HOUSEHOLD FOOD INSECURITY STATUS OF RURAL HABITANTS IN WEST BENGAL - A CASE STUDY OF HARISHCHANDRAPUR BLOCK -II

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Abstract:

Food insecurity is a situation when people do not get sufficient amount of food for their requirement. Worldwide food insecurity is the major problems while some people are living with a luxurious life. Only 1 % populations in the world enjoy more than 43.4% world resources and occupied it dominantly. Food insecurity status varies from region to region and also identified variation on the basic of different dimensions and determinants. Food insecurity and food habits depend on religions, communities, caste, ethnic, culture, habits, local availability and accessibility. Last few years, food insecure population in the world continues decreased and the countries are facing economic challenges and huge percentages of people lost their jobs and works due to shutdown of government sectors as well as private sectors. Specially developing before corona virus spread it may be expected that world would be hunger free in 2030 but due to corona pandemic ,it may again rapidly be increased due to lockdown and its impacts. Most of the under developing countries are going under very difficult situation and their crises increased day by day. Asia, Africa and Latin America are the storehouse of food insecure population. India, Bangladesh, Nepal Pakistan etc. countries having huge number of food insecure population and nearly 31% Indian population do not get their require amount of food. Food insecurity depends on various associated factors and regional imbalances, unequal distribution etc. In India, Scheduled Caste, Muslim, Scheduled tribes are the most backward sections, they are not only food insecure but also marginalized in all respects. The paper tries to find out the status of Muslims in term of food insecurity and shows the reality in Bengal region. The statistical techniques are used for this study with a diagram.

Keywords: *Food, Insecurity, Employment, Land, Education level, Income, Caloric*

Introduction:

Food is the birth right of every living being and it is the issues of 21st century. When people are traveling from Earth to sun, planet, atmosphere, at the same time huge number of people are struggling for two times meals in every part in the world. There is no place in the earth where hunger is free but there are number of countries in this earth which stores huge resources as well as food. Worldwide food production is sufficient and millions tons of food wasted in store houses but more than 820 million people in the world are going to bed without food. They are facing multiple problems likely malnutrition, chronic diseases and food deficiency diseases which is directly affected by rich people and social, physical, living environment. The food insecurity is not the new problems; it is since from the human origin. All the permanent types of settlement, development and everything in this earth are made for human need

and betterment of life. But the first and foremost priority is food for active and healthy life and present civilization is passing through various stages and difficulties. Now human civilization reaches in extreme development stages and all kinds of infrastructure are made for human societies but till now poverty prevails dominantly all over the world. Presently world produced sufficient amount of food for feeding its habitants but people do not have accessibility and stability due to unequal distribution, regional imbalance, low purchasing capacity and international laws and policies. In Asia more than 500 million food insecure populations are found, out of these, more than 230 million food insecure people are living in India. The poverty situation in India varies from state to state and district to villages. Few states and districts are having nearly 50% or more than 50% below poverty level population.

Concept of Food Insecurity

Food insecurity is a situation in which individuals have neither physical nor economic access to the nourishment they needs (Reutlinger 1987). Food insecurity situation arises due to number of factors and now a days it is mainly caused due to inhuman activities. Because world have sufficient amount of food for its 7 billion people but not equally distribute among the people. A household is said to be food insecure when its consumption falls to less than 80% of the daily Minimum Recommended Allowance (MRA) of caloric intake for an individual to be active and healthy(Ismail)

On the basis of temporal dimension two types of household food insecurity can be distinguished: chronic and transitory. Chronic (permanent) food insecurity refers to a continuously inadequate diet resulting from lack of resources to produce or acquire food (Reutlinger 1987). Transitory food insecurity refers to a temporary decline in the households' access to enough food. Alexandratos (1996) defined that, “The world has been making progress in improving food security, as measured by the per person availability of food for direct human consumption

In 1986, the highly influential World Bank report “Poverty and Hunger” focused on the temporal dynamics of food insecurity. It introduced the widely accepted distinction between chronic food insecurity, associated with problems of continuing or structural poverty and low incomes, and transitory food insecurity, which involved periods of intensified pressure caused by natural disasters, economic collapse or conflict. This concept of food security is further elaborated in terms of access of all people at all times to enough food for an active, healthy life .According to Swaminathan (2000) study that on average 44 per cent of households are deficient in Caloric intake while malnutrition among women and Children is higher. Bhanderi and Dubey (2001) also comment a similar conclusion and argued that the poverty line recalculated on the basis of Caloric requirements. MS Swaminathan Research Foundation (MSSRF 2003, 2004) reported that there are 17 key urban indicators for the food security and 19 such indicators for the rural area.

