

*Sri Lanka Association for the
Advancement of Science*



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Part II: Inaugural and Presidential Addresses

Sri Lanka Association for the Advancement of Science – 2010



General President's Address

Role of scientists and science associations in educating people towards sustainable development

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Prof. Satoru Ozawa, Professor, and Director of the Institute of Applied Beam Science, Ibaraki University, Japan, Our Guest of Honor; Dr. Dhyanendra Kumar, Representative of the Indian Science Congress Association; Mr. Harun Or Rashid, Representative of Bangladesh Association for Advancement of Science; Dr. Lalini Rajapaksa, President Elect; Past General Presidents; Members of the Council; Members of Sectional Committees and Statutory committees; Other Members of SLAAS, Vice Chancellors, Chairpersons of statutory bodies and all other Distinguished invitees, Award winners; Ladies and Gentlemen

We are now living in an era where much emphasis has to be in paid not only to the development but also to our own survival. Until the middle of the last century, the mentality of the mankind was exploitation. However, since the latter part of the last century man has realized that unplanned development through exploitation of resources would be very harmful and will ultimately threaten his own survival on earth. Considering the consequences of unplanned development and uncontrolled exploitation of natural resources, which ultimately lead to environmental degradation and environmental pollution threatening the survival of mankind, many global summits had been convened to discuss and develop suitable strategies to overcome such issues. Many international agreements, protocols and conventions have been signed to protect the environment and utilize natural resources without over-exploitation. However, even with these international agreements, the environment continues to degrade and natural resources are continuously being utilized, some of them reaching non-renewable levels. As learned people, we can and we have to play a big role through educating people on the consequences of uncontrolled utilization of resources and environmental pollution causing due to these activities. It is necessary to educate all sectors of our society from the richest to poorest, from the powerful politicians to weak rural farmers on the need for sustainable development which is commonly defined "as the development which meets the needs of the present without compromising the ability of future generations to meet their needs". During the course of this year, SLAAS, even without adequate funds, carried out many activities towards fulfilling these requirements.

The activities carried out by SLAAS this year included publishing newsletters, conducting seminars, workshops, media discussions, popular lectures, symposia, panel discussions and radio programmes etc. The areas covered by these activities included, health, environment, agriculture, disaster management, sustainable energy and biodiversity conservation among others. These activities helped to enlighten the public on various matters that contribute towards sustainable development. The Nature diaries programme was conducted in five districts with the aim of developing a love to the nature and opening eyes on detrimental activities done by man to the environment.



Several science day programmes were also carried out during the year. During this year digitizing of abstracts presented at past Annual Sessions was also carried out. The abstracts presented from 1994 to 2008 are now available in the web. From 1994 to 2004 they can be accessed through NSF website and from 2005 to 2008 through SLAAS website.

Based on the deliberations made at last year's Theme Seminar, a concept paper on sustainable use of water resources was developed and this document was distributed among the relevant institutions to take necessary action. We sincerely hope that this document would be used to develop policies on this subject and will not become dormant in shelves as most other such documents.

We were also able to come up with plans to construct a new four storeyed building for SLAAS. Strategies to raise funds for the new building were also identified. I must congratulate sectional presidents, and chairpersons of special committees and statutory committees for giving leadership to these activities and the members of these committees for responding efficiently and enthusiastically and carrying out those activities very successfully. Their achievements are remarkable because they have done those activities, generating their own funds.

I must also appreciate at this moment, generous sponsorships from Disaster Management Centre, and Sri Lanka Telecom who are the main sponsors of these Annual Sessions. I must also thank the Vice-Chancellor of the University of Kelaniya for the contributions made by providing the premises of Kelaniya University to hold the Technical Sessions and transport facilities to our guests, award winners, etc.

As a professional Association, SLAAS, in my view is doing a lot to educate people on this very important subject. However, due to inadequate funding, the amount of activities SLAAS can do is limited. There should be formal mechanisms and also commitment from all sectors of society especially the most powerful group today in Sri Lanka, the political leadership, to carry out these activities. We have the knowledge base, we have the human resources, but funding is limited.

We must incorporate the concept of sustainable development to our curricula, both at the school level as well as in the universities. At present topics such as the concept of sustainable use of resources and environmental conservation are included in the G.C.E (A.L) Biology syllabus. However, those who are not following Biology at G.C.E. (A.L) classes have little or no knowledge on these topics. Further, those who do not come to G.C.E. (A.L) classes also have little knowledge on these aspects. The most dangerous thing is that ultimately such persons get into very high positions and carry out activities which are detrimental to the environment and lead to unsustainability. Our universities should also pay more attention to educate the undergraduates, whatever their discipline is, on the need for environmental protection and sustainable development. At present, only few of our curricula address such topics.

Our curricula, whatever the field, should contain one section on general topics. Environmental conservation and sustainable development could be one of such topics.



Other topics may include topics such as ethics, Sri Lankan studies etc. Another section of any curriculum should have a section or topics that are related to the improvement of English and IT skills. These two sections may contribute to a relatively smaller percentage of the total volume of the curriculum. The other section, which is the main section, should concentrate on the main subject area.

