

“Elaboration and piloting of a school biology lesson curriculum supplement on planting trees”

The Ecological Education Center of the National University of Mongolia (EEC) implemented the project “Elaboration and piloting of a school biology lesson curriculum supplement on planting trees” within the framework of the GIZ-Program (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH) „Biodiversity and Adaptation of Key Forest Ecosystems to Climate Change” from 1st November 2012 to 30th May 2013 in pilot school 57 of Chingeltei District in Ulaanbaatar. The “Studien- und Fachkräfte Fond” project to support the Galsan-Tschinag Foundation in the field of environment aims to encourage civil society involvement in environmental education and nature conservation activities. This assignment has the objective to increase environmental awareness of the society through the active participation of youth.

The objective of the project was to develop a supplement to school biology curriculum on planting trees, implementing this curriculum supplement at one pilot school and advising the pilot school to become an Eco-School. The programme Eco-Schools and their seven step process aims to improve both the learning outcomes, attitude and behavior of students and local community and ultimately the local environment.

Results of the project are as follows:

1. Advice through the realization of an international programme ‘Eco-Schools’
 - A presentation on the concept of eco-schools and the seven steps guidance to become an eco-school was held for the teachers and all pupils from grade 5 until 11.
 - The eco-board, named “Eco tuuchee” was founded and for the new eco-board members a second, more detailed presentation was held. Our student assistants J.Gandolgor and G.Khaliun supervised and helped the eco-board by realizing the seven steps guide of the eco-schools during implementation of the project.
 - To support the teachers for integrating environmental topics in the curricula of different subjects, lessons on integration of environmental topics were held. For giving an idea on how to teach topics of sustainable development in a practical way,

learning stations of the EEC was showed and interactive learning tools were presented.

- An Open day for parents and the wider community was organized and the Eco-board presented its activity and exhibited the works of the competition "Eco-solution for waste".
2. Development of a supplement to school biology curriculum on planting trees and implementation of this curriculum supplement at one pilot school
- The curriculum supplement was elaborated by our senior expert Ms. Dr.R.Sunjidmaa and experts Ms. E.Nasanbayar and Ms. V.Albrecht. In this curriculum supplement, we combined theory and practice to provide pupils with the opportunity to practically implement the theories learnt. The curriculum supplement is printed as a handbook for teachers and as a small video material for pupils.
 - The Biology teacher of the school, Ms. E.Zolzaya was trained on new modules. Following training she implemented the new module to two classes of 7th grade, where all pupils of the class practiced the learnt theories.
3. Environmental education:
- Environmental lectures were held for all pupils from grade 5 until 11 on the following topics: ecological footprint, climate change, desertification, and waste/recycling.
 - We developed information materials on the topics Biodiversity and Climate Change.
 - A lecture on the techniques for tree planting and tree care was delivered to all pupils from grade 7 and the planting action days were realized in the end of October 2012 and spring 2013.
 - A small survey amongst 150 pupils and 28 teachers was implemented. The results showed that the pupils' knowledge about the environment and sustainable behavior was improved from 860 points to 2948 points (3,4times) while teachers' knowledge was raised by 29%. Knowledge of teachers was still good even before the survey.
4. Supporting of eco-standards of the school:
- For improvement of eco-standards of the school, windows were renewed for better insulation, sensor lights were installed for energy efficiency and information boards and signs were displayed in the corridors. A compost box for organic waste from the school kitchen and garden rubbish was placed in the garden. Dustbins were placed in each floor, at the entrance door and in front of the school building.
 - One classroom of the pilot school was chosen for an Eco-classroom. The wall of the classroom was painted with good materials, the floor was renewed and door and windows were sealed.

- For the interior greening of the school, flowers were bought and placed along the corridors of the first floor. An area of 170 m² in front of the school was greened with seeds and another set of 1000 decorative flowers were planted at an area of 21m².
- 863 trees and shrub seedlings of twelve different species were planted alongside the gateway and in two areas in front of the school building.

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**ЭКОЛОГИЙН БОЛОВСРОЛЫН ТӨВ**

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Дахин боловсруулъя!



