Agricultural Land Decline in Kerala; an Investigation

Shaharban KP (Student)^{*}, Shabana T.P (Assistant lecturer)^{**}

* Post Graduate and Research Department of Zoology, Farook College, Kozhikode, Kerala- 673632
** Post Graduate and Research Department of Zoology, Farook College, Kozhikode, Kerala, 673632

Abstract- Industrialization and urbanization affect agricultural land and lead to its scarcity. This change in turn affects the biodiversity, ecosystem and socio-economic conditions. In this context, changes in land use pattern, productivity, food security are matter of major concern. The agricultural sector is facing the most serious threats from overexploitation and conversion of land into other uses which results in degradation and depletion of agricultural land. The growth trend in agricultural sector has not been consistent in Kerala with a decline in the contribution to the state income. Agricultural land conversion, especially which of paddy fields, has been a burning issue in recent times both from the perspective of food security and its environmental impacts.

Index Terms- Biodiversity, Ecosystem, Food security, Degradation.

I. INTRODUCTION

Majority of people in Kerala depend on agriculture and related activities for their living. Paddy cultivation was part of the proud culture of Kerala state. But now the picture has is n changing. Agriculture in Kerala has passed through many changing phase. Land reduction occurs widely, mainly land use change hence agricultural land declined dramatically. Biodiversity in agricultural fields has now become history of past. The firm attachment of farmers with land has been lost in Kerala. Paddy farms and rice fields are fast disappearing and diminishing from Kerala that creates threat to food security of the state. Paddy fields are being converted and residential and commercial buildings are being constructed.

According to the "Land reforms Survey" conducted in1966-1967, there were 19.06 lakhs agricultural holding in Kerala, of which one percent was above 10 hector in extent. At the lower extreme, nearly 55% of the holdings were below 0.4 hector. The average size of holding was only 0.72 hector. By 1971, the number of holdings increased to 20.22 lakhs. In the years that followed the holdings were divided further quite rapidly. Agricultural census (1990 -1991) shows that there were over 54.18 lakh holding in Kerala of which nearly 84% were of less than half a hector in size with population growth and increasing pressure on limited land resources, the holding continue to get progressively sub divided leading to the emergence of still smaller holdings. At this juncture an investigation regarding agricultural land decline in kerala is highly significant.

II. METHOD OF STUDY

The major objective of the study is to identify the reasons for the reduction of Agricultural land in North Kerala. The investigation was undertaken during the year 2012-2013 at 4 districts of North Kerala (Kannur, Kasarkode, Kozhikkode, Malappuram).By purposive sampling method the samples were selected for the study. A structured questionnaire was used to collect data from farmers by personal interview method. The data collected were statistically analyzed by calculating frequency, percentage, and mean. The reasons for land decline have been analyzed and also an attempt has been made to study the changes that have occurred in the agricultural practices of people.

III. RESULT AND DISCUSSION

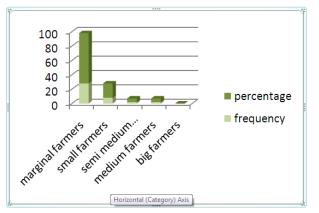
Table1 The farmers were categorized into different subdivision according to distribution of their land in the following:

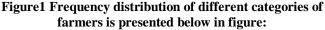
Category	Land holding
Marginal Farmers	Up to 2.50 acre
Small Farmers	2.50 to 5.00 acre
Semi- Medium Farmers	5.01 to 10.00 acre
Medium Farmers	10.01 to 25.00 acre
Big farmers	>25.00 acre.

From the table it is clear that on the basis of their land holdings farmers are categorized in to five division viz; Marginal Farmers ,Small Farmers ,Semi- Medium Farmers ,Medium Farmers and Big farmers. Data were collected from each category of farmer and is presented below in table.

Table2 Frequency distribution of different categories of farmers is presented below in table: (n=40)

	Frequency	Percentage
Marginal farmers	28	70
Small farmers	8	20
Semi-Medium farmers	2	5
Medium farmers	2	5
Big farmers	-	-





The above given table2 and figure1 show that, about 70% of respondents belong to marginal farmers category, followed by 20% belong to small farmers category. Only 5% of farmers belong to semi – medium farmers and none of them are categorized as big farmers.

One of the main reasons for land decline in agriculture is population pressure. The rapid development of tertiary sector and growing pressure from population growth has led to the situation where, agricultural lands throughout the state are being used for residential buildings, roads, and commercial establishments which reduce the areas under cultivated crops. "Yet another way of looking at the situation with respect to the population pressure is examining the changes in land use pattern. Increase in population pressure can lead to expansion of agricultural land and intensification of cultivation and after a stage it can cause conversion of agricultural land into residential and industrial area."(D.Radha Devi and N.Ajith Kumar-2011).

