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FOOD SECURITY AT HOUSEHOLD LEVEL IN ALIGARH DISTRICT

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Abstract:

India has one of the highest levels of malnutrition in the world and there are reports of hunger and starvation deaths from different parts of the country. Food are one of the basic human needs and it is indispensable for survival of life. Food Security describes a situation in which people don't live in hunger or fear of starvation. Worldwide around 852 million men, women and children are chronically hunger due to extreme poverty; while up to 2 billion people lack Food Security intermittently due to varying degree of poverty. There is little consideration has been taken toward household Food Security, the present study has been attempted to identify the Food Security at household level in selected villages of Aligarh District. In spite of an agriculturally developed area, Aligarh has about 40 per cent of Food Insecure households are food insecure, 53.12 per cent are Food secure and remaining 8 per cent of the sampled households are suffering from severe hunger. Not only single indicator but all the indicators i.e. food availability, food accessibility, food stability and food utilization together create Food Security in sampled households of selected villages.

KEYWORDS:

Food Security , Household , Malnutrition , Chronically.

INTRODUCTION:

Food Security mean that food is available at all times that all person have means of access to it; nutritionally adequate. The term Food Security came into existence during last 30 years. The world food conference by FAO in 1974 drew the attention of the geographer toward the assured Food Security to the hungry million of the world. The conference gave the call that no man, woman and child go to bed hungry and no one physical and mental capabilities should be stunted by malnutrition (FAO, 1974). Food is the basic human need. Food Security means food is available at all time to all people and it is nutritionally adequate in terms of quality, quantity and variety, which contain all the essential nutrients which is required for human health and they live active and healthy life (FAO, 1996). Two commonly used definitions of Food Security were given by the UN's Food and Agriculture Organization FAO and the United States Department of Agriculture (USDA): - Food Security exist when all people at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food Security for a household means access by all members at all times to enough food for an active, healthy life.

There is wide gap between rural and urban areas. 5 percent of rural and 2 per cent of urban populations do not get sufficient food throughout the year. Food Security describes a situation in which people don't live in hunger or fear of starvation. Worldwide around 800 million people are chronically

hunger due to extreme poverty, while up to billion lack of Food Security intermittently due to varying degree of poverty. Food Security is a flexible concept, the initial focus was on the volume and stability of food supplies. Food Security was defined as "availability at all times of adequate World Food supplies of basic food stuffs to sustain a steady expansion of food consumption and to offset fluctuation in production and prices" (World Food Summit, 1974). Food Security ought to be an issue of great importance for a country like India where more than one fourth of the population is estimated to be absolutely poor and half of children malnourished in one way or another. Food Security has a number of dimensions that go beyond the production, availability and demand for food. There has been a paradigm shift in the concept of Food Security from food availability and stability to household food insecurity (Towards Food Secure India, p-11).

REVIEW OF LITERATURE

Food Security means not only availability but other indicator of Food Security i.e. accessibility, stability and utilization play an important role in achieving Food Security and understood the issue of Food Insecurity. In India production of food grains is sufficient to feed their population but other indicator cannot regulate properly which result in Food Insecurity.

Ali Mohammed (1978) analyzed the level of nutrition and carrying capacity of agriculture under existing level of land resource exploitation for food production. Peter Berck (1993) discusses practical issues involved in the design of a successful strategy to cope with Food Insecurity. His work is of special interest for economist who is concerned with food stocks and nutritional policy and other involved in feeding the growing populations of less Developed Countries. Blaylock (1995) explored the relationship between food security and women's self evaluated health status in U.S.A. P.S. George (1996) linked the Public Distribution System (PDS) with Food Security for the vulnerable segment of the population, budgetary support for food subsidy and the price policy.

