

Sri Lanka - Country Statement CSD 14

Sri Lanka's current economic development policy framework (Mahinda Chintana) is a consolidation of Pro-poor growth strategies based on private and public sector participation in economic and social development. The policy framework is developed on a market friendly, export oriented and competitiveness basis to sustain eight (8) percent economic growth in the GDP during the medium term. The Millenium Development Goals are also incorporated in the economic development policy framework.

Energy security has become an important factor in achieving the objectives articulated in the economic policy framework. Supply of reliable, affordable and clean energy during the medium term for industries, individuals and other sectors are extremely important in this regard.

The industry sector has contributed 27 percent to the GDP in 2005 while the services sector contributed 59 percent. The agriculture sector contribution was 14 percent showing a declining trend compare to previous years. Of the industry sector manufacturing, factory, industries, and construction are the major contributing areas. With regards to the services sector trade, hotels, restaurant and transport are the major ones. Energy is a key input in all of these sectors.

Biomass, hydropower, and thermal power (fossil fuels), are the conventional energy sources in supplying energy. The utilization of renewable resources such as solar, wind, dendro, and mini-hydro are relatively small. The transport sector entirely utilizes energy sources such as gasoline and the diesel.

The steep rise in the oil prices in the recent past has resulted a great burden to the economy in supplying of these conventional energy sources without fluctuations. The absence of petroleum resources deposits in the country has aggravated the situation. This has created to explore avenues immediately to ease the energy problem. The available options are the utilization of renewable energy sources and efficiency improvement in the current use. The renewable resources are also important in reducing air pollution, mitigating adverse climate effects and the provision of clean energy.

The improvement in efficiency in energy resource is also useful to ease the problem. Several measures such as reducing system losses, use of low energy consuming equipment, saving energy through changing behaviors, etc. have been introduced and used at present.

Following table shows the theoretical potential of renewable energy sources in Sri Lanka.

Table 1.1 Theoretical Potential of the Renewable Energy Resources

Type of the Energy Source	Estimated Quantity (KTOE/year)
Biomass	16,000
Hydro power	360
Solar power	8600,000
Wind Power	3440

The solar power is the largest renewable energy source in terms of quantity and also useful in providing electrification in rural people in remote areas. The provision of electricity from the national grid is not possible due to capacity limits and cost effectiveness. The utilization of large hydropower projects has been limited due to the carrying capacity limits and absence of hydropower sources. The future hydropower expansion will be therefore mainly composed of introducing mini hydropower schemes.

The wind power is also a useful energy source in providing energy supply to the national grid in future.

The Dendro power has become increasingly popular among the renewable energy sources at present. It utilizes wood (biomass) to generate electricity. The cultivation of fuel wood species in marginal/uneconomic lands will generate employment opportunities as well as additional income to the rural population which in turn address the rural poverty. The direct output of Dendro power is the supply of electricity which ease the energy problem.

The Present Situation and Constraints

The efficient use of energy has been a priority area and the World Bank assisted renewable energy programme will provide further development of renewable energy sources. The use of solar power at present is far below its potential.

The high price of purchasing photovoltaic cells has become a constraint. The unavailability of adequate financial resources therefore is the major constraint in the expansion of solar power utilization. The power generated from the solar power is not strong as from the national grid. Therefore, a technological improvement plays a key role in popularising the use of solar power. The number of local companies/entities involved in establishing solar power units also a few and need to be expanded.

With regards to wind power the initial establishment cost are high. Some institutional problems such as land acquisition in suitable areas to establish wind power plants have been observed. Many of the wind power potential areas are located far from the transmission lines.

The markets of the renewable energy sources are ill-developed (thin markets).

The Dendro power is becoming more and more popular but the utilization at present is sub-optimal. The awareness programmes, release of marginal lands for fuel wood cultivation, and private sector involvement is inadequate.

Sri Lanka has introduced cleaner development mechanism (Waste minimization, pollution prevention and clean industrial production) is being progressed.

With regards to the implementation of CDM mechanism under the Kyoto Protocol Climate Change Secretariat has been established and it serves as the national focal point of the UNFCCC activities. It also provides one stop facility to disseminate information relating to the implementation of the decisions taken at the parties meetings. The Secretariat promotes research studies on impacts, mitigation, adaptations etc. The draft policy on CDM has been prepared.

The Clean Air 2007 has been prepared. Development of a coordinating body for all air quality improvement and management activities with stakeholder partnership, reducing the emission of harmful and toxic air pollutants through implementation of regulatory programmes in association of the stakeholders etc. are the major objectives of the programme. Actions have also been taken to implement the carbon finance mechanism.

The Way Forward

Renewable energy sources can be viewed as the most appropriate solution to mitigate the energy problem. The operation and maintenance cost are very low with compared to the conventional energy plants. To accelerate and utilize renewable energy sources following measures are envisaged.

- Transferring technology to Sri Lanka by developed countries in improving the utilization of renewable energy sources.
- Providing assistance in research and development in the renewable resources area to improve the quality and output.
- Providing financial assistance to purchase machinery and equipment and to develop Co-financing mechanism in the renewable energy sources sector.
- Encouraging private sector for investments in the renewable energy sector.
- Removing institutional, legal and other constraints with regards to the development of renewable energy sector and incentives to develop the renewable energy market.
- Popularizing the use of renewable energy use through awareness campaigns.