
UNIT 10 NUTRITION POLICY AND PROGRAMMES

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10.1 INTRODUCTION

In Units 7 and 8, we learnt about the various methods of assessment of nutritional status. Unit 9 focused on the concept of monitoring and surveillance of nutritional status. In this unit, we are going to study about the intervention programmes and the policy of the Government of India (GOI), which is designed to ensure good nutritional status of the population.

Widespread poverty resulting in chronic and persistent hunger is the single biggest affliction of the developing world today. In India about 50 percent of the people live below the poverty line and even after spending 80 percent of their income on food, they cannot have a balanced diet. The physical expression of this continuously re-enacted tragedy is the condition of under nutrition. In the face of continuing poverty and malnutrition, a strategy of development, comprising a frontal attack on poverty,

unemployment and malnutrition, became a national priority. Various intervention programmes have been launched by the government, to improve the provision of basic services to the poor and to devise a security system, through which the most vulnerable section, viz. women and children, could be protected. These programmes are discussed in this unit.

In 1993, the GOI adopted the National Nutrition Policy (NNP), in recognition of the magnitude of under nutrition in the country. The salient feature of the NNP is the other major focus in this unit.

Objectives

After studying this unit you will be able to:

- describe the national nutrition policy,
- enlist the various nutrition intervention programmes launched by the Government, and
- discuss the major features of the nutrition intervention programmes.

10.2 NATIONAL NUTRITION POLICY (NNP)

The National Nutrition Policy, formulated by the Department of Women and Child Development, Government of India (GOI) was approved by the Cabinet in April 1993 and tabled in both houses of the parliament in August 1993. The policy advocates a *"comprehensive, integrated and inter-sectoral strategy for alleviating the multifaceted problem of malnutrition and achieving the optimal state of nutrition for the people"*. The National Plan of Action on Nutrition (NPAN) was released in 1995 to implement the National Nutrition Policy, which included strategies specifically to address the prevention and control of micronutrient deficiencies.

Let us now review the important aspects of the NNP. These include: a) Aims of NNP, b) Nutrition Policy Instruments, and c) Policy implementation. We shall begin with the aims of NNP.

10.2.1 Aims of the National Nutrition Policy

The NNP is based on the conviction that reduction in malnutrition and improvement in nutritional status of the people will contribute significantly to development of human resources and the overall economic and social goals of the country.

The main aims of the NNP are:

- to draw attention to the urgent need to reduce malnutrition in the country,
- to highlight the need for inter-sectoral coordination to achieve nutritional goals,
- to orient relevant sectors to perceive nutrition as an outcome of their sectoral activities, and
- to identify short term, intermediate and long-term strategies for achieving nutritional goals either through direct policy changes or indirect institutional or structural changes.

Next, let us get to know what nutrition policy instruments have been advocated for achieving these above listed aims.

10.2.2 Nutrition Policy Instruments

Realizing the fact that nutrition is a multi-sectoral issue and needs to be tackled at various levels, the nutrition policy instruments focused on tackling the problem of nutrition both through nutrition interventions, for especially vulnerable groups, as well as, through various development policy instruments that will create conditions for improved nutrition. A direct intervention (short term strategy) and an indirect policy instrument through long term institutional and structural changes were advocated.

Let us then look at the nutrition policy instruments highlighting short and long-term measures.

A. Direct Short Term Intervention

The short-term measures focus on the following strategies:

1. Nutrition intervention for specially vulnerable groups by a) expanding the nutrition intervention net through Integrated Child Development Services (ICDS) so as to cover all vulnerable children in the age group 0-6 years b) Improving growth monitoring between the age group 0-3 years in particular, with closer involvement of the mothers, in a key intervention c) Reaching the adolescent girls through the ICDS so that they are made ready for a safe motherhood, their nutritional status is improved and they are given some skill up-gradation training in home-based skills and covered by non-formal education, particularly nutrition and health education, and d) Ensuring better coverage of expectant mothers, such coverage to include supplementary nutrition starting from first trimester of pregnancy to the first year after pregnancy,
2. Fortification of essential foods, for example, salt with iodine and/or iron.
3. Production and popularization of low cost nutritious foods from indigenous and locally available raw material, by involving women in this activity,
4. Control of micronutrient deficiencies among vulnerable groups - deficiencies of vitamin A, iron, folic acid and iodine among children, pregnant women and nursing mothers.

Next, let us look at the indirect policy instruments.

B. Indirect Policy Instruments

The long term strategies for achieving the national goals through indirect institutional or structural changes includes:

- i) Ensuring food security, a per capita availability of 215kg/person/year of food grains.
- ii) Improvement in the dietary patterns by promoting the production and increasing the per capita availability of nutritionally rich foods.
- iii) Policies for effective income transfers so as to improve the entitlement package of the rural and urban poor by re-orienting and restructuring the poverty alleviation programmes (like Integrated Rural Development Programme) and employment generation schemes (like Jawahar Rozgar Yagna etc) to make a forceful dent on the purchasing power of the lowest economic segments of the population and by ensuring an equitable food distribution, through the expansion of the public distribution system (PDS).
- iv) Implementing land reforms.
- v) Health and Family Welfare.
- vi) Basic nutrition and health knowledge, with special focus on wholesome infant feeding practices.
- vii) Prevention of food adulteration, by strengthening/gearing up the enforcement machinery.
- viii) Nutrition surveillance.
- ix) Monitoring, of nutrition programmes.
- x) Communication through established media for effective implementation of the nutrition policy.
- xi) Ensuring an effective, minimum wage administration.

- xii) Community participation, by involving the community through their panchayats / beneficiary committees or through actual participation, particularly of women, by promoting schemes relating to kitchen gardens, food preservation etc. and generation of effective demand at the level of the community for all services relating to nutrition.
- xiii) Education and literacy, and
- xiv) Improvement of the status of women.

The policy states that the measures enumerated above are to be administered through inter-sectoral coordination and activities. Next, we will look at how the National Nutrition Policy is being implemented.

10.2.3 National Policy Implementation

The nodal responsibility at the central level for policy implementation rests with the Ministry of Human Resource Development under the chairmanship of Secretary, Department of Women and Child Development. Sectoral Ministries/Departments concerned like Agriculture, Food, Civil Supplies, Health and Family Welfare, Rural Development, Education and Environment, whose role is crucial for sustainable improvement in nutritional status of the population, are represented on the *Inter-Ministerial Coordination Committee*. A *National Nutrition Council* is constituted in the Planning Commission with the Prime Minister as its President and concerned Union Ministers, a few State Ministers by rotation, and experts, representatives of non-governmental organizations and grass root leaders (especially women) as its members. Further, the effective implementation of the NNP is dependent to a large extent on the State Governments/Union Territory Administrations and the constitution of State Nutrition Councils.

From the discussion above it must be evident that we have a very comprehensive national nutrition policy in place, which addresses malnutrition through multi-sectoral approach. In the next section, we will discuss the nutrition intervention programmes designed and implemented by government of India. But first let us recapitulate what we have learnt so far.

Check Your Progress Exercise 1

1. List the main aims of National Nutrition Policy.

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2. List any two direct short-term interventions and two indirect policy instruments of National Nutrition Policy.

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3. NNP is implemented through a multi-sectoral approach. Elaborate.

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Now that we are aware about the Nutrition Policy, let us get to know about the nutrition programmes being run by the government to combat malnutrition.

10.3 NUTRITION PROGRAMMES

The National Nutrition Policy, about which we have studied above, was formulated only in 1993. However, prior to that, since the last four decades, Government has launched a variety of nutrition intervention programmes to combat malnutrition. One of the first nutrition programmes launched by the government was the Applied Nutrition Programme (ANP), way back in 1963. Thereafter, numerous programmes have been launched. Some of these programmes are in operation and some are not. Some new programmes focusing on ensuring food security for all and employment-based programmes have also been initiated by the government. We will now study about all these programmes. We will divide these programmes into the following sections.

- Integrated Child Development Services Programme (ICDS), which remains one of the world's most unique community based, outreach programme for early childhood care and development.
- Nutrient Deficiency Control Programmes, namely National Prophylaxis Programme for Prevention of Blindness due to Vitamin A deficiency, National Anaemia Control Programme, National Iodine Deficiency Disorder (IDD) Control Programme.
- Food Supplementation Programmes, like the Special Nutrition Programme (SNP), Balwadi Feeding Programme, Composite Nutrition Programme and Applied Nutrition Programmes.
- Food Security Programmes, namely Public Distribution System (PDS), Antodaya Anna Yojna, Annapurna Scheme, National Food for Work Programme, and
- Self Employment and Wage Employment Schemes, namely Sampoorna Gramin Rojgar Yojana, Swarna Jayanti Gram Swarozgar Yojana

We shall begin our exhaustive study of these programmes with a discussion on the ICDS programme.

