

# Thailand: Economic Growth, Employment and Rural Development

FRIEDRICH W. FUHS  
JAN VINGERHOETS

## Summary

At present Thailand's economy is at the cross roads. Structural changes in production and employment are unavoidable if the country is to continue the successful development. With both import substitution, which was the past pattern of industrialization, and area expansion, which was the main source of increased agricultural production, coming to an end, a reconsideration of policies becomes necessary. A new approach towards economic development is needed which includes employment promotion under its chief objectives. It is argued that only an overall employment-oriented development strategy can, in the long run, succeed in providing the additional job opportunities needed to avoid increasing open unemployment.

## I. Introduction

Development economics have always given relatively much attention to "labour", particularly since the famous article of W. A. Lewis<sup>1</sup>. In this line of thinking abundant labour is first of all an asset, a potential for development. This is clearly reflected in the approach toward capital formation by Nurkse<sup>2</sup> and still prevails in the development model of Ranis and Fei<sup>3</sup>. The need for accelerated capital formation and an industrialization drive were the major prescriptions forwarded by these economists.

Since rapid growth would absorb the agricultural surplus labour, employment was, and largely still is, treated as a stepchild in development plans. In recent years more explicit attention is gradually being given to the employment aspects of development. Facts of life make clear that "surplus labour" is primarily to be considered as a burden and not as an asset in most developing countries. Earlier theory tried to show that surplus labour in agriculture could be transferred to the modern sector without jeopardizing food supply. In fact, however, one of the biggest problems facing planners in most developing countries today, is how to maximize the labour-absorptive capacity of the rural/agricultural part of the economy because the non-agricultural sectors just do not create enough employment opportunities for the annual increase in the labour force<sup>4</sup>.

<sup>1</sup> W. A. Lewis: "Economic development with unlimited supplies of labour", The Manchester School, May 1954.

<sup>2</sup> R. Nurkse: "Problems of capital formation in underdeveloped countries", Oxford, Blackwell, 1953.

<sup>3</sup> G. Ranis and J. Fei: "Development of the Labour Surplus Economy", Yale University, 1964.

<sup>4</sup> In all developing Asia, with Taiwan as the only exception, the number of people dependent on agriculture still increases year after year.

Many of the developing economies facing acute employment problems are more or less stagnating economies. Consequently the opinion still seems to prevail that an acceleration of output growth would automatically cure the social evil of unemployment and underemployment. That output growth is a necessary but not a sufficient condition to avoid or solve employment problems seems hard to accept. For instance, after a thorough examination of the subject, Turnham concludes: "What essentially is at issue is the possibility of tuning up the growth performance of these economies so as to get rates of growth of 7 or 8 per cent rather than the 4 or 5 per cent currently being achieved."<sup>5</sup> On the other hand, it is more and more being realized that the way in which output growth is being achieved is at least as important as output growth itself: more attention has to be given to the pattern of development<sup>6</sup>.

In the past two decades Thailand succeeded in increasing domestic production at an amazing speed. While during the period 1951–1958 total domestic product (in constant prices) increased on an average at a rate of 4.8 per cent, the year 1959 marked an upswing in economic expansion<sup>7</sup>. During the sixties Gross Domestic Product in real terms has been growing at a rate of 8 per cent per year on average.

The "dynamic sectors" have been manufacturing, construction, mining and services while agriculture, with an average annual growth rate of over five per cent during the sixties, has also been expanding very satisfactorily. The period 1955–1965 has been characterized as one in which exports functioned as an "engine of growth"<sup>8</sup>, with new agricultural products – maize, kenaf and tapioca – playing an important role.

During the second part of the sixties Thailand seems to have experienced some slowdown in the rate of growth in the exports of goods. The dynamism of the Thai economy is perhaps best reflected in the rapid growth of investments: government investments in infrastructure and private investments in manufacturing, transport, trade and services. The share of gross domestic fixed investments in the national product has increased from about 13 per cent in the late fifties to around 24 per cent in the late sixties.

As early as the beginning fifties the expansion of domestic expenditures resulted in a deficit on the current account of the balance of payments. However, till 1969 this deficit has generally been more than compensated by capital imports, resulting in a substantial accumulation of monetary reserves.

From 1965–1966 onward the already growing Thai economy has further been

<sup>5</sup> D. Turnham: "The Employment Problem in Less Developed Countries", in *OECD Observer*, December 1970, No. 49.

<sup>6</sup> For a brief examination of the nature of the problem, see B. A. de Vries: "Unemployment and Poverty – what remedies are available?", in *Finance and Development*, No. 1, 1972; also A. G. Chandavarkar: "More Growth – More Employment?", in *Finance and Development*, No. 2, 1972.

<sup>7</sup> For a detailed discussion see J. C. Ingram: "Economic Change in Thailand 1850–1970", Stanford University Press, California, 1971, Chapt. 11.

<sup>8</sup> See W. M. Corden and H. V. Richter: "Trade and the Balance of Payments", in T. H. Silcock, ed.: "Thailand. Social and Economic Studies in Development", Australian National University Press, Canberra, 1967; and H. Myint: "Southeast Asia's Economy", Penguin Books, 1972, pp. 82–85.

stimulated by U.S. expenditures connected with the Vietnam war. The result has been that, despite rapid population growth — Thailand's population increased from 26.5 million in 1960 to 36 million in 1970 — per capita GDP has been expanding at a rate of about 5 per cent per year, reaching a level of almost 200 U.S. dollars in 1970<sup>9</sup>. Mainly because of deficits in the overall balance of payments in recent years, the Thai planners expect a somewhat slower growth for the years to come: for the Third Five Year Plan (1972–1976) the target for GDP growth has been set at 7 per cent per annum.

