# STRUCTURAL POLICY COUNTRY NOTES

# Thailand

This Country Note is an extract from the *Economic Outlook for Southeast Asia, China and India 2014: Beyond the Middle-Income Trap*, http://dx.doi.org/10.1787/saeo-2014-en.

# Thailand

**A. Medium-term economic outlook (Forecast, 2014-18 average)**

| | |
|---|---|
| GDP growth (percentage change): | 4.9 |
| Current account balance (% of GDP): | 2.0 |
| Fiscal balance: | -2.89 |

**B. Medium-term plan**

Period: 2012-16

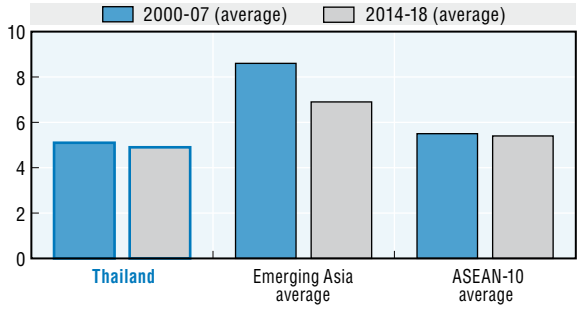
Theme: A happy society of equity, fairness and resilience – the vision of the Philosophy of a Sufficiency Economy

**C. Basic data (in 2012)**

| | |
|---|---|
| Total population: | 64 million* |
| Population of Bangkok | 5.7 million (in 2010) |
| GDP per capita at PPP: | 10 125 (current USD)** |

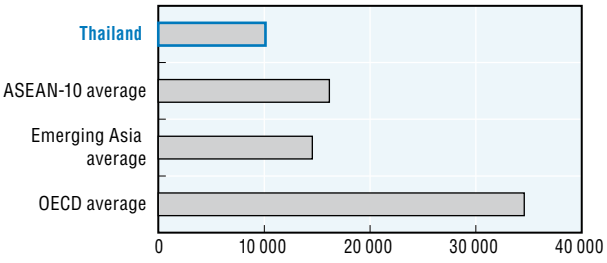
*Note:* * Total population data for 2012 are estimates.
** IMF estimate
*Sources:* OECD Development Centre, national sources and IMF.

**GDP growth rates** (Percentage change)




*Source*: OECD Development Centre, MPF-2014.

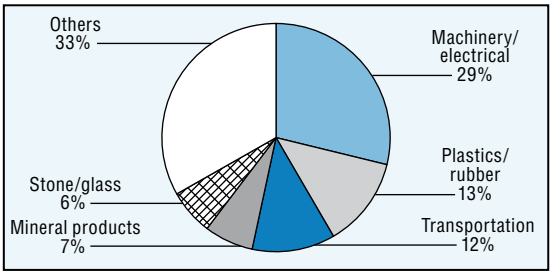
**GDP per capita** (PPP, current USD)




*Source*: IMF.

**Composition of exports, 2012**

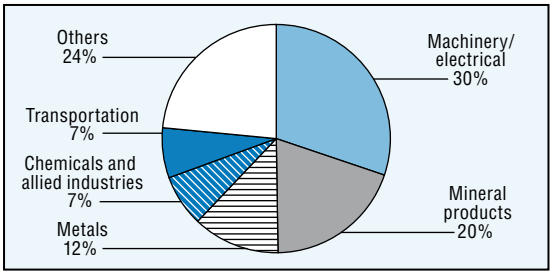
Percentage of total exports




*Source*: Trademap.

**Composition of imports, 2012**

Percentage of total imports




*Source*: Trademap.

## "Philosophy of Sufficiency Economy" – a happy society that is equitable, fair and resilient

Thailand will need to address several medium-term challenges identified in its 2012-16 Eleventh National Economic and Social Development Plan (NESDP) before it can achieve its vision of becoming an economy that is balanced, stable and sustainable. Although the country has carried out some reforms in the two years since the plan was initiated, it needs to do more – specifically to upgrade educational quality, strengthen the agriculture sector, and restructure the economy with an emphasis on green growth.

In education, there needs to be a co-ordinated effort to elevate the quality of learning and teaching if outcomes are to be improved. As for agriculture, meeting the challenge of greater productivity and income and employment security requires further efforts to modernise and to educate farmers in the use of technology. As regards green growth, Thailand can make its national strategy more effective by strengthening institutional co-ordination and raising levels of public awareness of the benefits of a green lifestyle.

**Thailand's medium-term policy challenges and responses**

- Upgrade human capital by improving the national curriculum and teaching standards
- Improve agricultural productivity through modernisation and education
- Improve institutional co-ordination to achieve green growth

