

THE KERALA STATE FARMERS' DEBT RELIEF
COMMISSION,

THIRUVANANTHAPURAM

Suo Motu Proceedings No. 4 of 2007

Present
Justice K. A. Abdul Gafoor
Chairman
And
Prof. M. J. Jacob
Shri. M. K. Bhaskaran
Shri. Sathyan Mokeri
Prof. N. Chandrasekharan Nair
Members

Recommendation Made under Section 5(1) of
the Kerala Farmers' Debt Relief Commission Act 2006
(Act 1 of 2007)
to the Government of Kerala
to Declare Kuttanad Taluk in Alappuzha District
Distress Affected Area

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‘ഈ കടമെല്ലാം ഈടാക്കുന്നത് നിറുത്തിവെക്കണമെന്ന് സർക്കാർ ഒരു നിയമം ഉണ്ടാക്കണം. അങ്ങനെ നിയമമുണ്ടാക്കാൻ പറ്റില്ലെന്നു പറയുമ്പോഴ് നമുക്കു ചോദിക്കാം, പട്ടർക്ക് പണം എവിടുന്ന്യായി എന്ന്. കുറെ തലമുറകളായി പലിശ മേടിക്കുകയല്ലോ. ഇനിയും കുറെ തലമുറ പലിശ വേണ്ട’



This was the first demand for a law on debt relief to farmers in Alappuzha, voiced by *Vattathra Gregory*, a typical Kuttanadan lease hold paddy farmer in debt trap, portrayed by *Thakazhy Sivashankara Pilla*, the great legend of Kuttanad, in his famous Malayalam fiction '*Kayar*' (കയർ - Coir). Now, here, this Commission is considering the agrarian situation in Alappuzha, based on an innovative law providing for writing off debts of distressed farmers, enacted by the legislature of Kerala, a century later than the period of the realistic story with a taint of history told by that Malayalee novelist of global repute.

The Commission, in its meeting, held on 26.04.07 considered a brief report submitted by one among its member Prof. N.Chandrasekaran Nair, concerning Alappuzha district. The Commission decided to initiate *suo motu* Proceedings to conduct an enquiry under Sec.5(1) of Kerala Farmers' Debt Relief Commission Act 2006 (Act 1 of 2007) - here in after referred to as the Act;- as to whether recommendation was to be made to the Government of Kerala to declare the paddy crop and duck rearing distress affected. At that time, the Commission was engaged in the enquiry concerning Wayanad and Idukky districts. After submitting the recommendation in respect of Wayanad district and almost finalising the draft of its recommendation in relation to the enquiry regarding Idukky district, the sittings for the enquiry concerning Alappuzha were conducted on 16th and 17th of August 2007 in Government Guest House, Alappuzha. Notices were issued in advance to the Chairman, Agricultural Prices Board, Trivandrum, the Director of Agriculture, Agricultural Expert, Planning Board, Director of Economics and Statistics, the Director of Animal Husbandry Department, NABARD, Associated Professor of Paddy Research Centre, Mankombu, Alappuzha; Central Plantation Crops Research Institute, the Principal Agricultural Officer (PAO), Alappuzha; the District Collector, Alappuzha, Thahasildars in Alappuzha, Land Development Corporation, District Fisheries Officer and to the representatives of the people including M.Ps , MLAs , Presidents, Members and Secretaries of Panchayats at the three levels, the Co-operative Banks including Agricultural and Rural Development Banks at all levels, lead bank, different organizations of farmers, etc. notifying the dates of hearing. Wide publicity was given in media as well. The office bearers and representatives of several organizations including of farmers and of primary, regional, district and state level co-operative credit institutions, representative of the lead bank and presidents and secretaries of the panchayats, attended the hearing apart from officials from various departments, including the District Collector and a number of farmers. Several of them, including duck farmers organisations submitted their written statements. Sri.Thomas Chandy, Member of Legislative Assembly representing Kuttanad assembly constituency was also

present at the time of hearing, placing relevant facts before the Commission. Sri.G.Sudhakaran, the Hon'ble Minister for Co-operation and Devaswam who represents Ambalapuzha legislative assembly constituency in Alappuzha district expressed his inconvenience to attend the hearing and sought for another opportunity. His letter in this regard is **Annexure I**. Shri.K.K.Shaju, another member of legislative assembly from Alappuzha district also expressed his inconvenience to attend the hearing and requested for postponement. His letter is **Annexure II**. As the Commission had already scheduled its sitting for the months of August, September and October in advance due to the requirements of statutory period of notice, in a letter addressed to the Private Secretary to the Hon'ble Minister, the Secretary of the Commission requested to apprise the Hon'ble Minister of the said fact and to indicate a date of his choice in November 2007, well in advance. This letter dated 14.08.07 is **Annexure III**. A letter was addressed to Shri.K.K.Shaju, MLA also, in the same lines. The said letter is **Annexure IV**.

The Private Secretary to the Hon'ble Minister, in his letter dated 12.11.07 informed the Commission that any day from 27th to 29th of November 2007 would be convenient to the Hon,ble Minister to attend the hearing. The said letter is **Annexure V**. As Commission had scheduled its sittings in Wayanad already, a bench consisting of the Chairman and Sri.Sathyan Mokeri, Member was specially constituted for this purpose. The Private Secretary to the Minister was informed of the sitting on 29.11.07 to bring it to the notice of the Hon'ble Minister. The letter dated 19-11-07, in this regard, is **Annexure VI**. The Secretary of the Commission has in person and over phone reminded his Private Secretary, more than once including on 28-11-07. However the Hon'ble Minister was not able to attend the sitting. There was no response from Shri Shaju MLA. The preparation of this recommendation concerning Alappuzha district was delayed this much, in order to render opportunity to the said two Hon'ble members of legislative assembly from Alappuzha district.

The Commission places on record its gratitude to the representatives of the people including Shri. Thomas Chndy MLA, of various organizations including that of farmers and of the co-operative banks and societies and lead bank and officials for their valuable assistance rendered to the Commission furnishing necessary details. The Commission also feel enlightened and enriched in its task with the study report submitted to the Government by M.S.Swaminathan Research Foundation on



Measures to Mitigate Agrarian Distress in Alappuzha and Kuttanad Wetland Ecosystem and a case study of January 2002 by Sri.P.M.Thomas on a project of Kerala Research Programme on Local Level Development (KRPLLD), Trivandrum titled ***Problems and Prospects of Paddy Cultivation in Kuttanad***. Excerpts, data and graphical representations from the said rich documents are included in this memorandum of recommendation, with due indebtedness.

During the hearing, there were strenuous and persisting demands from several of those who attended the hearing for declaring the entire revenue district distress affected. It was also stressed with supporting data that Kuttanad Taluk shall be declared distress affected, considering the special situation prevailing there since long years back, placing the farmers and people there in acute distress and in debt trap.

In the circumstances, though the District Collector and various officials including of revenue and agricultural departments had provided required details, the Commission thought it fit to address government pointing out the said demands, so as to render them an opportunity to have their say in the matter. Accordingly, the Secretary of the Commission was asked to address the Agricultural Production Commissioner, Government of Kerala for getting the views of Government. The letter dated 1-11-2007 in this regard is **Annexure VII.**

Though late, a reply was received from the Government on 06.12.07 stating that report submitted by M.S.Swaminathan Research Foundation to mitigate the prevailing agrarian distress in Alappuzha District was under consideration of Central Government and therefore “declaration of Alappuzha district as distressed district under the Kerala Farmers’ Debt Relief Commission Act may be taken up later after the picture on Kuttanad package becomes clear”. The letter also says that “if a declaration is made now, it may lead to distortion in demand and may lead to duplication. Therefore Government requested the Commission “to defer the present proposal by three months’. Copy of the Government letter is **Annexure VIII.**



The Government has not revealed any facts or details as to whether the demands for declaration of Alappuzha district or of Kuttanad Taluk or of the paddy crop distress affected is justified or not.

