
Notes

Rural Entrepreneurship: The Case of Small Rice Mills in Malaysia

Richard W. A. VOKES*

Introduction

In May 1969, Malaysia was shaken by serious race riots which have had far reaching effects on development policies within the country ever since. The roots of the racial conflict were seen to lie in the problem of poverty, and particularly in the wide disparity in income between Malays and the other major ethnic group, the Chinese. For example, in 1970 the mean monthly income of Malay households was M\$179, compared with M\$387 for Chinese households [8: 25].

The Second Malaysia Plan, launched in 1971, thus embodied a New Economic Policy (NEP) designed to eradicate poverty among all Malaysians, irrespective of race, and to restructure Malaysian society in order to correct racial imbalance [7: 1-2] with the government seeking to achieve these goals by 1990. The NEP essentially involves channelling greater development expenditure towards projects designed to benefit the major target groups, and the introduction of policies designed to foster a greater participation by

Malays and other indigenous peoples, referred to collectively as *bumiputeras* (sons of the soil) in the modern sector of the economy.

The development of a Malay entrepreneurial community was seen as one of the keystones of the policy aimed at restructuring the economy in favour of indigenous groups [*ibid.*: 47]. As a result, a range of measures has been introduced since 1969 to promote *bumiputera* entrepreneurial participation in commerce and industry, including the training of existing and potential entrepreneurs, credit assistance, advisory and extension services, administrative support (such as preference in the awarding of contracts and licenses) and finally direct government participation in the private sector on behalf of *bumiputera* interests [9: 192-197].

The promotion of small industries, which in Malaysia are normally defined as manufacturing or commercial enterprises employing less than 50 full-time paid workers, is seen as particularly important in this context [*ibid.*: 315] since they provide a suitable training ground for new entrepreneurs and there are now eight different government agencies providing assistance to such enterprises. They are; 1) Malaysian Industrial Development Authority, 2) Majlis Amanah Rakyat (MARA), 3) National Productivity Centre,

* Planning Division, Ministry of Agriculture and Water Development, P.O. Box 50197, Lusaka, Zambia

4) Standards and Industrial Research Institute of Malaysia, 5) Malaysian Industrial Development Finance Ltd. and its subsidiaries, 6) Credit Guarantee Corporation, 7) Bank Pembangunan Malaysia (Development Bank of Malaysia), 8) Bank Pertanian Malaysia (Agricultural Bank of Malaysia), all of these agencies being members of the Coordinating Council for Development of Small-scale Industries [4: 14-40]. The primary purpose of the assistance provided by these various agencies is to overcome what have been identified as the major constraints to the growth of a *bumiputera* commercial and industrial community; namely, the lack of entrepreneurial and managerial skills, and the shortage of capital.

The government's concern to assist the development of small enterprises in an effort to help promote *bumiputera* business interests, has resulted in the completion of a number of studies [*ibid.*; 11; 13]. These have, however, dealt primarily with small enterprises in urban areas. Yet the development of small-scale rural enterprises is likely to be especially important in the case of Malaysia, since the majority of *bumiputeras* are rural inhabitants. Furthermore, the development of small-scale rural industries can play a positive role in the whole process of rural development, which again holds a key position in the government's strategy for attacking poverty in the Malay community. Indeed, a lack of attention to the development of small and medium scale, agro-based industries, has recently been cited as one of the factors reducing the effectiveness of the country's Integrated Agricultural Development Projects in contributing towards the goals of the NEP

[5: 16-20].

In fact, earlier work undertaken by the writer on rice marketing and rice processing had revealed that, at least in the case of the service milling sector, where paddy retained by farming households for home consumption is milled in small rice mills (SRMs), rural based *bumiputera* entrepreneurs were already well established [16: Chapter 4]. The involvement of Malay entrepreneurs in this sector did not represent a new response to the incentives introduced by the government under the NEP, but rather a natural response to the economic opportunities provided by the growth in demand for mechanized service milling within the rural areas since the 1950s. Thus, these rural Malay entrepreneurs clearly provide an interesting group in the context of current government policy, especially since little attention appears to have been given to the promotion of small-scale industries in the rural areas as part of the NEP.

It was in the belief that a rural dimension to this policy was both possible and desirable that this case study of entrepreneurs in the SRM sector was undertaken. The primary aims of this study are similar to those undertaken on small-scale enterprises in urban areas in Malaysia; namely, to examine the socio-economic status and background of the entrepreneurs, to provide a profile of the enterprises, especially in relation to the sources of capital, and to examine the problems faced by the entrepreneurs. Finally, based on the findings of the study, to examine any implications for government policy.

The Development of the Small Rice Mill Sector¹⁾

In Asian countries, three basic types of rural industries can be identified namely; i) primary processing industries (agro-processing, livestock and poultry, forestry, fisheries, mining and quarry products); ii) agro-input industries; and iii) rural consumer goods industries [1: 281]. Within this grouping, agro-processing industries are normally the most important. For example, in the case of West Malaysia, agricultural processing accounted for almost 37 percent of rural employment in 1970 [18: 69].

