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RURAL THAILAND: CHANGE AND CONTINUITY

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ISEAS YUSOF ISHAK INSTITUTE

Trends in Southeast Asia

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FOREWORD

The economic, political, strategic and cultural dynamism in Southeast Asia has gained added relevance in recent years with the spectacular rise of giant economies in East and South Asia. This has drawn greater attention to the region and to the enhanced role it now plays in international relations and global economics.

The sustained effort made by Southeast Asian nations since 1967 towards a peaceful and gradual integration of their economies has had indubitable success, and perhaps as a consequence of this, most of these countries are undergoing deep political and social changes domestically and are constructing innovative solutions to meet new international challenges. Big Power tensions continue to be played out in the neighbourhood despite the tradition of neutrality exercised by the Association of Southeast Asian Nations (ASEAN).

The **Trends in Southeast Asia** series acts as a platform for serious analyses by selected authors who are experts in their fields. It is aimed at encouraging policy makers and scholars to contemplate the diversity and dynamism of this exciting region.

THE EDITORS

Rural Thailand: Change and Continuity

By Porphant Ouyyanont

EXECUTIVE SUMMARY

- Despite rapid industrialization in Thailand, the contribution of agriculture to GDP remains unusually high.
- The share of agricultural employment in total employment has also remained high, relative to the country's income level, as has the share of the rural population relative to the total population.
- Agribusiness has grown significantly, and there has been a rise in the number of large and strongly financed commercial farms that are less labour intensive. Contract farming has also been developing.
- The introduction of a rice premium by the government obstructed the modernization of the agricultural rice sector and caused the rice share in GDP to steadily decline, while that for upland crops such as cassava, maize, sugarcane, and oil palm increased. However, rice remains the most important crop.
- The high proportion of the population still living in rural areas and working in the agricultural sector attests to the resilience of that sector in the face of industrialization.

Rural Thailand: Change and Continuity

By Porphant Ouyyanont[1]

INTRODUCTION

Few countries have undergone greater structural changes in recent years in the passage from rural underdevelopment to urbanization and industrialization than Thailand. As recently as 1980, the Thai rural population made up 82 per cent of the total population and only 15 per cent lived in cities with populations larger than 50,000. The Bangkok metropolis alone accounted for around 60 per cent of the country's urban population.[2] Rice cultivation was still dominant, and was done with limited mechanization, using traditional technology. Today, however, large cities (especially Bangkok, and many other fast-growing centres in the central region such as Rayong) and rapidly expanding industries dominate much of the country.

The economic and demographic transformation of Thailand was particularly apparent from around 1986 until the early 1990s. In addition, despite the sharp dip caused by the 1997 Asian Financial Crisis, impressive growth continued until recently.

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[2] Population Census 1980.

However, rather surprisingly, village communities did not decline to the extent that one might have expected. The rural population remains large and significant, and the contribution of agriculture to GDP remains high. For these reasons, the greater attention being paid to rural development is warranted. This became all the more so with the emergence of a strong, rural-based, political force, most clearly seen in simplistic association with the "red-shirt" movement and the rural northeast and north.[3]

This essay examines demographic, production, economic and infrastructural data in Thailand's rural areas and considers some of the strategies used by the rural population to adapt to changes.

AN UNUSUALLY SMALL REDUCTION IN THE RURAL POPULATION

Thailand's population is still predominantly rural. In 2010, 56 per cent of the population lived in rural areas,[4] of which no less than a quarter were farmers. With the exception of the late 1980s, the proportion of agricultural workers to the total workforce has undergone only gradual decline. The share of non-agricultural employment surpassed that of agriculture for the first time only in 1999. However, the share of agriculture in Thailand's GDP has fallen significantly, to 10 per cent in 2010, compared with 40 per cent in 1980.[5]

There is no doubt that the strong rural aspect that has long characterized Thailand reflects the predominance of Bangkok. For a long time, Bangkok was the only major urban centre in the country. Other significant urban centres emerged only after the 1960s. Thus in 1947, Bangkok's population was 20 times the size of the second largest city, Chiang Mai. This difference continued growing. In 1960, the ratio with respect to Chiang Mai's population was 26 to one; in 1970, 35 to one, and

[3] For an interesting piece on recent rural socio-economic and political change, especially on the relations of Thai peasants with the Thai state, see Walker (2015).

[4] Population Census 2010.

[5] NESDB, www.nesdb.go.th, various years.

in 1980, 55 to one.[6] Bangkok's proportion of Thailand's total population rose steadily over the years, from under 5 per cent in the 1940s to some 10 per cent in the 1980s. Bangkok's population formed around 60 per cent of the total urban population in the 1980s.[7] In 2010, the officially registered population in Bangkok (Bangkok metropolis or Bangkok and Thonburi) numbered 8.2 million and accounted for 28 per cent of the total urban population.[8] However, if non-registered migrants (such as immigrant workers and those from Myanmar, Laos and Cambodia) were included, the population of Bangkok totalled around 10–11 million. Thus, Bangkok's share of the total urban population is actually higher.

However, after the 1980s, Bangkok's share of Thailand's urban population began falling significantly as provincial centres showed rapid growth. This in turn contributed to rural change by spurring agricultural diversification.

