

# SMALL -SCALE PADDY FARMING AND ITS CHALLENGES WITH SPECIAL REFERENCE TO THE HINGULA GN DIVISION, MAWANELLA, SRI LANKA

Moreen R <sup>1\*</sup>, Sifan MSM <sup>2</sup> and Handapangoda HMAK <sup>2</sup>

<sup>1</sup>*Sri Lanka Teaching Service, Sri Lanka*

<sup>2</sup>*Hemmathagama Water Supply Project - National Water Supply and Drainage Board, Sri Lanka*

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**Abstract:** Rice cultivation is an essential source of livelihood and food security, especially for those living in rice-growing countries. This study focused on the challenges of rural, small paddy farmers in Mawanella, Sri Lanka. The main objective of this research is, to understand small-scale paddy farmers' social and economic related challenges and attempt to propose recommendations. Using interview methods and direct observation, this research was conducted in the Hingula GN division, Mawanella DSD, Kegalle district, Sri Lanka. This study used 25 farmers in the Hingula GN division selected through the purposive sampling technique for the interview. In addition, this study collected information from a few stakeholders like Grama Niladhari, agricultural research and production officer, and leader of farmer organization. This study findings reveal that small-scale paddy farmers faced many challenges in paddy cultivation. There is a lack of labour, problems of wild animals (rats, wild boars), water scarcity, heavy rain, and climate change, lack of machinery, low marketing opportunity, low output, and poverty. This field-based study finds that young people's involvement in paddy cultivation is less in Mawanella for various reasons. In addition, they are not highly oriented towards marketing purposes, mainly they cultivate for themselves and, if only cultivation is high, markets. Finally, this study concludes that institutional support to these small-scale paddy farmers is compulsory to reduce their problems. GO, NGOs and CBOs should play a prominent role in facilitating the small-scale farmer's issues. In addition, there should be an organized bond among small paddy farmers and government officials.

**Keywords:** socio-economic, small-scale, agrarian, livelihood

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## Introduction

Without food, humans cannot survive, for that people cultivate maize, paddy, and several crops. Rice is the leading food and cultivation of people in many countries, especially rice-growing countries. It is, in fact, the second-largest food crop in production all over the world, next to maize. Therefore, rice has become the largest staple food crop used for human consumption in the World. Most of the rice cultivation takes place in Asian countries. According to World Bank Report 2018, 81.59% of people living in rural areas depend on agriculture for their livelihood (World Bank report, 218). Their main livelihood activity is paddy cultivation. Sri Lanka is an agrarian society. The agricultural programme at the national level in the country is geared towards achieving self-sufficiency in rice, the staple product (The International Institute of Rural Reconstruction, 2006). This study focused on rural, small paddy farmers. Farmers who owned less than 20 acres are belong to the small-scale paddy farmers group (Population and statistics department report, 2013/14). This study has conducted in Hingula, which has small-scale paddy farmers, and they most of the time cultivate for their consumption rather than marketing.

The national policy changes and developments did not meet small-scale paddy farmers, especially people who cultivate more for domestic purposes than marketing. Rural, small paddy farmers also matter in a country's economy. However, these small paddy farmers are excluded from national-level

\*Corresponding the author's email: [moreen970@gmail.com](mailto:moreen970@gmail.com)



privileges. These farmers' issues are not given sufficient attention to be solved. Therefore, there is a gap to be filled, and this study attempts to fill it. This study attempted to find the challenges of small-scale paddy farmers and recommend a suitable solution in order to overcome them.

Agriculture is one of the major livelihood activities among people in Hingula. People are involved in various agricultural-related works, for instance, paddy cultivation, vegetables, and fruit cultivation. The majority of people are involved in agricultural-related works to survive. According to below table, the majority of them belong to the middle and poorer classes, because we cannot see the large lands to be used for these activities. Here, except paddy cultivation, other crops are not regularly cultivated, it cultivated in seasons.