Throughout Asia rice milling is one of the most widely spread and important of the rural based agro-processing industries. Although the milling of paddy for market is frequently dominated by large-scale mills, there are many thousands of small-scale rice mills located throughout the paddy growing areas of Asia, which undertake to mill paddy retained by farmers for their own consumption, as well as often engaging in commercial milling.

Malaysia is no exception in this respect. There has been a very rapid growth in the numbers of small rice mills since the 1950s. The establishment of such mills at this time was encouraged by the Co-operative Department of the Ministry of Agriculture, with finance coming from the co-operative movement's own bank and with the management and administration of the mills vested in

representatives of the membership of the individual co-operatives.

While no special assistance or training appears to have been given to the managers of such co-operative mills, their operations proved profitable, largely because they proved very popular among farming families, since they provided a release from the drudgery of the traditional method of husking paddy using hand or foot operated pounders. By 1956, 210 Co-operative Rice Milling Societies (CRMSs) had been formed and by 1966, the number had risen to 397 [16: 99, 138]. However, the profitability of these early co-operative ventures attracted private capital into the small rice mill sector. By 1968 private mills outnumbered co-operative mills by approximately 3:1 in the major paddy producing states (Perlis, Kedah, Perak, Penang, Selangor, Kelantan) while the total number of service mills in the country at that time was somewhere in excess of 1,800 (Calculated from U. Thet Zin [15]). However, what is particularly significant in the context of present government policy, is that the majority of owners and managers of SRMs are Malay. This is in marked contrast to the privately owned large rice mills (LRMs) which are almost exclusively Chinese owned. Out of the 1800 SRMs in existence in 1968 the writer has estimated that over 70 percent were either owned or operated by Malays.

Not all of the mills that have been set up have been operated efficiently and profitably, because of excess capacity and poor management. As a result, many mills have closed down. However, at the same time new units are being set up, while many of the existing units continue to operate effectively,

1) For a more detailed discussion of the development of the rice processing industry in Malaysia see Vokes *et al.* [17: Chapter 1].

and have, at least until recently, competed in commercial milling with large rice mills.

Concept of Entrepreneurship Used in This Study

Entrepreneurship and management are frequently referred to as the fourth factor of production with land, labour and capital, and are terms used to describe the process of taking decisions concerning the use of these other factors in the production process.

The term 'entrepreneurship' is further generally regarded as having a more specific meaning, with the term 'entrepreneur' being used to describe the innovator and risk-taker in a business enterprise. This is essentially the concept used by Popenoe in his study of Malay entrepreneurs. He applies the term entrepreneur to 'the man who creates something new, who puts together a new business or who exercises a high degree of initiative, innovation or risk taking. It does not apply to the high ranking retired civil servant turned company director. It does not apply to the man who takes over a small, traditional family business and continues to follow the tradition in running it' [13: 350].

In practice this definition would seem to be rather too restrictive, at least in the context of the present study. Given the presence of uncertainty, there is always risk involved in running a business, even one inherited from one's father. Moreover, significant changes in technology or organization may not be justified. It is probably more realistic to simply recognize that there are different types, or degrees, of entrepreneurship. Leibenstein, for example, has distinguished two broad

types of entrepreneurial activity, namely 'routine entrepreneurship' which refers to 'activities involved in co-ordinating and carrying on a well established, going concern...' and 'new-type entrepreneurship' which refers to the 'activities necessary to create or carry on an enterprise where not all the markets are well established or clearly defined...' [6: 72].

For the purposes of this case study at least, a general definition of entrepreneurship is used, with the term entrepreneur being used to refer to the mill owners as businessmen and risk-takers. Since the development of managerial skills may also be taken to represent a first step in the development of entrepreneurial skills or at least a factor contributing to the success of an enterprise, the study also focuses on mill managers, primarily those employed in the co-operative mills.

Note on the Sample

This study on entrepreneurship in the SRM sector was undertaken as part of a larger study on socio-economic and technical aspects of rice processing in Malaysia, with special reference to Kedah in 1980-1981.

For the purposes of the entrepreneurship study a total of 27 SRMs in Kedah were surveyed. The mills were chosen at random from a list of rice mills obtained from a study by the Rice and Paddy Industry Sub-Committee of the Regional Action Committee for North Peninsular Malaysia (RACNOM) [12: 58-61]. Though completed in 1974 this was the only comprehensive listing of rice mills that could be obtained. All rice mills with a capacity of below two tons per hour (TPH)

were classified as SRMs, giving a total of 260 SRMs.

Of the 27 SRMs surveyed, 11 were Malay owned, eight were Chinese owned and the remaining eight were co-operative mills. This racial breakdown of ownership is representative for the SRMs in Kedah (and other north-west states) where the Chinese are actively involved in the small mill sector.²⁾ In the other major paddy producing areas in Selangor, Kelantan and Trengganu where the Chinese population is limited, the SRMs are almost exclusively owned by Malays. It should also be noted that the managers of the co-operative mills in all areas are also almost exclusively Malay. The location of the survey in Kedah, however, permits some comparative analysis between the Malay and Chinese owned mills. In the case of privately owned SRMs, it is common for the owners to act as managers, although they usually employ machine minders. In only one of the sampled private mills, which was Chinese owned, was a manager employed, and he was the son of the owner. Thus, the total number of respondents was 28; 19 owners and nine managers. Although a larger sample size would have been desirable this was not possible due to financial and logistical constraints. Nonetheless, the results of the survey do allow an examination of the key issues related to entrepreneurship in the small mill sector to be made.