The concern of the Government is that declaration of Alappuzha district as distressed district under the Act, if made now, ‘may lead to distortion in

demand and may lead to duplication.’ As revealed by D.O.No.12015/41/2004-Credit-I dated 7th November, 2006, assigning the task of study and report **on the sustainable development of Kuttanad Wetland Ecosystem** to the said Foundation, the Government of India directed the Foundation **to focus on the ecological security of Kuttanad Wetland Ecosystem and sustainable livelihood for the people of that area** and to make specific recommendations on : -

- a) **Measures for strengthening ecological security of Kuttanad Wetland Eco-system, and**
- b) **Measures for expanding sustainable livelihood opportunities for the people of the area.**

This was based on a **special plan of action for improving the farming conditions for Alappuzha district**, approved by the Government of India,

which envisaged **programmes for preservation and development of Kuttanad wetlands** in Alappuzha district. Copy of the said letter from Government of India is **Annexure IX**.



On the other hand the very object of legislating the Kerala Farmers Debt Relief Commission Act 2006 (Act 1 of 2007) is to provide relief to the farmers **“who are in distress due to indebtedness”** by constituting the Commission with power **“to recommend appropriate measures for the redressal of the grievances of such farmers.”** This was in the back drop of increased farmer indebtedness in the State, which **‘ruined many farmers financially’**, even **leading to suicides** and as Kerala Agricultural Debtors (Temporary Relief) Act 2001 was inadequate to take ameliorative steps to mitigate their grievances. Therefore the apprehension of the Government in the said letter that declaration if any made by this Commission may lead to distortion in demand and to duplication is misplaced.

Thus it is clear that the fields of enquiries and the purposes thereof undertaken by the Foundation as directed by Government of India and that by the Commission as mandated by the legislature of Kerala were in totally different spheres. So there arises no question of distortion or duplication in demands.

Further the Commission is a statutory entity, undertaking a statutory enquiry. It cannot wait the result of exercise by a non statutory body or of the action pursued on a report of a non statutory body. The enquiry undertaken by the Commission and the recommendations to be made by it are not based on any executive directions; but statutory functions which

cannot be abdicated on any reason. It will amount to discard the will of the people, expressed through legislation.

Moreover this Commission is not making any declaration that any area is distressed. This Commission can only make recommendations in that regard. The Government can, with the available inputs in their hands, defer the declaration at their sweet will or even decline to accept the recommendation made by the Commission. It is not mandatory in terms of Section (6) of the Act to accept the recommendations of the Commission. The Government being the repository of powers and with necessary input data shall have the power to consider any recommendation and to take appropriate decision in public interest. They are far above the Commission, which is only a recommendatory body. It could not be thought of that it is obligatory on the part of the Government to accept the recommendation of the Commission without probing further, wherever required.

After all what hat the government say in their letter Annexure VIII is to defer the recommendation to be made by the Commission by three months to await the decision of the Government of India on the report of the said Foundation. Even if the Government of India accept the report of that Foundation, it will be a piece of evidence before the Commission and an added reason to recommend to declare the area distress stricken. On the other hand, if the Government of India do not accept the report, it does not stand in the way of this Commission to come to its own findings. So in any view, the fact that the said report is under consideration of Government is not a cogent reason at all for this Commission to defer its recommendations.

When the Commission has completed its enquiry, it can come to its own conclusion based on the materials placed on record and the facts disclosed to it, either in one way or the other. It cannot delay or defer its recommendations as required by the Government. The Commission being temporary machinery with a time bound function, cannot delay its process which is meant for mitigating the grievances of farmers in debt trap. To do so amounts to abdication of statutory functions enjoined on the Commission.

So the Commission is of the view that there is no reason to defer the matter as requested in Annexure VIII Government letter. And in this background we have to proceed with the matter.

Alappuzha district came into being in the political map of Kerala on the 27th of August, 1957, carving out areas from the then Kollam and Kottayam districts. Alappuzha, with its past glory has a historic tradition of its own

and abundant trade activity in coir products and coconut oil, from ancient days onwards.

Alappuzha is also famous for the first labour and mass upsurge against princely regime and for democratic rights, known as ***Punnappa-Vayalar*** agitation. The sweeping network of canals honey-combing the town of Alappuzha, planned by Raja Kesavadasan, has earned the place its sobriquet, '***the Venice of the east***'. The district is also well-known for its coir industry. Most of Kerala's coir industries are situated in and around Alappuzha.



Alappuzha District, for its administration, is divided into two revenue divisions, viz; Alappuzha division comprising Cherthala, Kuttanad and Ambalappuzha taluks with 47 villages and Chengannur division comprising Mavelikkara, Chenganoor, and Karthikapalli taluks with 44 villages. Thus there are six taluks and ninety-one villages. There are seventy-three grama panchayats in the district.

The district is a sandy strip of land intercepted with lagoons, rivers and canals. It has an area of 1414 sq. kms and thus constitutes 3.64% of the total area of the State. According to 2001 census, Alappuzha district has a population of 2,105,349. This accounts for 6.61 % of the State population. The district has, thus, the highest density of population in Kerala, viz; 1492 persons per sq.km. In spite of its natural wealth, the district has high proportion of population living in poverty.

Another exciting feature is that four major rivers; Pampa, Achankovil, Manimala and Meenachil flow through this district and converge into the ***Vembanad*** lake. It is now receiving global attention because, the nature is at the peak of its beauty. The scenic beauty of Kuttanad also brings unforgettable moments. Snake boat races are the most significant traditional enchanting activity here which attracts tourists.

Alappuzha is now fastly developing into a world famous tourist spot. It's God's own land, the Immodest Green of ***Arundhati Roy***. The palm-fringed emerald islets are surrounded by vast expanses of water. The picturesque beauty carves out Kuttanad, a taluk in the district, as the very essence of Kerala's backwater experience. With the vast stretches of paddy fields, interlaced with serene backwaters, it creates some of the unforgettable sights to the tourists, both intranational and international. It is noted for its farming below sea level in ***kayal nilams*** (polders).

But, in the name of tourism, it is afraid, an invasion is being made spoiling the beauty of this heaven on the earth. A prominent leader of the ruling front of Kerala, very recently called for a collective agitation against what he termed the

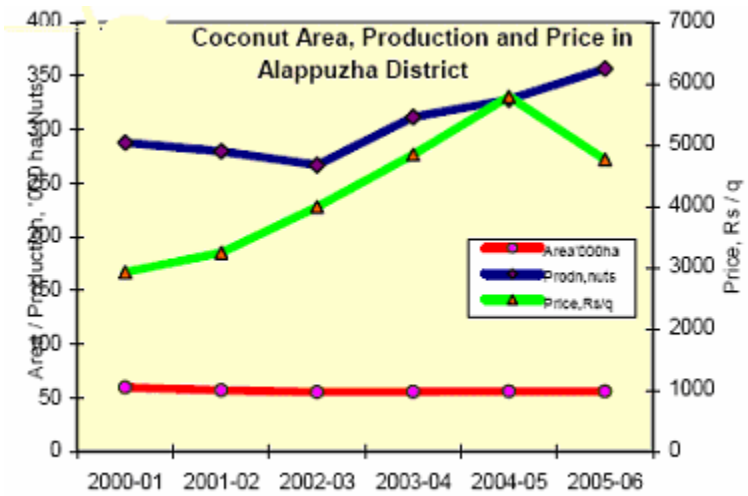


invasion of Kuttanad by business majors who have an eye on exploiting the beauty of this ecologically fragile region, apprising the people of the locality that the issue of Kuttanad facing the danger of invasion by business houses with vested interests was one that affected the entire region without any slant.

Still, Alappuzha is a backward district in terms of the standard of living of the people. The majority of the population of this district comprised, agricultural labourers and coir workers. Though literacy rate in the district is high as compared to many of the other districts in the State, employment rate is not proportionate to the literacy rate.

Agriculture is the major economic activity in Alappuzha District. Total cropped area in Alappuzha is 1,25,032 ha, which is 89 % of the geographic area of the district. Paddy and coconut are the major crops contributing to about 80 % of agricultural income in this district. Area occupied by coconut and paddy is estimated at 45 % and 38 % of the cropped area, respectively. Other crops such as sesamum, pulses, banana, tubers and vegetables are not influential on the economy considerably. Alappuzha has nearly 4.66 lakhs of operational holdings. The district has very high proportion of small and marginal farmers. Average size of operational holding is 0.23 ha as against the State average of 0.36 ha. Large majority of the farmers own holdings of 0.5 ha to 1 ha in size. About 60 % of farmers carry on cultivation in less than 2 ha area. The implementation of Kerala Land Reforms Act as amended by Act 39 of 1969, which abolished tenancy, imposing ceiling on land holding and distributing surplus land to the landless, has paved the way for this phenomenon.