10.4 INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) PROGRAMME

The Integrated Child Development Services is the world's most unique welfare programme, which holistically addresses health, nutrition and development needs of young children, adolescent girls and pregnant/nursing mothers across the life cycle. Launched by the Government of India in 1975-76, in 33 blocks, today, it has expanded to 4348 community development blocks (to target 5652 blocks upon expansion), reaching out to 26.85 million young children, 5.07 lakh adolescent girls and 5.3 million pregnant/nursing mothers, through a network of over 5 lakh Anganwadi Centres and more than 1 lakh mahila mandals.

ICDS contributes not only to the achievement of women and child goals related to health, nutrition and early child development, but also to other primary health care goals and the goals of universal elementary education, as enunciated in the National Plan of Action for Children 1992. Integration of services and consideration of the mother and child as one 'biological unit' are the unique features of this programme. We will look at the 1) objectives, 2) target groups, 3) programme components and, 4) implementation of ICDS. Let us begin with the objectives.

1) Objectives of the ICDS

The ICDS scheme aims at the holistic development of children in the age group of 0-6 years, nursing and pregnant mothers belonging to the most deprived sections of the society. The specific objectives of the ICDS are to:

- improve the nutritional and health status of children in the age group of 0-6 years and adolescents,
- lay the foundation for proper psychological, physical and social development of the child,

- reduce the incidence of mortality, morbidity, malnutrition and school drop-out,
- achieve effective coordination of policy and implementation amongst the various departments to promote child development, and
- enhance the capability of the mother to look after the health and nutritional needs of the child through proper nutrition and health education,

Let us look at type of population who receives the benefits of the programme. i.e. the target groups.

2) Target Groups

The main beneficiaries of the ICDS programme are:

- Infants
- Children 1-6 years of age
- Pregnant and Lactating women
- Adolescent Girls, and
- All women up to 45 years of age.

We will now review the services provided or the components of the ICDS.

3) Programme Components

ICDS programme is a package of several services. The services offered by the programme include:

- Supplementary nutrition
- Immunization
- Periodic health check-ups, treatment of minor ailments and referral services
- Growth monitoring
- Non-formal preschool education
- Health and nutrition education
- Adolescent girls scheme
- Safe drinking water

Let us look at each of these services in detail now. Figure 10.1 highlights the target group and programme component of ICDS.

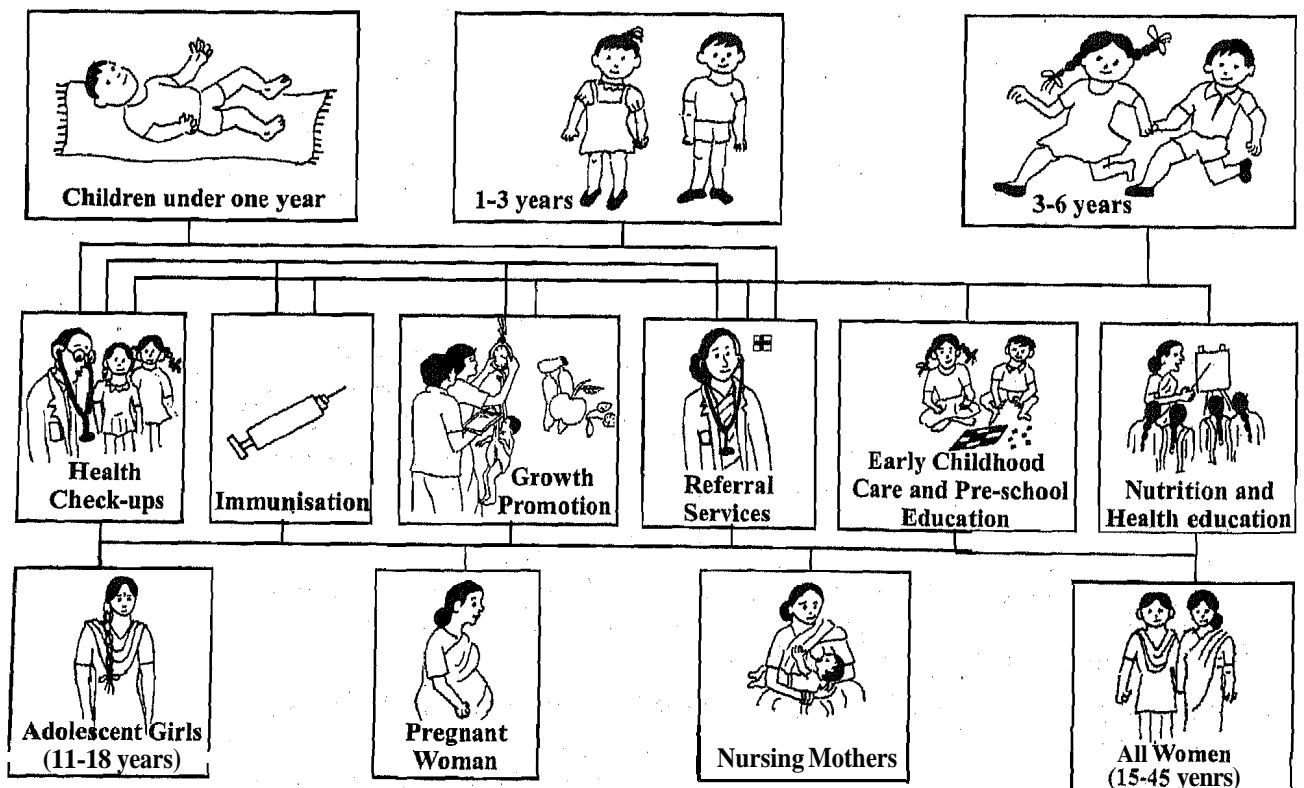


Figure 10.1 : ICDS : target groups and components

- *Supplementary Nutrition:* The ICDS Scheme has been recognized as the strongest and most viable vehicle for improving nutritional status. In Unit 12, we will look at the supplementary feeding component of ICDS. We will briefly describe it here. As discussed earlier, the problem of under nutrition has been mainly addressed through the services like supplementary feeding within the ICDS. The beneficiaries for supplementary nutrition are children below 6 years, pregnant and lactating women. As per existing guideline, the feeding is supplemental to meet calorie/protein gap of 300 Kcal, 8-10 g of proteins for Grade I and Grade II malnourished children and double the amount for Grade III and Grade IV children. In some ICDS projects 'take home ration strategy' (THRS) is already functioning. Food for 1-4 weeks is distributed at a time to mothers for feeding at home. As per existing norms, the cost involved in supplementary nutrition component of children is indicated at Rs. 1 per day per beneficiary.

A new initiative in the form of Pradhan Mantri Gramodaya Yojana (PMGY) has been introduced during financial year 2000-2001. The PMGY envisages allocation for Additional Central Assistance to States/UTs for selected Basic Minimum Services including nutrition. The nutrition component of PMGY has been specifically outlined with the objective of eradicating malnutrition amongst under-three years children by increased nutritional coverage of supplementary feeding of these children through the ICDS scheme.

For pregnant and nursing mothers, the feeding is supplemental to meet calorie/protein gap of 500 Kcal, 20-25 g proteins. A meal similar to that received by pregnant and lactating mother is being provided to adolescent girls providing 500 Kcal and 20-25g proteins on all six working days of the week. A variety of foods are used in the feeding programmes. A few examples include; fruit bread/muruku/ sev/biscuits etc.

- *Immunization:* Immunization plays a crucial role in preventing serious childhood diseases. All infants and children are covered by the ICDS and immunized against infectious diseases such as diphtheria, whooping cough, tetanus, poliomyelitis, tuberculosis etc. Measles vaccinations are also provided. All pregnant women are immunized against tetanus.
- *Health check-up and referral services:* As a vital input to provide the essential services of health check-up and referral services, each anganwadi center is provided every year with a medicine kit consisting of easy to use and dispensable medicines to remedy common ailments like cough and common cold, skin infections etc. If the ailment requires specialized treatment the case is referred to the nearest health system. Children, adolescent, nursing/pregnant women are examined and treated at regular intervals by the local health personnel, such as the Lady Health Visitor (LHV) and Auxillary Nurse Midwife (ANM). They provide a link between the village and the Primary Health Centre and sub-centres.
- *Growth Monitoring:* In the context of the ICDS, growth monitoring is a tool for preventing malnutrition and for early detection of growth faltering. Weight is easy to measure and interpret hence it is used in the Anganwadi as a measure to watch the progress of the child's health/nutritional status. Proper record is maintained in the Anganwadi in the growth chart known as Weight-for-age charts. The chart consist of a card presenting in graphic form the weight-for-age curves drawn across. Each curve denotes a particular level of nutrition/growth status. A sample growth chart you may recall has already been appended in Unit 7 on page 153. The growth charts once plotted are useful to Anganwadi worker/mothers to quickly identify signs of malnutrition and take prompt action. Using the chart, the mothers could be educated regarding: i) the child's weight, ii) dietary requirements, iii) right kind of food preparations/demonstration of cooking and feeding to meet the special needs of the children, and iv) quantity and frequency of feeding.

A new initiative has been taken for growth monitoring of all children less than three years along with other children.

