





Thailand's progress in agriculture:

Transition and sustained productivity growth

Key messages

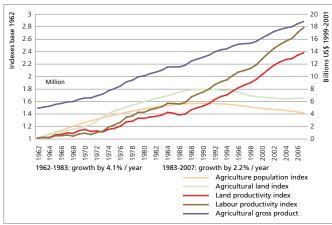
- 1. Agricultural development in Thailand since 1960 has facilitated the country's transformation into an urbanised economy based around manufacturing. There have been two phases: rapid agricultural growth based on utilisation of underused land and labour; and, as Thai farming began to shed land and labour, slower but continued growth through higher productivity.
- 2. Rural poverty has fallen from more than 60% in the early 1960s to barely more than 10% in the new century. Food prices have halved, and hunger and child malnutrition have reduced greatly.
- 3. Much has been achieved through private initiative, including a successful agribusiness sector. Despite political turbulences in Thailand, the state has played an essential role in setting the investment climate and investing in education, roads and research, as well as supporting agricultural credit to small farmers.

"Rural poverty has fallen from more than 60% in the early 1960s to barely more than 10%."

Summary

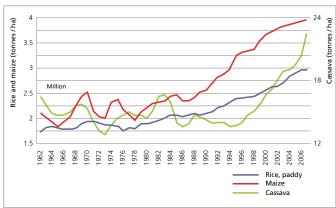
Agriculture in Thailand has grown more than the population over the past 50 years, at rates of over 4% a year initially, later slowing to 2% a year (Figure 1). This has taken place within an economy that has become more industrialised and urbanised.

Figure 1: Growth in agriculture and productivity, 1962-2006



Source: FAOSTAT dataset.

Figure 2: Yields of selected crops, 1962-2006



Source: FAOSTAT dataset.

The Thai story is a good example of managing a transition: from a situation in which it was possible for agriculture to grow by putting underused factors of production to work, with only limited improvements in productivity; to a later stage, in which land and labour had become increasingly scarce and growth could continue only through improved returns to these factors. Thai agriculture now produces highly competitive exports, based on increasingly diversified and specialised farming. Overall, agricultural growth has contributed towards falling rural poverty and better food security and nutrition. Much of what has taken place has been down to private initiative, both from farmers and from agribusiness, facilitated and encouraged by strategic public investments.

What has been achieved?

Initial agricultural growth through economic transition

From the 1960s to the early 1980s new lands were opened up for farming, facilitated by the existence of a forest frontier where squatting was tolerated. This absorbed growing labour to produce more of the main staples for both the domestic market and export (rice and teak in the first place). At this time, agriculture was the main driver of the economy. More than 70% of the active population was employed in the sector in 1980, among them the vast majority of the poor.

Improved productivity at a time of economic transition

Agriculture then began to transform, as Thailand experienced rapid economic growth led by manufacturing. Labour began to leave agriculture, attracted by jobs in manufacturing, urban services and the rural non-farm economy. At the same time, it was becoming harder to open up new land. Agricultural growth slowed, but productivity of land and labour increased notably. The sector became more mechanised and more capital intensive, facilitated by increasing availability of formal credit.

Use of better varieties and greater application of inputs led to increasing yields (Figure 2). So competitive are some Thai agricultural exports that they define the lowest cost production in the world, for example cassava from the landlocked and once lagging northeast region.

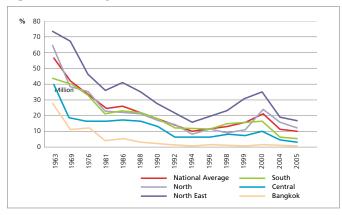


Farming households have increasingly diversified their income sources, and some have become ever more specialised in higher-value products sold into more sophisticated marketing chains.

Falling poverty

Overall since 1960, poverty has fallen throughout Thailand (Figure 3). Rates in rural areas have also fallen markedly. In the early 1960s, more than 60% of the rural population lived in poverty: by the early 2000s, the figure was at a little more than 10%. Improvements probably came initially from increasing farm incomes and subsequently from rural non-farm jobs and remittances from migrants.

Figure 3: Poverty in Thailand, 1963-2005¹



Better food security and nutrition

With agricultural growth, the real price of rice more than halved in the second half of the 20th century. From 1988 to 2007, the number of households affected by food poverty declined from 2.55 million to 418,000, and it almost disappeared from urban areas. As a result, child malnutrition has also declined. Incidence of underweight young children fell from 17% in 1987 to 7% in 2006; that of stunting fell from 25% to 16%.

What has driven change?

New domestic and exports markets - the engine of growth

Diversification and specialisation among farmers have been possible in part because of the emergence of higher-value markets alongside the country's economic growth. Technically innovative so-called 'professional farmers' represented 19.5% of Thai farmers in 2004.