This very brief sketch of Thailand's economy might easily give the impression that, despite some difficulties at the moment, everything is fine with the Thai economy. However, a more detailed analysis, especially from the point of view of employment, will reveal that in more than one sense Thailand's economy is at the cross-roads.

## II. Cross-Roads and Dualism

The major cross-roads Thailand's economy is passing at present are two: one in industrialization and one in agricultural development. So far industrialization has been characterized by import substitution, an inward orientation. It is becoming clearer and clearer that the easy stage of import substitution is over. Past agricultural output growth has primarily been based on expansion of the cultivated area. But area-expansion which may be considered a byproduct of large-scale roadbuilding projects cannot be continued at the same rate. Future growth will rather have to be based on intensifying land use and yield increases.

Presently the Thai economy appears to be more dualistic than before the start of the rapid economic growth in the late 1950's. Firstly, there is the dualism between the Bangkok metropolitan area and the rest of the country. Despite some efforts to boost regional centers, Bangkok remains the only big city in the country. Practically all modern manufacturing and services are concentrated here. However, it is too simplistic to emphasize the dualism between Bangkok and the rest of the country. Also within Bangkok dualism seems to be at the increase. For instance, the housing conditions of the poor in Bangkok have not only been deteriorating absolutely, but particularly in relation to the housing situation of the better-off, which has improved. Many other examples of increasing dualism in Bangkok could be added.

Further, a more distinct dualism between industry and agriculture has emerged in the process of rapid growth. A modern, albeit rather small, manufacturing sector supported by modern services has been developed while agriculture based on area expansion has largely remained a traditional sector. Within the manufacturing sector there is also a dualism, however. A number of traditional, small family-enterprises continue to operate alongside with new manufacturing establishments promoted by the Government. Many of them are operated by or linked with foreign firms. Between these two types there is an enormous distance, a "widening gap".

<sup>9</sup> GDP at current market prices converted at the going exchange rate of 20.8 baht = one U. S. dollar.

A certain degree of dualism — dualism at different levels or in different respects — seems to be unavoidable in a developing country, particularly when output is rapidly being expanded. In Thailand dualism has not yet reached unmanageable proportions as seems to be the case in some other developing countries. The flexibility and mobility of the Thai people and the government development efforts, particularly in the fields of communications and education, have prevented this. Presently, however, the directions that will be chosen at the two cross-roads indicated above, will determine whether dualism will be enhanced or eliminated.

Sharpening of dualism might endanger the long-term viability of the economy. The multiplicity and intensity of the links between the modern and the traditional (sub-) sectors of the economy seem to be of decisive importance. Modern manufacturing industry in Thailand apparently operates more or less on an island. The links with the more traditional sectors, particularly agriculture, are weak. Modern industry is rarely based on indigenous raw materials, and only a limited part of its production is destined for the agricultural population. Furthermore, modern manufacturing is not creating much employment. Industrialization is not giving enough positive incentives to agriculture but it depends largely on agriculture as earner of foreign exchange which is of vital importance for the import of the raw materials and capital equipment. The exports of the modern manufacturing sector are almost negligible. The sector concentrates heavily on production for the urban middle class and the comparatively large foreign community. In this situation it seems to be very vulnerable and the internal dynamism within the urban market appears hardly strong enough to warrant a continuation of rapid output growth.

Within agriculture, now that Thailand has reached the era of increasing shortage of land, a dualism could easily develop: large, mechanized modern farms on the one hand and traditional, small farms on the other. The beginning of such a development can easily be observed in areas which have recently been opened up for the production of maize and cassava. The continuation and enhancement of this development would be detrimental both to long-term agricultural development as well as to continued industrial growth. In case output growth would be concentrated on a limited number of farms, manufacturing would be deprived of its potential mass market.

The major danger and drawback of dualism, or rather of concentrating development efforts too much on the creation of subsectors using the most up-to-date Western techniques, is that a serious unemployment problem is unavoidable and that consequently the majority of the population will not share in the fruits of development.

### III. Growth and Employment

The labour force of the country increased from 12.7 million in 1960 to 16.2 million in 1970, growing at a rate of 2.5 per cent per year on an average<sup>10</sup>. Presently about 45 per cent of the total population is in the labour force. Of those 15 years of age and over about 80 per cent are considered to be economically active. This very

<sup>10</sup> For details see F. W. Fuhs and J. Vingerhoets: "Rural Manpower, Rural Institutions and Rural Employment in Thailand", National Economic Development Board, Bangkok, 1972.

high percentage is mainly due to the high degree of labour force participation by women. About 47 per cent of the labour force consists of females<sup>11</sup>. Due to a population pyramid with a very broad base, the labour force will grow at an accelerated pace in the years to come. For the period 1980–1985 an annual growth rate of 3.1 per cent is expected. A conservative projection estimates an increase of the labour force by 9 million between 1970 and 1985.

The data available indicate that open unemployment is at present negligible in Thailand. According to a 1969 survey<sup>12</sup> unemployment ranges from 0.1 per cent in rural areas to 1.6 per cent in metropolitan Bangkok<sup>13</sup>.

Underemployment is a recognized problem in Thailand. The exact dimensions are, however, not well known. This holds particularly true for the urban or non-agricultural sector of the economy. In terms of working time some data are available for 1969<sup>14</sup>. In the non-agricultural sectors of the economy 5.1 per cent of the employed people worked less than 30 hours during the reference week. Data indicating underemployment in non-agricultural sectors in terms of very low or inadequate incomes are very limited<sup>15</sup>.