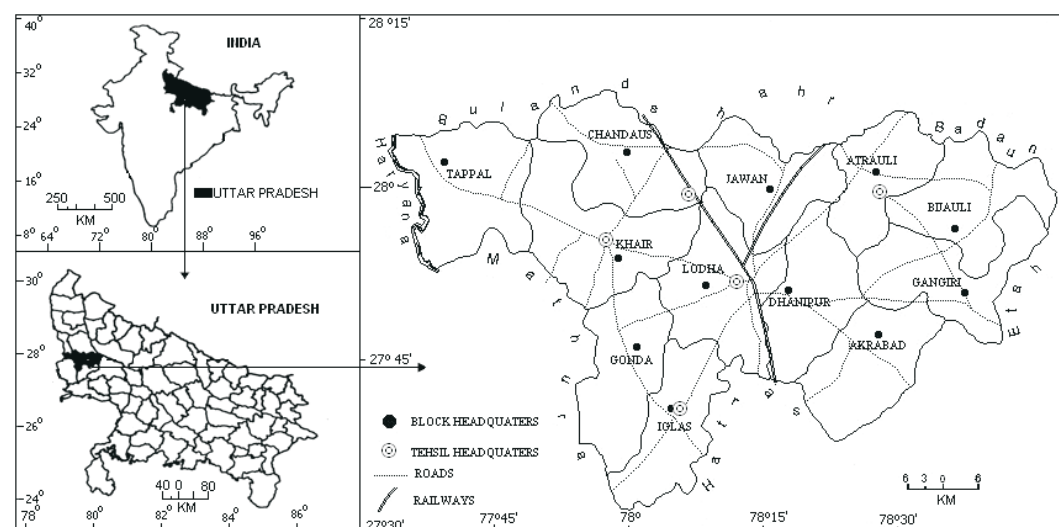
Swami Nathan (1996) has described Food Security as a physical and economic access to balanced diets, including the needed micronutrients, safe drinking water, and primary health care and primary education to every member of a household. Chaturvedi (1997) in his study examined the most vulnerable food insecurity household belong to weaker section of the society ie women and children. Mooij (1999) emphasized on specific government interventions: the PDS which is a welfare measure as it involves distribution of subsidized food grains to the needy but simultaneously it is also an instrument to influence the food grain market and a means to promote food grain production. Hanafi (1999) examined Food Security in U.P at district level taking 482gram/head/day as standard requirement. Raju (2001) discussed the temporal and structural trends in workforce participation rates for various social groups with focus on the gendered nature of casualisation of work and poverty and its implication for household Food Security. Shiva and Bedi (2002) examined the globalization of agriculture and its impact on Food Security and sustainability. Kashyap (2002) examined the issues of dimension of food availability and affordability with special reference to rural India. Graham (2002) emphasized on the elimination of poverty and food insecurity at household level. Kripa Shankar, (2004) in his studied identified that targeted Public Distribution System has not helped to provide food Security to vulnerable household in the absence of assured regular income. Amalesh Banerjee (2004) studied the food security and nutrition problems of the country and found that about 1/4th of the total population general are afflicted by the chronic crises of food insecurity. Nitya (2005) examined the issue of land rights and household Food Security as well as gender equality.

OBJECTIVES OF THE STUDY

The objectives behind this study are to identify the Food Secure households in selected villages of Aligarh District and examine the reason behind existing Food Insecurity. It also analyzes the Food Availability, Accessibility, Stability and Utilization and overall Food Security in selected villages. Finally some suggestions have given to solve the problem of Food Insecurity.

STUDY AREA

Aligarh is located in the Northwestern part of Uttar Pradesh, fertile region of Ganga and Yamuna known as Doab. It extend for 27°5' to 28°5' N latitude and 77°50' to 78°20' E longitude. The economy of Aligarh District is agricultural based. crops are grown in three agriculturally i.e kharif, rabi and zaid. crop intensity is measured in terms of total cropped area divided by net sown area then multiplied by 100. The average cropping intensity of Aligarh District is 168.93 in 201. It is not uniform in all the blocks of District.



