

Promoting Environmental Awareness of Youth through School Environmental Protection Clubs: A Case Study in Debre Tabor University, Ethiopia

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Abstract

The ever increasing population and changing lifestyles are contributing a great role for tremendously increasing environmental problems worldwide. Voluntary school Eco-clubs are the best ways of teaching the young about the environmental issues. The purpose of this case study was to investigate the role of environmental protection club to develop students' environmental awareness and sensitivity in Debre Tabor University, Ethiopia. The club has been undertaking many environmental protection activities including waste management, soil conservation, plantation, and campus landscaping. The students' awareness problems, lack of motivation to participate, and financial shortage were the major challenges for the success of the club.

Keywords: Environmental Awareness, Educational Institutions, Environmental Protection Club, Environmental Sustainability, Youth

Introduction

The exploitation of the Earth's resources for development purposes was started since the beginning of humankind, and up to now humankind's relationship with the planet Earth has been guided by the "anthropocentric paradigm" that nature subordinate the needs and wants of humans (William, 2007). The concept of environment is not new; moreover, it is deeply related to each specific culture and its relationship with nature. Environmental problems have become increasingly difficult to understand and to evaluate, yet environmental issues are more often expressed in "sound bites" than explained by sound reasoning (Stewart, 2001). In twenty - first century environmental concerns, elsewhere in the world, are receiving relatively a higher priority, because of environmental problems such as global warming, desertification, dwindling water supply, food shortage, climate change, greenhouse effect, energy crisis, biodiversity loss, air pollution, depletion of natural resources, and soil loss among others (Jadhav *et al.*, 2014; Priscilla, 2012).

The ever increasing population and changing lifestyles are contributing a great role for these tremendously increasing environmental problems at the global, regional and local levels (Connell *et al.*, 1999; Tung *et al.*, 2002; Kinyua and Murungi, 2002). Until recent days, people were not aware of their role in the emergence of these problems and their negative impact on the natural environment, and they have still continued to deplete environmental resources (Mehmet and Muhammet, 2009). Environmental risks and hazards disproportionately affect young people, who have to live for an extended period with the deteriorating environment bequeathed to them by earlier generations (DESA, 2004). This implies there is need among the school youth to be aware of environmental problems (nature, causes, and extent) and to stop the extensive use of environmental resources, protect our environment and create sustainable future.

Progress towards sustainable environment is dependent upon a fundamental change in youths' attitude to nature and the environment (Sukhwinder, 2013). The role of education institutions in relation to environmental sustainability is more prevalent as it is essential to impart and reinforce the environment-respecting moral values in the young minds (Brynjegard, 2001). Over the past 15 years or so, educational institutions across the world have been encouraged to mobilise students and to take a more active participation in local, national and global processes towards environmental sustainability issues (UNESCO, 2012). Learning more about the environment generally means learning more about what we have done to the environment rather than what we have done to care for it. To become involved in respecting nature and protecting the environment over the long term, people need to have a sense of hope and gratification from environmental instructions (Stewart, 2001). However, instead of focusing on environmental protection, educational institutions across the world were compelled to work towards the revision of teaching contents, so as to allow education systems to better respond to socio-economic challenges at the local, regional and global level (Walter, 2015).

Research dealing with students' participation in environmental action has tended to focus on the products in the environment rather than on the process involved in arriving at such action (Buskov, 1991; Pieters, 1991). School voluntary Eco-club, which promote the participation of young students in learning about and improving their environment, is best ways of reaching the young about the environment. Determining whether the educational institutions, especially higher educational institutions, are carrying out any environmental protection activities or programmes and its role to develop affective tendencies to youth (i.e. awareness and sensitivity rising) is crucially important. Therefore, the purpose of the study was to investigate the role of

environmental protection club to develop students' environmental awareness and sensitivity in Debre Tabor University, Ethiopia

Methods and Materials

Debre Tabor University is situated in Debre Tabor Town, North-Western part of Ethiopia. The area is located between 11°50'52" to 11°51'28"N latitude and 38°02'21" to 38°03'11"E longitude with an elevation of 2671 meters above sea level. This university is found in areas where environmental degradation, basically soil erosion, deforestation, loss of fauna and flora are very prominent due to unsustainable use of natural resources and the expansion of the land for agricultural use. The University started training in 2011 with 628 students, 124 academic staff, and 71 administrative staff in. Within few years, the number of students, academic and administrative staff increased to 7807, 383, and 420 respectively in 2014/15. The university is implementing the innovative approach through which the students are attached with the real environment and they can practice and relate what they learnt in the class room with the natural world.