The most recent survey on incomes<sup>16</sup> indicates firstly a general difference in income level between Bangkok and the other urban areas of the country. While the average annual household income for Bangkok is calculated at 34,000 baht, for the other towns of the country it ranges around 25,000 baht. It further indicates that in Bangkok 15 per cent of the households have an income of less than 12,000 baht. The highest income group, 10 per cent of the number of households, has an annual income of almost 120,000 baht.

Data on wages are very scarce. The Department of Labour estimated in 1971 that still more than 100,000 employees in Bangkok work at a wage rate of 10 baht (about half a dollar) per day or less. Other data indicate that for many workers in the non-agricultural sectors outside Bangkok a wage of this order of magnitude is rather normal<sup>17</sup>.

Severe seasonal underemployment is as yet unavoidable in Thailand's agriculture, characterized as it is by a monsoon monocropping system. It is still widely believed that on the other hand general labour shortages arise during the peak months of agricultural activities. Some case studies in the relatively prosperous Central Region of the country seem to confirm this point of view<sup>18</sup>. In the Northern, Northeastern and

<sup>11</sup> Even in urban areas females form more than 40 per cent of the labour force. The question remains, however, to what extent women can be considered full-time members of the labour force, particularly in agriculture.

<sup>12</sup> Labour Force Survey, National Statistical Office, Bangkok 1969.

<sup>13</sup> The low figures are partly due to the definition used: the criterion is whether a person did any gainful work during the week preceding the visit of the enumerator.

<sup>14</sup> Labour Force Survey 1969, op. cit.

<sup>15</sup> These concepts do have a certain ambiguous character; a country would have to set its own minimum acceptable standards.

<sup>16</sup> Preliminary results of a survey on incomes and expenditures conducted by the National Statistical Office in 1968–1969, Bangkok 1971.

<sup>17</sup> Derived from the 1968 establishment survey of the Labour Department. Only average wages per branch per province are given; thus computed the average earnings of one third of employees in manufacturing are a monthly wage of 350 baht or less.

<sup>18</sup> However, most studies seem to concentrate too much on relating labour requirements to available family labour only.

Southern regions of the country, however, labour surpluses do exist in agriculture: even in the most busy months between one fifth and one quarter of the agricultural labour force is underemployed<sup>19</sup>. The conclusion seems justified that underemployment in agriculture is not purely a seasonal phenomenon but that it assumes more and more a structural character. Underemployment in agriculture would not be so serious if it were not accompanied by poverty and inadequate incomes. For 1970 GDP per capita of the farm population was estimated at 1,300 baht, while the same figure for the non-farm population was 8,600 baht.

#### GDP per capita by regions (1970)

Central region	6,100 baht
Southern region	3,500 baht
Northern region	2,400 baht
Northeastern region	1,750 baht

In the Northeast, the poorest region of the country, incomes of many farm families are very low: in dry-land villages per capita incomes below 1,000 baht per year are the rule rather than an exception.

For the Central region it is also important to review farm incomes under tenurial aspects. The owner-operators of farms are generally best off, they are followed by the part-owners and finally by the tenants who earn the lowest incomes. A few figures from a recent investigation indicate the order of magnitude of income differences related to different tenurial situations.

Table 1: Income figures in baht for three villages in the Central Region (1969/70)<sup>20</sup>

	Net farm income (baht)	Income per head (baht)	Net farm income (in %)	Income per head (in %)
Owner-operators	16,300	2,760	100.0	100.0
Part-owners	11,400	1,990	70.2	72.0
Tenants	7,800	1,530	48.1	55.4

In the northernmost region of the country the income and employment potential of at least one third of the farms, which are smaller than one hectare, are definitely limited.

The structure of employment did not change significantly. On the basis of the 1960 Population Census and the employment estimates at the beginning of the Third Five Year Plan (1971), the following picture emerges. Employment in the non-agricultural sectors of the economy has been growing at an average annual rate of about 5 per cent per year. Since, however, the labour force was growing at a rate of about 2,5 per cent per year, the share of the non-agricultural sector in total employment increased only moderately: from about 18 per cent in 1960 to 22.6 per cent in 1971. Since output in the non-agricultural sectors has been growing at an

<sup>19</sup> Information from Sample Surveys on Rural Employment; for details see Fuhs and Vingerhoets, *op. cit.*, page 16.

<sup>20</sup> Source: NEDB Rural Manpower Utilization Study, unpublished.

average annual rate of just over 9 per cent<sup>21</sup> an employment elasticity of output of 0.55 is calculated: on average one per cent increase in output was accompanied by an increase in employment of 0.55 per cent.

In the relation between growth of output and employment a striking difference exists between the secondary and the tertiary sector of the economy.

For the secondary sector — including mining, manufacturing and construction — the employment elasticity of output amounts to just over 0.4. The elasticity is particularly low for the manufacturing sector: 0.35. One trend is absolutely clear: the manufacturing sector has created very little employment.

In the tertiary sector employment has been growing rapidly; the employment elasticity of output is about 0.65. In the sector "transport and communication" the elasticity turns out to be almost 0.9; in this sector the growth in employment was almost as fast as the growth in output.

