Assessment of awareness regarding right to food and food security schemes and evaluation of success of mid day meal programme in selected schools of Ajmer city (Rajasthan)

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Right to food is a Human Right, protecting the right for people to feed themselves in dignity, implying that sufficient food is available and people have means to it, access to it, and it meets the individual's dietary needs (United Nations Declaration of Human Rights, 1948). To ensure the availability of food to all, various schemes like Targeted Public Distribution Scheme which focuses on Below Poverty Line families, Antyodaya Anna Yojana for the poorest of poor, Annapurna Scheme targeted towards citizens of the age of 65 and above are being run by the Government of India. Besides these The Mid Day Meal Programme, a Nutrition Programme which is focussed to attract more children to Schools and improve their nutritional status are also being executed by the Government of India. The present study was undertaken on a random sample of 30 subjects from both Below Poverty line and Above Poverty Line families of Ajmer city, to find the awareness in people about the Right to Food and Food Security Schemes. Information regarding the success of Mid Day Meal Programme was obtained by a survey done in 10 Schools of Ajmer. To conduct the research, a Questionnaire was framed with questions related to awareness regarding the Right to Food and Food Security Schemes. The questions also included those related to income, interval of buying ration, palatability of Food Grains. The results revealed that 63 per cent of the people were aware of the Right to Food as their basic right while the remaining 36 per cent were unaware. The Targeted Public Distribution Scheme was very popular amongst people. This can be said as 90 per cent of the subjects were aware of it and many were availing its benefits. The Antyodaya Anna Yojana was relatively less popular and only about 60 per cent of the subjects knew of such a Scheme being executed by the Government of India. Almost similar is the case with the Annapurna Scheme as only a percentage of 40 per cent reflected any awareness in reference to it. The National Food Security Act is the least popular and in the study, a mere 30 per cent subjects answered positively towards it. Concerning the Mid Day Meal Scheme, the study revealed that it provided adequate nutrition to children of classes 1 to 5, but was found to be inadequate in terms of nutritive value (calories) for chlidren of classes VI to VIII. The meals provided did not meet the hygiene standards too.

Key Words: Right to food, Food security schemes, Mid day meal programme, Targeted public distribution system, Antyodaya anna yojana, Annapurna scheme, Food security act.

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Introduction

Nearly 70 per cent of India's population lives on less than 120 rupees a day, according to World Bank data. The country, which is the second largest producer of wheat and rice after China, is also a home to a quarter of the World's hungry. In contrast to this, the United Nations Declaration of Human Right recognizes, in its 25th Article, the Right to Food. It protects the right for people to feed themselves in dignity implying that sufficient food is available and that people have the means to it, access to it and that it adequately meets the individual's dietary needs. Right to food has three dimensions, availability, accessibility and adequacy (Ziegler, 2002). In an attempt to help the people of India, the Government of India has launched schemes for Food Security, so that the entire population can take two square meals a day, and the Right to Food is availed by all. Amongst the many schemes launched by the Government of India, Public Distribution Scheme now called Targeted Public Distribution Scheme, Antyodaya Anna Yojana, Annapurna Scheme, National Food for Work Programme are the most striking. Many programmes to improve the nutritional status targeted towards specific groups are also being run by the Government of India. Amongst them The Mid Day Meal Programme, is one that needs to be specially mentioned, as it is amongst the most successful ones.

Food security schemes and mid-day meal programme in India:

Public distribution scheme (PDS):

It is an Indian Food Security system established by the Government of India under the Ministry of Consumer Affairs, Food and Public Distribution and managed jointly by the State Governments of India. It distributes subsidized food grains and non food items also to the poor. The major food commodities distributed include staple food grains such as wheat and rice accessories like tea and sugar and non food items like soap and kerosene. These items are distributed through fair price shops commonly called Ration Shops. When launched initially the PDS failed to reach the poor and had an urban basis. The first change brought into it was to make it as "Revamped Public Distribution System" in June 1992. This scheme included 1775 blocks including hilly areas and some inaccessible sites. Later in June 1997 it was changed to Targeted Public Distribution Scheme (TPDS). Under the TPDS, States are required to formulate and

implement foolproof arrangements for identification of poor and delivery of food grains to them. The Scheme when introduced was intended to benefit about 6 crore poor families for whom a quantity of about two lakh tonnes of food grains was reserved for a year. The identification of poor is the responsibility of the State. When identified they are issued Below Poverty Line (BPL) ration cards. Every person having BPL ration card is issued 35 kg of food grains every month. The end retail price is fixed by States and Union Territories (UT's) after taking into account margins for whole sales and retailers, transportation charges, levies, local taxes etc. Under the TPDS, States are requested to issue food grains at a difference of not more than 50 paisa per kilogram(kg) over and above the central issue price for Below Poverty Line families (IGNOU Manual, 2006, Dfpd.nic.in> Targeted Public Distribution System, 2015).

