# **Food Security &** Global Agenda

By Mignonne CHAN

As the second special report on human security, this article attempts to look into the concept and dimensions of food security, the sources of food insecurity and the management of international cooperation on food security. The UN Millennium Development Goals are one of the initia-



tives aimed at achieving food security in the world. Among the eight MDGs, food security stands out as the first and foremost goal of human security. The United Nations is "to eradicate extreme hunger and poverty" by 2015.

## **Concept & Dimensions of Food Security:** Availability, Access, Justice & Sovereignty

The definition of food security is most evident in the concept defined by the UN Food & Agriculture Organization (FAO): "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

By this definition, food security is built on four pillars:

- · Food availability: sufficient quantities of food available on a consistent basis:
- Food access: acquiring adequate resources to obtain appropriate food for a safe and nutritious diet;
- Food justice: the political will to ensure basic human rights to subsistence regardless of any constraint;
- Food sovereignty: the right of people to safe, nutritious and culturally appropriate food and to the ability to lead an active and healthy life.

Food security has become a complex multifaceted development issue. In terms of food availability, future food needs may or may not be sustained with the current level of food production. In terms of food access, the question is whether we could guarantee that the existing food distribution system provides access to food at all times. In terms of food justice, a fundamental human right is for all people to acquire means of subsistence. In terms of food sovereignty, each human community may have its own special preference on production processes, food variety and food use, etc.

The FAO reported in 2003 there are around 852 million people worldwide who are chronically hungry due to extreme poverty, while up to two billion people lack food security intermittently due to varying degrees of poverty. Six million children die of hunger every year – 17,000 every day. As of late 2007, export restrictions and panic buying, intensified by the US dollar's depreciation, led to increased farming for use in biofuels.

Food security is no longer merely a poverty issue. It could also be an affluence issue. According to the World Resources Institute, global per capita food production has been increasing substantially for the past several decades. In 2006, MSNBC reported that globally, the number of overweight people surpassed the number of undernourished people – the world had more than one billion people who were overweight, and an estimated 800 million who were undernourished. In many countries, health problems related to dietary excess are an ever-increasing threat. The World Health Organization (WHO) predicts there will be 2.3 billion overweight adults in the world by 2015 and more than 700 million of them will be obese.

Since agriculture remains the largest employment sector in most

developing countries, when international agriculture agreements are deliberated, food security becomes a critical issue for each nation. Agriculture trade liberalization may partially address the issues of availability and access. However, some critics argue that trade liberalization may reduce a country's food security by reducing agricultural employment levels. This concern has led a group of World Trade Organization (WTO) members to recommend that current negotiations on agricultural agreements allow developing countries to reevaluate and raise tariffs on key products to protect national food security and employment. They maintain that WTO agreements, by pushing for the liberalization of crucial markets, are threatening the food security of whole communities. Related issues include:

- net impact of further liberalization of food and agriculture trade, given the various situations in developing countries;
- the extent to which domestic economic and social policies and food, agricultural and rural development policies - offset the diverse or negative impacts of international policies, such as those relating to international trade;
- the impact of overall international trade on those who are most likely to be suffering from food insecurity;
- the "trickle down" effect, if any, on food access for the poor;
- the potential overexploitation of natural resources that may jeopardize domestic food security in the long term; and
- the acceptable quality and safety of imported food products.

### **Sources of Food Insecurity**

The sources of food insecurity could be nature-invoked disasters or man-made causes, which may well be intertwined with each other from time to time:

- · Water shortage or drought: Scores of countries, including China, India, Pakistan, Afghanistan and Iran, are experiencing water scarcity due to widespread over-pumping by powerful diesel and electric pumps. This in turn led to price hikes on grain and increasing imports.
- Land degradation or land deals: Intensive farming easily leads to a vicious cycle of exhaustion of soil fertility and decline of agricultural yields. There is also growing concern over the controversial rise of land deals as a possible form of "neocolonialism." Rich governments and corporations are making acquisition of the rights to agricultural land in developing countries so as to secure their own longterm food supplies. For instance, South Korean firm Daewoo Logistics has secured a large tract of farmland in Madagascar to grow maize and crops for biofuel use. Libya has acquired 250,000 hectares of Ukrainian farmland, and oil-rich Arab investors are looking into Sudan, Ethiopia, Ukraine, Kazakhstan, Pakistan, Cambodia

