

FEATURES

RICE MILLING: AN INVESTIGATION INTO PRIVATE MILLERS

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Note: This study, conducted in August 1988, makes some references to the unsettled conditions in the Eastern Province which affected the rice milling industry. However, since then similar unsettled conditions have spread to certain other important rice milling areas in the country. The findings of the study should be observed in this context.

Rice - Sri Lanka's staple food is one of the major agricultural commodities produced in the country. Over the last quarter century paddy production in the country has increased by more than four fold, from 0.63 million metric tons in 1952 to 2.59 million metric tons in 1986. This growth was due to the increase in the extent of land brought under paddy cultivation, particularly under irrigation systems; and also due to the increase in average yield as a result of the use of improved cultivation methods together with a package of inputs. Paddy production in the country has been moving close to self-sufficiency in recent years and it is expected that in the coming years rice imports would be a thing of the past.

The immediate forward linkage of paddy cultivation (production) is the paddy milling industry which includes the removal of husks from the paddy grain and polishing the resultant rice grain partly or wholly. An effective milling industry is no doubt a pre-requisite to obtain the fullest potential of paddy production. It may be observed that in recent years with the increase in paddy production there was also an expansion in the paddy milling industry which underwent a series of changes. By 1988, however, the rice milling industry on the whole began to face various problems, although some of the established millers were having less difficulties.

Upto 1977 the private sector was not permitted to purchase and or transport paddy. Authority for purchasing paddy had been with the Paddy Marketing Board (PMB). Part of the paddy purchased by the PMB was milled by their own mills. The PMB got private sector mills to mill the balance through a Quota System by paying them milling and transport charges. The rice from the PMB mills and the quota mills was delivered to the Food Commissioner (FC) and the FC issued rice to the Co-opera-

tives to be distributed under the ration scheme.

With the introduction of the liberal economic policies in 1977 this system began to change. On the one hand the withdrawal of the rice ration from about one-half of the population from January 1978, and the introduction of the Food Stamp Scheme instead of the ration scheme from September 1979, led to a heavy decrease in the PMB's paddy purchases and its rice production, and the FC's rice issues to the Corporatives. For example, in 1978 the PMB purchased 36 percent of the total paddy production in the country, but this share dropped to 6 percent in 1981. The FC issued 573,000 metric tons of rice in 1978 and this decreased by 72 percent to 159,000 metric tons by 1981.

This created an open market for rice and expanded the market rapidly in the late 1970's and early 1980's. On the other hand the government invited private sector entrepreneurs to join the paddy milling industry by offering attractive incentives to the industry such as institutional credit facilities and tax holidays. In addition, the comparatively low technology involved in the industry, the suitability of the industry for promotion of various sizes of manufacturing units, easy import of machinery and spares after liberalisation, and wide spread availability of raw material and a market for the product also encouraged the private sector entrepreneurs to cater to the paddy milling industry. Under these circumstances private sector involvement in paddy milling and rice trading increased dramatically after the late 1970's.

Of the total paddy production in Sri Lanka it is estimated that 20 percent should be allocated for seed paddy and post harvest losses. The balance 80 percent is available for milling. Out of this amount available for milling 75 percent is milled in par boiled form and the

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balance 25 percent is milled in raw form. Paddy mills are spread all over the island but with a high concentration in certain districts where there is higher paddy production.

Paddy mills in Sri Lanka, belong to two main categories, namely, commercial mills and custom mills. Commercial mills are comparatively bigger mills; with an average rated milling capacity of about 0.7 metric tons of paddy per hour. There are about 1,600 commercial mills, which are owned by 3 types of owners: the Paddy Marketing Board (1%); the Co-operatives (3%); and the Private Sector (96%).

Mills owned by the PMB process part of the paddy purchased by them, directly from the farmers, and also through Co-operatives and Agriculture Service Centres. At present PMB mills mill only about 2 percent of the paddy available for milling in the country. According to the operational pattern, private sector and co-operative sector mills are divided into 2 types: Quota mills and Non-Quota mills.