*Table 1: Agricultural related work*

<b>Agricultural Activities Among People</b>		
	Land (acres )	Output (year )
<b>Coconut</b>	10	-
<b>Pineapple</b>	3	-
<b>Plantain</b>	4	7200kg
<b>Rambutan</b>	1. 2	2000kg
<b>Papaya</b>	2	500kg
<b>Chilli cultivation</b>	3	6000kg
<b>Coffee</b>	1	1500kg
<b>Clove cultivation</b>	1.5	1200kg
<b>Betel nuts</b>	4	2000kg
<b>Manioc cultivation</b>	1	2000kg

(source: Report of a samurdhi officer and agricultural research and production officer, 2017)

Above agricultural activities are not regular basis, its seasonal cultivation. However, in this village, people show interest to involve in above cultivation.

*Table 2: Paddy cultivation among people*

<b>Paddy Cultivation</b>		
	Land (acres )	Output (year )
<b>2012 Yala</b>	17.1	20480kg
<b>2012/2013 Maha</b>	20.3	24800kg
<b>2013 Yala</b>	18	21600kg
<b>2013/2014 Maha</b>	20	24850kg
<b>2014 Yala</b>	17	20550kg
<b>2014/2015 Maha</b>	20	24900kg
<b>2015 Yala</b>	15	18300kg
<b>2015/2016 Maha</b>	18	21700kg
<b>2016 Yala</b>	14	16950kg

(source: Agricultural research and production officer, 2018)

According to the chart, paddy cultivation is still the main farming activity in Hingula. People cultivate in both Yala and Maha seasons with the help of rainwater. According to the agricultural officer, 21 farmers worked in the last Maha Kanna season. In some families, there are three brothers, each of them works in a season. Most of them do not have their land; therefore, they take someone's land and give the profit or money to them. Even though paddy cultivation is a dominant occupation, we can only identify small-scale paddy farmers in this area. According to an agricultural officer, during 1980, there were extensive paddy lands in this area. Today paddy lands were transformed into houses and buildings. Today, there are many abandoned paddy lands; people have given up paddy cultivation for uproarious reasons.

All farmers are a member of the farmer organization. Agricultural officer P.R.A.Bandara plays an important role, he is the leader of this organization, and there are some other key persons. The meetings are held once every three months. They discuss agricultural matters such as the starting date of Cultivation, harvesting, and problems. This organization is performed actively and guides all the farmers in every season.

Women's participation in agriculture is also one of the features in this area. While observation, there are women in paddy lands, they were transplanting in paddy lands. It shows that the changing women's role in paddy lands came out from stereotypes, but the reality is that it is not the change of women's role. It is because of the lack of labourers. Therefore, women also need to involve in paddy cultivation with males. Consequently, it shows, females also play a crucial role in paddy cultivation even though they did not get social recognition.

Among the farmers, 23 farmers have their paddy lands, and only one person has 5 acres of paddy land, and others have less than 5 acres. According to the report of economic statistics in 2013/14, people with less than 20 acres of paddy land belonging to the small-scale paddy farmer list. Based on this, these farmers are identified as small-scale paddy farmers. Even sometimes, we cannot consider them small-scale paddy farmers because most have less than five acres. It is very close to the landless farmer's group.

People follow the "Tattumaru" system in this study area. There is a person, he was a farmer, and now he does not involve in Cultivation. He got 5 acres of paddy land from his father through the Thattumaru system, now he has 5 acres of land, and he has three sons, and he cannot divide the land further. Still, he owns the land; he used the "Karamaru" system to give the land to his sons. Now sons are using that land, each of them cultivates in order. Each year one person gets the paddy land, and he cultivates. Others work in the paddy land and do some other works as well. Still, they are doing this year the youngest son is cultivating.

Only two farmers sell the production or outcome to a private institution, and all others are taken for their consumption. Those farmers have 5 acres of land and get considerable output, and they take a little amount for their consumption because they do not have any better mechanism to store rice (the farmer, 46).

