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**Government of Kerala**

**Samyojitha Nelkrishi Vikasanam  
in  
Maniyoor Grama Panchayath, Kozhikode**

**A Quick Study Report**

**Evaluation Division  
Kerala State Planning Board  
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## **Abstract**

The project 'Samyojitha Nelkrishi Vikasanam' implemented in Maniyoor grama panchayath is selected for the evaluation study from Kozhikode district. Maniyoor is situated at Vatakara taluk in Kozhikode district. The panchayat is very rich in its agricultural heritage. It has the second largest area under paddy cultivation during the year 2011-12, in the district, next to Perambra panchayat, among the panchayats, which implemented a project on paddy cultivation jointly with district panchayat. The study intended to analyse the depth of 'Marginalisation of holdings' in the panchayat, to analyse the issue of 'increasing the area of fallow land' in the panchayat, to analyse whether the project helped to increase the area under paddy cultivation, to analyse whether the project helped to increase the paddy production and to analyse the relationship between variables such as Subsidy and Area under paddy cultivation and Subsidy and yield of paddy. The grama panchayat officials, ward members, President of the grama panchayat, Agricultural Officer, Pada sekhar samithi secretaries, and farmers were selected as respondents.

The records of various pada sekhar samities (PSS) were examined to study the state of agriculture of the panchayat. Four PSS have been selected from the total list of seven PSSs following systematic sampling method.

First part of the analysis of the study examines the issue of marginalisation of the land holdings of the grama panchayat and found that 78 per cent of the farmers owned land below 0.6 acres, only 9 per cent of the farmers had land above 1 acres and the average of land occupied by the farmers was 0.45 acres.

Next part of the analysis discusses the issue of increasing area of fallow land in the panchayat. It is found that the proportion of fallow land to sown area is 1.37 acres.

The third part of the analysis explains the expenditure incurred by the panchayat on the same project in various years and

the changes in the area under paddy cultivation in the last five years. It is found that the area under paddy cultivation and expenditure incurred by the panchayat on the paddy project declines in all these years except in 2011-12. The data on production of paddy of the panchayat had shown a decreasing trend.

## **Disclaimer**

This working paper has been prepared by Shri.Suresh Babu P.A, Research Assistant, District Planning Office, Kozhikode. The facts and figures in the report are based on quick field survey done by the author and do not reflect the views or policies of the State Planning Board. The purpose of this document is to provide a comprehensive overview of the scheme/project implemented by the Local Self Governments during XI Five Year Plan.

## **Introduction**

**Planning** is a process in public governance that analyses the situation, identifies the needs, sets the priorities, allocates the resources and fixes the targets for achieving the pre-determined objectives. It is a deliberate and conscious management of available resources in order to attain some predetermined objectives. Planning in India continued to be largely centralized till 1992. Until the enactment of the Constitution (73<sup>rd</sup> and 74<sup>th</sup> Amendment) Acts, 1992, the planning and decision making functions in India remained centralized around the two political levels, namely the Union and the states, whose spheres of responsibility had been defined in the Constitution. Urban and rural local bodies such as municipalities and village panchayats, had by and large, functioned as agencies of civic functioning and rural development schemes and not as instruments of micro-level planning and development. This design of the political and development set-up, in the country had left, for decades, a near vacuum for planning at below the state level.

The 73<sup>rd</sup> & 74<sup>th</sup> Constitution Amendment Acts provided a constitutional basis for decentralized and democratic planning process, giving a legal status to rural (panchayat) and urban (municipal) local bodies as self-government institutions. Planning today is practiced at national, sub-national, district and local levels. In Kerala, decentralized planning that followed the 73<sup>rd</sup> and 74<sup>th</sup> constitutional amendments and enabling enactments in the state in 1994 started off as the People's Plan Campaign and progressed with institutionalization at different levels of local govt. The local government at the three levels became local self governments and the bottom layer of this institution, that is, village panchayats became the focal point of participatory planning. The decentralised planning provided the people a new experience of mixing their practical experience from field with academic economic planning.

The effectiveness of a planning lies in its implementation. The plan monitoring and evaluation help us to assess the quality and impact of plans.

