

SUSTAINABLE DEVELOPMENT IN INDIA : SOME

KEY ISSUES

Jitendra Singhal

Associate Professor, IIMT College of Engg., Near LG Crossing , Plot No.A- 20

Knowledge Park-III, Greater Noida

Development is to be made along with preventing environment for future generation. We need to use natural stock like trustee not like owner, as we have to handover it to our future generation. Natural resources are not totally renewable and a serious as well as planned framework for sustainable development can help in their protection. In India we need : Firstly, Strong Political will, vision and the courage to adopt policy or institutional changes. Secondly, Public awareness programmer urging all parts of society to give a high priority to environment. Thirdly, India's sustainable Development Forum to make people to pay to secure the environment. Lastly, Repeated Cooperation of people in different forms & in different projects over time.

Keywords: Sustainable Development, Trustee, Public Awareness

I. SUSTAINABLE DEVELOPMENT IN INDIA: SOME KEY ISSUES

Environment and development are two sides of the same coin. Any one of these cannot be sacrificed for the other. On contrary, both are equally important for our better future.

If we will take care of both aspects through sustainable development then only, we will achieve our goal i.e. to secure a pollution free developed country for our next generation.

This paper aims at discussing some of the important issues relating to sustainable development in India. The paper is based on available literature and secondary data. The paper is proposing a model for sustainable development in India. It includes policies and practices of Indian government as its base and throws light on challenges and gives suggestions for improvement in practices.

Sustainable development means attaining a balance between environmental protection and human economic development and between the present and future needs. It requires an integration of economic, social and environmental approaches towards development...

To address the issues concerning continuing depletion of natural resources and unsustainable development, the World Commission on Environment and Development was created in 1983. Popularly known as Brundtland Commission (1983), it described sustainable development as “*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*”. After twenty years of Stockholm Declaration, the UN Conference on ‘Environment and Development’ (also known as ‘Earth Summit’) was held at Rio-de Janeiro in 1992 that adopted an action plan, popularly known as ‘Agenda 21’. The agenda 21 promised to reduce poverty, provide clean water and health care, and protect the natural resources and so on. Also to be noted that some of the Millennium Development Goals (see UNDP) have urged for ensuring environmental sustainability and reduction of the percentage of the population under extreme poverty. Similarly, explaining implications of climate change for sustainable development the Intergovernmental Panel on Climate Change notes (IPCC) the

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

importance of social and environmental equity in development. Thus all the major world conferences and initiatives taken so far on environment and development have stressed on economically viable development, socially equitable development and protection of the environment for attaining sustainable development.

Sustainable development does not preclude the use of exhaustible natural resources but requires that any use be appropriately offset. This concept is not acceptable to many developing countries since it seems to disregard their aspirations for growth and development. Further, sustainable development cannot be achieved without significant economic growth in the developing countries.

Three critical components in promoting sustainable development are economic growth, social equity and environmental sustainability. The question often asked is, should

the current economic growth (GNP, employment, etc.) be sacrificed for long-term environmental conservation? Policy makers in developing countries often perceive a tradeoff between economic growth and environmental sustainability.

However, there is a growing evidence to show that environmental conservation for sustainability of natural resources is not a luxury but a necessity when considering long-term economic growth and development. The decline and degradation of natural resources such as land, soil, forests, biodiversity and groundwater, resulting from current unsustainable use patterns are likely to be aggravated due to climate change in the next 25 to 50 years. Africa, South Asia and some regions of Latin America

are already experiencing severe land degradation and freshwater scarcity problems.

So we need to use natural stock like trustee not like owner, we have to handover it to our future generation. Natural resources are not totally renewable and a serious as well as planned framework for sustainable development can help in their protection. Through this paper we are trying to give a model to be adopted. This is not totally new or unique but it tries to make things easier to make it understand to all. As involvement of all parts of society is necessary to cope up with problem.

India's Sustainable Development Model must have four layers to complement each other.

1. Government with strong will to make institutional changes.
2. Public awareness programmer to make awareness
3. India's Sustainable development Forum and Courts.
4. Repeated cooperation of people

II. GOVERNEMENT'S WILL

Sustainable Development requires policies to be made in several areas such as policies to cope with the widespread impacts of climate change; to deal more effectively with the disposal of waste, including radioactive substances; to ensure the quality and supply of fresh water; and to do more to encourage energy generation from renewable sources. India has taken several initiatives and has a wide list of polices for environment protection and to make balanced development .