METHODOLOGY

The present study is based on primary data which is collected by the field survey of the selected villages of Aligarh District. These villages have been selected by uniform purposeful sampling. Out of them, 24 villages have been taken from 12 blocks i.e. 2 villages from each block. One village is located near the block headquarter and other from interior of village. Nearly 30 households have been selected from each village which includes a total of 720 households in the present study. The various determinants for which questions from respondents were asked relates to food availability, accessibility, stability and utilization such as land holdings, family size, employment, education etc. All the data were converted into percentages, ratios and other relative numbers. The statistical techniques commonly known as Z scores were used to analyze the data. In order to access the status of food security and the inter relationship among the

different variables of food security. The results of the analyses have also been presented in the forms of tables and diagrams and also show on the district map.

Table 5.6: Spatial Patterns of Overall Food Security in Aligarh District (2008)

	Villages	Availa bility	Stability	Accessibility	Utilization	Food Security
1	Kamalpur	0.52	-0.40	0.71	0.11	0.24
2	Jahangarh	1.17	0.26	0.91	0.68	0.76
3	Gomat	-1.16	0.05	-0.04	0.84	-0.08
4	Pepalgao	1.90	-1.06	0.43	0.69	0.49
5	Gonda	-1.51	0.81	0.07	0.67	0.01
6	Tarapur	0.39	-0.18	0.43	-0.42	0.05
7	Taharpur	0.49	0.49	0.29	0.87	0.54
8	Satlonnikala	-0.21	0.88	-0.46	0.72	0.23
9	Naglapadam	-1.17	-1.43	0.12	-0.56	-0.76
10	Gabhana	0.11	0.89	-1.1	-0.24	-0.08

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11	Lodha	1	0.79	0.38	-0.52	0.41
12	Ilyaspur	0.27	0.89	-0.34	-0.35	0.12
13	Panithi	-0.48	-0.94	-1.41	-1.30	-1.03
14	Dhanipur	0.75	1.97	-0.27	0.14	0.65
15	Nanu	1.30	-0.61	-0.39	-0.81	-0.13
16	Dabhra	-1.32	-1.54	0.77	-0.44	-0.63
17	Cheerat	-0.92	-2.18	0.4	0.35	-0.59
18	Barola	-1.10	-1.32	0.48	0.14	-0.45
19	Lohgarah	0.08	0.23	0.13	0.46	0.22
20	Jakhera	0.68	0.65	0.02	-0.12	0.31
21	Palimukhimpur	1.48	0.49	0.23	0.90	0.77
22	Shaekhpur	-0.24	-0.02	0.07	-0.40	-0.15
23	Pahadipur	-1.19	0.35	-0.18	-0.58	-0.40
24	Gangiri	-0.86	0.934	-1.25	-0.83	-0.50

Source: Calculated From Primary Survey Data, 2008

FOOD SECURITY AT HOUSEHOLD LEVEL

SPATIAL PATTERN OF FOOD AVAILABILITY

In order to examine food availability in the selected villages of Aligarh District 2008, the standard score additive model has been taken into consideration and z-scores of caloric availability of per head per day which is calculated by taken all the food items together Composite z- scores for over all food availability have been worked out of the selected villages. The Z - scores highlight the high food availability in Kamalpur (0.520), Jahangarh (1.172), Pepal Gao (1.902), Lodha (1.00), Dhanipur (0.751), Nanu (1.302), Jakhera (0.683) and Palimukhimpur (1.483). All these selected villages have calorific consumption 2400 or more per head per day which is the standard requirement for rural areas. The high score of calorific consumption in these villages are of many factors. In the entire selected villages sampled households have large size of land holding which increase the production. Other important factors which enhance the food security in all the selected villages are employment structure, distributions of government schemes such as public distribution system which are sure the food availability and increase the food security. Eight villages out of 24 namely Gomat (-1.157), Gonda (-1.511), Nagla padam (-1.169), Dabra (-1.302), Cheerat (-0.923), Barola (-1.102), Pahadipur (-1.188) and Gangiri (-0.862) are found in low category of food availability. All these selected villages come under low category of food due to concentration of land less. Other factors are large number of people of the sampled household engaged in daily causal and agriculture labour which have low income. It affects the purchasing power of the people and household food security.