In terms of commodity value, coconut is the major and important crop in Alappuzha district, having immense economic potential. Over the years, the area and productivity of coconut in Kerala have been rising, albeit at very slow rate in the case of area and rather irregularly in production. Coconut forms an important component of the house hold income every where in Kerala including Alappuzha. Major set back to coconut productivity faced in Kerala is the widespread damage from root-wilt disease. The problems of coconut



Source: Swaminathan Report

farming have been also compounded by the recent epidemic-like attack from coconut mite and an increasing incidences of damage from red-palm affecting largely the productivity and quality of nuts and the out put therefrom. But this is not a local specific phenomenon confined to Alappuzha district alone. As noticed by Prof. Swaminathan in his report referred supra, 'unlike in the case of rice, there is neither a decline in the area or production of coconut in Alappuzha district'.

According to the written statement filed by the Principal Agricultural Officer, Alappuzha, the price of coconut has increased considerably. The details furnished by him in this regard are as follows:-

Price of 100 nuts in Rupees

2000-01	2001-02	% of increase	2002-03	% of increase	2003-04	% of increase
284.31	336.87	18.50	479.65	68.70	583.23	105.13

This price tag cannot be one indicating any distress as far as coconut farmers are concerned. This is more evident from the above graph. The fall in price

experienced in 2005-06 alone cannot be a sign of distress. Of course they have some grave problems as mentioned above. These problems prevailing everywhere in the State faced by coconut growers are to be addressed on a higher plain being an agro-economic issue encountering the State economy. So, on its basis there is no reason at all to make recommendation to declare Alappuzha district as distress stricken for the purpose of debt relief.



So far as paddy cultivation is concerned, there are three major agricultural zones in the district, viz, **Kuttanad** eco system stretching over to neighbouring districts of Kottayam and Pathanamthitta, **Onattukara** which spreads over to Kollam district and **Pokkali** lands mainly of Thuravoor-Pattanakkad area in Chertalla taluk.

Land use pattern in paddy cultivation in the district has undergone swindling changes during the last few years. It was noticed by Prof. Swaminathan in his recent study report on **Measures to Mitigate Agrarian Distress in Alappuzha and Kuttanad Wetland Ecosystem** Alappuzha, herein after referred to as the report on Allappuzha, that,

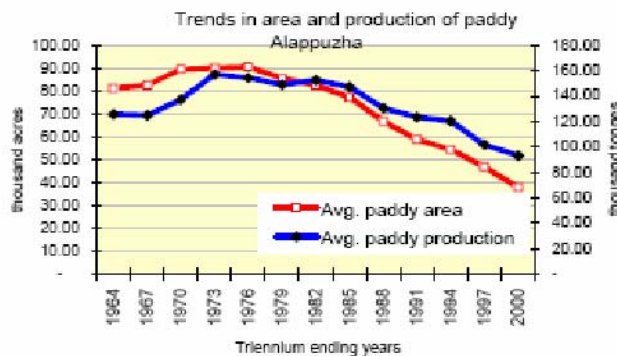
‘An analysis of data from 1960-61 to 1999- 2000 for trends in paddy area and production shows that paddy area in Alappuzha has indeed increased

from 1968-69 till 1975-76 upon which it started declining slowly initially till about 1985, and more steeply afterwards.

By the year

2000, the area appeared to have reduced to one-third of the peak area in 1975-76. Production of paddy had peaked at about 1.4 lakh tonnes/year during the decade 1971-72 to 1981-82, and the production decline started afterwards.’

So the problems faced by paddy growers are some what grave which compel us to go deeper into it.



Source: Swaminathan Report

Alappuzha has large number of fishermen engaged in capture fishing and shell collection. Having a long sea-coast of 82 km in length, this district has the benefit of immense wealth of marine fish landings. The *Vembanad* and *Kayamkulam* backwaters and the network of rivers and canals also enrich inland fishing. About 14 % of the marine fishermen and 27 % of inland fishermen of the State live in this district.

According to the livestock census held in 1987, there were 1290625 poultry including fowls, ducks, etc. The Central Hatchery at Chengannur is the major institution of that sort in the State. A Poultry Training Institute and Chick Sexing School is also functioning in the district, apart from several private hatcheries.

In Alappuzha district, rural agricultural credit is supported mainly by cooperative institutions like 160 Service Cooperative Banks, 4 Primary Co-operative Agricultural and Rural Development Banks and 3 Urban Co-operative Banks. The commercial banks in the district also serve the need equally. The outstanding amount as on 31 March 2007 towards loans disbursed by the primary banks was to the tune of Rs.777.29 crores and that by 160 Service Cooperative banks in the district was rupees 9045.24 lakhs towards principal and rupees 1258.47 lakhs towards interest. It is in this back ground that, we have to deal with the problems faced by paddy growers of Alappuzha district.

The pattern of paddy cultivation in the three eco-climatic agronomic regions in Alappuzha district, namely; Kuttanad, Onattukara and Cherthala-Pattanakkad, differs in many respects.

So far as Onattukara, the second major agricultural region is concerned, it was known for paddy and sesamum cultivation alternatively in two seasons in an year. The area is also considered to be a major coconut growing area. But since last few years, farmers were keeping their land fallow, as rice cultivation was becoming unattractive. There has been conversion of paddy fields into garden lands and commercial plots. Paddy cultivation is not the only source of livelihood for the farmers there. Further, because of abandonment of paddy cultivation, the farmers cannot be said to be in distress state entitling for debt relief. It was not because of debt trap they have abandoned paddy, but only due to unattractiveness and less profit. They have also shifted to other better options.



When we consider the situation in Chertala-Pattnakkad region, the third major paddy zone, it is noticed that the farmers there are growing *pokkali* rice. Though it cannot be said to be a crop yielding reasonable income,

all the farmers are growing shrimps or prawns during the months after paddy cultivation or even during the whole year. This is the major source of income so far as the paddy farmers in this area are concerned. On that reason it cannot be said that paddy farmers in Chertalla- Pattnakad *Pokkali* fields are distressed to grant debt relief.



Compared to these two paddy zones, Kuttanad is the major paddy growing area in the district. As mentioned earlier, geographical segment known as Kuttanad, stretches over to Kottayam and Pathnamthitta districts as well. Kuttanad area falling within Pathanamthitta district is comparatively of higher plain and garden lands. So, that area is not afflicted badly by flood every year, as happens in lower Kuttanad area in Alappuzha district. More over there are other equally important crops, as well grown there. The cultivation operation also differs from the water logged Kuttanad area in Alappuzha, where it is highly expensive. So, profit ratio there, is also in a better position.

Almost same is the situation in Kuttanad area in Kottayam district also, though not as advantageous as in Pathanamthitta. Even then flood occurrence is comparatively low and the cost of cultivation is also not as high as in lower Kuttanad area in Alappuzha district.

So, these two areas forming part of Kuttanad eco-system have to be viewed differently from the Kuttanad area falling within Alappuzha district. Any how these are our prima-facie and general observations so far as the said regions are concerned, as we are confining our task only to Alappuzha district. These prima-facie and general findings become necessary as we have to take into account the agronomic zone of Kuttanad, while considering the situation in Alappuzha district.

Kuttanad region in Alappuzha district is a typical area where the major cultivation of importance is paddy. It was once known as as “*The Rice Bowl*” of Kerala, as the rice produced there fed the Keralites sumptuously for years together. Paddy growers of this region, both the owners of land and the agricultural labourers ‘carry the proud legacy of indomitable adventure,

innovation and achievements in taming the nature, unmindful of the challenging conditions, for creating resources and livelihoods'. It includes about 50,000 ha of arable land in the region, lying even 60 cm to 200 cm below sea level. For the better part of the year, most of the land is submerged. It has the distinction of being one of the few areas in the world where farming is carried out below sea level in what is called *kayal* lands

It is often said that God created earth, but man created Kuttanad. *Kayal lands* in Kuttanad were reclaimed from *Vembanadu* lake in three stages. In the first stage it was carried out by private entrepreneurs with out any financial support from the part of the government. In this stage, reclamation and other agricultural activities were completely under the financing from private money lenders like the *Mancombu Brahmins*. Because of financial constraints, reclamation activities during the initial stage were largely confined to the scattered plots of shallow lands by the side of the Vembanadu lake. Only about 250 hectares of land were reclaimed during this stage. The second phase of reclamation commenced in 1888 with the government decision to provide direct loans. This phase of reclamation lasted till the end of 1903 when the government considering the safety of the Kochi harbour interdicted further reclamation from the *Vembanadu* lake. Meanwhile about 2000 hectares of the bed of the lake had already been reclaimed. The third phase of reclamation of *kayal* lands started in 1912. During the early years of the 1940's three segments of kayal lands viz., *Rani*, *Chithira*, and *Marthandom* were reclaimed.



