



# **School Based Food Security and Nutrition Programme in Afghanistan**

**Concept Paper under the  
Agricultural Production and Productivity Programme  
National Agriculture Development Framework**

**Ministry of Agriculture, Irrigation and Livestock**

**April 2009**

## **School-based food security and nutrition programme in Afghanistan**

### **1. BACKGROUND AND PROJECT JUSTIFICATION**

#### **The importance of fruit and vegetable production in Afghanistan**

In Afghanistan chronic malnutrition affects 50% of the children under 5 and micronutrient deficiencies are widespread<sup>1</sup>. Fruit and vegetable production plays a crucial role in fighting malnutrition and also provides a vital source of income for poor farming households. In most Afghan provinces, local food production, in particular fruit and vegetable production, has been affected by years of war, drought, destruction of infrastructure (notably irrigation), and social and cultural changes linked to population displacement. These factors have also contributed to the deterioration of Afghanistan's natural resources, exposing the country to more recurrent droughts and desertification. Furthermore, the dry and dusty environment exposes the population to an increased health risk such as eye and respiratory infections.

Fruit and vegetable production thus have a strong role to play in improving Afghanistan's food security, nutrition, health, economical as well as the environmental situation. School-based food security and nutrition activities, and school gardens in particular, are a very effective way of contributing to improved nutrition and household food security of a nation. Introducing sustainable concepts through schools to the young generation has a lasting impact on the future of the nation.

#### **Experience in Afghanistan**

Under the framework of the Healthy Schools Initiative, MAIL with support of FAO and in close collaboration with the Ministry of Education and UNICEF initiated school garden pilot projects starting in earlier years. The objective of the pilot phase was to evaluate schools' interest in the gardening, resources required to implement it successfully, and opportunities for up-scaling the activity. The pilots resulted in an increase in interest, resulting in support to almost 90 new school gardens in the year 2008, and 145 schools in 2009 in Kabul, Badakshan, Bamyan, Herat and Nangarhar. MAIL and FAO provided technical assistance, such as agricultural and nutrition training to teachers and provided seeds and tools. Counterparts from the MAIL as well as the University of Kabul provided technical supervision and monitored the implementation.

The results of the gardens were immediately seen: there was strong participation by school teachers, students and community members, as exemplified by additional demand for support so far. The communities contributed labour, supported in clearing the often hard and dry land and even provided additional seeds, also the gardens were well maintained as achieved good produce. Students and teachers appreciated the opportunity for practical trainings; teachers benefited from the production; students took seeds home and promoted its use among their families, relatives and neighbours on vegetable production; in areas where vegetable production is rare, such as Bamyan province, new crop varieties were thus disseminated. The school gardens acted as a model for local agricultural production. School staff and students also greatly appreciated the improvement in the school's environment: "Before, our school was full of

---

<sup>1</sup> Cases of scurvy occur in drought years, vitamin A deficiency is estimated to affect over 10% of children, and iron deficiency affects 70% of children under 5.

## Concept Paper

dust, and dry; now it is green and fresh". In August and September 2008, competitions to select the three best school gardens in each province were held, thereby stimulating further motivation, interest and ownership of this activity. The headmasters of all participating schools expressed their gratitude for the support and hope that it could be sustained in the future and expanded to other schools.

The positive results prompted to take continue efforts to upscale the projects for 2009 onwards. The requests for expansion are now overwhelming, with an increasing number of schools showing interest and having the resources in terms of land, community support and teacher commitment. Furthermore it is planned to integrate food security and nutrition and its practical aspects into the teaching curriculum, which requires more structural training for teachers as well as to develop a more comprehensive concept of school based food security and nutrition interventions, to which school gardens are the key. This would entail school based food production in theory and practice, improvements of the production techniques (i.e. small green houses, drip irrigation, seed management, poultry production), nutrition education, and food preparation. Additional support is also required to support the establishment of water supply where it is lacking.

## 2. PROJECT STRATEGY

### Project objectives

**Overall goal:** to increase production as well as the consumption of nutritious foods, in particular the production of fresh fruits and vegetable, in Afghan communities and improve the local environment through school based food security interventions.

### **Specific objectives:**

- To achieve practical knowledge on nutritious food production in Afghan communities with school gardens as an immediate entry point for a holistic food security and nutrition skills transfer programme.
- Increase students theoretical and practical knowledge on food production and increase the consumption of fresh foods in schools and as part of the family diet
- To improve the school environment by making it "greener"

### **Activities:**

- Development of a guideline for 'school based food security and nutrition interventions' in Afghanistan in close collaboration with all partners (MAIL, MoE, FAO, UNICEF, WFP, etc.).
- Further development of the training modules for school teachers, integration into the school curricula as well as regular teacher up-grading trainings.
- Provision of 3 training sessions per new school (3 assigned teachers per school, food production).
- Provision of seeds and tools to schools the first year, and of additional and new variety seeds the following year (focus on trials to increase diversity in production).
- Development of nutrition education modules and integration into the national school curriculum; training for teachers.
- Setting up a seed management system to maintain and multiply seeds for school and community use.