These farmers are not targeting markets and use advanced technologies and strategies to get a large production quantity. They cultivate for their consumption. Therefore, they use limited chemicals to the paddy lands. These farmers also like to produce more and get more profit, but their social and economic background, such as small land, poverty, lack of machinery, and labourers, are major barriers to producing more.

This study has two objectives to be met,

- To understand small-scale paddy farmers' problems and give a framework.
- To analyse, the effects of that problem and suggest suitable recommendations to minimize their problems.

## **Materials and Methods**

This study was conducted in Hingula. It is a city located in the Kegalle District, Sabragamuwa Province, Sri Lanka. It consists 5 villages named, Delgahagoda, Hingula, Batawala, Aththalapitiya and Idampitiya. According to the Annual Report of Divisional Secretariat Mawanella, 2017, the total population of Hingula is 2352. There are 382 houses and 423 families in this village. There are two government preschools and two schools in Hingula. There are 202 people involved in agricultural work, and 35 are farmers, among them in Hingula. Earlier it was 55, but last year it reduced to 35. In the study area, the number of farmers is changing according to season. Here the issue is, only a few farmers are doing paddy cultivation regular basis.

In this study, the target group is small-scale paddy farmers, and the study area is Hingula. Primary data was collected through interview methods and observation. For the interview, this study used 25 farmers in Hingula who were selected through the purposive sampling technique. In addition, this study collects information from a few stakeholders such as Grama Niladhari, Agricultural research and production officer, a Samoordhi officer, and a farmer organization leader, senior citizens in the village. Thus, it will help to get formal information about the situation of these farmers in Hingula.

Secondary data was collected from international and local journals, published books, internet sources, newspapers, magazines, reports. For the data analyse, this study used the thematic data analyse a method for qualitative data analyse, and data presentation utilized the following methods of paragraph writing, descriptive analyse.

## **Results and Discussion**

### ***Agricultural related Problems***

In Hingula, small-scale paddy farmers face many problems when they involve in paddy cultivation. It affects their work and output. These farmers cultivate in a small land. Therefore they expect maximum output. Anyhow, many factors affect their productions. Currently, Covid 19 is the main issue all around the world. It affects all sectors in this society. The current pandemic, such as difficulties in getting resources, an increase in prices are also affected these farmers.

Anyhow, this study did not exactly focus on the issues of the sudden pandemics. It puts more weight on their usual challenges that they have in paddy cultivation. They face several issues, as listed below.

### ***Wild animal (rats, wild boars) –***

It is a major problem identified in Hingula through the field study. Sometimes wild animals destroy the paddy lands. Though they use some mechanism to reduce this problem, still it's prevailing. Wild animals attack the paddy lands, and it is an unsolved problem for them. People still use some traditional methods to avoid this problem.

### ***Water scarcity-***

Water is essential for Cultivation, especially in paddy cultivation. In Sri Lanka, dry zone, people use a tank water system to get water. In Hingula, especially Idampitiya divisional people, do not have enough water facilities. Their Cultivation is based on rainwater because there is no stream or other way to get water. If they do not receive proper rain, they faced difficulties; sometimes, they took water from public wells. It is also problematic because other villagers also take water from well for the domestic consumption. Especially, one part of the study area is located on a hillside; they do not have any method to get water unless they did not get rainwater.

### ***Heavy rain and climate change-***

Nowadays, we can see the sudden climate change and its outcomes. Rainwater is also a basic need for these people to cultivate. At the same time, heavy or continuous rain becomes a problem for these farmers. According to respondents, recently, their paddy land is flooded due to constant rain.

### ***Lack of machinery-***

Sometimes they borrowed machinery from other farmers. Anyhow, they are not producing for marketing, and land size is also very small. So we cannot see machinery as a huge problem to these farmers. Only two people are producing for marketing. They are also not using very advanced machinery, and they have some issues related to machinery.

