

ASSESSMENT OF STUDENTS KNOWLEDGE AND PERCEPTIONS ABOUT BIODIVERSITY AND CONSERVATION METHOD IN HARARI REGIONAL STATE, EASTERN ETHIOPIA

Yeneayehu Fenetahun^{1*} and Girma Eshetu²

Ethiopia Biodiversity Institute (EBI), Harar Biodiversity Center

Email: yeneayehu07@gmail.com

Received-16.01.2018, Revised-27.01.2018

Abstract: The term biodiversity refers the number and variability of living organisms on the plant and it is the heart of sustainable development and the life insurance in itself. The main objective of this study was to assess students' level of knowledge and perception about biodiversity conservation techniques, hence strengthening and developing students' level of knowledge and perception towards biodiversity conservation has a great role to protect the variety of all species in the ecosystem. The study has employed both qualitative and quantitative methods such as individual interview, FGD and structured questionnaire. A total 360 students from two target groups (grade 10 and 12) selected from 6 secondary and preparatory schools were involved. The results showed that students' level of knowledge and perception towards biodiversity conservation was varied. Accordingly, above 50% and 70% of the students of grade 12 were found above mastery level in their knowledge and had shown favorable perception respectively regarding biodiversity conservation whereas students from grade 10 above 50% were found below mastery level regarding their knowledge and above 50% of the students also had shown favorable perception about conservation of biodiversity resource. This indicated that the students were not more awareness about biodiversity and conservation methods due to different factors like teaching learning of biodiversity conservation was found ineffective due to lack of facilities, lack of effective implementation of the stated methodology in their text book and large class size. Thus, it can be concluded that the students has not get the expected change in knowledge and perception among students about conservation of biodiversity resources particularly in grade 10 with in the school. Therefore, fulfilling of the necessary facilities, awareness creation on the concerning body and implementing effectively the teaching methods of biodiversity conservation that included in their text book such as field exposure, group discussion active classroom session and continues assessment in the study area is highly recommended.

Keywords: Biodiversity, Conservation, Harari, Students, Perception

REFERENCES

Amannule Asmamaw (2014). students' knowledge and perceptions about biodiversity conservation and evaluation of the effectiveness of the teaching method employed: the case of kebribeyah secondary and preparatory School, somali regional state, Ethiopia. *International Journal of Environmental & Science's*. Vol.4 (4):619-638.

EFAP (1994). *Ethiopian forestry action programme*. EFAP Secretariat, Ministry of Natural Resources Development and Environmental Protection Authority, Addis Ababa, Ethiopia.vol.2.

Food and Agricultural Organization (FAO) (1995). Global forest resources assessment 2005-progress towards sustainable forest management.FAO Forestry Paper 147. Food and Agriculture Organization of the United Nations Rome. Pp 320.

Getachew, Tesfaye and Berihun, Gebremedihen (1996). E.C. *Methods of Conservation of the Ecosystem and Biodiversity in Ethiopia*. Ecosystem and Biodiversity richness Protecting and Research Institution, Addis Ababa, Ethiopia. Pp. 5.

He, F. and S.P. Hubbell (2011). Species-area relationships always overestimate extinction rates from habitat loss. *Nature* 473: 368-371.

Humston, R. and E. Ortiz-Barney (2007). Evaluating course impact on student environmental

values in undergraduate ecology with a novel survey instrument. *Teaching Issues and Experiments in Ecology*, Vol. 5. Retrieved on June 28, 2013 from humston/article.html.

International Union for Conservation of Nature (IUCN) (2007). Red list of endangered species. Available at <http://www.iucnredlist.org/search/details.php/3748/> Accessed on September 2013.

Lavrenchenko, L.A., Milinshinkov, A.N., Aniskin, V.M., Warshavsky, A.A. and Woldegabriel Gebrekidan (2004). The genetic diversity of small mammals of the Bale Mountains, Ethiopia. *Sinet: Ethiop. J. Sci.* 20: 213-233.

Leeming, F.C., Porter, B.E., Cobern, M.K. and Dwyer, W.O. (1993). Outcome research in environmental education: A critical review. *Journal of Environmental Education* 29: 28-34.

Manuel, B., Imam, B., Pii, K., Douglas, S. and Meilinda, W. (2006). Biodiversity and Local Perceptions on the Edge of a Conservation Area, Khe Tran Village, Vietnam. *Center for International Forestry Research (CIFOR)*, Bogor, Indonesia .Pp 41-42.

Mazengia, Shimelis (2010). Conservation of Natural Resource for Sustainable Development: Assessing Students Awareness and Attitude in Northern Shewa Zone in Molale and Mehalmeda Schools. MA Addis Ababa University, Addis Ababa, Ethiopia Pp. 15.

*Corresponding Author

- MoE** (1988). *A Report on environmental Education in Ethiopia*. Ministry of Education, Addis Ababa 8-172.
- MoE** (2009). *Biology Syllabi of Grade 10*. Federal Democratic Republic of Ethiopia, Ministry of Education. Pp (iii-x).
- National Biodiversity Strategy and Action Plan** (2005). *Institute of Biodiversity Conservation*. Federal Democratic Republic of Ethiopia, Addis Ababa. Pp 1-3.
- Niles, E.** (2009). *Biodiversity*. Microsoft Encarta. Accessed on July 2013 from www.extension.org/pages/27534/biodiversity-and-biofuel-production.
- Rickinson, M.** (2001). Learners and learning in environmental education: A critical review of the evidence. *Environmental Education Research* 7: 207-230.
- Sajise, E.P.** (2005). Biodiversity research for sustainable development: Can it be achieved? *Journal of Agricultural and development* 2 (1 & 2): 1-14.
- UNCBD** (1992). Textofconvention. Available at: <http://www.un.org/ecosocder/goninfo/sustdev./deserert.html> Accessed on January 2013.
- Wendye, Beshah** (2009). Implementation of Biodiversity Instruction and its Impact on Students' achievement in knowledge and attitude; An MED Thesis Presented to the School of Graduate Studies of Haramaya University. Pp 1-56.
- Young, A.** (1997). *Agroforestry for soil conservation*. CAB international. Nairobi:ICRAF.
- Zelezny, L.C.** (1999). Educational interventions that improve environmental behaviors: A meta analysis. *The Journal of Environmental Education* 31: 5-14.