



Assessment of Awareness Raising Programs by Relevant Federal Institutions towards Environmental Pollution in Ethiopia

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ABSTRACT

Aim: Lack of environmental awareness, in addition to other manmade and natural factors is the most critical factor leading to environmental pollution in Ethiopia. This study was carried out at the concerned federal institutions in order to assess the awareness creation programs towards environmental pollution.

Methods: This study was conducted in 2010 and followed mixed research design. And total of 55 respondents were participated to fill questionnaire, interview and focus group discussion. Evaluation parameters were adopted from UNEP (1988) and included in the questionnaire.

Results: The assessment revealed that the cumulative awareness raising activities undertaken in the system has been far from the expected, more than 80% unattained. The lack of financial resource, trained personnel and lack of coordination were observed as major causes.

Conclusion: Awareness raising programs about environmental pollution were found to be inadequate.

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Introduction

In Ethiopia, to protect and mitigate environmental pollution many efforts have been made at the national level. For instance, adoption and ratification of some international conventions and agreements related to the environment, incorporation of environmental issues into the constitution, formulation of Environmental Policy and strategy and enactment of Environmental Pollution Control and Environmental Impact Assessment Proclamations are the major attempts [1-3].

In addition, the Environmental Protection Organs Establishment Proclamation [4] established institutions responsible for regulation of environmental protection from pollution; these include the Environmental Protection Authority (EPA), Regional Environmental Agencies and the Sectoral Environmental Units at all federal sectoral institutions such as Ministry of Water Resources (MoWR), Transport Authority (TA) and Ministry of Health (MoH).

While the activities done are appreciable effective environmental awareness creation program through inter-sectoral coordination, among others should be available to materialize the desired outcome. In Ethiopia, several scholars and institutions [5-7] have confirmed that lack of environmental awareness is the most critical factor leading to environmental degradation in Ethiopia, with the assumption being that awareness leads to empowerment and engagement with the issues.

Moreover, the availability and effectiveness of environmental awareness creation activity especially towards pollution control is not studied rigorously at the federal level. In addition the problem of environmental pollution is still observable in the country [6]. Thus, this study was initiated to assess the adequacy of awareness creation programs by those concerned federal institutions towards environmental pollution through examining the availability of continuous awareness creation programs and then identifying factors hindering the effectiveness of the program.

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Methods

The study was conducted in 2010 to assess the awareness raising programs by federal institutions in Ethiopia. And mixed research design (quantitative and qualitative) was employed. Questionnaire, interview and focus group discussion has been used as methods of data collection.

Evaluation packages were prepared to measure the level of awareness raising programs based on the relevant requirements stipulated under the national Environmental Pollution Control Proclamation and on the basis of the standards issued by UNEP to measure adequacy of awareness creation activities for African countries [8].

Questionnaires prepared for the Federal EPA, MoWR, MoH and TA were given to their relevant agents with a view to obtain an institutional response as opposed to an individual opinion. Key informant interview questions were developed and administered with relevant agents working at the said institutions. The selection of respondents was made purposively, based on the relevance of their post to the questions and also experience, knowledge and willingness. Accordingly, a total number of fifteen relevant personalities: five from EPA, three from TA, three from MoWR and four from MoH were contacted for interview. Then, four focus group discussions were undertaken with experts working at relevant posts within each institution to verify the information provided and to further expand the analytical component of the study.

The quantitative data obtained from questionnaires were analyzed using simple descriptive statistics which incorporates the use of percentages. The qualitative data collected through interview and focus group discussions were analyzed through narration.

Results

Assessment of Adequacy of Awareness Raising Programs

The assessment revealed that the cumulative awareness raising activities undertaken in the system has been far from the expected, more than 80% unattained.

As Table 1 indicated, awareness raising activity has been conducted using various tools and approaches

(17.85%) by relevant institutions (except TA) to enhance awareness about environmental concerns in general. TA has not yet established any system to conduct awareness raising activities.

Table 1. Approaches used to create awareness in EPA, MoWR, MoH and TA, 2010.