Although Thailand's population kept increasing, the annual population growth rate has shown a significant decline, especially after the early 1970s. From 2.7 per cent between 1960 and 1970, it fell to 1.1 per cent between 1990 and 2000 and 0.72 per cent between 2000 and 2010.[9] These lower growth rates resulted from rising incomes and effective family planning programmes implemented from the early 1970s onwards. Fertility rates are now slightly below replacement level.

The 1990s saw a significant change in the rural population as younger workers moved to the Bangkok region and the central provinces. Also, there were clear signs that the long period of extensive and available land for agricultural production was coming to an end. There was a rapid shift from agricultural to non-agricultural employment. Ammar noted in 2001 that "most of the movement was among men and women in the 15–24 years old group between 1989 and 1998. The agriculture sector lost almost half of its workers in this age group within these years."[10] But since then,

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[6] Falkus (1993), p. 144.

[7] Statistical Yearbook of Thailand, various years.

[8] http://popcensus.nso.go.th/file/popcensus-10-01-56-E.pdf.

[9] Population Census, various years.

[10] Ammar cited in Nipon (2007), p. 6.

the rural labour force has declined only gradually: "Between 1999–2005, the decline in the number of 15–24-year-old farm workforce dropped little more than 0.6 million persons. The decline is mainly attributed to the increase in number of students and non-agricultural employment in the rural areas".[11] The extension of compulsory education from primary to secondary education, and the establishment of new universities in the provinces in the 1990s were important in drawing young villagers from rural areas to Bangkok and nearby provinces to pursue higher education.[12]

As a consequence of low fertility rates and out-migration, the agricultural population is now older than in previous years. The National Statistical Office Surveys found that the proportion of farmers aged 60 years and over increased from 4.4 per cent in 1987 to 9.3 per cent and 12.3 per cent in 1999, and 2011 respectively.[13] This ageing of the workforce in rural areas will have significant implications for Thai rural development and for elderly support in the future.

CHANGES IN RURAL AGRICULTURE AND INDUSTRIALIZATION

Thai economic development took off in the 1960s and various aspects of industrialization, such as export-led growth, foreign capital inflows, technology transfer, labour markets and urbanization, to mention but a few, have held centre stage. On the other hand, the agricultural sector, and rural society generally, are often viewed as essential, though rather passive, components of overall economic change. Agriculture is a source of industrial raw materials, providing foodstuffs for the urban population, providing vital exports to enable increasing imports and the servicing of foreign debt, and providing a large pool of underemployed labour that flows to the urban and industrial sectors.

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[11] Nipon (2007), p. 8.

[12] See, for example, Nipon and Pattamawadi (1992).

[13] National Statistical Office cited in <http://www.bangkokbiznews.com/blog/detail/514538>.

Perhaps the most important contribution of agriculture to Thai economic development has been to help earn foreign exchange. As shown in Table 1, for a long time, the share of agricultural exports to total exports was higher than the share of agricultural GDP to total GDP. This meant that agriculture played a greater role than industry in export earnings. In 1960, at the start of the Thai economic development era, agricultural export share to total export was as high as 90.5 per cent. As the country's industrialization proceeded, the proportion of industrial exports increased. In 1980, for example, the agricultural export share was recorded at 58.3 per cent, falling quickly to 22.6 and then to 17.8 per cent in 1990 and 2014 respectively (see Table 1).

The share of agricultural employment in total employment has remained unusually high, relative to the country's income level. In turn, this means that the share of rural population in the total population has also remained high. Both these related characteristics are of long standing. In 1971, agriculture accounted for nearly 80 per cent of total employment. In 1990 the figure was still around 65 per cent, and in 2000 about 45 per cent. In 2015, the share was still some 33 per cent. These figures not only show that a high proportion of the employed population was in agriculture, but also that the rate of decline was slowing in recent years. In fact, agriculture today remains the single largest source of employment in Thailand (see Table 2).

It has been suggested that the way official statistics are collected exaggerates agricultural employment. Agricultural labour is seasonal and workers may state that they work in agriculture when in fact they work in other sectors. In addition, workers who combine both agricultural and non-agricultural employment in the village may also exaggerate the total amount of agricultural employment by recording just their agricultural work. Nevertheless, a recent attempt to examine such biases concludes that Thailand's agricultural employment is nevertheless still significantly higher than in comparable countries.[14]

[14] Klyuev (2015), pp. 23–24.

Table 1: Thai Agricultural Production in GDP and exports, 1960–2014 (billion baht)

	GDP (current price)			Exports (current values)		
	Agriculture	**Total**	**Share (%)**	**Agriculture**	**Total**	**Share (%)**
1960	21.5	54.0	39.8	7.6	8.4	90.5
1970	38.5	136.1	28.3	10.4	14.8	70.3
1980	152.9	658.5	23.2	77.6	133.0	58.3
1990	254.5	2,051.2	12.4	133.3	589.8	22.6
2000	431.1	5,069.8	8.5	476.0	2,730.9	17.4
2010	1,137.5	10,802.4	10.5	1,135.7	6,060.1	18.7
2014	1,378.3	13,148.6	10.4	1,308.0	7,313.7	17.8

Source: Medhi (1995, p. 48) and Quarterly Gross Domestic Product, various years.