There are many steps followed to establish this club, starting from naming. Here in this context club was used as group composed of people who voluntarily meet on a regular basis to help the society through environmental management and protection at campus level. The name "Environmental Protection Club" was used as it is general and inclusive term. It refers to any activity to maintain or restore the quality of environmental through conservation of natural resources, preventing the emission of pollutants, management of wastes, prevention of degradation of the landscape and ecosystems. So, these were taken as the areas where the members of the club can be participated and take action at campus level. After giving the name for the voluntary group, the next step was designing the legislation or bylaw through which the member of the club will be governed. The legislation was written by incorporating the vision, missions, objectives, basic activities, structural flow of the management committee, membership conditions, roles and responsibilities of the members and committee, source of finance, and other disciplinary cases. Finally, the legislation was evaluated and legally endorsed by university senate on November 2011. The next step was fulfilling basic field materials (dustbins, glove, watering and land digging materials, etc), store for equipments, and office for management committee. These are basic and very essential inputs for the proper functioning of any club.

The other key and basic step was searching for members. Different advertisement methods were used for this case. The objectives of the club and the membership conditions were introduced to the students through posters and flyers, and oral announcements were also used at different meetings. To make it simple and achievable, one voluntary student was selected from each department to register the interested students. When the registration has been finished, the general meeting was held and during this meeting general decisions were made, basically; 1) presentation and comment on club legislation and naming 2) selection of management committee and department coordinators 3) fixing the regular meeting time and place, 4) identification of basic activities to be carried out, and 5) identification of days for field work which are appropriate for all departments.

Managing an environmental club can be a very challenging but rewarding experience. The strength and the commitment of the committee have a great role and will determine the overall performance of the club. The management committee is responsible for the overall operation of the club. Critical emphasis was given for the selection of the management committee for this club. The year of study /students' batch/, environmental experience of the students in previous schools levels, and their interest were considered during the selection. The selection of committee was held through the whole members of the club, general assembly. The members of management committee were selected by free and democratic vote and with the interest of the nominees also. The members of management committee (president, auditor, secretary, treasurer, Public relation officer, and department coordinators) and their accountability are depicted in the diagram below:

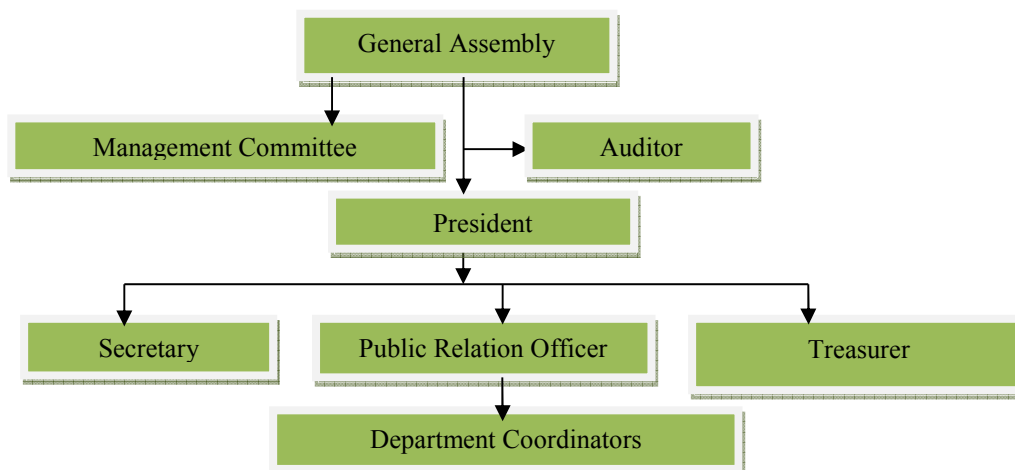


Figure 1: Organizational Structure of Environmental Protection Club in Debre Tabor University

As management committee, all committee members of environmental protection club (EPC) have joint role and responsibility. They all make decisions as a collective group and hold joint responsibility for decisions and actions. Management committee have ultimate responsibility for directing the club activities, ensuring it is well run and delivering the outcomes for which it has been established, setting the strategic direction to guide the club, monitoring and evaluating the progresses of the activities to ensure either they are in keeping with the vision, missions, and objects of the club or not. As an individual, every members of the management committee have also their own roles and responsibilities (Table 1)