SPATIAL PATTERN OF FOOD ACCESSABILITY

Food accessibility has been measure in terms of five indicators which are interrelated. These factors include land availability, working population, livestock rearing, possession of ration card (BPL card) and monthly per capita income. In High category villages are Kamalpur (0.71), Jahangarh (0.91) and Dabra (0.77). These villages have high accessibility of food because most of the households have large size of land holding which increase their production and income. Large numbers of people are engaged in cultivation and services sector so they get high income which enhance, their purchasing power and food security. And 6 villages are include in low category include Gabhana(-1.10), Illayspur(-0.34), Panithi(-

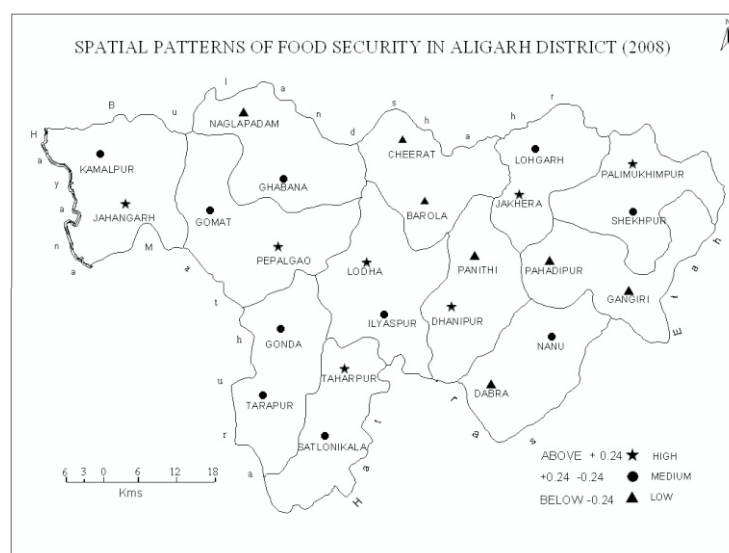
1.14), Pahadipur(-0.18) and Gangiri(-1.25). All these villages have low accessibility of food because the availability of land is low and large numbers of people have small and marginal size of landholdings which affect the production and food security. The second most important reason is the lack of accessibility of food through Public Distribution System to the vulnerable groups of the selected villages because of corruption and leakages in government schemes. All the factors explain low accessibility of food which creates the problem of food insecurity.

SPATIAL PATTERN OF FOOD STABILITY

Besides food availability and accessibility the component of stability in production, price, and marketing and distribution system is also an important dimension of Food Security. Besides food availability and accessibility the component of stability in production, price, and marketing and distribution system is also an important dimension of Food Security. The category of high food stability comprises Gonda (0.8), Satlonikala (0.88), Gabhana (0.89), Lodha (0.78), Ilyaspur (0.89), Dhanipur (1.96), Jakhera (0.64), and Gangiri (0.93). In these villages fair price shops is present due to which their inhabitant purchase the food stuff easily with in the primeses. This situation enhances the food stability of the selected villages and consequently their household food security. There are seven villages whose food stability is low. These villages include Pepal gao(-1.06), Naglapadam (-1.433), Panithi (-0.943), Nanu(-0.607), Dabra (-1.538), Cheerat(-2.179) and Barola(-1.315). All these selected villages have small number of fair price shops in comparison to the total population of the village