Farmers in Kuttanad experience several challenges, which their counterparts in other agro zones do not have for growing similar crop. Not only that; now 'a serious man-made crisis has been created on ecology, livelihood, agricultural activities and alternate options, which collaterally and cumulatively contribute to a spiraling agrarian distress in the region.' So Kuttanad area illustrates the paradox of co-existence of bountiful natural charm and acute agrarian distress. Kuttanad contributed 37% of the rice requirement of Kerala in 1970. Now it has been reduced to just half of it, even though the area is virtually unsuitable for crops other than paddy.

When we examine the paddy cultivation in Kuttanad area in Alappuzha district, it has to be borne in mind that the entire region is not identical so far as the paddy environment is concerned. The Kuttanad geographical segment in Alappuzha can be divided into Upper Kuttanad and Lower Kuttanad. The main paddy crop raised is *puncha*, the summer crop. This crop is raised both in water logged paddy fields and in *kayal* lands constituting different *padasekharams*.

The lands in Upper Kuttanad suffer less frequently with flood as compared to Lower Kuttanad. Even during flood, damages caused are less, compared to Lower Kuttanad. This area is also not affected by salinity, the greater menace in Lower Kuttanad. More over local labour, though scarce, is available in this area. It is also to be noticed that domestic and leisurely labour is possible in Upper Kuttanad region, as farmers' abode is closer to farms. This results in comparatively lesser cost of cultivation. So neither the paddy cultivation in Upper Kuttanad, nor that area can be said to be distressed to recommend to be declared so.

The lower Kuttanad area in Alappuzha district almost wholly lies in Kuttanad Taluk. In other words, the entire Kuttanad Taluk falls in Lower Kuttanad. Wherever Lower Kuttanad area stretches into the villages in the neighbouring taluks, it does not cover the whole area of those villages. But all most all the villages in Kuttanad Taluk wholly fall within Lower Kuttanad. Kuttanad taluk consists of 14 villages viz., Kainakari North, Kainakari South, Nedumudi, Thakazhi, Champakulam, Pulinkunnu, Kavalam, Neelamperoor, Veliyanad, Muttar, Thalavady, Edathua, Kunnumma and Ramankari.

Majority of the *padasekharams* lie in Lower Kuttanad which is the core area of Kuttanad, located at the southeastern side of the *Vembanadu Kayal*, with much of the area falling in Kuttanad taluk in Alappuzha district. There are about 314 *padasekharams* having extent ranging from 6.40 acres to 1337.30 acres, in Kuttanad taluk as disclosed in the statement filed by the Thahasildar of the taluk. Nearly 35percent of the *padasekharams* and 40 percent of the total area under paddy crop in the whole Kuttanad region lie in this taluk. It is part of the *Kayal zone* of the region.



Strengthening of bunds constructed to check flow of water from the lake is an important annually recurring event adding heavily to the cost of cultivation. Even then breach of bunds (Mada veezhcha) when there occurs heavy pressure of water during rainy season; and consequent crop loss due to flooding cannot be excluded. The regular maintenance of outer bund is managed by the respective '*Padasekhara Samithi*' of each of the *padasekharams*. The cost incurred is proportionately shared by owners of the land.

As noticed by Prof. Swaminathan in his report, some of the *padasekharams* in the *Kayal* area and lower Kuttanad are known for their huge size. These *padasekharams* are largely located in Pulimkunnam, Neelamperoor,

Kainakari, Veliyanadu and Kavalam panchayats. The huge *padasekharams* with their reported area are D Block (729 ha), E Block (402 ha), H Block (783 ha), R Block (619 ha), Raja Ramapuram *Kayal* (539 ha), Mangalam *Kayal* (402 ha), Parampady Ponupakke padom (352 ha), K & L Block and



Aappu *Kayal* (340 ha), etc. The huge size of some these *padasekharams* requires more than 2 km trekking from one end to the other. When each of these *padasekharams* was owned by one or few farm families, the logistical aspects of managing cultivation in them with the help of boats were less complex. Currently, each of these *padasekharams* is owned by a few hundreds of households with individual household ownership not exceeding 1 to 5 ha. For example, the Q (196 ha), S (240 ha) and T (204 ha) *padasekharams* have 490, 600, and 510 farm holdings, respectively, where the average size of the holding is 0.4 ha. The farmers who own the field deep inside the huge *padasekharams* are required to meet exceedingly high cost in carrying the farm inputs into and the produce out of their fields. The present high cost of manual transportation makes the cultivation charges of these farmers prohibitively higher.

As per the 1991 census there are 40794 households in Kuttanad taluk with a total population of 210004. Total number of main workers in this taluk is found to be 69462. Out of them 57.18 percent are agricultural labourers and another 11.13 percent are farmers. Thus agricultural activity provides livelihood to more than two-thirds of the populations in this taluk.

The paddy fields in this area are mainly water logged wet lands and reclaimed *kayal* lands situated below the sea level. *Kayal* lands are

reclaimed beds from Vembanad lake. The soil here requires extra amendments.

The average rain fall in this area is estimated to be 3,000 cm. Apart from that the rivers flowing into *Vembanadu* lake carry about 10,074 m³ of water into the lake which floods over to these paddy fields greatly, damaging the outer bunds constructed and maintained



with precious labour costing heavily, and destroying the crops. By reason of this, several are abandoning the *virippu* cultivation during May to September and those engaged in raising that crop face heavy crop failure due to flooding and breaches of bunds. The decline in the case of this second season rice crop is much more drastic, from 24,000 ha to about 5,000-10,000 ha. as compared to the first season crop viz; *puncha*. *Puncha* crop (summer crop) is the traditional crop in Kuttanad during which 80 percent of the paddy fields are sown. The season of this crop begins from October-November when the operation of bailing out water from *padasekharams* commences. In the other season viz; *virippu* (autumn or varsha crop) 40 percent of the paddy lands is expected to be cultivated.

Floods occur regularly in Kuttanad during the southwest monsoon and rarely during northeast monsoon. All in Kuttanad commonly share this major threat of flood during monsoon months, which is increasing in recent years in terms of frequency, intensity and damages inflicted. Prior to 1970's major floods used to be rare and there were only two recorded major floods. The impact of these floods used to last about 7-12 days during June-July and about 3 to 5 days during October-November. During such floods the water level used to rise by about 3 to 4 feet, often entering dwelling houses in many areas. As noticed in the report of Prof. Swaminathan and as stated by farmers and their organizations, during recent years, floods occur every year with destructive force and terrifying experience. The year 1961 witnessed heavy floods. Since then floods were recorded in 1968, 1975, 1981, 1985, 1986, 1989, 1992 and 1994. Limited flood affecting Kuttanad area also occurred in the years of 1964, 1971, 1978, 1996 and 1998. Kuttanad floods are devastating on paddy, fisheries, human lives and property. The most recent flood in 2005 caused several casualties in Kuttanad.

Several encroachments, unscientific developmental works like construction of roads, bridges and culverts and spread of water hyacinth have created hindrance to free and regular flow of water along the natural waterways. Developmental interventions have, in fact, only worked to hurt Kuttanad's fragile ecosystem. It is often said that Kuttanad is a testimony to misplaced

and impractical developmental schemes. The backwaters are vanishing due to encroachment. This has resulted in accumulation of wastes, promoting prolific breeding of predators, parasites and deadly pathogens, causing serious concern to plant life also. Reduced water spread has resulted in more frequent and intense flood.

