Non-Governmental Organisations (NGOs) and Private Voluntary Organisations (PVOs) are by definition non-profit making organisations. Some are religious, others secular, some are national, others of foreign origin. However, they all have one thing in common -their aim - alleviation of human sufferings and development. It must be borne in mind that NGOs/ PVOs do not mean either large private foundations or private firms, which are in search of profit, though they too are clearly both private and non-governmental organisations. NGOs and PVOs mobilise the enthusiasm and commitment of volunteers for disaster mitigation on one hand and for developmental activities on the other.

Natural disasters such as famine, earthquake, drought and floods and man-made disasters such as riots and fires, move them into action. They also swing into action through educational efforts to draw the attention of the public to the crying needs of the society such as arresting population explosion, disaster preparedness, environmental protection etc. These organisations are, however, best known for their relief and rescue activities. As against this, it is observed that the Government finds it very difficult to manage and mitigate disasters; as it tends to take upon itself many responsibilities that could have been better left to agencies like NGOs and PVOs, who could handle the job. In addition to NGOs, which can be treated as an organised sector, there is an unorganised sector of the local level individual experts that could also help in the cause of disaster management and sustainable development.

Any Government, however well-equipped it might be, cannot all alone handle the problems of disaster management and economic development. Its efforts have to be supplemented by social, educational, professional and voluntary organisations, which possess tremendous potential and therefore can help in large scale peoples' involvement. Exploitation of full potential of these organisations has, however, remained untapped so far, mainly on account of lack of coordination and inspiration. Role of civil society and professional societies have gained paramount importance in the present decade.

2. HISTORY OF VOLUNTARY EFFORTS IN INDIA

Origin of voluntary efforts in India, as elsewhere, can be traced back to social service with its antecedents in charity and, therefore, has close links with social reform and missionary activity aimed at spreading enlightenment and alleviating sufferings. In the earlier era, education, medical care and concern for the physically and socially disabled people were among the preferred fields of service.

With the passage of time, the emphasis shifted from individual suffering to community suffering, though the accent continued to be on welfare with moral responsibility as the driving force. Even the Government of India's first essay in community development was oriented to welfare rather than to development.

The activities and anxieties of voluntary agencies turned to relief measures during two successive drought years in India in the mid-sixties. Flood, famine and cyclone relief programmes had been undertaken even earlier too, but nothing was as large and sustained as efforts mounted to fight the famine in Bihar and elsewhere. This was also a landmark in the scale of foreign funding, entry of foreign NGOs and other forms of international support. Contributions in the form of food grain, milk-powder, clothes, medical supplies, drilling rigs, etc., started pouring in the large quantities. Eventually, the Government decided to channelise these donations through an official “Freedom from Hunger” campaign office in the Ministry of Food and Agriculture. This later on became the “People’s Action for Development in India (PADI) an official agency with non official representation, for allocating the rupee counterpart of foreign donations.
in kind – food grain and other food supplies, to Indian field agencies on the basis of approved programme.

During the British period such activities were discussed and sponsored through clubs, as a legacy of which even to day we see Lions Club & Rotary International pursuing such activities. These clubs, where the government officers and well to do people in the society, met in the evening, provided a forum for discussion for the ills of the society and what could be done to remove them. Several schemes were taken up as a follow up on these discussions both by the government departments and by the voluntary organisations through contribution.

Side by side with these clubs, came up, professional societies like the Institution of Engineers, Indian Medical Association, etc., whose aims are limited to bringing together the people belonging to the particular profession and to arrange discussions about developments related to their profession.

3. CLASSIFICATIONS OF NGO's

NGO's can, be broadly classified as under:

a) Educational institutions
b) Voluntary agencies'
c) Multi-disciplinary societies
d) Professional societies
e) Micro-specialised societies

a) Educational Institutions:

