Reviving the Green Lungs of the City

Inspiring Initiative: Planning for Urban Market Gardens in Nouakchott
Land: Mauritania
Land degradation: Water degradation (quantity), urban development
Initiative by: TENMIYA
Farmers are now more aware of their role in the urban ecosystem and are committed to farming in a more sustainable way. In turn, the local authority has developed a plan to encourage urban farming.

**SETTING THE INITIATIVE**

Nouakchott is the capital of Mauritania, one of the countries in the Sahel most affected by drought and desertification. Rainfall is low, with less than 300 mm per year. The country experienced prolonged droughts in the 1970s and 1980s. These contributed to a massive exodus of rural dwellers to Nouakchott and led to the establishment of numerous urban market gardens, some close to the centre of the city, but mostly in Dar Naim, a municipality on the edge of the capital. Some of these new migrants established market gardens which provided an important source of livelihood for people whose main experience and skills lay in agriculture. Some 6,000 people now work in production and distribution. They also provide an important supply of fresh vegetables for the city as well as helping to stabilise the sand dunes surrounding the city and providing green oases in the urban environment.

Yet in recent years, competition for two scarce resources, water and land, have threatened the successful continuation of these market gardens. There were concerns that the gardens were drawing too much water from local aquifers, a precious and finite resource, and the alternative of reusing urban wastewater clearly posed major health risks. At the same time, the expansion of the city put increasing pressure on land resources, with more land being bought up for development. As the city expanded, the market gardens, once located on the outskirts of the city, became surrounded by built-up areas and became attractive sites for future development. In one area the local municipality went as far as to ban market gardening.

**MAKING THE DIFFERENCE**

TENMIYA, a local NGO and research centre, became involved in resolving these conflicts by facilitating a strategic research action plan involving the Urban community of Nouakchott, the local municipalities, departments in the Ministry of Agriculture, the National Institute of Public Health, the local offices of some international organisations (WHO and UNDP) and the market gardeners of Nouakchott. Its first task was to evaluate the importance of market gardening in terms of socio-economics, the environment, health and food security and how market gardening fitted with the existing local municipal plans. This highlighted the importance of market gardening and the issues it was giving rise to, which in turn led to the development of a local plan to support and maintain these market gardens and resolve the problems. Water management was the key issue, and the report highlighted the need to improve the efficiency of water use and the potential of drip irrigation systems in achieving this. Finance was found to install drip irrigation systems, considerably reducing the burden that the gardeners put on local water resources and the need to recycle potentially polluted waste water.

As a result of this collaboration, farmers are now more aware of their role in the urban ecosystem and are committed to farming in a more sustainable way, improving water management and maintaining the city’s ‘green lungs’. In turn, the local authority has developed a plan to encourage urban farming, has taken development pressure off of the plots run by farmers and is supportive of grant applications by farmers to develop their skills and resources. The result has been a fruitful partnership between the market gardeners and the municipality of Dar Naim. The market gardens look set to provide a continued supply of local fresh vegetables, thereby helping to maintain the food supply and nutritional security of Nouakchott.