- **Early Childhood and Preschool Education:** The preschool education component under the ICDS is a crucial component of the package of services envisaged under the scheme. It aims at psycho-social, cognitive, conative and affective development of child in a cogent and holistic manner. It also aims at school readiness and development of positive attitudes towards education. The preschool activities at the Anganwadi center, enables the elder siblings to attend school. The preschool education in Anganwadi center is provided through non-formal and play-way method.

Recognizing the two-fold significance of early childhood education, the Government has decided to improve the quality of preschool education in Anganwadi centers through a new initiative of regular provision of preschool kit in Anganwadi center. The items in the kit are multiple in terms of possible play activities and concepts, durable, safe for children (non-toxic and without sharp edges), manipulative, culturally and environmentally relevant, cost-effective, easy to maintain and store and conducive to creativity and problem-solving.

- **Adolescent Girls Scheme:** For the first time in India, a special intervention has been devised for adolescent girls using the ICDS infrastructure. The Adolescent Girls (AG) Scheme under ICDS primarily aims at breaking the inter-generational life cycle of nutritional and gender disadvantage and providing a supportive environment for self-development. The AG Scheme in its present form is being implemented through the Anganwadi Centers in both rural and urban settings in 507 ICDS blocks throughout the country.

Under the scheme, the adolescent girls who are unmarried and belong to families below the poverty line and school drop-outs are selected and attached to the local Anganwadi Center for six monthly stints of learning and training activities. The scheme includes two sub-schemes viz. Scheme - I - Girl to Girl Approach, designed for girls in the age group 11-15 years. Under the scheme supplementary nutrition is provided and in-service training on how to manage the Anganwadi center is imparted to the girls. The second scheme (Scheme-11) - Balika Mandal, intended to reach girls in the age group 15-18 years, aims at involving and motivating adolescent girls to participate in non-formal education, developing literacy skills and up-gradation of home-based skills in popular crafts of the area/region. Educational programme will stress personal hygiene, environmental sanitation, nutrition and child care.

The AG Scheme has been revised and renamed as Kishori Shakti Yojana (KSY) with a training component particularly on the vocational aspects aimed at empowerment and enhanced self-perception and convergence with other programmes of similar nature in the education, rural development, employment and health sectors. The objective of the Kishori Shakti Yojana are:

- to improve the nutritional and health status of girls in the age group of 11-18 years,
- to provide the required literacy and numeracy skills through the non-formal stream of education, to stimulate a desire for more social exposure and knowledge and to help them improve their decision making capabilities,
- to train and equip the adolescent girls to improve/upgrade home-based and vocational skills,
- to promote awareness of health, hygiene, nutrition and family welfare, home management and child care,
- to gain a better understanding of their environment related social issues and impact on their lives, and
- to encourage adolescent girls to initiate various activities to be productive and useful members of the society.

To achieve the objectives of the KSY, a basket of programme options are made available. Under one option, a concerted effort is to be made to provide nutrition and health education including sanitation and personal hygiene aspects. IFA supplementation along with de-worming interventions may be provided. Another option is to emphasize on education with particular attention on school dropouts and functional literacy among illiterate adolescent girls. Alternatively, vocational training activities may be undertaken for adolescent girls for their economic empowerment.

We will next study how the ICDS is implemented at central, state and grassroots levels.

4) *Programme implementation*

The ICDS programme is implemented, at the central level, by the Department of Women and Child Development, Ministry of Human Resource Development in coordination with the Ministry of Health. At the State level, implementation is the responsibility of either the Department of Social Welfare/Women and Child Development/Health or a separate Directorate of ICDS. The programme infrastructure along with the designation of the programme functionaries at the Block to Village/Community levels is presented in Figure 10.2. The Anganwadi center – a courtyard play center – is the symbol of Government systems and services, closest to disadvantaged communities, at village/hamlet level. It is the focal point for converging various government programmes for young children, girls and women from disadvantaged communities. The Anganwadi Worker assumes a pivotal role in the ICDS structure due to her close and continuous contact with the community. As the crucial link between the community and the government administration, she becomes a central figure in asserting and meeting the needs of the community she lives in.

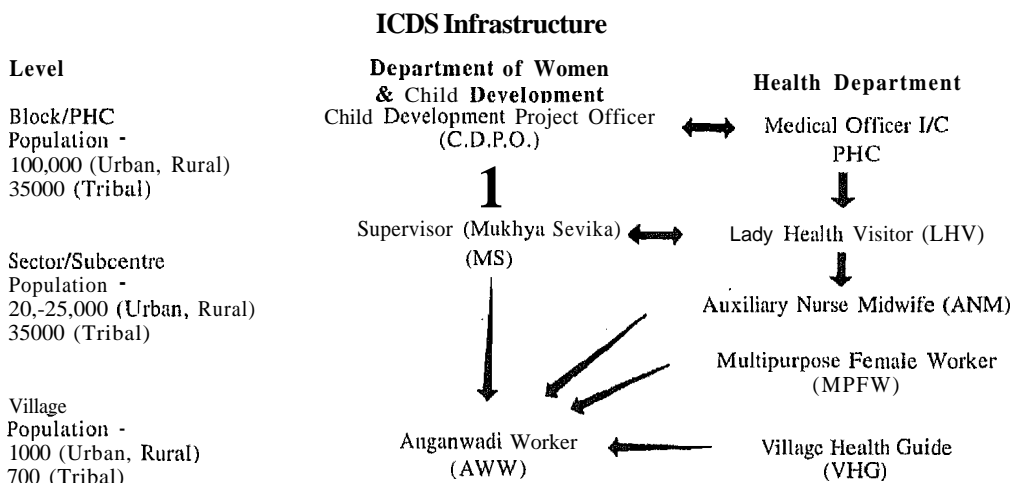


Figure 90.2: ICDS infrastructure

Thus, we saw that ICDS is a unique and largest programme in the world providing integrated services which holistically address the health, nutrition and development needs of young children, adolescent girls and pregnant/nursing mothers. In the next section, we would discuss the nutrient deficiency control programmes of the government of India. But first let us answer the questions given in check your progress exercise 2 to assess our learning of this section.

Check Your Progress Exercise 2

- List the various nutrition programmes launched by our government to combat malnutrition.

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2. Enumerate the goals/objectives of ICDS .

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3. Write the programme components of the ICDS,

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10.5 NUTRIENT DEFICIENCY CONTROL PROGRAMMES

The Government of India has implemented various prophylaxis (preventive) programmes to combat malnutrition, Under these schemes, commercially prepared vitamins and minerals are supplied to vulnerable sections of the population through organized programmes. These programmes are known as Nutrient Deficiency Control Programmes.

The three important ongoing nutrient deficiency control programmes are:

- 1j National Prophylaxis Programme for Prevention of Blindness due to Vitamin A deficiency
- 2) National **Anaemia** Control Programme, and
- 3) National Iodine Deficiency Disorder Control Programme (NIDDCP).

We will now discuss the important aspects of these programmes such as objectives, target group, programme strategy and implementation. Let us begin with the National Prophylaxis Programme for Prevention of Blindness due to Vitamin A deficiency.

10.5.1 National Prophylaxis Programme for Prevention of Blindness due to Vitamin A Deficiency

We have read in Unit 3 that Vitamin A deficiency has been recognized to be a major controllable public health nutritional problem. In India, milder forms of vitamin A deficiency affecting conjunctiva, like bitot spots are observed in about 1-5% preschool children. According to WHO, >0.5% prevalence of bitot spot in preschool children is indicative of public health significance. Longitudinal community studies reveal that in some parts of the country, the incidence of corneal xerophthalmia is about 0.5 to 1 per 1000 preschool children. It is estimated that about 30 - 40,000 children in the country are at risk of developing nutritional blindness every year. In recent years, however, there appears to be a significant change in the profile of vitamin A deficiency, The repeat survey of the National Nutrition Monitoring Bureau (NNMB) in 10 States in preschool children indicated a decline from about 2% in 1975-79 to about 0.7% in 1988-95. It is, however, important to understand that even mild vitamin A deficiency probably increases morbidity and mortality in children, emphasizing the public health importance of this disorder. Hence, the need for the National Prophylaxis Programme for the prevention of Nutritional Blindness due to vitamin A deficiency. Let us look at the objective of the programme.

Objective

The National Prophylaxis Programme for the Prevention of Nutritional Blindness due to vitamin A deficiency aims at protecting children 6 months to 5 years at risk from vitamin A deficiency. Let us look at the target group of the programme.

Target Group

All children, of 6 months to 5 years, particularly those living in rural, tribal and urban slum areas, are beneficiaries of the programme. Next, let us review the programme strategy.