SPATIAL PATTERN OF FOOD UTILISATION

Utilization or absorption of food is also one of the important dimensions of food security. It depends upon access of safe drinking water, sanitation facilities and good health. The Composite Z-Scores of indicators to health and sanitation such as access of safe drinking water, doctors and sanitation facilities. Villages recording high Food utilization include Jahangarh (0.682), Gomat (0.84), Pepalgao (0.69), Gonda (0.67), Taharpur (0.86), Satlonikala (0.72), Cheerat (0.34), Palimukhimpur (0.89) and Lohgarh (0.45). In all these selected villages drinking and sanitation facilities are well developed, which show the good health of most of the members because there are a number of diseases which is caused by water. And finally villages falling under the low category are NaglaPadam(-0.55), Panithi (-1.303), Nanau (-0.80), Dabra(-0.44), Shekhpur(-0.39), Pahadipur (-0.57), Gangiri (0.82), Lodha (-0.52), Ilyaspur (-0.34) and Tarapur (-0.42) in all selected villages health facilities are not good as they have in high category because of high growth of population in all these selected villages. All these selected villages show an adverse effect on the overall food security of a region.



SPATIAL PATTERN OF OVERALL FOOD SECURITY

In order to examine overall food security of the selected villages of Aligarh District, the Z Scores

of all the four basic components of food security i.e. food availability, food accessibility, food stability and utilization are taken together and composite z-scores are calculated which show the overall food security of the selected villages. The highly food secure villages are Jahangarh (0.76) Pepal Gao (0.49), Taharpur (0.54), Lodha (0.41), Dhanipur (0.65), Jakhera (0.31), Palimukhimpur (0.77). Most of these selected villages come under highly food secure category because of many factors such as high availability of land, people of the sampled households engaged in high income occupation, people get food from public distribution system. As a result these villages have high food availability, stability, accessibility and utilization and all together create over all food security of the District. Villages comprising low level of food security are Naglapadam (-0.132), Panithi (-0.743), Dabra (-0.63), Cheerat (-0.59), Barola (-0.45), Pahadipur (-0.41)

and Gangiri (-0.50). The main reason behind is the low availability of land and people of the sampled households have small size of land holding. Other factor of food insecurity is the employment structure; most of the people of the selected villages are engaged in daily and agricultural labour, which affect the purchasing power and overall household food security. There is also corruption and leakages in the public distribution system. All these factors together causes problem of food insecurity due to which large number of the sampled household suffer from food insecurity.

CONCLUSION

The present study reveals that Aligarh district is one of the agriculturally developed district of utter Pradesh, still about 40 per cent of the total sampled household are food insecure and remaining 53.12 per cent of sampled household are food secure.

It may be concluded that selected villages who are highly food secure have high food availability. Most of the sampled households have large size of land holdings which is an important indicator in household food security. on the other hand public distribution system also play an important role into provide food to vulnerable group through which they get food at reasonable price. If Public distribution system is in working condition the people don't face the problem of starvation because they get food through fair price shop. Apart from food availability, accessibility and stability food utilization is also a new and important indicator because in spite of availability and purchasing power, if people are ill they cannot utilize food properly and suffer from various diseases.

Finally it may find that not only one factor but all the indicators of food security ie food availability, food accessibility, food stability and food utilization enhance the overall food security of any region. Hence to enhance the food security we have to improve the entire indicator.

SUGGESTIONS

Food insecurity is a very serious issue for the vulnerable and weaker sections of the society. The main reason is the poverty which affects the household food security. Since the large proportion of the population continues to be poor, food security concern are of great importance in India. Various government agencies and NGOs take part in removing food insecurity. But these efforts are ineffective due to corruption and leakages. Following suggestions are put forward to improve the household food security.

The proportion of population which is suffering from food insecurity should be identified by the Planning Commission, NGOs and researchers.

Agriculture should be further developed which not only increases food availability in the region but also enhance Purchasing Power of people by providing them employment.

Attempt should be made to increase employment opportunities for the rural poor in as various employment generating programmes of rural development.

In rural areas the access of public distribution system for weaker sections of society should be established and improved.

Various food supplementing schemes should be launched by government for the school going children and also for women.

The education and health facilities should provided in the rural areas which in turn will improve food security.

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