#### IV. Causes and Consequences of the Growth Pattern

The causes and consequences of this pattern of growth in output and employment are manifold. Firstly it turns out that during the period reviewed, almost 65 per cent of the increase in the labour force had to be accommodated in agriculture. This proved to be possible in Thailand's flexible agricultural structure, based as it is on family-sized farms. New roads linked large areas with the world markets. The expansion of relatively new crops — particularly maize and cassava — was stimulated by the government and active merchants. Rice production also increased. The Thai Government, namely, invested huge amounts of money in irrigation facilities. These investments did not (yet) result in doublecropping but caused yield increases through flood control and additional wet season irrigation. The major factor, however, that made employment of many more people in agriculture possible, was the cultivation of more land. Between 1953 and 1967 total planted area is estimated to have increased from 41.2 million rai<sup>22</sup> to 65 million rai<sup>23</sup>, or at a rate of 3.3 per cent per year. Area expansion has been the base of agricultural production growth.

The signs of increasing pressure on agricultural land are slowly becoming apparent in different ways in several areas of the country. In the Upper North, for instance, Thai farmers from the valleys are encroaching upon the hills in search for new land, whereas the highland population pushes downhill. In the Central Plain the number of tenants is on the increase, and in the Northeastern region only increasingly marginal land can be brought under cultivation. Increased tenancy and increasing pressure on the land, of course, raise the question to what extent the Thai farmers shared in the benefits of economic growth. It is not possible to give a clearcut answer to this difficult question, but it may be observed that the economic position of a number of farm families has significantly improved during the past decade. Those farmers have seized new opportunities open to them. The best examples of such modernizing farmers are to be found in the Thai maize belt, the

<sup>21</sup> GDP at constant 1962 prices.

<sup>22</sup> One rai = 1600 m<sup>2</sup>.

<sup>23</sup> Source: Agricultural statistics of Thailand, 1967 and 1970.

cassava area and west of Bangkok where intensive fruit and vegetable production was recently introduced. It must, thus, be feared that the real income of the majority of traditional farmers has increased only little.

The developments in agriculture have not yet been followed by a massive migration from the country-side towards the urban areas. It is clear, however, that for many young people, stemming from agricultural households, it is becoming more and more difficult to find employment in agriculture. With the continuation of traditional techniques, the employment and income possibilities on the farm, particularly in dryland areas, are definitely limited.

It is not fully clear to what extent the employment situation in agriculture is connected with the relatively rapid growth of employment in the tertiary sector. Are people already flocking into this sector because of limited employment opportunities elsewhere? Very low increases in average labour productivity, particularly in a sector like "transportation", could be taken as an indication that this is already happening.

The sluggish expansion of employment opportunities in the secondary sector was generally caused by modernization in a capital-intensive way. Industrialization has received high priority in Thailand's development policy, and a number of modern factories have been established. They are very heavily concentrated in the Bangkok area<sup>24</sup>.

The inward-looking Industrial Promotion Policy of the government, in the hope that the established factories might eventually become competitive on the world market, stipulated in many instances the application of modern technology as a condition for the granting of privileges. The limited domestic market for industrial products combined with the government policy of avoiding monopolies has led to the creation of factories of relatively limited scale. Only very few plants are in fact of such a size that economies of scale could lead to production at low costs. Besides, the existing capacity is in many instances grossly underutilized<sup>25</sup>.

Protection against foreign competition has been an essential feature of the industrialization policy. The prevailing structure of import tariffs is "tailormade" for individual industrial branches. This policy seems to have had a major effect on the attitude of investors in a new branch. They could be quite sure that they would be able to get enough protection to operate profitably<sup>26</sup>.

The import substitution policy has been successful with regard to a number of individual products. In some cases, despite increasing domestic consumption, imports have been falling. Taking broader branches of industrial activity, import substitution has been substantial in textiles and petroleum. With respect to other intermediate goods and capital goods import substitution was limited<sup>27</sup>. In the expanding domestic market, imports of manufactured goods have been growing only slightly slower than domestic production<sup>28</sup>. The new industries are heavily

<sup>24</sup> 75 per cent of the promoted firms are located in Bangkok.

<sup>25</sup> In 1970 it was estimated that most firms worked at a level of capacity utilization of approximately 70 per cent.

<sup>26</sup> In many branches the marginal producer really seems to need the prevailing protection; in the oligopolistic market structure it raises the profits of intra-marginal producers.

<sup>27</sup> For details see for example Ingram, *op. cit.*, pp. 292-297.

<sup>28</sup> For example, in the period 1957/58 - 1970/71 imports of durable consumer goods, vehicles and fuel increased at a rate of over 8 per cent per year on an average.



dependent on imported inputs. In the period from 1957/58 to 1970/71 imports of capital goods, raw materials and intermediate products increased at rates of about 13 per cent annually for each one of these three categories.

Consequently it seems justified to conclude "that the primary effect of investment promotion in Thailand has not been a substitution of domestic production for imports, but a substitution of one kind of imports for another — in particular, a substitution of imported raw materials, components, and capital goods for imports of products now turned out by promoted firms"<sup>29</sup>.

The very limited increase in employment in manufacturing is to be understood against the background of the briefly described pattern of industrialization. Average labour productivity in manufacturing<sup>30</sup> has increased from 15,000 baht in 1960 to approximately 30,000 baht in 1972. Both figures, of course, conceal the large differences existing between branches and establishments of different size. The increase seems to have largely been brought about by the emergence of some new branches with very high labour productivity and by rapid increases in labour productivity in some of the already existing ones. The most striking example of the first phenomenon is "petroleum refining". This sector did not exist in 1960. In 1969 "petroleum refining" accounted for almost 8 per cent of value added in manufacturing. With very high labour productivity<sup>31</sup> this sector, creating very little employment weighs heavily in the increase of average labour productivity in manufacturing.

Presently about 50 per cent of those classified as being engaged in manufacturing are still own-account workers and unpaid family workers<sup>32</sup>. They are working in a number of traditional home industries including rice mills, textiles — cotton, silk and straw — dress making, basketry and pottery etc., and repair shops. Their labour productivity appears to be very low and there is no single indication that it has been increasing over the years.