Compared to the other rice zones in the state, productivity of paddy is higher in Kuttanad region. At the same time, the cost of cultivation is found to be disproportionately higher here. Apart from that, the incidence of plant diseases and rate of crop failures are also relatively higher in this area.

As already mentioned, the agriculture of Kuttanad is quite unique, because in large areas rice cultivation is being done below the sea level even more than two metres depth. But agricultural operation carried out there below the sea level 'with great vibrancy and confidence is dwindling under high cost of production, indebtedness and increasing risk from natural forces'. At the same time, farming is the only source of livelihood to more than 80 % of the population. And majority of them are small farmers with less than 0.4 ha land and agricultural labourers.



Inspite of the Thottappilly spillway and the Thannermukkam bund constructed to check intrusion of salinity from the Arabian Sea, other few major and many minor inlets cause salt intrusion largely affecting paddy cultivation in Kuttanad. Prof. Swaminathan in his report has estimated that paddy cultivation in more than 12000 ha was affected by this salinity intrusion.

This low salinity coupled with eutrophication of organic wastes and fertilizer residues has promoted high growth of water hyacinth in upper layer of the water body resulting pollution and contamination of water due to depletion of dissolved oxygen causing major increase in cost of cultivation to remove it for preparing the field for cultivation operation.

The soil in Kuttanad is a mixture of sand and clay in varying proportions. Efforts to boost rice yields gradually made this tract notorious for excessive use of chemicals spoiling the natural fertility. The high degree of human intervention in the natural endowment of the region coupled with the indiscriminate use of pesticides and chemical fertilizers over the past several years has caused irrevocable damage to the ecosystem of Kuttanad. Not only the soil has thus been lost leading to steep fall in the productivity but

also created several other hazards in the fisheries, health, cattle rearing and drinking water fronts. *Water, water, everywhere; nor any drop to drink-*, Samuel Taylor Coleridge would have set this a Kuttanadan rime rather than of an Ancient Mariner, had he known the present Kuttanad.

Added to these are the obvious results of encroachments and unscientific planning for development activities such as construction of roads, bridges and culverts. Unseemingly heavy growth of salvinia (*African payal*) and water hyacinth (*kulavazha*) and aquatic weeds have caused contamination due to accumulation of wastes causing misery to farmers. These have compelled the farmers to leave their otherwise cultivable land fallow. Due to several factors, despite the productivity of paddy in Kuttanad being 10 % higher than that of Palakkad, the other major paddy zone in Kerala, the net return in Kuttanad is 24 % lesser than that in Palakkad..

As mentioned earlier, paddy is grown here in two seasons; the *punja* summer crop (November-March) and *virippu* autumn crop (May-September). In Kuttanad alone there was paddy cultivation in about 60,921 ha of land in the year 1967. In 2003 it got reduced to 37,624 ha. According to Prof. Swaminathan, 'The share of Kuttanad to the State's total paddy production shrunk from 37 % in 1967 to 18 % in 2003'.

The change in land holding pattern given rise due to fragmentation is one among the reason for this short fall. Several of the small holders have lost interest in paddy growing. As on 30-11-2000, a total of 4543 acres of land had been distributed to 8434



families in Alapuzha district. It includes 1959 acres of kayal lands reclaimed by Muricken, which was declared surplus and distributed among landless farm labourers in 1975. This gives an out line about the change in the land holding pattern occurred recently. A survey conducted by Shri. P.M.Thomas in Ramakari village in Kuttanad taluk reveals that more than 21 percent of paddy farmers lease in paddy lands and area of such leased in lands amounts to 20 percent of the total area under the crop. It was also noticed that more than half of the lessors are marginal or small farmers with less than one hectare of land and the practice of leasing paddy lands is independent of the size of holdings. The position elsewhere in Kuttanad taluk cannot be different.

**Pattern of land holdings in Kuttanad area
in Alappuzha District (as in June 1973)**

Holding size	Kuttanad Area in Alappuzha District	
	No. of Holdings	Extent of Holding (ha)
< 0.42 ha (<1 Acre)	10,112	4,166
Between 0.42 - 1 ha	7,723	6,667
Between 1 and 2 ha	6,203	9,841
Between 2 and 4 ha	3,816	8,696
Between 4 and 6 ha	1,013	4,312
Above 6 ha (>15 Acre)	201	4,333
Total	29,068	38,015

Source: Problems and Prospects of Paddy Cultivation in Kuttanad Region by P.M.Thomas

The Statistics on the total area, production and productivity of paddy cultivation in Kuttanad in the nineties is worth mentioning. It is as below.

**Area, Production and Productivity of Rice in Kuttanad
Region During the period 1990 - 91 to 1999 - 2000**

Year	Area (in '000ha)	Production (in '000 tones)	Productivity (in kg/ha)
1990 - 91	101.17(18.08)	227.61(20.95)	2245(115.60)
1991 - 92	92.88(17.16)	201.63(19.02)	2170(110.77)
1992 - 93	91.78(17.07)	217.81(20.08)	2373(117.59)
1994 - 95	90.92(18.07)	180.22(18.48)	1978(102.12)
1995 -96	79.82(16.94)	203.87(21.39)	2554(126.25)
1996 - 97	72.64(16.86)	152.61(17.51)	2101(103.91)
1997 - 98	65.74(16.98)	142.69(18.66)	2171(109.92)
1998 - 99	57.02(16.17)	146.81(20.20)	2547(123.58)
1999-00	57.87(16.54)	152.16(19.74)	2630(119.38)
Av. Annual	79.72(17.18)	182.57(19.64)	2306(114.61)
Compound Growth Rate	-6.02	-4.38	1.77

% to state level figures are given in brackets

Source: Problems and Prospects of Paddy Cultivation in Kuttanad Region by P.M.Thomas

Area, production and productivity of paddy in Kuttanad Taluk (Veliyanad and Chambakkulam Blocks) during the last three years were as follows:-

2003-04			2004-05			2005-06		
Area	Prod'n	Pro'vty	Area	Prod'n	Pro'vty	Area	Prod'n	Pro'vty
21752	45578	2080	23950	62313	2580	22392	58181	2600

Though there is minimal increase in production, as compared to the data of 2003-04, in 2005-06, it has no comparison to that of earlier years, when the area cultivated was also more. The following table further reveals the declining trend.

Year	Area	Production	Shortage
1995- 96	44132	121047	
1996-97	41447	85192	35855
2000-01	37740	103344	
2003-04	32083	63008	40536

Thus the paddy graph of Kuttanad generally is of declining trend both in area as well as in gross production.

The fall in production in 1996-97 as compared to the previous year was due to attack of gall fly and that in 2003-04 as compared to 2000-01 was due to drought. Thus pests and also natural calamities are causing damages to paddy cultivation in Kuttanad taluk. It is disclosed by the PAO that there was pest attack in 200 ha in 2002-03 and in 1382 ha in 2004-05.

Even during the last monsoon season, the fury of nature caused devastating loss in Kuttanad taluk which was fully submerged in water. About 129375 persons had to be evacuated from flood affected areas of this taluk alone. It was estimated officially that paddy cultivation in 3362.5 ha having full grown paddy seedlings was destroyed completely because of breaches of bunds. There were 23 loss of life in the district. In Kuttanad taluk alone, apart from complete damage to 40 dwelling houses, more than 1450 houses were partly damaged, giving rise to a loss of rupees 107.65 lakhs. . Agricultural loss was assessed to the tune of rupees 2067.46 lakhs by the 3rd week of July 2007. Loss due to loss of cattle etc was to the extent of rupees 87.56 lakhs and the estimated loss due to loss of manpower was rupees 1276 lakhs.



Ofcourse, price of paddy during the last four years, has witnessed marginal increase, except in 2001-02, as shown below

2000-01	2001-02	% of decrease	2002-03	% of increase	2003-04	% of increase
639.84	581.07	(-) 9	669.79	4.6	722.09	12.8

This is certainly a positive factor. But this increase is not sufficient even to withstand the inflationary change. At the same time the cost of labour component involved in the cultivation operation has increased during a decade on an accelerated rate.