Environmental problems and issues received special attention of the Government of India during the beginning of the Fourth Five Year Plan. As a follow-up step, a National Committee of Environmental Planning and Co-ordination (NCEPC) was set up in 1972 under the Department of Science and Technology. A separate Empowered Committee was set up in 1980 for reviewing the existing legislative measures and administrative machinery for ensuring

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

environmental protection and for recommending ways to strengthen them. On the recommendations of this Empowered Committee, a separate Department of Environment was set up in 1980 which was subsequently upgraded to a full-fledged Ministry of Environment and Forests in 1985 to serve as the focal point in the administrative structure of the Government of India for the planning, promotion and co-ordination of environmental and forestry programmes. Other Government partners in carrying out environmental protection activities include:

- The State departments of environment;
- Central and State Pollution Control Boards;
- The Botanical And Zoological Survey Of India;
- The Forest Survey Of India;
- The National River Conservation Authority (Formerly Central Ganga Authority);
- The National Afforestation And Eco-Development Board;
- The Indian Council For Forestry Research And Education; And
- The Wildlife Institute Of India And The National Museum For Natural History.

The Government of India has entrusted the work relating to Ozone layer Protection and phase out of the Ozone depleting substances programme under the Montreal Protocol to the Ministry of Environment and Forests.

India is one of the few countries which have a forest policy since 1894. It was revised in 1952 and again in 1988.

The main plank of the Forestry Policy of 1988 is protection, conservation and development of forest

The Central Pollution Control Board (CPCB) is the national apex body for assessment, monitoring and control of water and air pollution. The executive responsibilities for enforcement of the Acts for Prevention and Control of Pollution of Water (1974) and Air (1981) and also of the Water (Cess) Act, 1977 are carried out through the Board. The CPCB advises the Central Government in all matters concerning the prevention and control of air, water and noise pollution and provides technical services to the Ministry of Environment and forests for implementing the provisions of the Environment (Protection) Act, 1986

India's National Water Policy (NWP) was adopted in September 1987. The National Water Resources Council (NWRC) under the Chairmanship of the Prime Minister lays down the NWP, reviews development plans and advises on implementation. The Policy envisages strategies covering ground water development, water allocation priorities, drinking water, irrigation, water quality, water zoning, water conservation, flood control and management. In the context of water use, the main issues are the pricing of water for various end uses including drinking, irrigation and industrial use.

All these policies and efforts only don't guarantee achievements of objectives. Policy implementation is more important to make policy making a success. India lacks here. In our model to have safe future Firstly we need strong political will, vision and the courage to adopt policies as well as to implement them successfully for institutional changes. The Government has already given a lead, particularly over climate change, but a reappraisal and re-ordering of priorities is essential to protect the environment and the natural resource base on which we all depend.

Let us take a field of energy requirements in rural sector. India is the second most populous nation in the world. 70% of the population of India, which still live in the rural areas. Meeting their energy requirements in a sustainable manner continues to be a major challenge for the country. Almost 75% of the total rural energy consumption is in the domestic sector. For meeting their cooking energy requirements, villagers depend predominantly on biomass fuels such as wood, animal dung and agricultural residues, often burnt in inefficient traditional cooking stoves. The

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

main fuels used for lighting in the rural households are kerosene and electricity. Irrigation is mainly through electrical and diesel pump sets, while the rural industries and the transport sectors rely primarily on animal power and to some extent on commercial sources of energy like diesel and electricity. Of the total energy consumption in the country, almost 60% is met by conventional energy sources and the rest is met by non-conventional and renewable energy sources. This energy use pattern has serious implications both on the environment as a whole as well as on the users. Fuel wood requirements have contributed to the degradation of forests. Degradation of forests has associated implications regarding CO₂ sequestration.

To redress these problems, several efforts have been made both by governmental organizations and non-governmental organizations in the form of national programmes for rural electrification, and promoting renewable energy technologies like biogas, improved cooking stoves and solar cookers. However, in spite of the existence of these programmes, their impact on the rural energy scenario has been limited.

The main reason why renewable energy projects have not grown at the desired pace is the high cost. While India has a phenomenal potential for solar energy exploitation is peripheral since the costs involved are quite considerable. Consequently, while there is a case for every household in India to put up solar panels, this actually has not taken place because they are currently quite expensive. There are other related problems of maintenance and servicing.

So we can say population, unemployment, underemployment, low purchasing power, exploitation of natural resources and pollution are interlinked with each other. We can not move separately and need to have a single unidirectional objective of the government. And for it we desperately need to remove diseases of corruption. This is why we are talking about strong political will again and again.

Technologies exist through which substantial reduction in consumption of resources is possible. Efforts to identify, evaluate, introduce and use these technologies could be made. We Need national legislation, which restricts transfer of productive agricultural land to other use. In several areas, desirable limits and standards for consumption need to be established and applied through appropriate mechanisms including education, incentives and legislation. We need to develop better means for determining the real cost of environmental policy. And we need to implement all these.