Table 1: Roles and Responsibilities of EPC Management Committee Members

Members	Roles and Responsibilities
President	- He/she collects calls the meetings; interacts with campus communities on behalf of the club; takes a leadership role in organizing events and in planning managing projects, ensuring that the committee fulfils its responsibilities for the governance and success of the club, and performs other related duties as assigned
Secretary	- He/she keeps the minutes of the meetings; sends copies of the minutes to concerned persons; maintains the record of attendance of members; prepares the report of activities; acting as the vise president at his/her absence, and performs other related duties as assigned
Public Relation Officer	- He/she publicizing relating to the club, such as posters, leaflets, social media and other mediums used to advertise the club; control and assist department coordinators; arrange the welcome program for the new comers to the club; work to maintain key relationships within and outside of the club; performs other related duties as assigned
Treasurer	- He/she collects and manages all the money of the club; keeps accounts of the funds received, spent, etc; purchase the important materials with the other bodies assigned by chairperson; seek sponsorship and organize fundraising events; compile financial report at the end of year; and performs other related duties as assigned
Auditor	- He/she provide oversight of the financial reporting processes, audit processes, control internal systems; audit all bills approved for payment by the purchase committee; prepare the annual budget consumption report, and performs other related duties as assigned
Department Coordinators	- He/she Coordinates the members of his/her department and evaluate their performances, take attendance and evaluate their participation, arrange the appropriate time for activities by considering the students' load (by considering exam time, field work, etc), prepare the performance report, and performs other related duties as assigned

Result and Discussion

Effective and meaningful environmental protection systems should be designed and implemented if we and future generations are to enjoy the benefits of our natural heritage. Moreover, young generation should play an important role in explaining and evaluating environmental issues and in forging solutions to environmental problems. Educational institutions are best places for environmental educators to easily train their students and where students themselves can exchange their experiences. Debre Tabor University is one of the governmental higher educational institutes in Ethiopia working in the field of natural resource and environment by opining departments like geography and environmental studies, biology, natural resource management, water engineering, plant science, and others which deal with environment management related issues. This University is giving strong emphases towards green campus and has done fundamental activities water consumption, soil

loss control, landscaping and plantation, electricity consumption and solid waste management, and other related activities in its campus.

In line with the great vision and missions of the university in creating clean and green campus, EPC in our Debre Tabor University started-up participation in environmental protection activities at the beginning year 2012. Many literatures show that, if 40-45 participants of the club are registered at the beginning of the year, they may be left 25-30 who are really interested. But, in the case of our university 149 members (11 academic staffs and 138 students) were registered at the beginning stage of the club. This number was unexpected and more than the standard limit used in other papers, and in fact which conferred great initiation for the club to look forward.

Majority of the participants were from geography and environmental studies, natural resource management, plant science, and biology (Figure 2). They students associated environmental issues with agricultural related department, and students from social science, engineering, and other sciences were responded as not more concerned to environmental issues. This shows the broken understanding of students about “for whom environment belongs to”? During the face to face interview, held with some students from different faculties, students confirmed that the issues of being involved in environmental and natural resource conservation and management issues is the responsibility of environment related departments like geography and environmental studies, natural resource management, plant science, and biology and other related fields. However, the reality is that, everyone is responsible for the protection and wellbeing of the environment, as no one can be out of it.

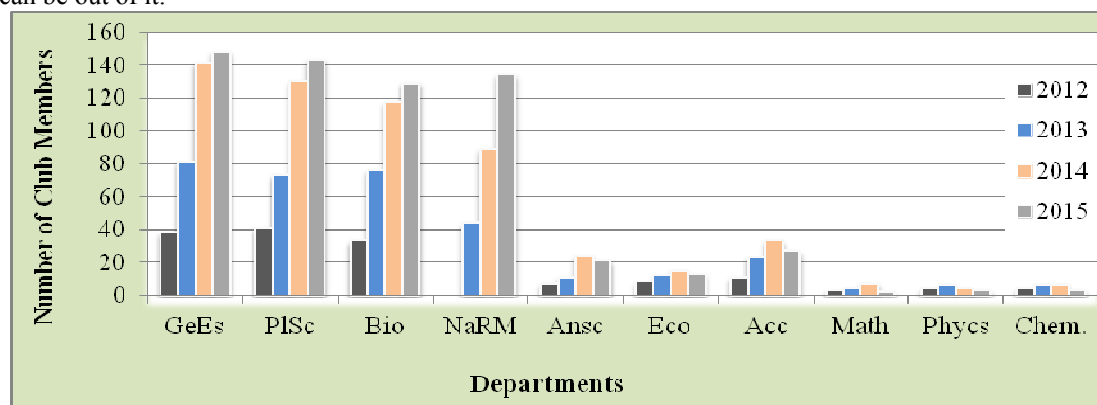


Figure 2: Members of Environmental Protection Club Across Departments (year 2012 - 2015)