## Concept Paper

- Involvement of parents' associations and student representatives to assist with the teacher training and monitoring of interventions.
- Technical supervision and monitoring of school-based interventions
- Organization of provincial school garden competitions
- Update of the school-based food security and nutrition guideline, and development of a national model that can be further upscaled and integrated in national programmes.
- Documentation and dissemination of lessons learnt from the 'Afghan Food Security and Nutrition Interventions in Schools'.

### **Implementation strategy for upscaling the programme**

- Current gardens are spread out in various districts of the provinces, such that each garden can play the role of a model for neighbouring schools. Each year, an additional 5 schools near each existing gardens, will be added to the selected group. Three trainings will be provided to teachers from the newly participating schools (3 teachers/school), in March, May and June. Existing school gardens will be used as models and training grounds for the new schools.

Guidelines will also be available on the involvement of parents associations to support the school based interventions, support its monitoring and sharing to the communities.

Each new school will receive required basic inputs (particularly seeds, tools, plastic sheeting, and where required, bucket drip irrigation systems, water pumps, support for seed management, improved soil management techniques, use of bio-insecticides, support to establish living fences). Every year, schools can receive a fresh supply of new varieties of seeds from the MAIL, and technical assistance upon request. Faculty of agriculture volunteers will assist the monitoring of school gardens and provide technical assistance to schools upon demand.

- School teachers will be trained on nutrition education to school students and given relevant education materials. Where possible, teachers together with parents' representatives and students will be encouraged to organize cooking demonstrations in the schools. In a longer term nutrition education modules will be developed for its integration into the national school curriculum.
- Guidelines to evaluate the food security and nutrition interventions in schools will be developed. They will provide the basis for competitions to be held between the schools, to select the best three schools in the province. The selection will be done by a jury composed of representatives from the Departments of Agriculture, Education, Public Health, Youth Affairs, and Faculty of Agriculture (which can be changed).  
Schools will be encouraged to allocate each plot of land to a class or group of classes, and to establish a competition between the plots of land, to enhance student participation, encourage students to care for their plots, and promote crop diversification and rotation.  
Where possible the garden management will be affiliated to school clubs and parents associations.

## Concept Paper

- A guideline to assist Ministry of Education, Ministry of Agriculture and school staff in setting up and maintaining school based food security and nutrition interventions will be developed and published in Dari and Pashto. The existing FAO School Garden Manual can be used as a foundation.
- The project's approach, results and lessons learnt will be disseminated through stakeholder meetings, workshops and possibly through a paper to be submitted for publication in relevant journals and websites

### **Coordination**

The programme will be implemented in close collaboration with relevant Government authorities and international partners participating in the Healthy Schools Initiative and the Joint National Youth Program.

### **Estimated coverage & duration**

The project proposed to establish gardens in a total of 7 provinces: Kabul, Badakshan, Bamyan, Herat, Nangarhar, Balkh and Baghlan. In each province, an estimated 320 school gardens will be established over three years.

These provinces correspond to the provinces where MAIL's Home Economics Department is represented and is also covered by the FAO project "Supporting Household Food Security, Nutrition and Livelihoods in Afghanistan" (GCP/AFG/050/GER) which will allow for a close technical and logistical support to this programme.

### **Sustainability:**

It is expected that once all schools are covered in a province, the project can be largely self-sustained, as teachers and students will already have experience. The schools will only need some technical supervision and inputs of new variety of seeds. The nutrition education will become part of the national school curriculum and will be taught through teacher's basic and up-grading training.

Opportunities for establishing a fund to enable the MAIL to provide the schools with technical support and seeds every year will be explored, and lobbying will be conducted for this fund is included in the MAIL's annual budget. Opportunities for sponsorship by seed producers will be sought, and schools will be encouraged to develop their own seed supply at local level (e.g. by producing seed, establishing seed management with parents support, or selling some of the produce to purchase more seeds).

### **3. RESOURCES REQUIRED:**

The following resources will be required.

Detailed budget estimates are provided in the Excel sheet attached

#### *Support costs at national level:*

- An international advisor on 'food security and nutrition in schools' (18 months)
- A national 'food security and nutrition in schools' officer (36 months)
- A national school garden officer (36 months)
- Computer and office equipment

## Concept Paper

- Car & driver
- An international consultant for manual development, monitoring, evaluation, documentation of lessons learnt
- Travel costs for field trips
- Development of manual (including printing and publication costs for nutrition education materials, school garden manuals).

*Estimated cost at national level: \$350,000*

### *At provincial level:*

- 2 DAHL officers (food security and nutrition as well as school garden)
- Stipends for Faculty of Agriculture volunteers (incentive + travel costs)
- Training materials
- Transport and Travel costs for monitoring visits
- Seeds, tools, water pumps (where needed), bucket drip irrigation systems, plastic sheeting

*Estimated cost for 320 gardens in one province for 3 years: \$159,800*

***Total costs for 7 provinces (including MAIL's support costs of approx. 13% for 3 years: \$1,463,800***