# The Paddy Farmers' Channel Choice and Links to the Public and Private Marketing Channels in Sri Lanka

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#### ABSTRACT

A better understanding of the paddy marketing channels paves the way to explore the dynamics of the rice economy in mixed marketing conditions. Thus, paddy/rice industry in Sri Lanka has now become a serious concern with all its multi-faceted implications. This study examines the influencing factors for the choice of marketing channels by the paddy farmers as well as the links to the public and private marketing channels in Sri Lanka. A sample of 345 farmers were selected using multi-stage random sampling from DS divisions in Ampara, Anuradhapura, Polonnaruwa and Batticaloa districts. A pre-tested structured questionnaire and focus group discussions were conducted to collect primary data. Binary logistic regression was deployed for the data analysis. Results revealed that the average paddy land cultivated in the Maha season in Anuradhapura, Ampara, Polonnaruwa and Batticaloa was 3.41 ac., 3.50 ac., 3.09 ac., and 4.80 ac. respectively. Nearly 52% of the farmers sold their paddy to the Paddy Marketing Board (PMB) showing the popularity of the Government Paddy Purchasing Programme (GPPP) in major producing areas. Analysis further indicated that, low land extent (p<0.1), availability of paddy storage facility (p<0.1), distance to PMB centers (p<0.1), distance to private collectors (p<0.05) and quantity of wet paddy sold (p<0.1) were the criteria which had significant impact over choice of paddy marketing channels. Positive significant coefficient of 'Distance to PMB center' reflects that, even if a selected farmer is residing far from the PMB center, he or she is more inclined to select GPPP. PMB centers offer more price premium than in the open market and in some cases, this was more than Rs.10.00/kg. "Quantity of wet paddy sold" is the variable which indicates a negative and significant impact on selecting GPPP. If a particular farmer tends to sell higher quantity of paddy as 'wet paddy', he or she is less likely to select GPPP. Farmers who, did not possess safe storage facilities, had difficulties in finding a suitable place to dry paddy, had high labour requirement to reach 14% moisture content in the final produce and the farmers who faced immediate cash needs were more inclined towards private buyers. There are more opportunities for small-scale farmers who produce limited surplus of paddy in government paddy purchasing channel. More time and cost involved, ineffective buying process, strict quality checks, lack of sufficient storage facilities, delaying of the commencement of purchasing and lack of drying facilities are the major problems faced by the farmers when selling paddy to the PMB centers. The major problem highlighted by the farmers regarding selling paddy to private sector is inability to receive a fair price.

KEY WORDS: Channel Choice, Paddy Marketing, Public, and Private Market Channels

# Introduction

Rice is the staple food of nearly half of the world's population. About one billion households depend on rice cultivation as their main source of livelihood (IRRI, 2012). Rice is often mentioned in the scriptures of the ancient civilizations in Asia and played a key role in the historical development in many Asian countries. Today, patterns of cultivation, marketing, and consumption of rice are changing faster than ever before. The key factors that affect the demand for rice are income, prices, population growth, and urbanization in different ways. As incomes rise, consumers tend to shift from standard-quality rice to high-quality rice (Toriyama et. al., 2005; Sharma, R. 2014 and Rice Today, 2013).

Prasanna et. al., (2011) explained in their study related to the paddy marketing conducted in the North Central Province that the poor returns of paddy farming is mainly due to the marketing issue and emphasized the need of better marketing practices for the paddy farmers. During the peak harvesting month, more than 50 percent of the divisional secretarial (DS) divisions recorded farm gate price below guaranteed price, in Ampara and Batticaloa districts. Farm gate prices of all DS divisions in Ampara district were well below the guaranteed price in 2010 and 2013. The situation was more or less common across all the major producing districts, hence DS areas with regular low farm gate prices for paddy could be identified in all major producing districts (Wijesooriya et. al., 2016). Meantime, the political economy of rice is changing, and that shapes rice production and consumption. Most Asian governments still view rice as a strategic commodity because of its importance, in the diet of the poor, in livelihoods of the people and income generation of farmers. In view of its strategic and political importance, the rice sector has been subject to a number of policy interventions.

