



LFRTD dedicates its December 2007 Newsletter
to

Deshamanya Vidya-jyothi Dr. Ray Wijewardene
in appreciation of his work in the transport sector
- read the story inside -

Warm Wishes
for a
**HAPPY
&
PEACEFUL
NEW YEAR
2008**
from
LFRTD

11th Annual General Meeting

The 11th Annual General Meeting of the Lanka Forum on Rural Transport Development (LFRTD) was held on 6th July 2007 at the Sri Lanka Foundation Institute followed by the LFRTD Annual Session (see page 4).

The AGM was chaired by the Chairman Dr. D S Jayaweera who welcomed the members stating it was a pleasure to have led the organization for the past two years. After the confirmation of 10th AGM minutes and presentations of Annual Progress Report & Statement of Accounts the following members were unanimously elected as the new office bearers of the LFRTD for the year 2007/2008.

- | | |
|------------------------------------|------------------------------------|
| Ms. Priyanthi Fernando | - Hony. Chairperson |
| Mr. C Maliyadde | - Hony. Vice Chairman |
| Ms. Dushanthily Sithamparam | - Hony. Secretary |
| Mr. Granie Jayalath | - Hony. Assistant Secretary |
| Ms. Manel De Silva | - Hony. Treasurer |
| Dr. Palitha Ekanayake | - Hony. Assistant Treasurer |
| Dr. Palitha Ekanayake | - Hony. Treasurer |
| Ms. P Seneviratne | - Hony. Assistant Treasurer |

Dr. Palitha Ekanayake was elected as the Hon. Treasurer and Ms. P Seneviratne as the Hon. Assistant Treasurer at the 4th Executive Committee Meeting held on 19th October 2007 due to the resignation of Ms. Manel De Silva from the Treasurer's post.

IFRTD Asia Regional Meeting 2007

The 6th IFRTD Asia Regional Meeting of Seven National Forum Groups (Sri Lanka, Pakistan, India, Nepal, Bangladesh, Cambodia and Indonesia) was held in Hanoi, Vietnam from 14th to 15th September, 2007 while Vietnam and Bhutan participated as observers. The Philippines NFG and representation from Lao PDR were absent. Regional Institutional Members ILO ASIST AP, Practical Action (Nepal, Bangladesh and Sri Lanka) and SEACAP were also represented. DFID and World Bank representatives also attended the meeting.

The South East Asia Community Access Programme (SEACAP) supported the meeting and prior to the IFRTD 6th ARM all Asian NFGs were invited to attend the SEACAP practitioner meeting.

The Keynote Address was given by the Chief Guest Hon. Dr. Ha Khac Hao, Deputy Director General of the Ministry of Transport, Vietnam.

LFRTD was represented by the Immediate Past Chairman Dr. D S Jayaweera.

IFRTD Asia Regional Meeting 2008 will be held in Pakistan.



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- 'LFRTD Exclusive':
an interview with
Deshamanya Vidya-jyothi
Dr. Ray Wijewardene
- LFRTD 11th AGM - July 2007
- LFRTD Annual Session 2007
- IFRTD Asia Regional Meeting
- Study on Rural Transport
Services in Sri Lanka
- LFRTD links with UOM

- The key issues highlighted during the meeting were :**
- Road Maintenance
 - Rural Transport Safety
 - Lobby for better strategies & policies for rural transport development
 - IMTs & Transport Services
 - Mobility of Persons with Disabilities
 - Inland Water Transport
 - Transport & Employment

- see www.ifrtd.org for more details & to download the proceedings -

Our Very Own 'Renaissance Man'

Deshamanya Vidya-jyothi Dr. RAY WIJEWARDENE

**"Like the ripples from a pebble
someone tosses in a stream
Never ending nor beginning
in a half forgotten dream.....!"**

Suggests Deshamanya, Vidya-jyothi Dr. Ray Wijewardene, the former Chancellor of Moratuwa University, when trying to define his understanding of the word 'Sustainability' in the context of 'energy' and 'agriculture', seated in front of us in his study surrounded by books, pictures and models of the various novel flying machines he has developed, trophies from his adventurous life and memorabilia of years gone by including an amazing detailed sculpture in wood of Lord Nelson's one-hundred-gun flagship "Victory" from which Lord Nelson directed the defeat of the Spanish Armada and flags bearing the message 'England expects that every man shall do his duty'.

