Role of NGOs in Promoting Non-Formal Environment Education  
A Case Study in Bangalore District

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Abstract

Environmental degradation represents one of the greatest challenges in the present century. World Commission on Environment and Development predicted that the world population will double and economic output will increase 4-5 folds in next 40-50 years. At that time human needs will require a major shift in their relationship to the environment. This major shift will need a long-term societal efforts in EE and society will need a continuous supply of environmental specialists to deal with and understand the human requirements and environmental problems, and to develop strategies, policies and technology to keep the environment clean, productive and biologically diverse. It also needs environmentally sensitive people with eco-friendly attitudes and values to understand the environmental scenario and its adverse effects and also to act appropriately towards environment protection and improvement. There is no second argument regarding the role of EE in the direction of meeting the above said needs.

Since the emergence of EE as a new dimension in the educational system (both formal and non-formal) several attempts have been and are being made in terms of developing policies and strategies aiming at creation of public awareness and sensitivity towards environmental problems and environmental protection leading to timely and meaningful action. While the Department of Education, MHRD took initiative for integration of EE into the formal system, MOEF has taken the responsibility of promoting NFEE and it has sought support from NGOs, Educational institutions, Self Help Groups, Research Centers and other organizations.

It is very clear, NGOs play a significant role in promoting NFEE as they can reach all sections of the society. Many NGOs are contributing considerably through their EE programs to reach the goals of EE. This paper presents the findings of the research project entitled 'Role of NGOs in Promoting Non-Formal Environment Education - A case Study in Bangalore District'.

Conceptual Clarification

Environmental Education (EE): Environmental Education is considered as an interdisciplinary subject, which aims at developing effective skills and solutions for solving environmental problems. It should prepare the individuals for life through an understanding of the major problems of the contemporary world and the provision of skills and attributes needed to play a constructive role for improving life and protecting the environment. The analysis of different definitions of EE stresses that EE is a comprehensive, continuing process; routed in a broad interdisciplinary base, but responsive to changes in a rapidly changing world; linking the acts of today with consequences for tomorrow, while emphasizing enduring continuity.

Non-Formal Environmental Education (NFEE): It means EE outside the formal schooling. It is less definitive and structured; directed towards the public at large (may be one community or a section of
a community or society as a whole). It caters to varied target groups - children, students, teachers, administrators, social workers, women, slum dwellers, rural youth, non-student youth and public in general - of different age groups and background; demands varied strategies, approaches and programs on a sustained basis. The agenda of NFEF is very broad with the objectives that individuals and social groups should acquire awareness and knowledge, develop attitudes, skills, abilities and motivation to participate in solving real life problems with a practical bias for ensuring a healthy environment all around.

Non-Governmental Organization (NGO): In Encyclopedia article (1.44.3.7), it is defined as an independent voluntary association of people acting together on a continuous basis, for some common purpose, other than achieving government office, making money or illegal activities. This term came into currency in 1945 with the establishment of UN and 1970 onwards it passed into popular usage. It connotes different meanings in different countries and cultures. In the third world countries including India, the term generally refers to organizations involved in development. But, in general, NGO is a non-profit making, non-criminal, non-political and non-violent group independent from Govt. control.

Objectives of the Study
The present study was taken up to identify the NGOs involved in Non-Formal Environmental Education and to make as case study of some of them in Bangalore District (urban), the administrative center of Karnataka. This study mainly aimed to

- identify the NGOs in Bangalore District (urban) working towards NFEE
- study the functioning of the NGOs selected for the study (case - study)
- study the effectiveness of the NGOs in promoting NFEE
- study the NGOs’ linkage with school education to promote EE
- identify the problems faced by / limitations of NGOs in promoting NFEE

Methodology
This study has employed normative survey method involving descriptive analysis and case study with multiple case replication design. The study was conducted in three phases: i) Identification of NGOs who are working on EE  ii) Construction of Research Tools  iii) Case Study of select NGOs

i) Identification of NGOs who are working on EE: The list of NGOs in Bangalore District (Urban) was prepared by referring to the sources like- websites, directories and organizations. The NGOs working towards NFEF were short-listed after screening the thrust areas and objectives of the listed NGOs. Then, these NGOs were visited in person/ contacted through e-mails / websites / telephone numbers, and totally 22 NGOs were identified as those working on EE, and their profiles were prepared. Out of these 22 NGOs, 3 were selected (ATREE, ECOWATCH and YMCA) for the case study. The data was collected from about these 3 NGOs by using multiple sources of evidence such as documentation, archival records, interview, questionnaire, tests and physical artifacts.

ii) Construction of Research Tools: The following research tools required for the data collection were prepared by the investigator and validated in a participatory workshop involving subject experts to meet the criteria of truthfulness, consistency, comprehensiveness, repetitiveness, language precision and practicability. Further, the tools were claimed to be reliable as the items included in them were objective and the tools were of considerable length. No separate attempts have been made to establish validity and reliability for the tools.

