

*An analysis of rice cultivation by joint liability groups of  
Kudumbashree in Palakkad*



**Lisha Das Sivadasan**

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**Tata Institute of Social Sciences**



**Tata Institute of  
Social Sciences**

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# Introduction

Poverty is a social and economic condition that exists throughout the country and has been prevailing for the past many years. There have been several measures taken by the central government to tackle this issue. But, just like other concerns that we face as a nation, poverty is also something which has to be dealt with differently in different regions according to the needs and habits of the people. It is with reference to this fact that, each state has suggested and is currently implementing their own poverty eradication missions. One of the most successful state poverty eradication mission is that of Kerala known as Kudumbashree.

Kudumbashree as a state mission has been working relentlessly for the past 19 years with the main purpose of poverty eradication through women empowerment.

Kudumbashree works with many program domains like microfinance, collective farming, microenterprises etc with the women of the state through the formation of neighborhood groups. One of the recent developments and flagship efforts of Kudumbashree is the formation of joint liability groups which can then function as self employing enterprises. These joint liability groups with the support of initial investment from Kudumbashree can start their own enterprises and hence become economically independent. These efforts have given rise to many initiatives from the women themselves like pickle making, rice flour and snacks making, spices powders, soaps, candles, local produce, cafes, canteens etc and also group farming.

Collective farming is gaining popularity these days especially since many land owners have abandoned agriculture and the land lays fallow. This is an excellent opportunity for the women groups to take the land on lease and practice agriculture.

Since, this opportunity provides employment and sustenance , many women farming groups are ready to take it up. Kudumbashree has 14 district missions, out of which Palakkad district mission is encouraging rice cultivation and branding of the produce under the name of “Annam.” This project report is a concise understanding of the women self help groups which practice group farming or sangha krishi in Palakkad district. The objectives of this project are:

1. To understand the conditions of production and sale of rice by joint liability groups (JLGs).
2. To analyse the concerns that women experience during their agricultural ventures.
3. To provide constructive and viable solutions for the issues faced by the women through inclusive value chain analysis.

## Literature Review

Rice is the basic cereal consumed as food in India which is found in almost every Indian kitchen. It is the most common food in India. India is not only a big consumer of rice but it is also the second largest producer of rice in the world after China. India also holds the largest agriculture land for paddy production in the world. In 2009 total arable land for paddy in the world was 15,83,00,068 hectare with the total production of 68,52,40,469 tonnes of paddy, out of which 4,18,50,000 hectare of the area is held by India only, which produced 13,37,00,000 tonnes of paddy just second after 19,66,81,170 tonnes by China. India leads in terms of the land holding, while the production is led by China.

Rice is the staple food of the people of Kerala, and, traditionally, the cultivation of rice has occupied pride of place in the agrarian economy of the State. The lush green of paddy fields is one of the most captivating features of Kerala's landscape. The area under paddy cultivation increased substantially during the first fifteen years after the State's formation – from 7,60,000 hectares in 1955–56 to 8,80,000 hectares in 1970–71. In 1965–66, rice accounted for the highest share of gross cropped area in Kerala (32 per cent of the total). There was, however, a steady decline in the area under rice cultivation from the 1980s onwards – from 8,50,000 hectares in 1980–81 to 5,60,000 hectares in 1990–91, 3,20,000 hectares in 2001–02 and 2,30,000 hectares in 2007–08. Kerala imports food grains from Tamil Nadu, Andhra Pradesh, Madhya Pradesh, Bihar and Gujarat to fully meet its consumption needs. It is the State's relatively efficient public distribution system that has so far ensured availability of food grains at reasonable rates to the population of Kerala.

Palakkad and Alappuzha are the two major rice-producing districts of Kerala. While the Kuttanad region in Alappuzha is endowed with a large system of backwaters, agriculture in Palakkad benefits from irrigation projects in Malampuzha, Chulliar, Meenkara, Walayar, Pothundi, Mangalam and Parambikkulam.

Within Palakkad district, Chittur, Alathur, Kuzhalmannam, Kollengode, Nenmara and Palakkad are the blocks in which paddy production is concentrated. There are many farmers in this region who cultivate rice in relatively large plots, ranging in size from 5 to 10 acres each, which is much above the average size of plots for paddy cultivation in Kerala as a whole. Among farmers who have plots of this size, the operational holding typically comprises self-owned land; land owned by relatives and leased-in land. Productivity in rice cultivation is relatively high in this region. Farmers and Krishi Bhavan (agricultural assistance office) officials observe that yield levels of 3,000 kg/hectare are quite common in this region, which is higher than the State-wide average (2,557 kg/hectare). There are also farmers who have achieved yields as high as 4,500 kg/hectare.

