

Aug 21, 2010

## Feeding urban masses: A key world challenge

By P.K. Hangzo, For The Straits Times



Wheat awaiting harvest in Russia. The food security problems in the country as well as globally highlight an urgent need for food production, especially in urban areas. -- PHOTO: AGENCE-FRANCE PRESSE

---

THE world is bracing itself for a food crunch. Amid the growing food shortages, in part due to climate change, there is an urban green revolution emerging. As cities burgeon in size, they are growing food to feed themselves.

To understand this emerging phenomenon, a Food Security Expert Group Meeting was convened in Singapore on Aug 4 and Aug 5 by the Centre for Non-Traditional Security Studies of the S. Rajaratnam School of International Studies. It was attended by representatives from academia, policy and think-tank communities, private agribusiness companies, urban planners and humanitarian organisations. Aside from drawing attention to the issue of urban food security, the meeting also discussed Singapore's role in the global food system.

Food security and agriculture are largely considered a rural phenomenon, discussed primarily in the context of rural poverty. The Green Revolution, which occurred between the mid-1950s and the mid-1990s, was a rural phenomenon to change crop varieties and agricultural practices, and to enact broader social, economic and political change.

It led to a substantial increase in gross world food production, with rapid economic development in some developing countries. Remarkably, despite an increase in the global population from three billion in 1960 to 6.7 billion last year, per capita agricultural production outpaced population growth.

Ironically, these successes contributed to public complacency about food and agriculture, manifested in decades of faltering public commitment to investing in agriculture in developing countries.

The share of official development assistance to agriculture, for example, fell sharply from a peak of 17 per cent in 1979 to a low of 3.5 per cent in 2004. Public complacency, a low stockpile of staples, declining agricultural yield, declining investment, population growth, rising income levels, dietary change, climate change and the global financial crisis combined to spark a food crisis in 2008, when food prices climbed to their highest levels since the 1970s.

This crisis triggered riots across the globe - particularly in the teeming, impoverished cities of the developing world, where many people spend a major portion of their incomes on food.

Whereas issues of food security, livelihood and agriculture resulted in peasant revolts in rural areas, they are now capable of eliciting unrest among the urban poor, the urban working class and the urban underclass.

The importance of urban food security is intensified by a growing urban population. For the first time in history, urban population had equalled rural population in 2008. By 2050, about 70 per cent of the world's projected population of 9.1 billion are expected to live in urban areas.

How will these teeming urban masses be fed? The feeding of a larger, more urban and richer population requires food production to increase by over 70 per cent. This must be done in the face of changing consumption patterns, the impact of climate change and the growing scarcity of water and land.

Rural agriculture alone will be insufficient to meet the future need for food in urban areas. Only an urban green revolution will help countries secure food for their populations. To do this, urban agriculture must be stepped up to supplement food supplied from the hinterland and rural areas.

Urban agriculture is the growing of food crops and the raising of farm animals within and around cities. It plays an important role in enhancing urban food security, since the cost of supplying and distributing food to urban areas based on rural production and imports continues to increase, and does not satisfy demand, especially that of the urban poor. Urban agriculture also contributes to economic development, poverty alleviation and the social inclusion of the poor. It also contributes to the overall greening of the city and the productive reuse of urban waste.

Urban food security has been a major concern for small, highly urbanised city-states like Singapore.

Due to size limitations, Singapore relies primarily on imports. It bought more than 90 per cent of its food requirements from 31 countries in 2008. Singapore boosts food supply resilience by upgrading its local farm production capability. It is also aiming to invest in overseas food zones, overseas contract farming and sourcing from non-traditional sources or existing sources which are not major exporters to Singapore.

Singapore can be an important player in regional food security. Given its role as a stable regional financial centre, it can serve as a catalyst for venture investment funds. It can also facilitate and inspire technology transfers, best practices, processes, business models and standards. The Republic is also home to a number of research-oriented local and foreign agribusiness companies. By harnessing their knowledge and expertise, it can take the lead in developing high-yielding seed varieties, fertilisers, pesticides and related products. Singapore's efficient port and logistics can also help the country establish itself as a regional food processing and distribution hub.

Food processing has already been pursued vigorously in the country, with exports totalling US\$3.4 billion (S\$4.6 billion) last year - an increase of nearly US\$1 billion since 2005. The Singapore Food Manufacturers' Association has predicted that food exports from Singapore companies will reach US\$4 billion this year. The growth of its exports is due to the increasing number of manufacturers based locally: There are 781 today, compared with 677 in 2005. This is a result of higher overseas demand for food products made and processed in Singapore.

The Food Security Expert Group Meeting had discussed urban food security and developed a consensus that it has become one of this century's key global challenges, requiring urgent attention.

Although urban agriculture has been around for a long time, it has not been thought of seriously. It is time to pay serious consideration to it, in order to feed the stomachs of the ever-increasing urban population. In the end, it is not just about feeding people, but also about keeping countries stable.

**The writer is an associate research fellow with the S. Rajaratnam School of International Studies, Nanyang Technological University, where he is attached to the Centre for Non-Traditional Security Studies.**