1. Organizational Data Sheet
2. Interview Schedule for Key Informants
3. Interview Schedule for Public
4. Questionnaire for Participants
5. Interview Schedule for Heads and Teachers
6. Questionnaire for Students
7. Environmental Knowledge Test (EKT)
8. Environmental Awareness Test (EAT)
9. Environmental Action Behavior Test (EABT)

iii) Case Study of select NGOs: In order to study the functioning of NGOs to promote NCEE the case study of 3 NGOs - ATREE, Eco-Watch, YMCA - was conducted. The functioning of the NGOs was studied with reference to the following variables - objectives, thrust areas, target groups, programs, follow-up activities, approaches / methods / materials used, evaluation procedure followed publications, linkage with schools and problems faced by / limitations of NGOs. Consolidating the information collected through the organizational data sheet constructed for the purpose, the NGOs' documentation, archival records and the interview with the Key informants of the respective NGOs selected for the study, the case report was prepared.

Sample for the study

The sample for the study was drawn using multiple stage (three stages), multiple sources and multiple sampling technique. In the first stage, purposive sampling technique was used to select three NGOs for the detailed case study. In the second stage, 11 key informants, 43 participants, 15 public were selected using convenient sampling technique. In the third stage, 1/3 of the total number of schools, with which the selected NGOs had linkage, were considered for the sample of the study. The schools linked with each NGO were randomly selected. The total sample of the schools consisted of 11 schools, out of which 4 each are from ATREE and ECOWATCH, and 3 from YMCA. Using convenient sampling technique, 25 teachers (including HMs) and 238 students were drawn from the selected 11 schools.

Findings and Implications

Both the qualitative and quantitative data collected for the study have been subjected to descriptive as well as interpretative analysis. A few statistical measures like mean and standard deviation, 't' test for significance of the difference between means have also been used for analyzing the quantitative data. The major findings emerged from the study are presented below.

Typology of NGOs: All the 22 NGOs, identified in the present study are the grassroot NonGovernment Development Organizations (NGDOs) working on NCEE, out of which 5 NGOs - CEE, MYRADA, PARINITI, TERI, WWF - work as network NGOs too. Of them, only 12 NGOs are found working exclusively on EE in the direction of promoting environmental awareness and knowledge among public and environment conservation, whereas other 10 NGOs have EE as a part of their development programs and work for it. This implied that only 1% of the total number of NGOs in Bangalore district are working towards EE.

Functioning of NGOs

- The objectives of the NGOs regarding NCEE are not clearly and specifically spelt out, and all the objectives expected of NCEE are not considered.
- NGOs do not have clarity in their objectives. This in turn affects their functioning due to lack of appropriate approaches and methods to reach the goals of EE.
- NGOs only with EE programmes targeted mainly students, teachers, youth; public and rural folk to some extent. NGOs with other developmental activities targeted different sections of the society like farmers, women folk, rural folk and weaker sections.
- The concerns of NGOs regarding environmental issues reflect the national/global concerns about environment.
- The organisation and conduct of the programmes - influenced by donor priorities, policies, vested interest, conveniences/facilities.
- Most of the programmes are knowledge oriented, very few are action oriented. Some NGOs do have steady and regular programmes scheduled and some do not have. All the 3 case study
NGOs belong to first category.

- Programmes organised are not adequate, not more effective in the direction of achieving the goals of EE. Employed participatory & interactive approach. Used different methods/activities and materials.
- Instructional material given to the participants is not adequate, but is opt and useful. Informal evaluation followed; no formal/structured evaluation
- Follow up work is not adequate; longitudinal follow up is not possible, Cross-sectional follow up is being attempted
- No information could be obtained regarding the nature and level of funding, and budget for the programmes
- Publication- Some NGOs have rich publication; considerable in some cases and no publication in some cases.

**Effectiveness of NGOs:** Programmes are 50% to 75% effective. The participants have exhibited average level of environmental knowledge, awareness and action behaviour. Eco-Watch is more effective than ATREE and YMCA. NGOs' attempts at developing environmental knowledge, awareness and sensitivity are appreciable where as efforts on developing and monitoring the skills for environment protection and sustainable use is very marginal.