The dominant sector of the Sri Lankan economy historically has been paddy (*Orayza sativa*) cultivation. As a result, the country was known as the Granary of the East. Paddy is cultivated in almost all parts of the country, except at very high altitudes. It is the main contributor to the rural economy, as the majority of rural households are engaged in rice production as their main or supplementary source of livelihood. The relationship between Sri Lankan life and paddy cultivation is closely knit, that it permeates all aspects of Sri Lankan culture and history. After 2009, the country's paddy production gradually increased due to the increase of the contribution to the national production from the Eastern and Northern provinces because of the ending of the prolonged war. During the period of 2008-2015, the country was able to achieve self-sufficiency in rice and produce more than the requirement. In year 2015 paddy production of the country reached the highest ever 4.8 million metric tons (Central bank of Sri Lanka, 2006, 2012 & 2017 & Department of Census and Statistics, 2013).

The government intervention in paddy/rice marketing system in order to stabilize the market is common in most of the rice producing countries in Asia. The government policy intervention in paddy marketing in Sri Lanka mainly focuses on procurement of paddy, fixing and maintaining guaranteed prices (GP), stock management, grain distribution, and disposal of paddy in order to stabilize the rice market. During the harvesting season farm gate prices decline drastically and in the offseason it is the converse. Hence, both the farmers and the consumers were negatively affected. In order to prevent these adverse fluctuations, the government intervenes in paddy marketing mainly through the Paddy Marketing Board (PMB) and encouraging the private sector. Some research exercises have brought to light that the terms of trade of paddy is unfavourable to the paddy farmers in Sri Lanka due to the continuous rise of production cost, low paddy prices, and a significant increase in the prices of consumer goods (Wijetunga, 2011 and Ahamed, 2014). In the circumstances, this study is concerned with examining the socio-economic status and the perception of paddy farmers' links to the public and private marketing channels in Sri Lanka.

### Present Paddy Purchasing System in Sri Lanka

The present paddy purchasing system in the country comprises both the public and the private sector participation. The paddy production in the war affected areas such as Batticaloa, Trincomalee, Ampara and Mannar increased significantly after 2009 as the war ended. The market equation of paddy started to change because of a huge surplus reaching the market from those areas. Therefore, the role of the PMB as a public entity has become prominent in stabilizing the paddy market than ever before. The PMB continued purchasing paddy increasing the amount gradually every season and reached the highest ever in the year 2015. In 2015, the PMB purchased 335,582mt of paddy, which was 8% of the total paddy production and nearly 12% of the total marketable surplus. Remaining 88% of the marketable surplus of whole paddy production was purchased by the private sector and similar process take place in every year. Large, medium, and small-scale millers are the main actors who purchase the paddy in major producing areas. These millers were able to purchase paddy in bulk and stored due to the providence of pledge loans by the state banks and the private banks. When the purchasing data for the last ten years is considered, the annual purchasing of the PMB ranged 1% - 8% of the total paddy production in the country. The government policy intervention in paddy marketing in Sri Lanka mainly focuses on procurement of paddy, fixing and maintaining GP of paddy, stock management, grain distribution, and disposal of paddy in order to stabilize the rice market. The government intervenes in paddy marketing mainly through the government parastatal, the PMB. The major objectives of the PMB procurement programme are to stabilize the farm gate prices, maintaining GP of paddy, buffer stock management, and grain distribution and disposal of paddy in order to stabilize the rice market.

# Methodology

### Research Design & Data

The study is based on both primary and secondary data. Primary data were collected via a pre-tested structured questionnaire survey of the farmers. Key informant discussions were conducted with private sector buyers, farmer organization leaders, bank officers, other input services providers, rural community leaders, and government officers. Secondary data comprises a comprehensive literature review based on main concepts related to the study such as the behaviours of marketing channel choice of the paddy farmers, government, and private intervention on the paddy marketing process and economics of paddy marketing channels in Sri Lanka and trends in the recent past. Furthermore, secondary data was collected from the Central Bank reports, annual reports of the Paddy Marketing Board, various survey reports published by the Department of Census and Statistics, progress reports of WHRM, relevant books and journals, HARTI weekly and monthly bulletins and HARTI price database.

### Study Area

For the collection of primary data of paddy farmers, Ampara, Anuradhapura, Polonnaruwa, and Batticaloa districts were selected according to the distribution of marketable surplus<sup>1</sup> of paddy in major producing areas in the country. As the first step, districts to conduct the sample survey were selected based on the district - wise figures of paddy marketable surplus of the country in an average production year (Figure 1). Nearly 75% of paddy marketable surplus is being reached to the market from Ampara, Anuradhapura, Polonnaruwa and Batticaloa districts. Therefore, this study mainly focused on those four areas.



