

# Lima, Peru

## growing cities – growing food

### Background information:

**Location:** Eastern Coast of Peru

**Climate:**  
mean annual temperature: 18° C

**Total Population:** 7 million

**Population Density:** 2,614 pers/km<sup>2</sup>

**Size of the city:** 2,812 km<sup>2</sup>

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### The main urban agricultural systems

#### Home gardens:

Home gardens make a major contribution to the food security in poor areas as well as to the nutritional, economic, and social well being of the poorer households. Producers are mainly low income migrants in the big city of Lima.

#### Popular hydroponics:

The system of "easy hydroponics" has been introduced by FAO-Chile. It tries to make use of the slope of a plot in order to water the vegetables without using electric pumps. A standard formula mix of nutrients (micro and macro nutrients) is applied. The costs of materials can be cut by using discarded wood (for the table) and different types of plastic waste. Work is also being done to simplify the management of hydroponics by producers.

#### Guinea pigs:

The breeding of Guinea pigs is based on research done by the INIA into new breeds of animals adapted to different climates. The materials needed for breeding guinea pigs are not expensive, e.g. rearing cages raised to facilitate cleaning and made of locally available bamboo.



*Lima's home garden.*



*Popular hydroponics.*



*Guinea pig raising: a family-communal system.*

# Adapting Urban Agriculture to Local Conditions and Resources

## Lima, Peru

Much has been done over the last 15 years to disseminate various UA systems among poor urban families, especially in the fast growing marginal areas: the "pueblos jóvenes" of the city. The vast majority of these activities has been promoted by extension staff of private institutions (notably NGOs and local organizations) and public agencies. The experiences generated a wealth of small-scale productive

technologies and widely spread know-how both in the institutions and among the target population. A central element of the almost all these activities is the effort to adapt the different UA systems to local, resource-poor conditions in the project area as well as to the educational and economic capacity of target families.

*School garden in Lima shanty town area.*



*Women are the principal social actors in UA.*



*Improving new technologies in UA gardens.*

## Lessons Learned with Relevance to Other Cities

Why do so many garden projects fail? In many cases this is because the projects start by establishing a model garden and trying to convince local people to adopt this model without first understanding existing local gardens, resources and knowledge.

Low-income urban families are keen to participate in small-scale food and animal production schemes.

To make UA systems accessible, it is necessary to provide technical assistance and adapt the technology so as to make production less costly and easier.

Appropriate UA must avoid creating new needs in

the implementation stage and uses locally available resources.

Commercialization is a crucial issue for market-oriented small-scale projects. In addition to training to secure quality production technical support from institutions - public and private- in marketing is required.

Promoters, researchers and extensionists in UA must take into account the opportunity cost of female family labor time and keep in mind women's time constraints.