

PAN AFRICAN FOR CONSERVATION EDUCATION

IN MADAGASCAR

Capacity building for Conservation Education in Madagascar through the PACE project: Training and creation of a demonstration site, application in schools

Report I

Global framework of the project:

The project proposes to build on existing partnerships in Antananarivo to:

- Create a PACE demonstration site at CREE (the Centre for Environmental Education Research at the Ecole Normale Supérieure (secondary level teacher training), working in collaboration with teachers and the trainee students at CREE ENS to develop cost-effective solutions to common environmental problems
- Create and share French versions and pictorial representations of the PACE Action Sheets, along with a Malagasy Educators' Booklet describing how the PACE materials can be used in the national curriculum
- Run teacher training workshops at the demonstration site to share information and educational resources with other schools and communities

PACE Demonstration Projects

The demonstration project will be developed at the Centre for Environmental Education Research in Antananarivo. The project will negotiate access to the technical support needed to adapt the PACE Action Sheets for the Malagasy context, and will include:

- Ways to increase access to safe clean water and sanitation such as water pasteurization, toilet construction, hand-washing
- Vegetable gardening and tree-planting programmes to improve access to food and reduce pressure on forest resources
- Fuel-efficient stoves and biogas to improve access to energy and reduce pressure on forest resources (most people cook with charcoal)
- Waste management: Reduce, Re-use and Recycle including issues specific to the urban context

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Implementation :

PRELIMINARY WORKSHOP ABOUT PACE AT CREE-ENS ANTANANARIVO: DEMONSTRATION ACTIVITIES

A 2-day workshop with 2 extra days for practical activities has been conducted at the CREE-ENS Antananarivo from 9th to 12th January to practise the activities from PACE action sheets. After an evaluation of the general needs of local people living nearby protected areas or national parks, the participants came up with few interesting topics that need to be addressed to better help wildlife conservation. They set up four groups to work on different topics:

Group 1: Growing vegetables in the city, Practical composting

Group 2: Growing fruit trees, natural pest control, conserving fruits

Group 3: Health problems from unsafe water, water filters, solar pasteurization

Group 4: Fuel savers, solar cooking, and energy efficient stoves



VISIT OF THREE SCHOOLS IN DABOLAVA FOR APPLICATION

The student members of the CREE ENS with three professors from the ENS University organized an 8-days fieldtrip from Antananarivo to Morondava. On their way to Morondava, they passed to Dabolava and bring practical environmental education to four classes within three schools in the village. 70 students from the first to the fourth year of the ENS University were divided

into 4 groups to better implement the practical training. The objective was to bring simple, common environmental techniques for a sustainable use of the natural resources and to promote environmental education.

Group 1

Theme: How to grow vegetables in your small garden. Practical composting

Context: Dabolava is a small village, where local people focus on artisanal mining. People are used to go further from their house to be able to grow vegetables, therefore, children need to help their parents to work on that matter, making them neglecting schools. We proposed to them an effective solution to plant vegetables nearby their house or in their small garden, or even in the schoolyard.

Results: Children and teachers from the primary school were happy and found the effectiveness of this method to grow useful vegetables such as tomatoes, spinach, spring onions... Since the houses in Dabolava are close to each other and that they have no land close to their houses, having this method would bring solution to that.

Trainer: CREE students from 4th year

Trainee: 50 students from a class of the public primary schools in Dabolava.

Pictures





Group 2

Theme: How to grow fruit trees, how to control pest and diseases naturally, how to conserve fruits for later.

Context: Two species of fruit trees have been seen in Dabolava: Papaya and mango tree. People need to buy the other fruits for their personal needs. However, the land in Dabolava is good for fruit trees and this can be done easily there.

Results: The training was divided into two phases: Phase1, theoretical training, Phase 2, practical training in the schoolyard.

Phase 1: the CREE students spoke about the objectives of the work, the methods to plant trees, the preparation of the holes, the planting, the maintenance of the seedling/saplings, the natural methods for pest and disease control, the conservation of fruits (Jam and dried fruits).

Phase 2: 40 students from the private primary school were divided into 2 groups. Each group participated in the training by preparing holes, planting the sapling... Although, children have already the knowledge on how to plant trees, the practical training we conducted in the school brought visible practical experiences. They also obtained knowledge on the importance of taking care of the saplings once planted, the use of natural methods to control pests, the methods to conserve fruits. The school benefited from having fruit trees and the

teacher will arrange a tree planting programme to better practise the knowledge gathered from this training.

Trainer: CREE students from 3th year

Trainee: 40 students from a class in the private primary schools in Dabolava

Pictures





Group 3

Theme: Health problems from unsafe water, water filters, solar pasteurization

Context: People living outside of Dabolava village are suffering from dirty water. They usually use water from the well, or from river or from rice fields. For this reason, we chose this topic to explain them the problems that they may get from unsafe water and how to pasteurize water in simple ways.

Results: Children understood the diseases and problems they may have from unsafe water. They received knowledge about how to filter the water and how to pasteurize water without paying expensive materials.

Trainer: CREE students from 2nd year

Trainee: 30 students from the public secondary school in Dabolava (CEG)

Pictures





Group 4

Theme: Fuel savers, solar cooking, energy efficient stoves

Context: Illegal timber exploitation occurs in Dabolava, where trees are mainly composed of rosewood and ebony. Local people use firewood to cook and collect these woods from nearby forests. To reduce this threat, the CREE students proposed to bring solution by teaching the children new methods to reduce the use of wood.

Results: The students from the secondary school learnt about how to make two types of energy efficient stoves (fatana mitsitsy): one for charcoal and one for firewood - and how to use them as both reduce to 40-60% the rate of charcoal used. We also brought 'new charcoal products' called 'briquettes économiques' made with natural materials. This reduces to 20% the use of charcoal. We also brought the technique of solar cooking to these students. These students, at the end of their secondary school, benefited the practical training and felt that the methods we brought are very simple and can be used in their house within their family. They also obtained knowledge about how to save forests by simple behaviour and actions.

Trainer: CREE students from 1st year

Trainee: 60 students from two classes of the public secondary school in Dabolava (CEG)

Pictures



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