Programme Strategy

The programme focuses on two strategies a) prevention of Vitamin A deficiency, and b) treatment of Vitamin A deficiency. Let us study each strategy in detail.

a) *Prevention of Vitamin A Deficiency*

The prevention strategy within the programme comprises a long-term and a short-term intervention. While the short-term intervention focuses on administration of mega dose of vitamin A on periodic basis, dietary improvement is the long-term ultimate solution to the problem of vitamin A deficiency. We will study the long-term intervention first i.e. promotion of consumption of vitamin A rich foods.

i) *Long term intervention-Promoting consumption of vitamin A rich foods:* Action points under this intervention include that:

- Regular dietary intake of vitamin A rich foods by pregnant and lactating mothers and by children under 5 years of age must be promoted.
- The mothers attending antenatal clinics and immunization sessions, as well as, mothers and children enrolled in the ICDS Programme must be made aware of the importance of preventing vitamin A deficiency.
- Breastfeeding including feeding of colostrums must be encouraged.
- Feeding of locally available β -carotene (precursor of vitamin A) rich food such as green leafy vegetables and yellow and orange vegetables and fruits like pumpkin, carrots, papaya, mango, oranges etc. along with cereals and pulses to a weaning child must be promoted widely. In addition, whenever, economically feasible, consumption of milk, cheese, paneer, yoghurt, ghee, eggs, liver etc. must be promoted.

For increasing availability of vitamin A rich food, growing of vitamin A rich foods in home gardens and consumption of these must be promoted.

We will now study the short term intervention i.e. administration of massive dose of vitamin A.

ii) *Short term intervention-administering massive dose of vitamin A:* Administration of massive dose of vitamin A to preschool children at periodic intervals is a simple, effective and most direct intervention strategy. This is a short-term strategy. Unlike most other micronutrients, vitamin A is stored in the body for prolonged periods and hence periodic administration of massive dose ensures adequate vitamin A nutrition

- Under the massive dose programme, every infant 6-11 months and children 1-5 years is to be administered vitamin A every 6 months. Priority is to be given for coverage of children 6 months to 3 years since the highest prevalence of clinical signs of vitamin A deficiency is reported in this age group. The recommended schedule is as follows:

6 – 11 months — one dose of 100000 IU

1 – 5 years — 200 000 IU/6months

A child must receive a total of 9 oral doses of vitamin A by the fifth birthday. The contact with an infant during administration of measles vaccine between the age of 9-12 months is considered a practical time for administering the vitamin A supplement.

- A camp approach may be used for administering vitamin A to children 1-3 years and 3-5 years. However, the DPT/OPV booster in mid-second year to a child is a suitable time for the second dose of vitamin A (200000 IU). The 9th and 10th plan recommends the administration of vitamin A drops to children, 9 months-36 months of age, through RCH/ICDS system.

We will now study the second strategy i.e. treatment of vitamin A deficiency.

b) *Treatment of Vitamin A deficiency*

All children with clinical signs of vitamin A deficiency must be treated as early as possible. Treatment schedule includes:

- Single oral dose of 200 000 IU of vitamin A immediately at diagnosis
- Follow up dose of 200 000 IU 1-4 weeks later.

Infants and young children suffering from diarrhoea, measles or acute respiratory infections must be monitored closely and encouraged to consume vitamin A rich food. In case, early signs of vitamin A deficiency are observed, the above treatment schedule must be followed. We will now study the implementation strategy of the vitamin A programme.

Implementation Strategy

The national prophylaxis programme for the prevention of nutritional blindness due to vitamin A deficiency is implemented through the Primary Health Centers and its sub-centers. The multi-purpose worker (F) and other paramedicals working in the Primary Health Centers are responsible for administering vitamin A concentrates to children under 5 years and for imparting nutrition education. The services of ICDS, under the Department of Women and Child Development, Ministry of Welfare, is utilized for the distribution of vitamin A to children in the ICDS Blocks and for the education of mothers on prevention of vitamin A deficiency.

The Mother-Infant Immunization Card is used to record and monitor the administration of vitamin A dose to children under two years. The Growth Monitoring Card/Register used for monitoring the growth of children under the ICDS programme, is used for recording and monitoring administration of vitamin A solution till the age of five years.

We will now study the second nutrient deficiency control programme. i.e National Nutritional Anaemia Control Programme.

10.5.2 National Nutritional Anaemia Control Programme

We have read in Unit 3 in nutritional problems that nutritional anaemia is a serious public health problem. Although anaemia is widespread in the country, it especially affects women in the reproductive age group and young children. It is estimated that over 50 percent of pregnant women are anaemic. Nutritional anaemia, due to iron and folic acid deficiency, is directly or indirectly responsible for about 20 percent of maternal deaths. Recently the NFHS-2 (1998-99) data (NFHS 2000) reveal that 74% children, 6-35 months of age, are anaemic. Anaemia is a major contributory cause of high incidence of premature births, low birth weight and perinatal mortality. To reduce the prevalence of anaemia in pregnancy the national anaemia prophylaxis programme of iron and folic acid distribution to pregnant mothers was initiated by Government of India in 1972. Let us look at the objectives of the programme.

Objectives

The National Nutritional Anaemia Control Programme aims at significantly decreasing the prevalence and incidence of anaemia in women in reproductive age group, especially pregnant and lactating women, and preschool children. Let us look at the target group of the programme.

Target Group

The beneficiaries of the programme include:

- Women in the reproductive age group, particularly pregnant and lactating mothers.
- Children 1-5 years of age.

- Family planning acceptors (women who accept family planning measures like intrauterine devices (IUD) and tubectomy).

We will now look at the programme strategies.

Programme Strategy

The programme focuses on primarily three strategies: a) Promotion of regular consumption of foods rich in iron b) Promotion of consumption of iron and folic acid supplements to the 'high risk' groups, and c) Identification and treatment of severely anaemic cases. We will study each strategy briefly now. Let us start with the first strategy i.e. promotion of regular consumption of foods rich in iron.

a) *Promotion of regular consumption of foods rich in iron*

Various action points under this strategy include:

- Regular dietary intake of iron and folic acid rich foods by pregnant and lactating women, adolescent girls and children under 5 years of age must be promoted.
- Regular consumption of iron rich foods such as green leafy vegetables (such as mustard leaves (sarso ka sag), amaranth (chaulai sag), colocasia (arbi) leaves, knoll khol greens (Ganth Gobi ka sag), bengal gram greens (chana sag), turnip greens (shalgam ka sag), cereals (such as wheat, ragi, jowar, bajra), pulses, especially sprouted pulses and jaggery (gur) must be promoted widely. In addition, wherever culturally and economically feasible, consumption of animal foods such as meat, liver, poultry etc. must be encouraged.
- Ensure incorporation of iron rich foods such as green leafy vegetables in the weaning foods of infants.
- Vitamin C (ascorbic acid) promotes absorption of iron. Regular consumption of vitamin C rich foods such as lemon, orange, guava, amla, green mango along with iron rich foods must be promoted.
- For increasing availability of iron rich foods, growing of iron rich foods in home gardens and consumption of these must be promoted.
- Tea inhibits absorption of iron. Advice a reduce consumption of tea, specially during pregnancy, for improving the absorption of iron and prevention of anaemia. Let us discuss the second strategy now.

b) *Promoting consumption of iron and folic acid supplements to the 'high risk' groups*

As a priority, all pregnant women, irrespective of haemoglobin levels, must be provided with the recommended dose of iron and folic acid (folifer) supplements. Preschool children, especially those in tribal areas and ICDS blocks, should be given on priority the recommended dosage of iron and folic acid supplements. The recommended doses of folic acid and iron supplements are:

- Pregnant women* : One big (adult) tablet per day for 100 days (each tablet containing 60 mg/100 mg of elemental iron and 500 µg folic acid). These tablets provided to women after the first trimester of pregnancy.
- Preschool: Children (1-5 years)*: One paediatric (small) tablet containing 20 mg iron and 100 µg folic acid daily for 100 days every year.
- Lactating women and Intrauterine device (IUD) acceptors*: One big (adult) tablet (containing 60 mg/100 mg of elemental iron and 500 µg folic acid) per day for 700 days.

Let us go over to the third strategy.

c) *Identification and treatment of severely anaemic cases*

Women with haemoglobin levels below 7 g/dl are considered to be severely anaemic. Testing of blood for haemoglobin concentration at field level is neither considered safe or practical. Therefore, as far as possible, severely anaemic cases should be identified on the basis of clinical signs. All health workers should be trained to identify such anaemic cases. Further, cases of severe anaemia should be referred to the PHC medical officer for diagnosis of the causative factors and treatment. Recommended therapeutic dose, for women in the reproductive age group is one big tablet of iron thrice daily for a minimum of 100 days. This will provide equivalent to 180 mg elemental iron and 1500 µg folic acid per day. In case of 100 mg elemental folifer tablet, recommended dose is two (big) tablet of iron daily for a minimum of 100 days. We will now study how the programme is implemented in the field.

Programme Implementation

The programme is implemented through the Primary Health Centres and its sub-centres under the RCH programme. The Multipurpose Worker (F) and other paramedicals working in the Primary Health Centres are responsible for the distribution of iron tablets (adult and paediatric doses) to the beneficiaries. The functionaries of ICDS programme assist in the distribution of iron tablets to children and mothers in the ICDS Blocks and for imparting education to mothers on prevention of nutritional anaemia. Department of Food (Ministry of Food and Civil Supplies) is responsible for promoting consumption of iron rich foods. In addition, services of other community level workers and involvement of formal and non-formal education, media, horticulture departments and voluntary organizations is utilized for the effective implementation of the programme. In addition, records of under fives and antenatal care maintained under the MCH services and ICDS programme, is used for identifying beneficiaries, as well as, for recording and monitoring the distribution of iron and folic acid supplements.

