



Urban agriculture and productivity

For many Asians, “urban agriculture” (UAG) is a familiar phenomenon. It is a common sight in open fields, backyards of houses, along riverbanks, or even on rooftops. It may be paddy farming, horticulture, intensive dairying, or gardening. UAG is natural and beneficial to exploit every space to grow food when necessary. How much does UAG matter and what are the issues involved?

An immediate answer is that UAG contributes to better livelihoods of the urban poor by providing nonmarket access to food and offering jobs and incomes (UN ESC 2000). The importance of UAG in this regard is paramount, especially in least developing countries where huge numbers of the poor flock to urban areas. Better household food security and poverty reduction should be the prime policy target for those populations. Governments and civil society can offer helping hands such as micro credit, vocational training, land titles, or market facilities. In the past, the APO has organized several seminars and training courses that addressed these issues.

In some Asian countries, a challenging issue has been emerging in UAG: optimal land use. Unless resources are used efficiently, the productivity of the entire economy will be undermined. Land is one of the most important resources for both the agriculture and urban sectors. In many Asian countries, urbanization has sprawled at unprecedented speed to what had once been fertile agricultural land. Roads, housing, and factories disrupted farmland and rural villages. Irrigation channels have become filthy ditches. Land prices have soared elsewhere, and speculation followed. Some lucky farmers have been paid handsomely for selling their land, but many others have held onto farmland because no guaranteed alternative employment was available or in the hope of further price rises. The consequence is patchy mixes of farmland and urbanized plots, far from the ideal land use that spatial economists dream of.

If this phenomenon is confined to limited areas of a nation, it can be regarded as a local issue. But Asia is changing at a rapid pace. With a continual influx of people, the urban population now accounts for 54% of the total in East Asia, 44% in Southeast Asia, and 32% in South Asia. The rate reached 83% in the ROK and 72% in Malaysia in 2010. Japan’s census indicated that “urban-like areas” produced 30% of national agricultural output in 2005. The percentage was much higher for vegetables at 40%. UAG therefore cannot be neglected from the viewpoint of national development.

One possible solution is a policy mix of “zoning” and taxation. Japan has a long, bitter history of this, which is worth briefly reviewing.

Line drawing between urbanization promotion areas (UPAs) and urbanization control areas (UCAs) started in 1969 under the City Planning Law. After tough negotiations and hard work, local governments eventually identified 1.2 million ha of UPAs in Japan, of which nearly 30% were farmland. The City Planning Law, however, contained sticks as well as carrots to achieve goals. Owners of farmland within UPAs were requested to

pay taxes “equivalent to residential land” which were 100–500-fold higher than farmland tax. This was sensible because UPAs were expected to be converted to urban use. Farmers’ groups launched strong petitions and were rewarded with a conditional tax suspension for specified land.

In the late 1980s, however, farmland in UPAs and generous tax reductions became a prime target of social criticism as urban land prices soared. The rule was modified in 1991 so that tax suspensions applied only to farmers who continued farming for more than 30 years, after which they had to sell the land to the local government. Farmers were forced to choose either paying higher taxes in return for retaining the freedom to dispose of farmland or continuing to farm for such a long period. Only one-third of farmers chose the latter. Farmland in UPAs declined sharply from 150,000 ha in the early 1990s to 90,000 ha in 2004.

What happened to the 1 million ha of farmland in the UCAs? It has been protected fairly well thanks to strict control under the Agricultural Land Law. In addition, the strong impact of the Agriculture Promotion Law 1969 cannot be overlooked. This law, enacted only one year after the new City Planning Law, was armed with zoning clauses for agriculture. It was originally planned to protect agricultural “territory” but quickly evolved into a powerful means to promote comprehensive rural development. The law prescribes both policy assistance to facilitate agricultural development and zoning regulations to protect agricultural land. Government assistance for irrigation, food marketing, or agricultural loans was offered only to farmers in agricultural use areas (AUAs).

It is not a contradiction that AUAs overlap with UCAs as defined by the City Planning Law. In 1999, AUAs covered 850,000 ha of farmland in UCAs. AUA farmers have committed themselves to agriculture and receive services equivalent to those of farmers in rural areas. Many admit that these



Vegetables thriving in vertical shelves in a plant factory.

farmers are more productive than others by taking advantage of geo-economic conditions.

It is ironic that voices appreciating UAG are gaining momentum after farmers and farmland have almost disappeared in UPAs. Many municipalities now encourage farmers in UPAs to retain their productive land. They believe that farmland in UPAs offers urban citizens a shelter in times of natural disaster and a breathing green space in “concrete jungles.” Some researchers add that peri-urban paddy land mitigates flooding. Various programs have started to retain UAG, including product sales in “road stations,” allotment gardens for urban dwellers, and farming experience for schoolchildren. These are new attempts to internalize the positive externalities of UAG.

As the above example shows, the task of Japanese controlling UAG is extremely difficult and complicated. Nevertheless, many Asian countries will

face similar challenges. Optimal use of scarce land must be a prerequisite for the sustainable development of national economies. APO member countries can learn many lessons by sharing experiences and knowledge on UAG. 🌾



Tsubota is currently a professor at Meiji University, Japan. As an agricultural economist for 40 years, he has been involved in agricultural policy/project analysis in several international agencies including the OECD, ADB, FAO, and APO where he was the Director of the Secretariat Agriculture Department from 2002–2006. Professor Tsubota has contributed to numerous research publications and specialist agro-economic journals over the years.