There are about 1,425 Non-Quota mills in the country. However, the majority of quota millers also do non-quota milling in addition to their quota milling. Non-Quota millers buy paddy directly from farmers or paddy traders or through their paddy collecting agents. Of the total paddy available for milling in the country about 75 percent is milled under this system. A large part of their rice is sold to the Colombo Wholesale markets; while a small part of their production goes to wholesale markets in certain provincial towns and sometimes to the Co-operatives. However, rice produced by small scale wholesale markets in certain provincial towns, wholesale selling centres organised in certain areas and to the retail sellers.

About 150 mills are functioning as quota mills. Quota mills obtain paddy from the PMB paddy stores and after milling the rice is delivered to the Food Commissioner's (FC's) Store or sometimes to the PMB's rice stores. Millers are paid milling charges and transport charges by the PMB. At present they mill about 4 percent of the total paddy available for milling in the country under the quota system. As noted above the majority of these mills do non quota

milling too, in addition to their quota milling.

Custom mills are the smallest size private owned traditional (one huller) mills located primarily in villages in paddy producing areas. There are more than 5,000 custom mills in the country. The average capacity of a mill is about 0.2 metric tons of paddy per hour. They mill mainly paddy brought by farmers and villages and charge about Rs.6/- per bushel (21 kg.) of paddy for milling hire. They will about 20 percent of paddy available for milling in the country.

This paper attempts to ascertain the major problems faced by various types of private sector millers. Each type of miller in the private sector faces different types of problems although some of the problems are common to many of them. Even in case of some common problems these problems affect them in different ways.

Most of the specific problems faced by the non-quota millers are related to their raw material (paddy) market and the market for rice.

The lack of working capital to purchase paddy for stocks is one of the main problems faced by the non-quota millers. After the harvest season paddy prices and rice prices come down and during the off season (particularly during the last months of the year) these prices increase. Millers having adequate working capital buy large stock of paddy at low prices soon after the paddy harvest and mill this paddy throughout the year. By selling this rice at higher prices (during the off season) they earn good profits. A large majority of the millers do not have their own money or credit facilities to buy such large stocks of paddy, when the price is

low. Hence they cannot earn higher profits during the off season. Some of these millers do not mill at all for a few months during the off season, mainly because they cannot buy paddy due to higher prices as well as the shortage of paddy during this season.

Another problem they face is the inadequacy of raw material. When it is assumed that paddy mills work one 8 hour shift per day, 22 days per month and 12 months per year, it is estimated that paddy available for commercial mills is enough only for about 70 percent of milling capacity of these mills. In other words these mills have to be closed about 3½ months of the year due to the lack of paddy. During the period of closure the miller has to incur part of the overhead costs without receiving any income.

This situation is due to a higher increase in the number of mills and available milling capacity than the increase in paddy production since the late 1970's. The total number of commercial mills increased by 83 percent, from 875 in 1978 (1) to 1,600 in 1987 (2); although paddy production increased only by 37 percent, from 1.9 million metric tons in 1978 to 2.6 million metric tons in 1986. (3)

Paddy available in most parts of the country in the open market is not of good quality. This paddy is of mixed variety; which includes 5 percent to 10 percent of immature "bol" paddy, mixed with impurities like sand and small stones and with a moisture content higher than the required level of 14 percent.

When paddy with higher moisture content is stored it gathers fungus and part of it has to be destroyed, while rice from this paddy becomes discoloured. When there is a high level of impurities and a variety of mixture with immature paddy the miller gets a low percentage of head rice and high percentage of damaged and broken rice. In most cases the miller cannot grade this rice and he is compelled to label this rice as off grade rice.

In the wholesale rice market these

millers are exploited by the commission agents. Commission agents in the Pettah wholesale rice market charge normally a commission of Rs.10/- per bag (60 kilograms) of rice from the rice miller. The balance of the sales value of the rice is returned to the miller. About 75 percent of this value is paid to the miller when the rice is delivered to the wholesale commission agent's/trader's shop or stores. The balance is paid after about a week to 10 days when this sale of rice is over. This money is paid after calculating the total sales value of the rice, by taking into consideration the sales price of the rice. In most cases Commission agents/traders in the wholesale market do not quote the actual market price to millers. They lead the millers to believe that the lower prices they quote are the actual market prices and millers have no alternative but to give their rice at this price. The Commission agent/trader keeps this margin which actually belongs to the millers. This margin generally would be upto 5 percent of the sales values.