We will now study the third nutrient deficiency programme i.e. National Iodine Deficiency Disorders Control Programme (NIDDCP).

10.5.3 National Iodine Deficiency Disorders Control Programme (NIDDCP)

We have read in Unit 3 that Iodine Deficiency Disorders (IDD) form a spectrum of abnormalities which include goitre, mental retardation, deaf mutism, squint, difficulties in standing or walking normally and stunting of the limbs. Iodine deficient women frequently suffer abortions and still births. Their children may be born deformed, mentally deficient or even cretins. All these problems are caused by simple lack of iodine, and goitre is the least tragic of them. No State in India is free from IDD. In India, out of the 239 districts surveyed (in 29 states and union territories), 197 districts have goitre prevalence rates ranging from 10% to 65%. Women in child-bearing age and children under the age of 15 years are most susceptible to IDD. With every passing hour, 10 children are being born in India who will not attain their optimum physical and mental potential due to iodine deficiency. In 1962, the Government of India launched the National Goitre Control Programme (NGCP), which aimed at controlling goitre by supplying and ensuring consumption of iodized salt to the population living in the endemic region. The Government re-structured the NGCP in 1986, and aimed at achieving the goal for universal iodization of salt to control IDD in India by 1992. The National Goitre Control Programme, referred to as the National Iodine Deficiency Disorders Control Programme (NIDDCP) since April 1992, is being implemented by the Department of Health. The NIDDCP aims at universalizing iodization of all edible salt. Let us now look at the objectives of the NIDDCP.

Objectives

The objectives of the NIDDCP include:

- Supply of iodized salt in place of common salt to the entire country, The emphasis is on establishing iodized salt with active private sector participation.
- Re-survey to assess the impact of supply of iodized salt.

By September 1993, about 65 percent of the total population in the country had been covered in the Government of India's drive to universalize iodized salt. At the macro level, the salt producing areas of India are located in the States of Gujarat, Tamil Nadu, Rajasthan, Andhra Pradesh, Maharashtra, Orissa, Karnataka and West Bengal. Overall, the private sector handles 94% of salt iodization with the public sector handling a miniscule 6%. Under the Prevention of Food Adulteration Act (PFA Act), the level of iodization has been fixed at 30 ppm of iodine in salt at the manufacturing level and 15 ppm at the household level. To ensure exclusive use of iodized salt in endemic areas, the sale of non iodized salt is being discouraged nationally. Let us look at the target population for NIDDCP.

Target Group

Entire population, particularly women in child bearing age and young children.
Now let us look at the implementation strategy.

Implementation strategy

The NIDDCP is executed by a multiplicity of agencies comprising the health, industry and railway ministries of the Central Government. The Ministry of Health and Family Welfare and Directorate General of Health Services (DGHS) is responsible for the national implementation of the programme. The Salt Department, under the Ministry of Industry, is the nodal agency for production, distribution, monitoring and quality control of iodized salt. The Salt Commissioner, in consultation with the Ministry of Railways, arranges for the movement of iodized salt from the production center to the States. The State Government is responsible for the distribution of the iodized salt within the state either through the Public Distribution System or through the open market. For effective implementation of the NIDDCP, a central IDD Cell is established at the DGHS level and is responsible for coordinating surveys, training, monitoring and management of the IDD programme. All the states/UTs have been advised to set up IDD Control Cell.

Thus you saw that government has very well conceptualized and formulated programmes to combat micronutrient deficiency in our country. We will now study about the supplementary feeding programmes of the government. But first, let us check our learning by answering the questions included in the check your progress exercise 3 given next.

Check Your Progress Exercise 3

1. List the various nutrient deficiency control programmes? Enumerate the objectives of any one of the programmes.

2. Explain the dietary actions you would take to promote foods rich in vitamin A.

3. Mention the dosage of iron and folate for pregnant and preschool children and also the dose of vitamin A for infants and pre-schoolers.

10.6 SUPPLEMENTARY FEEDING PROGRAMMES

Food supplementation programmes have a very important role to play to combat malnutrition. The aim of these supplementary feeding programmes is to improve the nutritional status of vulnerable groups through distribution of food supplements.

Different types of supplementary feeding programmes have evolved over the years as short-term measures to combat malnutrition. Some of these are on going and some are no longer in operation now. We will study about the following supplementary feeding programmes in this section:

1. National Programme of Nutritional Support to Primary Education (Mid Day Meal Programme)
2. Special Nutrition Programme
3. Pradhan Mantri's Gramodaya Yojana (PMGY)
4. Balwadi Feeding Programme
5. Coinposite Nutrition Programme, and
6. Applied nutrition programme

Let us get to know about these programmes then.

10.6.1 National Programme of Nutritional Support to Primary Education (Mid Day Meal Programme)

The National Programme of Nutritional Support to Primary Education commonly known as Mid Day Meals Scheme was launched in August, 1995 consequent to the favourable impact of the scheme on children in some States, as well as, the comfortable food stock position in the country, and to relate primary education with nutrition, health and ICDS.

The mid day meal programme is one of the most important ongoing feeding programmes organized by the Department of Education not only to improve nutritional status of school children but also to attract poor children to school. Further, school age children are in a phase of rapid growth and development. Their nutritional needs are considerable. However, children, particularly from poor families, do not get enough food to eat. Their home diets are often inadequate. Many, especially in rural areas, come to school partly hungry and some even on empty stomach, trekking long distances. Under such circumstances, they are unable to concentrate on the studies and benefit from the education. Hence, providing a supplement in school would complement the home diet and sustain the interest of children in learning so that drop out rates are lowered and school attendance improves. We would study about the objectives, target group, programme component and strategy of MDM programme. Let us look at the objectives first.

Objectives

The programme is intended to give a boost to universalization of primary education by increasing enrolment, retention and attendance and simultaneously impacting upon nutritional status of students in primary classes.

Target Group

All students of primary classes (I-V) in the Government, Local Body and Government aided schools in the country are covered in all States/UTs (except Lakshdweep). From October 2002, the programme has been extended to children studying in Education Guarantee Scheme and Alternative and Innovative Education (EGS & AIE) Centres. Private un-aided schools are not covered under the programme. The main beneficiaries

of the programme are therefore school children between 6-11 years of age attending elementary/primary schools.

Let us now review the programme component and strategy.

Programme Component

The major component of the MDM programme is food supplementation. The central support consists of:

- 100 gram food-grains (wheat or rice) per child per school day where cooked meals are served; 3 kgs foodgrains per student per month where foodgrains are distributed.
- Transport subsidy upto a maximum Rs.50 per quintal for move'ment of foodgrains from the nearest FCI depot to schools.'
- Food-grain (wheat or rice) is supplied through Food Corporation of India the cost of which is reimbursed at below poverty line (BPL) rate.

As per provision mentioned in the programme, the meal is to be provided for 200 working days in a year and the rate of mid day meal is Rs. 2 per child per day.

The meal/food supplement distributed as part of the programme provides roughly 350-450 Kcal and 20-30g protein per child per day, which is expected to meet one-third of the energy and half of the protein recommended dietary intakes of the children.

The food supplements provided through the programme vary from ready-to-eat food like fruit bread etc. to cooked food like 'upma' or 'khichri' or others, which are convenient to eat. In Tamil Nadu, traditional 'rice-sambar' preparation is used in the programme. In Rajasthan *ghugri* (porsidge) is being provided. Whereas, in the State of Delhi a six day cycle menu of cooked foods is being used for MDMP. The raw materials supplied by the international agencies include corn soya meal (CSM), wheat soya blend, soya fortified bulgar (SFB) and salad oil. The programme was conceived for inculcating the qualities of discipline, comradeship, good food and healthy habits and knowledge about nutrition through the provision of nutritious meal daily.

Programme Implementation

The programme is operated by the Department of Education. The programme is being implemented through Panchayats and Nagarpalikas. The feeding is usually carried out within the school premises. The school teacher is responsible for the preparation and distribution of food and maintenance of records such as food stock register, health cards and attendance register relevant to the programme. A helper is appointed to assist the teacher in organizing the feeding. Special budgetary provisions are made to meet the cost of fuel, condiments and other incidentals. Salaries of cooks, helpers, etc., as well as, expenditure on construction of kitchen sheds needed under the programme are eligible for coverage under the poverty alleviation schemes. Other costs of conversion of foodgrains into cooked meal/processed food are to be met by implementing agencies/ states. There is a wide variation in the implementation of the programme from State to State.

We will now go over to the next supplementary feeding programme. i.e Special Nutrition Programme.

10.6.2 Special Nutrition Programme (SNP)

The Special Nutrition Programme was launched by the Central Social Welfare Board (CSWB) in 1970-71. The aim of the programme was to provide supplementary nutrition to children, pregnant women and nursing mothers belonging to the weaker sections of the society. In 1970-71, it was envisaged that nutritious food would be supplied to 6.8 lakh children in the age group 0-3 years. However, the benefits of the programme

were extended to children in the age group 0-6 years, as well as, pregnant/nursing mothers during 1971-72. By 1986, the programme covered nearly 70 lakh beneficiaries in urban slums, tribal and backward rural area. In 1975 the ICDS programme was launched. As the area under ICDS increased, the coverage of the special nutrition programme decreased. It has now been converged with the ICDS wherever possible.

