha District. This pattern of location clearly indicate that there is a serious imbalance in the distribution of economic activities by region and it creates disparity in economic opportunities. This would not only affect achievement of a sustainable high level of economic growth, but also lead to social and political instability in the country.

A successful development strategy should aim at realizing the uplifting of the economic status in the regions, the rural areas in particular, to lay a solid foundation for the acceleration of growth of the economy and thereby shift the people from low productivity sectors to high productivity sectors to enhance their income and employment. This has been proved by the garment industry sector in Sri Lanka during the last fifteen years.

Recognizing the imperatives of poverty reduction and greater participation of the community in the growth process, at the beginning of 1990, the government encouraged industrialists to locate industrial activity, notably textiles and apparel in the rural areas. This programme has successfully employed nearly 150,000 persons, the majority of whom are women from low-income families. The output of the apparel industry was Rs. 70 million in 1976, and this amount increased to Rs. 248 billion by 2003. Textile, wearing apparel, and leather, which contributed to 13.7% of total industrial production in 1970, increased to 43.3% by 2003. The industry grew by an annual average of 15% during the same period. The easy market created by the Multi Fiber Agreement (MFA), the availability of abundant and easily trainable labour, a well-developed port and a favourable climate for foreign investment have assisted the process.

It is noteworthy that the bulk of the garment factories are in the category of the SMEs. A study conducted by JICA in 2000 identified 891 enterprises in the sector of which only 20 were categorized as large. The SMEs have accounted for 51% of total exports of the country. Many of these SMEs which started up as back yard workshops grew into SMEs with around 100-350 sewing machines. Their interaction with the rural economy is significant.

All these factories maintain the best labour practices in Asia, as recognized by the EU. A large proportion of the companies have developed ties with their purchasers, produce specialty products for niche markets (particularly in lingerie) and would, therefore, continue to be competitive. Many of them have a good record with respect to on-time delivery. They are less affected than some competitors by political unrest, general strikes and frequent labour trouble.

**Targets and Cost:** The empirical evidence as set out clearly suggests that the expansion of the garment industry in the rural areas will have tremendous potential for acceleration of the growth of the economy and reduction of poverty. Therefore, a proposal to provide infrastructure for the establishment of three industrial townships for the garment industry has been developed.

The present project proposal has been based on a number of factors of which the following are the main ones-

1. Introduction of a rapid livelihood programme to create employment for youth affected by Tsunami and alleviate the severe poverty in the country.
2. Reconstruction of coastal areas after the Tsunami devastation demands rebuilding of townships as a priority action.
3. The need of the hour is for the industry to perform with greater commitment, also as a national obligation, to generate additional foreign exchange in the near term, being the only significant manufacturing industry now visible in the country after the Tsunami devastation.
4. The need to promote backward integration in Sri Lanka is felt more in today's circumstances as the fortunes of the apparel industry are inextricably linked to that of the textile industry.
5. The contribution to efforts towards rural poverty alleviation by creating economic activities for youth through the injection of a new source of income.

New Townships are to be developed in areas which meet the following criteria.

- 1) Tsunami affected areas
- 2) Availability of sources of surface water
- 3) High unemployment and resultant poverty
- 4) Access to a transport system (mainly railway system) that can be developed.

Having regard to the above criteria it was decided to locate the projects in the districts of Ampara, Kegalle and Hambantota. Except Kegalle, the other two districts were badly affected by the Tsunami disaster.

Hambantota District records the highest level of unemployment of 18% and has over 42% of GCE O/L qualified persons without jobs. The incidence of poverty in the district is about 32 %. Even though Ampara records a relatively low level of unemployment it comes within the Eastern Province, which has 16% unemployment and the highest female unemployment of 13%. Unemployment in the Kegalle district remains around 14 % and the incidence of poverty there is about 32%.

The location of the townships is given in annex 20. The exact physical location of townships has already been identified.

The following infrastructure for the township will be provided under the project:

- Power supply
- Water supply
- Access roads

- Sewerage and drainage
- Telecommunication facilities
- Water and effluent treatment facility
- Storm water disposal system
- Solid waste disposal system

Each township will establish forty factories. Private investors will be mobilized to construct the factories and to purchase the machinery and equipment required by them using their own resources. The responsibility of this function has already been assigned to the Board of Investment (BOI). Development of three townships will be undertaken simultaneously.