## V. Employment Projections

When preparing the Third National Economic and Social Development Plan (October 1971 — October 1976) it became apparent for the first time that the continuation of a situation of full employment could no longer be taken for granted. Eventually it was accepted in the plan that open unemployment would increase from almost 40,000 in 1969 to 180,000 in 1976.

The total labour force of the country was projected to increase by 2.64 million during the five years of the plan, growing at a rate of 2.9 per cent year. The method adopted to project the future employment situation was one of applying labour productivity growth rates to projected output increases by broad sectors of the economy<sup>33</sup>.

<sup>29</sup> Ingram, *op. cit.*, page 197.

<sup>30</sup> Calculated by dividing total value added by the total number of people estimated to be engaged in the manufacturing sector.

<sup>31</sup> Estimated at about 1 million baht per person employed.

<sup>32</sup> Data for 1960, 1963 and 1969 indicate that the proportion has remained constant.

<sup>33</sup> Eight sectors were distinguished: agriculture, mining, manufacturing, construction, electricity, commerce, transport, services.

Agriculture is projected to absorb 60 per cent of the increase in the labour force or an additional 1.5 million workers. It means that the agricultural labour force will be growing at a rate of 2.2 per cent per year, and that in 1976 still 75 per cent of the total labour force will be engaged in agriculture.

The employment statistics indicate that employment creation in manufacturing almost stagnated during the period 1966–1969. On this basis estimates for the Third plan project employment in manufacturing to grow at a rate of only 2 per cent per year. The share of manufacturing in total employment is projected to decline from 4.2 per cent in 1971 to 4 per cent in 1976. Almost 88 per cent of the additional employment in the non-agricultural sector is projected to take place in the tertiary sector.

Thailand still can be considered as a labour surplus economy in the sense that, in the growth process, the supply of labour to the non-agricultural sectors is perfectly elastic<sup>34</sup>. While average labour productivity in a certain sector may increase, employers continue to hire workers up to the point that marginal labour productivity approaches the wage level, while the minimum wage for unskilled labour is set by the income opportunities as marginal farmers. In this situation a real improvement in the standard of living of those who are mainly dependent on their labour capacity, seems very unlikely.

## VI. Towards an Employment-oriented Development Strategy

A development strategy giving due weight to employment considerations has to be devised against the background of the longterm employment outlook in the country<sup>35</sup>. The total labour force is projected to increase by 9 million between 1970 and 1985. Based on past trends one would project that an additional 2.8 million people might be able to find employment in the non-agricultural sectors of the economy<sup>36</sup>. In case one is very optimistic regarding employment opportunities in non-agriculture, an absorption by these sectors of an additional 3.3 million workers could be envisaged. This projection, rough as it is, indicates two things. Firstly, the bulk of the increase in the labour force, around two thirds, will have to be accommodated in agriculture. Secondly, accelerated labour absorption by the non-agricultural sector<sup>37</sup>, does have, even over a period of fifteen years, only a limited impact on the need to create employment opportunities in agriculture. Accelerated employment creation in the non-agricultural sectors is urgently required, but in the medium term at least, the employment battle will be won or lost in rural Thailand, in agriculture.

An employment-oriented development strategy must aim at eradicating the existing backlog of unemployment and underemployment and at creating new productive and remunerative employment opportunities.

<sup>34</sup> Following the dynamic interpretation of W. A. Lewis' "unlimited supplies of labour" as given by Higgins: "Economic Development", London, 1968.

<sup>35</sup> A five year period is too short; this seems to be the major reason why Thailand's employment problem has not fully been appreciated in the Third Five Year Plan (1971–1976).

<sup>36</sup> The GDP growth rate assumed was 7 per cent; for further details see F. W. Fuhs and J. Vingerhoets, *op. cit.*

<sup>37</sup> The difference between the "normal" and the "optimistic" projection.

Employment creation may not be an objective in itself but the ultimate objective is to have the poor people share in the fruits of economic growth. More demand for labour by the modern sectors and improved opportunities for self-employment in the traditional sectors are the prerequisites to this.

The need for an orientation of the development strategy towards employment is directly linked with the two "cross-roads" Thailand is passing presently: the end of import substitution and the end of area expansion. Such a situation is known from other Asian countries since years and Thailand should draw upon the experience of these countries and try to avoid the social and economic problems which are directly connected with land shortage and import substitution pushed too far in manufacturing.

A first approach to an employment strategy for Thailand could be "exploring ways of combining employment and output maximization policies as integral parts of the overall development strategy"<sup>38</sup>. In such a strategy one will have to consider the employment repercussions of the whole range of economic policies like taxes, import duties, internal price policy, the exchange rate, wage policy, education and training and last but not least agricultural policy. All factors making the utilization of capital more attractive than the use of labour should be identified.

Removing those biases in favour of capital may be expected to result in a more efficient resource allocation and consequently in higher growth of production and more employment<sup>39</sup>. In Thailand's private enterprise economy, guided mainly by indirect government measures, it seems appropriate to choose such a strategy as a starting point. It implies counteracting dualism as much as possible. Capital-intensive, large scale, modern production will no longer be considered as synonymous with development. The bias in favour of the most advanced areas and sectors must be redressed. The dichotomy between those regularly employed and the unemployed and underemployed, "the most dangerous dualism of all"<sup>40</sup>, will be directly tackled.

Since it could prove very difficult to create adequately remunerative employment opportunities for Thailand's rapidly growing labour force, a strategy giving first priority to raising the incomes of the poor and creating employment for them might be contemplated<sup>41</sup>.