Table A: Central issue price of rice and wheat in TPDS Scheme, 2015						
	Above Poverty Line	Below Poverty Line				
Rice	Rs. 8.3	Rs. 5.65				
Wheat	Rs. 6.1	Rs. 4.15				

Source: Department of Food and Public Distribution, Ministry of Consumer Affairs, 2015

Antyodaya Anna Yojana (AAY):

Launched on 25th December 2000, this scheme reflects the commitment of the Government of India to ensure Food Security for all, and create a hunger free India in the next 5 years and to reform the PDS so as to serve the poorest of poor in both rural and urban areas. It is estimated that 5 per cent of the population are unable to get two square meals a day on a sustained basis throughout the year. Their purchasing power is so low that they are not in a position to buy food grains round the year, even at BPL rates. It is this 5 per cent of the population which forms the target of AAY (IGNOU Manual, 2006).

Scale + Price of Issue: AAY families are provided food grains at a rate of 35 kg. per family per month. The food grains are issued by Government of India at Rs. 2 per kg. for wheat and Rs. 3 per kg for rice. Identification of beneficiaries is carried out by the State Government and Union Territories (UT's), from amongst BPL families within the State/UT's.

After identification the beneficiaries are issued Antyodaya Ration cards. The Ration Cards have the necessary details about the family, scale of ration etc. The AAY has undergone three expansions, with number of beneficiaries being increased with each expansion, and in the third expansion it covered a total of 2.5 crore households (Source: Department of Food and Public Distribution, Ministry of Consumer Affairs, 2015).

Annapurna Scheme:

The Annapurna Scheme aims at providing Food Security to meet the requirement of those senior citizens who though eligible, have remained uncovered under the National Old Age Pension Scheme. Thus they are "destitute" in the sense that they have little or no regular means of subsistence. However the age of the beneficiary should be 65 years or above. Under the scheme the beneficiaries are provided with 10 kg of food grains per month free of cost. They have an entitlement card issued by Gram Panchayat to avail the benefits.

National Food For Work Programme (NFFWP) :

The Planning Commission has identified 150 most backward districts of the country. Most of them happen to be Tribal Districts. There is a need for substantial investment in these districts to convert their surplus labour into required capital formation solving livelihood issues. The new Food for Work Programme is one such attempt. Substantial resources in the form of cash and food grains are being provided under the programme to generate additional supplementary wage employment. The programme is open to all rural poor who are in need of wage employment and desired to do annual unskilled work. The programme is 100 per cent centrally sponsored Scheme. Distribution of food grains as a part of wages under NFFWP aims to improve nutritional standards of families of rural poor. Food grains as a part of wages are given to the rural poor @ 5 kg per Manday at a uniform BPL rate. The wages in cash and food grain should be given such that they are assured of notified minimum wages. A maximum of 5 kg of food grain can be given to the labourers under this programme. In exceptional cases, minimum of 25 per cent of the wages can be paid in cash (http://en.wikipedia.org/wiki/National Food for Work Programme, 2006).

Mid Day Meal Programme (MDM):

National Programme of Nutritional support to Primary Education, popularly known as Mid Day Meal Scheme was started in 1995 in an attempt to enhance enrolment, retention and attendance while simultaneously, improving nutritional level among children in Schools. It currently covers 12 crore children. The main objectives of the Scheme are to:

- Improve the nutritional status of children in classes one to five in Government and Government aided schools.
- To encourage children from disadvantaged backgrounds to attend school regularly.
- To provide nutritional support to students in drought ridden areas throughout summer vacation.