Based on the experience gained by the Board of Investment historically in the development of industrial zones and parks, the cost of a proposed township development has been estimated to be around US\$ 19 mn. Thus three townships require US\$ 57 mn.

Land and workforce required for the erection of townships will be provided by the Board of Investment.

**Benefits:** During the construction period about 1,000 jobs will be generated and this will revive the local economy. On commencement of production in the factories it is expected to provide direct and indirect employment to about 20,000 youth in each township, and inject around Rs. 2 bn into the rural economy.

Improvement to infrastructure such as roads, telecommunication, transport, water, will benefit the rest of the population in the area making them indirect beneficiaries of the project.

The hard pressed regional economy in the areas which has been debilitated further by the Tsunami will also reap the benefit of internal resource generation to the extent of approximately Rs.1.8 billion annually. In addition, the project is also expected to contribute approximately US\$ 60 million annually to export earnings. The much coveted backward integration process will get a fillip as a result and the apparel industry will in turn, greatly benefit from the local manufacture of a vital input needed to sustain it competitively in the long term.

The project has been justified by a financial analysis. At an interest rate of 7.5% per annum each Township project will have a Net Present Value of Rs. 903,825 million at the end of the 25-year period. In effect, if the cost of the Township was funded by a loan at 7.5%, at the end of the 25-year period it will generate Rs. 903,825 million in excess of the original investment. Details are given in annex 21.

**Executing Agency:** The project will be implemented under the purview of the Ministry of Industrial Development and Investment Promotion. The Board of Investment (BOI) will be the Project implementation Agency. It will establish a separate unit to accelerate the establishment of these townships. The Joint Apparel Association Forum (JAAF) will assist the BOI in the process of implementation of the project.

**Implementation:** The project will be implemented during 2006-2008. Details are given in annex 22.

**Monitoring Criteria:** The Provincial Steering Committees will be actively involved in the process of monitoring. The progress of work and issues will be reported to PIU of CEB and the Project Management Unit in the Ministry of Finance and Planning to be forwarded to MCA. In addition, independent monitoring will be undertaken by a non-governmental agency for MCA.

**Future Maintenance:** Maintenance of the project in the future will be undertaken by BOI. Funds required for this purpose will be raised from the investors in the townships.

## 16. Rural Electrification

### Summary:

Estimated cost: US\$ 42.0 mn.; Proposed MCA funding: US\$ 37.5 mn.  
Executing agency: Ceylon Electricity Board  
Activities/Benefits: Provision of electricity for 1000 villages  
Extension of MVE lines by 650 Km  
Rehabilitation of two distribution centres  
Status: Feasibility study and EIA have been completed.

**Present Status:** Electricity is essential for development. The Ceylon Electricity Board (CEB) is the state authority locally responsible for generation, transmission and distribution of electricity in Sri Lanka. Its capacity for generating power has been estimated at 2483 MW, of which 1247 MW is hydro, and the remaining 1236 MW is thermal connected to the national grid. The total supply from the national grid is 63%.

The transmission voltages of the CEB system are 220 kV and 132 kV and all the lines are interconnected in one grid system. The total length of the transmission lines is 1829 km. In addition there are 21,000 km of MV lines for sub transmission. In order to meet the increasing demand, the transmission system and associated grid substation facilities are being developed continuously. The LV distribution lines total 75,000 km and there are about 14,750 distribution substations. The distribution voltage in the country is 400/230 volts at 50 Hz.

Biomass/wood provides some 50% of primary energy requirements, largely used in households and small commercial establishments. *Bagasse* is used in the sugar factories for cogeneration systems. Private costs of wood for cooking are higher than electricity in some areas and also result in large economic costs to society as cutting wood increases the problem of flooding, drought, and providing clean water.

Most of Sri Lanka's energy is produced from imported oil. This creates a burden on the balance of payments, particularly as the price of oil is high. Furthermore, it pollutes and also contributes to the high cost of electricity. Sustainable energy has been talked about much, but little has been done about it in a concerted manner.