Table 2: Share of Employment by Economic Sector in Thailand, 1971–2015 (per cent)

	Agriculture	**Industry**	**Service**
1971	79.2	5.3	15.5
1980	69.4	11.8	19.8
1990	64.5	22.3	14.2
2000	45.1	19.2	35.7
2010	38.2	20.6	41.2
2015	33.0	22.8	44.2

Source: Labor Force Survey, various years.

It is notable that in recent years there has been a slowdown in the decline of the agricultural labour force as a proportion of the total employed workforce, and also a narrowing of the productivity gap between agriculture and the other sectors.[15]

Against the background of these general considerations, we shall now look in more detail at aspects of the rural economy.

CHANGE IN THE STRUCTURE OF THE RURAL ECONOMY

Structurally, rural production in Thailand has changed considerably. The share of rice in GDP, for example, has steadily declined, accompanied by an increase in upland crops such as cassava, maize, sugarcane, and oil palm. This can be attributed to the rice premium or rice export tax established in 1955, and abolished in 1986. For the government, it satisfied two main purposes. First, it was a major source of government revenue, easily administered and collected. The premium provided as much as 17 per cent of total government revenue in 1956 and 1957. The

[15] Ibid., pp. 11–13.

share since then has declined to between 9 and 14 per cent between 1958 and 1965, and to 3.5 to 8 per cent during 1966 and 1970.[16]

Secondly, the rice premium was used mainly to prevent an excessive increase in the domestic price of rice when world prices rose.[17] The difference in the border price and the domestic price of rice was therefore substantial, imposing a heavy burden on rice farmers (see Table 3).

This not only led to low agricultural productivity but also to a transfer of income from the rural to the urban sector, widening the urban-rural gap.[18] When compared to other Asian countries, the improvement in rice yields in Thailand was very small (see Table 4).

Virabongsa (1972) employed the simulation model and concluded that the abolition of the rice premium would have increased the paddy output by 2.1 per cent and the paddy cultivated area by 1.4 per cent in 1953–69.[19] Similar to Sarun (1978), he showed that if the rice premium was eliminated, paddy output and paddy cultivated area would have

Table 3: Nominal Price Effects of Rice Premium (baht/ton)

	Domestic Price	**Border Price**	**Tax Premium as percentage (BP-DP/BP)**
1960–64	974	1,448	32.1
1965–69	1,241	1,783	30.5
1970–74	1,469	2,335	32.8
1975–79	2,419	3,222	25.0
1980–84	3,459	4,156	15.5

Source: Christensen (1993), p. 216.

[16] Chaiyawat (1975), p. 171.

[17] Ibid.

[18] A comprehensive survey of the literature on aspects of the economic impacts of the rice premium on the Thai Economy can be found in Rungsan (1987).

[19] Cited in Rungsan (1987), p. 210.

Table 4: Comparative Rice Yields of Thailand and Selected Countries in 1981–85

Country	Kg per rai
South Korea	990
Japan	950
Taiwan	787
Burma	493
Sri Lanka	447
Pakistan	410
India	331
Thailand	306
Lao	254

Source: Ammar and Viroj (1990), p. 28.

increased 0.9 per cent and 0.8 per cent respectively.[20] Chesada (1978) simulated the abolition of the premium in a dynamic crop-choice model and estimated that the domestic price of rice would rise by 38 per cent and paddy output would increase and overall farm income would go up by 30 per cent.[21] The rice premium thus obstructed the modernization of the rice sector by distorting the rate of returns and/or encouraging the diversification of crops such as maize, kenaf and cassava. The rice premium greatly reduced the use of fertilizers, pesticides, chemical inputs, and various mechanized production factors.[22] The share of paddy

[20] Ibid., p. 210.

[21] Cited in Feeny (1975), p. 113.

[22] Per capita fertilizer use in Thailand was very low for example in 1962–63 (1.8 lbs per capita) which was only 4.8, 5.8 and 6.9 per cent of the comparable levels for Japan (37.4 lbs per capita), Taiwan (30.8 lbs per capita), and Korea (25.9 lbs per capita) respectively (Bertrand 1969, p. 181). In the mid-1960s, in terms of the use of fertilizer per acre, Thailand was among the lowest in Asian countries, estimated at 1.3 kg being used per acre, Sri Lanka 21.9, Taiwan 148.2, India 3.2, Indonesia 3.5, Korea 96.6, Malaysia 12.4, Pakistan 4.2 and the Philippines 7.3 (Asian Development Bank cited in Tanet (1974), p. 216).

land with respect to total cultivated area declined throughout the post-war period, from 88 per cent in 1950 to 79 per cent in 1960 to 68 per cent in 1965.[23]

Many observers have emphasized the extent of the discriminatory policies caused by the rice premium. It should be noted however that the more favoured commercial crops were usually less labour intensive than rice, and so added to the shift in the balance between demand/supply conditions for urban and rural labour.[24]

However, rice remains the most important crop in Thailand. In 2013, paddy growing occupied around 51 per cent of the total cultivated area and engaged around 65 per cent of the active agricultural population.[25] Factors sustaining rice production include the expansion of a second rice crop in the 1980s and 1990s, increased intensification, multiple cropping, and specialization.[26]