The cultural transformation of the population in the state also has contributed to the land decline of agricultural land in the state. The land lords found better social status in government services. The gulf boom also made visible changes in the outlook of the average Keralaite. Younger generation access to better education and blue and white collar job (many of them low-paid) found agriculture and related jobs strenuous and menial. This self denial of the land-related by the youngsters in the state has added a sociological elimination to the land decline of agriculture in Kerala. "The younger generation had developed a sort of aversion to take up paddy cultivation and they prefer white collar jobs. They are better educated than old generation, younger generation in the study area are attracted towards gulf countries because of higher learning job opportunities and they considered it as symbol of their social status" (Ms.Sheeba Abraham).

Decline in the profitability of agricultural product leads to the conversion of agricultural land. The material and labor cost have been high in Kerala in nearby years. Price of fertilizers has increased manifold. The decline in farm price, in the absence of any north worthy increase in farm productivity, adversely affected the profitability of major crops of Kerala.

Climate also seems to be a playing role. Traditional monsoon and Njattuvela have been abnormally dry and changed nowadays. It is really bad for farmers as traditional crops such as coconut and areca nut has trouble growing in dry and hot condition.

Uneconomic size of holding deters the young people from traditional farmer households to take up cultivation as fulltime occupation. The land reforms in Kerala thus inhibited free capital formation in the sector and restricted the scope of large –scale scientific farming. The agrarian structure of Kerala is dominated by the large –scale presence of marginal holdings.

Another reason to be discussed is the loss of skilled labors. The employment opportunities, for the semi -skilled and skilled members of farmers in other sectors have given them more profit. The large scale migration of rural youth to foreign countries and other states in industrial or other sectors also add to the shortage in supply of rural labor willing to contribute human power to the cultivation of crops here.

According to Kerala Conservation of paddy land and Wetland act (2008) which eventually prevents land holders from converting wetland to other uses. Even if the land is sold, it remains wetland and cannot be used for anything aside from rice cultivation. Land value of wetland must have dropped dramatically after this bill was introduced. But widely bribe way out wetlands status. There is loop hole in the act. It says" you can build on wetland if the structure, with in which one's family may live is classified as the pump house. In Kerala land is not treated as a means of production but as an asset and for speculative exchange. The speculative investors and real estate developers who have no interest in farming have already entered the land market as buyers.

According to pre amble of the Kerala conservation of paddy land and wetland act (2008) it has come to the notice of the government that indiscriminate and uncontrolled reclamation and massive conversion of paddy land wetland is taking place in the state. And there is no existing law to restrict effectively. The conversion or reclamation of paddy land and government are satisfied that it is expedient, is public interest to provide for the conservation of paddy land and wetland and to restrict the conservation or reclamation thereof, in order to promote agricultural growth, to ensure food security, and to sustain the ecological system in state of Kerala.

Reduction in land also causes the depletion of biodiversity and productivity. The area conversion of paddy fields leads to ecological impacts also. It depletes the small fishes, creature etc from paddy land. It also depletes the ground water in the study area. Therefore, the ecological system loss its quality irrecoverably forever and the entire society is the loser. (Ms Sheeba Abraham.)

IV. IMPLICATIONS

- 1. 70% of the respondents belong to marginal farmers category. , followed by 20% belong to small farmers category. Only 5% of farmers belong to semi medium farmers and none of them are categorized as big farmers.
- 2. One of the main reasons for land decline in agriculture is population pressure.
- 3. Climate also seems to be a playing role. Traditional monsoon and Njattuvela have been abnormally dry and changed nowadays

- 4. Decline in the profitability of agricultural product lead to the land reform of agricultural land.
- 5. The cultural transformation of the population in the state also has contributed to the land decline of agricultural land in the state.

References

- [1] D.Radha Devi and N.ajith kumar; "Population Pressure on land in Kerala" February, 2011.
- [2] Government of Kerala, "Land reform survey Report", Buerea of Economics and statistics, (1968).
- [3] Government of Kerala, "preamble of Kerala conservation paddy land and wetland act",(2008).

- [4] Ms.Sheeba Abraham, "survey of minor research project on impact of padyy land conversion in Kerala; A Case study".
- [5] Sreeja chandran, "Agriculture land conservation: issues of justice and economics", part 1.

AUTHORS

First Author – Shaharban KP (Student), Post Graduate and Research Department of Zoology, Farook College, Kozhikode, Kerala- 673632, shaharbankp26@gmail.com

Second Author – Shabana T.P (Assistant lecturer), Post Graduate and Research Department of Zoology, Farook College

, Kozhikode, Kerala, 673632, tpshabana2000@gmail.com