# Figure 1: Annual Marketable Surplus of Paddy in Sri Lanka (%) in an average production year, 2013

Source: Department of Census and Statistics, 2013

## Sampling Technique & Sample Size

Multi-stage random sampling technique was deployed to select respective DS Divisions and Agrarian Services Divisions (ASC) Divisions. The list of the farmers by districts was obtained from the Paddy Marketing Board and sample sizes were determined according

<sup>&</sup>lt;sup>1</sup>Marketable Surplus = Net Production - (Wastage + Consumption + Seed requirement for next season). This surplus was normally distributed to the deficit areas like Western Province as rice from the major surplus producing areas.

to the number of paddy farmers (who joined the government programme) and the nature of surplus by the respective district. However, there were no records of farmers, who selected private marketing channels. Therefore, those farmers were selected based on convenient sampling. Total sample of the study was 345 and it was allocated proportionately according to the respective marketable surplus of paddy in each district (Ampara, n=140; Anuradhapura, n=95; Polonnaruwa, n=74 & Batticaloe, n=36).

### Analytical Framework

Logistic regression is used to describe data and to explain the relationship between one dependent binary variable and one or more independent variables that could be nominal, ordinal, interval, or in ratio-level. Paddy marketing channel choice by the farmer is the dependent variable of this study. Dependent variable has two categories where, farmer who selected the Government Paddy Purchasing Programme (GPPP) as the marketing channel of his surplus paddy and the farmer who selected private channel. When the outcome of interest is a binary variable, logistic regression is appropriate (Ingram, 2003). An empirical representation of choosing GPPP by farmer i to observable explanatory variables is given by equation 1.

$$Y_i = X_i \beta + \epsilon_i$$
 [1]

Where, Xi is the vector of explanatory variables relevant to i<sup>th</sup> farmers' choice of GPPP system.  $\beta$  is the vector of unknown parameters and " $\epsilon$ i" is the residual error assumed normally distributed. Farmer who selected GPPP was given the value 1, while farmer who did otherwise was given zero. The predictor variables were derived based on the assumption that choosing GPPP is a function of range of farmer characteristics such as personal, resource related, income related, Indebtedness related and locality related variables.

Accordingly, it is predicted that resource related attributes such as low land extent and availability of paddy storage facilities might have some influence on the marketing channel choice. Further, predicted income related variables which have some effect over farmer's decision on choosing a marketing channel were quantity of wet paddy sold, income from other field crops (Yala season) and income from other field crops (Maha season). Indebtedness related variable captures whether farmers have taken informal loans or not. Next, considered locality related variables were distance to PMB center (km), distance to private mill (km) and distance to private collector (km) (Table 1).

### **Results and Discussion**

Out of the total sample (n = 345), nearly half of the farmers (48%) depended on private sector paddy purchasing schemes, whereas the corresponding figure for the government sector was only 14%. This is mainly due to their selling quantity not exceeding 2,500kg, which is the maximum limit of PMB purchasing quantity for a season per farmer. Furthermore, 130 farmers selected both the private and the government marketing channels. Their first choice was the PMB stores and the rest of the surplus is sold to the private sector. However, farmers who have selected both the private and the government channels were grouped into the government category in the analysis because their first choice was always with the government PMB center. Having recorded the second highest

marketable surplus of paddy, in Polonnaruwa nearly two third (72%) of the farmers relied on the private sector paddy purchasing schemes. This is due to large number of private sector paddy mills being concentrated within the area. In Batticaloa district, 56% of the farmers relied on the private sector paddy purchasing schemes, whereas none relied entirely on the government sector. Among all the districts, which have been selected, the highest farmer choice for the government paddy-purchasing scheme was demonstrated in Ampara. Majority of the farmers (47%) in Anuradhapura have selected a combination of both the private and the government sector.