The bulk of electricity production is by diesel fuel. It is expensive as it uses relatively small plants for producing electricity. The base load for an electric grid should be large plants, coal, or semi refined oil plants to reduce the cost of production.

Hydropower generation is diminishing since its potential, particularly large hydro, has been to a very great extent tapped. Other renewable sources of energy are not significant. However their future potential is considered to be high, as envisaged by the recent World Bank/GEF (Global Environmental Facility) project for development of 85 MW (approximately 5% of total capacity) of renewable energy in Sri Lanka.

Distribution losses from the national grid are relatively high. As of 2003 losses were about 18.5%. The CEB has had a long-standing goal of bringing the distribution losses down to 13%. Since 2000, total losses have been brought down from 21.6% to 18.5%. Since such losses were at 17.7% in 1997, the decline is neither steady nor assured.

Although tariffs are relatively high, they are inadequate to cover the costs of delivering electricity to consumers. High cost electricity plants have a heavy debt-servicing cost. The cost of production is nearly as great as the average sale price (production cost about Rs. 6, distribution cost about Rs. 3.45, tariff Rs. 7.8. Production cost could be brought down to Rs. 4). As a result the CEB had losses of nearly 17% in 2002 (a loss of Rs. 7.4 billion, or \$ 74 million on an income of Rs. 44 billion).

The medium-sized firms in the country, which produce garments, and agricultural raw materials pay 20-40% more than their competitors. The situation is even worse for commercial firms handling export commodities. Their competitors in other countries get electricity 40-50% cheaper. There is a shortage of power supply in some firms and such shortages are met by increasing the number of small, power generating units at a higher cost.

The problem is aggravated by inadequate investment in low cost power in the past, resulting in increased blackouts in the last decade. An estimate (by Dr. Tilak Siyambalapitiya) is that in 2022 some 9% of demand (forecast sales) will not be met and that this will reduce GDP by Rs. 13.5 billion (\$ 135 million) or 1.5%. These problems will get worse if projects ready for implementation are delayed. The pressure to limit blackouts is likely to lead to further investment in quickly available diesel generation. This will increase the cost of electricity by another one third by 2016. The result would be huge CEB losses or further increased tariffs and reduction or stagnation in the growth of the economy.

### **16.1 Rural Electrification Schemes**

The Government of Sri Lanka assigns a very high priority to rural electrification. Large amounts of funds, though not sufficient to meet the demand, have been allocated for the expansion of electrification in villages. Two ongoing programmes to electrify over 1800 villages is under way. These programmes have been funded by the Asian Development Bank and Chinese Government. Under these programmes 2400 km of MV lines, 7200 km of LV lines, 1100 Distribution Substations are being constructed. Although this

programme would electrify over 1800 villages another 14000 villages are in need of electricity. The Government of Sri Lanka is making efforts to provide electricity to at least 80 to 85% of households by the year 2010. The resources needed to achieve this goal are enormous and the Government wishes to invite the assistance of other countries and organizations to implement this plan.

**Targets and Cost:** Under this project it is proposed to construct 450 new Rural Electrification (RE) Schemes (annex 23) to provide electricity to about 1000 villages and extend the distribution lines by 4650 km to meet the requirements of medium and large industries, micro enterprises, government and non government organizations and households in the rural sector. The expansion of electricity under this programme will be carried out in parts of Sri Lanka where the level of electrification is low compared with the country average and it will be in keeping with the policy of the Government to extend facilities to rural areas. It is also associated with the Distribution Expansion Plans of the Power Sector.

This scheme generally consists of a 100/160 KVA distribution sub-station, 1 to 2 km long MV (33 kV or 11 kV) spur line and 4 to 6 km of LV distribution lines. The area of coverage in a village varies very widely from one to another. A RE Scheme may have a coverage varying from a section of a village to two villages. Proposals for the electrification of villages are entertained from government and non-government organizations, Members of Parliament and Provincial Councils, the Villages themselves and also from the CEB's Provincial and Area Offices.

The layout and the design of the distribution scheme will be carried out either in the CEB's main Distribution Planning Office or in the Provincial Offices. The construction of schemes will be done by CEB's own in-house Construction Units or by local contractors. The available labour in the locality will always be used in the unskilled work. The participation of the beneficiaries of the electrification is always obtained to clear the trees etc., in the way. Quite often they also participate in carrying out some of the unskilled labour.