The 1990s saw greater diversification, with intensive livestock rearing, aquaculture, horticulture and fruit production. Production of vegetables, fruits and flowers all increased, though rice continued to be the staple crop. In 1998, the rice share in total crop income was 40 per cent, followed by rubber (12.5 per cent), fruit and tree crops (12.2 per cent), sugar cane (9.2 per cent), vegetables (9.0 per cent) and cassava (4.1per cent).[27]

The past two decades or so have seen remarkable changes throughout rural Thailand, nowhere more so than in the Central Plain. There was

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[23] Bertrand (1980, p. 21) also estimated that the rice premium resulted in a substantial disincentive measured by market returns in land that undervalued rice by some 50–70 per cent. The rice premium led to market returns to land that were generally around 100–300 baht per rai, substantially below returns that could be obtained from biannual upland crops (Bertrand 1980, pp. 71–79).

[24] See for example Bertrand (1969; 1980), Feeny (1982), Rungsan (1987) and Ammar (1989).

[25] Agricultural Census 2013.

[26] Nipon (2007), p. 46.

[27] Financial and Economic data for Thailand, various years; Shigetomi (2004), p. 360.

a sharp increase in larger less labour-intensive commercial farms with very large capital accumulation and investment, and in a broad range of activities involving cultivation of shrimps, fruits and vegetables.

This change was fundamentally brought about by contract farming — for example in the raising of chickens, pigs, fish and so on — which requires capital, technology, and intensive management, and helps link agriculture ever more strongly to Thailand‘s urbanization and export-oriented industrialization.[28] Contract farming is a system with a vertical chain of production and marketing between manufacturers and farmers in specific commodities, which ensures that the flow of raw materials, such as baby corn, asparagus, chickens and ducks to processing plants, is kept constant.

Agribusiness which is largely related to contract farming also grew significantly, with increasing vertical integration of upstream inputs and downstream processing industries.[29] Thailand has become a world leader in the export of key commodities such as canned pineapple, frozen prawns, and frozen chickens. Rates of expansion of output of frozen poultry and canned vegetables, for example, averaged respectively 35 and 54 per cent annually during the 1980s, and reached 57 and 52 per cent in the 1990s and 2000s respectively.[30]

Thailand has developed the agribusiness sector much further than any other Southeast Asian nation, and the industry is dominated by large corporate enterprises. Notable is the giant multinational Charoen Pokphand Group. By 1993, this was Asia’s largest agribusiness with annual sales exceeding US$5 billion, and a workforce of 50,000 (excluding contract farmers) and comprising 200 companies across 16 countries.[31] Another change in agricultural production has been regional specialization, with a single crop increasing its share of total output.

[28] Kasetsart University (1996), p. 82.

[29] Hirsch (1994), p. 322.

[30] Financial and economic data for Thailand, various years; Hirsch (1994), p. 322.

[31] Falvey (2000), p. 308.

Such specialization has resulted in lower average costs, and increased innovation.

In the Central Plain, irrigated rice cultivation still predominates, but its share has declined in favour of crops for the metropolitan market including market gardening produce and tree crops. Fruits such as grapes, and vegetables such as asparagus, often require considerable investment.[32] Urban growth and proximity of some provinces to the Eastern Seaboard also favour single-crop specialization.

The north, northeast, and west are highly specialized in crop production. The crop share of agricultural value added in the north increased from 74 per cent in 1981 to over 90 per cent in 2013.[33] One explanation is that the north has the smallest farm household land holdings and may not be suitable for other agricultural activities except vegetables and high-value fruit trees.[34] Due to a plentiful supply of surface water, many farmers can grow several crops in one year. Shigetomi points out that the north is fortunate in that "local people developed a communal irrigation system using water from rivers and streams; this system allows higher paddy yields than in other regions and dry-season cultivation of crops such as soybeans."[35] The west specializes in upland crops and rice.

In the northeast, the major crops are rice, cassava, and sugarcane. Agricultural activities are concentrated in crop production, which, for example, in 2012 accounted for 82.6 per cent of agricultural value added, and livestock (13.8 per cent).[36] Because of the lowland rain-fed terrain, poor soils, and limited irrigation, rice yields are low. Most rice production is of glutinous rice, which is mainly consumed domestically. The upland areas are used to grow cassava, sugarcane, and until recently, rubber. Northeast agricultural households are more dependent on rice than any

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32 See, for example, Cheyroux (2003), pp. 157–76.

33 Agricultural Statistics of Thailand 2014.

34 Nipon (2007), pp. 48–51.

35 Shigetomi (2004), p. 301.

36 Agricultural Statistics of Thailand 2012.

other region in Thailand. In 2013, almost nine in ten farmers produced mainly rice. This compares to two in three in the north, two in five in the centre, and one in ten in the south.[37] The agricultural census for 2013 showed that 67.5 per cent of all northeastern land holdings were used for rice, compared to 50.1 per cent in the north, and 42.4 per cent in the Central Region.[38] Only 11 per cent of the northeast farmers specialized in non-rice crops, such as cassava and maize, or fruits and vegetables, the lowest share in the country.[39] However, the northeast contributes a good part of Thailand's agricultural output, much of which is exported. Thus, in the mid-2010s, the northeast produced 50 per cent of the cassava, one-fifth of the maize, and 42 per cent of the sugarcane in the country.[40] Also in recent decades, Jasmine rice (or Hom Mali rice) which was mostly produced and exported from the southern provinces of the northeast generated export income of about 57,000 million baht a year and made up 35 per cent of the total Thai rice export in the years 2010 to 2015.[41]

In the south, farmers have specialized in rubber, palm fruit, and fisheries. Because of the higher value added of these products compared to rice and other upland crops, the south is the only region where the proportion of agricultural income exceeds non-agricultural income.