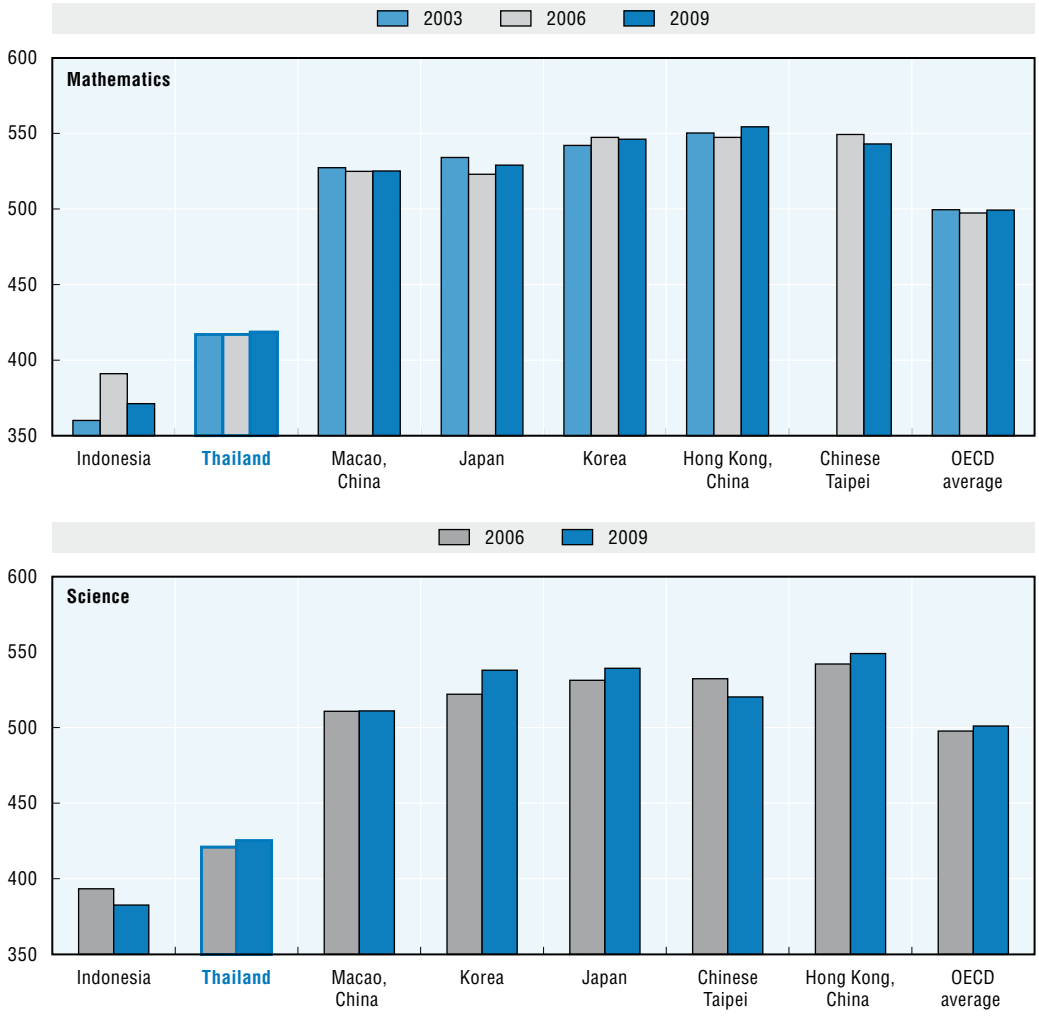
**POLICY FOCUS**

**Upgrade human capital by improving the national curriculum and teaching standards**

Thailand's educational system has seen a significant increase in access and enrolment levels at primary, secondary, and tertiary levels. Yet overall learning outcomes have remained stationary and even deteriorated over time – a trend reflected in Thai students' poor showings in national and international tests. In 2009, their scores in the mathematics and science tests of the Programme for International Student Assessment (PISA) were either similar or only marginally better than in previous assessments. Thailand lags behind other Asian countries, with the exception of Indonesia, and lies well below the OECD average in PISA performance levels (see Figure 2.9.1).

Figure 2.9.1. **PISA scores in mathematics and science in Thailand and other selected economies**

Mean score




*Note*: PISA scale was set such that approximately two-thirds of students across OECD countries score between 400 and 600 points. Gaps of 72, 62 and 75 points in reading, mathematics and science scores, respectively, are equivalent to one proficiency level.

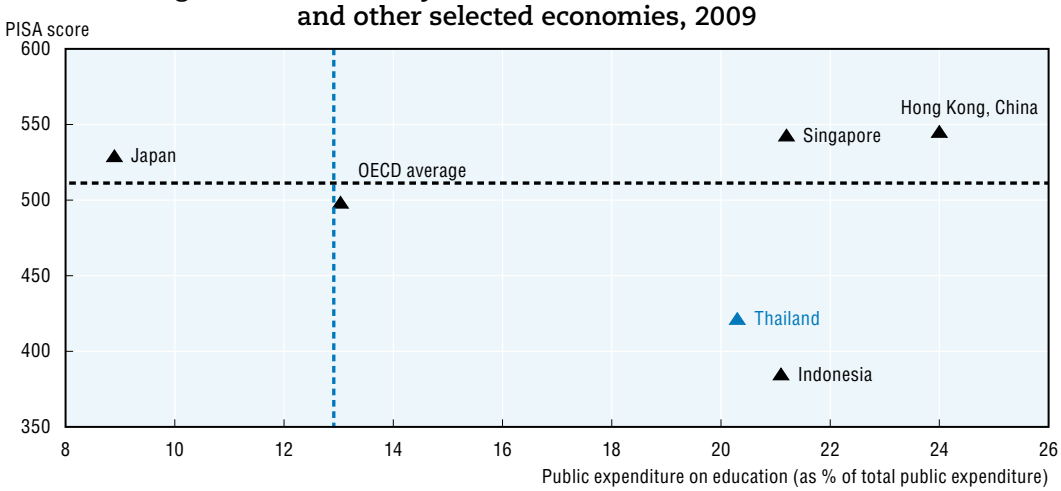
*Source*: OECD (2011b), *PISA 2009 Results: Learning Trends: Changes in Student Performance since 2000* (Volume 5), OECD Publishing, Paris.

StatLink http://dx.doi.org/10.1787/888932938422

## The Thai educational paradox

Thailand's educational outcomes are relatively weak even though the percentage of the national budget devoted to education is consistently higher (20% in 2009) than in other countries that belong to the Association of Southeast Asian Nations (ASEAN). Indeed, some analysts speak of the "Thai educational paradox" (see Figure 2.9.2). The paradox shows that merely increasing financial resources cannot in itself raise standards of education, particularly when expenditure focuses on expanding education quantitatively – i.e. building infrastructure (Fry and Bi, 2013).