No	Tools and approaches	Percentage
1	Print and electronic media (TV, radio, posters, leaflets)	4.76
2	Internet	1.19
3	Various consultative and sensitization forum (workshops, seminars, focus group meetings, press conferences)	5.95
4	Establishment of information systems/ center	1.19
5	Development and implementation of environmental education strategies/ programs with multimedia approach	1.19
6	Demonstration and pilot projects	2.38
7	Integrating into the school curriculum	1.19
	Total percentage	17.85

Use of consultative and sensitization forum has shown better result (5.95%) compared to other tools. In EPA and MoWR it has been reported as

a major means of raising awareness to different sections of the society. Print and electronic media has been the second preferred tool to raise awareness which is 4.76%. Demonstration and pilot projects are on the third level which is 2.38%. Other tools such as internet, use of information center and the like shows the same level of implementation by those concerned institutions.

In terms of institutional performance, the result shows that EPA has used all kinds of tools and approaches to create awareness about environmental protection. MoWR next to EPA conducted awareness raising activities on how to maintain the quality of water resources for different stakeholders at different levels. MoH also at the third place educate the society about health problems caused by poor sanitation.

Discussion

An effective environmental awareness raising activity requires a broad range of tools and approaches to reach out different segments of the community such as: mass media, publications, meetings and hearings, internet and others [9] (Table 1). In using these tools as a means of raising awareness, EPA has performed better than the other sectoral agencies (Table 1). In this respect; EPA, in collaboration with Ethiopian Television (ETV), has got access to 15 minutes a week air time on ETV since the last two years. On its media time, EPA is currently presenting various environmental protection issues to the general public with the view to enhance the level of awareness of its audiences. Adding to this, EPA in collaboration with donor agencies had provided a one year environmental awareness raising program on Radio Fana (one of the dominant radio stations in Ethiopia) from 2009 September-September 2010 using 20 minutes media hour per week. Moreover, EPA has also been occasionally using public newspaper (Addis Zemen) and private newspapers as a medium of awareness rising to the general public. These are encouraging efforts which are vital to enable the general public better understand the benefits and mechanisms of environmental protection and be informed actors within the process.

In spite of the said positive efforts, it is also observed that EPA has faced some challenges to effectively use the media. According to an interview with the head of the Environmental Education office at EPA,

conducting continuous awareness creation activity requires adequate number of qualified experts (to regularly prepare well-organized, holistic, and understandable programs) and huge amount of money especially to use the media. However, such kinds of experts are mentioned to be so scarce on the market to access for EPA by its current salary scale. Accordingly, the scarcity is mainly attributed to the fact that specializations on environment related trainings are not offered in many of our universities. Even when the existing staffs of the department prepared programs for the media, shortage of fund to pay the media has been frequently observed as a hindrance to use the media. To solve this problem EPA prepared training for some journalists from ETV and Ethiopian Radio before a year ago. But such training did not last long for financial reason. And currently EPA neither have communication with those trained journalists nor does it know their where about.

On the side of Sectoral agencies (MoWR, MoH and TA), it is observed that they have not utilized any media (except occasional leaflets) as a means to raise awareness of their stakeholders on issues related to environmental pollution, mainly for budgetary reasons. All these indicate that the concerned organs have not effectively used the media and printed materials as expected, thus missed the advantage of transmitting environmental information by which different segments of the society could have gotten access to information. Therefore, all stakeholders should work closely in preparing programs so as to boost the number of qualified experts on the market and integrate environmental and sectoral issues to jointly cover the cost of media utilization.

Secondly, the performance of relevant agencies in using internet as a channel of communication and information sharing among themselves has been far below expected. In this respect, the performance of EPA is relatively better, while the other agencies done nothing on the issue. According to an interview with the head of the Environmental Pollution Control department of EPA, the prevailing gap is observed mainly because of inadequate infrastructure facility.

On the side of responsible sectoral agencies, absence of environmental unit (within each agencies) to handle environmental matters and lack of initiative to communicate information are observed as major hindrances to use internet as a channel of communication. Establishment of responsible unit

within each sectoral institution is a prerequisite to start-up exchanging environmental issues among responsible organs. Contrary to this, however, none of the relevant sectoral agencies (except MoWR) have established their respective environmental units. Owing to this fact, it has been difficult for them to use internet or any other communication tool for communicating environmental pollution control issues with the responsible bodies.

The third awareness raising tools assessed are consultative meetings, workshops, and trainings. These tools are vital for building and maintaining the knowledge and skills of staff and stakeholders. On the positive side, EPA has been preparing continuous training programs to its staffs to enable them understand how to meet their responsibilities. For instance, trainings and meetings on the issues like: tasks and responsibilities of each staff in meeting the objectives of the institution and the role of each department in ensuring the implementation of the relevant legislations were conducted this year. Such moves are encouraging and should be enhanced since it improves the knowledge and commitment of the staffs.

