Context

Madagascar is among the five countries most affected by chronic malnutrition and the ten countries most vulnerable to climate change. Antananarivo is experiencing an increase in the rate of malnutrition caused by the rapid growth of the urban population in extreme poverty. Children’s food and nutrition security continues to require urgent action. The World Food Programme (WFP) and the Ministry of National Education (MNE) operate a programme to improve school children’s food security by providing food for school canteens in Antananarivo. The food from this programme do not include fresh vegetables, however. Madagascar is also extremely vulnerable to natural disasters linked to climate change. The City Council of Antananarivo, the Institute for City Trades (IMV/Ile-de-France) and WFP have collaborated to respond to the challenges of both food security and nutrition as well as climate change through urban agriculture involving schools.

Overview of the food practice

In 2015 the city of Antananarivo launched an “Urban Agriculture Programme” which promotes the installation of micro-vegetable gardens in the city’s low-income neighborhoods to improve food security and create income-generating activities for the sale of locally produced fresh vegetables. In the last three years the Urban Agriculture Programme has spread to 24 districts, 21 training centers and 15,000 beneficiaries. The School Gardens Project links urban micro-vegetable gardens to school canteens. There are two objectives: (1) improving the food and nutritional security of children and their school performance through food diversification via vegetable gardens, and (2) popularizing urban agriculture practices among students so they can transmit to their parents the possibility of making a vegetable garden at home. Demonstration sites and training courses helped raise awareness of the project, and gardens were stocked with materials for above-ground vegetable production. By 2017 the school gardens reached 15,000 students in the 24 districts and provided diversification of children’s diets two to three times per week. The process used to implement the school gardens were:

1. Identification of schools
2. Preliminary diagnosis of beneficiaries in the field
3. Sensitization of beneficiaries to the implementation of urban agriculture schemes, such as bags of rice transformed into cultivation containers or “agrisacs”
4. Agreement between the main actors of the programme
5. Start of the training at the municipal nursery
6. Installation of the production site (vegetable garden)
7. Follow-up of beneficiaries for 18 months with intermediate training sessions as required (maintenance, disease control, fertilization)
8. Support for beneficiaries until autonomy has been reached

Results and lessons learned

A key benefit of the School Gardens Project is that the area and resources required are very modest. Water requirements are low and the micro-gardens can be managed by men, women, children and elderly. Ninety percent of the beneficiaries are women who are recognized as local producers of quality food. Both the school gardens and micro-gardens in neighborhoods can be adapted for diverse contexts, including disadvantaged neighborhoods where space is limited.

The City of Antananarivo today supports urban agriculture as it is a major source of urban food supply and a promising form of implementation of Sustainable Development Goals and targets. Furthermore the school canteens are seen as platforms for exchange, innovation and environmental awareness. The integration of urban agriculture into school curricula is taking place through collaboration between schools, parents’ associations and local neighborhood authorities.