Figure 2.9.2. **Efficiency of the education sector in Thailand and other selected economies, 2009**




*Source*: OECD Pisa database and national sources.
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## Revamp national curriculum and performance assessment system to raise academic standards

A closer look at Thailand's weak educational outcomes reveals an inward-looking curriculum that emphasises rote learning. The current national curriculum has been described as "hierarchical, top-down, with a systematic lack of critical thinking" that does not prepare students for work in the 21st century (Ahuja, 2011).

What is needed is a revamped curriculum that provides for project-based learning, teamwork and the use of information technology (IT) resources for e-learning purposes, while affording teachers some flexibility in the classroom. While current Prime Minister Yingluck Shinawatra's "one tablet per child" pledge is a step in the right direction of encouraging information and communication technology (ICT) in the classroom, it should be complemented with a change in curriculum that puts the focus of learning on student needs in the present global environment.

Changes to the curriculum should be supported by a performance assessment system that effectively measures students' academic abilities and is aligned with international standards. Thailand's existing system has often been described as lacking in credibility.

At present, students are assessed through two sets of standardised national tests administered by the National Institute of Educational Testing Services (NIETS): the Ordinary National Education Tests (O-Net) at grades 6 and 9, and the Advanced National Education Test (A-Net) at grade 12. Although passing O-Net and A-Net is a requirement for university admission, it is reported that average scores are inconsistent and have declined over time. Many educators and independent researchers have called for O-Net and A-Net to be replaced by standardised tests that take international standards of academic performance as their benchmarks. Such tests could further serve to hold teachers and schools accountable for their students' performance, especially if schools' average test scores were released publicly.

## Improve teaching standards

Another decisive factor in educational outcomes is the standard of teaching. A large and growing body of research convincingly shows that the quality of teachers is the single most important schooling-related factor in student achievement (OECD, 2009c). In Thailand, improving the quality of teachers and learners and making the school management system more efficient were among the recommendations of the 2008 Commission on Second Decade of Educational Reform.

Consequently, teachers became the focus of educational reform under former Prime Minister Abhisit Vejjajiva's government, which sought to raise pay and respect for the profession. To that end, the government introduced two schemes:

In 2009 it approved a project known as "Khru Pan Mai" ("New Breed of Teachers"). The project sought to create 300 000 positions for a new breed of teachers who would have high qualifications, knowledge and versatility. They would replace retiring teachers and help raise the profile of the teaching profession.

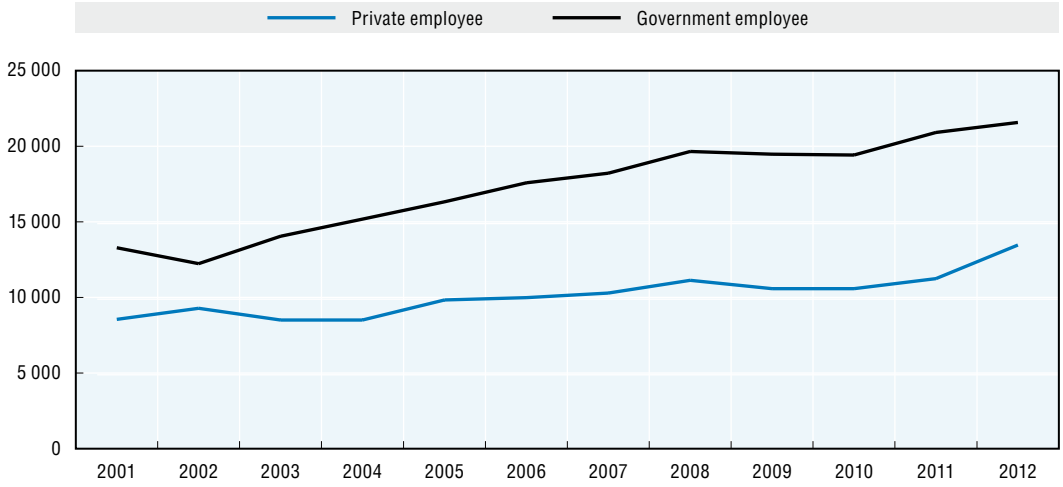
In 2004 the government introduced a new salary scheme that not only doubled the minimum salary at each teaching level (with the exception of the first level), it also provided bonuses for teachers whose students achieved good results (Table 2.9.1). Consequently, teachers' pay – especially in the public sector – has increased over time (Figure 2.9.3).

Table 2.9.1. **Comparison of old and new salary schemes in Thailand**

| Old scheme (prior to 2004) | | New scheme (2004) | | |
|---|---|---|---|---|
| **Level** | **Salary (THB)** | **Level** | **Salary (THB)** | **Extra allowance** |
| Teacher 1 | 4 230 ~ 13 550 (USD 124 ~ 399) | Assistant teacher | 8 360 (USD 246) | |
| Teacher 2 | 5 050 ~ 16 650 (USD 149 ~ 490) | Teacher | 11 470 ~ 26 440 (USD 337 ~ 778) | |
| Instructor 1 | 6 210 ~ 20 340 (USD 183 ~ 598) | Experienced teacher | 14 810 ~ 32 250 (USD 436 ~ 949) | 3 500 (USD 103) |
| Instructor 2 | 9 320 ~ 25 180 (USD 274 ~ 741) | Highly experienced teacher | 18 180 ~ 45 620 (USD 535 ~ 1 342) | 5 600 (USD 165) |
| | | Expert teacher | 22 330 ~ 48 600 (USD 657 ~ 1 430) | 9 900 (USD 291) |
| Instructor 3 | 11 340 ~ 43 440 (USD 334 ~ 1 278) | Specialised teacher | 24 450 ~ 61 860 (USD 719 ~ 1 819) | 13 000 (USD 382) |

*Source:* Atagi (2011), *Secondary Teacher Policy Research in Asia: Secondary Teachers in Thailand*, UNESCO, Bangkok.