### ***Marketing-***

People cultivate for consumption. In this study area, two farmers involve in marketing, but they also not produce a large quantity of paddy. They are selling to a private agency. The marketing issue related to some other components, if they have large lands, machinery and human capitals they can produce for the marketing.

### ***Low output and poverty***

Due to small land and the traditional way of cultivating, it means using few types of machinery; these people produce a low output. Most of the time, their production is low than the cost. Here, they did not receive a considerable amount of output, and their workforce has wasted only. Therefore, it causes poverty; there is no mobilization in their economic background.

Small land and low production cause no surplus; therefore, there is no market monopoly; it causes poverty.

### ***Lack of Laborers***

Although, farmers in Hingula have faced many problems. According to their responses and the agricultural research officer's response, it is clear that they have the main problem of "lack of labor". Most of the respondents said that they lack labourers to work in their paddy lands. Not only in their lands, but also there are many abandoned paddy lands due to lack of labour.

Now there are 35 farmers; they face many challenges but still did not give up farming because it's very much attached to their lifestyle, and they do not know any works except paddy cultivation. When their period is finished, there are no more new farmers who emerged in this area. Still, a group of people who belong to the same age categories engages in farming because they are farmers from their young age. There is a risky situation in Hingula; within 5 to 10 year's agriculture will vanish. According to the agricultural officer, there are higher probabilities for that. Even now, few people do paddy cultivation.

Youngers do not like to cultivate paddy because it is very much a traditional and rural work setting. In the western world, agriculture is a modern profession because it has used modern technology, and people who engage in agriculture-related works are rich and have a solid economic background and social recognition. However, when it comes to our country, farmers are very vulnerable, and they are in poverty. We cannot see significant development in agriculture and farmers in these decades. Even day by day, farmers' situations also becoming more vulnerable compared with other occupations.

In Hingula, some youngers do not have any jobs; even though they do not have jobs, they are not ready to step into paddy lands. These youngers are looking for employment in some other fields except paddy cultivation. Earlier, Sri Lankans was proud to say them as a farmer; that's why, even in the caste system Govigama was at the top of other castes. But today, any younger person does not like

to name their profession as a farmer. Again this is not their fault or mistakes; this is the outcome of our mobility towards a technological world.

Sri Lankan education and other programme are also inspiring some other jobs; it does not encourage to be involved in agriculture. It is also one of the reasons for the younger's lack of participation in Agriculture. Even though they work hard, they get a small amount of production, it is not enough, so youngers do not like to get involved.

*"I am a farmer, but my son even didn't foot into paddy land, he does not like to be a farmer, it means, I am the last person in my family who is a farmer."*

*(Farmer, 53)*

According to the book, scientific agricultural workforce in Asia (1985), "Still agriculture is not considered a profession". In Sri Lanka, this is the main reason that people do not like to involve in agriculture. Earlier, 55 farmers were there; last year, it reduced because they also give up the paddy cultivation and doing other jobs to earn. There is no profit, so people are involved in other profitable occupations.

Lack of output and low profit is also one of the reasons for this problem. Farmers have faced many challenges during Cultivation, but they finally tolerate all the problems to get a good output. But it does not achieve because they have to sell very low price, and some policy and administrative changes also badly affect these farmers.

In another way, landowners can hire the person and give the salary to that working person. There are three types of issues that occur in this method.

Landowners do not get the expected amount of production, so it is lost to them to pay money to the farmer.

Farmers get the money correctly, but do not work hard because the output is going to the lord, not to him. Therefore, landowners keep their lands without cultivating. It is profitable rather than giving it to someone to cultivate.

They are not hiring people because people do not like to work in paddy lands for a small payment. However, when they work as daily workers, they receive 1500 or 2000 per day, which is profitable.

Farmer's pension age over 60, per year government, paid two times. Therefore, a person should start working as a farmer at the age of 18 and work until 60 to get a pension. If not, they receive less money as a pension. It also makes people away from paddy cultivation.