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Variable	Level of	Unit of	Description	
	Measurement	Measurement	Description	
Paddy marketing channel choice by	Ordinal Binary 1 =		1 = Select GPPP	
the farmer (Dependent variable)	Ofullia	Diffaty	0 = Otherwise	
Low land extent	Ratio	Acres		
Distance to PMB Center	Ratio	km		
Distance to private mill	Ratio	km		
Distance to private collector	Ratio	km		
Quantity of wet paddy sold	Ratio	kg		
Income from other field crops (Yala)/Rs. per month	Ratio	Rs./Month		
(Maha)/Rs. per month	Ratio	Rs./Month		
Availability of paddy storage space (yes)	Nominal	Binary	1= Yes 2= No	
Loan from an informal source for agric. purpose (yes)	Nominal	Binary	1= Yes 2= No	

 Table 1: Descriptions of the Selected Variables Applied in the Logistic

 Regression Model

It was noted that majority of the small farmers, not producing a considerable market surplus selected only the government paddy purchasing schemes. They fetched comparatively higher prices from the PMB stores. In general, the government imposed a ceiling of 2,500 kg of paddy from an individual farmer. Therefore, small-scale farmers opted for the government schemes. However, farmers who cultivate on a larger scale (nearly three or more acres) and producing marketable surplus beyond 2500kg sold to PMB and rest to the private sector. Hence, the first choice of these farmers is always bound with the government paddy purchasing schemes. Because of the limited purchasing capacity of the government schemes, these farmers tend to sell the rest to the private channels. Generally, farmers who demarcated their first preference as the private sector have credit binding with private parties. Leaving them with no option other than depend on the private channels. This is clearly visible in the Batticaloa district where the government intervention in paddy purchasing is very limited.

Results revealed that the average age of the farmers in the two categories were equal and it was nearly 55 years (Table 2). This demonstrates how different age categories behave

and select the best purchasing schemes according to their prior experience and awareness. From the total sample, 57% was in the age group of 40 years to 60 years and only 10% represented the age category of less than 40 years. Among the farmers who have selected the government purchasing schemes in Anuradhapura and Ampara, only 1% were less than 40 years. Interestingly, none of the farmers in this category in both Batticaloa and Polonnaruwa has selected the government paddy purchasing schemes, indicates the reluctance of the young farmers towards the government paddy purchasing schemes.

Majority of households are engaged in farming activities as their main occupation: in Anuradhapura (75%); in Ampara (85%); in Batticaloa (94%) and in Polonnaruwa (91%). Therefore, their preference in selecting the best purchasing channel is a vital decision for respondents in all four districts. It was revealed that the majority of respondents (53%) did not have secondary income sources.

Table 2: Descriptive Statistics of Both	Farmer	s who	Sold Paddy to	Govern	ment
and Private Channels			-		
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	Overall	Private	Government
Characteristics (Variables)	n=345	n=167	n=178
	Mean	Mean	Mean
Age (years)	54.99	55.05	54.93
High land extent (ac.)	1.56	1.63	1.49
Low land extent (ac.)	3.35	3.53	3.18
Experience in paddy farming (yrs)	28.65	28.35	28.93
Family labour availability (nu)	2.97	3.10	2.84
Distance to PMB Center (km.)	5.72	4.99	6.42
Distance to private mill (km.)	5.81	4.93	6.64
Distance to private collector (km.)	1.53	1.17	1.86
Quantity of wet paddy sold (kg.)	349.89	480.53	227.32
Sold marketable surplus of paddy	1057.06	2172 50	15(1.02
(Maha) (kg.)	1857.06	2172.59	1561.02
Income from other field crops	1002 24	4694 79	4014 57
(Yala)/Rs. per month	4803.34	4684.78	4914.57
Income from other field crops	4524 (2)		2667 61
(Maha)/Rs. per month	4534.62	5458.75	3667.61
		Percentages	
Secondary occupation (yes)	82.02	80.80	83.10
Availability of paddy storage space (yes)	90.72	94.60	87.10
Samurdhi recipient status (yes)	17.10	19.10	15.00
Loan from an informal source for agric.	10.72	12.00	0.40
purpose (yes)	10.72	12.00	9.60
Pawning of jewellery for agricultural	55.04		5 ( )
purpose (yes)	55.36	54.5	56.2
Having an own transport facility to	27.07	22.20	12.20
transport paddy (yes)	37.97	32.30	43.30
Source: HARTI survey data 2017			

Source: HARTI survey data, 2017

From the total sample, 20% are engaged in farming as their secondary occupation. Other secondary income sources include, animal husbandry, labour, and skilled jobs like masonry, carpentry, self-employee, and business activities. Interestingly, a higher

percentage of respondents (11%) who selected government paddy purchasing schemes engaged in farming activities than farmers who selected private channels. An average land extent of all districts in both seasons except Anuradhapura has an equal contribution for the cultivation. Interestingly, this average extent for both seasons in Batticaloa exceeded 4.0 acres. In general, the majority of the farmers in Anuradhapura and Ampara opted government-purchasing channel while the majority in Polonnaruwa and Baticaloa selected private marketing channels.