Figure 2.9.3. **Average monthly wage for an employee in Thailand, by sector of education (i.e. private and government), 2001-12**
In Thailand baht




*Source*: National Statistical Office, *Labour Force Survey* and CEIC.
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### Merit-based incentives

Although teachers are now better renumerated, there remains room for improvement in using incentives to improve standards. Because the quality of teachers is so important to student learning outcomes, education systems are increasingly assessing teachers performance according to students achievement (OECD, 2009c). In this regard, Thailand should consider a merit-based incentive framework – one that ties teacher recruitment and promotion to students' educational outcomes.

The current incentive system places a greater premium on administrative duties than on student performance and does little to promote good teaching or teacher training. In addition, promotion is determined by how long a teacher has been in the profession, not by his or her students' performances. There could also be incentives for teachers willing to teach in rural areas and in such shortage subjects as science and mathematics. However, before a merit-based reward system can work, a framework for fair, systematic teacher appraisals across schools must be in place (see Box 2.9.1).

### Better teacher training

Thailand's teacher-training programmes have been criticised for their poor quality. Teachers report such failings as courses that are too short, low-standard lectures, and the inapplicability of material taught (Atagi, 2011). Courses also fail to emphasise the transmission of new knowledge or innovative teaching strategies. To improve its current system, Thailand should offer a wide range of accredited teacher-training programmes to support teachers and educators in new learning strategies, assessment and evaluation, ICT competency and mentoring skills.

### More rigorous teacher licensing

Further improvements are also called for in Thailand's teacher licensing system.[1] Currently, a licensed teacher may teach all subjects at all levels. A first step in the right direction could be to grant more specialised teacher licences, especially in subjects that require more technical ability, such as science and mathematics. In addition, when the system was first implemented, nearly all teachers were awarded their licences by meeting such minimum requirements as merely attending training programmes. A stringent, demanding evaluation of applicants' qualifications should be considered as the next step in reforming the system.

## Educational reform should be supported by closer co-ordination across related agencies

Finally, as reforms for teacher appraisal, student assessment, and school evaluation cut across several education agencies, such agencies should discuss and agree on any existing policy changes before implementing them. At present, the Teachers Council of Thailand, the Office of National Education Standards and Quality Assessment (ONESQA), NIETS, and other related education agencies act independently of one another. A centralised agency tasked with monitoring, evaluating and accounting for reform could strengthen overall improvements to educational quality.

### Box 2.9.1. **Examples of incentives to enhance teacher performance in OECD countries**

Many countries have initiated incentive systems that will attract and retain highly effective teachers in schools. On the other hand, there is also evidence that incentives can improve the quality of teaching among incumbent teaching personnel. Educational sectors in various OECD countries show that incentive programmes generally take two forms – financial and non-financial – and rewards may be individual or collective. Many countries use a combination of both programmes. For financial incentives, the critical issue is to determine the appropriate mix of payments that will attract and retain teachers while also encouraging them to improve their knowledge and skills.

**Knowledge and skills-based incentives.** Teachers are required to demonstrate their skills either through external examinations or teacher evaluations based on a school-system-selected model of teacher effectiveness. Such programmes focus on the continuing improvement of teacher competencies that are likely to lead to improved student outcomes. In some states in **Germany**, teachers are able to climb the salary levels faster if their performance evaluations are good. In some regions of **Switzerland**, teachers must successfully complete self-evaluations and external assessments before they can move up to the next pay scale.

**Incentives for hard-to-staff schools.** These schemes create an opportunity to staff schools in remote areas or which serve students in disadvantaged neighbourhoods. In **Australia**, the Queensland Remote Area Incentive Scheme provides teachers with cash awards of up to AUD 5 000 (Australian dollars) to cover the cost of transport from the remote areas where they work to metropolitan areas for shopping or visiting relatives. The awards come on top of retention stipends, also of up to AUD 5 000 per year.

Box 2.9.1 (contd.)

**Incentives for shortage subjects.** Such incentives usually take the form of additional compensation for teaching certain subjects, such as mathematics, science, technology, foreign languages and special education. In the **UK**, the Shortage Subject Support Scheme provides up to GBP 5 000 (British pounds) for students studying a secondary subject that is identified nationally as a shortage subject. Loan forgiveness programmes for teachers of mathematics, science, special education and technology offer up to GBP 16 000 in teacher training tuition expenses over ten years of teaching.

**Pay-for-performance incentives.** These include incentives based on a school's performance and improvements in test scores and on its attendance and drop-out rates. They may also target individual teachers' performances and improvements in their test scores. For instance, schools in **Brazil** are rewarded for meeting and exceeding targets for teacher attendance and retention and for student achievement, enrolment, graduation, and low drop-out rates. Teachers in schools that meet all their targets receive up to three months' additional salary, with pay proportional to their school's level of achievement.

However, these kinds of incentive schemes are often deemed controversial. Not only may there be great differences in the effectiveness of teachers, but such schemes may actually create disincentives in schools with low-achieving students.

**Non-financial incentives.** They usually take the form of recognition and prestige, job stability and favourable working conditions with adequate support and resources.

*Source:* OECD (2009c), *Evaluating and Rewarding the Quality of Teachers: International Practices*, OECD Publishing, Paris. http://dx.doi.org/ 10.1787/9789264034358-en

## POLICY FOCUS

### Improve agricultural productivity through modernisation and education

Agriculture, which employs 35% of the workforce, is a key sector of the Thai economy. Even though its contribution to GDP has declined to 12% over time, it is still one of the world's top exporters of commodity crops such as rice, sugar cane and rubber.[2] It exported 20% (in value) of its rice exports to Asian countries in 2012. In recent decades, Thai agriculture has shifted towards higher-value crops with increased mechanisation in order to remain competitive and raise farmers' incomes.