Labour productivity has always been lowest in the northeast, where in 2014, value added per agricultural worker was 26,913 baht; in the north it was 38,094 baht, the Central region (excluding Bangkok) 71,386 baht, and the south 82,976 baht.[42] The difference in labour productivity reflects the types and pattern of production and other factors including irrigation, proximity to markets, and other agricultural infrastructure.

[37] Agricultural Census 2013.

[38] Ibid.

[39] Ibid.

[40] <http://www.oae.go.th>.

[41] Ibid.

[42] Gross Regional and Provincial Product, 2014 and Labour Force Survey, 2014 (4th quarter).

Out-migration from rural villages, a decline in fertility rates, and a growing demand for labour in non-agricultural sectors led to real wage rates in both agriculture and non-agriculture increasing. Between 1965 and 1985, agricultural real wages in the country stagnated, but increased by 50 per cent over the following ten years.[43] This increase had a significant impact on farm mechanization, as farmers invested in more farm machinery rather than paying for labour. Farm mechanization grew particularly rapidly in the Central Plain, being mainly concentrated in the irrigated areas. Somporn's study of rice farming in the Chao Phraya delta in 1987 and 1998 concluded that: "As a consequence of labour saving technology the total amount of labour use per hectare in rice farming activities declined significantly in all production environments".[44] In some areas of agricultural production, such as the fisheries sector, the shortage of labour resulted in a reliance on cheaper immigrant labour, largely Burmese.

A principal factor in rural economic change was provincial industrialization. The late 1980s saw industrialization spread from Bangkok to other parts of the country, with paths of industrial-urban development stretching far into adjacent provinces. Foreign direct investment grew rapidly, in particular from Japan. By the early 1990s, industrialization stretched 100 km north from Bangkok to Ayutthaya, 50 km to Chachoengsao, and 100 km southeast to Sriracha. The Eastern Seaboard, focusing on Laem Chabang and Rayong, was a major developmental region. After 1987, manufacturing establishments not only dispersed further towards provinces in the Central region, but also to the northeast and the north. Growth rates of manufacturing establishments in 1987–91 were recorded at 4.5 per cent in Bangkok, 11.8 per cent in the Central region (excluding Bangkok), 11.6 per cent in the north, 12.3 per cent in the northeast, and 9.2 per cent in the south.[45]

Even after the economic crisis of 1997, the Thai industrial sector continued to grow at a good pace (4.6 per cent) while employing 2.4–3.5

[43] Molle (2003), p. 101.

[44] Somporn and Hossain (2003), p. 122.

[45] Department of Community Development, various years.

million workers in 1996–2007.[46] Much of the growth came from rural industrialization. Around 2005, the Central region, especially Rayong, Ayutthaya, Rathchaburi, and Saraburi, contributed around 85 per cent to the National Industrial Product.

This growth had a significant impact on the countryside, and resulted in higher labour costs. Increased migration to industrial sectors both rural and urban has continued, impacting on land prices and the environment. The move from agricultural to non-agricultural occupations was pervasive in the Central Plain. In the early 2000s, only one third of the workers there were in agriculture, compared to 45 per cent in the mid-1980s.[47] Recently, the rural population continued to drop sharply, as reported by the 2014 Labour Force Survey. At that time, there were 38.49 million employed persons, of whom 13.21 (34.3 per cent) and 25.28 million (65.7 per cent) worked in agriculture and non-agriculture respectively.

Urban influence increasingly dominated and affected not only villages near large towns, such as Bangkok, and provinces in the Central region where growth rates were especially high in the 1990s, but also large towns in the provinces generally.[48] Kitahara's study of a village near industrializing Nakhon Pathom in the late 1990s found that "many of the young can commute to the industrial and service sectors every day and live in their parents' house or surrounding areas and they can sustain the basic unit of the extended family".[49] He also found that economic activities in the village underwent significant change in comparison with the situation in 1980. For instance, "the younger age strata predominantly engage in factory work, while middle-aged people together with the elderly and women are found working in rice farming or in the village informal sector. These informal activities include all kinds of cottage industries, daily wage work, or sub-contract workshops, food preparation, as well as a few small-scale factories."[50]

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[46] Industrial Census (2007).

[47] Labour Force Survey, various years.

[48] World Bank (2005), p. 60.

[49] Kitahara (2004), p. 16.

[50] Kitahara cited in Molle (2003), p. 5.