In 2007, the Scheme was revised to cover children in primary section as well as classes VI to VIII .The Scheme delivers a cooked Mid Day Meal with minimum of 450 Kilo calories and 12 grams of protein for children of Classes I-V. The Meals consist of 700 Kilo-calories and 20 grams of protein by providing 150 grams of food grains per child per day from nearest Food Corporation of India (FCI) godown to children of Classes VI to VIII. Foods like upma, khichri, dal chapatti are served in MDM programmes. The programme is operated by the Department of Education (http://www.mdm.nic.in2015).

The present study was undertaken with the following objectives:

- To assess the awareness regarding Right to Food in people of Ajmer city.
- To assess the awareness regarding Food Security Schemes of the Government of India in various segments of the population of Aimer city.
- To assess the adequacy, nutritive value, and acceptability of food items served to children of Classes I to V and VI to VIII under the MDM Scheme and the overall success of Mid Day Meal Programme in various Schools of Aimer city.

METHODOLOGY

To fulfil the objectives of the study, a random sample of 30 families was chosen from Ajmer city to assess the awareness about the Right to Food, National Food Security Act and the various Food Security Schemes of the Government of India. A survey, with a questionnaire was the tool for the study. The following specific steps were carried out to obtain the results.

- Selection of Area
- Selection of Sample
- Framing the Questionnaire for survey

- Getting the Questionnaire filled by representatives from families.
 - Evaluating the Questionnaire
 - Analysis of data
 - Editing
 - Coding
 - Tabulation

Selection of area:

The area chosen for the study was the city of Ajmer.

Selection of sample:

Some families were randomly chosen for the study. Families both Below Poverty Line and Above Poverty Line were a part of the sample.

Framing the questionnaire for the survey:

To carry out the survey and actually obtain knowledge related to the awareness regarding the Right to Food, National Food Security Act and about the Food Security Schemes and their success, a questionnaire was framed. The questionnaire included general questions related to the families like their educational status, type of family (Nuclear or joint), income, occupation and specific questions like questions regarding Right to Food, awareness about Public Distribution System, Antyodaya Anna Yojana, Annapurna Scheme, Food Security Act, items purchased, their quantity, frequency of buying etc.

Getting the questionnaire filled:

The questionnaire was generally filled by the male members of the family, but in some cases females also answered the questionnaire.

Evaluation of the questionnaire:

The questionnaire was evaluated to obtain the results.

Analysis of data:

The data was analysed, and percentages calculated to arrive at the results.

To evaluate the success of the Mid Day Meal Programme 10 Schools were chosen from Ajmer City in which Mid Day Meal was being offered to children. A total number of 20 students were chosen from classes 1 to V and another 20 from classes VI to VIII. Thus the study was conducted on 40 students each from 10 different Schools –a total of 400 students were therefore selected to collect the data. They were asked questions regarding the taste, acceptability, adequacy and regularity of meals. Observation of meals served and evaluation of the nutritional composition of foods given to students of classes 1 to V and VI to VIII was also done and was compared with the standards.

OBSERVATIONS AND ASSESSMENT

The results related to awareness regarding Food Security Schemes and the Right to Food were obtained from the Questionnaire. The results of the educational status of the subjects revealed that majority of the subjects were qualified greater than secondary but could not complete graduation due to some reason. Some were government employees, others were in private jobs. The results have been shown in Table 1.

Table 1: Educational and occupational status of the subjects choson for the study

chosen for the study						
Educational status	Number of subjects (n)	Percentage of subjects				
Less than secondary	3	10%				
Greater than secondary	18	60%				
Graduates	9	30%				
Total	n=30	100%				
Occupational status						
Government employees	10	33.3%				
Small entrepreneurs	6	20%				
Private jobs	11	36.7%				
Unemployed	3	10%				
Total	n=30	100%				

In the present study, a greater part of the subjects (66%) were Below Poverty Line and majority (90%) belonged to joint families. Table 2 shows these results.