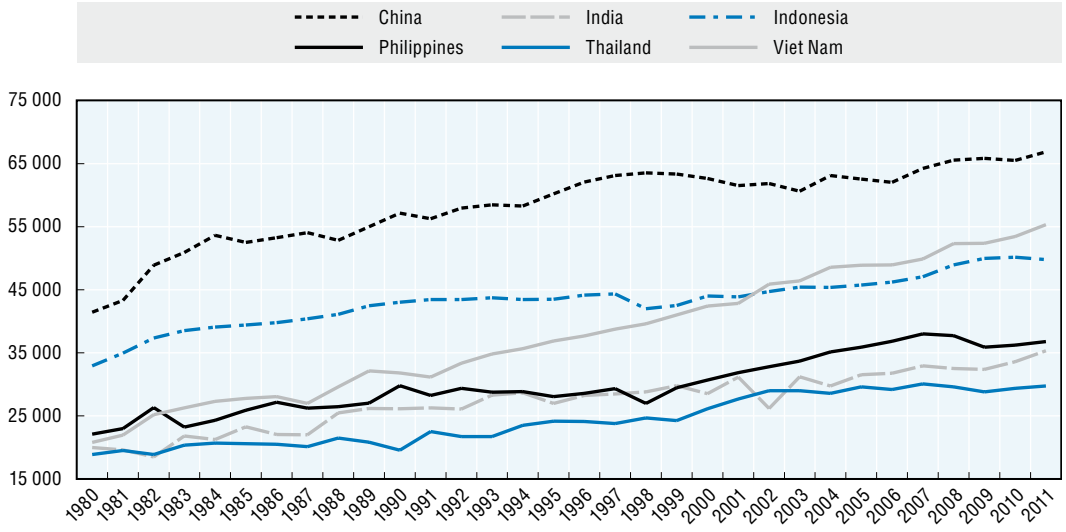
### Despite reform, productivity is still relatively low and there is a shortage of farmers

In spite of increased mechanisation and industrialisation, Thailand continues to lag behind its Asian neighbours in agricultural productivity. Rice yields, for example, have been lacklustre by regional standards even though they have increased modestly over time (see Figure 2.9.4).

Forssell (2009) reasons that lower productivity is due to the production of low-yield, higher-quality rice and a low percentage of irrigated farming areas that leaves farmers unable to diversify into more profitable crops. Some analysts also believe it is the result of the widely scattered ownership of land that prevents small farmers from benefitting from economies of scale. Further contributory factors include the limited use of technology, inadequate research into and development of better farming methods, and the slow transfer and take-up of new knowledge and technologies among local farmers.

Figure 2.9.4. **Rice yield in Thailand and other Asian countries, 1980-2011**

Hectogram per hectare




*Source*: FAOSTAT.

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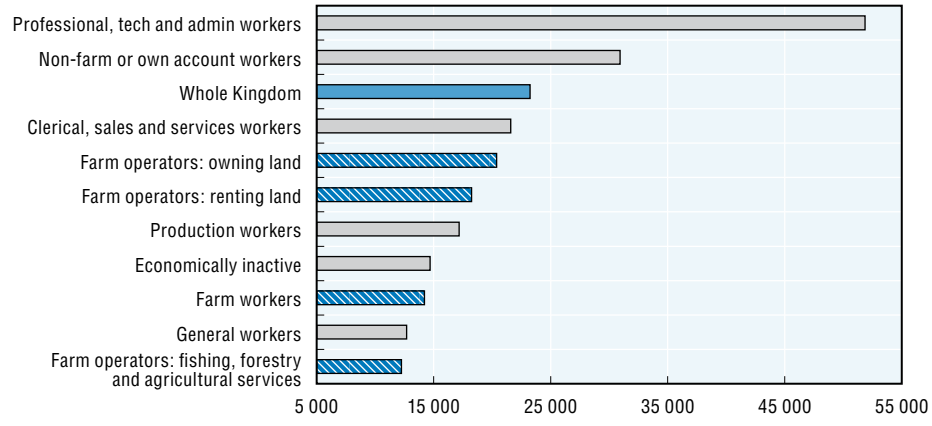
In addition, the Thai agricultural sector is experiencing a labour shortage as farmers move into the better-paid manufacturing and services sectors and those who remain get older. Incomes are below the national average and below those of professional, technical, and administrative workers (Figure 2.9.5). According to government statistics, the average age of farmers jumped from 31 years old in 1985 to 42 in 2010. Only 12% were under 25, compared to 34% in 1985.

Figure 2.9.5. **Average monthly household income in Thailand, by type of occupation, 2011**

In Thailand baht




*Source*: National Statistical Office, *Household Socio-Economic Survey* and CEIC.

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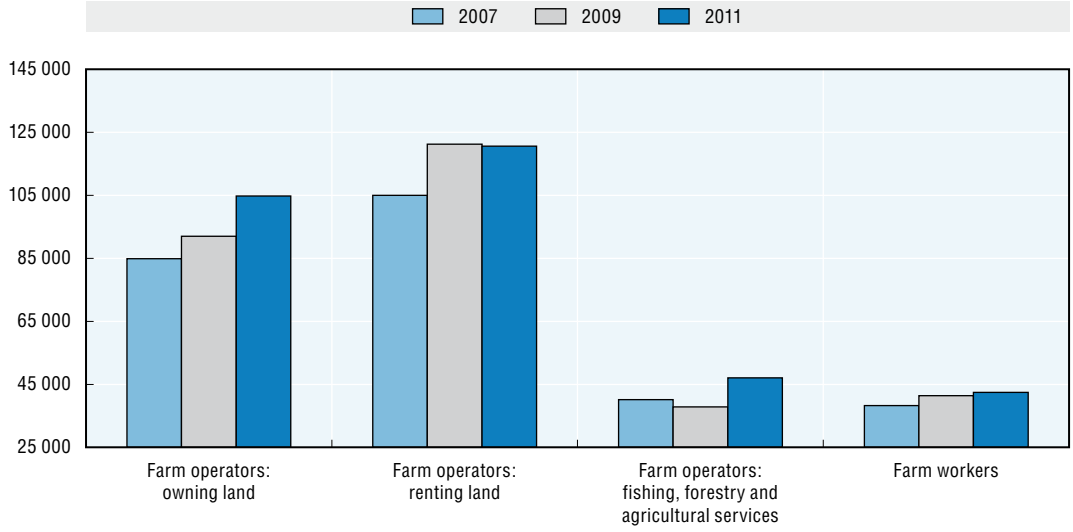
## Contract farming, agribusiness development and farm subsidies bring farmers income security

