# T.H.Silcock The Economic Development of Thai Agriculture



## The Economic Development of Thai Agriculture

T. H. Silcock

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Some six pages of the text of the book are appearing more or less simultaneously, in my chapter on Thai Agriculture in R. T. Shand's book on *The Development of Asian Agriculture*; tables 2.1 and 9.1 and parts of some other tables are also used in that chapter.

Tables 2.3 and 4.3 and 4 are in large part taken from tables previously published in the author's *Thailand: Social and Economic Studies in Development*, A.N.U. Press, 1967. Permission from Dr R. T. Shand and from the A.N.U. Press to reproduce the material is hereby acknowledged. Permission from the Editor of

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T.H.S.

Canberra 16 April 1968

#### **Abbreviations**

F.A.O. Food and Agriculture Organization

I.B.R.D. International Bank for Reconstruction and Development

I.L.O. International Labour Organization

N.E.D.B. National Economic Development Board

N.S.O. National Statistical Office

U.S.O.M. United States Operations Mission

#### Thai Weights, Measures, Spelling, etc.

Weights and distances in Thailand are often reckoned in the metric system, though a standardised Thai system is also used. In this book the metric system is followed.

The only traditional Thai measurements used in this book are two which are still almost invariably used in both daily business and official publications. These are

1 kwien = 2000 litres = 440 gallons capacity 1 rai = 1600 sq metres = 1914 sq yards area

The Thai unit of currency, the baht, has the following parities in terms of International Monetary Fund values

1 baht = 0.0427245 grammes of fine gold US\$1 = 20.80 baht

Thai words have no suffix for the plural, and the plural of baht is usually written baht. This practice is followed here. Other Thai words, when occurring in transliterated forms in English sentences are here given a final s, e.g. 'the six changwats of the West Subregion'. Some scholars, while following this practice in general, make an exception of the word 'Thai', when used to mean inhabitants of the country. This exception can, however, lead to misunderstandings and in this book inhabitants of Thailand are called 'Thais'.

Thai words have, in general, been avoided in the text except for the administrative terms changwat (province), amphur (district) and tambon (roughly, parish). For place names the spelling of the U.S.O.M./N.S.O. Statistical Year Book is followed, or failing this, the U.S.O.M. Changwat-Amphur Statistical Directory. Where the titles of Thai books are transliterated (as well as translated) in notes, the spelling used is the same as that in the author's Thailand: Social and Economic Studies in Development, A.N.U. Press, 1967.

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#### Introduction

One respect in which Thailand is often praised for its policy towards economic development is its emphasis on the importance of agriculture. Unlike many of the less developed countries it has put a good deal of money and effort into developing agricultural infrastructure—the irrigation, the roads and railways, even the research and extension activities, which raise productivity (N.E.D.B., 1964: ch. 6; 1967: ch. 9). Moreover there is a good deal of evidence that this policy is succeeding. Thai agriculture is, in fact, becoming more diversified, and at the same time productivity in the traditional main crop, rice, is improving, so reversing a trend towards falling yields which had been in existence for many decades (Ingram, 1955: 48-9; Trescott, 1968).

This lends special interest to the agricultural sector of the Thai economy, though we must be careful to avoid accepting the obvious implications too readily. If we infer that the Thai government gives special attention to agriculture out of concern for the welfare of the farmers who constitute some three-quarters of the population, our inference will probably be wrong. The large expenditures on roads, irrigation, etc., did not even result from a rational analysis of the best methods of promoting overall economic growth. Nor can we be sure that the improvement in productivity—still less the diversification—is a simple consequence of the expenditure of government funds on agricultural infrastructure. A closer look at Thai agriculture reveals other explanations and implications. Yet the interest of the subject is such that a closer look is justified.

In Silcock (1967) some attention was given to agriculture; three chapters were almost wholly concerned with the agricultural sector, and it was given some attention elsewhere also. Yet, because of the previous interests of the participants, agriculture was not given as much attention as it deserves. This book attempts to make good this deficiency by concentrating almost exclusively on the development of Thai agriculture. However, within agriculture it aims at reasonable comprehensiveness, so that some aspects of the rural economy covered particularly in chapters 9 and 10 of the former studies have also been included in this work, though with a different approach.