**Monitoring** is a systematic collection and analysis of information as a project progresses. It is aimed at improving the efficiency and effectiveness of a project or organisation. It is based

on targets set and activities planned during the planning phases of work. It helps to keep the work on track, and can let management know when things are going wrong. If done properly, it is an invaluable tool for good management, and it provides a useful base for evaluation. It enables to determine whether the resources available are sufficient and are being well used, whether the capacity we have is sufficient and appropriate, and whether we are doing what we planned accordingly.

**Evaluation** is the comparison of actual project impacts against the agreed strategic plans. It looks at what we set out to do, at what we have accomplished, and how we accomplished it.

It is in this context, State Planning Board strives to strengthen monitoring and evaluation of plans prepared by various local bodies of the state. Sample studies are conducted all over the state, as its part, and the project done by Maniyoor grama panchayat in the year 2011-12, namely 'Samyojitha Nelkrishi Vikasanam' is the project selected for the study in Kozhikode district.

Why from agriculture sector?

Agriculture plays a crucial role in the life of an economy. It is the backbone of our economic system. Agriculture not only provides food and raw material but also employment opportunities to a very large proportion of population. The relevance of agriculture could not be neglected by a country of teeming millions where more than 50 per cent of its population is poor, where 42 per cent of its children are malnourished and more than 50 per cent of its women folk is anaemic. Kerala is a state which depends heavily on other state for its food requirements. The undue dependence of Kerala on other states invites serious economic issues in the sphere of food requirement of the state. The food requirement of the state is increasing on one side, whereas the production and area under cultivation decreases. Paddy is the principal crop extensively cultivated in all districts of the state. But the area under cultivation and the quantity produced decreases in all these years. It is a matter of serious concern, which should be addressed with utmost importance.

The total paddy area during the year 1961-62 was 7.53 lakh hectares and in 1975-76 it was 8.76 lakh hectares. Thereafter a steady decline in paddy cultivation has been reported and it reached to 2.29 lakh hectares during the year 2007-08. Comparing with the year 1975-76, area of paddy cultivation is decreased by 7 per cent during the year 2010-11. The area under paddy cultivation in Kerala during the year 2011-12 is 2.13 lakh hectares. It is decreased by 20,826 hectares (9%) than previous years. Comparing with 2001-02, 34 per cent of paddy area decreased during 2011-12. The production of rice decreased from 5,98,337 tonnes to 5,22,739 over the previous year which shows a decrease of 12.63 per cent. The production of rice which was 689 Metric Tonnes during 2002-03 was declined to 522 Metric Tonnes in the year 2010-11. That means the production declined by near about 25 per cent over this period. An analysis of all these data shows that production of rice which is the staple food of the state requires a serious intervention from the part of planners.

### **The State of Paddy in Kozhikode District**

Kozhikode stands in the 11<sup>th</sup> position among the districts of Kerala with respect to area under paddy cultivation. The production of paddy is very low in Kozhikode. During the year 2011-12, Kozhikode was the least producer of paddy among the districts of Kerala. Kozhikode produced only 3814 tonnes of rice during the year, where as the production of Palakkad was 2,18,155 tonnes. The area under cultivation decreases year after year in the district. The area under cultivation was 4038 hectares in 2008-09, which is reduced to 3004 hectares in the year 2010-11. That means, the area under cultivation was reduced by more than 25 per cent within mere three years. The production was reduced by 32 per cent during this period. Moreover the productivity of rice is the lowest in the district.

### **Why the Project from Maniyoor Panchayat**

Maniyoor is situated at Vatakara taluk in Kozhikode district. The panchayat was very rich in its agricultural heritage. The hectares of paddy land with golden coloured rice were one of the sweet memories of the people of the locality. People from faraway places were attracted by their agricultural heritage and various ancient kingdoms of malabar were tried to confiscate it. It is one of the panchayats which implemented a project related to agriculture