In Hingula, they are many abandoned lands due to a lack of labour. When farmers do not receive the production and do not receive any support from government or local bodies, they are helpless. Moreover, most of them are cultivating for their consumption, therefore most of the time, they have neglected some privileges.

If the situation continues, the paddy cultivation will end in this area. However, it is not the issue of these farmers only; it will become a social issue within a few decades. Though there are enough paddy lands in this study area, due to the lack of labour capacity, lands are not cultivated, and even they are unable to get an outcome from their owned lands.

Job satisfaction is also very low among existing farmers; they are doing this paddy cultivation because they do not have any other options.

"society is changed, in our period we are not like this generation, always with the mobile phone, when they get hungry, then only they remember about rice, even that time no one remains about the producer of that rice, people think it comes from the sky, from our period to now, we are working hard, we cannot expect this from our children" (respondent.52).

## **Conclusion**

In Sri Lanka, there are many policies and arrangements for farmers. It covered large-scale paddy farmers, again the approach also top-down approach. It did not meet the rural small-scale paddy farmers. It should be changed, and there is a need for more attention on small-scale paddy farmers. They do not depend on anyone for rice; it represents the ancient self-sufficient Sri Lankan. The government should be concerned about these farmers as well.

Lack of attention towards small-scale paddy farmers is one of the main reasons for people's lack of engagement. So people who already engaged in paddy cultivation are given up and find another job and the next generation means youngsters are also not ready to engage in paddy cultivation. There is no job security for these paddy farmers as well. It causes a lack of labour within the family and society. Due to this lack of labourers, in this study area, there are several abandoned and uncultivated paddy lands as well. Farmers are cultivating their land. It is also not completely. They cultivate a small part of that land. Because they do not have any supporters to use full land, they cannot cultivate the whole land. It affects their output directly.

- Form, a Govi Hamudha (a group of people) and guide and train them to engage in paddy cultivation. This Hamudha includes the younger generation in this village. Most of them are unemployed, and this organization trains these younger groups to cultivate in paddy lands.
- Solving the problems of existing village farmers and empowering them to continue their farming. In this village, some farmers also give up paddy cultivation due to various reasons. This paddy cultivation is not profitable. It is the main reason for these farmers. Therefore, it is needed to solve their problems to save the existing farmers in this village.
- They are giving social recognition to farmers as a profession to get public attention towards paddy cultivation. Still, farmers are neglected; they are vulnerable. Government has to create a sustainable solution for all the farmers.
- Bring policy level change by representing small-scale paddy farmers in general policies. Most of the general agricultural policies and programme are centered on large-scale paddy farmers. It should give sufficient attention to these small-scale paddy farmers.
- Encourage people to use or give someone to use the land and produce. Few people have owned land, but they are not cultivating and do not give to someone to cultivate; here, anybody did not benefit from this land. The government should be involved in this matter and help poor farmers who do not have their land.
- Giving job security is another important one to increase the number of farmers.
- Give awareness for youth and other people to engage in paddy cultivation and train them to get a large output in a small size of land and train them to sustainable paddy cultivation.
- A loan scheme with low interest is needed, and if a farmer cannot pay it, an arrangement to help poor farmers.
- Suitable pension schemes give social security for a farmer; even after retirement, they can survive without depending on others. But, unfortunately, today, pension money did not give to the farmer's wife after the farmer's death. It should again implement by the government.
- Giving lands to the people who wish to involve in paddy cultivation, not only the lands other all facilities should be met by farmers. Therefore, it will create a comfortable platform for farmers to involve in paddy cultivation.

Lack of labor is not one problem. It has multiple factors in relation. It interconnects with other aspects of society. Though these village people had landed, there are no people to work in those lands, making huge backwardness in paddy cultivation in this area. This recommendation can reduce and

create a better social environment that will drag people, especially youth, to engage in paddy cultivation.

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## **Appendix**

### ***Paddy lands***





***Abandoned paddy lands***