In recent decades, suburban encroachment into agricultural land has taken some cropland out of cultivation. Agricultural land has been transformed into housing estates, golf courses, commercial areas, or department stores. McGee noted that such peri-urban environments and economic areas are marked by increasingly diverse sources of household income, by the mobility of the population, and by new products for urban markets, such as flowers and vegetable production.[51] Peri-urban areas grew rapidly not only in the Central Plain, especially areas near Bangkok such as Nakhon Pathom, Pathum Thani, and Samut Prakarn, but also occurred in large towns in the provinces. In Chiang Mai, for example, "land in peri-urban has become increasingly attractive for, and sought after by, urban middle-class people who want to have residences in the countryside but remain close to the facilities and cultural attraction of the city."[52]

Encroachments have also been made into forest reserves, such as Khao Yai in Nakhon Ratchasima province. The economic boom after 1986 saw land prices increase considerably, and as businesses moved beyond towns, the distinction between urban and rural became blurred. The emergence of high-value crops constituted the most important aspect of the agricultural diversification process.[53]

Other notable changes included the growing middle and upper middle classes, a rise in new business elites who borrowed large sums from the banks and acted as major investors as contractors, moneylenders, and owners of businesses for rent (such as rented motorcycles). Under the new pattern of development, there was expanded investment in many aspects of production, such as mechanization.

McGee's analysis of peri-urban Asia applies well to Thailand. As communications improved in the post-war years, smallholder rice farmers were increasingly in contact with markets. The peri-urban landscape is characterized by non-agricultural activities in areas that were previously

[51] McGee (2008), pp. 43-44.

[52] Tubtim (2014), p. 161.

[53] For example, see Kasetsart University (1996).

largely agricultural. Non-agricultural activities are diverse, including trading, transportation and industry, and involve members of the same household. Thus, one person may commute to the city to work as a clerk, another engage in farming, a third work in industry, and another employed in retail.[54]

Peri-urban zones are generally characterized by extreme fluidity and mobility of the population.

> This mixture creates a situation in which the economic linkages within such a region may be as important as the dominance of the large cities in the megalopolis that draw the surrounding regions into their orbit … The availability of relatively cheap transport such as two-stroke motorbikes, buses, and trucks facilitate relatively quick movement over longer distances than could be covered previously. Thus, these zones are characterized not only by commuting to the larger urban centres but also by intense movement of people and goods within the zones.[55]

In sum, although agriculture has declined in terms of GDP and the total labour force, its role is still significant to Thai economic development. Agricultural production ensures food security, and provides income, both direct and indirect, to a large portion of the population.

PHYSICAL INFRASTRUCTURE AND THE TRANSFORMATION OF RURAL THAILAND

One of the most important factors for rural development is improved communications, especially the expansion of the provincial road network. Today, nearly all villages are connected by roads. The post-war period saw a dramatic increase in road-building, especially in the 1960s and 1970s, and a national road network was largely completed by 1975.

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[54] McGee (2008), p. 43. For a fuller discussion, see pp. 30–51.

[55] Ibid., p. 53.

According to a World Bank study, in the early 1980s, "fewer than 5 per cent of all villages are more than one kilometre from the road and do not have an access road to one."[56] Improved communications opened up vast areas for cultivation, especially for upland crops, and contributed to the breakdown of the isolation and self-sufficiency which had hitherto been characteristic of many outlying parts of the country.

Roads encouraged labour mobility. For example, in the mid-1950s, only some 100 vehicles a day used the old Saraburi-Korat road. In the 1960s, 2,500 vehicles were traversing the new Friendship Highway daily, which provided the northeast, for the first time, with all-weather communication with Bangkok.[57] The growth of upland crops followed the development of roads, and large areas of land were brought under such cultivation. Tractors replaced animal power and the cultivation of upland crops such as cassava, kenaf, sugarcane and maize expanded enormously in the Central region in the 1960s and later in the northeast during the 1970s.

Agricultural growth in the northeast was possible in 1958 to 1980 due to this expansion of cultivated land, rather than to an increase in the use of capital. During this period, the production of commercial crops in the northeast grew by 12 per cent per year,[58] following a pattern akin to Myint's "Vent-for-Surplus" model.[59] Fuglie noted that in the region,

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[56] World Bank (1983), p. 129.

[57] Falkus (1991), p. 66.

[58] Fuglie (1991), p. 331.

[59] Myint (1958). The "Vent-for-surplus" concept was introduced by Hla Myint, a Burmese economist, in the 1950s. According to this model, the rapid expansion of agricultural exports took place during the latter half of the 19th and early 20th centuries in some land-surplus developing countries. Unlike the comparative advantage theory put forward by the classical economist David Ricardo, the "Vent for surplus" model emphasized that such countries possessed surplus productive capacity left unexploited owing to an inelastic demand for locally produced goods and a poor state of economic circumstances such as internal economic organization, infrastructure development and so on. However, exports played an important role in creating new effective demand for the output of the surplus resources (Myint cited in Fuglie (1991), p. 331).

"[t]his phenomenal growth in agricultural exports was achieved not by diverting resources from the subsistence food crop (rice) but by mobilizing previously idle land resources to produce new crops for export (mainly cassava, and to a lesser degree kenaf, sugarcane, and maize)."[60] Farm cash income of northeast farmers had increased from only 5,187 baht per household in 1974 to 12,696 baht in 1988. This was then followed by a dramatic increase to 40,926 baht per household in 2001.[61]

Until 1977, short distance migration between Bangkok and the Central region was common. After 1977, rural migrants from the northeast outnumbered those from the Central region, reflecting the importance of national highways linking various parts of the northeast provinces. The pull of Bangkok became even stronger as new agricultural land became less available, and as continued low agricultural productivity led to wider regional income gaps.