A lot to see, lots to listen to, to learn and gain from this very special person.



Deshamanya Vidya-jyothi Dr. Ray Wijewardene

Inventions

Based on heavy, steam-driven, two and four-wheeled tractors used in Europe during the 1800s, the young Ray Wijewardene adapted his ideas for a much smaller hand-held tractor which the smaller-built Asian farmer could use even on small, soft and soggy paddy-fields, yet based on the buffalo-drawn implements used in his part of the world. He then produced an 8mm, movie of it in action (this was in the 1950s and long before the advent of TV or videos) to capture and demonstrate the idea in action as used by small Asian farmers working their own small rice fields. He took this to Britain along with a tiny 8mm. projector to show the film to potential British manufacturers, now keen to restart in export-orientated industry after World War II. His endeavors were greatly supported by pioneers of the Intermediate Technology Development Group (ITDG) now Practical Action, the renowned Dr. Fritz Schumacher and Dame Barbara Ward and Mr. George McRobie, who put him in touch with the agricultural machinery manufacturers in Britain. They liked the idea but explained to him that far more important than the invention was the development of the markets throughout Asia, which would use the new concept. They sent him to Malaysia,

to Japan, to Taiwan, to Korea, to the Philippines, to Southern China which were all brand new territories to young Ray Wijewardene.

Armed again with his 8mm. demonstration film, he took in orders from all these countries for a concept that was still only in prototype form and on film. Young Ray Wijewardene returned from this tour now armed with the orders that would make manufacture a possibility and production started near Nottingham on the LANDMASTER tractor which soon became popular all over Asia and also in Africa with branches also in the USA and Australia.

Special interest was taken also in the comprehensive range of implements which complemented the LANDMASTER (the name soon became 'generic' for two-wheeled tractors in Asia) and the international Rice Research Institute (IRRI) based in the Philippines, reproduced all the drawings of the tractor and its range for release throughout Asia. Their idea was to popularize the concept with small rice farmers throughout the Far East and encourage local blacksmiths and small manufacturers to start producing it for the farmers of their districts. Soon the larger manufacturers in Japan, Mitsubishi, Iseki, and Kubota etc. sought to expand their own, largely demolished manufacturing capabilities and using their earlier, crude and heavy form-power engines.

Ray Wijewardene helped them re-design the Landmaster concept but now using their own much heavier engines, into what would still be marketed as the Kubota Landmaster, Iseki Landmaster etc. through Ray Wijewardene's well established marketing organization throughout Asia, but now supported by the famous "Marshal Plan" to assist Japan re-establish its industrial capabilities.

Same plough, same gears, same trailer but different countries used their own engines to suit their environment, and the use of heavy engines made the tractor a road vehicle rather than a land vehicle.



Early Landmaster tractors used in the 1960s in Sri Lanka and extensively in the Philippines, where the design was copied by International Rice Research Institute (IRRI) and drawings circulated all over Asia and reproduced in Japan, Taiwan, China etc., each country using their own farm-power engines but still with the same implements and tools designed for the original Landmaster as manufactured in England.

Dr. Ray Wijewardene is sad that the Landmaster hand-tractor was never manufactured in Sri Lanka, in which country it had originated.

In the year 1950 or 1951, as a Cambridge University student Dr. Ray re-built a World War II 'Tiger-Moth' aircraft as a university project and flew it from Cambridge to Madras. He flashed a boyish grin and his eyes gleamed when he started talking about his passion for building and flying, flying machines. His study is surrounded by various models and pictures of his adaptations and inventions of flying machines and his unexpected landings. Once he landed his aircraft on Geoffrey Bawa's roof at Lunuganga. Dr. Ray reverts his memory to younger, adventurous and amusing days when there were no sponsorships to support these adventures, no radio so there was no contact with the people on land but only a compass to determine the flying direction. "It was real traveling and I was a traveler not a tourist" says Dr. Ray. "A traveler can see people on the lands they pass by, can hear people shout and people always show courtesy to travelers". Dr. Ray sold his re-built air craft in Madras to the Madras flying club and now after almost 70 years it is one of the last remaining "Tiger-Moth' aircraft in existence.