The main component of the programme was food supplementation. The supplement consisted of 300 Kcal and 10 g protein for children and 500 Kcal and 25 g protein for pregnant/lactating women. Feeding of the beneficiaries was undertaken for 300 days a year. The programme provided various food supplements according to the availability and convenience. In urban areas, usually bread, milk or other processed foods were given. In tribal areas, locally produced foods or food items donated by international organizations such as CARE, are being given.

In addition to supplementary feeding, the scheme also included periodic health check-ups for the beneficiaries. Efforts were made to conduct immunization, improving the appearance of children, haemoglobin estimation and weight measurement for beneficiaries from time to time. Let us now go over to the third supplementary feeding programme, i.e., PMGY.

10.6.3 Pradhan Mantri's Gramodaya Yojana (PMGY)

In order to achieve the objective of sustainable human development at the village level, a new initiative in the form of Pradhan Mantri's Gramodaya Yojana (PMGY) has been introduced in the Annual Plan 2000-01. This focuses on the creation of social and economic infrastructure in five critical areas with the objective of improving the quality of life of our people specially in rural areas. Schemes related to health, nutrition, education, drinking water, housing and rural roads are undertaken within this programme. The PMGY has two components: Programmes for rural connectivity with 50 percent allocation, and other programmes of primary health, primary education, rural shelter, rural drinking water and nutrition with the remaining 50 percent allocation.

The PMGY envisages allocations for Additional Central Assistance (ACA) for selected basic minimum services in order to focus on certain priority areas including nutrition. The allocation under nutrition component of PMGY, which is essentially meant as an **additionality** for providing the complete nutritional requirements to all below poverty line (BPL) children in the age group of 6 months to 3 years only, is to be made under the Supplementary Nutrition Programme component of ICDS. You may recall studying about this earlier in Section 10.4 under the programme component of ICDS on page 205. Hence, we shall not duplicate the information here. The minimum allocation for nutrition component is 15% of the Additional Central Assistance for PMGY.

10.6.4 Balwadi Feeding Programme

Like the Special Nutrition Programme above, the Balwadi Feeding Programme was also launched in 1970-71. Although the Special Nutrition Programme is no longer in operation, the Balwadi Feeding Programme remains one of the ongoing programmes implemented through the voluntary organizations. The Central Social Welfare Board and National level voluntary organizations such as Indian Council for Child Welfare, Bhartiya Adimjati Sevak Sangh and Harijan Sevak Sangh are responsible for implementing the programme with grant-in-aid given by the Ministry of Social Welfare. At the field level, the programme is implemented through the *Balsevika* with the assistance of the helper.

The beneficiaries of the programme include preschool children attending the Balwadi. The services provided under the programme are supplementary feeding, regular health check-ups, immunization, habit formation and socialization through games and recreation. Supplementary food consisting of 300 Kcal and 10 g protein per day per child is provided for nearly 280 days in a year and contributes to at least one-third of the daily nutritional requirements of the child. The total cost per child per day of the

food is expected to be around 25 paise. The nutrition programme also has an educative value as it brings together several children of the same age and is expected to inculcate good habits and help children develop taste for different types of foods. By 1986, about 2-3 lakh children in the age group of 3-5 years were covered under the programme. Let us move on to the next supplementary feeding programme i.e. Composite Nutrition Programme.

10.6.5 Composite Nutrition Programme

The Composite Nutrition Programme was a feeding programme launched by the Department of Community Development, with the main objective of providing nutrition education to the masses. The core of the programme was nutrition education and its particular application through demonstration feeding. The programme had five components:

- Nutrition education through mahila mandals
- Encouragement of economic activities of mahila mandals
- Strengthening 'the supervisory machinery for women's programme
- Training of associate women workers, and
- Demonstration feeding

In demonstration feeding, provision was made for feeding 80 beneficiaries (women and children in the age group 0-5 years) each day for 25 days a month. The State Government through official and non-government agencies implemented the programme. The existing institutions of mahila mandals and balwadis played a major role in implementing the programme at the field level. *The programme is no longer in operation* now. Let us now look at the last supplementary feeding programme i.e. Applied Nutrition Programme covered in this section.

10.6.6 Applied Nutrition Programme

The Applied Nutrition Programme was one of the first national nutrition programmes launched in 1963 through the Community Development Department, aimed at improving the nutrition of lactating pregnant women and children. The programme was developed 'to educate rural people about how they can increase and improve their food supply through their own efforts'. The main objectives of the programme were:

- To encourage production of body-building foods (such as eggs, fish, milk etc.) and protective foods (such as vegetables, fruits), and
- To provide nutrition education, so as to promote consumption of the body-building protective foods by mothers and children.

The main components of the programme were nutrition education and demonstration feeding. Under the programme about 20-30 beneficiaries (children and pregnant/lactating mothers) in each center, were provided nutritious items prepared with body-building and protective foods and demonstration feedings held for 200 days in a year. The programme was an education effort and aimed at developing progressively a coordinated and comprehensive national programme of education and training in applied nutrition and related subjects. Efforts were made through the programme to improve local diets through the production, preservation and use of protective foods.

The programme was initially launched with the assistance of International Agencies such as United Nations Children Fund (UNICEF), Food and Agriculture Organization (FAO), and World Health Organization (WHO). At the central level, the programme involved the coordinated efforts of the Departments of Agriculture, Animal Husbandry, Health, Education and Social Welfare. By the end of the fifth five year plan the programme covered roughly, '1880 community development blocks in the country. However, with the introduction of other nutrition programmes in the country, the coverage of this programme was reduced and it is no longer in operation.

Thus, we studied about the major supplementary feeding programmes of the country. We also observed that with the launch of as big a programme as ICDS, some of the smaller programmes like Special Nutrition Programmes and Applied Nutrition Programme gradually ceased to be in operation. ICDS programme included all the services provided under these programmes. ICDS being a very ambitious programme, (its coverage still expanding) is formulated and implemented by the nodal agency – Department of Women and Child Development under Ministry of Human Resource Development and thus duplication of services by other government agencies is avoided.

Let us now do an exercise to recapitulate our knowledge.

Check Your Progress Exercise 4

1. Read the following carefully and mention whether true or false and correct the false statement.
 - a) Mid day meal programme was launched not only to improve nutritional status of children but also to attract poor children to school.
 - b) The department of women and child development operates the mid day meal programme.
 - c) Balwadi feeding programme of the government is implemented through voluntary organization.
 - d) The nutrition component of PMGY is to be made under the supplementary nutrition programme component of the ICDS.

2. Discuss briefly the special nutrition programme (SNP) .

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3. Enumerate the programme component of MDM programme.

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10.7 FOOD SECURITY PROGRAMMES

Food security as you may recall studying in Unit 2 refers to access by all people at all times to enough food for an active, healthy life. It is now well recognized that the availability of food grains is not a sufficient condition to ensure food security to the poor. It is also necessary that the poor have sufficient means to purchase food. The capacity of the poor to purchase food can be ensured in two ways – by raising the incomes or supplying food grains at subsidized prices. While employment generation programmes attempt the first solution, the public distribution system (PDS) is the mechanism for the second option. Our government has made consistent efforts to improve availability of food for poor. Besides the PDS, other programmes such as, the Antodaya Anna Yojna (AAY), the Annapurna Scheme, National Food for Work Programme (NFFW) have also been launched. Let us learn about these programmes, here in this section. We shall begin with the PDS.

10.7.1 .Public Distribution System (PDS) and the Targeted Public Distribution System (TPDS)

A well targeted and properly functioning Public Distribution System (PDS) is an important constituent of the strategy for poverty alleviation. PDS continues to be a major instrument of Government's economic policy for ensuring food security to the poor. With a network of more than 4.62 lakh fair price shops (FPS) distributing commodities worth more than Rs 30,000 crore annually to about 160 million families, the PDS in India is perhaps the largest distribution network of its kind in the world. For effective functioning of PDS, the Central Government bears the responsibility for procurement and supply of foodgrains namely, wheat and rice, besides sugar, imported edible oils and kerosene to the State governments and the Union Territories for distribution. Some States /UTs distribute additional items of mass consumption also through the PDS outlets.

The PDS as it was being implemented earlier, had been widely criticized for its failure to serve the population *Below the Poverty Line* (BPL), its urban bias, limited coverage in the States with high concentration of the rural poor and lack of transparent and accountable arrangements for delivery. Therefore, in June 1997, the Government of India launched the *Targeted Public Distribution System* (TPDS) with focus on the poor.