By 2005 it was noted that even in the northeast, where rural road density per person was the lowest, "the northeast is adequately endowed with transport infrastructure and has easy access to major urban growth centres. Road length, unpaved and covered in asphalt, was expanded continuously in the northeast."[62] Electricity came to some large villages in the late 1960s. In 1981, only 22,525 villages or 44 per cent of all villages had electricity. This rose to 75 per cent in 1986 and 98 per cent ten years later.[63] By 2011, 98.48 per cent of all villages and 99.13 per cent of all households had electricity.[64]

The various benefits of electrification included cost-saving in comparison with the use of traditional fuel, an increase in the productivity of agri-related industries and intensive farming from the use of electric irrigation (thus creating job opportunities in the farm sector), an increase

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[60] Fuglie (1991), p. 331.

[61] Benchaphun (2007), p. 125.

[62] World Bank (2005), p. 115.

[63] <http://www.globalelectricity.org/Projects/RuralElectrification/Presentations/9.2%20(RWE)%20-%20Pongsak%20Harnboonyanon.pdf>.

[64] Department of Community Development (2011).

in agricultural productivity, and the establishment and development of business entities and cottage industries. In addition, electrification facilitated social and community programmes that brought benefits in the areas of health, family planning, mass literacy, social gathering, recreational facilities, working environment. Villagers now receive better social welfare, earn more income, have a better lifestyle and are healthier.[65]

Electricity in the villages allowed for and increased the purchase of electrical goods such as fans, radios, refrigerators, and televisions. Suvit recorded that in 2002, of the total 1,574 households in 12 villages in 10 provinces in the northeast, more than 53.4 per cent had refrigerators, 84.9 per cent owned televisions, 74.3 per cent owned electric rice cookers, 88.1 per cent had electric fans, 62.6 per cent owned motorbikes and 11.8 per cent had cars.[66] Through radio and television, newspapers, and the internet, farmers were able to improve their knowledge, as well as benefit from new sources of entertainment. Thus, roads brought significant social and economic gains for rural dwellers. Villagers in remote areas now had the opportunity to venture further — to market towns and cities. Travel broadened horizons, provided new experiences and brought hitherto isolated communities into contact with new products and new ideas. The availability of a cinema or of national newspapers was part of the broadening experience. The availability of better health and education services that were accessible as a consequence of better transport were certainly important social developments.

In addition, villagers have become increasingly connected by the emergence of other forms of communications. The use of the mobile phone was widespread for example in 2011, with some 570,512 village households (78.7 per cent of the total) owning a mobile phone. Interestingly, only 15.87 per cent of all village households had a landline. The distribution of mobile phone ownership by household in the various regions was as follows; it reached 80.14 per cent in the Central region,

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[65] Ibid.

[66] Suvit (2003), p. 496.

80.34 per cent in the northeast, 75.69 per cent in the north and 78.7 per cent in the south.[67]

Beyond such obvious effects of improved mobility were two further significant social changes. One was that Bangkok was brought nearer, in time and in influence. Its image was built up through radio, television, cinema and stories of returning migrants. So different was Bangkok to other places, with its palaces, department stores, modern shops and streets that in the words of one writer, "[t]he spell of Bangkok is cast" among rural dwellers.[68] Rural-to-urban migration was a form of human capital investment, transferring the labour surplus of the low productive rural sector into the more productive urban sector. In this way, improved communications were a unifying force for the country. Villagers could now move more readily to Bangkok (and to other centres served by highways or accessible from nodal points), and those villagers living and working in Bangkok could bring back ideas and influences from the metropolis. Remittances sent back to villages were also substantial.

Television has played an important part in influencing the lifestyle of villagers since the late 1980s, even in remote areas. Keyes's northeast village study confirms this: "Since the 1980s, most Bang Nong Tuen villagers have worn urban-style commercially manufactured clothing whereas in 1963–64 most wore clothing they produced themselves. Today (in 2005) women use cosmetics, whereas few did in 1963–64. The styles of dress and housing and of consumption reflect, in part, the images villagers see every day on the TVs that are in nearly every home."[69] More importantly, "with the live broadcasting of parliament debates, mainstream politics is brought directly to rural households".[70]

The quality of everyday life in rural Thailand continued to improve over several decades and poverty has maintained its long-term decline. Life expectancy has increased dramatically from 55.91 years for males

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[67] Department of Community Development (2011).

[68] Paritta (1993), p. 31.

[69] Keyes (2014), p. 155.