The country today has a largest network of educational institutions like schools, colleges, universities, research centres, etc., functioning in the non-governmental sector side by side with the government institutions. These institutions however have so far not played any significant role at the local level planning except for some institutions associated for conducting services for Integrated Rural Development Programme (IRDP). They have remained unconcerned and uninvolved with the social problems related to disaster management and sustainable development. Some of the social work that many schools take up are also mainly in the field of campaign for literacy, hygiene, etc. This large population of educated youth could be used in educating the public on disaster mitigation, availability of natural resources, developmental programmes, environmental impact assessment and need for conservation as a part of their school curriculum either under special social service or socially useful productive works (SUPW). Participation of over a million student volunteers apart from NCC, National Service Scheme, Nehru Yuvak Kendras, Bharat Scouts and Guides can make success of rescue, relief and rehabilitation in disaster besides creating proper public awareness.

b) Voluntary Agencies:

There are many voluntary agencies in the country today engaged in the task of relief work and rural development. The earliest among these were the Sewagram set up by Mahatma Gandhi and Shantiniketan set up by Rabinder Nath Tagore.

Image : Check dam
Caption: Rural Development, Check dam in Rajasthan

These agencies due to their better understanding of local needs, problems and resources, can evolve new programmes, strategies and approaches through local people in fulfilling many social needs without much expenditure. These agencies are of different sizes. Some of the larger agencies which cover from 40 to 100 villages through one or more programmes are Sewa Mandir, Kishore Bharti, Gandhi Smarak Nidhi, Agrindees, Smanvaya Ashram and Tamulpur Anchalic Gram Dan Sangh, Xavier Institute of Social Services.
The programme of these agencies is however not uniform. General education and welfare programmes tend to cover more villages and population rather than other programmes. The associations set up on the Gandhian pattern such as Gandhi Vichar Prishad, Gram Bharti, Gandhi Samarak Nidhi have common objective including socio-economic and cultural development, undertaking constructive programmes with which Gandhiji was associated, developing individual, family and community and creating awareness among people about social problems. The major field of their activity, however, could be grouped into disaster mitigation, education, irrigation & agriculture, cottage & village industries and health.

c) Multi-disciplinary Societies:

These societies are those which have among their members people from all walks of life rather than a particular profession who have direct or indirect interest in disaster mitigation, developmental projects and environmental management. Some of such notable multi-disciplinary societies in India are:

1. Assam Science Society
2. Marathi Vighyan Parishad
3. Kerala Sahitya Parishad
4. Indian Association for Environment Management
5. Indian Institute of Public Administration
6. Indian Environment Congress Association
7. Indian Society of Training and Development
8. Industrial & Chambers Federations like ASSOCHAM, CII,FICCI, PHDCCI
9. Institute of Directors
10. Society for Environmental Conservation
11. World Environment Foundation

These societies are well organised and have been successfully carrying out seminars, workshops, exhibitions, etc. for dissemination and propagation of knowledge and have many eminent people amongst their members. They are capable of taking up for study to advise on various problems and projects for disaster mitigation. These societies not only create suitable mass awareness but also deliberate upon to evolve consensus on future strategy in planning and tender suitable advice to the government at crucial times.

d) Professional Societies:

Professional societies and institutions are those whose aims & objectives relate to a specific profession and their activities connected to the development in the concerned discipline. Some of the prominent Indian institutions/societies are:

1. Computer Society of India
2. Confederation of Tourism Professionals of India
3. Engineering Council of India
4. Indian Medical Association
5. Indian National Science Academy
6. Institution of Engineers (India)
7. Indian Society for Technical Education
8. Institute of Cost Works Accountants
9. Institute of Chartered Accountants
10. Indian Economists Association
11. Indian Law Association
12. Indian National Academy of Engineering
13. Indian Council of Arbitration
14. Indian Society of Valuers
15. National Academy of Agricultural Sciences
The membership of these societies is limited mainly to the related professions. These societies are highly technical and have eminent scientists, engineers, doctors, economists, lawyers, chartered accountants, tourism professionals etc. as their members. Their opinion carries a lot of weight and often influences the policy decisions of the government. They however should gradually broaden their objectives with a view to take up activities involving general welfare of the society, particularly for disaster mitigation and sustainable economic development.

**e) Micro-specialised Societies:**

The emphasis and need of micro-specialisation in various fields of engineering, science, agriculture, medicine and surgery, town planning, architecture, public administration, etc., have given birth to many professional societies. Their membership and activities are limited to a particular functional area of that profession. Such societies have many prominent experts as their members who strive hard to keep them abreast of the state of art in various challenging topics of that specialisation.