Despite the positive efforts of EPA, the researcher observed that there is low level of willingness from the side of some individuals working in the relevant sectoral institutions to attend and prepare environment related forums. Thus, EPA, as the major stakeholder, should endorse various trainings and workshops to the staffs of sector agencies on issues related to the roles and responsibilities of each institution pertaining to the implementation of the environmental pollution control process. And sectoral institutions themselves should also work hard to enhance the awareness of their staffs. In this regard, the experience of MoWR could be taken as a good example (Table 1). The assessment revealed that the ministry has prepared and organized different forums and meetings on issues like sanitation and water quality management to its staffs and stakeholders including EPA. This is an encouraging move that should be followed by the other relevant sector institutions, namely, MoH and TA.

The other approach of raising environmental awareness is through environmental information system. It is an important tool for environmental decision making as well as to enhance the awareness and draw the attention of various organizations with

regard to environmental matters [9]. The assessment indicated that environmental information centre is absent in all institutions. As a result, currently all institutions do not share environment related information with each other (Table 1). Hence, it is difficult to easily access and exchange well organized environmental information. This problem will create knowledge gap which is important for institutional decision making. For instance, during the data collection the researcher has observed that experts working in TA do not know the location of EPA and even the existence of the Vehicular Emission Standards approved by EPA in 2010. And they were on their way to prepare their own standards without knowing the pre-existed standards. Such duplication of efforts and resource wastages are the result of absence of information sharing system among relevant institutions.

The Federal EPA has a mandate to coordinate the establishment of Environmental Information Systems (EIS), for the purpose of networking, collaboration and building partnership between and among different environmental data custodians within the country. In line with this, the establishment of environmental information centre within EPA has started, Missions and Vision statements are set out, and offices are under construction in EPA. In addition to establishing its own environmental information center EPA has also put its effort to lay the foundation for the realization of a multi-sectoral environmental information sharing system through initiating the establishment of Environment Information Network among relevant institutions such as MoWR, MoH and Ministry of Agriculture, among others. However, absence of clear mechanisms to force sectoral institutions share environmental information and lack of corresponding effort from the side of sectoral institutions have been observed as a potential hindrance to effectuate the system.

Educational institutions at all levels could play a pivotal role in creating and raising environmental awareness to the public at large. In formal education, raising the levels of environmental awareness could be more efficient, owing to greater levels of continuity in learning, wider geographical coverage, and the presence of an evaluation and monitoring system [10]. In this line, the assessment indicated that there is only initiation to integrate environmental issue in the school curriculum. According to an interview with the head of Environmental Education Department at EPA, currently, in elementary

schools environment related issues are offered with the course called “Environmental Science” and the postgraduate programs in the College of Development Studies and Environmental Science at Addis Ababa University are good examples. Even though the activities undertaken so far are positive, the work done to date in the area is inadequate. The reasons mentioned are: lack of continuity of environment related courses from KG to higher levels, low/lack of participation of environmentally trained professionals in the process of formulating the school curriculum, absence of responsible unit/body for integrating environmental issues into the curriculum and continuously update environment related matters. Hence, accordingly, it is possible to say that environmental issues are not sufficiently integrated in the school curriculums.

On the other hand, discussants from MoH, MoWR and TA mentioned that their respective institutions have not effectively used school curriculum as a medium of raising awareness. Accordingly, because of weak partnership between their institutions and Ministry of Education they were unable to actively participate and update issues in the curriculum. Lack of continuous and comprehensive environmental education in learning institution will cause youth to overlook the importance of the environmental protection in their daily life. This is because; they do not have continuous exposure on environmental issues and awareness by mean exposure through formal education [11]. Thus, considering the advantages of using school curriculum to create awareness, the responsible institution which is Ministry of Education, should create closer relations with the relevant institutions to ensure that all the necessary issues are more fully integrated.

Conclusion

From the findings of the study the following conclusions are drawn. Awareness raising activities were found to be inadequate. The inadequacy ranges from none (TA) to medium (EPA). A lot of uncoordinated effort is carried out by concerned institutions to enhance awareness about environmental concerns in general. However, a continuous and targeted awareness raising program pertaining environmental pollution control does not exist. The lack of financial resource, trained personnel and lack of partnership were observed as

major causes.

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