

# **Thai Agriculture Golden Cradle of Millennia**

**Lindsay Falvey**



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The book is heavily referenced, as one of its objectives is to encourage wider analysis through further reading on the range of subjects that impact and derive from Thai agriculture. Nevertheless, errors, omissions, and biases are mine alone, and for any which cause offence, I apologise.

JLF

## Foreword

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The story of Thai agriculture is too voluminous to contain in one book such as this. It includes all elements of the Thai culture, economy and environment, and has been the subject of specialist research in the various branches of these fields over centuries. Because Thai traditions of writing have not emphasised the same technical and economic approaches common to Western documentation until recent times, much of the origins of Thai agriculture is derived from professional extrapolations. Nevertheless, there are voluminous writings surrounding the subject, beginning in the thirteenth century, from Thai, Chinese, Japanese, and various European authors. It is their experience and knowledge which comprise the bulk of this book much more than the eclectic experiences on which I reminisce with increasing frequency in this twenty-fifth year of working in Thailand. Having a year to collate information has been most beneficial. As Zimmerman noted in his 1930s treatment of the subject, one year to write on Thai agriculture is grossly inadequate, twenty years' research being a minimum.

The book seeks to highlight unique aspects of Thai agriculture. As Thailand has many faces, so there are differing types of agriculture. It is misleading to assume that this is an ecologically and ethnically uniform rice-producing Buddhist country; agriculture of the South differs from that of the Central Plain, which differs from that of the Northeast, which differs from that of the North's river valleys, which in turn is distinct from highland agriculture. So this book, in taking an historical, as well as technical, economic and cultural perspectives, seeks to use examples from Thailand's different regions to highlight the diversity which in itself adds to the resilience of Thai agriculture.

The book traces the origins of Thai agriculture from pre-history through historical times to the present day, concluding with speculation about the future. As it strives to cover a wide range of disciplines and views, and to stimulate deeper local interest in the study of the subject, the work contains more references than may be customary. It is thus synoptic in an attempt to present a flow of thought which is something of a middle path through sometimes contentious opinions. To facilitate the flow of chronology, technical evolution, and cultural thought, each chapter concludes with a three paragraph summary, which in turn is referred to as part of the concluding chapter where the elements which may influence the future

of Thai agriculture are discussed.

There have been many exceptional works which relate to Thai agriculture in both Thai and other languages. Most are included in the hundreds of references used to compile this work. Many have taken a technical and development approach; others have taken economic historical approaches, while yet others have taken cultural perspectives, although, in numbers of words, the post-1960 development literature dominates. Works in the Thai language have also followed similar trends, often deviating in their conclusions and emphases from foreign works on apparently similar subjects. However, such differences appear to have steadily declined with the rise of English language publications in Thailand, such that today many Thai and English language works are the same, and where different, the English work may be the more carefully presented. For these reasons, works in the Thai language are included together with those in English in one list of references, rather than follow another tradition of assuming separate groups of readers. Notwithstanding the implications of these views, this work is also expected to appear in the Thai language as a means of extending it beyond the usual educated elite. With some 900 references, some sentences have more than one reference; this has the dual aims of providing direct guidance for further reading on the summarised detail, and to highlight the source of the thought behind statements which might otherwise be assumed to be in error.

Before discussing the substance of the text, a few more matters may assist the reader. This English version uses BC to denote dates before the Christian era; no suffix is attached to dates after that date, which continue to follow that calendar. In contrast to earlier major texts on Thai agriculture whose major undertaking was the creation of statistics, production data is now readily available, much of it electronically. Therefore, the book uses statistics to illustrate trends or support arguments which transcend the short time frames of such data bases; those interested in more detail are referred to the references. The currency used for matters within Thailand is baht; conversions to foreign currencies are unhelpful over such periods as the 1997 exchange rate variations from 25 to 50 baht per dollar; foreign aid and debt is denominated in the relevant currencies, usually USD. Land area is specified in rai and in most cases is followed by the hectare figure in brackets; 6.25 rai is equivalent to one hectare. Other pragmatisms of potential confusion include English language distinctions which are not relevant in Thailand; thus corn is maize, and

prawns are shrimps, with the text taking the word more commonly used in the original material. Now, to more important matters.

The story of Thai agriculture is one of importance to all. It contains lessons about the importance of culture and history in development. It highlights the shortcomings of the economic development models. It illustrates the durability of an export industry which also employs most of the population, leads the world in some business fields, and rescues the non-agricultural classes from catastrophe in times of crisis. Yet it also contains lessons about the civilising of development, and is bold enough to relate spiritual aspirations to those of industry. Very briefly, the story flows as follows.