In reference to the specific questions, the results revealed that majority of the subjects that is 63.3 per

Table 2: Possession of BPL cards (Economic Status) and type of family of the subjects

Economic status	Number of subjects	Percentage of subjects
Above poverty line	10	33.33%
Below poverty line	20	66.67%
Total	n=30	100%
Type of family		
Nuclear	3	10%
Joint	27	90%
Total	n=30	100%

cent were aware of the Right to Food as one of their basic rights, while a small percentage of 36 per cent were unaware of it. Regarding the Food Security Schemes, the results revealed that Targeted Public Distribution Scheme was the most popular and 90 per cent of the subjects were aware of it. Many were availing the benefit of buying ration through ration shops. The Antyodaya Anna Yojana was less popular as compared to Targeted Public Distribution Scheme and only 60 per cent of the subjects knew about such a Scheme being run by the Government of India. The Scheme thus needs to be popularised more. The Annapurna Scheme was also not known by many and a percentage of only about 40 per cent knew about it. The National Food Security Act was the least popular and only 30 per cent of the subjects were aware of it. The results have been shown in a tabulated form in Table 3.

The results of the survey to assess the success of the Mid Day Meal programme showed that it did meet the nutritional requirements for children of classes 1 to V, but for classes V1 to V111 it was insufficient especially in reference to calories. Also the meals did not meet the hygiene standards required.

Table 3: Awareness about the right to food and food security

schemes		
Right to food	Number of subjects (n)	Percentage of Subjects
Aware	19	63.33%
Unaware	11	36.67%
Total	n=30	100%
Food security schemes		
Targeted public distribution scho	eme	
Aware	27	90%
Unaware	3	10%
Total	n=30	100%
Antyodaya Anna Yojana		
Aware	18	60%
Unaware	12	40%
Total	n=30	100%
National food security act		
Aware	9	30%
Unaware	21	70%
Total	n=30	100%
Annapurna scheme		
Aware	12	40%
Unaware	18	60%
Total	30	100%

Table 4: Nutritive value of recipes provided to children of classes 1 to V in mid day meal and their comparison with standards

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Recipe served in MDM	Energy(Kcal)	Carbohydrate (g)	Fat (g)	Protein (g)	Nutritive value			
MDM Recipe 1-Dal and chapati	453.0	80.9	7.04	16.5	Adequate			
MDM Recipe2-Dal and Rice	455.7	90.8	5.87	11.09	Adequate			
MDM Recipe3-Chapati and vegetable	434.5	80.7	6.75	12.9	Adequate			

Standards as per mid day meal scheme - Energy 450 Kcals, Protein-12 grams

Table 5: Nutritive value of recipes provided to children of classes V1 to VIII in mid day meal and their comparison with standards

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Recipe served in MDM	Energy (Kcal)	Carbohydrate (g)	Fat (g)	Protein (g)	Nutritive value			
MDM Recipe 1-Dal and Chapati	679.5	121.3	8.7	16.6	Inadequate			
MDM Recipe2-Dal and Rice	683	136	8.7	16.6	Inadequate			
MDM Recipe3-chapati and vegetable	641.7	118.7	10.1	19.4	Inadequate			

Standards as per MDM Scheme- Energy-700 Kcal, Protein-20 grams

Table 6: Adequacy, acceptability and regularity of meals served in mid day meal scheme (MDM)(Classes-1 to V)

Name of recipe			Ev	aluation Crite	eria [n=200]				
served in MDM		Ade	Adequacy		Taste			Regularity	
		Adequate	Inadequate	Good	Satisfactory	Poor	Regular	Irregular	
Dal and Chapati	No. of subjects	150	50	100	50	50	200		
	Percentage	75%	25%	50%	25%	25%	100%	-	
Dal and Rice	No. of subjects	100	100	50	100	50	200		
	Percentage	50%	50%	25%	50%	25%	100%	-	
Vegetable and	No. of subjects	150	50	50	100	50	200		
Chapati	Percentage	75%	25%	25%	50%	25%	100%	-	

