Urban and Periurban Agriculture in Setif

In Algeria, periurban agriculture as such is not recognised. For a long time State policy considered only one form of agriculture, strictly controlled, regionally specialised and operating at the level of the national market. Thus small-scale agriculture around a city like Setif has not been differentiated from the larger-scale cultivation of cereal in the rural regions of its wilaya (governorate). With the liberalisation of economic policy since 1987, farmers have greater freedom in the orientation of their agricultural operations.

Setif is the main town of the wilaya, located within the central zone, and has a population of around 260,000 (DPAT, 2002). Urbanisation is nearly always at the expense of agricultural space. This article seeks to answer two questions: How does farming adapt to liberalisation and urban development? To what extent can periurban agriculture in Setif be considered urban agriculture?

Various transformations in Setif’s agriculture are indicative of a passage from an agriculture that is planned at the national scale to one that has a local focus and is more responsive to the market. Periurban farmers are reorganising their operations to take advantage of the urban proximity.

**SETIF’S AGRICULTURE: A LAND TENURE CRISIS**

In the zones of Setif designated to agriculture, 92.6% is actually used for the purpose (9098 ha). Farming is highly diverse, both in its legal categories and in the combination of activities. Land tenure is the principal criterion for designating land for agricultural purposes.

The State owns three quarters of agricultural land as a result of the confiscation of properties after the country’s colonisation. Starting in 1987, the State land was restructured, either as individual agricultural operations (IAO), or as collective agricultural operations (CAO). The IAOs have an average area of 13.4 ha., while the CAOs average 201 ha. (about 31 ha. per individual farmer).

Private property makes up the remaining 23.4% of the agricultural land around Setif. While farming activities on private lands are small (averaging 6.8 ha), they represent 87.7% of the legal operations and 57.7% of the farmers. Their number appears to have increased by one fifth according to the latest census, through the subdivision of existing operations; similarly, the number of CAOs have risen as a result of informal splitting of units among farmers with usufruct (According to the Agricultural Census of 2001).

The status of land held as IAO or CAO poses a serious political problem. While farmers would like to appropriate these properties the State wishes to maintain title to the lands (under the 1987 and 1992 reorganisation of the agricultural sector, Law 87-19, they fall under private rights and can be transferred). The main challenge for these farmers is to have full land ownership rights, just like private farmers, to freely sell the land or leave it to their heirs.

In terms of production, cereal production is dominant with its share of total crops increasing from 75.6% in 1985 to 93.2% in 2001. A significant growth in market gardening crops (particularly potatoes) has also been observed, particularly between 1993 and 1998, when it rose from 2.3% to 8.0%. The share of fodder has plummeted from 22% to 5.4%, while leguminous grains have disappeared altogether. Meanwhile, nurseries have started to appear in intra-urban communally- held vacant spaces. Animal husbandry occupies itself mainly with cattle, sheep and goats and poultry.

**EMERGENCE OF A CITY-ORIENTED AGRICULTURE IN SETIF**

Many families not included in the government’s agricultural classification have traditionally maintained their gardens at the urban periphery for domestic production of vegetables or livestock (poultry, small herds grazing around the neighbourhood). While most of the products are consumed by the household, a portion is often sold nearby, on the roadside, or at the market. Income from agriculture is only part of the household income, as some family members also work in other sectors (trade, administration, education, etc.). Yet, agricultural operations play an essential economic role within families.

Periurban, and to a certain extent intra-urban, agriculture delivers a growing portion of the city’s supply of perishable goods. This is the result of expanded, small-scale private agriculture: household gardening and animal husbandry, small-scale market gardening close to water sources (like oued (valley) Boussellam, and...
The waste treatment plant, put into operation in 1996, is interested to supply urban agriculture with its by-products, both treated water and the composted sludge (about 27 000 m³/year). The water is still discharged into a oued, from which it is pumped to neighbouring farms. A distribution system is under construction, which would allow the irrigation of 800 ha of land for market gardening and fodder cultivation (and ultimately orchards). This would consist of 13 CAOs on 707 ha, one IAO on 43 ha, and 14 private farmers on 50 ha (ENPHE, 1995).

Although some farmers, notably market gardeners in the vicinity and tobacco growers further away, are starting to use the sludge for soil fertility management (averaging 40 users), this activity is still rather disorganised and barely promoted. Research is expected to clarify the specific risks (in transportation, spreading) of sludge and the proper conditions for its use.

Livestock waste is used for soil replenishment in cereal production. Other wastes such as by-products of poultry slaughterhouses crushed into meal by the Regional Avicultural Office of the East, or mouldy bread, gathered by children door-to-door and resold at the weekly markets, are used as feed for animals.

**Urban agriculture delivers a growing portion of the city’s supply of perishable goods**

Essentially, the traditional agricultural systems in Setif remain and become integrated into the regional, or even national, economy. The private home gardens and micro-herds belong to the more customary forms of urban agriculture, and make use of smaller vacant spaces. Yet new production systems that build on new opportunities such as waste reuse, growing local markets for fresh produce, and the designation of greenbelts for agriculture (Fleury, Donadieu, 1997) are coming up.

The Setif master plan of 1997 classifies certain green wedges as agricultural spaces (oued Boussellam, and an area south of the city). This already points to a change of mind regarding agriculture in the city.

**POLICIES TO ENHANCE THE DEVELOPMENT OF URBAN AGRICULTURE**

The built-up area in Setif grew from 313 hectares in 1966, to 646 in 1974, 1780 in 1987, and will grow further by 1600 ha in the following 25 years, of which at least 60

Agricultural use is further hindered by theft of crops, vandalism and trampling of fields.

**ACCESS TO LAND**

Despite the strong demographic growth in Setif, the food situation does not require spontaneous appropriation of lands for the establishment of household gardens. However, it is striking to observe new houses standing in the middle of empty fields in peripheral municipal areas, illustrating the need by many households to grow food.

After the restructuring of the agricultural sector in 1987, access to land has become difficult, particularly on government-owned lands. Instead, new forms of land tenure are emerging: ceding of inherited land to relatives; leasing of land, even among IAOs and CAOs; and annual partnerships between landowners and investors in crops such as potatoes.

**CONCLUSION**

Although periurban agriculture in Setif plays a modest, but growing, role in the city, it officially exists principally at the regional or national scales. Poverty as encountered in many African cities, which urges for subsistence urban agriculture to emerge, does not prevail in Setif. However, it would be interesting to further investigate the potential for a public policy that promotes household gardens in periurban popular housing areas, to meet food as well as recreational functions, spatial control and environmental functions. However, the proper integration of agriculture in urban planning requires recognition, specification of, among others, the role of agricultural spaces and activities in the urban system of Setif, and institutional strengthening. Such policies cannot emerge unless the current instability of real estate due to inappropriate laws, lethargy of the State, and superposition of local power is tackled.

**REFERENCES**