Supermarkets led the development of higher food standards, offering a price premium for contracted producers. The government facilitated the emergence of contract farming schemes by supporting interaction between smallholders and with private companies which supplied inputs and purchased products.

Commercialised farming also looks for opportunities to trade on international markets. Thailand, a founder member of the Cairns Group, has been an active member of the G20 in pushing for more liberalised global trading rules. The country has negotiated, or is negotiating, a dozen bilateral Free Trade Agreements.

Dynamic agribusiness –a favourable environment to foreign and domestic investments

Many agribusiness companies were founded with European and Chinese investments, but later the government developed public and semi-public agribusiness companies. These enjoyed significant autonomy and limited accountability to their line ministries: they were expected to generate profit. Agribusiness has been instrumental in developing exports, as well as in stimulating growth of higher-value produce in domestic markets.

Agribusiness companies have also been important players in the development of input supply chains, the diffusion of improved varieties and the creation of new production relationships, such as contract farming and certification.

Meanwhile, the rural non-farm economy has grown to the point where it provides around half of all rural jobs. Many of these are linked to prospering agriculture.

¹ Compiled by Jonathan Rigg, University of Durham, from Krongkaew (1993); Krongkaew et al. (1992; 2006); Paitoonpong (1999); Warr (2000; 2004); World Bank (1999a; 1999b; 2000a; 2000b); Zepeda (2004).

"Much has been achieved through private initiative, through private initiative, including a successful agribusiness sector."

Evolution of agriculture taxation— a shift in public policies

Until the early 1980s, to raise revenue and to keep the domestic price of rice low, thereby helping hold down labour costs, agricultural exports were taxed heavily to raise the resources to invest in other sectors of the economy. Rice exports were subject to a fixed export tax, ad valorem duty, volume limits and a requirement that exporters sell a share of rice at rates below the market price. Exporters were further penalised by over-valuation of the baht.

After industrialisation, taxation eased, the baht devalued and, under growing pressure from a better-educated rural population, measures were taken to support farmers. Subsequently, protection against shocks was introduced, including intervention prices for rice.

Investment in key public goods, supported by aid

The state's construction of rural roads has improved access to markets markedly, especially for areas such as the formerly isolated northeast.² Investments in large-scale irrigation, often with foreign assistance, were prioritised until the mid-1980s, with government support later shifting towards smaller-scale irrigation. Investments in telecommunications have contributed to better-functioning markets.

With universal primary education nearly achieved, further investments in post-primary education have contributed to agricultural productivity growth. Public agricultural research has also played a big role. Uptake of agricultural research outputs has increased, in particular improved modern rice, rubber, maize, soybean and cassava varieties.

Provision of agriculture credit through institutional innovations

As in most developing countries, it used to be difficult and expensive for Thai farmers to access credit. Market failures demanded both public investments and institutional development. From 1975, the Bank of Thailand instructed all banks to allocate a growing share (up to 14% in the 1980s) of all commercial loans to agriculture, at an interest rate lower than the market rate. Penalties on banks that could not meet targets contributed towards funding

the Bank for Agriculture and Agricultural Cooperatives (BAAC), whose development was supported also by public and international funding. BAAC has subsequently expanded provision of agricultural credit, reaching 90% of farm households and all farm cooperatives, using a group liability guarantee that enables small farmers to access short-term credit without land titles as collateral. The BAAC is now almost entirely self-financed, achieved by attracting savings accounts, thanks to a wide network, competitive rates and a positive image.

Lessons learnt

The Thai story is a good example of managing a transition from land- and labour-based growth, with only limited improvements in productivity, to a later stage, whereby growth could continue only through improved returns to these scarce factors. Agricultural labour productivity growth then contributed to rural poverty reduction. But the rural-urban income gap widened, helping fuel political tensions: even if the Thai economic transition has been a clear success, a democratic political transition is still to happen.

Much of what has taken place has been down to private initiative, both from farmers and from agribusiness concerns in the supply chain. The state has facilitated and encouraged this by focusing on key strategic interventions, including:

- The opening up of new land was encouraged by tenure rules that allowed family farmers to clear enough land for a small farm and then to obtain secure property rights. Restrictions were applied only later, when conservation of the environment became a more pressing priority.
- Investments in roads and irrigation were later complemented by more spending on electrification and telecommunications.
- To resolve failing rural credit markets, funds have been channelled through a state-owned bank, using group lending to reach small farmers, while mobilising funds by attracting savings.
- 2 Supported by the US, Japan and the World Bank as the main financial partners.



- More recently, the state has promoted certification to allow farmers to develop premium domestic markets.
- Government has sought to promote agricultural exports through active participation in trade talks, in multilateral, regional and bilateral negotiations.

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