Where; GeEs = Geography and environmental studies, NaRM = Natural resource management, PISc = Plant Science, Bio = Biology, AnSc = Animal science, Eco = Economics, Acc = Accounting, Math = Mathematics, Phycs = Physics, Chem = Chemistry

As indicated in **Figure 2**, even though there is little fluctuation, the number of club members increased in high rate as we go from year 2012 to 2015. But in 2015 the rate of increase was relatively less than previous years, due to the leave of 2011 batch students by completing their program (graduation) except NaRM department which is one year late opened. There are different approaches used to attract the new members into the club, and to sustain the old members, and finally to achieve the objectives of the club. Some of them were; 1) establishing strong management committee; 2) celebrating different events by printing green T-shirts through which they will enjoy and learn at the same time; 3) continuous meeting, discussion and progress evaluation; 4) support from teachers and the university administrative bodies; 5) providing certificate for their participation and contribution when they accomplished the program and leave the campus; and 6) department level (small unit) control system.

It the last three years, the club was involved in a variety of activities aimed at promoting environmental perception and protecting the environment. The main objective of establishing EPC in Debre Tabor University was to connect the young people of school, students, with the concept of environment, and thereby to increase their understanding about environmental protection issues. Through continuous discussion, training, and vast practical works, the club highly commenced the students to understand the nature and characteristics of their environment and biodiversity, to beautify the campus landscape, to be responsive to global climate changes, to manage and protect natural resources, to practice nursery establishment and tree planting exercise, to control soil and water from loss (**Figure 3**), to management the campus waste, to cultivate an appreciation and interest in the environment, and to develop positive attitude towards environment and its sustainable utilization.



Figure 3: Environmental Protection Club members at different events in Debre Tabor University

Solid waste management was the one and major activity of the club. As universities are sources of major wastes generated from teaching learning activities, student kitchen, and students' daily activities. The club members were responsible for keeping classrooms free from paper, plastic and other wastes. Besides the main and regular programs of the club, campus mobilizations on environmental protection issues were organized by celebrating different events; like World Environment Day, World Youth Day, Labour Day and others. The welcome program was also common event annually for the newly registered club members by senior members. Beside the welcome celebration, this was the good time and place to brief the legislation of the club to the new comers, to encourage them to continue as members, to know their background in environmental protection issues, to select department coordinators, and to exchange experiences. The EPC was also found to be a wonderful opportunity for the students of environment and natural resource related departments to take up activities in real world, in conditions where the constraints of the classroom and curriculum will not allow. It provided opportunities for members to gain exposure on care for the environment through excursions. The club was also used as a center of experience sharing among different students who came from difference areas with various environmental ideas and management experiences.

The EPC in our university have been passed many challenges, especially at the beginning, and it is still going with some of the challenges. The first challenge happened during the registration of the club members, i.e. the difficulty to identify the dedicated and committed members from those who are not (members to be registered for pleasure and certificate). Undedicated members were the main obstacles to run the club properly as they disturb the other members and pull them back. Eventually, the problem was minimized by giving the task for each student individually and serious performance evaluation. The second challenge was the attitudinal problem of the students about the environment by relating the concern of environment and environmental protection with few departments (**Figure 2**, i.e. Geography, Natural Resource Management, Biology, Plant Science etc) and assuming that the students from the remaining disciplines were out of environmental protection concern. This was the very big challenge, especially at the beginning stage of the club, to get the club members. The third challenge was unwillingness of teachers to participation in EPC. Teachers play an important role in improving human capacity in environmental awareness, protection and problem-solving (Sukhwinder, 2013), and to produce the generation that have commendable personality and the existence of nature and environment. Teachers have the opportunity and ability to educate the young people (school students) both inside and outside the class room. If the teachers become the member of the Eco-Clubs they will play a great role in coordinating and facilitating the students, and at the same time students will be more motivated by looking their teachers as model. Finally, finance was also the other big challenge, as it was important to fulfil the required materials and inputs like photo camera, t-shirt and cap, glove, and other office materials. The main source of the budget for EPC was the money collected from the members, i.e. membership fee, monthly payment, and penalty payment.