Objectives of the study

- To measure the households' food insecurity status.
- To identify the underlying causes of the households' food insecurity.
- To examine the relation among size of land holding, occupational structure, level of education, level of income and size of family
- To calculate the caloric availability per day per head

Database and Methodology

The study is based on primary survey which is conducted during the year 2017-2018 with a details scheduled. Total 500 samples have been collected through field survey randomly and total 15 villages cover it. Atleast 40 sample have been collected from each villages and adapted number of criteria. Only one village has been taken from each gram panchayat and it cover nine panchayat. More than 60% Muslim populated villages are considered for this study. The study is based on the basis of five determinants which are namely, Employment structure, Landownership, Education levels, Size of family, Income of household and Food Consumption. Selection of villages depends on the following criteria, three villages have been taken from below 2000 populated, five have been considered from 200-4000 populated and three villages above 4000 population.

Study area:

Malda was the Capital of Gour-Banga and Now the gate way of North Bengal located between latitudes 240 40' 20' N to 250 32' 8" N, and longitudes 870 45' 50 E to 880 28' 10" E. Harishchandrapur is located away from the 70km from the Malda town(fig.1). The block Harischandrapur-2 with an area of 217.22 Sq. K.M. hectares represents the fertile agriculture. Total population of the block Harischandrapur-2 is 251345, there are 52% are male and 48% are female (with Male 130367 and Female 120978).