Under the new system a *two tier subsidized* pricing system has been introduced to benefit the poor. The essential features of TPDS are: Government of India is committed to making available foodgrains to the States to meet the requirement of foodgrains at the scale of 10 Kg per month per family at specially subsidized prices to population falling below the officially estimated poverty line (BPL families). The states would also receive the quantity needed for transitory allocation to Above Poverty Line (APL) population. The state governments were to streamline the PDS by issuing special cards to BPL families and selling essential articles under TPDS to them at specially subsidized prices, with better monitoring of the delivery system.

The BPL households were determined on the basis of population projections of the Registrar General of India for 1995 and the State wise poverty estimates (1993-94) of the Planning Commission for 1993-94. The total number of BPL households so determined was 596.20 lakh. Thus the scheme, when introduced, was intended to benefit these poor families for whom a quantity of about 72 lakh tonnes of foodgrains was earmarked annually.

Keeping in view the consensus on increasing the allocation of foodgrains to BPL families, and to better target the food subsidy, Government of India increased the allocation to BPL families from 10 Kg to 20 Kg of foodgrains per family per month at 50% of the economic cost and allocation to APL families at economic cost w.e.f. 1.4.2000. The allocation of APL families was retained at the same level as at the time of introduction of TPDS but the *Central Issue Prices* (CIP) for APL were fixed at 100% of economic cost from that date so that the entire consumer subsidy could be directed to the benefit of the BPL population.

The end retail price is fixed by the States/UTs after taking into account margins for wholesalers/retailers, transportations charges, levies, local taxes etc. Under the TPDS the States are requested to issue food-grains at a difference of not more than 50 paise per Kg over and above the CIP for BPL families. Flexibility to States/UTs has been given in the matter of fixing the retail issue prices by removing the restriction of 50 paise per Kg over and above the CIP for distribution of foodgrains under TPDS except with respect to Antyodaya Anna Yojana (AAY) where the end retail price is to be retained at Rs. 2/- per Kg for wheat and Rs. 3/- per Kg for rice. We shall learn about the AAY scheme in a little while from now.

For identification of BPL families under TPDS, Gram Panchayats and Nagar Palikas are involved. While doing so the thrust is to include the really poor and vulnerable sections of the society such as landless agricultural labourers, marginal farmers, rural artisans/craftsmen such as potters, tapers, weavers, black-smith, carpenters etc. in the rural areas and slum dwellers and persons earning their livelihood on daily basis in the informal sector like potters, lickshaw-pullers, cart-pullers, fruit and flower sellers on the pavement etc. in urban areas.

Scale and Issue Price

Since 1997, the Scale of issue of the BPL families has been gradually increased from 10 Kg to 35 Kg per family-per ration month. The scale of issue was increased from 10 Kg to 20 Kg per family per family per month with effect from 1.4.2000. The allocation for APL families has been retained as the same level as at the time of introduction of TPDS (i.e 10 Kg per family per month). The allocation of foodgrains for the BPL families has been further increased from 20 Kg to 25 Kg per family per month with effect from July, 2001. Initially, the Antyodaya (AAY) families were provided 25 Kg of foodgrains per family per month at the time of launching of the scheme. The scale of issue under APL, BPL and AAY has been revised to 35 Kg per family per month with effect from 1.4.2002 with a view to enhancing the food security at the household level

10.7.2 Antyodaya Anna Yojana (AAY)

Antyodaya Anna yojana has been launched by the Hon'ble Prime Minister of India on the 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 five years and to reform and improve the Public Distribution System so as to serve the poorest of the poor in rural and urban areas. It is for the poorest of poor that the Antyodaya Anna Yojana has been conserved. It is estimated that 5% of 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% of our population (5 crores of people or 1 crore families) which constitutes the target group of Antyodaya Anna Yojana.

Scale and Issue Price

Antyodaya Anna Yojana contemplates identification of one crore families out of the BPL families who would be provided food grains at the rate of 35 Kg per family per month. The food grains will be issued by the Government of India @ Rs.2/- per Kg for wheat and Rs. 3/- per Kg for rice. The Government of India suggests that in view of abject poverty of this group of beneficiaries, the State Government may ensure that the end retail price is retained at Rs.2/-per Kg for wheat and Rs.3/- per Kg for rice.

Identification of Beneficiaries

The most crucial element for ensuring the success of Antyodaya Anna Yojana is the correct identification of Antyodaya families. It is estimated that there are 6.52 crore families below poverty line in the country as on 01-03-2000. These families are being provided food grains under the TPDS at highly subsidized rates. One crore Antyodaya families would constitute about 15.33% of the BPL families in the country. The identification of these families are carried out by the State Government / UT administrations, from amongst the number of BPL families within the state.

Issue of Ration Cards

After the identification of Antyodaya families, distinctive ration cards to be known as "Antyodaya Ration Card" are issued to the Antyodaya families by the designated authority. The ration card have the necessary details about the Antyodaya family, scale of ration etc.

Finally, let us get to know about the Annapurna Scheme.

10.7.3 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 (NOAPS). Under the Annapurna Scheme, 10 Kg of *food grains per month* are to be provided 'free of cost' to the beneficiary. The number of persons to be benefited from the Scheme will, in the first instance, be 20% of the persons eligible to receive pension under NOAPS in States/Union Territories. The National Old Age Pension Scheme (NOAPS), launched in 1995, seeks to provide pension @ Rs. 75 per month to 68.81 lakh destitutes, aged 65 years and above. Thus, 20% of 68.81 lakh would imply that 13.762 lakh beneficiaries would be eligible for coverage under the Annapurna Scheme.

Who are eligible for this scheme and how are they identified? Let's find out next.

Eligibility Criteria

Central assistance under Annapurna Scheme is provided to the beneficiaries fulfilling the following criteria:

- a) The age of the beneficiary (male or female) should be 65 years or above.
- b) The beneficiary must be "destitute" in the sense of having little or no regular means of subsistence from his/her own source of income or through financial support from family members or other sources. In order to determine destitution, the criteria (if any) currently in force in the State/UTs could also be followed.
- c) The beneficiary should not be in receipt of pension under the NOAPS or State Pension Scheme.

Identification of Beneficiaries

- a) The Gram Panchayat is required to identify, prepare and display list of persons eligible to receive benefits under the annapurna scheme, after giving wide publicity to the scheme. The panchayat is also responsible for the distribution of the *Entitlement Card* to beneficiaries, the dissemination of information about the scheme and the procedure for securing benefits under the same. The Municipality is responsible for the above activities in the implementation of the scheme in their respective areas. The State Government communicates the targets for "Annapurna" to the Panchayat and municipalities for identification of the beneficiaries.

Next, who is responsible for implementation of this scheme? The following paragraph highlights this aspect.

Implementing Authorities

- a) The Department of Public Distribution, Union Ministry of Consumer Affairs and Public Distribution ensures the supply of required quantities of prescribed quality food grains from the godowns of the Food Corporation of India (FCI) to the agency designated by the State Government.
- b) At the State level, the State Department of Public Distribution (Departments of Food, Civil Supplies and Consumer Affairs) and at the District level, the Collector/District Magistrate/Chief Executive Officer, Zila Panchayat is squarely responsible for the implementation of the scheme. The State Food, Civil Supplies and Consumer Affairs Department will purchase the food grains from the Food Corporation of India on payment of economic cost and will ensure that the FCI supplies the food grains to the district as per district-wise allocation decided by the state within the overall allocation of the State concerned. The Collector/

CEO, through the District Officers of the State Food Civil Supplies and Consumer Affairs Department is responsible for ensuring the availability of food grains at the District level and for distributing the same through the Network of Fair Price Shops under the Targeted Public Distribution System (TPDS). The Collector/CEO makes arrangement for the distribution of food grains and issue the Entitlement Cards through the Panchayat/Municipalities and ensure that the beneficiaries covered under Annapurna are not receiving any old age pensions.

10.7.4 National Food for Work Programme (NFFWB)

The National Food for Work Programme has been conceived with the objective to provide additional resources apart from the resources available under the Sampoorna Grameen Rozgar Yojana (SGRY) (about which we shall study in the next section) to 150 most backward districts of the country so that generation of supplementary wage employment and providing of food security through creation of need based economic, social and community assets in these districts is further intensified. The NFFWP is open to all rural poor who are in need of wage employment and desire to do manual and unskilled work. The programme is self-targeting in nature.

Distribution of foodgrains as part of wages under the NFFWP is the focus of the programme and based on the principle of protecting the real wages of the workers besides improving the nutritional standards of the families of the rural poor. Under the scheme, foodgrains are given as part of wages to the rural poor at the rate of 5 Kg per manday. More than 5 Kg foodgrains can be given to the labourers under this programme in exceptional cases subject to a minimum of 25% of wages to be paid in cash. The State Governments will take into account the cost of foodgrains paid as part of wages, at a uniform BPL rate. The workers will be paid the balance of wages in cash, such that they are assured of the notified Minimum Wages.

The programme initially covers 150 most backward districts of the country and provide additional supplementary wage employment through creation of need-based economic, social and community assets. Works relating to water conservation, drought proofing and land improvement, flood control and rural connectivity of all-weather roads are taken up to create wage employment. The Centre provides food grains and cash component to the states to generate additional wage employment. Distribution of foodgrains to the workers under the programme is either through PDS or by the Village Panchayat or implementing agency or any other Agency appointed by the State Government. Distribution of foodgrains is made to the workers, most preferably, at the work site.