Conclusion

Although great efforts have been made in protecting environment and natural resources, the fast growing population and unmanaged use these resources will continue to pose significant challenges of protection. environmental problems like; depletion of natural resources, soil loss, diminishing of water quality, climate change, global warming, greenhouse effect, biodiversity loss, air pollution etc. are becoming more serious throughout the world and receiving relatively a higher priority. These environmental risks and hazards are more affecting and will affect young people who have to live for an extended period. This implies, the new generation is the one who is more affected by environmental problems and who can do something towards the solution. The educational institutions, where more young generations are more concentrated, have the big responsibility and opportunity to create awareness on young students through both formal and informal educations. These institutions should more recognize and respond effectively to environmental deterioration problems through creating environmental awareness to the new leaders of environmental field over the coming new century. The school Eco-Clubs are one of the good ways through which the students can meet together and deal on environmental protection issues. Environmental protection club in Debre Tabor University is established in year 2011 to develop students' environmental awareness and sensitivity. The club was organized and started active participation in campus environmental protection and awareness creation activities at the beginning of year 2012 with 149 members from different disciplines. In previous few years, the club brought about significant change in students environmental mentality and on ground environmental protection activities, with ever increasing large number of participants (more than 600), the club is currently engaged on campus land rehabilitation and land cover through plantation.

Recommendation

From the results of the case study it is possible to recommend the following:

- ↳ Even though this study is conducted in higher educational institution, the same procedure can be applied at any educational institutions, like primary and secondary schools, with slight modification
- ↳ The government should allocate some capital from the regular budget of specific institution for the voluntary associations, especially in environmental protection and management issues
- ↳ For better success of environmental protection clubs, at least few (2-5) teachers should be involved who will play the greater role in coordination and training
- ↳ The clubs should have strong linkage with the administrative structural of the university, i.e. student service directors, sport centre, faculties, and departments.
- ↳ The educational institutions need to come up with their specific environmental policy, implement it and ensure all students belong to at least one environmental club.
- ↳ Researches should be carried out in other educational institutions to find participation of students in environmental protection issues via Eco-Clubs.

References

- Brynjegard, S. (2001). School Gardens, Raising environmental Awareness in Children. ERIC Document Reproduction Service No ED 452 085
- Buskov, P. (1991). How do we want to use Nature? Environmental, Schools and Active Learning, OECD, Paris.
- Connell, S., Fien, J., Lee, J., Sykes, H., and Yencken, D. (1999). If doesn't directly affect you, you don't think about it: A qualitative study of young people's environmental attitudes in two Australian cities. *Environmental Education Research*, 5, 95-114.
- Jadhav A. S., Jadhav V.V. and Raut P.D. (2014). Role of Higher Education Institutions in Environmental Conservation and Sustainable Development: A case study of Shivaji University, Maharashtra, India. *Journal of Environment and Earth Science*, 4, 30-34.
- Kinyua, A.K. & Murungi, J. (2002). Factors impeding the development of evaluation in Africa with special reference to policy and practice: A case study of EE curriculum in Kenya, Nairobi.
- Mehmet E. & Muhammet U. (2009). Curricular and Extra-Curricular Activities to Develop the Environmental Awareness of Young Students: A Case from Turkey. *Odgojne Znanosti*, 11, 73-85.
- Pieters, M. (1991). The Netherlands: Environmental Education in Regular Subjects: Innovation through a Curriculum Development Project. Environment, Schools and Active Learning, OECD, Paris.
- Priscilla N.M. (2012). Roles and constraints of clubs in enhancing environmental awareness among secondary school learners in Nairobi west district, A thesis submitted in partial fulfillment for the degree of master of environmental science of Kenyatta University, Kenya.
- Stewart J. Hudson. (2001). Challenges for Environmental Education: Issues and Ideas for the 21st Century. *BioScience*, 51, 283-288.
- Sukhwinder Kaur. (2013). Role of Teachers in Imparting Environmental Education for Sustainable Development. *International Educational E-Journal*, 2, 10-16.

- Tung, C., Huang, C., and Kawata, C. (2002). The effects of different environmental education programs on the environmental behaviour of seventh-grade students and related factors. *Journal of Environmental Health*, 64, 24-29.
- UNESCO. (2012). *Shaping the Education of Tomorrow. Report on the UN Decade of Education for Sustainable Development*. UNESCO, Paris.
- Walter L. F. (2015). *Education for Sustainable Development in Higher Education: Reviewing Needs. Transformative Approaches to Sustainable Development at Universities*. World Sustainability Series.
- William W. T, *Secondary School Students' Participation in Environmental Action: Coercion or Dynamism? Eurasia Journal of Mathematics, Science & Technology Education*, 3, 51-69.
- DESA (Department of Economic and Social Affairs) (2004). *The global situation of young people, World youth Report*, United Nations, 131-133.