The choice of the marketing channel is a fundamental and important decision for the farmers where many factors and conditions have to be considered as a basis for a precise decision. The logit model on the farmers marketing channel selection was empirically tested using data collected from paddy farmers in major producing districts in the country. The estimated coefficient of variable 'Distance to private mill' has reported more than 5% of significance level. Estimated coefficients of variables such as 'Distance to PMB centers' and 'Availability of paddy storage facility' have reported positive value, thus affected positively and significantly (10%) for selection of GPPP. On the other hand, assessed coefficient of the 'Quantity of wet paddy sold' has reported a negative value, hence affected negatively and significantly for selection of GPPP (Table 3).

Variable	Coefficient	S.E.
Lowland extent (ac.)	-0.035*	0.037
Availability of paddy storage facility (yes/no)	0.838*	0.429
Distance to PMB Center (km.)	0.036*	0.022
Distance to private mill (km.)	0.032	0.021
Distance to private Collector (km.)	0.389**	0.114
Loan from an informal source for agri. purpose(yes/no)	0.322	0.298
Quantity of wet paddy sold (kg.)	-0.001*	0.001
Income from other field crops (Yala)/Rs. per month	-3.200x10-6	6.170x10-6
Income from other field crops (Maha)/Rs. per month	-5.710x10-6	6.890x10-6
Constant	-2.222**	0.793
Number of observation	345	
Likelihood ratio chi2	37.690	
Probability of chi2	0.000**	
Pseudo R2	0.079	
Log likelihood	-220.115	

### **Table 3: Regression Results**

\*\* and \* indicate the significant levels of 5% and 10% respectively

Positive significant coefficient of 'Distance to PMB Center' reflects that, even if a selected farmer is residing far from the PMB center, he or she is more inclined to select GPPP. This is mainly because in peak harvesting months of February and March the price gap between the open farm gate price and price offered by the PMB centers is comparatively high. PMB centers offer more price premium than in the open market and in some cases, this was more than Rs.10.00/kg. Therefore, regardless of distance, farmers tend to select

the PMB stores. The context in which farmers sell paddy to the PMB centers explains this further. The normal procedure is that the farmers take their supply to the nearest PMB centers as the first step. The distance to the nearest PMB center is generally in the range of 10-15km from a farmer's residing place.

The farmers who had late harvesting as well as those who experienced delays in the processing stage were unable to sell their harvest to the PBM store as it was filled by the time they reached there. Therefore, each farmer had to transport their harvest to relatively larger PMB centers with higher capacity, which are situated far from their residing place. In such cases, some farmers had transported their harvest 20-30km to the PMB center, which indicate their preference to the GPPP regardless the distance they have to travel.

It envisaged that, irrespective to distance farmers who opted government paddy purchasing channel more likely to select PMB centers. Interestingly, it is noted that, those farmers, also selected private mills over village level collectors' shops. In general, during peak harvesting seasons, village level collectors offer the lowest paddy prices, whereas private mills located in distantly offer somewhat higher prices. However, PMB centers offer the guaranteed price, which is higher than both collector price and miller price. Generally, farmers maintain a considerable space to store paddy used for home consumption. However, this is not a proper storage facility to store surplus paddy for a longer period. The farmers who do early harvesting often have to store their paddy for about a period of one month, in safe condition, until the PMB empty their stores and commence paddy purchasing. Therefore, the paddy growers who do not have safe storage facilities are somewhat reluctant to keep the harvest for 3-4 weeks, to be able to sell to the PMB. They often prefer selling wet paddy to the private buyers, who comes to their fields during the time of harvesting.

In present study, "Quantity of wet paddy sold" is the variable which indicates negative and significant impact on selecting GPPP. It points out that if "Quantity of wet paddy sold" increased by one unit, on average, the estimated log likelihood value decreases by 0.001, signifying a negative relationship between selection of GPPP and the considered variable. It means if a particular farmer tended to sell higher quantity of paddy as 'wet paddy', he, or she is less likely to select GPPP. Because of wet paddy arriving to the market, the prices decline sharply and the farmers who produce dried paddy also received low prices due to the market distortions. In the recent years, combined harvesters are the most popular harvesting method in almost all major producing areas. Farmers tend to use the combined harvesters mainly due to the low cost compared to the alternative method of harvesting. However, the combined harvester's threshed paddy has high moisture content (nearly 20%) needed an additional drying process to reach the standard moisture level in the final produce.