As per the report of Prof. Swaminathan, on an average about 150 man days are required to grow one crop of paddy in one hectare of land in Kuttanad. Different estimates show that 60 to 78 % of cultivation cost was attributed to labour cost, depending on whether or not machinery is used. The labour unions enhance the wage levels at their sweet will, particularly when the government decides to increase the procurement price. With the declining availability of labour, increasing shift to mechanization is an essential imperative. The distribution of main and marginal agricultural labour and the cropped area in each Block of the Alappuzha district shows that there is a huge mismatch between local available labour and the net cropped area.

High cost of hired labour is an important factor contributing to the cost of cultivation. As pointed out by Prof. Swaminathan, 'Different studies show that 60-74 % of the cost of cultivation is accounted to hired manual labour. Farm labour in Kerala is paid two to three times higher than in most other paddy cultivating States.' Compared to garden crops and plantation crops, paddy cultivation is more labour intensive. The high rate in this regard is local specific for Kuttanad. Compared to the other major rice producing areas in the State, cultivation cost is found to be higher in Kuttanad and the difference is mainly due to higher costs on human labour. As per a study conducted in 2002 under the auspices of '***A Project of Kerala Research Programme on Local Level Development (KRPLLD), Thiruvananthapuram***' by **Shri. P.M.Thomas** in **Ramankari** village in Kuttanad, 'household members of 60 percent of the sample farmers in the study area do not perform any sort of manual works in their fields. It is also found that 33 percent of the marginal farmers, 67 percent of the small farmers, 80 percent of the medium farmers and 83 percent of the local farmers are exclusively depending on hired human labour.



Production costs in paddy cultivation can be broadly classified into material costs, consisting of the cost of seeds, fertilizers, weedicides, insecticides and lime. labour (human, animal and machine) costs and miscellaneous expenses such as land tax, cost of purchase of implements like baskets, repair charges

of farming implements, expenses to provide refreshments and incentives to farm labourers etc.

Human Labour Costs in Paddy Cultivation (Cost in Rs/Acre)

Activity	Type of farmers				Average
	Marginal	Small	Medium	Large	
Land preparation	843.34 (19.78)	959.55 (21.54)	807.34 (18.89)	854.58 (20.16)	866.20 (20.11)
Sowing	84.00 (1.97)	82.03 (1.84)	81.67 (1.91)	88.13 (2.08)	84.01 (1.95)
Transplanting	446.50 (10.48)	408.03 (9.16)	412.00 (9.64)	380.00 (8.96)	411.63 (9.56)
Weeding	568.33 (13.35)	493.48 (11.08)	480.00 (11.23)	530.00 (12.50)	517.95 (12.03)
Manuring	170.67 (4.01)	196.48 (4.41)	184.67 (4.32)	199.58 (4.71)	187.85 (4.36)
Plant protection	76.50 (1.80)	98.33 (2.21)	50.67 (1.19)	77.08 (1.82)	75.65 (1.76)
Harvesting	1898.50 (44.58)	2036.67 (45.73)	2069.87 (48.42)	1952.75 (46.07)	1989.45 (46.20)
Miscellaneous	170.67 (4.01)	179.55 (4.03)	188.33 (4.41)	156.67 (3.70)	173.81 (4.04)
Total	4258.67 (100.00)	4454.12 (100.00)	4274.53 (100.00)	4239.00 (100.00)	4306.58 (100.00)

Note: Percentages are given in brackets

Source : Problems and Prospects of Paddy Cultivation in Kuttanad Region by P.M.Thomas

Distribution of Machine Labour Costs (Costs in Rs/Acre)

Cost items	Type of farmers				Average
	Marginal	Small	Medium	Large	
Tractor/tiller	211.67	182.58	156.33	277.08	206.92
Threshing	300.00	300.00	300.00	300.00	300.00
Pumping	254.00	292.73	330.00	316.67	298.35
Total	765.67	775.31	786.33	893.75	805.27

Source : Problems and Prospects of Paddy Cultivation in Kuttanad Region by P.M.Thomas

Cost of Cultivation of Paddy Crop in Ramankari Village

(Cost in Rs/Acre)

Cost items	Category of farmers				Average
	Marginal	Small	Medium	Large	
Material cost	1646(23.4)	1837(24.3)	1812(25.0)	1788(24.6)	1771(24.3)
Human labour cost	4259(60.4)	4454(59.0)	4275(58.9)	4239(58.3)	4307(59.2)
Machine labour cost	766(10.9)	775(10.3)	786(10.8)	894(12.3)	805(11.1)
Animal labour cost	143(2.0)	271(3.6)	157(2.2)	151(2.1)	181(2.5)
Miscellaneous	233(3.3)	212(2.8)	227(3.1)	196(2.7)	217(3.0)
Total	7047(100.0)	7549(100.0)	7257(100.0)	7268(100.0)	7281(100.0)

Note: Percentages are given in brackets

The different cost items for the marginal, small, medium and large farmers differ according to the study conducted by Shri. P.M.Thomas, in Ramankary village in Kuttanad taluk.

Productivity, Price and Value of Products of Paddy Crop in Ramankari Village (Productivity in Qtl./ha., Price in Rs./Qntl.)

Type of farmers	Productivity	Price	Value of product
Marginal	18.18	580	10544
Small	19.55	592	11574
Medium	20.09	597	11994
Large	18.91	612	11573
Average	19.81	595	11412

Gross and Net Profits in Paddy Cultivation in the Said Area (in Rs./Acre)

1.Type of farmers	2.Value of Product	3.Paidout cost	4.Interest	5.Total (3+4)	Gross Profit (2-3)	Net Profit (2-5)
Marginal	10544	7047	423	7470	3497	3074
Small	11574	7549	453	8002	4025	4025
Medium	11994	7257	435	7692	4737	4302
Large	11573	7268	436	7704	4305	3869
Average	11412	7281	437	7718	4131	3694

Source : Problems and Prospects of Paddy Cultivation in Kuttanad Region by P.M.Thomas

The estimate made by Shri. P.M,Thomas, is based on the data collected from Ramankari village in the year 2002. It being a typical village representing an exact sample of Kuttanad taluk, can safely be applied to other parts of the taluk, as there is no situational variance. But according to the estimate of Prof.Swaminathan, in his report referred supra, which takes into consideration the minimum support price of this year, cultivation in *Kayal* land in Lower Kuttanad incurred a cost of Rs. 25,850 per ha. At yield of 4 tonnes of paddy per hectare and price of paddy at Rs.8,500 per tonne, the net profit was Rs. 8,150. These estimates show that in paddy cultivation, when

there is profit, it is less than one-third of the cost of cultivation. This predicament destabilizes the economic viability of paddy cultivation in Kuttanad, where the average yield is even one of the highest.

During the period from 1980-81 to 1999-2000, the average daily wage rate of male paddy farm labourers increased from 11.13 to 118.90 rupees at the annual compound growth rate of 13.27 percent and the average daily wage of female workers increased from 7.91 to 78.80 rupees showing the growth rate of 12.86 percent per annum. However, during the same period the average price of paddy per quintal had increased from 152 to 685 rupees showing a relatively much lower growth rate of 8.25 percent per annum. The further data available disclose as follows:-

Year	Wage Female Rs	Wage Male Rs	% of increase	Price of Paddy Rs	% of increase
1995	45	70	-----	500	----
2000	75	125	74 %	650	30 %
2005	90	170	120 %	700	40 %

These are the details furnished by the Principal Agricultural Officer, Alappuzha. It can, thus, be seen that the price increase was only to the extent of 40 % and was not commensurate with the 120 % increase in wages. This is an obvious position as the governmental machinery always effectively makes timely intervention in the market to check the rise in price of food articles. At the same time the government offers reasonable support price to the farmers. This year it was at the rate of Rs.850/- per Qtl, and it could help the farmers from sustaining heavy loss. Though there is some margin as admitted by the farmers and their organisations, it was not sufficient at all for their sustenance all round the year.

Working conditions and working hours of the labour have undergone a sea change. Presently, daily working duration for ploughing is 4 hours and 5 hours for all other work in *Kayal* lands, and 6 hours in remaining area. The prevailing daily wage rate for men is Rs.175 and for woman, it is Rs. 90. For harvesting, 16 % of the produce is given as wages and this is applicable even if machine is used at additional cost for harvesting and staking. Loading and unloading of inputs and produce are charged on contract basis; with restriction that only specified group of workers alone can be employed for the work. Farmers view that paddy cultivation is not profitable on the grounds of high cost of production and low prices. It cannot be said to be baseless.