Potential of using Inland Water Transport

In the olden days people mainly used water transport for their transport needs even during World Wars. The British used inland water ways like 'Ma Oya' when they went to surround Kandy from Colombo. "If we do not have road transport, the day we cannot afford a vehicle, we will have a potential in using water transport" says Dr. Ray, who is a keen yachtsman represented Ceylon in 1968 at the Mexico Olympic Games and won the silver medal at the Asian Games in 1970 and who has navigated some of Sri Lanka's inland waterways, including building his own canoe and canoeing down the Mahaweli River from Peradeniya for three days with Major Raven Hart.

Renewable Energy

Dr. Ray is currently working on balloons and Airships. But he says his bread and butter life is in Tropical Agriculture. At his estate near Chilaw he has a dendro power plant which uses biomass energy and generates electricity. Dr. Ray is convinced that Sri Lanka's energy requirements can be fulfilled by using biomass energy. But the most important part of this project is fertilizer. Dr. Ray uses an environment friendly electric car which he says costs only one-fifth the cost of a fuel powered car to run. Not only much cheaper than petrol it is pollution free and without noise. Unfortunately there are no duty incentives for people to purchase this type of vehicles.



Photo: Paul Starkey

About Him

Deshamanya, Vidya-jyothi Dr. Ray Wijewardene is a graduate from Cambridge University in Aviation, Mechanical Sciences and Agriculture. He has followed a postgraduate MBA course in Business Administration at the Harvard Business School. He was the first Chairman of the Tea Research Board, Chairman of the Sri Lanka Inventors' Commission and the Chancellor of the Moratuwa University for five years, following Sir Arthur C. Clarke who was the first Chancellor of Moratuwa University and the author of several publications. He has also been appointed as the Head of Agriculture Engineering at the Agriculture Engineering research and Development Institute in Malaysia a research institute set up by the Food and Agriculture Organization of the United Nations and Head of the Agriculture Engineering and Research Division of the International Institute of Tropical Agriculture based in Nigeria. He won the Ceylon Single Sculls Championship in rowing and scored fourth place in single handling yachting at the Mexico Olympic Games in 1968 and won the silver medal at the Asian Games in 1970.



Young Ray in the 'TIGER-MOTH' training aircraft which he re-built from a scrap heap in the late 1940s as a University project.

Dr. Ray with his home-built helicopter 'SOOTIKKA'. This is still parked at Ratmalana airport awaiting permission to fly again. All his planes were built in his home garage.



'Tank-Cart' - One of Dr. Ray's earliest inventions

This was invented in the early 1950s when Dr. Ray was employed as an engineer by the Standard Oil company to accomplish a task of devising a system for marketing and distributing kerosene from storage supplies at railway-stations to the towns and villages by 'The Bottle' and 'The Half-Bottle' for rural lighting in those pre-electricity days. The barrel was mounted on a 'single-bullock-cart', the earlier ones were painted 'Socony' - yellow and the idea was then taken up by the SHELL company who painted their carts red, also for distributing kerosene to a wider market. The tank-carts operating in the towns later used rubber-tyred axles from old Austin cars.

'Old pilots never die; they just go on a higher plane' - a sign at the entrance to Dr. Ray's study.

Never ending though there is a beginning for the renaissance he created, his endeavor, his adventure.....
Dr. Ray, his legend to continue.....

"May God bless you with health and long life to carry out your future endeavors!"

LFRTD Annual Session 

Lanka Forum on Rural Transport Development held its year 2007 Annual Session on 6th July at the Sri Lanka Foundation Institute following the 11th AGM. Presentation Topics ;

The Evaluation of Road Projects

- by Dr. William Griffiths - Project Manager (ADB funded feasibility studies & final design of National Roads in Sri Lanka)

Rural Road Classification System

- by Mr. Granie Jayalath - Consulting Engineer (Rural Roads Engineering & Transport) / Hon. Assistant Secretary LFRTD)

Appraisal of Provincial Roads Improvement Projects

- by Mr. John Standingford - Team Leader (ADB funded feasibility study & detailed design of Provincial Roads)