III. PUBLIC AWARENESS PROGRAMMERS

With increasing purchasing power, wasteful consumption linked to market driven consumerism is stressing the resource base of developing countries further. It is important to counter this through education and public awareness. It is worthwhile to mention here that principle 10 of Rio declaration, 1992 states that: "Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."

This Priority is accorded by the Ministry of Environment and Forests to promote environmental education, create environmental awareness among various age-groups and to disseminate information through Environmental Information System (ENVIS) network to all concerned. A major initiative to include environment education as a separate and compulsory subject in the educational curricula has been taken by the Ministry at all levels of formal

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

education, i.e., secondary, senior secondary and tertiary levels. A discussion paper prepared on strengthening environment education was presented by the Minister for Environment and Forests at the State Education Ministers' Conference held from 22 to 24 October 1998. The paper was adopted by the Conference. The Chief Ministers were urged to introduce environment education in the school curricula from the 1999-2000 academic session. Maharashtra is the first State to introduce the subject in the school curriculum.

Paryavaran Vahinis (environment launch-vehicle) are proposed to be constituted in 194 selected districts all over the country which have a high incidence of pollution and density of tribal and forest population. The Vahinis also play a watch-dog role by reporting instances of environmental scheme is entirely financed by the Ministry of Environment and Forests. Seven Centres of Excellence have been set up by the Ministry to strengthen awareness, research and training in priority areas of Environmental Science and Management. These are: Centre for Ecological Sciences, Bangalore; Centre for Mining Environment, Dhanbad; Centre for Environmental Education, Ahmedabad; CPR Environmental Education Centre, Chennai; Salim Ali Centre for Ornithology and Natural History, Coimbatore; the Centre for Environmental Management of Degraded Ecosystems, Delhi, and the Tropical Botanical Garden and Research Institute, Thiruvananthapuram, Kerala.

The National Museum of Natural History (NMNH) set up in New Delhi in 1978, is concerned with the promotion of non-formal education in the area of environment and conservation. Besides permanent exhibit galleries on various aspects of environment, the museum also conducts temporary exhibitions and a large number of educational programmes and activities for school children, college youth and the general public. Three Regional Museums of Natural History have been established at Mysore, Bhopal and Bhubaneswar.

The Indian Council for Forestry Research and Education is the focal point for forestry education and extension development in the country. The Indira Gandhi National Forest Academy, Dehra Dun, imparts in-service professional training to Indian Forest Service (IFS) professionals. State forest service colleges provide training to the officers of the State Forest Service (SFS). The Indian Plywood Industries Research and Training Institute, Bangalore, organizes short-term courses in the area of wood science. The Indian Institute of Forest Management, Bhopal, also provides training in forest management and allied subjects to persons from the Indian Forest Service, forest development corporations, and forest-related industries to develop forestry programmes. The Wildlife Institute of India, Dehradun, provides in-service training to forest officers, wildlife ecologists and other professionals for conservation and management of the wildlife resources of the country.

There are several efforts being made by the Government at all levels to increase public awareness these include:

3.1 National Environment Awareness Campaign (NEAC)

The Ministry of Environment & Forests has been conducting a country-wide National Environment Awareness Campaign (NEAC) every year since 1986 with the objective of creating environmental awareness among each and every citizen of the country. Each year, a theme or themes is chosen for the NEAC around which the campaign activities are organized.

3.2 Mass Awareness Campaign

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

Besides the NEAC described above another new programme “Mass Awareness Campaign” is also being launched with the objective of spreading wide awareness about environmental issues and sensitizing people, institutions and industry to the necessity of preserving a good environment.

3.3. Eco-Clubs

Since the youth of today are the citizens of tomorrow, a special programme for creating awareness specifically among school students, is also being implemented by the government. Known as the Eco clubs programme, the main objectives of this programme are to educate children about their immediate environment and impart knowledge about the eco-systems, their inter-dependence and their need for survival, through visits and demonstrations and to mobilize youngsters by instilling in them the spirit of scientific inquiry into environmental problems and involving them in the efforts of environmental preservation.

3.4. National Green Army

It is proposed to raise a ‘National Green Army’ through the Eco clubs with the objective of spreading environmental awareness and to motivate school children to carry out action based programmes for protection and improvement of environment. Under this programme, it is proposed to set up about 50,000 Eco clubs all over the country.

Besides this the State controlled television and radio media very frequently feature programmes giving ways and means on how to contain environmental degradation.