This has to be viewed conceiving the hike in prices of other inputs like fertilizers and pesticides during the relevant period. There had been unprecedented increase in the prices of such agricultural inputs since the adoption of the new economic policy in the country, from early nineties. According to the study of Shri.P.M.Thomas, material input and human labour costs together account for 83.48 percent of the total paid out costs of paddy cultivation.

Another costly component contributing to this high cost of cultivation in Kuttanad is the recurring cost on the infrastructure like strengthening of outer bunds including repair of breaches, construction of motor base otherwise called *thara*, pump shed and *chals* for setting the field fit for paddy cultivation. Depending on the location, this varies between 10-20 % of cultivation cost.

Attack of pests and infection of plant diseases are very common in Kuttanad. As already mentioned above, paddy fields in Kuttanad taluk, whether it is wet land or *kayal nlams* are below the sea level and surrounded by water on all the fours. Necessarily during summer season, when the major *puncha* paddy crop is raised, the atmosphere will have large extent of moisture content. This contributes multiplication of pests and spread of plant diseases.

Natural calamities and resultant crop loss are usual phenomenon in Kuttanad taluk. During 2003, due to heavy south-east monsoon shower, paddy cultivation in 150 ha; due to summer rains, paddy crop in 70 ha and due to north-eastern monsoon, crops in another 145 ha were damaged. In 2004, due to drought paddy cultivation in 19228 ha was lost. In 2006 flood caused loss of cultivation in 728 ha of paddy field.

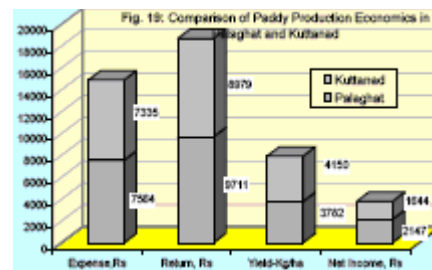
The prospects of paddy cultivation in Kuttanad are invariably related to the profitability of the crop that in turn depends on the cost of cultivation and income from farming. Compared to the other major rice producing areas in the State, cultivation cost is found to be higher in Kuttanad and the difference is mainly due to higher costs on human labour. Increasing cost of cultivation, coupled with less profitability insufficient to support day to day living, is forcing farmers either to fallow the land leading to its reversion to water logging state, or conversion to garden lands.

The surplus available to farmers in Kuttanad is far less as compared to their counter parts in Palakkad, the other prime paddy zone in Kerala. This is evident from the graph adjoining. So, the paddy growers in Kuttanad taluk

are in a disadvantageous position and will be fast stricken by any minor adversity even.

According to a vast majority of paddy farmers in this area the single biggest problem they are facing is the non-availability of sufficient farm labourers during the harvesting season. As observed

by Prof. Swaminathan in his report on the agrarian scene of Alappuzha, the farm labour in Kuttanad had been the strong allies to farmers there with utmost dedication in executing tasks uncommon in other rice zones any where. However, with the march of time their unique skill has diminished a lot and their work culture is on decline. The region is now facing acute labour shortage during the days of peak agricultural operation. The youngsters, both among farmers as well as farm labourers, are less keen to stay in agriculture.



Source: M.S.Swaminathan Foundation

A major portion of the human labour requirements in paddy cultivation is for harvesting the crop. Until few decades back the supply of local labour during the harvest season was supplemented by outside labourers. Hundreds of outside labourers used to come to the *padasekharams* as harvesters and stayed in temporary sheds until the entire harvesting operations were over. In course of time as harvesting became less attractive the inflow of such labourers gradually declined and at present all of the paddy farmers are depending on locally available labourers for all farming activities. The lower growth rates in the price of paddy have adversely affected the real earnings of harvestors. Even though the problem of labour shortage becomes more severe during the harvest season, many local farmers complained that they could not complete other activities like transplanting and weeding in the right time due to the paucity of farm labourers. At the same time, even though the IRC for Kuttanad had upheld the freedom of farmers to fix the number of workers and their right to select the persons they prefer, at present the cultivators' prerogative to choose specific workers is very much limited. This also is an agony faced by farmers here.

Agriculture is an activity to be planned according to the seasonal changes that occur naturally and according to the traditional practices followed innovated with scientific and technological advancements depending on the

zone of cultivation. But most of the farming operations in Kuttanad are carried out according to the convenience of labourers and neither in accordance with the dictates of natural factors nor with the agronomic practices. This greatly affects productivity and yield considerably. The complaint voiced in this regard by farmers and their organizations cannot be brushed aside.



At the same time in the study conducted by Shri. P.M. Thomas in 2002, he had noticed that, over the last few years agricultural labourers in Kuttanad had acquired a multiple status. With the implementation of land reforms many of them had received plots of surplus land, size of their holdings not exceeding one acre. Some of them leased in additional land for personal cultivation, while some others leased out their land and the rest of them sowed in their newly acquired land and engaged in other activities during the non-farming seasons. The distinction between paddy farm workers, marginal farmers, inland fishermen, construction workers and casual labourers has narrowed down as the very same person performs all these activities in different times.

Distribution of sample farmers on the basis of their major occupation is as follows:-

Major Occupation	No. of cultivators	Percentage
Paddy farming	54	60.00
Fish farming	3	3.33
Agricultural Labour	11	12.22
Self employed	10	11.11
Private employment	2	2.22
Govt. employment	2	2.22
Casual labour	8	8.89
TOAL	90	100.00

Source: Study of Mr.P.M.Thomas

Age factor of farmers also seems worth mentioning. The mean age of the farmers was found to be 52 years and 10 percent of them are above 70 years old. It is also observed that more than 55 percent of them are of past 50. Percentage of farmers below 40 years old is only 18.9 percent. Age distribution of farmers based on sample collected by Shri P.M.Thomas is as shown below.

Age Distribution of Sample Cultivators

Age	No. of cultivators	Percentage
30-40	17	18.89
40-50	22	24.44
50-60	28	31.11
60-70	14	15.56
70 and above	9	10.00
Total	90	100.00

Source: Study of Mr. P.M.T

The youngsters thus do not view farming as an attractive avocation, as they closely witness the agony of their elders. This drives away young energetic and educated cream of the work force away from cultivation. This is a serious challenge faced by the society.

The relatively lower growth rates in paddy prices till the late nineties had encouraged the farmers in the State to reallocate their fields for the cultivation of more remunerative cash crops. But unlike the other major rice producing areas in the State, with the exception of the *kole* lands in Thrissur district, the low lying *kayal* lands in Kuttanad cannot be used to cultivate alternative cash crops. The farmers here are placed in a disadvantageous situation in that regard as well, as compared to their counter parts elsewhere.

At present the paddy farm sector in Kuttanad Taluk is on the verge of a serious crisis and farmers are facing a host of problems like the non-availability of required number of labourers during the peak crop season, declining profitability of the crop, militant trade unionism, slow pace mechanization, lack of easy credit and proper marketing facilities, recurring crop failures, uneconomic size of holdings and so on. Five to seven years back in almost all of the padasekharams, farmers used to raise a second crop called the *virippu* crop in addition to the traditional *puncha* crop. Unable to withstand the ever growing problems in paddy cultivation, at present, the local farmers have reduced crop intensity by dropping the *virippu* crop and their fields are kept fallow for several months after the summer harvest.

Thus in every respect paddy farmers in Kuttanad taluk are in shere distress.

It has to be mentioned that golden rice has now started to ear head in Kuttanad. It is the product of a bold effort to raise 'safe rice' in an organic way, keeping soil, crop, environment and ecology unspoiled. Chemical-free

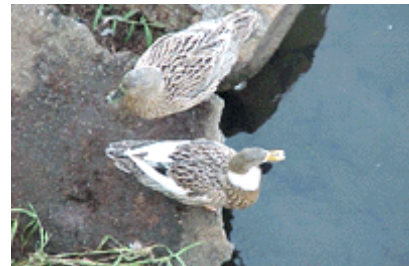
rice culture is slowly becoming the dream of Kuttanad farmers, thanks to the determination of farmers and support from Kuttanad Vikasana Samithi. The statement on behalf of that Samithi has narrated efforts in this regard. Their effort is to mechanise paddy



cultivation in possible way to solve the problem caused by labour shortage, without denying work to the willing and available farm labourers, to follow definite crop calendar and to bring back the glory of *Kuttandan Kuthari* once popular in the indigenous market and to introduce value added products envisaging a '*Rice Park*' producing not only food but even fodder using hay, with the hope that it will save the farmers of Kuttanad from mounting distress.