It is not sufficient to look at Thai export agriculture alone. This is obvious when we consider rice, of which over half is grown as a subsistence crop, although it is also Thailand's leading export. Thailand has, indeed, been successful in expanding its export crops, but it has at the same time apparently greatly expanded its output of crops and other products for consumption within Thailand. It is an 'outward-looking' economy (Myint, 1967), devoting much of its attention to export promotion rather than to import-substitution; yet it has succeeded in doing this without subjecting its own agriculture to any serious outside competition.

There are, however, special obstacles in the way of any detailed study of the structure and the changes of an agriculture producing for the Thai market. The published figures are neither very extensive nor very reliable. The process of change is also extremely complex: transport is simultaneously widening the area of exchange and increasing local real incomes, in some areas very rapidly; but the process is certainly not one of a straightforward increase in regional specialisation. Moreover the period of time for which figures are available for most of the questions one wishes to ask is still very short; although it is long enough for perceptible change to have taken place, it is certainly not yet long enough for elimination by reliable statistical methods of all random influences due to weather or flooding.

Some of the development problems raised in this book might well repay study in Thailand by a considerable team of investigators working together; but that is not the basis of the present book. It is based on the work of a single individual, using the statistical sources and existing secondary material supplemented by a very limited amount of field work. Nevertheless it has been

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thought worth while to publish it because of the interest and importance of the subject.

Not only did I work alone; I can claim no competence in the techniques of Thai (or any other) agriculture. There is always rather a tendency for a rural Thai to expect any European—except perhaps a soldier—to be an expert on any scientific matter. Particularly when I came to interview farmers, they could be forgiven for feeling some disappointment when I could give them no indication of the fertiliser or weed-killer best suited to their needs. Their questions were often informative to me, helping me to understand attitudes, and the nature of the service they received. I often wished that the exchange of information could have been less unequal.

#### Theoretical Considerations

The analysis of the agriculture of a country such as Thailand may be assisted by taking up first some theoretical questions. Perhaps one of the most interesting theoretical aspects of Thailand's development is the very considerable and rapid growth of a road transport network, reducing the costs of specialisation and increasing the integration of the economy. It is surprising that, in the general expansion of economic development theory in recent years, so little attention has been paid to general problems of 'opening up', or the impact of communications on the internal structure and characteristics of an economy. We shall attempt to set out briefly here the micro-economic and macro-economic characteristics of a contact economy, where new transport is opening up an area which previously produced mainly on a subsistence basis.<sup>1</sup>

At the beginning of contact with an external market economy,

<sup>&</sup>lt;sup>1</sup> Economists appear to have followed very inadequately the lead given by Sir Keith Hancock in interpreting economic development in colonial areas in terms of frontier concepts. His breadth of vision made it possible to give unity to the 'opening up' process into regions both lightly and densely populated where the original economies were very different. See Hancock, 1942: vol. ii, pts 1 and 2. There are, however, advantages in looking specifically at the opening up process in a previously populated and culturally unified area. Since the use of the term 'frontier' has been largely pre-empted by American writers to describe advance into formerly 'empty' territory, I here use the term 'contact economy' to describe the characteristics of an economy on the frontier, in Hancock's sense, when studied from its own point of view and not from that of the specialised system in which it is being absorbed.

one of the chief characteristics of a contact economy is that the price of any given product in different places within the area will be subject to very wide, but also rapidly diminishing, differences. All goods from the outside world will be much cheaper at the ports of entry, much dearer at points far from these ports; farm prices of export crops will be much lower in remote areas, much higher near the ports; where there is rudimentary specialisation in tools or handicrafts, these will be much cheaper where they are produced, much dearer elsewhere.

New entrepreneurs, in these conditions, earn high profits from investment in transport equipment, premises, credit, and stock-intrade. These, however, are not usually their only investments. They normally encounter an unspecialised, customary society in which the new trade tends to upset social customs and the basis of authority. They have to invest a good deal of effort in persuasion, education, and conciliation. When they have initiated new lines of trade they may easily be in the position of an inventor unprotected by patents, or an author unprotected by copyright. Imitation is much easier after the initial step has been taken.