Most of these problems faced by the quota millers seems to have been associated with the operations of PMB. For instance, insufficient milling charges and transport charges paid by the PMB have seriously affected the quota millers. The present milling charges paid by the PMB to the quota millers were Rs.36/- per 100 Kg. of paddy in case of par boiled milling and Rs.19/50 per 100 Kg. of paddy in case of raw milling. These payments are not sufficient for a large majority of quota millers to earn fair profit margins. Quota millers particularly who have set up new mills by taking bank loans cannot obtain a reasonable profit margin after paying the instalments on their loans and interest.

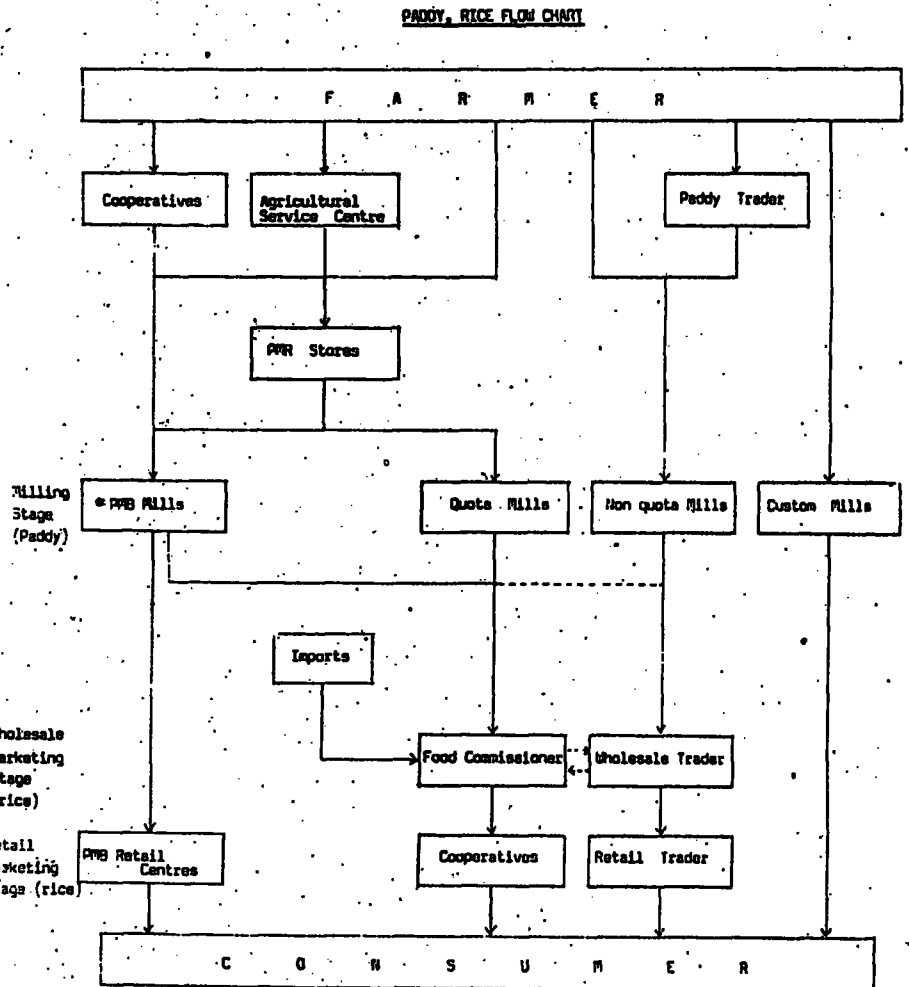
The transport charges paid to the quota millers for transporting paddy from the PMB to the mills and rice from the mills to the FC's stores is also lower than the open market transport charges. Millers particularly who do not have their own transport facilities have to incur losses in their transport of paddy and rice.

1. Project Report on Rice Milling by Industrial Development Board of Ceylon - 1978
2. Unpublished data of the Survey on Rice Milling in Sri Lanka conducted by the Rice Producing Research and Development Centre - 1987.
3. Paddy production in 1987 is not taken for comparison since production in this year recorded an unusual drop.