Discussion

The results of the survey are presented in

2) By contrast, all but four of the 36 LRMs in Kedah are Chinese owned.

the following tables and discussion and focus on a number of key variables considered relevant to an analysis of entrepreneurship. The variables included are similar to those employed in other studies of entrepreneurship in Malaysia.

Characteristics of Small Mill Owners and Managers

a. Age

Table 1 provides details on the age of the respondents. Over half of the owners were aged 50 and above, there being only three who were below 40. On the basis of this information there is little evidence of 'young blood' being drawn into the small mill sector.

Table 1 Age of SRM Owners/Managers

	Mill Owners		Mill Managers	
	Malay	Chinese	Chinese	Co-operative
<30	—	1	1	—
30-49	4	3	—	5
50-59	6	4	—	2
60 & above	1	—	—	1
Total	11	8	1	8

Indeed, it is significant that in the case of the nine owners who reported either establishing a new mill or taking over an existing mill since 1980, only three had been less than 40 years old at the time of their entry into the rice processing business, while three had been over 50 years old. By contrast, of the 10 owners who had entered the business prior to 1970, seven had been less than 40 years old, with four of these being below 30 years old when establishing their business. The group of mill managers interviewed had a lower age profile overall than the owners. There was,

however, only one manager below 40 years of age. Four of the managers of co-operative mills had taken up their positions since 1970, but again only two had been below the age of 40 at the time of taking up their positions. This absence of young entrants probably stems from the fact that the period of rapid growth and easy profit within the small mill sector is over. However, it may also reflect an urban bias among younger entrepreneurs in their search for commercial opportunities.

b. Educational Attainment

Table 2 provides data on the educational attainment of SRM owners and managers.

Table 2 Educational Attainment of SRM Owners/Managers

Educational Level	Mill Owners		Mill Managers		Total	%
	Malay	Chinese	Chinese	Co-operative		
Primary	10	5	—	7	22	79
Lower Secondary	1	—	—	1	2	7
Upper Secondary	—	3	1	—	4	14
College/University	—	—	—	—	—	—
Total	11	8	1	8	28	100

The predominantly low level of educational attainment amongst the owners and managers appears to be a fairly common situation in small enterprises. A recent study of 239 small entrepreneurs and enterprises in Malaysia found that over 50 percent of the respondents had received either no formal education or only primary education [4: 101]. Popenoe, in his study of 140, predominantly urban, Malay entrepreneurs in Malaysia, also found that 45 percent had no more than primary education, and that a number were illiterate.

Indeed, he argued that educational failure was one of the factors which pushed people into business rather than leading them to seek a more prestigious job in government service [13: 354]. While this is probably also true of rural based entrepreneurs, it is likely to be a less significant factor in the rural areas, since the general level of educational attainment in the rural areas is much lower, with many of the older farmers not having completed even primary education.

c. Occupations of Mill Owners/Managers and Their Fathers

Table 3 provides data on the occupations of the fathers of mill owners and managers. It can be seen that in this respect the farm sector was slightly more commonly cited than the non-farm sector. However, it is significant that in the case of the 19 mill owners, the majority of their fathers had or had had, jobs in the non-farm sector. Mostly they had engaged in some form of business activity,

including trade in agricultural products, and in three cases the fathers had engaged in rice milling. Not surprisingly, it was mainly the fathers of the Malay owners who had been farmers, since most of the paddy lands in Malaysia are covered by Malay Reservation Acts and cannot be owned by non-Malays. As noted earlier, the father of the Chinese mill manager was the mill owner, while the fathers of the co-operative mill managers had all had jobs in farming.

Table 4 reveals that all of the mill owners

Table 3 Occupation of the Fathers of Mill Owners/Managers (by Sector)

Occupation	Mill Owners		Mill Managers		Total	%
	Malay	Chinese	Chinese	Co-operative		
Farm Sector	6	1	—	8	15	54
Non-farm Sector	5	7	1	—	13	46
Total	11	8	1	8	28	100

Table 4 Mill Owners/Managers' Former Occupations (by Sector)

Occupation	Mill Owners		Mill Managers		Total	%
	Malay	Chinese	Chinese	Co-operative		
Farm Sector	3	1	—	3	7	26
Non-farm Sector	8	7	—	5	20	74
Total	11	8	—	8	27	100

Table 5 Mill Owners/Managers' Occupations besides Rice Milling (by Sector)

Occupation	Mill Owners		Mill Managers		Total	%
	Malay	Chinese	Chinese	Co-operative		
Farm Sector	5	—	—	6	11	39
Non-farm Sector	3	4	—	1	8	29
None	3	4	1	1	9	32
Total	11	8	1	8	28	100

and all but the Chinese mill manager had had other occupations before entering into rice milling. Again, these were predominantly in the non-farm sector, with 10 of the owners and two of the co-operative managers having formerly been engaged in business activities. One of the Chinese owners had been a paddy wholesaler before moving into rice milling. The other non-farm occupations previously held were mainly in government service, including teaching, and being employed by

the armed services. Thus, for nine of the owners, seven Malay and two Chinese, and seven of the managers, rice milling represented their first business enterprise.