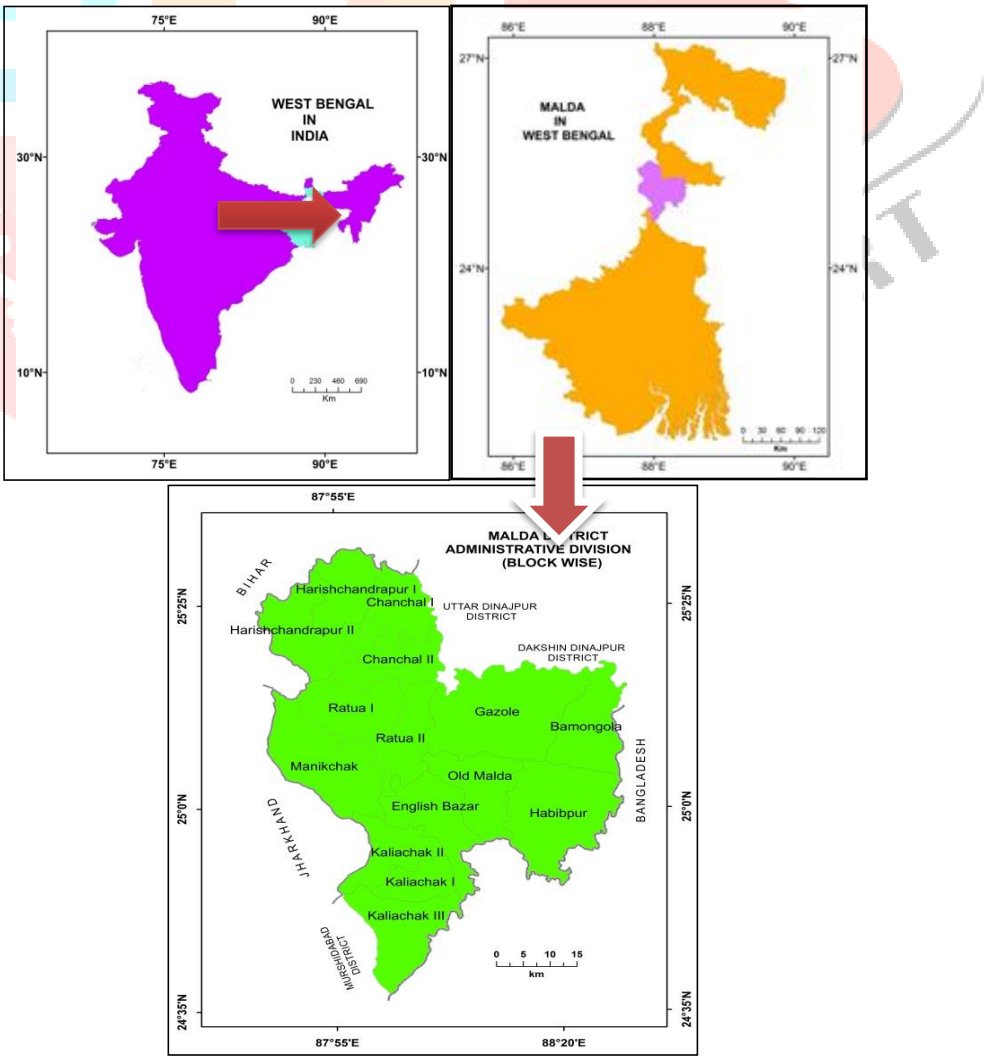

Fig.1 Geographical Location of various Block in Malda

Discussion and Results

The measurement of food insecurity are varies from country to counties because it depends on various associated factors. The food intake capacity is depends on climate, working loads, body requirement. According to ICMR, average 2400 kcal per day are essential for active and healthy life. But heavy workers, lactating women are need more caloric per day mention average. Urban and rural areas people need different caloric due to their working and hard work capacities. But various agencies in India calculated nearly 1800 kcal are standard for Indian normal people but ICMR recommended more than 2400kcal per day. Those who get less than recommended amount of caloric are called food insecure population and those who getting less than 1800 kcal per day are called hungry. Food security not only refers to carbohydrate intake capacity of people but also it is the compositions of various foods which is required for body growth and functions. The average caloric intake in the study areas are 2126kcal per day but most of caloric intake comes from staple food which is carbohydrate and very low amount of caloric consumption vegetable, protein, roots, milks, fish, meat etc. According to field survey, more than 63.16 per cent households are consuming less than 2400 kcal which is considered as a food insecure. The highest numbers of food insecure population are found in Dakshin Mukandapur villages which are average 1890 kcal per day per head. The lowest percentage of food insecure household are found in Belshur(41.57%)and average per capita intake is 2390kcal per day per head. On the basis of average caloric intake of the all sample units are less than recommended amount per day per head. Among the nine units, there are not found any food secure units in term of caloric intake. The average caloric intake of Jagannathpur village is 2135kcal per day per head which is basically agriculture based village and more than 90 households depend on agricultural activities and migratory works, very little percentage of households depends on pretty business activities and this village is very remote which is located far away from block and district headquarters. Bhairabpur is another sample unit which is also the most backward village not among sample unit, it also all over Bengal region. It is locationally backward and totally disconnected from transport and communication networks, 99% people depends on agriculture, migration works, unskilled labourers, and two people are government contractual employed and one person is employed in police service and its population are more than 6000.The Average caloric intake is 2073kcal per day per head. Latasi is also Muslim shersha badia community dominated village which is located near district highway but internal road connectivity is kutcha and also socio-economically very backward sample unit and average caloric intake is 2180kcal per day per head. This village is also predominantly depends on agricultural and migrations activities but have few based families and having more per capita land ownership.Nawapara is also similar type of sample unit which is also disconnected from transport network system and average caloric intake is 2085kcal per day per head followed by Belshur 2390kcal which condition is better as compared to all sample units but average caloric intake is also low as per recommendation of ICMR(2400kcal per day per head).This sample unit is located nearly block headquarter and socio-economic and educational status is very better. Jalapur is a sample unit which located near railway station and block office. The average caloric intake is 2363 kcal per day per head followed by Kariali 2095kcal per day per head and Basudebpur 1925 kcal (Fig2).