A number of seminars, workshops and training programmes are organized by the Government of India for creating awareness about renewable energy among different sections of the society including for policy makers, industries and also for users. These programmes are carried out by State Governments, Academic and R&D institutions, NGOs and industries

But we know the results. How many of us i.e. aam janta know about all these things? If we start analyzing all things seriously from appraisal point of view we will find almost half of all these are on papers only or not having proper coverage of population and being done with the help and involvement of known persons.

In reference to principle 10 mentioned above we must have a department having a public awareness programmer either under sustainable development forum or environment ministry or independent to work as a controlling authority to all activities related with public awareness and he/she must have a control system to check progress of these activities and he must be made accountable for having unawareness among people. This programmer may also popularize those traditional practices that are sustainable and environment friendly to make them a regular part of the lives of people in our country instead of replacing them by more ‘modern’ but unsustainable practices and technologies.

We need a campaign like “Incredible India” and “Jago grahak jago” in the field of Sustainable Development also.

IV. INDIA’S SUSTAINABLE DEVELOPMENT FORUM AND COURTS

India’s Sustainable Development Forum (ISDF) is a platform which will seek to create awareness and action towards meeting the objectives of sustainable development. It will assess the challenge of integrating environmental issues with development strategies, in order to establish a pattern of sustainable development in India, and will formulate strategies and directions, which would be provided as recommendations and advise to various levels and

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

agencies of the Government of India, and, Its aim should not be only to understand and disseminate information on issues of sustainable development in particular regions but also study, monitor and report achievements or the lack of them in this field.

It will work on the principle of **Polluter Pays of Rio declaration, 1992 i.e.** "National authorities should endeavor to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment. "

It is quite obvious that the object of the above principle is to make the polluter liable not only for the compensation to the victims but also for the cost of restoring of environmental degradation. Once the actor is proved to be guilty, he is liable to compensate for his act irrelevant of the fact that whether he's involved in development process or not. As we have consumer courts in India to give safeguards to consumers we need to have a separate Sustainable Development Courts to make people pay for their environment enemy practices and make them feel guilty.

V.COOPERATION OF PEOPLE

To ensure the sustainability of the natural resource base, the recognition of all stakeholders in it and their roles in its protection and management is essential. The official enactments and regulations are necessary but they cannot replace the people's participation as the most effective approach to sustainable development. Sustainable development is based on ecological, socio-cultural and economic sustainability. It demands changes in behaviour patterns so that it is more conservation than consumption oriented. It is important that community and local residents participate to protect the area's cultural and environmental heritage. Repetitive cooperation of people from each strata of society such as women, children and youth ,local authority, scientific and technical community, NGOs, business and industry is must. It could be in the form of Chipko Aandolan,Green Marketing by corporates, ban on plastic bags by supreme court or government initiative for participative approach such as a circular for joint forest management (JFM) and resource sharing issued by the Indian Ministry of Environment and Forests in 1990.

Conclusion: There is on the one hand a surfeit of laws, many of them outmoded and irrelevant. On the other hand, effective enforcement is lacking in respect of laws relevant to contemporary concerns and conducive to governance. Internal reviews as well as learnings from international experience should be the basis of identifying and filling gaps. Laws in themselves do not provide solutions, unless there are mechanisms to effectively enforce them. There are many traditional systems and practices whose value and validity needs to be recognized and brought into the mainstream of governmental development thinking and policy. Appropriate mechanisms for integrating them need to be created. Areas lacking policies such as people involvement and penalty for rule breakers should be identified and adequate policies compatible with the imperatives of sustainable development framed, taking into account successful examples, of policies and initiatives in similar areas.

REFERENCES

- [1] Eleventh Plan Document, Planning Commission, New Delhi, 2002.
- [2] Helmut Weidner, Martin Jänicke (2002): Capacity Building an National Environmental Policy – A comparative Study of 17 Countries, Environmental Capacity-Building: India's Democratic Politics and Environmental Management, Page 239-259, Berlin Heidelberg 2002.

2nd International Conference on Recent Innovations in Management and Engineering

IIMT College of Engineering, Greater Noida

(ICRIME-17)

24th June 2017, www.conferenceworld.in

ISBN: 978-93-86171-50-4

- [3] India's Initial National Communications to the United Nations Framework Convention on Climate Change, Ministry of Environment and Forests, New Delhi, 2004.
- [4] UNCED 1992. Agenda 21, United Nations Conference on Environment and Development, Rio de Janeiro, 2-14 June.
- [5] SP Gupta Committee Report. Planning Commission, New Delhi, 2002.
- [6] United Nations Framework Convention on Climate Change 1992 (UNFCCC), Geneva, Switzerland,
- [7] United Nations Environment Program Information Unit on Climate Change, 1992.
- [8] World Resources 2000–2001, People and Ecosystems: The Fraying Web of Life, World Resources Institute, Oxford University Press, New York, 2001.