 **ӨӨРӨӨСӨӨ ЭХЛЭЭ!**

Tree planting action



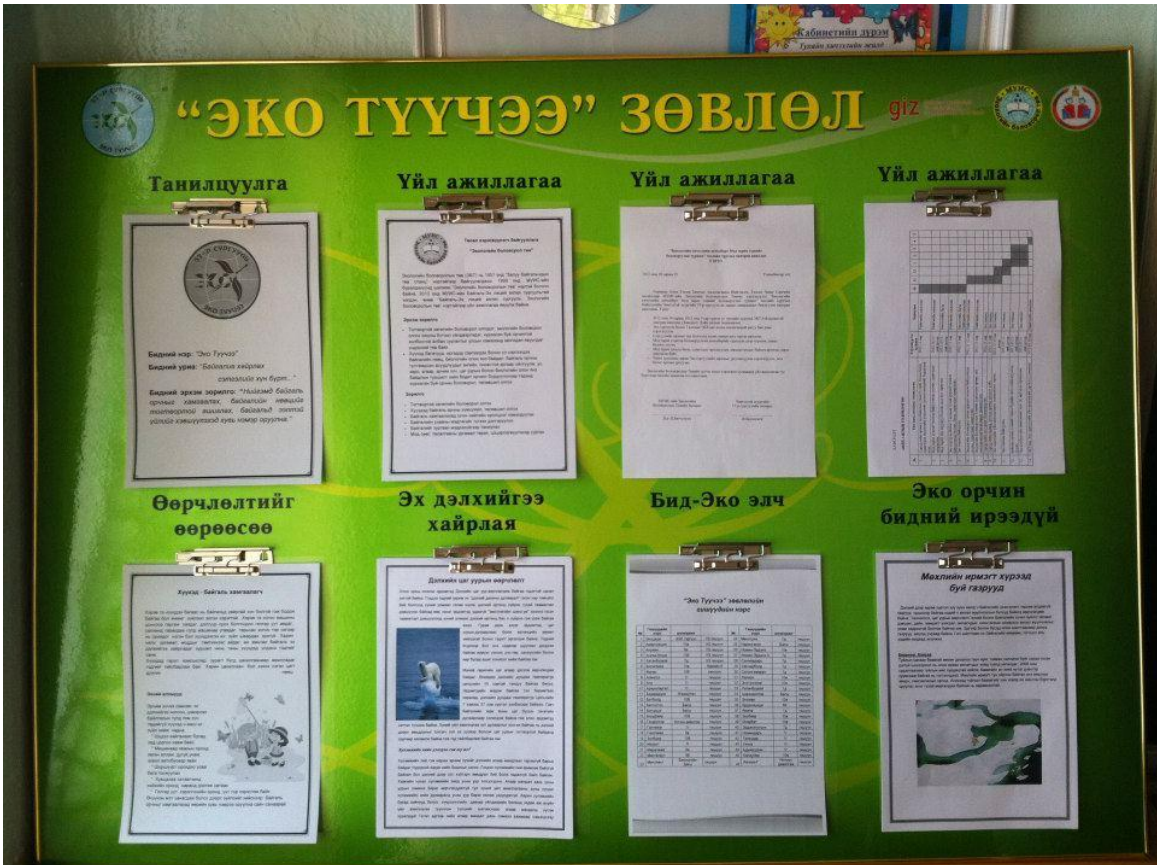


Trainings for environmental education





Activities of the Ecoboard "Eco-tuuchee"

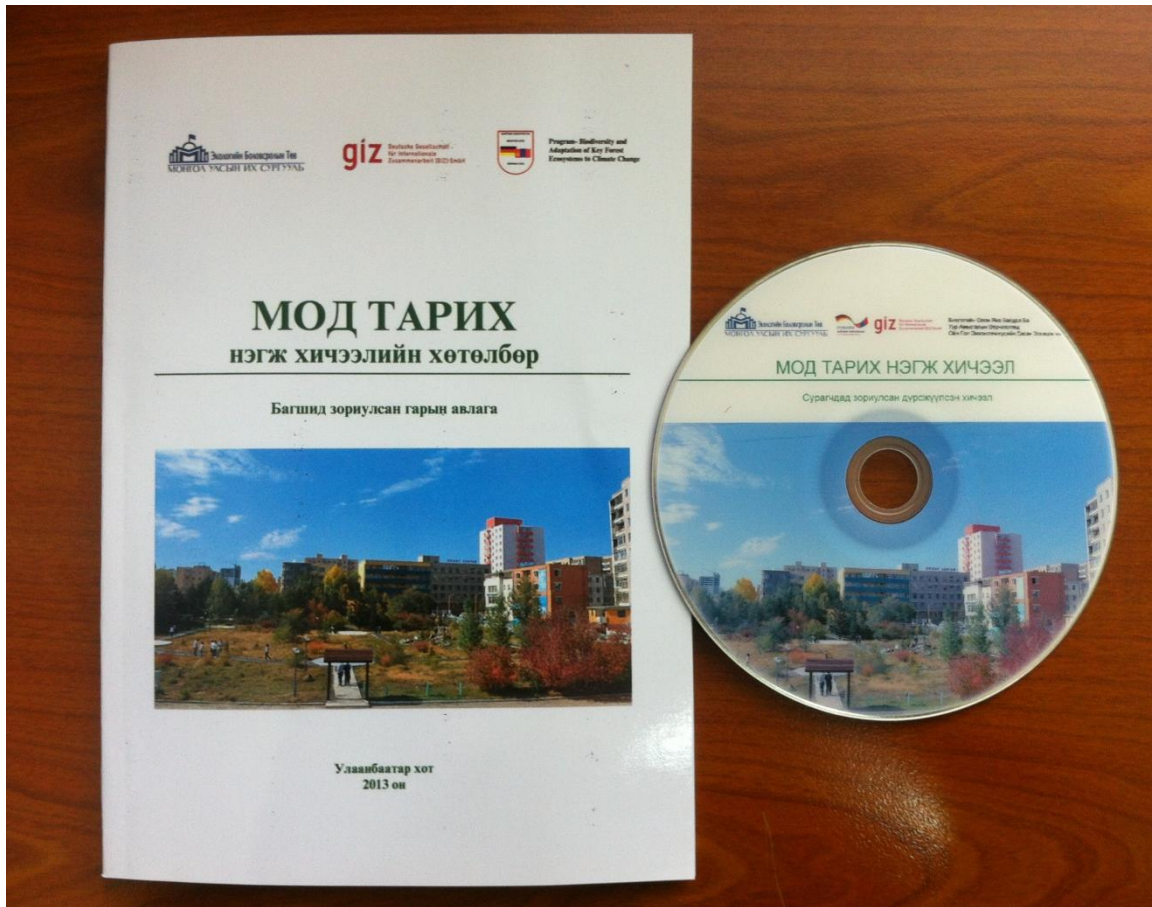








A handbook for teachers and video material for pupils „School biology lesson curriculum supplement on planting trees”



Ecological Education Center of the National University of Mongolia
Ulaanbaatar, June 2013