As the benefits of electrification of villages are best realized when the villages selected for electrification have reached a certain level of development, the rural electrification in Sri Lanka is generally carried out in villages which have attained that level of development. These villages have the basic needs of water, housing, transport, health, education, entrepreneurial support like extension services, credit facilities and markets. The addition of electricity to the existing infrastructure of these villages becomes an effective catalyst in accelerating the growth in the villages and will improve the quality of life in the villages.

**Selection of RE Schemes:** The selection of RE Schemes to be implemented can be based on the same criteria as agreed with the ADB and used in the current Programme under implementation. In the present programme candidate schemes which meet an Economic Internal Rate of Return of 10% or more are selected for implementation. A computer model has been developed by CEB with the assistance of ADB for the economic

evaluation of RES. This facility will be used for evaluation of the suitable villages. The model can be modified to meet any other selection criteria if the need arises.

The cost of the project has been estimated at Rs. 3300 million (US\$ 33.0 million). Of this sum MCA is expected to fund US\$ 30.0 million. The remaining US\$ 3 mn. will be funded by the government. Details of the total cost of Re schemes are given in table 5.

**Table 5**  
**Summary of Cost of RE Schemes**

Item	Quantity	Cost (Rs. mn.)
33 kV/LT, 100 kVA Substations	450 Nos	350
33 kV HT lines	650 km	670
Total 3 phase LT lines	3350 km	2280
<b>Total Cost</b>		<b>3300</b>

**Benefits:** 4650 km of distribution lines are planned under this Project and the total number of potential consumers along this length of distribution lines would be over 70,000. Within the first year of completion about 30,000 households will obtain electricity connections and a further 40,000 households will obtain connections within a period of 3 to 4 years.

Non-electrified villages in Sri Lanka use Kerosene Oil for domestic lighting. The first benefit to be seen immediately after electrification is the savings in the use of imported fuel. Prior to electrification the type of house receiving electricity had been using 14 liters of Kerosene per month at a cost of US\$ 4.1 The average electricity consumption of a rural house is 48 kWh and the cost to the householder for this consumption is US\$ 1.8, which is less than his earlier expenditure on Kerosene.

The electrification of a village gives an impetus to industries. It opens up many opportunities for productivity growth, development of small industries and commercial activity. It has been seen that electrification coupled with other complementary infrastructure inputs existing or to be provided in the future from other sectors will promote many small scale industries such as Rice Mills, Rubber Mills, Coconut Fibre Mills, Saw Mills, Carpentry Metal Workshops, Stone Crushers, Sugar Cane Crushers, Brick Making Machines, Garment Industries, Food Industries, Farms etc. Several of these industries already exist in non-electrified villages using traditional techniques and power derived from Kerosene and Diesel. With the availability of electricity these industries will eventually convert to electricity thus increasing their output gaining substantial savings in fuel and maintenance costs and thereby improving competitiveness.

In addition to the facilities made available to Small Industries, Medium and Large Industries can also benefit from the availability of the substation and the spur medium voltage line. As a result it is envisaged that a substantial number of Medium Scale Factories will be established in the rural sector. A few industries that have commenced production due to improved power supply have made a great contribution to the economy

by providing employment and opening opportunities to sell ancillary services to the industry sector.

Electrification will enhance the quality of life as a whole in the village; better medical facilities, improvement of places of public interest such as schools, community halls and temples. Households will be more productive. This includes more productive hours in the commercial establishments and workshops, increase in cultivation using modern technology, and the increase in productivity in cottage industries.

The growth of IT related activities in the rural sector is very slow as a result of the lack of electricity. The proposed project will mobilize the IT industrialists towards villages enabling the rural youth to enhance their employability. It will also result in the improvement of the efficiency of many governmental and non-governmental institutions.

An evaluation has been conducted by ADB on the outcome of Rural Electrification in Sri Lanka. This study has included 1500 villages covered by its programme on rural electrification. It has been found that the program has been very successful and needs further expansion. The study has also indicated that the least cost option for providing lighting in rural villages in Sri Lanka is grid-supplied electrification.