Kudumbashree from 2002 onward have targeted agricultural sector as a potential source of livelihood for women. During the period from 2002 to 2006-07 women, both at individual and group levels, were given incentives, thus encouraging them to abandon their reservations to enter into this otherwise male only domain; to take land on lease and start cultivation. In 2007-2008 Kudumbashree embarked onto collective farming allowing groups of women to undertake the responsibility of lands that otherwise have remained fallow for several years. Collective farming introduced by Kudumbashree allowed women whose otherwise unconventional presences in the farming sector, to actively engage in agricultural projects. According to sources available on the Kudumbashree's website the main objectives behind the idea of collective farming was

1. To bring back fallow land to cultivation and women to agriculture
2. Creating livelihood for poor and landless women in the community
3. To ensure food and nutritional security of the state

Thus it could be seen as a conscious attempt on its part to intervene into the crisis situation at the same time as exploring the possibilities for finding new albeit unconventional sources of livelihood for the poor women (Thomas, 2015).

As rice is the basic grain of daily consumption in India, it always has a significant demand which shows a seasonal growing trend especially at the time of festivals and during the seasons of cultural events. To identify the appropriate demand and meet them properly in a profitable way is the primary concern of the rice value chain. A proper value chain management framework is very essential for efficient sourcing, processing, distribution, and retailing and hence meeting the customer demands without facing a situation of lost sales.

A traditionally followed basic framework for rice value chain management generally follows the multi stage value chain system including: Government agencies or private farming input suppliers, farmers as the basic supplier of paddy, middlemen or agents, rice processing industries, distribution agents, and retailers; as the interlinked upstream and downstream stages. During the long value chain process many activities take place at every stage which affects the functions of the next stage and requires the value chain to co-operate in a customized manner.



# Methodology

Palakkad district has 13 blocks divided according to the Kudumbashree Neighbourhood groups. For the purpose of this study, the following methods were used:

1. Key informant interviews with 10 Joint Liability Groups across the blocks
2. Interviews with CDS chairpersons and block coordinators
3. Group discussion with trainers from different panchayats
4. Interviews with large land holding farmers
5. Interviews with wholesalers and retailers of rice
6. Interview with Palakkad district mission officers working on “Annam”, rice branding initiative by the district mission.

## Inputs from the Field

An initial discussion and interview with the district mission officer yielded a basic understanding of the rice cultivation by JLGs in Palakkad. The following table represents the paddy cultivation information in Palakkad district:

Block Name	No. of JLGs cultivating paddy	Area (Acre)	Production (kg)
Attapady	1	1	1600
Mannarkad	9	15.5	24800
Pattambi	43	84.75	135600
Malampuzha	84	238.2	381120
Kuzhalmannam	234	577.88	924608
Thrithala	84	157	251200
Chittur	15	16	25600
Alathur	179	393	628800
Palakkad	60	66.5	106400
Nemmara	215	215.875	345400
Kollengode	49	56	89600
Ottapalam	84	177.85	284560
Srikrishnapuram	22	36	57600
Total	987	2035.55	3256888

From the interviews with the units, the following information was retrieved:

Unit	No. of members	Land	Agricultural produce	Markets	Initial investment/season/acre	Approximate profit margin/Person/season
Haritham	5	1.5	Rice	Supplyco	25,000	5,000
Harsha	4	1.4	Rice	Local market	18,000	5,000
Kathirmani	8	8	Rice, vegetables, spices, banana	Local market	20,000	15,000
Thulyatha	5	11	Rice, vegetables	Local open market	17,000	10,000
Haritham	5	5	Rice, vegetables	Local market	17,000	5000
Srikutty	4	10	Rice, banana, vegetables, spices	Wholesale markets	25,000	20,000
Thalir	4	7	Rice,vegetables, spices	Thrissur, local markets	18,000	15,000
Mahalakshmi	4	11	Rice, vegetables	Local market, supplyco	19,000	10,000
Akshaya	5	1.5	Rice, groundnut, banana	Supplyco, local market	20,000	5,000

Some of the concerns regarding cultivation and sustainability of the process expressed by the women are:

1. Profitability – Even though the standard price for white and matta rice is 23 rupees per kilo, the local market wholesalers often give much lesser prices like 19 or 20 rupees for rice and upto 14 rupees per kilo for grains.
2. Inputs and Resources – Cost of inputs like seeds, fertilizers and land is high where the cost of land leasing varies from 9,000 to 12,000 per acre per year.