Non availability of adequate stocks of paddy in PMB stores hampers the smooth operation of paddy milling in certain part of the country. Because of low operation in the PMB's paddy purchasing activities in certain areas, particularly in the Easter Province, in the recent years paddy stocks in the PMB stores in these areas have decreased heavily. The quota millers who obtained paddy from these stores have to face a problem of non availability of paddy for their quota milling. The PMB was reluctant to issue paddy from distance stores to these millers since it could have increased PMB's transport payments to these millers on the one hand, and on the other hand, these millers were also reluctant to obtain paddy from distant stores since it would have increased losses they had to incur on transport. Hence these millers are compelled to do some non-quota milling or to remain idle.

A further problem for these millers is the poor quality of available raw material at PMB stores. Although the PMB stores must purchase only paddy of required quality (in terms of moisture content, impurities, variety mixture, refraction and damage and discoloured grains) in most instances the PMB buys poor quality paddy as a result of malpractices at the purchasing centres. The quota millers to whom this poor quality paddy is issued are faced with the difficulties of producing the required quality of rice. When their rice is not upto the required qualities it is not accepted at the FC's Stores (or PMB's rice stores). In these instances millers are compelled to sell this rice in the open market and pay the PMB for the paddy quota thus causing difficulties and sometimes even losses. Also occasionally they are not able to obtain the required rice percentage (of 66%) as often the quality of this rice is very poor.

It was found that corruption and malpractices were operating to a high degree at PMB/Stores from where the millers had to obtain paddy and at FC's Stores where they had to deliver their rice. Corruption was found to be prevalent in the form of bribery, at various stages in both places. As a result of these malpractices at the PMB Stores the miller is issued paddy of low quality



and low weight and at the FC's Stores miller's rice is not accepted promptly but is delayed or not accepted unnecessary sometimes. Though there are regulations to protect millers from these malpractices, in practice the millers are not in a position to break the prevailing system. There were some cases where millers had stopped quota milling since they could not afford the hidden costs of this system.

In addition to these specific problems, both the quota and non-quota millers face a set of common problems which affect the profitability of the industry.

For instance, the machinery of paddy mills cannot be used at full capacity when the capacities of infrastructural facilities of the mills such as paddy stores, soaking and boiling tanks and drying yards are lower than the capacity of the machinery. More than 75 percent of the paddy mills set up under the ins-

titutional credit scheme belong to this category. Lack of infrastructural facilities interrupts activities of these mills when they want to perform a heavy work load in the working seasons.

Inappropriate technology and old machinery constitute another problem area. Of the total number of commercial mills 71 percent or 1,140 mills are huller type mills or traditional mills. The balance 29 percent or 470 mills are categorised as semi-modern and modern. \* Some of the mills which belong to the first category but operate on a medium scale and manufacture for the wholesale market need low cost simple modernization facilities like introduction of rubber roll shellers and paddy cleaners. Low cost modernization could increase the quality of products and thereby profit margins of these mills.

A considerable number of mills are

also too old. Their productivity as well as the quality of production remain at a low level. Replacement with new machinery is necessary to increase their productivity, quality of production and thereby the profitability of these mills. [There are some old mills given on rent. People running these mills wanted the mill owners to repair them or install new machinery while the mill owners neglect these mills for some reason.]

Lack of investment capital is another common shortfall. There are some successful millers who really want to expand capacity of machinery or infrastructural facilities, replace the old machines with new machines and introduce modernization appropriate to their scale of production and markets; but they do not have their this purpose. Some of them have not tried to obtain bank loans; some of them are not in a position to obtain bank loans since they have already taken the maximum amount of loans they could obtain; and another set of millers do not like to obtain more loans for some reason though they are capable of getting loans.

Problems emanating from inefficient management and planning can be categorized into three classes.

(a) According to the nature of the rice milling industry it needs a close supervision over its production and marketing procedures for its success. One of the main reasons for the failure of paddy mills is the owners inability to make a close supervision of operation in their industry.

(b) Lack of financial discipline is another problem. The millers inability to reuse their income properly creates a shortage of working capital while insufficient re-investment of profits generated over a period of time on the industry aggravates their capital investment problems.

(c) The millers inability (i) to select the level of technology or modernization to suit his scale of production and the market and (ii) to plan capacity of infrastructural facilities to suit his machinery capacity also interrupts his work performance.