**Linkage with Schools:** Only 50% of the NGOs identified in the study have established linkage with schools. Linkage with schools for EE programmes is a very recent phenomenon. Schools linked to NGOs are largely well established English-medium schools. Programmes organised are not adequate (adequate in case of Eco-Watch); 50% to 75% effective. Students exhibited average level of environmental knowledge, awareness and action behaviour. Difference between the students from the schools with NGO intervention and without, is very less; but statistically significant. NGOs linkage with schools for the promotion of EE is not very effective. Though NGOs are attempting to establish linkages, schools are not proactive in using the resources of NGOs.

**Problems faced by / limitations of NGOs**

1. Funding - Funds from Government is not adequate, inordinate delay in getting funds, difficulty in mobilizing funds from different sources, non-availability of information and procedures regarding funding
2. Follow-up programs - it is possible to have follow-up in developmental programs, not possible to have direct and adequate follow-up activities in case of EE programs. Cross-sectional follow-up is possible in some cases, but not the longitudinal follow-up.
3. Co-operation from the community and participants - very difficult to convince and motivate them for the purpose.
4. Organizational problems - like venue, time management and changes in the Resource Person (specific to Eco-watch)
5. Late coming and changes in Resource Person (specific to YMCA)
6. Mobilization of Resource Persons and community facilities
7. Frequent transfers and discontinuity of Heads and teachers in the schools (particularly in govt. schools), and officials in the govt. offices
8. Publicity of their programs to reach the public
9. Net working with other organizations
10. Widespread corruption, confusing and complicating procedures, non-availability of information and involvement of vested interests.
Suggestions for Improvement

Following suggestions have been made to enable the NGOs to be more active and effective:

1. Reach out programs should be increased so as to reach more people both in rural and urban areas.
2. Build up networking with other NGOs and local institutions.
3. Sustain hardwork with greater consistency and commitment.
4. Get like minded people/organizations to work with the NGO.
5. Accommodate more Resource Persons and manpower (Volunteers).
6. Get more funds from Govt. and other agencies.

Further, it is suggested the NGOs should consider the following points, in addition to the suggestions given above - NGOs should have clarity in the objectives and approaches for EE on their agenda, go for more action oriented programs with outdoor activities, have upward linkage with other agencies for funding, extend the programs to the wider section of the society.

Conclusions

Based on the findings of this study, the following policy implications have been suggested - strengthening the networking of NGOs, building leadership and resource capital, formulation of State policy and ensuring accountability of NGOs.

Strengthening the networking of NGOs: The main point emerged from this study is the lack of networking among NGOs and other local organizations. Because of this, NGOs are unable to interact each other and know what they are doing towards EE. NGOs are facing some common problems like inadequate funding, lack of co-operation from public and participants, organizational problems, resource persons and resource material problems, non-availability of information regarding funding and procedures as well as formalities to get the funds etc. All these problems can be discussed and tackled, provided there is a strong networking of NGOs.

Building leadership and resource capital: The findings of this study emphasize a need for leadership and personality development, which is possible through training for NGO personnel. Government can take initiative in this direction - identify certain nodal agencies and support them to take up the responsibility of training. The Extension Service Units in the Universities and SRCs can also think of certain programs in this regard.

Formulation of State policy: It can be said that the Government's effort in seeking NGOs support only through sponsored programs is not enough, it should develop a meaningful relationship with NGOs who play a significant role in promoting public participation; State should realize that it has a responsibility to facilitate NGOs to function effectively in the right direction. This envisages a greater need for a State policy for NGOs.

Ensuring accountability of NGOs: The present study found that the NGOs do not have clarity in their objectives and approaches, transparency regarding funding and evaluation of their effectiveness. This suggests that ensuring accountability of NGOs is required for their effective functioning. Accountability of NGOs implies 3 types - academic, administrative and financial. The academic accountability implies the extent to which NGO activities and programs seek to fulfill the objectives with which NGOs were started; administrative accountability speaks of the office modalities of NGOs such as recruitment guidelines, planning and implementation of programs etc. where as financial accountability refers to financial matters of the NGOs. One of the strategies to ensure accountability is the evaluation of NGOs by an external agency, using a common scale for evaluation. This work is again to be initiated by the Government, as NGOs are not interested in this evaluation. But, it appears to be a difficult task because of distrust among NGOs towards Government and Government's apathy towards NGOs. Thus, how NGOs are accountable partners of the Government is a question for which answers are not acceptable to everybody.