Transport Sector Investment & Vision for future in Sri Lanka

- by Ms. Lise Weidner - Transport Specialist PPP (South Asia Transport & Communication Division - Asian Development Bank)

LFRTD to study Sri Lanka's mix of Rural Transport Services 

In the new year LFRTD will carry out a study to assess the impact of Sri Lanka's mix of rural transport services on the transport needs of the country's rural population. Sri Lanka's rural transport services are run by the state and the private sector, both formal and informal, include special subsidies provided by the State to private bus operators to run uneconomical routes and special programmes organised by the National Transport Commission to ensure provision of transport services to isolated villages (Gemi Sariya), and to particularly vulnerable groups like school children (Sisu Sariya). There are also informal services provided by local owners of transport modes (e.g. tractors and trailers) and more organised services such as the Community Bus Service initiated by the LFRTD with support from Practical Action (then ITDG) in the Ratnapura District in 1998 which concept was replicated by other communities in several locations.

The LFRTD is pleased that the Secretariat of the IFRTD will part support this study. The outcomes of the study will enable Sri Lanka to develop a system of rural transport provision that can contribute positively to poverty reduction. The study will also highlight the uniqueness of some of the ongoing initiatives (the Community Bus Service for instance has been going on for a decade despite the initial scepticism about its viability) and assess the replicability to other contexts. We are pleased that the IFRTD is also supporting the participation in this study of a member of the study team that carried out rural transport services study in four countries in Africa for the World Bank's Sub-Saharan Africa programme. This will facilitate cross-regional understanding of rural transport provision and put this study into a global context.

LFRTD is a network of organizations and people aiming to improve the quality of life of rural communities by reducing their transport burdens.

The network commenced in 1995 with representatives of the Ministries of Transport and Plan Implementation, Practical Action South Asia (ITDG), National Transport Commission, Road Development Authority, Commissioner of Motor Traffic, Southern Province Transport Authority, World Bank, Transport

LFRTD links with the 
University of Moratuwa

LFRTD members are teaching the Rural and Non-Motorized Transport modules of the Post Graduate Diploma/MSc Course on Transportation at the University of Moratuwa. The objective of the course is to identify the nature of rural and non-motorized transport needs, how such needs can be met, the types of infrastructure, services, vehicles required and also consider issues of financing, sustainability and stakeholder ownership.

The course was initiated in 2001 by the University of Moratuwa and the lectures covering this module were taken by Mrs. Mandrie Sahabandu, a former Chairperson of the LFRTD and a member of LFRTD's Executive Committee. This year, an institutional link was established between the University of Moratuwa and the LFRTD and four members of the LFRTD were invited as visiting and guest lecturers. They were: Dr D S Jayaweera, Mr Granie Jayalath, Mr Namiz Musafer and Ms Priyanthi Fernando.

The lectures covered the following topics:

Nature of Rural Travel Needs - Trip purposes, trip rates, needs of women, estate sector.

Transport Connectivity - Urban Linkages, Access to Markets and economic consequences.

Bicycles & Pedestrians - Requirements, lanes, paths and clear walkways.

Rural Transport Vehicles - Types and function of IMT's, bus services.

Rural Roads & Footpaths - Types, construction, maintenance, drainage, water crossing structures.

Funding of rural transport.

The LFRTD hopes that this link will continue and looks forward to continued collaboration with Professor Amal Kumarage and his team in the future.

Studies and Planning Centre and universities of Colombo and Ruhuna. Later, Western Province Transport Authority, Provincial Councils, National Planning Commission, Rural Transport Promoters Ltd. in Ratnapura, Vinivida, Gamana Network, Center for Poverty Analysis, Institute of Policy Studies, SEEDS, Ministries of Highways, Local Government and Individuals joined in.

LFRTD is also the national forum group of the IFRTD - International Forum for Rural Transport & Development' a global network with national forum groups of over 27 countries.

If you are keen to be a part of our vision & mission BE A MEMBER and subscribe to this newsletter and other publications of LFRTD

You are invited to send news of your village or your organization relating to rural transport either in English or Sinhala to be published in this newsletter. Contact us on ;



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