For Thailand this line of thinking seems to be of particular relevance with respect to the development of the Northeast. Investments in this most depressed area of the country may be less productive, but when they lead to higher incomes of the poor, their social value will be high.

<sup>38</sup> ECAFE, *Economic Survey of Asia and the Far East*, Bangkok 1971, pp. 22–23.

<sup>39</sup> For a detailed discussion see G. Ranis: "Output and Employment in the 70's: Conflicts or Complements" in: "Employment and Unemployment Problems of the Near East and South Asia", ed. by R. G. Ridker and H. Lubell, Vikas Publications, Dehli 1971.

<sup>40</sup> H. W. Singer: "Dualism revisited: a new approach to the problems of the dual society in developing countries". *The Journal of Development Studies*, Vol. 7, No. 1, October 1970.

<sup>41</sup> "What a development plan needs to concentrate on is first an employment target and then — to achieve the target — not so much the pace as the process of growth . . .", Dudley Seers, "New approaches suggested by the Colombia employment programme", *International Labour Review*, Vol. 102, 1970, page 380.

## 1. Manufacturing

It seems that only in an employment-oriented development strategy can the rapid growth of Thailand's industrial sector be continued. One of the comparative advantages of the economy, its cheap and proficient labour, will have to play a crucial role in the industrialization policy. The necessary changes in the industrialization efforts can be approached from different angles or be expressed in different ways.

Limiting the easy profit-opportunities in import substitution industries may be expected to lead to greater attention from investors for production for export, production of goods for the lower income groups in urban and rural areas and production of inputs for agriculture. It is hard to predict that Thailand could successfully develop a light consumer goods export-industry, given the competition from other Asian countries and the import barriers imposed by the developed countries<sup>42</sup>. However, the industrialization policy could stimulate investors to seize the opportunities that do exist. As regards the internal market, an essential feature of the new development strategy is a shift in emphasis from the rather sophisticated products for the urban middle class towards simpler and cheaper consumer goods for the mass-consumption market. Since an employment-oriented development strategy aims at creating productivity and incomes of the masses of the people, increasingly large markets for simple consumer goods could become a major dynamic force in the industrialization process.

An employment-oriented industrialization policy would try to redress the dualism between large-scale and small-scale industries. Of course, for a number of products large-scale, capital-intensive production will prove to be most efficient. An equal chance could, however, be given to small-scale establishments in every branch of industry; an equal chance — with respect to access to capital, in dealings with government agencies, the provision of infrastructural facilities — to compete with bigger factories. It is not suggested to reserve certain branches for small-scale industries. When given the opportunity, the numerous industrious small entrepreneurs in Thailand will be able to prove in which branches they are able to produce efficiently by applying labour-intensive techniques, and by modernizing in a way fitting in the social and economic development of the country.

The promotion of "exportsubstitution", directly aiming at reducing the dualism between agriculture and manufacturing fits into an employment-oriented industrialization policy. Further processing of agricultural products — from the farm, fishery, forestry and livestock-sectors alike — seems to be the most promising way to boost Thailand's exports. Particularly for products like vegetable oils and meats and high grade blockrubber the marketing prospects appear to be very favourable<sup>43</sup>.

By promoting these industries it may be expected that the "modernization gap" between agriculture and manufacturing will directly be diminished. Linked with the foregoing points are the efforts to diminish, through the industrialization policy,

<sup>42</sup> See H. Myint, *op. cit.*, page 60.

<sup>43</sup> L. H. Manderstan and partners: "The Development of Export Industries in Thailand", study on behalf of the Royal Government of Thailand, London, October 1970.

the dualism between urban and rural Thailand. On the one hand, the increasing concentration of manufacturing in Bangkok leads to very heavy infrastructural costs in the metropolitan area. On the other hand, the development of industrial centers up-country seems a pre-requisite for sustained rural and regional development. Besides, agro-based and small-scale industries in regional "growth centers" would diminish the danger of accelerated migration to Bangkok.

In the long run, rural industrialization which should begin at the main regional centres will be the only solution of the employment problem. But for immediate action it seems advisable to ensure that the processing of agricultural products takes place in the regions of origin of the raw material. It is necessary, however, that in the context of the employment strategy immediate action is taken to eradicate laws and provisions which prevent industrial activities up-country and to work out a programme of incentives, promotional rights and transport subsidies for the promotion of rural industrialization.

Notwithstanding the urgency for a better regional distribution of modern industries, must the promotion of traditional village industries be continued and strengthened. Handloom weaving, pottery, rattan work, blacksmithy, etc., play an important role in the traditional rural economy with regard to employment and (sometimes) income. But many of these activities are endangered by the competition of low cost industrial products, and only an improvement in the quality of products and of sales organization will keep them in a competitive position. Handicraft industries (artistic crafts), i.e. nielloware, lacquerware, woodcarving, gem cutting which are mostly located in specific areas also contribute to employment and diversification in rural areas. Their development, however, is hampered in general by shortage of capital, lack of organizational ability in coping with sales, lack of regular supply of raw materials and traditional methods of production. Efforts to modernize production, to organize or improve marketing cooperatives and to find export markets could do much to strengthen these artistic crafts.

## 2. Agriculture

In Thailand planners and policy-makers are sharply aware of the fact that only by vigorously diversifying and modernising agricultural production, its growth momentum can be maintained. Besides, it is increasingly being realized that in the future growing agricultural production, exports and marketable surplus, can only be brought about by raising yields per unit area. This means that within a relatively short time-span a complete turn-about has to be realized in the pattern of agricultural growth. Fortunately, there is some breathing space to adjust to the new situation<sup>44</sup>. However, since a drastic process of change has to be initiated the years immediately ahead will be most critical: from now on, in programmes and policy, top-priority will have to be given to increasing land productivity. This is the first basic factor governing the future agricultural development strategy.