As explained, farmers who do not have safe storage facilities, who have difficulties in finding a suitable place to dry the paddy, the who required additional labour to dry the paddy to reach 14% moisture level and the farmers who have immediate cash needs are more inclined towards selling paddy as wet paddy in their fields, to private buyers. On the other hand, farmers who sell less quantity of their harvest as wet paddy are more likely to select GPPP over private purchasing channel, due to price premium that they can enjoy by selling to PMB centers. In addition, study also found that, of the total farmers 40% have obtained some kind of loans for agricultural purposes. Further,

55% of farmers have pawned their jewelry to obtain money for agricultural purposes. This indicates the level of indebtedness and credit binding nature of paddy farmers. Literature also suggests that, there is a limited choice for such farmers.

The model estimation results have provided useful insights into the farmer characteristics of marketing channel choice of paddy farmers in Sri Lanka. It further reveals the farmers' preference of GPPP regardless of the distance to the PMB center, mainly due to the price premium they received. However, delay in the commencement of procurement by the PMB has restricted the access of resource poor farmers to the GPPP. Farmers complained that the delay in the commencement of the purchasing programme leads to very low farm gate prices in the open market. They pointed out that the timely procurement did not take during the peak harvesting month in most of the major producing areas like Ampara and Batticaloa districts.

Under these circumstances, the farmers who face difficulties in storing paddy in a safe place (normally wild elephants were attracted to the smell of paddy and thereby storing of paddy became dangerous in the areas where elephant attack were frequent) are hesitant to store paddy in their houses, though they have enough space to store paddy. Hence, these farmers tend to sell wet paddy, mostly to the village level collectors and local millers who purchase paddy in the paddy lands at the time of harvesting. Thus, timely intervention in procurement process is very important to increase the access to GPPP for resource poor, vulnerable farmers.

# Conclusions

Increasing market participation among smallholder paddy farmers has the potential to lift them to better income levels through increased productivity and surplus production. Out of the total sample, nearly half of the farmers (48%) entirely depended on private sector paddy purchasing schemes, whereas the corresponding figure for the government sector was only 14% and those who selected both are 38%. Nearly 52% of the sample farmers selling their paddy to the PMB reflects popularity of the government-purchasing programme in major producing areas. The study brought light to the small-scale farmers' preference of government paddy purchasing programme to the private channels. Specific reasons are differences in the price premium in purchasing channels, which are higher in the government channels in the peak harvesting seasons. The study emphasizes the need of an intervention to increase the income of farmers who sell wet paddy to the private sector soon after harvesting. Public - private sector partnership is an indispensable situation to explore the probability of having modern mills with state of the art technology, in paddy surplus producing rural areas especially in Ampara, Batticaloa and Anuradhapura. This would lead to enhance the quality of paddy, livelihood of paddy farming community as well as to reduce market distortion. There is an utter need to implement short term and long-term strategies to overcome the major problems highlighted by the farmers' links to both marketing channels. As short term, the GP of paddy should be increased to improve the income and well-being of paddy farmers. The application of Information Communication Technology (ICT) should be promoted to enhance the efficiency of PMB paddy purchasing and distribution programme.

Implementing drying yard facilities in procurement centers would help procure paddy just after harvesting. Implement a mechanism to provide proper and quality drying yards giving emphasis to the areas, which have severe needs of them. For this purpose, the private sector can also be encouraged. Introducing grading system for paddy by the PMB encourages the farmers to produce quality paddy. It is a long-term need to create agricultural as well as nonagricultural opportunities in main paddy farming oriented rural DS division areas. At the same time more market based strategies like Ware House Receipt Marketing (WHRM), Deficiency Price Payment System can be implemented. Due to wild elephant threats, the farmers in these areas tend to sell the paddy soon after harvesting without keeping it stored. This situation can be avoided by promoting WHRM system through which the farmers are provided safe storage away from their houses and assured income. A monitoring mechanism of producer prices of paddy at DS level especially during the peak harvesting season need to be established. Public - private sector partnership is an indispensable situation to explore the probability of having modern mills with state of the art technology, in paddy surplus producing rural areas especially in Ampara, Batticaloa and Anuradhapura.

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