

Food Security in Southeast Asia



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Food security, defined by the 1996 World Food Summit as existing “when all people at all times have access to sufficient nutritious food to maintain a healthy and active life”, has been identified as a major issue for Southeast Asian countries. In the majority of developing countries the most effective means of ensuring food security is broad-based economic growth in agriculture. Public support for agriculture has waned significantly since the mid-1980s. Australia has been a leader in the recent resurgence of aid investment in agriculture. This has involved lifting investment in agricultural research in developing countries, through ACIAR, and AusAID programs, in particular in the Mekong countries, South Asia and Africa.

The concept of food security is built on four pillars^{1,2,6}:

- Food availability: sufficient quantities of food available on a consistent basis.
- Food access: having sufficient resources to obtain nutritious foods.
- Food use: appropriate use based on knowledge of basic nutrition.
- Food stability: access to adequate food at all times and without the risk of losing access due to sudden shocks (for example, climatic crisis) or cyclical events (for example, seasonal food insecurity).

A direct relationship exists between food consumption levels and poverty. Thus poor families are the segment of the population most at risk during times of food shortage, famines and high food prices³. This has been demonstrated in recent years by the effects of high food prices in developing countries possibly resulting from export restrictions and panic buying, increased demand for biofuels, high oil prices, global population growth, climate change, and of prime agricultural land to urbanisation^{2,4,5}.

Food security has been identified as a major issue for Southeast Asia⁷. Key issues associated with the high vulnerability of Southeast Asian countries to food insecurity include: high susceptibility to physical and economic impacts, climate change, water stress, saltwater intrusion, increasing urbanisation, marginal self-sufficiency in food and reliance on imports, wide year to year fluctuation in food production and a high incidence of rural and urban poverty⁸. In particular Southeast Asia is highly vulnerable to climate change due to: a high number of exposed areas (islands, deltas, coastal regions, and steep slopes); a high concentration of populations and economic activity in coastal areas; a high reliance on climate-sensitive sectors (agriculture, hydroelectricity and tourism); millions of people with low adaptive capacity and rapid urbanisation. Observed physical impacts due to climate change are already occurring and these include⁷:

- Indonesia: Wet season rainfall increased; dry season rainfall decreased; number of floods and storms increased; number of hot days and warm nights increased; intensity and frequency of heat waves and forest fires increased.
- Malaysia: Number of rainy days declined.
- Philippines: Increasing intensity and frequency of events associated with El-Niño and La-Niña; annual frequency of cyclones increased by 4.2.
- Thailand: Decreasing rainfall; growing intensity of storms.
- Vietnam: Decrease in monthly rainfall; rapid increase in extreme events.

Bhalla⁸ is of the view that the only sure way to ensure that the vulnerable have adequate access to food is through a wide range of policies such as land reform, employment creation, agricultural development and industrial growth. In addition to these, the FAO suggests that instruments are required that strengthen supply (boosting domestic production and increasing supplies through

imports), a range of subsidies to keep cost low, and output price controls to enable the consumers to obtain food at reasonable prices^{9,10}.

In most developing countries between 60% and 80% of the population is either directly or indirectly reliant for their livelihood on agriculture. The most effective means of reducing poverty in developing countries is broad-based economic growth in the largest sector: agriculture. The Centre for Global Development noted in 2005: “no country has been able to sustain a rapid transition out of poverty without raising productivity in its agriculture sector”¹¹. The International Fund for Agricultural Development (IFAD) states that GDP growth generated by agriculture is up to four times more effective in reducing poverty than growth generated by other sectors. The World Bank’s International Development Association suggests that of all the countries it finances, economic growth overall was fastest in those where agriculture projects were a component of their financing.

Increasing the productivity of rural smallholders and a transition from subsistence to commercial production is central to poverty reduction. And a key mechanism for this is targeted and adaptable agricultural research. Recent FAO projects suggest that global food production will need to increase by more than 40% in the 20 years to 2030, and by 70% in 2050 to feed this population¹².

Since the mid-1980s, the value of aid to agriculture has halved. The actual share of aid to agriculture has declined from 17% of total aid in the late 1980s to 13% in the mid-1990s to 6% in 2007.

Ultimately, it took a severe shock to food production globally, in the form of the 2007–08 global food price crisis, to fully refocus international priorities on food security. Recognition of the need for agricultural research investment as the foundation of food security has risen since that time^{11,13}.

Australia has been a leader in this resurgence. Our track record on farm-level innovation is world-class and we have much to offer developing countries in their efforts to achieve food security for their people. The Australian Government has increased funding to its aid program, including for initiatives to boost food security. This has involved lifting investment in agricultural research in developing countries, through ACIAR, and AusAID programs, in particular in the Mekong countries, South Asia and Africa.

The Australian Government has requested ACIAR to establish a new Australian International Food Security Centre (AIFSC) to assist developing countries maximise the benefits and opportunities of agricultural productivity to achieve food and nutritional security. The Australian Government has committed funding of A\$33 million over four years.

The AIFSC will have a broad international focus, recognising the significance of food security to developing countries across

Africa, Asia and the Pacific. This centre will provide partner countries access to Australian research, technical and policy expertise in areas of national comparative advantage, including tropical, subtropical and temperate agriculture.

Australia’s commitment to transferring the knowledge that has driven its agricultural innovation, to help developing countries achieve food security and lift those dependent on agriculture, remains strong. The challenges that have resulted in many people living in poverty are likely to increase into the future, strengthening the need for effective agricultural research for development.

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Biography

Mr Les Baxter is currently Research Program Manager, Horticulture and the Principal Regional Coordinator PNG and The Pacific with the Australian Centre for International Agricultural Research (ACIAR). His research interests are in horticultural crop agronomy, seed physiology, plant breeding and sociology.