## **16.2 Transmission Component**

### **(a) Proposed Grid Substation at Maho :**

At present, the MV (33 kV) network around Maho is fed by the Kurunegala Grid Substation. The distance to Maho from the Grid Substations is about 55 kms. Obviously, the 33 kV feeder to Maho is longer. This results in low voltage in Maho. The recent MV Development Study revealed that the voltage in the MV network in and around Maho is about 93.5 % of nominal 33 kV in 2005 and is going to be 90% in 2009.

Under the proposed rural electrification programme, there will be 30 schemes in the Kurunegala District, 30 in the Puttalam District and 25 in the Anuradhapura District. Some of these schemes in all three districts will be in and around Maho. As a result of what has been stated above, these schemes will face severe under voltage.

Options, including 33 kV express lines from existing Grid Substations, have been studied but they all have failed to solve this low voltage problem due to excessive feeder lengths. In order to solve this problem, it is necessary to provide a power injection point near Maho. Thus, a grid substation has been proposed at Maho, under MV Development Study for 2004 – 2013. This Grid Substation will feed the 33 kV network in and around Maho and extend it towards Tambuttegama, Nikaweratiya and Wariyapola. It will remedy the low voltage of the 33 kV Network in those areas. Therefore, successful implementation of the above rural electrification schemes essentially requires establishment of the Grid Substation at Maho.

### **(b) Proposed Grid Substation at Medagama :**

The MV (33 kV) Electricity Network of the Uva Province is fed by the Grid Substations at Badulla, Balangoda, Nuwara Eliya and Rantambe. However, these Grid Substations

are located far away from Moneragala – Wellawaya and, as a result, these areas have low voltage. The voltage levels in and around Moneragala and Wellawaya are about 86% and 83% respectively. This has been confirmed by MV Development Studies carried out for the period 2001 – 2009.

Under the proposed Rural Electrification programme, there will be 30 schemes in the Moneragala District. These schemes will face severe low voltage due to the reason indicated above. In addition there will be 25 schemes proposed for the Ampara District including Siyambalanduwa, Pottuvil, Panama. These locations are far away from the Inginiyagala Grid Substation. Therefore, these new schemes also will have severe low voltages.

Various options, including 33 kV express lines from the existing Grid Substations have been studied but they have all failed to solve this problem due to excessive feeder lengths. Therefore, it is necessary to provide a power injection point at Madagama to serve for the Moneragala and the Ampara districts. This grid substation has also been proposed by MV Development Studies for 2001 – 2009.

The total cost of the Transmission Component has been estimated at US\$ 9.0 Million.

### **16.3 Executing Agency**

Implementation will be carried out by the Provincial Construction Units of the CEB and private Contractors employed by the Provincial Offices. It has been found that this arrangement is very successful under the implementation of the Rural Electrification project 3 and 4. The ongoing Rural Electrification Project 6 and 7 which is using the same arrangement is expected to be completed ahead of schedule.

### **16.4 Monitoring Criteria**

The Provincial Steering Comities will be actively involved in the process of monitoring. The progress of work and issues will be reported to PIU of CEB and the Project Management Unit in the Ministry of Finance and Planning to be forwarded to MCA. In addition, independent monitoring will be undertaken by a non-governmental agency for MCA.

## **17. SME Development: Technological, Entrepreneurship and Enterprise Development and Increase of International Competitiveness of Sri Lankan SMEs**

The objective of this proposal for Millennium Challenge Account funding is to outline an economic and technology development strategy for the next four (4) years to effect a dynamic, positive, and equitable change throughout Sri Lanka while addressing the anticipated national challenges through assistance provided to rural Micro, Small and Medium Enterprises (MSMEs). A cost effective multi-task, rural economic growth programme implemented by a credible organization experienced in Sri Lanka will achieve a substantial impact as measured by increases in jobs, foreign exchange and rural development opportunities. With US volunteers' historical awareness and comprehensive experience in Sri Lanka, associated with most prestigious industry specific US technology institutes, the programme will dramatically increase the prospects

of overall success. An understanding of Sri Lanka's comparative and competitive capacities--including the public/private economic environment will promote the dynamic rural economic growth recovery of Sri Lanka.