Table 5 shows that rice milling was the sole occupation of nine of the respondents at the time of interview. Of the 12 mill owners who had other occupations besides rice milling, seven had occupations in the non-farming sector, and these were again predominantly business activities. In the case of co-operative mill managers, most had other occupations in farming, and were normally employed on a part-time basis as mill managers. Of the 12 owners who had other occupations, eight reported that rice milling was their major occupation at that time.

d. Years of Experience in Rice Milling

Eleven of the 19 owners, had over 10 years experience in rice milling (Table 6). However, as noted earlier, those who had entered the industry during the preceding 10 years were not necessarily young in age. It is interesting to note that five of the 11 Malay owners had been involved in the industry for 15 years or more, since this is indicative of the fact that private Malay interests have been involved in the industry since the early years of the growth of the service sector.

Table 6 Mill Owners/Managers: Years of Experience in Rice Milling

	Mill Owners		Mill Managers	
	Malay	Chinese	Chinese	Malay
<5	2	3	—	—
5-9	3	—	1	4
10-14	1	3	—	1
15-19	3	—	—	—
20 & above	2	2	—	3
Total	11	8	1	8

Profile of Business

a. Date of Establishment

Table 7 provides data relating to the date of establishment of the mills. These data are interesting in that they suggest that the level of investment in terms of the number of mills being set up has remained relatively constant since the early 1950s, although the data also show that the more recent investments have primarily been undertaken by Malay interests.

Table 7 Date of Establishment of Mills

	Private Mills		Co-operative Mills	Total
	Malay	Chinese		
1950 & before	—	2	1	3
1951-1960	2	3	3	8
1961-1970	5	2	2	9
1971-1980	4	1	2	7
Total	11	8	8	27

However, it should be emphasised that in the case of the private SRMs the date of establishment is not necessarily the same as the date when the current owner began operating his rice processing business. This reflects the fact that four of the private mills had been taken-over after their establishment. In three of these cases, the mills were family businesses taken over by the sons of the original owners.

b. Type of Business and Business Activity

Table 8 provides a breakdown of the type of business organization for the private mills. In the case of the partnerships, the partners were normally members of the same family.

All of the SRMs sampled engaged in service milling. However, Table 9 shows that five of the Chinese mills and two of the co-operative mills also engaged in commercial milling. All but one of the mills engaging in commercial milling were doing so legally, meaning that they possessed the requisite licenses to trade in paddy and rice issued by the National Paddy and Rice Authority.³⁾

Table 8 Type of Business: Private Mills

Business Type	Malay	Chinese
Sole Proprietorship	9	2
Partnership	2	5
Private Ltd. Co.	—	1
Total	11	8

Table 9 Type of Business Activity

	Malay	Chinese	Co-operative
Service	11	3	6
Service & Commercial	—	5	2
Total	11	8	8

c. Capacity and Technology of Sampled Mills

The average milling capacity of the 27 SRMs was 0.43 TPH with 24 of the mills having a capacity in the range 0.30-0.60 TPH. The Chinese owned mills had the largest average capacity at 0.51 TPH, followed by the co-operatives with an average of 0.42 TPH, and the private Malay owned mills with an average of 0.35 TPH. Of the

3) The illegal operations of SRMs for commercial milling purposes is discussed later in the paper.

27 mills, 18 consisted of mills using rubber-roller hullers, generally regarded as the most efficient type of hulling technology, seven still relied on the more primitive steel hullers, while the remaining two used under-runner-stone disc hullers.⁴⁾ The rubber-roller mills were most common in the case of the Chinese owned mills, all but one of these using rubber-roller hullers. Four of the 11 Malay owned mills used steel-hullers, which were also used by two of the co-operative mills. It is, however, worth noting that there was no clear relationship between mill capacity and mill technology. Nonetheless the Malay millers would no doubt benefit from assistance to help them modernize their milling equipment.

d. Level of Investment

Given that investments in milling equipment and buildings had been made at different times during the preceeding 30 years, and also referred to different types of milling systems as well as mills of different capacities, there were wide variations in the level of mill investment. Thus, reported investment in mill machinery and motors ranged from M\$300 to M\$38,000, while that in building and drying yards ranged between M\$300 and M\$50,000. It is, however, worth noting that even when an allowance for the year of investment was made, there was no obvious clear relationship between the level of investment in mill machinery and mill capacity, or even the type of milling system used. There were, for example, seven mills with a current

rated capacity of 0.3 TPH. One of these had been purchased in 1979 at a cost of M\$11,000. Of the others, one had been purchased in 1961 at a reported cost of M\$300, while five had been purchased during the period 1968–1975, and all but one of these had an investment cost well above that of the one purchased in 1979.