Duck farming is a major subsidiary activity among small and marginal farmers in Kuttanad area, especially Lower Kuttanad, apart from the coastal belt of Alappuzha district. It is usually integrated with paddy growing, utilising the fallen grains, for feeding the fowl. Though traditional duck farmers follow a nomadic rearing, farmers keeping 10 to 20 ducks are the common phenomenon in Kuttanad taluk. According to the statement filed by the Animal Husbandry Director, the economics of duck rearing is that it usually yields an income of Rs. 127900 per annum from a unit of 1000 ducks. Even if the cost of domestic labour of two persons per day @Rs.100/- is taken note of, the net profit per month will be to the tune of Rs.4658/-.

But the misery faced by duck rearers is the sudden out break of diseases like duck plague and pasteurellosis, including due to immunity break down, inspite of timely vaccination. The mortality rate is always very high. In Chambakulam panchayat alone there was loss of 62000 ducks during the last three years



causing loss of rupees 45.20 lakhs. This figure depicts the sad picture of this poor community of duck farmers. It is said that the immunity break down is due to eutrophication of high pesticide contents in the water in paddy fields. It is suspected to cause immuno-suppression in ducks. It is to be noted that insurance companies are hesitant to provide insurance coverage to ducks. It is also a fact that generally banks are not advancing finance for duck rearing.

This was a grievance voiced during the enquiry. Therefore the farmers have to totally depend on private financiers. This leads to life long debt trap. Added to this is the fact that farmers are always left to the mercy of private hatcheries, which provide ducklings to the farmers, who have to sell their products at the dictates of hatchery owners who lend the ducklings. Duck farmers are also facing increasing resistance in feeding ducks in harvested paddy fields. All these are adversely affecting duck farming and causing decline in duck population in Kuttanad, where, according to the report of Prof. Swaminathan, out of the total ducks in Alappuzha district '89% of ducks are in Kuttanad'. Further, duck farming is closely linked with the paddy cultivation and the adversities faced in paddy cultivation will have repercussions in duck rearing also.

Thus this major subsidiary farm related activity in Kuttanad, which comes within the definition of 'agriculture' in section 2(i) of the Kerala Farmers' Debt Relief Commission Act 2006 (Act 1 of 2007), is also in distress.

The abundance of water bodies in Kuttanad, with its estuaries, once provided an abode to wide variety of fishes and other aquatic organisms like clams. Reduced water spread, dredging and mining in *kayals*, salinity reduction due to checking of sea water flow etc have caused problem to fishing sector also. Several species have become extinct varieties in Kuttanad. It has been noticed by Prof. Swaminathan in his study also. Fishing is an important avocation in Kuttanad taluk. Fish cultivation in paddy fields is now being promoted by farmers organizations in the manner of '*one paddy – one fish*', though not strictly allowed in terms of the statute on land utilization. Even, the usual varieties grown in the water in paddy fields become extinct as a result of contamination of water due to residue of fertilizers and pesticides and due to depletion of oxygen in water because of *salvinia* and water *hyacinth* grown in the upper layer of water bodies. Fish growing also comes within the definition of 'agriculture' in the Act. This third major farm related activity in Kuttanad taluk also cannot be said to be beyond distress.

The Agricultural credit situation in Alappuzha, as revealed by the Kerala State Cooperative Agricultural and Rural Development Bank Ltd, Thiruvananthapuram, in relation to its constituents in the district is also alarming as far as Kuttanad taluk is concerned. Let us examine the details

Overdue Position of Agricultural Loans inclusive of interest in
Four Coop Agri Rural Dvpt Banks in Alappuzha District

Coop Bank	ARD	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Mavelikara		32.44	40.82	65.29	52.27	39.78	68.35
Karthikapilly		-----	-----	-----	-----	-----	2.36
Cherthala		107.92	129.40	75.61	112.00	122.97	20.33
Ambalappuzha		114.93	162.37	176.01	223.47	220.93*	296.12*

**inclusive of Kisan Credit Card Loans*

Of the above four premier rural credit institutions, the fourth one caters to the needs of Kuttanad taluk as well. There the over due position is gradually increasing and is on higher position as compared to other three institutions. Thus the acute indebtedness and inability encountered by the farmers there in paying back agricultural debts availed are duly demonstrated by these figures.



The representatives of various Service Cooperative Banks also detailed their position before us. It was also disclosed to us that one or two of such institutions are facing threat of closure because of high mounting overdue position.

According to the details furnished by the Registrar of Cooperative Societies, there are 32 of such banks in Kuttanad taluk alone. An amount of rupees 2111.99 lakhs is outstanding to these banks as on 31-3-2007, inclusive of interest accrued on the principal amount lent. The overdue position as on that date comes to rupees 1296.67 lakhs. The position in comparison to that in other taluks in the district is as follows:-

Taluk	Outstanding	Overdue
Karthikappilly	1845.48	634.38
Chengannuur	944.82	377.31
Mavelikkara	1139.06	286.45
Ambalappuzha	887.74	354.02
Cherthala	3674.62	203.85
Kuttanad	2111.99	1296.67

Thus it can be seen that the overdue position in Kuttanad taluk is incomparably high as against the same in other taluks. This overwhelming

and increasing overdue position is nothing but the manifestation of agricultural distress in the taluk.

Separate taluk wise loan details of the commercial banks are not available. Outstanding amount on agricultural advances to State Banks group in the district is Rupees 22688 lakhs and that to other nationalised banks is rupees 19336 lakhs, apart from rupees 20487 lakhs to other scheduled banks in private sector.

Kuttanad taluk is entirely a farm area. The farmers there have also availed non agricultural loans, other than for trade or luxuries, which come within the definition of debt contained in the Act. Such debts are in addition to that contained in the above table. Overdue position of such loans including house loans is also increasing year by year

Thus the farmers of Kuttanad taluk are in debt trap. To repay one loan they are availing another and thus their debt burden is swelling year after year. With a net income of only around Rs 5,000 to 7500 from a hectare of land, which is not enough for his subsistence, a farmer cannot escape from this trap in the near future, as his family does not have any considerable alternative source of income.

Of course the package announced by the Government of India based on the report of Prof. Swaminathan on Alappuzha for reviving the agriculture of the entire Kuttanad will give its advantage to the farmers in the taluk. It is mainly aimed at agricultural development which in turn will advance the position of the farmers. It will take three to five years for the farmers to reap the benefits of the package on its full implementation. Until then they have to subsist. Debt liability will be multiplying. The only way to salvage this distress stricken community is to render them debt relief, so that they can have atleast a sigh of relief; though not a solution for their problems in full.

The only way out is to declare Kuttanad taluk within Alappuzha revenue district as distress affected area to render the indebted farmers there debt relief.



We are aware that two or three villages in the periphery of Kuttanad Taluk, but falling within Ambalappuzha Taluk experience the pressure of the aforesaid agrarian difficulties. But this does not extent to the entire area of the said villages; but only in the paddy fields there. So the yard stick we adopted for the area in Kuttanad taluk cannot be as such applied to those villages in their entirety. We can only consider as

much possible an area with geographical precision, though not with geometrical accuracy, which is not possible. We make it clear that this aspect shall be kept in mind when applications, if any, of paddy farmers from that area for declaring them distress affected are considered later.

So, we, in exercise of the powers and functions vested in us in terms of subsection (1) of Section (5) of the Kerala Farmers' Debt Relief Commission Act 2006 (Act 1 of 2007) recommend to the Government of Kerala to declare the area comprised in Kuttanad taluk in Alappuzha revenue district distress affected area invoking the power conferred on them by Section (6) of the said Act.

Dated this the 2nd day of January 2008

Justice K.A.Abdul Gafoor, Chairman

Prof. M.J.Jacob, Member

Shri.M.K.Bhaskaran, Member

Shri.Sathyan Mokeri, Member

Prof. N.Chandrasekharan Nair, Member