3. Land lease issues – Many land owners refuse to give agreements and land tax receipts, which prohibits them from availing subsidies from Krishi Bhavan.
4. Animal conflicts – Many areas in Palakkad face the issue of pigs, peacocks and elephant encroaching the agricultural fields which leads to huge crop losses.
5. Lack of crop insurance – Crop losses are frequent due erratic climate variations and hence leading to debts for the JLGs.
6. Shift to more profitable crops – Cash crops like banana and seasonal vegetables which get sold fast in the local market. Also, their cultivation period is less without much efforts.
7. Climate change and water scarcity – Rice is a crop, highly dependent on rainfall and water, so lack of water becomes a concern for many groups.

Some of the views from the administrators' regarding collective farming are:

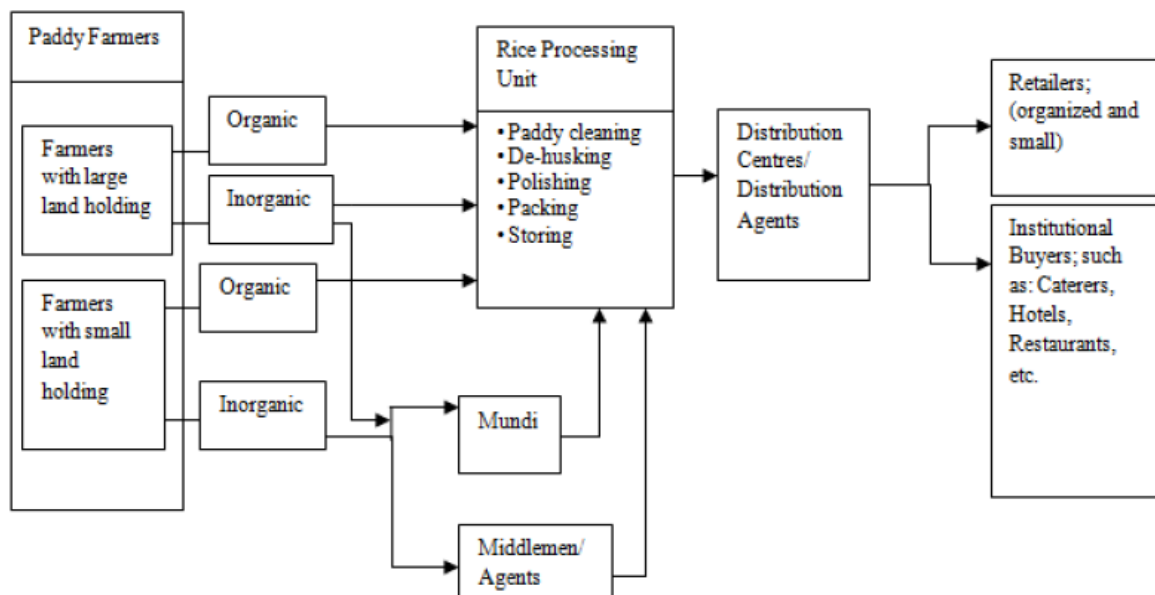
1. Misuse of loan – The agricultural loan is subsidized at an interest rate of 4% for the JLGs for doing collective farming. But, many groups use it for personal uses.
2. Group dynamics – Many JLGs start collective farming as a group, but fallout due to the enthusiasm of a particular person or lack of immediate financial returns. Also, there are groups functioning, where the land is owned by certain members and the work is done by others. The ownership or leasing is not shared and hence does not qualify as collective farming.
3. Sustainability of rice cultivation as a microenterprise – Many JLGs have shifted from rice cultivation to other cultivations and occupations due to lack of viable immediate financial returns. This can lead to the NHGs becoming dependent on others for livelihood, instead of being self employed.

Even though there are concerns, there are also many benefits these women from indulging in rice cultivation with the support of Kudumbashree. They are:

1. Kudumbashree has opened tie ups with local branches of public sector banks. This considerably helps the farming groups to avail loan facilities through better credit systems. This is in addition to the internal arrangements for loan facilities available within the community and neighbourhood groups of Kudumbashree which operates on the basis of the micro finance principles and policies.
2. *Pattom*, the system of leasing land, has long been prohibited in the state, but due to Kudumbashree's collective initiative, land less women are able to cultivate by taking land on lease, although leasing is still at an informal level. This has helped the women groups to enter into this activity with a comparatively small sized capital which otherwise would not have been possible as the enormous cost of land would have quelled the project at the very beginning.
3. Kudumbashree also organizes regular training sessions where women are imparted with important lessons about agricultural activity both at theoretical and practical levels. This has played a significant role in helping these women to gain mastery over both the indigenous and mechanized systems of cultivation. They are also imparted lessons, in addition to providing them necessary help and support to collect, better seeds, organic fertilisers and so on.
4. The factor of wage is a big and common liability in any average farming enterprises where the landlord/farmer employs labourers on daily wage at all stages of farming. This is especially so in contexts like Keralam where the average daily wage is very high. The average cost of paddy production increases by several times due to the wage factor. In collective farming enterprises of Kudumbashree however, this is overcome in one single and simple blow as the

women themselves are the labourers. Their wage becomes their own income making farming a very cost effective enterprise.

## Value Chain Analysis



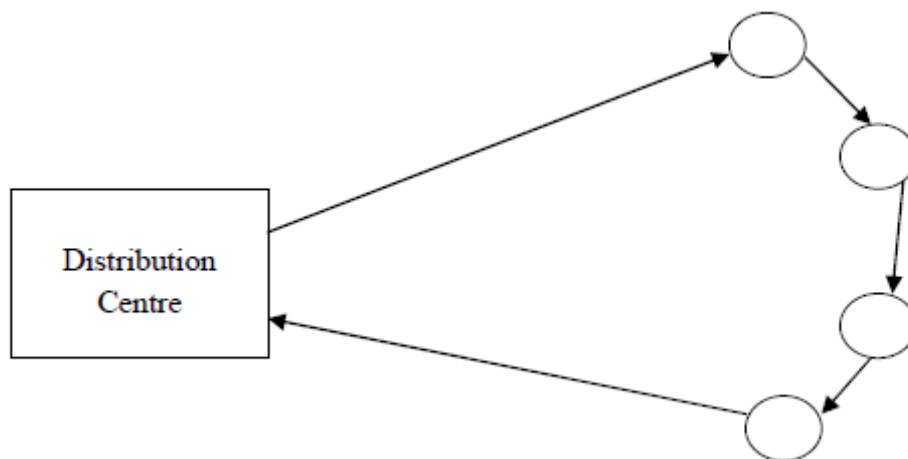
The characteristics of the existing value chain are different and divided input resources for different types of JLGs – small land leaseings, large land leaseings, organic and inorganic cultivation, many intermediaries before reaching the end customer and multiple markets for multiple JLGs. The existing value chains lack in efficiency due to one or more reasons, out of which major issue is the existence of many intermediaries existing between the farmer and the rice processing company, and again between the processing company and the customer, resulting in greater complexity, lower efficiency, reduced margin and increased cost on the product.

For higher and a standardized price of rice, value chain management is essential. Value chain management also requires the mutuality and co-operation among its upward and downward members which especially the existing rice value chain is lacking. With reference to food value chain, collaborative value chain is very effective and it is very important to build trust and collaboration among all the partners. For any value chain it is important to understand the nature of product and then designing a value chain according to its nature.

Demand of rice for a period of time doesn't change dramatically and it can be predicted easily, and profits earned are very marginal, which make it a functional product in nature, and therefore it requires to have an efficient value chain. An efficient value chain requires if lacking, it will result in stock outs of demanded and overstocking of undemanded variety of rice. The rice cultivation sector is very much lacking in forecasting at all the levels, starting from which variety to produce, to which variety to order and source at which time.