The most likely reasons for this weak relationship between capacity and capital cost are: i) that millers often invest in larger motors than necessary to drive existing equipment, thus giving them flexibility in future investments, and ii) that the capacity of the various component parts of the milling equipment are not matched. The throughput of a mill is not only determined by the capacity of the huller, but also by the capacities of the other equipment, viz., intake hopper, cleaner, separators and polishers, and these units are often purchased and/or replaced at different times from the huller. However, the data on investments made since 1975 does suggest that at current prices the purchase of a 0.60 TPH rubber-roller type mill would require an investment of approximately M\$40,000, split equally between the mill machinery and buildings.

Table 10 provides data on the existing level of capital investment in mill equipment and buildings for the 27 SRMs. This has been calculated on the basis of the historic value of fixed assets not yet written off, assuming a 10 year life for mill equipment and a 20 year life for mill buildings. This reveals that the level of investment by the Chinese mills was considerably greater than that of either the Malay owned private mills or the co-operative mills. This occurred inspite of the fact that

4) For a discussion of rice milling technologies see Vokes *et al.* [17: Chapter 3].

Table 10 Level of Investment in Mill Equipment and Building (M \$)

	Private Mills		Co-operative Mills	Average All Mills
	Malay	Chinese ¹		
Milling Equipment	6,682	15,675	5,221	8,914
Building & Yards	4,909	15,500	4,920	8,050
Total	11,591	31,175	10,141	16,964

Note 1 One Chinese owned mill had invested in an artificial drier. The cost of this is not included in the figures given here.

only one of the Chinese mills had been established since 1970, because all of the other Chinese millers had made investments in new milling equipment since 1970, while three had also made significant new investments in buildings and drying yards during the same period. By contrast, while four Malay owned mills had been established since 1970, and two others had made new investments in either new milling equipment or buildings, the average level of investments made by these mills, particularly in the case of buildings, was significantly below that of the Chinese mill. This certainly suggests that Malay owners find it harder to raise capital than Chinese owners. However, the difference in the level of investment, particularly with respect to buildings, also reflects the fact that five of the eight Chinese mills were engaged in commercial milling as well as service milling activities, whereas none of the Malay mills engaged in commercial milling. For mills engaging in commercial milling, additional investments in buildings is required to provide storage space.

Not surprisingly, the reason given by most

of the mill owners (16 out of the 19) for investing in rice milling was the expected profitability of milling operations. The other three owners were taking over family businesses.

e. Source of Capital

Table 11 provides data on the sources of investment and reinvestment capital for the private mills. This shows clearly the importance of the mill owners' own savings as a source of investment capital. Only four of the owners, three Malays and one Chinese had obtained a bank loan for their investment capital, the loans being obtained between 1973 and 1975. The amounts borrowed ranged from M \$ 4,500–M \$ 32,000, with interest rates ranging from 8.5–15 percent. The loan of M \$ 32,000 was used to cover the cost of both mill machinery and buildings. It is, in fact, not surprising that relatively few owners obtained bank loans for their investment capital, since commercial banks in Malaysia do not generally provide long-term loans for investment capital. However, in some cases assistance in raising capital is provided by the firms supplying the milling equipment.

Table 11 Source of Investment and Reinvestment Capital, Private Mills

Source of Capital	Investment Capital		Reinvestment Capital	
	Malay	Chinese	Malay	Chinese
Own Savings	6	7	4	6
Other Family Savings	1	—	—	1
Bank Loan	3	1	—	—
Other Loan	1	—	—	—
Total	11	8	4	7

One of the private owners, a Malay, reported that he had obtained investment capital in the form of shares provided by a group of friends, who received payment on a profit sharing basis. This mill was thus operating on the lines of a co-operative mill. In the case of the co-operative mills, investment capital was normally obtained from both share capital provided by members, and loans from Bank Rakyat, the co-operative movement's own bank.

Table 11 also shows that the 11 owners who reported making additional investments in mill machinery or buildings all relied entirely on either their own or other family savings. In the context of sources of capital, the fact that most of the owners had had fathers with non-farm occupations and had themselves in many cases previously engaged in non-farm occupations is likely to be significant, since there is more potential for generating savings in these occupations than in farming.

In the case of working capital, all of the co-operatives and all but two of the private mills relied on income received from service milling, both from hire charges and from the sale of bran. The remaining two, both Malay owned, reported taking out loans for working capital. However, no details on these loans were provided.

Problems Faced by Mill Owners and Managers

It is significant that in the case of the private mills only one, which was Malay owned, reported receiving any assistance from the various agencies set up to help small

businesses. Indeed, one of the Malay owners even indicated that it was difficult to get assistance from such bodies. However, only three of the owners, all Malay, indicated that lack of capital had been a problem at the time of setting up the mill.

