

The Government of Sri Lanka is in a position to satisfy electricity needs at present at an affordable price mainly due to the 40 years of untiring efforts of a person who lived during the first half of 20th century. This person is none other than D. J. Wimalasurendra, who is the father of hydro power in Sri Lanka.

At present 50 percent of power generation capacity and 40 percent of annual electricity generation in Sri Lanka comes from hydro power. The balance is generated from oil fired thermal power plants. The generation cost of a unit of electricity from Laxapana hydro complex is Rs. 0.90 and from Mahawali hydro complex is Rs. 2.30. On the other hand the average unit cost of oil fired thermal power plants is about Rs. 20. If we were to generate electricity from imported fossil fuels then the electricity consumers in Sri Lanka have to pay additional Rs. 7.50 for each unit of electricity consumed. If so electricity would become a prohibitively expensive service for over 75% of the people living in Sri Lanka.

Wimalasurendra started by demonstrating the technical options that he believed in. Wimalasurendra's colleagues among the engineering community were dubious about these projects and laughed at him. His supervisors smiled at his ideas. Others disrespected him for what they called his "Journeys into the realms of fantasy." One European boss of his department transferred him to a remote area where he would have no access to the scientific literature, data and statistics that inspired his dream.

Despite negative campaigns, work on the Aberdeen-Laxapana scheme commenced in 1924, but was then suspended in 1927 due to unforeseen circumstances. The power house was constructed in 1938 and the work officially resumed on February 18th, 1940. The first stage of the scheme was to harness the Kehelgamu Oya in order to generate 25 MW of power. Although the project was expected to be completed within four years, the outbreak of World War II in September 1939 delayed the work. Finally the project was completed in 1950. Sixty years passed by. During this period successive Sri Lankan governments tapped almost all the hydro potentials in Sri Lanka. The present government is currently implementing an aggressive programme for the tapping remaining hydro potential. The country has not exceeded 85% electrification rate. The modern-day Wimalasurendras have been promoting renewable and indigenous energy based electricity for the last two decades in order to meet the increasing demand. Meanwhile, the power sector pundits were advocating the establishment of imported fossil fuel based power plants, during the last two decades. This is a similar situation that existed during Wimalasurendra's era. As a result imported fossil fuel based power generation has increased from 5 per cent in 1995 to 60 per cent by 2010, burdening the electricity consumers in Sri Lanka.

This is the beginning of the second decade of the third millennium. The fossil fuel economy has reached a dead end due to scarcity of fossil fuel resources and climate change. The future should be based on low carbon economy. We should seriously consider this as the transition stage: Transition from fossil fuel to renewable energy. The potential renewable energies other than hydro power in Sri Lanka are sustainably grown biomass, wind, solar and ocean energy. Government has already decided to get the active participation of the private sector for developing renewable energy in Sri Lanka and offered a cost reflective tariff for some of the renewable energy technologies.

The Government has further encouraged the private sector to have embedded renewable energy based power plants through a net metering process. A net meter is a two-way metering system where a net flow of energy exports and imports is measured. The Ministry of Power and Energy has initiated a campaign to encourage the private sector to use this opportunity. Some individuals and private sector entities that are keen on using green energy have already switched to net metering systems. The fossil fuel lobby citing this as a great danger to their businesses has started a campaign against solar power with the help of some Stone Age energy pundits in Sri Lanka. These pundits claim that renewable energy is expensive and the private sector and public should not invest on embedded renewable energy technologies. They claim that the average unit price of electricity in Sri Lanka is Rs. 13 and therefore it is not a wise idea to invest on renewable energy as the unit price of which is much higher than that.

The Stone Age energy pundits however have missed one major point; the future fossil fuel price will most likely increase. They have not taken into consideration the possible fossil fuel price increase during the next 20-year period. The global citizen is about to witness the fossil oil peak and carbon dioxide peak during this decade which means that the price of oil and coal will increase at an alarming rate in the near future making oil and coal prohibitively expensive. Solar power on the other hand has no fuel cost as the sun as long as it exists, will generate and deliver solar energy to our roof top free of charge. The energy pundits deliberately ignore this fact to mislead the general public. Further these pundits have failed to mention that the currently General Purpose tariff is Rs. 19.50 and not Rs. 13. It is essential to mention at this stage that the CEB is running at a loss and therefore the CEB cost is not reflected in the average tariff either. On the other hand the Government is heavily subsidizing fossil fuel for power generation at present and therefore the true cost of a unit is much higher than the average tariff. It is clear that the Government cannot continue with these subsidies forever and therefore it is necessary to encourage the consumers to tap into the renewable energy available on their rooftops and the surroundings.

It is encouraging to note that modern-day Wimalasurendras who have dedicated their lives to developing renewable energy technologies are continuing their battle against these pundits who are hired by the fossil fuel lobby. This is imperative for developing our indigenous renewable energy base to ensure the energy non dependence status of Sri Lanka. The Minister of Power and Energy has quite rightly taken steps to commemorate 136th birthday anniversary of D. J. Wimalasurendra on September 17th to salute him for the service rendered by him to mother Sri Lanka and also to encourage the modern-day Wimalasurendras who have dedicated their lives to ensure a sustainable energy future for all Sri Lankans.

~ dailymirror.lk ~ By Asoka Abeygunawardana