with due considerations in the district during the year 2011-12. It has the second largest area under paddy cultivation during the year 2011-12, next to Perambra panchayat, among the panchayats which implemented project on paddy cultivation jointly with district panchayat. (See Appendix 1 for list of Panchayats with area under cultivation). The panchayat occupies 187.5 hectares of 'Kuni Nilangal' and 707 hectares of 'Nelvayal' with 'Chira' which are most suited for paddy cultivation. The panchayat occupies several well known paddy fields such as 'Cherandathur Chira, Edathumkara Vayal, Mantharathur Vayal, Meenathkara, Muthuvana, maniyoor, Madathumthazhe Vayal. Among them Cherandathur Chira alone constitutes 500 acres of land and it is the place in which highest paddy cultivation takes place in the panchayat. The area under paddy cultivation constitutes the second largest among the various crops produced in the panchayat. 360 hectares of land is utilised in the panchayat for paddy cultivation.

**Problem Statement: Decline in Paddy production of Maniyoor Grama Panchayat**

Specific Objectives

- Analyse the depth of 'Marginalisation of holdings' in the panchayat
- Analyse the issue of ' increasing the area of fallow land' in the panchayat
- Analyse whether the project helped to increase the area under paddy cultivation
- Analyse whether the project helped to increase the paddy production
- Analyse the relationship between variables such as subsidy and area under paddy cultivation and subsidy and yield of paddy.

Area of the study                      Study conducted at Maniyoor grama Panchayat

Respondents selected                Grama panchayat officials, ward members, president of the grama panchayat, agricultural officer, pada



sekhara samithi secretaries, and farmers were selected as respondents.

### **Methods of Data Collection**

Both primary and secondary data were used for the study. Primary data were collected by applying direct personal interview and telephonic interview. Panchayat records, records kept in krishi bhavan, records of pada sekhara samithi etc. were examined for secondary data collection.

### **Some Basic Information of Various Pada Sekhara Samithies of the Panchayat**

The records of various Pada Sekhara Samithies (PSS) were examined to study the state of agriculture of the panchayat. Four PSS have been selected from the total list of seven PSSs following systematic sampling method.

Following table represents the data of four Pada sekhara samithies in the panchayat and the number of farmers in each samithies.

**Table No. 1**  
**Number of Farmers in the Pada Sekhara Samithies of Maniyoor Grama Panchayat**

<b>Name of Pada Sekhara Samithies(PSS)</b>	<b>No. of Farmers</b>
Elambilad	210
Mantharathoor	62
Haritha	23
Aswathi Maniyoor	64

*Source: Records of Pada Sekhara Samithies.*

**Table No. 2**  
**Distribution of Farmers Based on Ownership of Land**  
**– Elambilad PSS**

<b>Land Owned (In Acres)</b>	<b>No. of Farmers</b>
0.00 - 0.20	42
0.20 - 0.40	81
0.40 - 0.60	54
0.60 - 0.80	19
0.80 - 1.00	4
1.00 - 1.20	3
1.20 - 1.40	3
1.4 and above	4
<b>Total</b>	<b>210</b>

*Source: Records of Pada Sekhara Samities.*

**Table No. 3**  
**Distribution of Farmers Based on the Ownership of Land-**  
**Mantharathoor PSS**

<b>Land Owned (In Acres)</b>	<b>No. of Farmers</b>
0.00 - 0.20	14
0.20 - 0.40	28
0.40 - 0.60	10
0.60 - 0.80	5
0.80 - 1.00	2
1.00 - 1.20	1
1.20 - 1.40	1
1.4 and above	1
<b>Total</b>	<b>62</b>

*Source: Records of Pada Sekhara Samities.*

**Table No. 4**  
**Distribution of Farmers Based on the Ownership of**  
**Land- Haritha PSS**

<b>Land Owned (In Acres)</b>	<b>No. of Farmers</b>
0-00 - 0.20	3
0.20 - 0.40	3
0.40 - 0.60	9
0.60 - 0.80	2
0.80 - 1.00	2
1.00 - 1.20	2
1.20 - 1.40	1
1.40 and above	1
<b>Total</b>	<b>23</b>