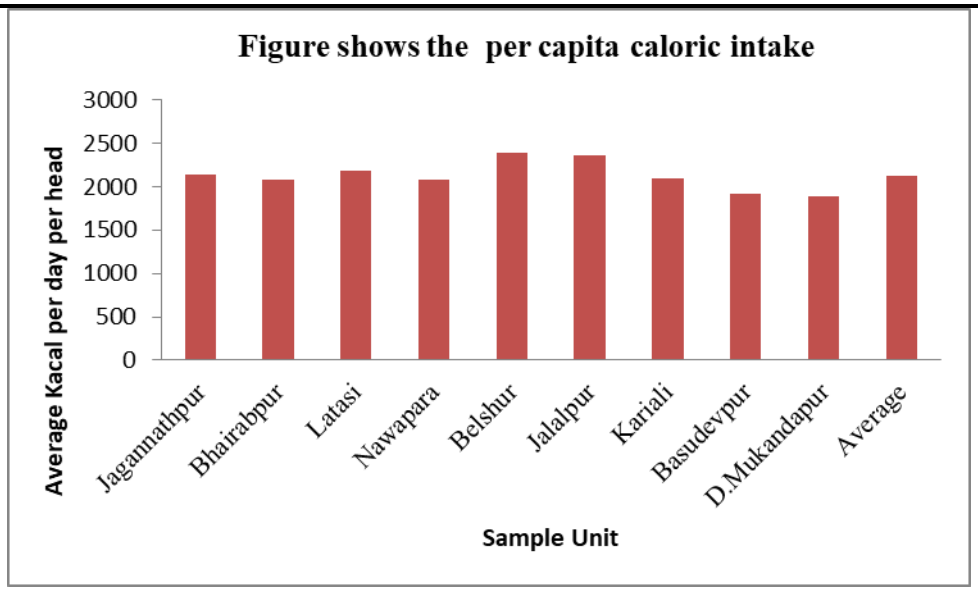

Fig.2

Relation between Land Ownership and Food Insecurity Status

Land ownership is determined households food insecurity. A small piece of land can reduces the level of poverty among households. According to study, landless households are more food insecure and level of food consumption per day per head low as compared to landlords. Amount of land promised to secure livelihood and it is measured by this study. According to study, average 77.03% landless households among sample are food insecure in term of caloric intake. The highest number of insecure households is found among landless population. It is slowly decreased among landlords according to land sizes. The study trace out that nearly 74.42% households are food insecure who have less than 5 bigha land ownership. It is very interesting that the result is found on the basis of land ownership. About 41.18% food insecure households are found among those people who have 6-10 bigha land ownership. Food insecurity decreased drastically when increased the amount of land size. About 38.10% food insecure households are found among those landlords who have 11-15 bigha land and more than 22.22% food insecure households are found among the 16-20 bigha landowners. Only 28.57 % food insecure households are found among large farmers. Land is the important determinants which can reduce poverty level and provide permanent food. According to study, nearly 43.27% households among sample are land less and among them only 23 households are food secure and 25.15% households having less than 5 bigha land followed by 9.94% households among sample having 5-10 bigha land. About 12.28% households have land in between 11-15 bigha and 5.26% households having less than 16-20bigha land ownership. Only 4% households are having more than 20 bigha land and among them having lowest percentage of poverty (figure3)