The second basic factor is the rapid growth of the labour force. The availability

<sup>44</sup> The Indicative World Plan of the FAO estimates that the arable area in Thailand increased annually by 4 per cent on an average during the period 1950 to 1962. For the period 1962-1975 arable area is projected to increase at an average annual growth rate of 1.6 per cent. For the period 1975-1985 this growth rate is expected to drop to an average of 0.5 per cent per annum.

of employment opportunities in agriculture will, at least in the seventies and eighties<sup>45</sup>, be of decisive importance for the general employment situation.

The social, economic and physical conditions in Thailand are such that this challenge can successfully be met, provided an employment-oriented agricultural development strategy is being implemented. By making the fullest possible use of the abundant agricultural labour force the growth rate of production will be highest. By increasing the earnings of millions of people in agriculture, the badly needed massmarket will be created, thus securing an internally viable economy in the long run.

The urgent need for an employment-oriented development strategy in Thailand can further be illustrated by trying to envisage how the traditional farm labour force<sup>46</sup> could possibly be absorbed by the farming sector. The FAO-projection regarding agricultural land implies that the arable area will increase by about 10 million rai between 1970 and 1985. Our labour projection means that in the same period the number of farm families increases by 2.2 to 2.4 million. These two sets of figures indicate firstly that only for a part of the additional families new arable land will be available. Assuming that for one third an employment and income opportunity could be provided in this way seems to be optimistic.

The remaining additional families, let us say approximately 1.5 million, have to work and live on and by the existing farms. For a number of this latter category of families an income opportunity can be created by subdivision of farms. However, in 1963 already only 35 per cent of the farm holders owned 20 rai of farm land or more<sup>47</sup>. Many farms are too small to be subdivided. For many other farms subdivision without a decline in per capita incomes is only possible in case the productivity of the old family-farm is largely increased. For a third category of families the demand for labour on the larger farms will be the deciding factor. To rent part of a larger holding, possibly combined with working in peak seasons as a labourer, will hopefully provide them with an adequate income and employment opportunity. Only a policy of aiming at increasing the demand for labour by preventing labour-saving farm mechanization, combined with a policy maximizing access to land — either by renting or buying — for those in need for land, can prevent the employment situation from deteriorating.

Agro-economic research has proved that economies of scale which are important in certain manufacturing sectors do not operate in the same way in agriculture<sup>48</sup>. One can even argue that economies of scale are reversed in a particular sense in agriculture. Quite substantial evidence has been found in recent research that, in general, yields are inversely related to the size of farms<sup>49</sup>. This phenomenon has

<sup>45</sup> In fact it is hard to envisage an actual decline of the agricultural labour force before the end of the century.

<sup>46</sup> The farm labour force is arrived at by deducting from the agricultural labour force those projected to be engaged in forestry and fisheries.

<sup>47</sup> Census of Agriculture, 1963. Besides, in that year about 15 per cent of the farms comprised as many as two families.

<sup>48</sup> See, for instance, J. W. Mellor: "The Economics of Agricultural Development", Cornell University Press, Ithaca, New York, 1966.

<sup>49</sup> An overview of available evidence is given by P. Dorner and H. Felstehausen "Agrarian reform and employment: the Columbian case", in *International Labour Review*, Vol. 102, No. 3, Sept. 1970.

also been observed in Thailand<sup>50</sup>: the yields per area unit on smaller farms are generally higher and in several instances much higher than the yields on larger farms. An additional consideration is that small farms make less use of mechanical equipment than larger farms<sup>51</sup>. In Thailand the small farmer makes full use of the family labour force, to the best of his knowledge; on the other hand, he is naturally inclined to be very selective in the application of mechanical equipment.

Besides, it is becoming clearer that the package of inputs needed to achieve the green revolution is neutral to farm size and can be applied without heavy mechanization<sup>52</sup>. "As the implications of demographic changes have become clearer, the principal virtue seen in small-scale family farming is that it can provide employment, and to a lesser extent, economize on purchased inputs. If small holdings tend to be more socially productive than large holdings — in that they produce as great an output per unit area using more of the abundant and less of the scarce resources — the conflict which many have perceived between an equitable distribution of land and efficiency in farming may be largely illusory."<sup>53</sup>

In Thailand the pre-conditions to modernize agriculture and increase land productivity by more intensive labour utilization on small-scale family farms, seem to be highly favourable. It means the continuation of the still largely prevailing traditional system of family-owned and family-operated farms. Being open-minded and not bound by traditional or other strings, the Thai farmers feel free to adopt new agricultural methods and new crops, provided they are profitable.

Agricultural research, agricultural extension services and agricultural vocational training do exist. They must, however, be strengthened and provided with new objectives if the production and employment potential of Thailand's agriculture is to be fully utilized. Introducing modern agriculture and working towards diversified farm production requires knowledge and experience which most Thai paddy-farmers do not yet have. Such knowledge must be generated at research and experiment stations and must then be transmitted to the farmers through an efficient extension service.

To teach the farmers how to make use of modern inputs, like fertilizers, etc., is not sufficient. Their application has to be profitable. Presently the price of some basic fertilizers is very high, due to protection of domestic production. To stimulate both production and employment, correction of this situation seems urgently required.

Credit facilities have to be available for all farmers to enable them to finance the purchase of modern inputs. Presently, the smaller farmers are under-represented in the government-sponsored agricultural credit programmes. In order to reach them, it seems vital to realize that the smaller farmers need not only credit, but also the proper guidance to make productive use of it.