The first in the field may enjoy some advantage in initiating further changes; but we need, in each situation, to look into the character of the enterprise generated by the circumstances, and at the factors that would make either continued innovation on the one hand or effort to prevent further competition on the other more likely to be profitable. In an initially unspecialised society the first entrepreneurs may well become closely involved in the social structure and the framework of authority. There will be at least some factors which will incline them to protect their investment by using social and political power, based on wealth, to check the growth of competition.

In so far as competition is allowed to develop, the advantages of improved transport accrue to the primary producers, in ways which will be discussed later. Yet analysis of a contact economy is seriously incomplete if it does not discuss the social and political conditions which prevent or favour competition. For it is competition which diffuses traders' profits by raising costs or lowering prices. The entrepreneur in a contact society is not normally made in the pattern described by Schumpeter (1949: 74-94). He is normally involved in efforts to stabilise the initial abnormal profits or political struggles to capture them from rivals. The Thai rice

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premium, for example, can be partly interpreted as a successful capture, for the public purse, of most of the profit resulting from improved transport of Thai rice during the twentieth century. The later stages of this political struggle are discussed in detail in

Appendix I.

If the transport and trading interests are unable—either alone or in combination with the politicians—to stabilise the profits resulting from lower transport costs, the farm price of the goods exported will rise. This will be simply a redistribution, which does not directly affect the size of the gross domestic product; but if, as commonly happens, some of the export goods are also consumed within the country, the value of these also rises, and the gross domestic product, measured in terms of internationally traded goods, is raised by the amount of this rise in price (Usher, 1963: 140-58; 1965).

When, as in Thailand, one of the main exports is also the country's staple food, an improvement in the transport system which raised the farm price of that food would lead to a very great rise in the gross domestic product. It can be argued that much of this is illusory—a mere statistical accident—so long as the amount of rice consumed on farms is unchanged (Usher, 1965); yet in fact the change in the relative value of this rice and of other consumption goods is the source of possible specialisation which may come later, while the change in relative value of rice and fertilisers may stimulate new and more productive methods. The higher income is certainly there, even before the option to use it is exercised.

Low transport costs do not, of course, only raise the farm value of the original subsistence crop. They also increase the range of crops that it is now possible to produce, as well as increasing the range of consumption goods available. In some measure also, falling transport costs themselves add to the difficulty of establishing permanent and effective monopolies, so that the process of diffusion, once begun, is cumulative.

In Thailand the rice premium has prevented most of the advantages of falling transport costs from diffusing to rice farmers, but they can secure these advantages by switching to other crops. There is thus a much greater inducement to switch to other crops than would arise from lower transport costs alone. This is partly a distortion of the Thai economy; but in part it is an acceleration of

the process of transition from a subsistence economy to one based on specialisation and exchange. The effect of this pressure needs to be examined in more detail. Some of the implications are discussed in chapters 2 and 3.

Turning to the macro-economic characteristics of a contact economy, we must recognise that the high cost of transport produces discontinuities which often make it more useful to apply Keynesian analysis to particular districts than to apply it to the country as a whole. Aggregate demand in Thailand as a whole may be a less useful concept than aggregate demand in Chon Buri Province or Takhli District. We can probably sensibly speak of a multiplier effect resulting from any autonomous increase in exports from Chon Buri, or any investment in Takhli, because of the proportion of the additional income that will be spent on products of that area. The analysis differs in some respects from that of an entire national economy, but it has more in common with it than would any regional study within a more developed economy with smaller price differentials.

One of the important differences relates to mobility of factors. Regional analysis is profitable because the mobility of factors is restricted by certain institutional barriers. Yet changing transport costs and manageable institutional changes can modify these restrictions. We can look at regions as economic entities with fixed factor supplies and later consider changes which may permit more growth by an influx of scarce factors from elsewhere.

Much of the recent growth in Thailand has been concentrated in quite limited regions. Some of the macro-economic implications are discussed in chapters 6 and 7.

#### Sources and Field Work

Most of the published material on Thai agriculture is available in English. Of the statistical sources virtually the only ones for which a knowledge of Thai is necessary are the annual crop reports and the annual reports of the provincial governments. Even the interpretations of the statistics of agriculture and the special research projects on particular problems of agricultural economics have, for the most part, either been written in English or translated into it. Among these, however, there are a few significant exceptions. Perhaps the most important is the series of annual reports on the production of rice. These have been delayed so much—the latest