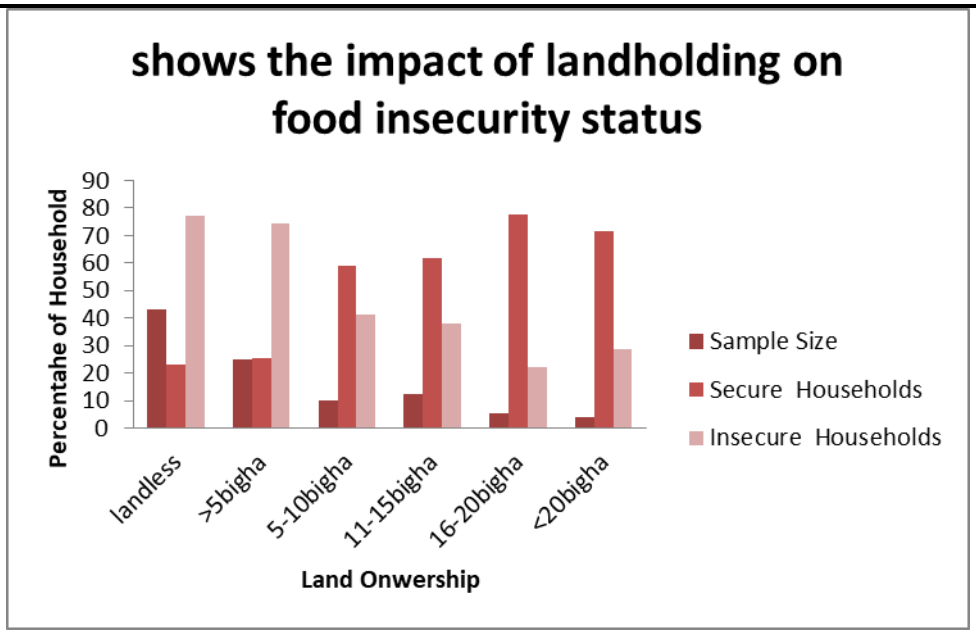

Fig.3

Relation between Occupation and Food Insecurity Status

Occupational structure refers to various types of occupational activities and food insecurity status is depending on occupational structure. The food insecurity is more among permanent and high income group of people. The study tries to find out the food insecurity status on the basis of variation and food insecurity status are badly affected by occupations. According to study, only 8.33% households are found food insecure among service holders and these insecure households are low paid, contractual serviceman. The highest numbers of food insecure households are found among agricultural labourers which is more than 87.50% households. This group of worker is very economically backward and their daily wages are not fixed, it varies from region to regions. This type of works is seasonal as a result, more than 50% days in the year not getting works. Other working group is mainly unskilled labourers and they have also not any particular works. They are engaged in households to field's works, construction works and money more works. According to primary report, nearly 78.5% households are food insecure among other workers followed by daily labourers nearly 66.67% households. The farmers are also the backward group in the era and about 51.85 per cent farmers are food insecure among sample. But most of the farmers are small farmer; they have less than 2 hectares lands. The business is another important occupation which holds economic capacity and among the businessman very little percentage of households are foods insecure. This food insecure people are mainly small businessman, hawkers, etc. and only 20% businessman households are found food insecure(fig.4).

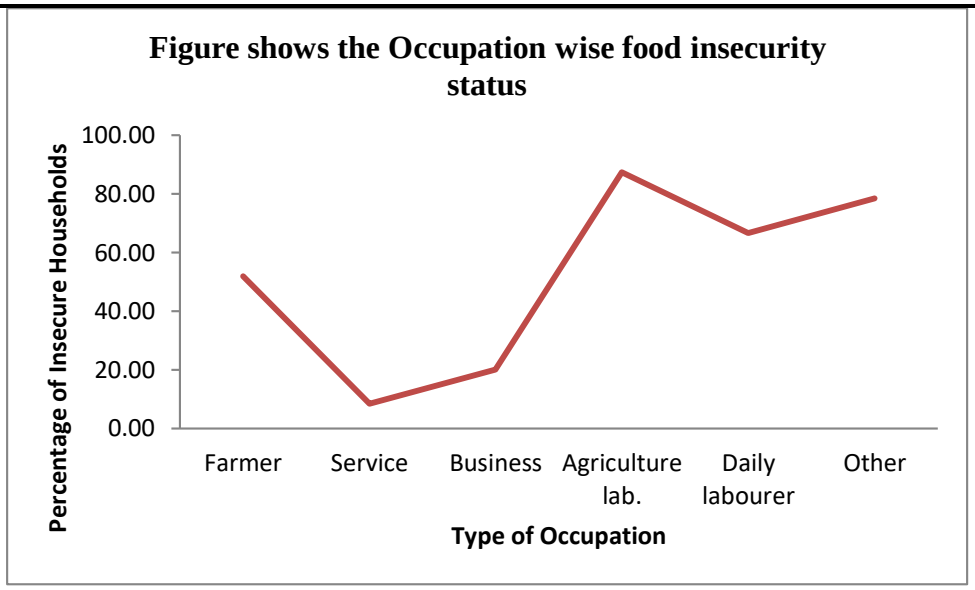

Fig.4

Relation between Education and Food Insecurity status

Education plays key role and everywhere having great impact. Education and level of education are playing very important role to reduce the level of poverty. According to various study, educated household are more food insecure as compared to uneducated households and not only that food insecurity status decreased while level of education increased. So, level of education are greatly affected the food security status of households. The study tries to find out the relationship between education and food insecurity status and findings the very interesting relationships. According to study, more than 81.58% uneducated households are food insecure among sample and their caloric intake and food composition are very low. The consumed fewer amounts of food as compared to recommended and most of the caloric comes from carbohydrate. The primary survey reported that 74.19% primary pass households head are food insecure in term of caloric consumption and among the insecure households more than 40 households consumed less than 1800 caloric per day per head. About 55.56% households among middle pass households head are food insecure and more than 80% household consumed more than 2000kcal per day per head. The study minutely find out the food insecurity status among inter pass households heads and 41.67% households among inter pass are food insecure. The low number of households consumed less than 1800mkcal per day per head. But very rare result found among 12^{th} pass heads, here 44.44% households is food insecure. Only 16.67 households are food insecure among graduate pass households head and they are regularly earning handsome amount and also employed in government and private services. Post graduate and other refer to various technical, professional courses, etc. and here only 14.29% households are found food insecure. Among these insecure households various underlying factors prevail. Sometimes they have good income and purchasing power but their food intake capacity is very low.