Since the 1980s, the government has encouraged contract farming as a way of providing farmers with a stable income.[3] To make Thailand the "kitchen of the world", farmers, contract companies and agri-industrial firms have worked with financial institutions like the Bank for Agriculture and Agricultural Cooperatives (BAAC) to produce processed food such as canned fish, tomato products, and poultry – primarily for export markets. Contract farming has allowed small farmers to become part of the global food chain, bringing them a degree of market certainty, price stability, access to technical knowledge in farming methods and ease of access to loans.

Nevertheless, small-scale farmers are seldom able to negotiate fair contracts with large agri-businesses. Nor do they have any control over production methods, and many have had to bear the costs of initial investment and expensive machinery and equipment. Farmers also have to contend with the risk of natural disasters and crop failures (Delforge, 2007). As a result, they are increasingly indebted, with smallholders owing an average of THB 105 000 (Thailand baht) in 2011 – equivalent to five months of their average monthly income (see Figure 2.9.6).

Figure 2.9.6. **Average household debt in the farming industry in Thailand, by type of occupation, 2007-11**

In Thailand baht




*Source*: National Statistical Office, *Household Socio-Economic Survey* and CEIC.

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With the rise of contract farming in Thailand, there is a need for a dispute settlement mechanism to ensure the fairness of contracts and so improve working relationships between farmers and contract companies or agri-businesses. The Senate Committee on Agriculture and Co-operatives identified the lack of such an agency as a problem in 2003. But efforts to put one in place have not borne fruit.

In the agriculture sector as a whole, some progress has been made towards improving farmers' welfare and social protection. In 2011, the Department of Rice in the Ministry of Agriculture and Co-operatives set up the Farmers' Welfare Fund to provide old age pensions and disability compensation.[4] With the dynamics of the Fund now in place, it should be easier to extend welfare coverage to crop insurance for farmers affected by natural disasters and health insurance for those whose health has been damaged by pesticide poisoning.

In addition to the Farmers' Welfare Fund, the government has put in place price intervention programmes for rice, cassava, red onion, garlic, pineapple and rubber. The programmes serve as income insurance for farmers. The rice price guarantee scheme, for instance, pays local farmers at rates that are higher than market prices for unlimited output, with the taxpayer and exporters footing the bill.[5] Since the inception of the schemes, farmers have reported a doubling of their monthly incomes.

Although subsidies have benefitted local farmers, they are not necessarily the right way forward. Experience from OECD countries indicate that, while price policies are a convenient lever for the government in the short term, they address income concerns inefficiently and often prove to be fiscally unsustainable (OECD, 2012f).

At a time when rice production from countries such as China and India has increased, there are concerns that the farm subsidy scheme has made Thai rice uncompetitive in the global market, giving rise to anti-dumping fears over the government's large rice stockpiles and farmers' lack of incentive to improve their productivity. Rather than using the added income to improve their productivity, farmers have reportedly spent it on fertilisers to increase rice production.

The government needs to decide whether to pursue its intervention scheme by weighing its costs and benefits against the pros and cons of a policy that tackles the underlying causes of poor productivity and low farmers' incomes.

### Focus on further modernisation and education focus to raise productivity and farmers' incomes

Instead of using price and market interventions, policy makers should encourage rural incomes to grow through productivity gains. Their efforts to that end could include increased mechanisation, the use of new technologies in farming methods, and the transfer of the resulting knowledge and experience to agricultural communities. It is precisely in that direction that Thailand has gone with its moderately successful Smart Farm scheme.

Launched in 2008, Smart Farm was intended to boost agricultural sector productivity by applying knowledge and technology to conventional farming methods – first at farm level and, subsequently, across agricultural supply chains and logistics. State agencies under the aegis of the National Science and Technology Development Agency worked with the private sector to introduce farmers to equipment such as sensors to evaluate soil acidity, fertiliser mixing machines, sugar cane water management tools, and shrimp farm monitors.

However, the main challenge in using ICT to improve farming efficiency is insufficient investment in such technology on a nationwide level – Thailand's existing broadband network reaches only 33% of its total population (Pornwasin, 2012). To that should be

added the difficult tasks of convincing farmers to use ICT in their farming methods, educating them to that end, and addressing the inadequate capacity of qualified IT support personnel. For the successful implementation of Smart Farm projects, extending Internet coverage to rural farms should be complemented by the training and recruitment of qualified IT professionals.

In the meantime, farmers' communities could be organised to share best practices in and understanding of technology utilisation, yield management, harvesting techniques, and disease and disaster management. Thailand has established community rice centres to share ICT knowledge and know-how, with more capable farmers teaching and counselling others (Sangbuapuan, 2012).