#### and Thailand for farmland acquisition.

- · Climate change: A UN climate report published in 2007 pointed to the Himalayan glaciers. which are the principal dry-season water source of Asia's biggest rivers, could disappear by 2035 as temperatures rise. It was estimated that approximately 2.4 billion people living in the drainage basin of the Himalayan rivers could experience floods followed by severe drought in coming decades. A UNICEF UK report on climate change in 2008 found that access to clean water and food supplies will become more difficult, particularly in Africa and Asia.
- · Ambiguity toward biotechnology: It is widely advocated that biotechnology can contribute to future food security. However, agro-biotechnology research has cited ethical, safety and intellectual property rights issues in the midst of large private-sector investment in agrobiotechnology. One highly contentious issue is "genetically modified organisms" (GMOs). The United States, Brazil, Argentina, India and Canada are the top five producers in terms of land under GMO cultivation. Prolonged debates over time as to the safety and possible chronic side-effects of GMOs on human health have created wariness, ambiguity and bans on GMOs. Recently, the Austrian and Dutch governments renewed their proposal of 2008, and wish to exclude the cultivation of GMOs from the EU Common Agriculture Policy.
- · Lack of good governance: Government action or inaction often determines events that may trigger food security conditions. Agrarian policies, especially the pricing of agricultural commodities, could effectively work to the detriment of farmers in rural areas. Furthermore. some dictators and warlords have used food as

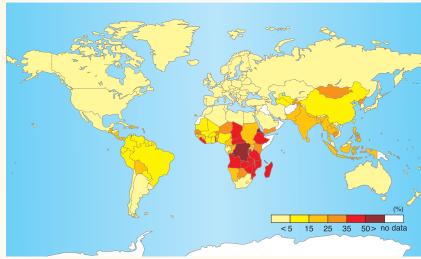
a political weapon by rewarding their supporters and denying food supplies to their enemies in rebel regions. History has also proved that when the rule of law is absent or when private property is nonexistent, farmers have little incentive to improve productivity so as to secure their perceived safety.

## **Management of International Cooperation** on Food Security

Food security encompasses multidimensional issues, including food availability, food access, food justice and food sovereignty, which were explicated above. With the intensifying globalization, international development cooperation on these fronts is particularly indispensable. Addressing the fundamental sources of insecurity, including natural, man-made or scientific uncertainty listed earlier, entails the critical momentum for global management of food security.

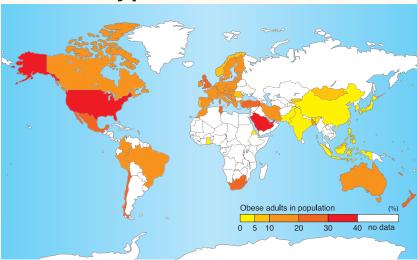
Technological cooperation and multifaceted collaboration should include:

# Prevalence of undemourishment in total population



Source: FAO (available at: http://www.fao.org/faostat/foodsecurity/index\_en.htm), 2009

## Global obesity problem



Note: An obese adult is classified as having a body mass index equal to or greater than 30 Source: World Health Organization, 2005

- economic growth and poverty alleviation;
- food production technology;
- intellectual property protection on agricultural innovation;
- population control:
- · access to agro-finance;
- · education on nutrition;
- collaboration on scientific discovery relating to food safety;
- accountability and transparency at public institutions;
- food aid logistics supervision and management;
- · mutual understanding on food culture; and
- emergency food-aid programs.

There may be some new emerging issues on food security on the way to economic development and human security. Concerted efforts with a human face would be a sure way to achieve food security around the globe.

Mignonne Chan is assistant professor at the Graduate Institute of the Americas, Tamkang University, Taiwan.