

WORLD CONGRESS ON SUSTAINABLE DEVELOPMENT

KOLKATA, JANUARY 20-23, 2000

CALCUTTA DECLARATION

We, the delegates of the World Congress on Sustainable Development organized by The Institution of Engineers (India) in Calcutta from January 20-23, 2000 under the aegis of World Federation of Engineering Organizations and supported by the Commonwealth Engineers Council and Federation of Engineering Institutions of South and Central Asia, have reviewed past efforts and achievements on sustainable development and environmental governance to meet the global challenges of population, poverty and environment. The current Congress is a timely opportunity to reiterate words of wisdom, include and mobilize additional views and support for implementing the world environment agenda at all levels. We therefore, issue this Declaration as a clarion call to action for all to become seriously concerned with the sustainability in environmental, social, cultural and economic aspects of our life on earth.

In view of the compelling evidence of the insufficient initiatives and accomplishments to arrest the inordinately high environmental degradation and world wide loss of ecological balance in the name of economic growth of nations by following development paradigms without equity and justice **we recommend** that the following approaches be widely applied, supported and further developed :

- **Enhance Institutional and Participatory Capacities for improved Convergence of Economic Growth and Environmental protection.**

While Individuals are to take more responsibility in their choice ensuring sustainability, role of the engineers should not be limited to finding the least cost solution but be expanded to consider environmental and social costs so that optimizations of consumption and saving of resource ensure sustainable development with equitable growth and environmental protection by means of following actions :

--- **Environmental**

Limitation of industrial and agricultural development within the carrying capacities of biotic communities.

--- **Social**

participation of well informed groups of citizens in the governance and improvement of all communities.

--- **Economic**

internalization of environmental costs in consumer prices and the sharing of wealth more equitably with the belief that the prosperity of the rich may not be sustainable without the progress of the poor.

UN Commission on Sustainable Development (CSD) is to oversee and coordinate Institutional funding. International Development fund, NGO s CBO s at local levels by co-opting the businessmen in participatory action programmes.

- **Resolve Contradiction between the Overpopulation of the Developing World and Unsustainable Consumerism of the Developed World.**

The over consumption of energy and resources by the rich nations will make their equivalent population size much larger in comparison with the population size of the poor countries. So the burden of investment for environmental protection is on the North but return on the investment depends on the self control exercised by the South.

- **Improve Environmental Education, Information and Communication.**

Value-oriented environmental education, information and communication should be imparted at primary, secondary and tertiary levels to imbibe in the minds of the future citizens the concept of environmental ethics. The participation of stockholders and interest groups in the private sectors, public sectors, NGOs and CBOs in imparting non-formal education on issues of environmental and ecological challenges should be supported.

- **Support Infra-structural Development to Improve Health and Education of the Poor with International Co-operation.**

Alleviation of poverty in the developing countries can be achieved through promotion of health care and education amongst rural poor, especially amongst the womenfolk. Co-operation of the UN Commission on Sustainable Development with international assistance and joint venture with NGOs and CBOs working at the grass root level is necessary to augment national efforts in this direction.

- **Stress Scientific, Engineering, Technological and Social Issues of Environmental Management and Minimize Political Role.**

Scientific and technological commitments in the social context of the developing countries should be made proactive with international understanding and assistance.

- **Support Environmental Planning and Management (EPM) to Eliminate Strategic Threats to Water Resource and Aquatic Life.**

The river basin-wise development is to be supported, in place of riparian right of the user, to develop river basin in a non-integrated manner endangering the quality and quantity of surface water leading to harmful effects on population and extinction of aquatic life. Complex river basin development with inter basin transfer must be planned and managed to ensure ecological balance. Dependence on ground water for agriculture and drinking purposes should be limited to the extent that the use is sustainable.

- **Support Sustainable Strategies for Energy.**

While recognizing the unique importance of energy for sustainable development, it is observed that the traditional supply-side approach is inadequate to avail of the opportunities engendered by changes in energy demand and shifts from traditional to modern energy sources. Therefore, engineers should play active role in adopting a system approach on both demand and supply sides giving attention to technological, economic, human capacity and institutional factors. Further that the market prices of the traditional supply energy must reflect environmental cost so that the advantages of the new and cleaner energy options are rewarded in the market place.

While recognizing that the bold initiative of the Earth Summit at Rio, which had marginal impact in some fields, and that most of the responsibilities for implementation did not come from the richest of the nations despite the majority support by all other nations, we strive for international support by continuous efforts in international for a for social and environmental safety through global co-operation. Therefore, we commit ourselves, in our respective capacities to the further implementation of Agenda 21 by overcoming resistance against application of these approaches.

- **We recommend** alleviation of poverty with the promise of International financial resources and transfer of technology on concessional terms as opposed to dumping of unsustainable technology in the third world by taking advantage of soft laws of the environmental regime in these countries. Notwithstanding legislative measures to combat pollution, engineers and technologists must conduct international co-operative and joint R & D for inventing clean technologies, up-gradation of traditional technologies up-gradation of traditional technologies at appropriate levels of production through training of workforce in which engineers and technologists be involved.
- **We recommend** that every citizen must have the fundamental right of access to clean air and potable water. Therefore all activities leading to this goal must be supported while those leading to the extinction of this right must be opposed.
- **We recommend** that industrial economies meet the commitments they have made on green house gas emissions in Kyoto protocol in December 1998 by 2010 with the higher target of compliance below 1990 level in the successive time spans of 5 years in order to remove the threat of global warming and climatic shift affecting the fragile societies of the third world.
- **We recommend** equitable sharing of benefits as a pre-requisite for creating incentives to maintain the earth's biotic wealth by means of inclusion of benefit sharing in discussions on technology transfer, the clearing house mechanism, access to genetic resources, agricultural bio-diversity and intellectual property rights by incorporating measures in the national bio-diversity strategies of the Government.

To build upon the momentum gained through this Congress and to provide a firm basis to strengthen and expand our future activities we recommend that we continue this dialogue between NGOs CBOs and environment conscious groups to further develop these ideas in future meetings in support of our commitment to Our Common Heritage .

- **We recommend** that the implementation of the policy for Sustainable Development must involve engineers and technologists in strategic decision making and follow-up actions free from the regressive politico bureaucratic procedures of the past.