**POLICY FOCUS**

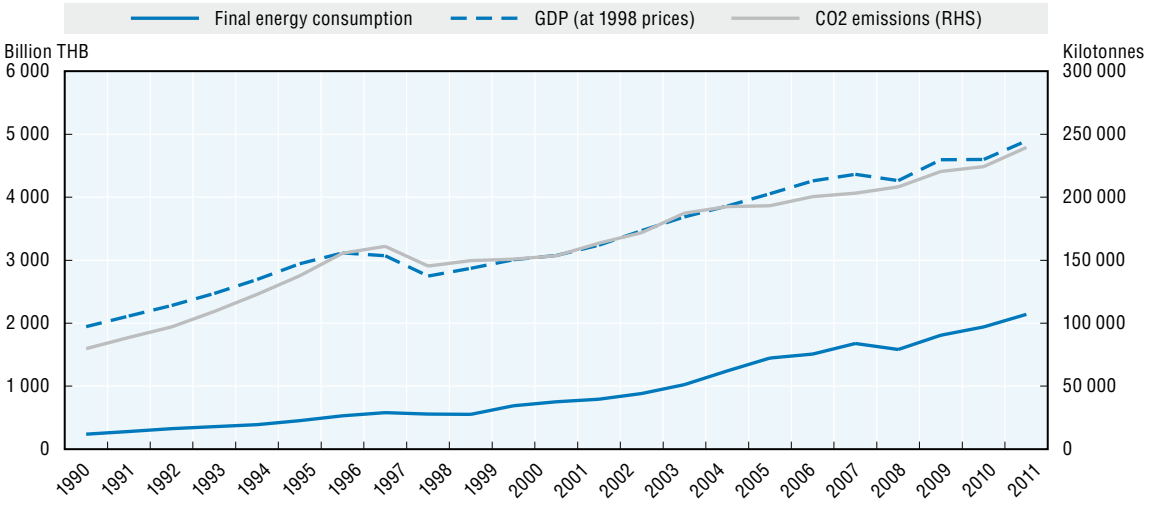
**Improve institutional co-ordination to achieve green growth**

Many Asian countries have become more mindful of green growth development strategies to address the issues of climate change, the depletion of natural resources, and energy security. Thailand is no exception, with the government making the goal of green growth in a low-carbon society a central theme in its 11th NESDP. Since then, its efforts have been supported by both national and sector-specific local policies to promote a clean, green economy that does not preclude growth.

### Economic growth increases resource consumption and environmental pollution

The Thai government's recent commitment to the green growth imperative was prompted by concerns over the country's energy use – particularly as it has not decoupled economic growth from its consumption of raw material resources and the resulting greenhouse gas emissions (Figure 2.9.7). Indeed, even during the 2009 global financial crisis, growth and energy consumption continued to be closely coupled. Greenhouse gas emissions in Thailand ranked 20th in the world and 5th in East Asia, according to the World Bank in 2011. Thailand was also the third most energy-intensive ASEAN economy after Brunei and Singapore in 2010, as Figure 2.9.8 shows, which suggests that it has a great deal of room for energy efficiency improvement.

Figure 2.9.7. **Final energy consumption, GDP (at 1998 prices) and $CO_2$ emissions in Thailand, 1990-2012**




*Source*: National Economic and Social Development Board (NESDB), Bank of Thailand (BOT), Energy Policy and Planning Office, Ministry of Energy (EPPO); and Department of Alternative Energy Development and Efficiency, Ministry of Energy (DEDE).

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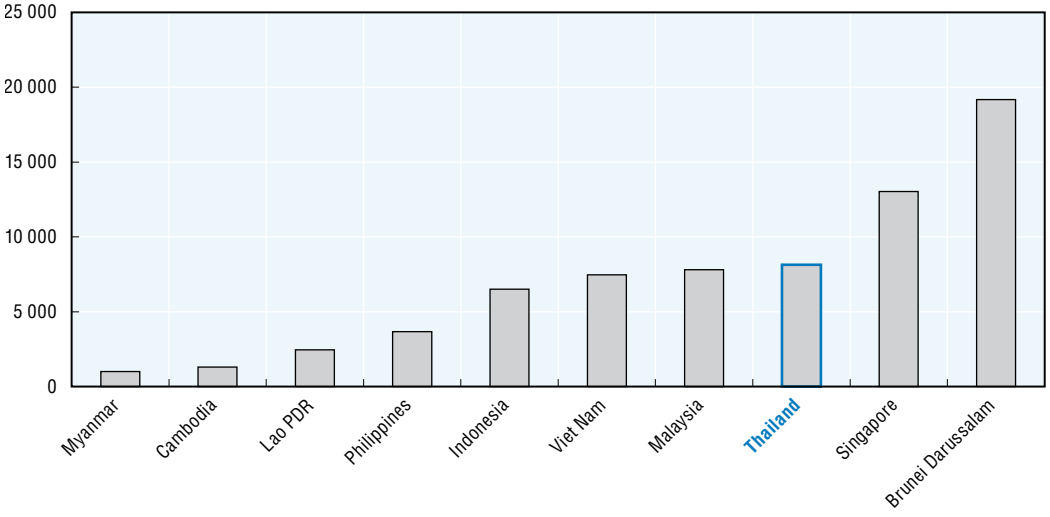
Figure 2.9.8. **Energy intensity in Thailand and other Southeast Asian countries, 2010**

British terminal units (Btu) per 2005 USD PPP




*Note*: Energy intensity is defined as total primary energy consumption in British terminal units (Btu) per 2005 USD PPP.

*Source*: U.S. Energy Information Administration (EIA).

StatLink http://dx.doi.org/10.1787/888932938555

## Government departments take action as Thailand rolls out its green economy policy

The Thai government has now set a number of national targets in order to improve environmental quality and reduce greenhouse gas emissions (Table 2.9.2).

