



# Permaculture/Agroecology system in Timor-Leste National School Curriculum for Basic Education

## Introduction

Timor-Leste is a half Island country with a total population of 1.2 million people; it is geographically situated between Asia and the Pacific region. It is a tropical country and 80 per cent of its population live in rural areas. Agriculture, fishery and forestry are the main economical mainstays.



Figure 1. Students working in the garden during school garden classes (photo: Ego Lemos)

In 2013, the Ministry of Education of Timor-Leste decided to reform its national curriculum for Basic Education from grade one to six. Permaculture/Agroecology school gardens had been part of the discipline of Arts and Culture. The organization behind this movement of Permaculture/Agroecology is Permatil (Permaculture Timor-Leste), which was established in 2002. This school garden program now became part of formal education of Timor-Leste. 1415 schools have been targeted to introduce school gardens across the territory of Timor-Leste. The main reason for introducing school gardens is to help teachers and students learn how to grow a variety of seasonal food crops that can contribute to the school feeding program, shifting from passive learning inside classrooms into activities outside the classroom, while providing beauty to the school landscaping. School students and communities learn how to copy the model into their home garden to improve health and nutrition of the wider family.

## Description of the Agroecology system

The Permaculture/agroecological system is a system that increases the production of agriculture without harming nature; it is culturally appropriate and makes communities more resilient to climate change. In Timor-Leste Timorese farmers grow different variety of crops such as corn, rice, banana, potatoes, yams and others that are specifically adapted to the area and the season. The Permaculture/Agroecology system requires a strong connection between food crops, trees, seeds, soil, water, animals and fish to create a viable ecosystem of benefit the local community.



The Permaculture/Agroecology system is not a new concept, but it is the first time that it has been formalized in the education system of Timor-Leste. During the school garden classes students are actually working in the school garden growing crops. Timorese farmers gain the knowledge to apply this system, through their children.

Many young people get involved in the Permaculture/Agroecology system in Timor-Leste and every two years Permatil organizes a Permaculture Youth camp in which around one thousand young people participate.

### Political space

Many materials have already been produced to prove that the Permaculture/Agroecology system works better for the people and the environment. The Timorese government is now also part of the High-Level Group of the UN formed to ensure early implementation of 17 Sustainable Development Goals (SDGs), and the 2030 Agenda are implemented at all levels of society. Permatil, as a small organization is working with the Ministry of Education and different civil society group including farmers' union to implement these goals. Among other activities, Permatil advocates for Permaculture/Agroecology to be part of national curriculum for Basic Education.



Figure 2. Teachers helping the students in the school garden (photo: Ego Lemos)

## Outcomes of the practices

The school garden program started pilots in a few schools and is already giving good results in terms of production. Also the response from the school and the community towards school gardens is very positive. If this program is implemented well, in five years Timor-Leste will have strong Food Sovereignty, better nutrition for the children and community, there will be no more hunger and local economy of the people in rural areas will improve.

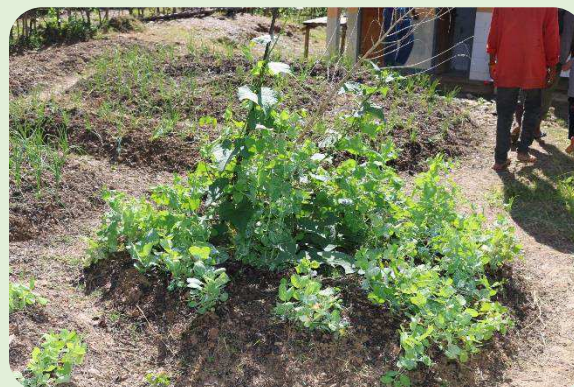
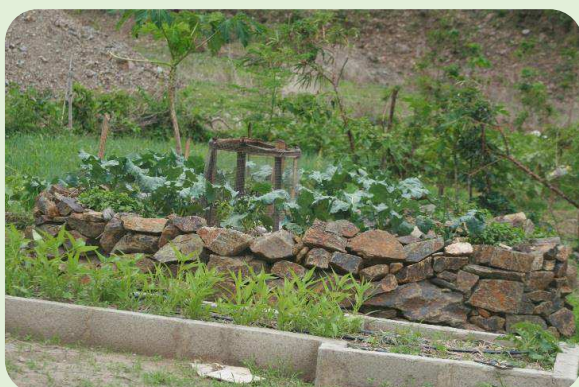


Figure 3. Productive school garden (photo: Ego Lemos)

The future cost for food will be reduced and the system will benefit the local people as every input is produced locally and there is no need to buy external inputs. Every school will decide the menu for the school feeding program without depending all the time on the Ministry of Education or companies to supply food.





## Message from farmer to farmers

*"In my village we already implemented the system and it works very well. For the near future I want to share with other farmers for them to use the same system. I will try my best to help local school use permaculture/Agroecology systems to produce food for school feeding programs."*

— Message from Eugenio 'Ego' Lemos, Permaculture Timor-Leste (Permatil)



Figure 5. Teacher and students at the school garden (photo: Ego Lemos)

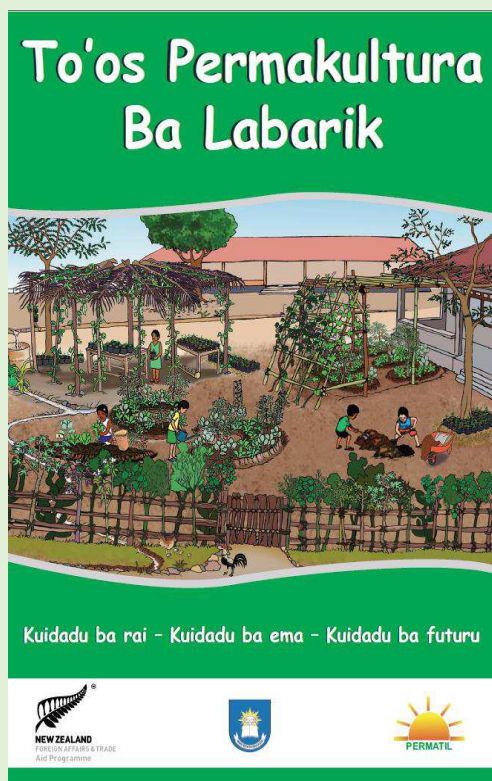


Figure 4. Cover page of Permaculture garden book for kids in Timor-Leste, published by Permatil and distribute by Ministry of Education through all elementary school in Timor-Leste