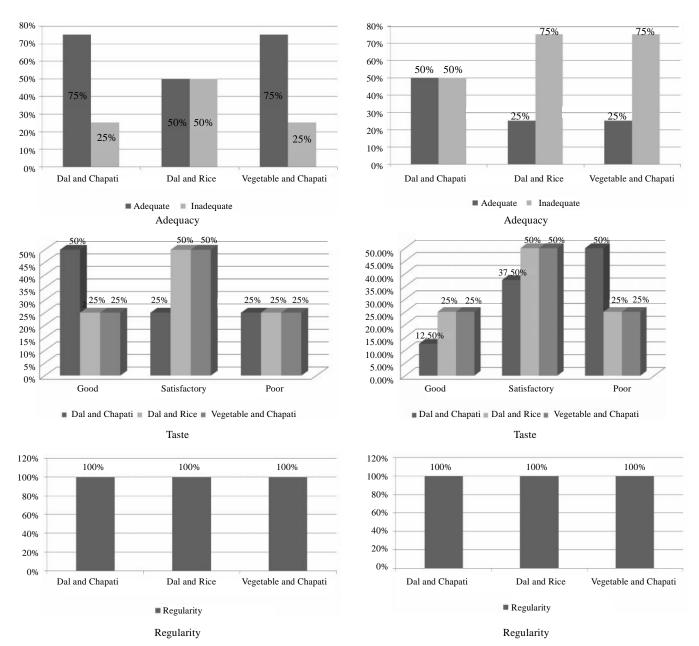


Fig. 1: Adequacy, acceptability and regularity of meals served in mid day meal scheme class I to V

Fig. 2: Adequacy, acceptability and regularity of meals served in mid day meal scheme class (VI to VIII)

Table 7: Adequacy, acceptability and regularity of meals served in mid day meal scheme classes (VI to VIII)

Name of recipe served	Evaluation Criteria [n=200]							
in MDM		Adequacy		Taste			Regularity	
		Adequate	Inadequate	Good	Satisfactory	Poor	Regular	Irregular
Dal and Chapati	No. of subjects	100	100	25	75	100	200	
	Percentage	50%	50%	12.5%	37.5%	50%	100%	-
Dal and Rice	No. of subjects	50	150	50	100	50	200	
	Percentage	25%	75%	25%	50%	25%	100%	-
Vegetable and	No. of subjects	50	150	50	100	50	200	
Chapati	Percentage	25%	75%	25%	50%	25%	100%	-

Table 4 and 5 clearly show that for Classes 1 to V the meals provided meet the standards while for Classes V1 to VIII it is insufficient especially with respect to calories.

Hence in conclusion it can be said that 63% people were aware about the Right to Food. The Targeted Public Distribution Scheme was very popular amongst people while the other Schemes like Antyodaya Anna Yojana, Annapurna Schemes were not so well known to these subjects. Thus they need to be made more popular amongst the people so that more targets may be able to avail their benefits. The Mid Day Meal Scheme designed to attract more children to Schools and simultaneously improve their nutritional status should be reviewed again with respect to calories, protein for children of Classes V1 to VIII. A special focus on the hygiene and palatabilty of the meals should be made as presently the meals are cooked and served under unhealthy conditions. Creativity should also be scientifically used in planning and preparation of these meals like incorporating fats, oils, fresh fruits and seasonal vegetables to prevent micronutrient deficiencies in school children and also enhance the immunity, academic performance and overall health and nutritional status of these School children who are the future citizens of tomorrow.

LITERATURE CITED

Indira Gandhi National Open University (2006). MFN-006 Laxmi Print India, New Delhi. pp 218-222

Park, K. (2011). Textbook of Preventive and Social Medicine", Ed.18th M/s Banarsidas Bhanot Publishers, Jabalpur pp. 482.

Redeppa, L. (2011). Food Security in India. Kanishka Publishers and Distributors.

Ziegler, Jean (2002). United Nations. Economic and Social Council. Commission on Human Rights, Economic, Social and Cultural Rights; The Right to Food; Report by the Special Rapporteur on the Right to Food, Mr. Jean Ziegler, Submitted in Accordance with Commission on Human Rights Resolution 2000/25 (Geneva: UNECOSOC E/CN.4/2002/558, 10 January 2002. http:/ /www.unhchr.ch/Huridocda/Huridoca.nsf/TestFrame/ 832c9dd3b2f32e68c1256b970054dc89?Opendocument

■ WEBLIOGRAPHY

Dfpd.nic.in>Targeted Public Distribution System.

http://www.jus.uio.no/lm/un.universal.declaration. of.human.rights.1948/sisu_manifest.html>

http///en.wikipedia.org/wiki/National Food For Work Programme, 2006.

http://en.wikipedia.org/wiki/National Food Security Act 2013.

http//un.org/en/documents/udhr.Universal Declaration of Human Rights.

http//en.wikipedia.org/wiki/right to food

http://www.mdm.nic.in2015

Southasia.oneworld.net.Mid Day Meals satisfy Rajasthan's

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