The societies in this group deliberate and publish papers covering research and developmental activities belonging to that micro profession. They can render considerable help in promoting awareness and advice to government on specific projects and problems of their concern.

4. SCIENTIFIC KNOWLEDGE AND DEVELOPMENT NGOs

In this industrial age, the major concern for the relationship between human, natural resources and disasters mitigation has been the exponential growth of human population; whereas resources have been limited. Most of the NGOs should work through scientific information particularly the power of knowledge in terms of disasters and environment management. It is ridiculous to continue to believe in myths even; when they are clearly contradicted by scientific facts, and believing in two contradictory ideas. It is important to realise that most of the myths are created in the absence of precise knowledge of the matter. For better results, we need to enlarge our database which is evident in computers age. We can accordingly, manage disasters in better ways and resolve the mysteries of nature as well.

The only way to interact with nature is to enlarge our understanding of environment natural resources and development projects. NGOs should also understand relationship and functioning realising the limitations of human capabilities. However, every change in the environment should not be termed negative. The process of change is an integral part of the functioning of environment and natural resources management particularly due to very high consumption patterns in developed countries while population explosion in developing nations. The level of technological development influences the extent of human intervention influencing the magnitude of disasters and ecological status.

Earlier, NGOs were engaged in relief and charity, often under a religious/ missionary zeal feeding the hungry, supplying basic health care and education, focussing on the weak and vulnerable. Now, the focus shifted to development to evolve packages of technology, skills and market connections to facilitate better living and poverty alleviation. Soon, thereafter the range of activities of NGOs assumed a new complexity like advocacy for policy change, organising people for assertion of basic rights and the location of activity moved from local to the national and then to the global. NGOs have been praised for being in the forefront of micro credit provision for the poor, for pushing more inclusive and participatory planning and evaluation in raising public awareness.

The role of NGOs have been underlined in every major international forum eg., from Rio (environment), Vienna (human rights), Beijing (gender), Kyoto (climate change), Tehran (habitat), Copenhagen (social development) which still remains to be studied, particularly in their advocacy of ‘abstract’ international standards without adequate concern for time and context. It is a fact that most of the NGOs active in these domains are insufficiently rooted in the national or local context. To be genuine civic actors, it is crucial that the NGOs be both locally rooted and responsive. It is worth analysing why networking and
lobbying for changes in a WTO forum (from Seattle to Cancun) comes more easily than lobbying for right concerns in their own country.

Another challenge is in forging relationships with other, independent entities not unlike coalition building. This is very difficult since few are willing to cede authority and control or even merge their objectives with others in service of a larger aim. Both globally and nationally; this appears like handing over to the better connected and endowed NGOs. The capacity building to develop new skills and learning for new roles in a changing context is also relevant. Finally there is the issue of legitimacy and accountability. Once the gap between precept and practice becomes glaring, it may well be that public ire may turn against NGOs. They must gear up to face this challenge.

5. ROLE FOR PROFESSIONAL SOCIETIES

It is a fact that very few people associated with the media reporting and environmental activism in India have proper understanding of the complexities of causes of disasters, environmental process and techniques of infrastructural development projects. The result is that they tend to overstress only one or two aspects of the problem.

Quite often the 'dose response function' of different disasters and environmental impacts are not understood, when looked at the processes in isolation. The causes and effect of natural disasters, environmental process and planning of sustainable developmental projects are quiet intricate and multi-disciplinary subjects.

In the recent decade, it is being noticed that a fear syndrome has been created by media and self acclaimed environmentalists against the developmental projects in general and hydropower development projects in particular through unjustified manifold exaggeration of the so called environmental impacts of such schemes. While we should ensure that environmental considerations are not neglected in the developmental process; nevertheless creating obstructions by exaggerating the minor environmental impacts side by side conveniently forgetting their tremendous benefits would be disastrous. Let us not forget that 40% of our people still live below the poverty line.

Mankind is at the centre of environment and if minimum needs of the society are taken care of, environment gets protected and sustainable development follows. Also as society's capacity to carry poverty is limited, economic development which reduces poverty becomes essential so that carrying capacity of natural resources remains within limits.