Six of the owners indicated that milling operations were currently less profitable than before, due to the growth in the numbers of SRMs and the resultant competition for paddy supplies. The other major problem experienced in running their mills, reported by four of the owners, was the difficulty of obtaining labourers. This would appear to be a somewhat unexpected problem. However, it is now widely accepted that unskilled labour is generally in short supply in this region of Malaysia. This is primarily due to out-migration to industrial areas in Penang, and the reluctance of rural/urban youths to engage in work in the rural areas.

In spite of these problems, 12 of the private mill owners and three of the co-operative managers, reported plans for further investment. Half of the 12 indicated plans for further investment in plant and machinery, with one of the Chinese owners indicating plans to purchase an artificial drier.

For the other half, the new investments were to centre on an expansion of the business into commercial milling. This was especially true of the Malay owned mills. As noted earlier, none of these were engaging in commercial milling at the time of the survey, but five indicated their desire to expand into commercial milling. Two of the co-operative mills and one of the Chinese owned mills were also keen to obtain the necessary licenses to permit commercial milling.

Implications of Findings for Government Policy

From the foregoing discussion, it will be clear that, despite the generally low level of formal education, mill owners and managers, whether Malay or Chinese, generally come from what may be termed the *rural commercial elite*. This is made up of people who possess some business skills and experience and, in the case of owners, access to capital, normally in the form of their own savings. In this respect, it is significant that almost half of the fathers of the mill owners and managers had had occupations in the non-farm sector and that 20 (74 percent) of the respondents themselves had, at some stage, been employed in the non-farm sector, often in business related occupations. As a result, most of the respondents had been exposed to a tradition of business, had had the opportunity to gain business experience, and were favourably placed to build up savings, since wages and salaries in the non-farm sector are normally considerably higher than in the farm sector.

This situation supports one of the findings of Popenoe's study on Malay entrepreneurs, namely, that a large number come from business backgrounds [*ibid.*: 355]. The evidence of the two other major studies of small enterprises and entrepreneurs in Malaysia are less conclusive in this respect. Both found that only about 13 percent of those entrepreneurs who had had previous occupations had had jobs directly in business. However, in both cases, over 60 percent had had jobs in the non-farm sectors, and many of these jobs, for example salesmen, skilled and

semi-skilled worker, clerk and technician, would have involved contact with business activities or have provided experience relevant to the running of a business. It is also significant that both studies found that approximately 77 percent of the entrepreneurs had had previous jobs [4: 110–111; 11: 10–12].

In the case of the present study, it is clear that the small mill owners had relied primarily on their own or other family savings, for their investment and reinvestment capital, with only three owners citing lack of capital as a problem. A similar picture emerges from the other major studies undertaken in Malaysia. In his study of the financing of 399 small manufacturing establishments in Peninsular Malaysia, Chee Peng Lim found that just over 86 percent of the initial capital and almost 67 percent of funds for re-equipment or expansion had been provided by the entrepreneur, members of his family and relatives [3: 21–23]. In the more recent study of 239 firms, Chee Peng Lim *et al.* found that only 18 percent had obtained a loan to start their businesses, and only 23 percent received a loan to run their businesses. In spite of this, only 28 percent reported that lack of capital was a problem for their business, although this was identified as the most serious operational problem of the small businesses surveyed [4: 122–173].

The study of small *bumiputera* enterprises in Kuala Lumpur and Johore Bahru also found that five percent of the 871 entrepreneurs interviewed had relied entirely on their own or other family savings for their initial investment capital, while 40 percent had relied on a combination of sources in which their own capital was again of greatest importance,

and only three percent had relied entirely on outside loans, in this case loans from statutory bodies [11: 82]. However, in this particular study, it was found that loans from statutory sources and banks did play a significant part in meeting the needs of additional investment capital, while it was also noted that 61 percent of the respondents identified lack of capital and finance as a serious problem [*ibid.*: 52–55].

Access to external sources of capital may well be a crucial factor in the expansion of small enterprises. However, the available evidence suggests that it is not the most serious constraining factor in the growth in numbers of small enterprises, or in their profitable operation. Rather, the ability to build up savings and gain experience emerge as key factors in this respect. In this case, assistance in training, coupled with the provision of opportunities to gain experience within the business sector, would seem to be two key areas deserving of greater public sector support, and this appears to be happening under the Fourth Malaysia Plan [10: 299].

Nonetheless, it should be noted that while access to external sources of capital may not be so important to members of the *rural commercial elite*, there may be other rural inhabitants who have the qualities necessary to become entrepreneurs but who are not in a position to build up the necessary savings needed for capital formation. For such people, access to external sources of capital would be necessary before they could set up a business enterprise. Given the desirability of a more equitable pattern of growth, the identification and assistance of such people, rather than a reliance on the *rural commercial elite* is clearly important. It does, however,

emphasise the complexity of the kinds of support programmes needed to help the development of small-scale rural enterprises. Indeed, given that both the nature and seriousness of the constraints faced by small-scale entrepreneurs are likely to vary widely, it is increasingly being argued that governments should provide as comprehensive a package of assistance as possible to enable them to achieve the maximum impact [2: 12].