*Source: Records of Pada Sekhara Samities*

**Table No. 5**  
**Distribution of Farmers Based on the Ownership of**  
**Land Aswathi PSS**

<b>Land Owned (in Acres)</b>	<b>No. of Farmers</b>
0.0 - 0.20	7
0.20 - 0.40	13
0.40 - 0.60	17
0.60 - 0.80	3
0.80 - 1.00	6
1.00 - 1.20	5
1.20 - 1.40	3
1.40and above	10
<b>Total</b>	<b>64</b>

*Source: Records of Pada Sekhara Samities.*

**Table No. 6**  
**Distribution of Farmers Based on the Ownership of Land**

<b>Land Owned (In Acres)</b>	<b>No. of Farmers</b>
0.00 - 0.20	66
0.20 - 0.40	125
0.40 - 0.60	90
0.60 - 0.80	29
0.80 - 1.00	14
1.00 - 1.20	11
1.20- 1.40	8
1.40 and above	16
<b>Total</b>	<b>359</b>

*Source: Records of Pada Sekhara Samities*

### **Findings**

- \* 78 per cent of the farmers owned land below 0.6 acres.
- \* Only 9 per cent of the farmers owned land above 1 acre.
- \* The average (Arithmetic Mean) of land occupied by the farmers was 0 .45 acres.

**Table No. 7**  
**Average Land Holdings of Various PSSs**

<b>Name of Pada Sekhara Samities (PSS)</b>	<b>Average land holdings (In Acres)</b>
Elambilad	0.40
Mantharathoor	0.38
Haritha	0.60
Aswathi Maniyoor	0.70

*Source: Based on the records of Pada Sekhara Samities.*

- \* The average of pada sekhara samities, haritha and aswathi maniyoor is higher than the panchayath average.
- \* The very low average of size of holdings suggests the gravity of subdivision and fragmentation of holdings.
- \* The low average size of holdings indicates the growing marginalisation of size of holdings.

### **The Issue of Fallow Land Exceeding Sown Area**

The land which were taken up for cultivation but have been temporarily put off cultivation for a period of not less than one year but not more than five years due to poverty of the cultivators, inadequate supply of water, silting of canals and rivers etc. are treated as fallow land.

The notable change in the land use pattern of the panchayat is that the area of fallow land overcomes the sown area in most of the PSSs.

The following table gives a snapshot of the issue.

**Table No. 8**  
**Area of Fallow and Sown Land in Various PSSs**

<b>Name of Pada Sekhara Samities(PSS)</b>	<b>Fallow Land (In Acres)</b>	<b>Sown Area (In Acres)</b>
Elambilad	80.00	30.00
Mantharathoor	02.00	34.52
Haritha	43.03	33.97
Aswathi Maniyoor	93.34	60.37
Total	218.37	158.86

*Source: The records of Pada Sekhara Samities.*

### **Findings**

- \* The proportion of fallow land to sown area is 1.37
- \* Except in Mantharathoor PSS, in all other PSSs fallow land exceeds sown area.
- \* Increasing the area of fallow land is a matter of serious concern.

The total area of fallow land is higher than sown area in the panchayat.

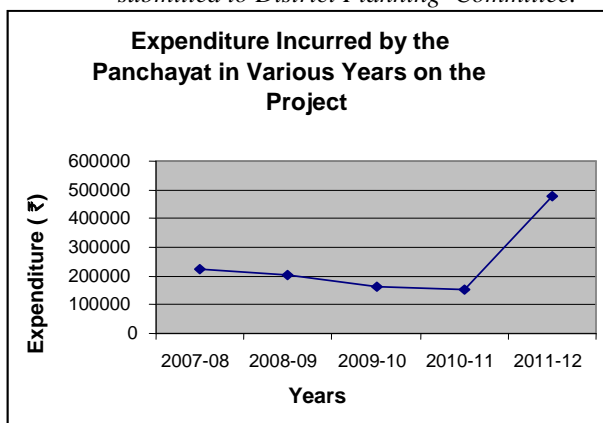
### **Relationship between Variables Such as Expenditure, Area under Cultivation and Yield**

For the evaluation study of the project the money spend by the grama panchayat for the project 'Nelkrishi Vikasaanam' in the year 2011-12 is studied. The same for the last five years also have been analysed and compared. The expenditure of the panchayat was studied with the other variables like area under cultivation and output produced. Following table and diagram represents the expenditure incurred by the panchayat in various years.