To promote agricultural employment a selective farm mechanization policy is

<sup>50</sup> Source: Census of Agriculture, 1963.

<sup>51</sup> The major deciding factors are risk, limited financial resources and the low opportunity costs of family labour.

<sup>52</sup> See, for instance, S. R. Bose: "The Green Revolution and Agricultural Development under Conditions of rapid Population Growth: The Pakistan Problem", in: "Employment and Unemployment Problems of the Near East and South Asia", op. cit.

<sup>53</sup> World Bank, Agriculture, Sector Working Paper, June 1972.

needed. Such a policy would mean stimulating the use of bottle-neck breaking equipment and preventing the introduction of labour-displacing machinery. For instance, water-pumps and tractors making double-cropping possible are types of equipment increasing the labour requirements on the farms. Harvest-machines, however, are mostly labour-displacing. Negatively, it seems advisable to put heavy taxes on machines which just affect the substitution of labour by capital. Positively, the agencies of the Thai government engaged in testing and designing farm equipment should concentrate on machinery suitable for use on small farms, e.g. two wheel tractors (iron buffaloes).

A comprehensive land policy is an other essential feature of an agricultural strategy aiming at maximization of output and employment. In Thailand a definite policy seems to be most urgently required in the related fields of tenancy regulations, land ceilings, land taxes, and land settlement. Through greatly improved tenancy regulations the use of modern inputs has to be made attractive to tenant farmers. This is the only way to realize the production and employment potential of these farms. A system of progressive land taxes seems more suitable for Thailand than a more inflexible system of land ceilings. By increasing the tax per unit of land progressively with the size of the farm, the objective of intensive land utilization would be served.

Modernization of agriculture, in general terms means not only introducing new farming methods on scientific lines but rather working out new concepts of farming and agricultural production. The objective should be to strengthen the existing family-type farms and to develop

- labour-intensive farming systems with a minimum of farm mechanization,
- new rotations for double and multicropping,
- integrated farming systems for crop and livestock production.

It would be wrong to look at modernizing agriculture as a process which requires large and the most modern machines and great amounts of capital. Modernization of agriculture should rather be understood mainly as a process in which reallocation of existing resources and better use of existing factors can bring about considerable increases in gainful employment<sup>54</sup>, production and income. Breaking away from traditional monocropping systems and introducing "on the farm diversification" and rotations calling for year-round plant growth and increased labour inputs can open a new era of agricultural development.

Differences in water supply, soils, topography, farm-size, etc. make it necessary to work out employment-oriented agricultural development plans for homogeneous regions and subregions if necessary. For Thailand a valid approach could be to distinguish

- areas with canal or tank irrigation,
- areas with secured groundwater supply for lift irrigation,
- non-irrigable areas with sufficient rainfall for growing two crops,
- dryland areas and
- the highlands.

The objective for irrigable areas should be to work out and implement rotations (crop-sequences) for double or multicropping. The introduction of "non-paddy-

<sup>54</sup> The introduction of "the Japanese method of paddy production", for instance, would double the demand for labour and increase production per rai.



crops" during the dry season could lead to an "on the farm diversification" which would result in a more even labour demand over the year, increased production per rai and diminishing risk.

Once the process of growing two (or even more) crops per year on the same piece of land is under way it will become apparent that additional labour will be demanded not only for agricultural work but also for collecting, transporting and processing the additional produce. Moreover, the introduction of new agricultural methods will increase the demand for better seeds, fertilizers, chemicals for plant protection, farm equipment, machines and for all the services connected therewith. Given these circumstances it will not be necessary to launch other programmes for employment promotion regarding non-agricultural activities in irrigated areas. On the contrary it must be expected that some of the traditional handicrafts and cottage industries will be terminated and substituted by agricultural activities. Such a development should be welcomed because it would give way to introduce these or similar activities in dryland areas where seasonal unemployment cannot be overcome by modernization of agriculture alone.

Research into the possibilities of a more intensive land use will also have to be one of the initial efforts for modernizing agriculture in the non-irrigable areas. In many of these dryland areas, however, it is clear from the beginning that year-round crop production cannot be achieved. Thus, other means of employment creation must be found if seasonal underemployment is to be reduced. One distinct possibility can be seen in combining crop production and animal husbandry more closely. Growing special fodder crops and preserving the fodder for the dry-season may be one way to increase the number of livestock, to improve the quality of the product and to create gainful employment in otherwise idle seasons. In addition the promotion of non-agricultural activities, e.g. cottage industries, should therefore be emphasized. For the Northeast, silk production still offers a great potential for employment and income, provided an improvement in quality and marketing facilities. For the North and South of Thailand which are covered by vast forest areas the introduction of sustained yield forestry production and reforestation programmes could open up a large employment potential. Work in the forests could, at least partly, help to provide employment during the dry season.

The highlands which cover large parts of Thailand's landed area could also be included in the nation-wide effort to modernize agriculture and increase production and income. The present extensive land-use supports only one fifth to one tenth of the population which could make a living in the hills provided that the traditional swiddening methods are substituted by permanent and more intensive farming systems. Cooler temperatures and a generally moister climate allow for the production of many crops which do not thrive in the low-lands, e.g. tea and other tree crops, certain vegetables or spices. Another possibility of making more productive use of the highland savanna would be to introduce or intensify the production of beef cattle.

To sum up: a re-thinking with regard to the modes of agricultural production is badly needed. Economic, social and employment considerations should play an equal part in devising future agrarian policies, closely connected with the overall development policy.