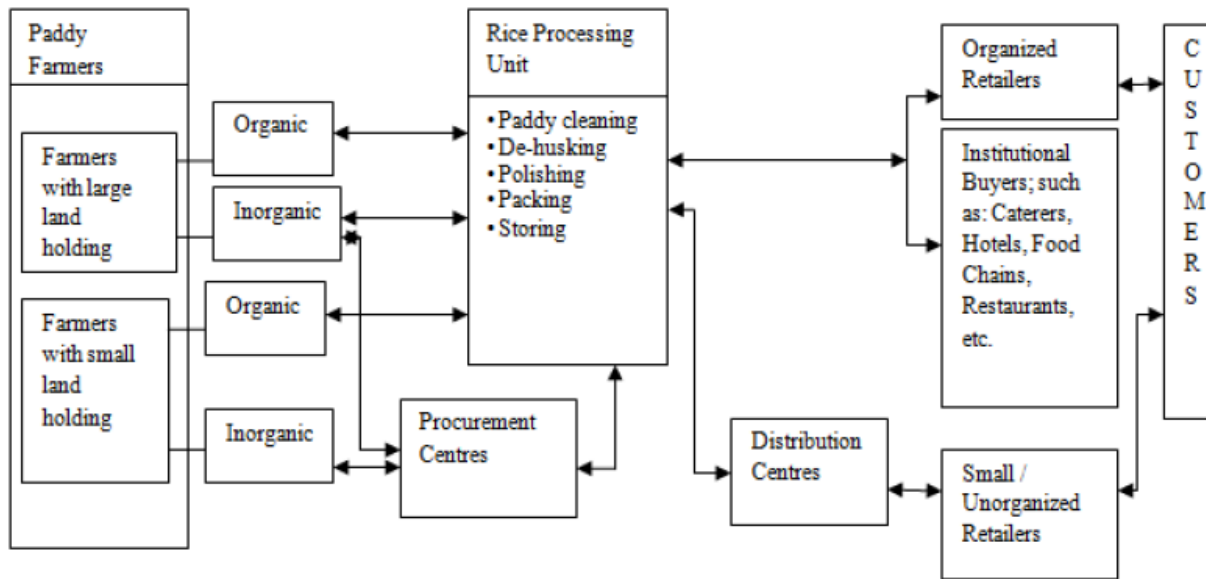
### Redesigning the value chain:

As the existing value chain is not efficient and competitive with the changing global scenario, a redesign in the supply chain management system of rice sector is demanded. It must need to work on the areas of efficiency which requires looking into a collaborative framework, information management, forecasting of future requirements and inventory planning and an efficient logistics system. It also requires minimizing the role of intermediaries to the minimum possible level. One of the most essential characteristics in the new value chain is a distribution centre for both inputs of resources and sale of produce with common storage facility.





This image explains the distribution of inputs for many farmers and also the sale of produce from a common point to different markets. This will help in increasing the profitability of rice cultivation for many JLGs as a whole. This can be implemented at the block level.



An improved redesigned supply chain framework argues about minimizing the unnecessary members of supply chain, such as, lot of intermediaries at both upstream and downstream front, and supports the direct interaction with the stages and members of the supply chain.

## Proposed Solutions

Collective farming through joint liability groups is a flagship and intelligent effort taken by Kudumbashree to generate livelihoods for women using the resources of the privileged. It has yielded many successful efforts, but as in the case of any other project, there is always room for improvement. Some of the proposed solutions for improvement are:

1. Short term actions for increasing marketability and profitability:

- a. Common distribution centres for inputs like seeds, fertilizers, machineries etc in every panchayat where rice cultivation is being practiced. Currently, Kudumbashree does offer common machineries, but other inputs should also be included and a facility for leasing of land easily.
- b. Common markets for sale of rice with a standardized price, which includes separate prices for organic and inorganic rice, and also depending on the varieties like matta, navara. Kudumbashree currently has monthly and weekly markets, but their functioning is irregular, which must be regularized.

2. Long term actions to turn rice cultivation into a self initiated enterprise by women:

- a. Encourage cultivation of organic rice:

Organic rice (45 rupees per kg) yields double the price of inorganic rice (23 rupees per kg) and the cost of inputs is also lessened as pesticides use is reduced. But, organic rice gives higher yield only after 2 years and certification can be obtained only after 3 years of consistent organic cultivation. This gradual transformation from inorganic to organic will benefit the women and the environment as well.

- b. Encourage cultivation of indigenous varieties:

Palakkad has two rice varieties – Navara and Matta as indigenous varieties with GI tag and can be officially grown only in Palakkad. These varieties have a huge market potential as Navara is used in Ayurveda and matta (red rice) also has various health benefits. The cultivation of these varieties can target the urbane health

conscious market in semi urban population of the state, which can gradually move towards other states and maybe also export to other countries.

c. Building the brand “Annam”:

Annam is an initiative by the Palakkad District Mission which attempts to bring all the agricultural produce under one banner. This brand and the reputation of Kudumbashree for delivering good quality produce will take the rice cultivating enterprises to a successful venture.

## Conclusion

Collective Farming initiated by Kudumbashree in Kerala state in India is a fine example of grass root level interventions making remarkable difference in the local agrarian landscapes. This provides an exciting model of sustainable intervention

through livelihood programmes that suit the local geographic, demographic, social and economic realities. Although the project as such has still a long way to tread in order to make its impact felt deeply and substantially in the region, the extent to which it has been implemented marks remarkable degrees of success. With a few more initiatives from the women and persistent effort from the administration, rice cultivation can be built into a successful and enthusiastic women led enterprise in Palakkad district.

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