The proposed strategies will support the Government's goals for growth in employment and export development while complementing existing Government and donor-funded programming. The proposed programme is large enough and focused enough to have a significant, measurable impact on the sectors it serves. In addition, the programme supports the government's desire to emphasize rural and regional development and be flexible enough to accommodate economic and policy changes affecting the private sector. Overall, it would foster a new civil stability in the country. The proposed programme initiative possesses the proven ability to mobilize rapidly and expeditiously, as time is of the essence. The following is only a very brief summary of the 95 page project proposal (and its associated annexure) that has been submitted to the Government of Sri Lanka and to the officials of the MCC. The proposed programme is a result of the island wide extensive consultative process that was initiated in May'2004 numbering over 120 discussions and meetings with the large spectrum of the stake holders of Sri Lankan society.

**Purposes and Objectives:** Despite what appears to be a tripling of the per capita income levels in the country, a majority in the nation has only experienced an increase in the cost of living, as the rising per-capita income figure is largely a Western Province driven statistic. Whilst income is highly concentrated among the top 20 percent of the population with the Western Province accounting for over 50 percent of the Gross Domestic Product (GDP), growth of income has stagnated for the lower 40 percent. It is pertinent to note that 78 percent of the nation's population resides in the rural areas. As an engine for industrial growth, the role of MSMEs is of critical importance to the Sri Lankan economy. Particularly the need to create business and entrepreneurial opportunities in rural areas is more pressing in the context of uneven development among the provinces.

The predominantly agricultural areas have been badly affected by the stagnation in coconut and domestic agriculture. As these economic disparities coincide with the intra-provincial disparities in human development in general, specific measures and activities are required to introduce an impetus to balanced economic development to reduce this gap between those areas with more resources and those without them. Focusing on the provinces outside the Western Province, the component aims at the creation of growth-oriented MSMEs and expanding existing micro- and small-scale entrepreneurial endeavors to small- and medium-scale industrial enterprises. This is a conclusion assumed at after the FCCISL and the programme administering agency, IESC found, through the joint extensive (more than 120) consultative meetings. This was further strengthened by the independent studies related to SME development, studies related to USAID/IESC's successful implementation of the TIPS Project, competitiveness of different Sri Lankan industries and also other country experiences.

**Proposed Priority Areas:** In order to foster economic growth opportunities, particularly within the rural areas, a successful programme must coordinate and exploit a network of

players that includes national and provincial governmental agencies, existing regional business chambers and MSME associations, and a well-integrated team of participants, both international and Sri Lankan, along with US volunteers (but not limited to them) to deliver the needed assistance at the level of the rural firm in Sri Lanka. Together, these resources will foster entrepreneurial skills and deliver business training, thereby addressing previously untouched areas in the rural economy and micro, MSME sector development.

The Sri Lanka Task Force for Small and Medium Enterprise Sector Development Programme studied MSMEs and identified the following constraints affecting them - low level of technology; limited access to markets and market information; absence of business development services; limited access to and cost of capital; regulatory and administrative constraints and inadequate institutional support.

Of the above, the first four constraints are micro level (enterprise specific) and the rest are macro level (policy). The proposed economic growth programme will assist at the micro level and will facilitate the process to address the macro issues.

**Regional Business Centres:** Immediate implementation of the programme is anticipated by establishing nine (9) regional business centres and 45 cyber cafes throughout Sri Lanka. More than 200 US volunteers will be deployed within the first 12 months of the programme. The proposed locations for the regional business centres are in table 6.