However, the results of this study of rice milling also focus attention on what is probably the most important factor influencing the growth of small enterprises, that is the existence of profitable economic opportunities. This point is duly emphasised by Popenoe in his study of Malay entrepreneurs, when he notes that ‘the factors mentioned so far are the seeds of entrepreneurship, but economic opportunity is required for them to sprout’ [13: 352].

The very rapid growth of the small mill sector in Malaysia, and other countries, without significant access to external sources of capital, clearly suggests that in fact, given profitable opportunities, there exists a by no means insignificant supply of entrepreneurial and managerial skills and capital in the rural areas, which the government should seek to mobilize. Yet, significantly, in the case of the development of the small rice mill sector, which represents one of the main profitable outlets for private capital in the rural areas, government policy in Malaysia has been largely negative. The rapid growth in the number of privately owned SRMs since the success of the early co-operative ventures, has occurred despite attempts in all of the states to use licensing laws to restrict the growth in

the number of small mills, and in the face of a policy to give co-operative mills a monopsony on service milling in some states, measures which were essentially designed to ensure that the existing SRMs (predominantly co-operative mills) attained a viable level of capacity utilization. These licensing laws have not been effectively enforced, so that many of the private mills are unlicensed.⁵⁾

While there is indeed much evidence of excess capacity within the small mill sector, a recent study has shown that in spite of this, service milling remains profitable, primarily because of the strong demand from farm families and hence their willingness to pay for a local milling service.⁶⁾ The market can thus support considerably more mills than the number deemed desirable by government planners. Ironically, it is the existence of the *bumiputera* policy that has been the major factor accounting for the failure to enforce licensing laws, since punitive action against unlicensed SRMs, many of which are Malay owned, has not been considered politically expedient.

Another aspect of government policy which has acted as a constraint on the growth of the small mill sector has been the general policy of restricting these mills to service milling only. This policy has been followed

since the early 1950s and has primarily reflected the desire to prevent a worsening in the problem of excess capacity in the commercial sector. Yet the presence of excess capacity within the small mill sector made commercial milling an attractive proposition for the owners of SRMs keen to raise the level of capacity utilization and thus mill profits. Since the government found it equally difficult to effectively enforce this policy a situation developed where many SRMs did engage in commercial milling illegally. More recently, however, the introduction of the subsidy on paddy prices has effectively halted such illegal commercial milling by SRMs, since farmers only receive the subsidy when they sell to licensed mills, a move which is certain to reduce the return on investments in SRMs. It was clear from the survey that the five Chinese mills engaged in both commercial and service milling (all but one of which were licensed to do so) had a much larger turnover than the other mills. It was also clear that Malay owners in particular were keen to expand into commercial milling. In fact, the subsidy mechanism does provide the government with a means of discriminating in favour of Malay owned SRMs. Yet one of the Malay owners indicated that his recent application for the necessary licenses to trade in paddy and rice had been turned down.

In fact, besides the continued desire to prevent a worsening of the problem of excess capacity in the commercial sector, the continued reluctance to allow SRMs to engage in commercial milling appears to reflect the still widespread belief in the technological inferiority of the SRMs in terms of both the

5) Although recent data on the number of unlicensed mills is not available, in the case of Kelantan in 1968, 83 percent of the service mills known to be in existence were unlicensed. See U. Thet Zin [15: Volume 2, Table 1B].

6) For a detailed examination of the problem of capacity utilization and of the profitability of service milling, see Vokes *et al.* [17: Chapters 4-5].

quantity and quality of rice outturn. Yet this belief is essentially a hangover from the days when most of the SRMs consisted of primitive steel-hullers. Nowadays the vast majority of the SRMs employ improved huller technologies, most notably rubber-roller hullers. While it remains true that the SRMs cannot turn out top quality rice, this is not an important constraint, since the market for such rice is comparatively limited. Improvements in the technical efficiency of SRMs could anyway be achieved through further investments in improved milling equipment.

At the same time, the existence of a range of milling technologies and in particular, of small-scale milling systems, has been vital to providing the economic opportunity for investment by rural entrepreneurs. Indeed, in this context, the rapid growth of the small mill sector supports an important argument of Schumacher's in relation to the question of intermediate technology; namely that the supply of entrepreneurship in developing countries is essentially a function of the type of technology used; thus, 'Men quite incapable of acting as entrepreneurs on the level of modern technology may nonetheless be fully capable of making a success of a small-scale enterprise set up on the basis of intermediate technology' [14: 154-155].

Conclusions

The rapid growth and development of the small rice mill sector which, as we have seen, has relied primarily on the existing supply of entrepreneurs and capital within the rural areas, clearly indicates that there is considerable potential for developing small-scale in-

dustries in the rural areas. The desirability of such a development, particularly given the current emphasis on a comprehensive development of rural areas, has been increasingly accepted by governments in developing countries, with many such governments introducing specific programmes to promote the development of these industries by providing a range of assistance, including the provision of credit, technical, managerial and marketing assistance, to rural entrepreneurs.⁷⁾

Most of the components of these programmes can also be found in the various promotional schemes for small enterprises introduced in Malaysia. However, unlike other countries, much less attention has been given to channelling specific assistance to *rural* entrepreneurs. Rather, government efforts have concentrated on helping small enterprises in urban areas. This appears to reflect an official bias in the *bumiputera* policy, whereby the government sees the movement of *bumiputeras* from rural areas, identified as part of the traditional (agricultural) economy, to urban areas, identified as the modern sector, as a crucial part of the process of restructuring the economy.