**Table No. 9**  
**Expenditure Incurred by the Panchayat on the Project**

<b>Year</b>	<b>Expenditure (₹)</b>
2007-08	221246
2008-09	201246
2009-10	161628
2010-11	153311
2011-12	478750

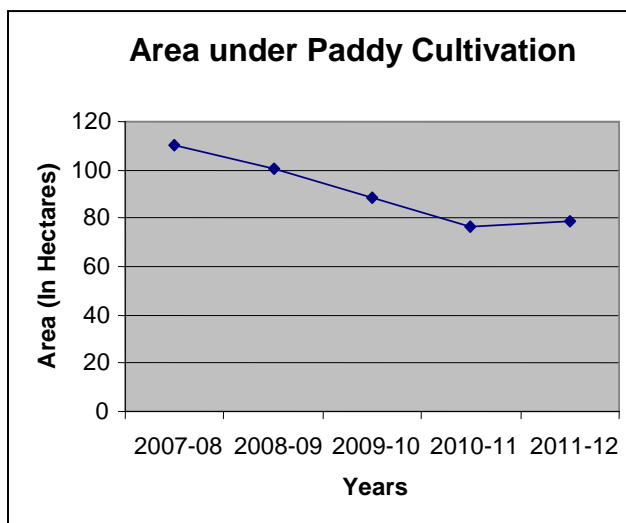
*Source: Nelkrishi Vikasana Project of the Panchayath submitted to District Planning Committee.*



Following table shows the area under paddy cultivation over various years in the Panchayat.

**Table No.10**  
**Area under Paddy Cultivation of the Panchayat**

<b>Year</b>	<b>Area (In Hectares)</b>
2007-08	110.62
2008-09	100.62
2009-10	88.81
2010-11	76.65
2011-12	78.75



## Findings

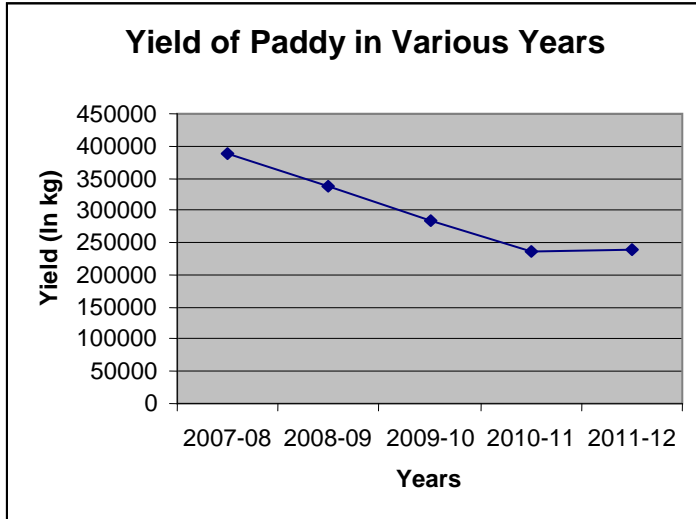
An analysis of the variables, expenditure incurred by the panchayat on the project and area under cultivation suggests following points.

- \* Area under cultivation declines throughout these years except 2011-12
  - \* In the year 2011-12 the area under paddy cultivation increased slightly by 2.73 per cent
  - \* In comparison to the year 2007-08 the area under paddy cultivation decreased by 28.81 per cent in the year 2011-12
  - \* The expenditure incurred by the panchayat on paddy cultivation declines all these years except in 2011-12
  - \* The expenditure incurred by the panchayat increased by 212.27 per cent during the year 2011-12 in comparison to the previous year. But area under cultivation increased only by 2.73 per cent during the period.
  - \* The expenditure incurred by the panchayat declined by 30.70 per cent during the period from 2007-08 to 2010-11.
- Following table represents the paddy production of the panchayat during the periods between 2007-08 and 2011-12

**Table-11**  
**Paddy Production of the Panchayat**

Year	Output (In kg)
2007-08	387180
2008-09	337087
2009-10	284192
2010-11	237615
2011-12	240187





Karl Pearson's Coefficient of Correlation( $r$ ) is calculated for the following table to find out the correlation between expenditure and the area under cultivation. The correlation coefficient is  $-0.288$ . This shows negative correlation between expenditure and area under cultivation.