**Table 6**  
**Locations of Business Centres by District**

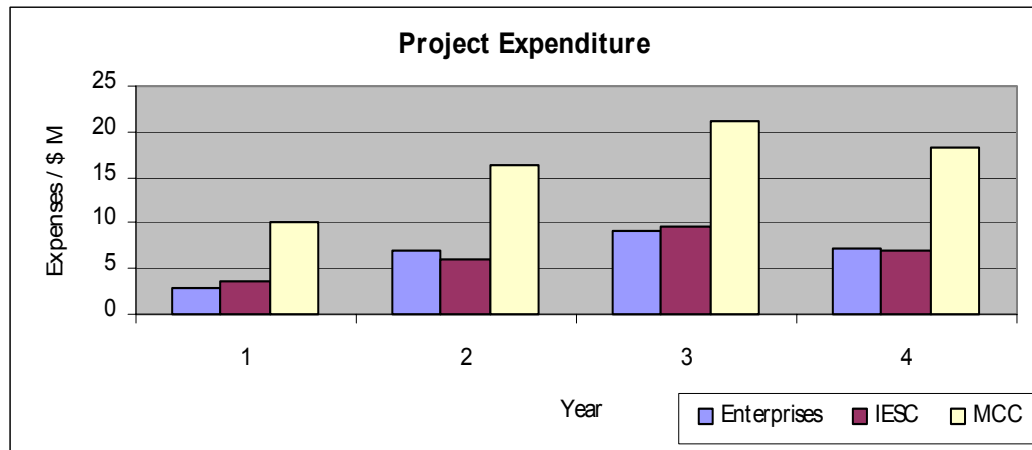
	<b>Province</b>	<b>Location</b>
1	Southern	Galle
2		Hambantota
3	Northern	Jaffna
4	Eastern	Trincomalee or Batticaloa
5	North Western	Kurunegala
6	North Central	Anuradhapura
7	Central	Kandy
8	Uva	Badulla
9	Sabaragamuwa	Ratnapura
10	Western and Main Office	Colombo

Most sectors of the economy need to design a road map to raise Sri Lanka to a higher level of technological sophistication than exists today. At the inception of the programme there will be a series of region specific sectoral studies for the enterprises and the policy makers to be aware of the existing gaps and to enable effective measures to fill those gaps. It is anticipated that such studies will be completed within the first six months of this four-year program.

**Funding Rationale/Mechanism:** Millennium Challenge Account: fund activities (sectoral studies, financial grants to Sri Lankan enterprises), partial cost reimbursement for the beneficiaries, and programme administrative costs (US\$ 20 mn).

1. IESC Volunteer Consultant contribution (US\$ 22 mn).
2. Cost sharing by the participating Sri Lankan enterprises (US\$ 26 mn).

**Project Expenditure Distribution:** Detailed budgets are submitted with annual expenses for easy monitoring and evaluation of the proposed project.



**Benefits:** The major impact of the programme would be the composite growth of employment, markets and sales of the targeted 1,500 beneficiary MSMEs. Whilst the programme will facilitate creation of new enterprises, the majority would be existing enterprises. The associated performance of the beneficiary MSMEs would be: 100 percent increase in sustainable employment; 100 percent increase in domestic sales; 100 percent increase in international sales (exports).

Other programme deliverables

- New clients: Minimum 460 by the end of the second year of the programme, 1,000 over the life of the programme;
- Average of 50 - 60percent repeat clients during the life of the programme;
- Approximately 2,000 services per year after year one;
- More than 6 sector level training courses per year;
- 5 Trade show exhibitions in Year 1 and 12-15 per year in subsequent years to promote Sri Lankan products;
- 6 - 10 Technology Exposure missions each year;
- At least one Tourism Familiarization Trip each year;
- Work with 10 - 12 associations over the life of the programme;
- Provide assistance to 5 Government / Educational Institutions in support of competitiveness.

Also, with the experience of USAID’s previously successful TIPS Programme, this proposed programme is confident of building Micro – MSME, Micro – Large

Corporation, MSME – Large Corporation, and Rural Enterprise - Urban Corporation linkages.

**Economic Internal Rate of Return (EIRR):** With the experience of TIPS and similar programmes, the programme expects to generate 55,000 sustainable new employment.

It was found that a 22.69 percent EIRR will result from the successful implementation of the project. This has been validated by the Institute of Policy Studies (IPS), the prime think tank in Sri Lanka. IPS conducts the annual survey of Sri Lanka's international competitiveness with World Economic Forum's Global Competitiveness Report. It Sensitivity Analysis was carried out for extremely negative shifts in profit before taxation (PBT), shift in earnings per employee (EPE), and shift in loss of employment, but it was found that the lowest EIRR of 5.8 percent is acceptable for a programme of this nature where social benefits outweigh the monetary benefits many fold. Attention has also been paid to developing sustainability of the said services beyond the project period.