In the above difficult situation, all the professional societies would need to strengthen their forte for stimulating and supporting the discussion on the real burning issues to serve the national interests in tune with the changing scenario. It is also essential that subjects of disaster management, environmental concerns and the process of planning and operation of various types of projects are rightly taught at different levels of education from an early stage as well as to the experts of different disciplines.

It is frequently felt that persons with true multi-disciplinary inclination are very few in our developmental and research organisations; most of the experts tend to develop a feeling that only they are able to diagnose the problems better. In the process, cooperative working arrangements and team spirit become causalities. Multi-disciplinary teamwork, though advocated easily, is indeed a difficult task to accomplish, specially when the individual's training is in the narrow disciplinary field of specialisation.

The success of multi-disciplinary team efforts relies heavily on effective team leadership. The team leaders should be able to sensitize and create enthusiasm for understanding and accommodating the needs of micro specialised disciplines, motivate team members, arbitrate differences, develop a basic understanding of all the disciplines involved and channelize the group efforts towards achieving the common goals.

Effective leadership also depends on the art of building good inter-personal relations, encouraging synergism and promoting group dynamics. Since structured university education hardly provides for
exposure and development of skills in these areas, it becomes essential that the professional, multidisciplinary and specialised societies and voluntary agencies play their dominant roles in continuing education, quality up-gradation, disaster management and sustainable development through the following activities:-

1. Organising workshops, symposia, conventions etc. at national, regional and local levels.
2. Publishing of literatures in the form of Monographs, Papers, Conference Proceeding, Journals, etc.
3. Conducting training programmes
4. Facility of libraries, reading rooms and resources centres
5. Distant learning facilities
6. Distribution of popular publicity material
7. Public awareness through mass media reporting
8. Technical and industrial exhibitions
9. Popular lectures from eminent experts
10. Regular classes for informal education and enhancement of qualifications
11. Award of Diplomas and Certificates after prescribed Examinations
12. Honouring and recognition of individual's achievements
13. Research and standardisation
15. Publishing rejoinders pointing out the scientific facts against unbalanced newspaper articles
16. Advising the governmental agencies through memorandums about the needs and perspective planning for disaster management and sustainable development.
17. Participating in the subject committees formed at various levels to advise the government.

6. UNORGANISED EFFORT

Apart from the organised efforts through NGOs and PVOs, many towns and villages have retired persons with technical, scientific, medical and other expertise, who may be willing to offer their services for preparing plans or schemes for the disaster management and sustainable developmental projects. These professionals possess a wealth of knowledge and information about their specialisation. Unfortunately, their special knowledge and expertise are hardly ever utilised. They are hardly consulted by the Panchayats nor the government agencies.

On one hand there are complaints of the lack or inadequacy of expertise, on the other hand such large available resource remains untapped. There is a need of making a formal mechanism for associating locally available talent by drafting such persons to the advisory committees at the village, town, district and state levels. Such an association can help in obtaining data and information, carrying surveys, preparing schemes, formulating plans as a whole in the areas of preparedness, mitigation, monitoring, evaluation and management of natural disasters management.

7. PEOPLES PARTICIPATION

Let us appreciate that disaster management and ecological degradation cannot be taken care of by a few experts and government agencies. Every individual has some role to play for sustainable development in a country like India. Proper orientation of people's mind is a pre-requisite in this task. The common man's mind is preoccupied with the problems of hunger and drinking water. He is too busy fighting with the vagaries of floods during monsoon and droughts during dry season.

Three legged system for sustainable development should be based on bringing awareness among people, continuous monitoring and interdisciplinary research and implementation of such findings. This would require close cooperation between government agencies and non-governmental organisations. A net work of environment awareness programme should include collection of information, analysis, evaluation and
documentation followed by dissemination of information through lecturers, seminars etc. Hence, people’s active involvement and suitable changes in their habits are of paramount importance for sustainability of economic developmental projects.