**Table No. 12**  
**Expenditure and Area Under Cultivation (2007-08 to 2011-12)**

Expenditure (₹)	Area (In Hectares)
221246	110.62
201246	100.62
161628	88.81
153311	76.65
478750	78.75

Karl Pearson's Coefficient of Correlation ( $r$ ) is calculated for the following table to find out the correlation between

expenditure and yield. The correlation coefficient of -0.307 shows negative correlation between expenditure and yield of paddy.

**Table No.13**  
**Expenditure and Yield of Paddy (2007-08 to 2011-12)**

<b>Expenditure (₹)</b>	<b>Yield from Paddy Field (In kg)</b>
221246	387180
201246	337087
161628	284192
153311	237615
478750	240187

### **Findings**

A study on yield suggests following points

- \* Yield declined by 37 per cent during the period between 2007- 08 and 2011-12
- \* In comparison to the previous year the yield increased slightly by 1.08 per cent whereas the expenditure of the panchayat increased by 212.27 per cent during the period
- \* The yield and area under paddy cultivation decreases all these years except 2011-12
- \* The correlation between expenditure incurred by the panchayat and the area under paddy cultivation is -0.288
- \* The correlation between expenditure incurred by the panchayat and yield is -0.307
- \* The negative correlation between these variables suggests that yield and area under cultivation could not be increased only by the money spend by the panchayat in the form of subsidy.
- \* An opinion survey conducted among the stake holders of the project suggests that the farmers are reluctant towards paddy cultivation and the minimum number of farmers still cultivate the paddy only because they are getting supports from panchayat in the form of subsidy.

- \* This suggests the paradox of our paddy cultivation. Farmers, on the one end, desires for subsidy from government. On the other end, the subsidy increase alone doesn't increase the yield and area under cultivation.

## **Suggestions**

The study reveals the contradiction prevails in the paddy cultivation in our villages. On the one end the farmers argues for more subsidies to the agriculture and says that they may stop the production if the government stop the subsidy in the form of seeds, fertilisers etc. On the other hand the analysis of the data shows that the subsidy from the government fails to uplift the paddy production and area under paddy cultivation. So the problem lies in some were else. That should be studied in details and following points are suggested based on this study.

- \* The problems in agriculture should be looked comprehensively.
- \* Farmers require a good price for their product, fertilizers seeds, electricity etc. at low price, labourers, irrigational facilities etc.
- \* Providing subsidy in the form of seeds and fertilizers alone will not help the farmers. So the government intervention should be holistic in nature.
- \* The issue of increasing area of fallow land should be addressed with utmost consideration. Special projects for bringing fallow land under cultivation should be prepared. The leasing of land to actual farmers, farming on co-operative basis, farming by Kudumbashree like organisation etc. can be considered.
- \* Marginalisation of the area under cultivation should be addressed with special projects. Cultivation by pooling of land can be considered.
- \* Spread of algae in the paddy field should be attended and its removal should be taken care of.
- \* Labour shortage can be addressed with pooling of available labour force and volunteers.

### Appendix

Name of Panchayat	Area under the Project(In ha)
Edacheri	40.00
Purameri	20.00
Kuttiadi	30.00
Maniyur	78.75
Ayancheri	50.00
Thiruvallur	75.00
Kodenchery	14.15
Omassery	10.00
Kattippara	10.00
Puthupadi	43.00
Payyoli	10.00
Keezhariyur	05.00
Moodadi	05.00
Arikkulam	40.00
Mukkam	18.89
Perambra	88.30
Chengottukave	10.00
Tuneri	15.00
Kadalundi	65.00
Chathamangalam	08.98
Thalakkulathur	20.59
Chelannur	15.00
Kakkur	24.125
Nanminda	20.00
Narikkuni	25.00
Perumanna	10.00
Kuruvattur	18.00
Feroke	06.00
Kakkodi	26.26