Environmental education is essential for Sustainable Development. We cannot survive in a polluted environment. Air pollution fills our lungs with deadly substances. Water pollution eradicates the little potable water we have. Land pollution makes our fertile lands unfertile. We must make the society aware of these. We must teach people that resources are not inexhaustible. Without environmental sustainability we cannot achieve sustainable economic development.

Sustainable development could not be achieved only with Science and Technology development. Fundamental change in the attitudes of people towards nature and the environment are also necessary. It is essential to reinforce environment respecting moral values among our people. We can do this in our young minds expecting that when they become older they will nurture these good moral values. However, this is not sufficient. We have to educate the entire society including our politicians. During the election campaigns, politicians have to get the support of businessmen to cover their election expenses. When the politicians come in to power these businessmen expect something in return. If these supporters are those who are engaged in environmentally harmful activities, they want the blessings of the politicians to continue their harmful activities. Therefore, the politicians should be aware of the repercussions of the environmentally harmful activities, so that they can refrain from getting funds from those who are engaged in such activities. I am happy to note that some of our politicians are now more environment conscious during their political campaigns than in earlier days. During the past Provincial Council election, some candidates refrained from using undegradable material for their campaigns. This is a commendable move. In addition, our Judiciary should also be made aware of the environmental consequences of some human activities. I am happy to note that some of the members of the judiciary are well aware of such activities, which helped to control sand mining in some of our rivers, especially Deduruoya in the North Western Province.

When the environment is degraded, it would be very costly to restore it. This will have serious implications on our future generations. The solution here would be sustainable utilization of environmental resources and environmental conservation as much as possible. For this, it is extremely important to educate our people.

Education is needed to change the attitudes of our people. Environmental education is needed not only for proper use of resources but also to protect our environment which will lead to sustainable development.

Environmental education should be included not only in Biology curricula but also in all other curricula. Air quality, water quality, land use, sustainable energy resources, ecosystems and biodiversity are some of the areas that could be included as general topics in all our curricula. In addition, these should not be confined to just teaching facts and figures. Our children must realize that they are part of the problem and therefore they have to be part of the solution also. Environmental education should be given in an interesting



manner. It should be introduced as voluntary, hands on extra-curricular activity to arouse the enthusiasm and interest of students rather than an academic classroom subject. It should also give not only hands-on experience, but also minds-on experience. We must work hard to develop a responsible environmental behaviour in our children. The responsible environmental behaviour is the whole of the actions that an individual does within the society taking into account, the harmonious relationships with the environment. Our student generation must acquire knowledge and skills on technologies and keep pace with rapid advanced in all areas of science and technology.

In order to attain sustainability, the society, environment and economy should be developed hand in hand. If economy is to be developed without considering the entire society, it would not be sustainable as there would be more and more disparity in distribution of benefits of economics developments. This will lead to social unrest possibly resulting in internal problems. Then the economic benefits have to be utilized to solve internal conflicts. This may develop further to internal terrorism and to internal wars. Then the economic benefits have to be utilized to combat internal terrorism or internal wars. Similarly, if economy is developed without considering the environment, environmental quality and resources would be degraded and the economic gains have to be used to restore the environment and solve the problems those arise due to economic development. For example, if air is polluted due to emission of noxious gases, the people will suffer from respiratory problems and the economic gains may have to be used to import medicine to treat the suffering society. Now we are building the first ever coal fired thermal power plant in Norachcholai. At the beginning, there were lots of environmental concerns regarding emission of Sulphur Dioxide in to the atmosphere. Many countries have experienced environment degradation due to coal fired thermal power plants. With the environmental awareness of the public by various environmental groups, we can remember that there was a huge public outcry against the Norachcholai thermal power plant. However, if low Sulphur coal is used such impacts could be easily mitigated. High Sulphur coal should never be used in Norachcholai. Government should ensure that only low Sulphur coal is imported and used, so that our ancient cultural and religious monuments including Ruwanweliseya and other stupas as well as our vegetation in the dry evergreen forests in the northwestern, north central and northern parts of the country are protected from acid rains. The policy makers should also be educated on these, so that they can monitor whether the development activities are carried out as recommended by the experts to ensure environmental quality and by that sustainability of the Development.

According to UNESCO, sustainable development is a vision that encompasses animal and plant populations on earth, ecosystems and natural resources, and that integrates concerns such as fight against poverty, gender equity, human rights, education for all, health, human security and intercultural dialog (www.unesco.org/en/esd). We as scientists should always be willing to provide education on scientific matters, new scientific research and developments to the nation, because strengthening people with scientific knowledge will help the people to develop attitudes, skills and knowledge to make informal decisions for the benefit of themselves and act on those, which will be extremely important for sustainable development. We wish that the relevant authorities and policy makers utilize the vast resource of scientists at the SLAAS for the wellbeing of our nation through sustainable development.



I would like to take this opportunity to express my sincere thanks to all institutions and individuals who contributed generously for the activities of SLAAS this year. I must thank our general secretaries, treasurer, the editor and all other members of the Council who worked hard and gave me their fullest cooperation to successfully carry out our activities this year. I extend my grateful thanks also to the office staff of SLAAS for their commitment and cooperation.

Finally I thank our guest of honor, foreign delegates, past presidents members of SLAAS and you all ladies and gentlemen for being present here today to make this event a success.

Thank You