*From hunters and gatherers through agro-cities, State-religious Empires infiltrated by migrating Tai persons with a wet glutinous rice technology, evolved to produce a sustainable agriculture. Rice culture determined administrative structures in a pragmatic society which regularly produced a saleable surplus. Ayutthaya's ascendancy, continuing today, consolidated the importance of rice agriculture to national security and economic well-being, as Chinese and European influence benefited agribusiness and initiated the demand which would expand agriculture through population increase until accessible land was expended. The resulting central interest in the spoils of agriculture more than its producers pervaded decision-making until recently, and was supported by narrow economic development advocates.*

*As agriculture declined in relative financial importance, it continued to provide the benefits of employment, crisis resilience, self-sufficiency, rural social support, and cultural custody. Technical and economic globalisation forces which assumed a cultural uniformity were eventually revealed to require modification, but had meanwhile allowed unregulated exploitation of community resources and excesses in economic activity, all with at least the tacit approval of development financiers. Agricultural institutions evolved from a taxation and dispute resolution base to provide research, education, and technology transfer at levels below potential as they supported commercial agriculture funded by credit. Agribusiness, both private and government, expanded from the 1960s and small-holders were partly viewed as a past relic which agribusiness could modernise. However, small-holders' intensive integrated production systems continued to offer efficiencies uncounted*

*in narrow financial analyses, including social benefits which have now caused agriculture to be treated as both a social and financial sector in planning, with increased cognisance of environmental and cultural values.*

*Unique elements of Thai agriculture include: irrigation technologies which spanned a millennium; administrative structures which originated with agricultural water control; its global leadership in production and export of a number of agricultural commodities; its agribusiness sector which includes one of the world's huge multinational conglomerates; the negotiating approaches of the culture over several centuries; potential for further large increases in productivity from known technologies, and an open culture which has allowed new ideas and peoples to be absorbed at various times, and which can still relate a national cultural ethic to traditional agriculture with its religious and environmental management associations.*

*Now one of the world's few major agricultural exporters, leading the world in rice, rubber, canned pineapple, and Black Tiger Prawn production and export, the region in chicken meat export and several other commodities, and feeding more the four times its own population from less intensive agriculture than its neighbours, Thailand is poised to benefit from predicted expansion in livestock products demand. Poverty reduction, and improved education, research, and legal and social systems, which may be addressed in the wake of the recent Asian financial crisis, stand to benefit from popular concern for environmentally and socially sensitive alternatives for small-holder farmers to co-exist with commercial agriculture. Unlikely to rapidly industrialise, Thailand will remain one of the world's major agricultural countries in social, environmental and economic terms for the foreseeable future.*

Apart from the overriding dichotomies of Thai agriculture in terms of; self-sufficient and commercial agriculture, national income and rural poverty alleviation, and traditional and imported value systems, which will necessarily inform future policy formation, other issues remain. Sunthorn Phu's<sup>1</sup> ancient love lament evokes sadness through agricultural metaphor...*at a sugar mill, they feed in sugarcane, buffaloes are noisily urged to pull the vice; juice gushes forth onto a row of jars. Oh, I see tears dropping from my eyes: the sugar cane is crushed like*

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<sup>1</sup> Umavijani, Montri. (1986)

*my heart; the juice pours out like my tears.* ...If he wrote today, the flood of sugar juice in large mechanised mills might symbolise tears for 80 percent of the buffalo herd which has been lost, itself a metaphor for lost traditions and values in the society. If one lives by the financial efficiency sword, one dies by it; thus social costs of unbalanced development may yet force genuine reconsideration of agriculture and rural dwellers.

It has been a fulfilling experience to collate the works of others, to challenge my own conclusions, and to assimilate diverse information into, what I hope is, a cohesive text. My wish is that the diversity which is still common in Thai agriculture remains, and that a central component of future development can be the small-holder farmer.

Lindsay Falvey,  
Melbourne 2000

## Abbreviations and Acronyms

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AVRDC	Asian Vegetable Research and Development Center
BAAC	Bank for Agriculture and Agricultural Cooperatives
BC	Before Christian Era
CGIAR	Consultative Group for International Agriculture Research
CIAT	Centro Internacional de Agricultura Tropical
CIF	Cost Including Freight
CIMMYT	Centro Internacional de Mejoramiento de Maiz y Trigo
CIP	Centro Internacional de la Papa
CP	Charoen Pokaphand
DFPO	Dairy Farm Promotion Organisation
EEC	European Economic Community
EU	European Union
FAO	Food and Agriculture Organisation
FMD	Foot and Mouth Disease
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
GHG	Green House Gas
GNP	Gross National Product
IRRI	International Rice Research Institute
JICA	Japan International Cooperation Agency
MOAC	Ministry of Agriculture and Cooperatives
MOF	Marketing Organisation of Farmers
NESDB	National Economic and Social Development Board
NGO	Non Government Organisation
OECF	Overseas Economic Cooperation Fund
RTG	Royal Thai Government
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisation
WTO	World Trade Organisation

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