Relationship between food security and level of income

Purchasing power is depending on income of any people. The study is finding the very strong relationship between level of income and food insecurity status. The study shows very clear result that higher level of income removes the insecurity status and level of low income increased the level of poverty. According to study highest level of food insecure households found among lower income group households and lowest number of food insecure households is found among highest income group households. The study reported that more than 86.30% households are food insecure which has less than Rs. 3000 income per month and among them more than 50% households are consumed less than 1700 kcal per day per head. Their caloric intake comes from staple food which is carbohydrate and 15% kcal comes from non-cereal food. Another important income group Rs. 3000-6000per month which is cover very large percentage of households among samples and here about 64.81% households is found as a food insecure. Primary survey examined that 29.41% households are food insecure among the Rs. 7000-10000 income group households. The number of food insecure populations continues decreased while level of income increased. According to study, nearly 23% insecure households are found among the Rs. 11,000-14000 income group per month. The lowest percentages of insecure households are found among Rs.15000-18000 per month which is only 12.5%.households. Lastly 16.67% households are food insecure those who have income above Rs.18000 per month(fig.5).

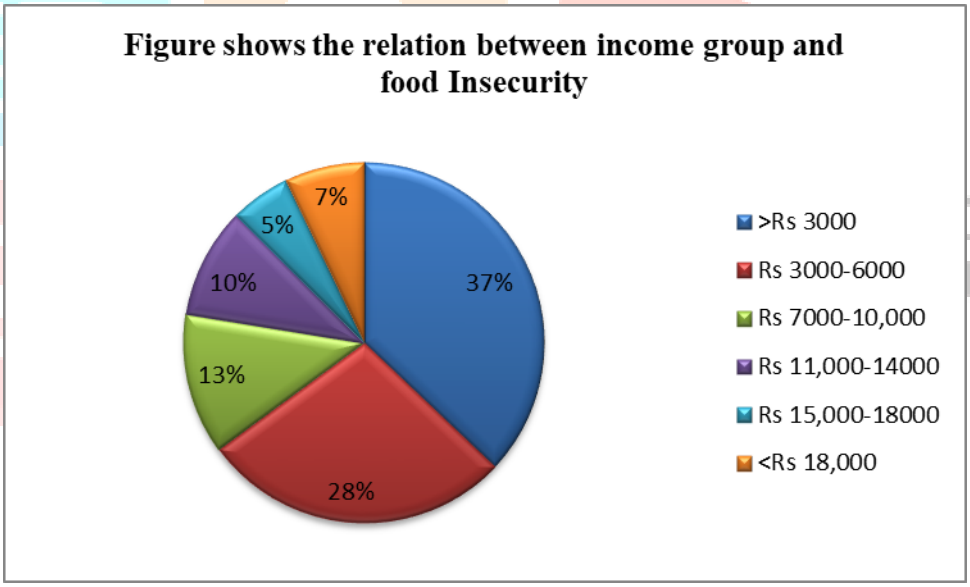

Fig.5

Conclusion

It is concluded that the household's food insecurity in the study area shows very clear picture and the study identified nearly 63.16% of the households are food insecure. The study analyzes very vivid picture of food insecurity status and shows the result on the basis of adapting variables. According to study, more than average 76.49% kcal comes from cereals based food which is mainly carbohydrates and it intakes varies from 47.33% to 94.61%.It is also concluded that more than 39% households in the study are consumed less than 1700 kcal per day per head. These households are consumed very low amount of food as per recommended by ICMR.The study shows very clear relationship among various variable with food insecurity. Those households are more insecure where level of education low, income level low, and big size of families. It is also indicated that land holding size and occupational

structure greatly affected the food insecurity status of households. The food availability, accessibility and stability are very much depending on these variables. Finally study concluded that food insecurity status in this area is high as compared to many other areas.

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