[70] Hirsch (1994), p. 324.

and 62 years for females in 1965 to 71 years and 77.1 years respectively in 2010. The World Bank announced in 2011 that Thailand had moved from being a lower-middle income economy to an upper-income one. The country is also likely to meet most of the Millennium Development Goals (MDGs) on an aggregate basis. For example, maternal mortality and under-five mortality rates have been greatly reduced and more than 97 per cent of the population now have access to clean water and sanitation.[71] In 2011, almost all village households (99.44 per cent) had clean water.[72]

Nevertheless, as of 2013, over 80 per cent of the country's 7.3 million poor people live in rural areas. Income inequality, as measured by the Gini coefficient, has fallen in recent years, but stays consistently high at above 0.45.[73]

THE TRANSFORMATION OF RURAL HOUSEHOLD ECONOMIES

As we have discussed, massive changes took place in the rural areas from the 1990s onwards. A major question we should ask is: does a rural Thai society still exist today? According to Hirsch,

> Rural Thailand in the 1990s is less than previously made up of bounded entities that can be clearly identified as village communities, either in a geographical or social sense. Most rural people's social field has expanded greatly with increase in communications and migration. Village-level institutions such as the temple play a lesser role in social life than previously. It is difficult to talk of a "village economy" when so great a part of people's livelihood comes from elsewhere.[74]

[71] <http://www.worldbank.org/en/country/thailand/overview>.

[72] Department of Community Development (2011, p.14).

[73] <http://www.worldbank.org/en/country/thailand/overview>.

[74] Hirsch (1994), p. 331.

Keyes also suggested that in the northeast, "there is no longer a rural peasantry that has little interest in or linkage to the wider political economy. On the contrary, the people who today still identify as 'villagers' are … 'cosmopolitan' in their understanding of the world."[75]

Service sectors, including small-scale activities such as grocery stores, food stalls, motorcycle and tractor repair shops, television, radio and electronic repair shops, small construction firms, and a host of artisan workshops have grown very rapidly, mainly sustained by remittances. As Table 5 shows, such activities have been increasing in importance as major sources of additional employment.

Although rapid industrialization took place after the late 1980s, with young people abandoning agricultural production to work in factories and offices in urban areas, industrialization did not destroy village-based economies. Young villagers, especially in the Central Plain, commuted daily to their factory job but remained actively engaged in the production of rice, fruits, vegetable and shrimps.

Table 5 also shows an interesting pattern in how the household economy and peasant families turned their attention to alternative forms of non-agricultural activity as a means of survival. Peasants showed a remarkable capacity to adapt to changing conditions while at the same time conserving their established patterns of behaviour and their particular mode of survival. Indeed, it is at this point that peasant-workers, far from disappearing, increasingly imposed themselves on the village economy. Peasants provided the workforce and often the entrepreneurship which lay behind the expansion of a multitude of new small businesses.

What is interesting is that the formation of this workforce does not correspond to the classic model for the creation of an industrial working class. This model sees workers leaving farming due to agricultural modernization or because of the attraction of higher wages in urban industries. In the Thai case, the growth of small service activities in the village created different forms of enterprises. These relied solely on family workers and the resources of the peasant family. Characteristically,

[75] Keyes (2015), p. 28.

Table 5: Small Shops in Villages, 1999–2011

Year	Number of villages	Grocery store/small restaurants	Agricultural selling input shop	Vehicle repair shop	Radio and Television shop	Electronic repair shop	Welding shops	Small construc-tors	Artisan work-shops
1999	63,239	272,415	9,032	50,155	8,881	6,080	10,695	1,212	1,697
2001	66,193	292,420	15,366	59,449	10,117	7,301	12,497	4,503	6,443
2005	69,110	326,758	15,949	58,204	12,287	n.a	16,601	9,125	n.a
2009	71,130	327,152	20,606	62,311	25,587	15,587	17,413	11,368	n.a
2011	71,137	317,025	19,969	70,557	n.a	14,518	16,171	10,321	12,359

Source: Department of Community Development, various years.

only small amounts of capital and minimal skill levels are required. In many ways the new forms of enterprise built on traditional skills and traditions, such as marketing and bargaining.

In many villages where land was scarce or productivity low, households would diversify their production, adding animal husbandry or cultivating other products such as vegetables or fruit. Some would work on a seasonal basis in factories in nearby towns or Bangkok, while others went into family trade and service enterprises in the villages.[76] The typical farm family allocated labour to off-farm work, and a substantial portion of the added income was remitted to their home villages. Some of these remittances were then invested in agricultural production; here, the off-farm work was part of the household's plan for utilizing its labour and sustaining it.

Living in the city and working in the factory did not separate individuals from their households in the countryside. On the contrary, the mix of activities helped peasants survive on the land, and off-farm income sometimes helped equalize income distribution in the villages. Despite increasingly mixed economic activities and off-farm work, strong ties persisted within households and within the communities. Households continued to pool their labour to build new houses and to work on community projects. This accounts for the unusually high proportion of the population staying in the villages, and in the rural sector generally.

CONCLUSION

Despite rapid economic and social changes in recent decades, the Thai countryside has shown continuing strength and vitality. As discussed, urban influence has increasingly dominated and affected not only villages near large towns but also those out in the provinces. Yet we find that even there, a relatively large proportion of the population continues to live in rural villages and to work as farmers on small owner-occupied farms.

Village communities in Thailand have indeed often been able to withstand change, to maintain their populations and traditions, and in

[76] For a fuller discussion, see Porphant (2003).

many ways to flourish. They have managed this not by retreating into self-sufficiency or ossification, but through adaptation such as diversification into new crops for the urban and export markets; especially, the growth of local by-employments such as running small stores, repair shops, and so on.

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