8. COMMITMENT TO SUSTAINABILITY

Sustainable development should be regarded as a fundamental component of social responsibility, sound business practice and natural resource management. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable development requires the integration of three components – economic development, social development and environmental protection – as interdependent, mutually reinforcing pillars. Eradicating poverty, changing unsustainable patterns of production and consumption, and protecting and managing the natural resource base underpinning economic and social development are overarching objectives of, and essential requirements for sustainable development. Sustainable development is the collective responsibility of government, business, civil society, consumers and individuals. It is committed to working cooperatively with these sectors in achieving sustainable outcomes. We should care for the values of eco-efficiency and a precautionary approach to environmental management.

9. ECO-EFFICIENCY

We should support the opportunities to create more value with less environmental impact through the concept of eco-efficiency. Eco-efficiency is founded on the idea that becoming more efficient makes good business sense and is concerned with three broad objectives:

- Reducing the consumption of resources
- Reducing the impact on nature
- Increasing product or service value

10. PRECAUTIONARY APPROACH

A precautionary approach is one of the underlying values guiding efforts to achieve more sustainable outcomes for new and existing developments. In the application of this approach, public and private decisions should be guided by:

- evaluation to avoid, wherever practicable, serious or irreversible damage to the environment;
- consideration of the need for electricity and a reliable water supply to alleviate poverty and enhance living standards; and
- an assessment of the risks associated with various options.

Precautionary approach should be applied at the national and/or regional policy level. Decision makers should consider global issues, such as global warming, acid rain, and loss of biodiversity, when establishing national and/or regional policies for energy, water and land use. These issues should be addressed and dealt with at the national and/or regional policy level prior to the assessment of specific projects.

11. CONCLUSION

It is a challenge before us where the services of thousands of young men and women - highly qualified, with professional knowledge and commitment - who, presently, do-not fit in the existing governmental structure, can be utilised for the cause of disaster management and sustainable development. Professional societies and voluntary organisations can play a vital role in the preparedness, mitigation and management of natural disasters and optimum development of natural resources with due care of environmental management.
They may provide constructive criticism for timely correction and should side by side provide complimentary role by creating balanced scientific public awareness, informal educational and public participation. The modalities of the involvement and limitations of NGOs, educational, professional and voluntary organisations need to be worked out so as to streamline their useful participation in preparedness, mitigation and management of disasters.

We must remember that India has to support more than 1/6th of the world’s population and 1/6th world’s cattle, on just 1/50th of global land; with meager 1/25th of the world’s water resources. In India, 80% of all diseases and over 1/3rd of deaths are caused due to contaminated water. World Bank has estimated that water pollution accounts for about 60% of the major annual environmental costs in India.

Safe water supply and environmental sanitation are vital for protecting environment, improving health and alleviating poverty Social tensions, political instability and street fights are already being experienced in India, on account of fast deteriorating availability of water in adequate quantity and of acceptable quality. Non-development of water storage and large hydropower projects is not a viable or available option; due to the very high temporal variations in river flows in Indian monsoonic climate.

Some non-credible NGOs and self styled non-professional environmentalists leave no stone unturned to oppose almost each water storage dam, hydel plant and continue fighting tooth and nail against vitally needed inter-linking of rivers projects, perhaps through foreign funding and to garner awards, fame and monopoly even though they are totally ignorant of even basic facts and intricate ‘dose response functions’ of complicated environmental processes and techniques of water resources and hydro power development, since they have no scientific or technical background.

Environment is either science or engineering, which can- not be so well understood by novelists, journalists and self- styled activists. Such persons repeatedly use media to create fantasies since they have excellent command on language, media relationship and have nothing else to do except whole hearted full time tirade against large river valley projects, on many shifting grounds. Efforts of few non-professional activists in blocking large number of infrastructural projects should be curbed while replicating excellent examples of careful sustainable models like Delhi Metros, large number of river valley projects and planned cities like Chandigarh. It is also essential that water and energy sensitive planning is undertaken for cities and new urban centres.

We should promote greater consideration of environmental, social and economic aspects in the sustainability assessment of new infrastructural projects and the management and operation of existing schemes. Thorough sustainability assessments should ensure that detrimental social and environmental impacts are avoided, mitigated or compensated and positive outcomes are maximized. Of necessity, the principles are generic since each particular development project will have its own unique set of circumstances influenced by scale, geographic location, social, legal and political constraints.

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