In addition, lack of labour and excessive rains, acts as another common problems. In major paddy growing areas millers who do not have permanent labour, face a shortage of labour in the paddy cultivation and harvesting seasons. They are compelled to work slow or close down their mills temporarily owing to this problem.

Excessive rain during the North-East monsoon season hampers par boiling and drying activities in major producing areas; since drying of paddy is a pre-requirement for processing.

Custom millers face the two main problems of low capacity utilization and lack of investment capital. When the mills are taken as a whole their average capacity utilization is very low at present. One reason for this present high under-utilization is the increase in the number of custom mills over the last five years at a faster rate than that of their customers.

Some of these millers, particularly those who have comparatively bigger hullers [of size No. 7], try to improve their mills to do some commercial milling too; in addition to custom milling, [this is still done by a small percentage of custom millers]. To improve these mills to the level of smallest size semi commercial mills they need capital expenditure [ranging from Rs.20,000/- to Rs.40,000/-] for building up of necessary infrastructural facilities such as drying yards and boiling tanks in the case of par boiled milling. At present they are short of the required capital.

Though different categories of millers face different types of problems, millers falling within different categories are not affected equally by these problems, but at different intensities. In spite of this variety of problems a good majority of millers continue operations without a major crisis.

There are also some sections of millers who perform comparatively better than others.

When the commercial mills are considered small scale commercial millers

(whose average milling capacity is around 0.4 metric tons of paddy per hour) can compete with the medium scale commercial miller (whose average milling capacity is around 0.9 metric tons of paddy per hour) due to a number of reasons, such as:-

- (a) They use more family labour and to a lesser extent hired labour.
- (b) Their overhead costs are low.
- (c) Their capital costs are comparatively low since they use fewer machines, and produce low quality rice to cater to the low income groups.
- (d) Their transport costs are low since they sell their rice at the mill and/or places close to the mill [such as small scale wholesale market of certain provincial towns, wholesale and retail selling centres like Maradaghamula and retail shops]
- (e) They could always supply rice at a lower price to the consumer in low income groups.

Millers who set up mills without taking loans need to undergo fewer difficulties than those who set up mills by taking bank loans. The bank loan receiver has to pay monthly installments on the loan and interest out of his profits and therefore his real profit margin is comparatively small or sometimes nil. Under this situation even a temporary crisis in the industry affects them very badly.

The commercial millers engaged in other forms of business, but who pay sufficient attention to their paddy milling industry, are capable of doing their milling more successfully than others, since their milling industry is supported by these other businesses. For example a miller who has a shop in a wholesale rice market can easily obtain a good price for his rice. If he has a transport service he can get easy transport for his paddy milling industry. A miller who has retail shops or hotels can sell part of his rice to these establishments. Also, he can get the help of these business to solve short term liquidity problems of the mill and to maintain the mill in a crisis period without much damage.

Though custom mills work at high undercapacity, as noted earlier, mill

owners do not think it a serious problem because custom milling is only an additional income source for them, but this income covers a good part of consumption expenditure of their families. Only one family member is engaged in this milling work, while he carries on his other work uninterrupted except during the few months when milling work is a little heavy. And also some of these millers [a small percentage] do commercial milling too, but on a very small scale, and they earn a considerably good income from it.

The intensity of the problems listed above, and their implications for the industry as a whole could be mitigated by:

- (a) provision of working capital to purchase raw material, and also, investment capital to modernize those mills with outdated machinery.
- (b) (i) encouraging farmers to produce high quality paddy after their harvest; and (ii) making arrangements to encourage the purchase of high quality paddy by the PMB,
- (c) increase of milling charges [by more than 50 percent] paid to the quota millers,
- (d) minimising the alleged malpractices at the institutional marketing network,
- (e) provision of required knowledge and training to the paddy millers on production activities, machine requirements and financial management.

To encourage new investments to install paddy mills only in areas that may be considered desirable, as there seems to be a high degree of over capacity within the system. The capacity of the country to make a quantum increase of paddy production within the next few years seems to be highly questionable. This makes the available milling capacity more than adequate for any minor increase in paddy production in the foreseeable future.