While in a general sense this is true, in practice such a distinction between the traditional and modern sectors is clearly too narrow. There are no fundamental reasons why small-scale rural industries should be regarded any differently from similar industries in the urban areas, other than the fact that, unlike their urban counterparts, the development of rural small-scale industries

7) Notable examples in this respect are India and Kenya. See Carr [2: 12].

could also make a significant contribution towards the eradication of poverty among rural Malays, and thus towards the other primary goals of the NEP. At the same time, by failing to take account of existing rural industries as part of the modern sector, the government has underestimated the existing level of *bumiputera* participation in the modern commercial and business sector.

It is therefore the author's belief that a shift in government policy, whereby greater emphasis is placed on assisting the development and promotion of small-scale *rural* industries as part of its policy of restructuring, is desirable. Clearly a good starting point for such a policy is the small rice mill sector itself. In the context of objectives set by the NEP there are clearly strong arguments for removing obstacles to the growth of the small mill sector. This sector should be regarded as a seedbed for the development of entrepreneurial talent and managerial skills which could be crucial to the development of other small-scale enterprises in both rural and urban areas. Hence a more consistent policy which provides the necessary incentives for its continued development should be introduced.

Acknowledgements

Financial support for this study was provided by the Canadian International Development Agency as part of its programme of support to the Human Settlements Division of the Asian Institute of Technology. The author is grateful to Dr. Chee Peng Lim, Mr. R. J. G. Wells, colleagues in the Human Settlements Division and anonymous referees of *Southeast Asian Studies* for their helpful comments on an earlier draft of the paper.

References

1. Asian Development Bank. 1977. *Rural Asia: Challenge and Opportunity*. Singapore: Federal Publications.
2. Carr, M. 1982. *Appropriate Technology and Rural Industrialisation*. Intermediate Technology Development Group, Occasional Papers No. 1. London: ITDG Publications.
3. Chee Peng Lim. 1977. *Financing the Development of Small Industry in Malaysia*. Occasional Papers on Malaysian Socio-Economic Affairs, No. 6. Kuala Lumpur: Faculty of Economics and Administration, University of Malaya.
4. Chee Peng Lim; Puthuceary, M. C.; and Lee, D. 1979. *A Study of Small Entrepreneurs and Entrepreneurial Development Programmes in Malaysia*. Kuala Lumpur: University of Malaya Press.
5. Johari Mat. 1981. Integrated Agricultural Development Projects in Peninsular Malaysia: Issues of the Second Stage. Paper presented at the Seminar on *Rural Development and Regional Planning in the 80's: Challenges and Priorities*. Bangkok: Asian Institute of Technology.
6. Leibenstein, H. 1968. Entrepreneurship and Development. *American Economic Review* 58(2).
7. Malaysia. 1971. *Second Malaysia Plan, 1971-1975*. Kuala Lumpur: Government Printer.
8. ———. 1973. *Mid-Term Review of the Second Malaysia Plan, 1971-1975*. Kuala Lumpur: Government Printer.
9. ———. 1976. *Third Malaysia Plan, 1976-1980*. Kuala Lumpur: Government Printer.
10. ———. 1981. *Fourth Malaysia Plan, 1981-1985*. Kuala Lumpur: Government Printer.
11. ———, Faculty of Economics and Administration, University of Malaya. 1979. *Interim Report of Project on Small Bumiputera Enterprises in Kuala Lumpur and Johore Bahru*. Kuala Lumpur: University of Malaya. (Mimeographed)

12. ———, Regional Action Committee for North Peninsular Malaysia (RACNOM). 1974. *Report of the Rice and Paddy Sub-Committee*. Alor Setar.
13. Popenoe, O. 1975. A Study of Malay Entrepreneurs. In *Readings on Malaysian Economic Development*, edited by D. Lim. Kuala Lumpur: Oxford University Press.
14. Schumacher, E. F. 1974. *Small is Beautiful*. London.
15. U. Thet Zin. 1969/1970. *Survey Report on Rice Processing in West Malaysia*. Volume 1 and Volume 2. Serdang: Food Technology Research Centre.
16. Vokes, R. W. A. 1978. State Marketing in a Private Enterprise Economy: The Paddy and Rice Market in West Malaysia, 1966–1975. Unpublished Ph. D. Thesis University of Hull.
17. Vokes, R. W. A.; Wells, R. J. G.; and Fredericks, L. J. 1982. *Rice Processing in Kedah, Malaysia. An Economic and Technical Survey*. Research Monograph No. 2. Bangkok: Human Settlements Division, Asian Institute of Technology.
18. World Bank. 1978. *Rural Enterprise and Non-Farm Employment*. Washington: World Bank.