Table 2.9.2. **Climate change mitigation targets for Thailand**

| | Emissions | Energy efficiency | Renewable energy | Deforestation |
|---|---|---|---|---|
| **National plan** | Energy Efficiency Development Plan (2011-2030) | | Renewable and Alternative Energy Development Plan (2012-2021) | - |
| **National targets** | Reduction of 30% energy emissions below BAU* by 2020 (base year 2005) | Reduction of 15% energy intensity by 2020, 25% by 2030 (base year 2005) | 20% of final energy demand from renewable energy by 2021 | Forest cover to be 40% of total land mass by 2020 (target introduced in 1991, level is 37% in 2010, up from 25% in 1998) |

*Note:* *BAU refers to business-as-usual.

*Source:* ADB and ADB Institute (2012), *Study on Climate Change and Green Asia: Policies and Practices for Low-Carbon Green Growth in Asia: HIGHLIGHTS*, Asian Development Bank Institute, Philippines; Department of Alternative Energy Development and Efficiency, Ministry of Energy.

In addition, multiple ministries and agencies have developed their own environmental policies and action plans for the sectors for which they have responsibility. For businesses and SMEs, there is a range of government assistance programmes in the areas of certification, loans, tax and non-tax incentives to coax companies into producing eco-friendly materials and reducing their environmental impacts (Table 2.9.3). To improve environmental quality on an industrial level, five eco-industrial estates have been built to help companies operating there reduce their environmental footprint and energy consumption.

Table 2.9.3. **Green growth initiatives enacted for companies operating in Thailand, by ministry**

| Agency-in-charge | Initiatives and areas targeted |
|---|---|
| **Ministry of Industry** | Green Industry Initiative to promote green production in 30 industries |
| | Training courses for industries, businesses and SMEs on green curriculum |
| **National Science and Technology Development Agency** | The Company Directed Technology Development Programme (CD) |
| | Industrial Technology Assistance Programme (iTAP) |
| **Board of Investment** | Special tax and non-tax (e.g. import duty exemption) privileges to enterprises related to energy conservation, renewable energy and production of environmentally friendly products |
| **Department of Alternative Energy Development and Efficiency** | Feed-in tariffs e.g. the Adder programme for small power producers and very small power producers |
| | Training courses aimed to promote green skills (with the Bureau of Energy Human Resource Development) |
| **Ministry of Tourism and Sports** | Green Leaf Programme certifies hotels according to the level of energy efficiency (Board of Environmental Promotion of Tourism Activities) |
| | Training courses on eco-tourism |
| **Ministry of Energy** | Investment grants for design, consultant and partial investment to support renewable energy (biogas, municipal waste and solar hot water) projects |
| **Thai financial institutions** | Green Loans to support environmentally-friendly projects |
| | ENCON Fund - ESCO Fund and the Energy Efficiency Revolving Fund to provide financial support for energy conservation-related activities |
| **Federation of Thai Industries** | Training courses on clean technology, application of value engineering approach in energy conservation and environmental standards |

*Source:* OECD Development Centre compilation from various sources.

### Effective institutional co-ordination a prerequisite for successful green growth

The key to the successful implementation of green growth and energy conservation measures in any country is effective institutional co-ordination across the key sectors and between central and local government (World Bank and NESDB, 2011).

In Thailand, despite efforts by public and private sector agencies to push for environmental reform, researchers and policy experts state that there is a lack of focus, enforcement, and policy co-ordination at national, local, and sectoral levels. The challenge for policy makers is to implement green growth strategies in a more integrated manner across those different levels. One way could be through a green-growth inter-ministerial committee with the mandate, authority, and resources required to lead efforts across sectors and regions. Singapore, for instance, set up an inter-ministerial committee on sustainable development in 2008 to formulate a clear national framework and strategy with goals and targets for the next 10 to 20 years. Co-chaired by the Minister for National Development and the Minister for the Environment and Water Resources, its members include ministers from relevant government departments.

Besides effective institutional co-ordination across public agencies, the successful implementation of a green growth policy also requires the participation and awareness of the general public and, as a consequence, a shift towards greener consumption practices. The Thai government's approach to environmental and green policies is generally top-down, with little participation from local communities. The general public therefore tends to be unaware of the benefits of such policies or the costs of environmental degradation and is not supportive of green policy efforts. It is clear, then, that the Thai government should include public consultation and feedback in the formulation of future green growth strategies. Korea actively promotes a green, low-carbon lifestyle by offering incentives, supplying practical information, and including the environment in its educational curriculum at elementary and secondary school levels (Sang In, Jin-gyu and Hongseok, 2012).

### *Notes*

1. The teacher licensing system was established in 2003 after the passing of the Teachers and Education Personnel Council Act. Applicants and teachers have to adhere to the Education Performance Standards – for professional knowledge and experience, performance and conduct – before they can apply or renew their existing licenses. Attending approved training programmes is a major factor for renewal for teachers, but the current process involves self-reporting paper work only (Atagi, 2011).
2. 2012 data.
3. According to the Food and Agriculture Organization of the United Nations (FAO), "contract farming can be defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice".
4. Members of the Fund will reportedly contribute to it, with their contributions being matched by the Thai government. The government will offer an endowment of at least 150% of members' contributions, with a committee chaired by the Permanent Secretary for Agriculture setting out benefits and membership criteria.
5. The rice subsidy policy was first introduced in 2001. It functioned as a mortgage programme in which farmers were able to get a fixed minimum price for their rice, which was slightly higher than the market rate. It was reintroduced in 2008 under the Samak government (Forssell, 2009). Current Prime Minister Yingluck Shinawatra continued the programme in 2011 as a way of winning the support of farmers. His government pledged to buy unlimited quantities of rice from farmers at a 40-50% premium over the market price. The government has spent THB 300 billion on the scheme and will channel in an additional THB 100 billion by the end of 2013. It is conducting a similar pledging programme for rubber following protests against falling global rubber prices

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