## 17.1 Management

Based on past experience, a recommended approach would be to utilize an international volunteer organization as the project administering agency on a not-for-profit basis that could ensure disbursement of fund smoothly. Sri Lanka's past performance experience would be a requisite to assure rapid mobilization and effectiveness. The proposed network of technical assistance and cost sharing grants, delivered through a set of national regional business centers and cyber cafes, will create immediate awareness of the programme.

The structure of the programme and services outlined have been developed on the basis of successful economic development programmes in Sri Lanka and worldwide. USAID's previous TIPS project has become a model for encouraging SMEs to take the required risk to increase the country's international competitiveness. Notwithstanding the highlighted sectors, the proposed programme will also offer cross-sector enterprise development assistance in areas such as tourism, information technology, agribusiness, electronic assembly, tea, rubber, jewelry, ceramics, wooden products, coir (coconut fibre), toys & gifts and spices. The proposed programme will operate at all levels of Sri Lankan society, from elementary "young entrepreneurs" training through university graduate on-the-job training, to international business linkage support.

In order to achieve successful and cost effective implementation of the programme, it should be administered and managed similar to other USAID programmes.

In achieving a higher level of technological sophistication and human resource development, Sri Lanka would like to be associated with many prestigious research and development and technological institutes in the United States. Technical assistance would be delivered primarily by active consultants and volunteer experts, with 235 assignments contracted during the first year. These resources will be deployed on a need and demand basis. Considering that the proposed programme is for a four year period, and also that needs are highly dynamic in nature, the US based administering agency will

coordinate different resource groups and deploy them in selecting the most effective resource on a case by case basis. Towards this, seventeen (17) elite US institutes have been identified as potential partners and twelve (12) of them have stated that they will be associated in supporting the objective.

The Sri Lankan enterprises' lack of access to technology transfer and to market information is not limited to North America. In fact the prospects for Sri Lankan SMEs exporting to European and Far Eastern markets are much greater than to the North American market. To effectively transfer the knowledge from Europe and Asia, the programme will be obtaining the services of volunteer professionals in such geographical locations. The programme administering agency, IESC, has communicated with Australian Business Volunteers (ABV) and also with the Volunteer Service Organization of UK. Both these organizations have agreed to provide business professionals on a volunteer basis. The programme intends to obtain their services mainly for market intelligence and training.

Approximately 1,500 enterprises (new and existing) throughout the nation will participate, with thousands more individuals trained and connected to a national network. Cost sharing grants (which have been successfully deployed in Sri Lanka previously) will total more than 2,000, with more than 12,000 funded activities. This focused core initiative programme will become, in effect, the operating model for the nation. Approximately 6,000 activities will mainly comprise marketing initiatives for the Sri Lankan producers to promote their products in overseas markets. Over 1,884 consultancy arrangements (volunteers and active consultants from US, Sri Lanka and other countries) will be obtained and over 4,000 enterprise level activities will be performed for training, increasing the level of sophistication of product & process technologies, sector assessments and workforce development. The opportunity will be offered to Sri Lankan technologists to attend international technology exposure programmes.

### **Client Services**

Through cost sharing financial grants:

- Cost effective technical assistance
- Training
- Trade Analysis
- Market Intelligence
- Participating in Trade Missions and Trade Shows

## **17.2 Implementation:**

The Federation of Chambers of Commerce and Industry in Sri Lanka will be the project counterpart with GOSL for the implementation of the proposed project, whilst International Executive Service Corps, a Washington DC-based, not-for-profit volunteer organization, will be administering the project, both in Sri Lanka and in the US. An Advisory Board comprising:

1. Senior officials from the Sri Lankan Government including the MCC Coordinator;
2. US Government officials including the MCC Coordinator in charge of Sri Lanka;
3. Senior officials in the Sri Lankan private sector from the major business chambers; will be reviewing the project progress. Similarly, each regional office will have an Advisory Council to review the progress of the regional offices. The members of these councils will be:
  1. Senior public officials from the provincial administration;
  2. Senior officials of regional enterprise / business chambers

Project Reporting Chart