With this we end our study about the programmes being run by the government to ensure adequate availability of foodstuffs for the poor. In addition to the programmes discussed above there are a few employment schemes linked with food security. We will review a few of these next.

10.8 SELF EMPLOYMENT AND WAGE EMPLOYMENT SCHEMES

Poverty alleviation and employment generation programmes have been in operation for several years. The specifically designed anti-poverty programmes for generation of self employment and wage employment in rural areas have been redesigned and restructured to improve their efficacy/impact on the poor and ensuring food security. Some of these programmes are discussed in this section.

10.8.1 Sampoorna Gramin Rojgar Yojana

The Government of India has indicated the Sampoorna Gramin Rojgar Yojana as an important scheme of poverty alleviation in the 10th Five Year Plan. The Honourable Prime Minister of India, on 15th August, 2001 has declared the new employment scheme linked with food security namely Sampoorna Gramin Rojgar Yojana. Accordingly, Government of India has merged the Employment Assurance Scheme and Jawahar Gram Samridhi Yojana into *Sampoorna Gramin Rojgar Yojana* and Sampoorna Gramin Rojgar Yojana has been started implementing in the country w.e.f. 25/9/2001.

The scheme is self targeting in nature. Under the scheme, the foodgrains are distributed to the labourers as a part of wages at the BPL rate. The main objective of the scheme is to give the security to the rural poor and create a water conservation watersheds, roads and small infrastructures by generating the employment for poverty alleviation through the employment and foodgrains. Generation of supplementary employment for the unemployment poor in the rural area is the focus of the scheme.

The SGRY is available for all the rural poor (BPL and APL), who are in need of wage employment and are willing to take up manual on unskilled works in an around his/her village and habitation. However, the preference will be given to the poorest among the poor, SC/ST and parents of child labourers withdrawn from hazardous occupation. The programme is implemented as a centrally sponsored scheme on cost sharing basis between the Central and State in the ratio of 75:25.

Next, we move on to the Swarna Jayanti Gram Swarozgar Yojana.

10.8.2 Swarna Jayanthi Gram Swarozgar Yojana (SGSY)

The Government of India by restructuring the self employment programmes has merged IRDP (Integrated Rural Development Programme), TRYSEM (Training of Rural Youth for Self Employment), DWCRA (Development of Women and Children in Rural Areas), Million Wells Scheme (MWS) into a new scheme namely "*Swaranjayanti Gram Swarozgar Yojana*" which has been launched from April 1999. This yojana is a holistic package covering all aspect of self employment such as organization of poor into self help groups, training, credit, technology, infrastructure and marketing. The centre and state governments are funding the yojana on 75:25 sharing basis.

The scheme aimed at covering 30% of below poverty line (BPL) families in each block during the five years i.e., 1999-2000 to 2003-2004. The objective of SGSY is to bring the assisted poor families above the poverty line within 3 years, by providing them income generating assets through a mix of bank credit and government subsidy. The scheme envisages that the monthly income of a assisted family increases to atleast Rs. 2000/- monthly. SGSY aims at establishing a large number of micro enterprises in the rural areas, organization of rural poor into self help groups and their capacity building, planning of activity clusters, infrastructure build up, technology, credit and marketing. The assisted families under this scheme will be individuals or groups (SHGs). SGSY particularly focuses on the vulnerable groups among the rural poor. Accordingly, the SC / ST account for the 50% of swarozgaris, women for 40% and the disabled for 3%. SGSY is implemented by the DRDAs (District Rural Development Agency) through the panchayat samitis.

SGSY integrates various agencies - District Rural Development Agencies, banks, line departments, Panchayati Raj Institutions, non-governmental organizations and other semi-government organizations.

With this we end our study of the food security and the wage employments schemes. Do answer the check your progress exercise given herewith. This will help you recapitulate what you have learnt so far.

Check Your Progress Exercise 5

1. Fill in the blanks:

- (a) is the main food subsidy programmes implemented by the government to provide food security to poor people in India.
- (b)andare the local bodies involved in the identification of BPL families.
- (c) Yojana launched on 25th December, 2000 serves the poorest of the poor in rural and urban area.
- (d) Distribution of food grains is done as a part of wages under the programme
- (e) The implementing authority of annapurna scheme at the state level is department of public distribution.

2. Why were the food security programmes initiated. List the various food security programmes initiated in our country?

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3. Enumerate the working of the PDS. Also mention the highlights of TPDS.

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4. Who are the beneficiaries of Annapurna Scheme? Discuss the criteria for being eligible for this scheme.

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5. List the salient features of National Food for Work Programme.

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10.9 LET US SUM UP

In this unit we studied that the Government of India has undertaken several measures in alleviating the problems of malnutrition in the country. Some of these include formulation and implementation of National Nutrition Policy and various nutrition intervention programmes like Integrated Child Development Services Scheme, nutrient deficiency control programmes and supplementary feeding programmes. The National Nutrition Policy advocates a "comprehensive, integrated and inter-sectoral strategy for alleviating the multifaceted problem of malnutrition and achieving the optimal state of nutrition for the people". The Integrated Child Development Services is the world's most unique welfare programme, which holistically addresses health, nutrition and development needs of young children, adolescent girls and pregnant/nursing mothers across the life cycle. The three important ongoing nutrient deficiency control programmes are: 1) National Prophylaxis Programme for Prevention of Blindness due to Vitamin A deficiency 2) National Anaemia Control Programme, and 3) National Iodine Deficiency Disorder (IDD) Control Programme. These programmes aim towards reduction and elimination of vitamin A deficiency, iron deficiency anaemia and iodine deficiency disorders respectively. Mid Day Meal Programme is one of the most important ongoing supplementary feeding programmes organized by the Department of Education. It is aimed at not only to improve the nutritional status of school children but also to attract poor children to school. In addition to these programmes the programmes linked to food security and wage employment such as PDS, food for work programme, SGRY and SGSY were also described.

10.10 GLOSSARY

- Balwadi** : A play school for children 3-5 years of age
- Intrauterine device** : A birth control device, such as a plastic or metallic loop, ring, or spiral, that is inserted into the uterus to prevent implantation.
- Mahila mandal** : Women's group formed to carry out specific activities

10.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 3

1. The main aims of the NNP are:
 - The draw attention to the urgent need to reduce malnutrition in the country.
 - To highlight the need for inter-sectoral coordination to achieve nutritional goals.
 - To orient relevant sectors to perceive nutrition as an outcome of their sectoral activities, and
 - To identify short term, intermediate and long-term strategies for achieving nutritional goals either through direct policy changes or indirect institutional or structural changes.
2. The two direct short-term interventions of Nutrition Policy Instruments are.
 - a) Fortification of essential foods, for example salt with iodine and/or iron.
 - b) Production and popularization of low cost nutritious foods from indigenous and locally available raw material, by involving women in this activity.

The two indirect policy instruments of Nutrition policy are:

Public Nutrition

- i) Ensuring food security, a per capita availability of 215 Kg/person/year of food grains
 - ii) Improvement in the dietary patterns by promoting the production and increasing the per capita availability of nutritionally rich foods.
3. The nodal responsibility at the central level for policy implementation rests with the Ministry of Human Resource Development under the chairmanship of Secretary, Department of Women and Child Development. Sectoral Ministries/ Departments concerned like Agriculture, Food, Civil Supplies, Health and Family Welfare, Rural Development, Education and Environment, whose role is crucial for sustainable improvement in nutritional status of the population, are represented on the Inter-Ministerial Coordination Committee. A National Nutrition Council is constituted in the Planning Commission with the Prime Minister as its President and concerned Union Ministers, a few State Ministers by rotation, and experts, representatives of non-governmental organizations and grass root leaders especially women as its members. Further, the effective implementation of the NNP is dependent to a large extent on the State Governments/Union Territory Administration and the constitution of State Nutrition Councils.

Check Your Progress Exercise 2

1. The various nutrition programmes include: Integrated Child Development Services Programme (ICDS), Nutrient Deficiency Control Programmes namely National Prophylaxis Programme for Prevention of Blindness due to Vitamin A deficiency, National Anaemia Control Programme, National Iodine Deficiency Disorder (IDD) Control Programme, Food Supplementation Programmes like the Special Nutrition Programme (SNP), Balwadi Feeding Programme, Composite Nutrition Programme and Applied Nutrition Programmes. Food Security Programmes, namely Public Distribution System (PDS), Antodaya Anna Yojana, Annapurna Scheme, National Food for Work programme and the Self Employment Programmes, linked to Food security namely Swarnajayanti Gram Swarozgar Yojana, Sampoorna Gramin Rojgar Yojana.
2. The major objectives of ICDS are:
 - To improve the nutritional and health status of children in the age group 0-6 years and adolescents.
 - Lay the foundation for proper psychological physical and social development of the child.
 - Reduce the incidence of mortality, morbidity, malnutrition and school drop-out.
 - Achieve effective coordination of policy and implementation amongst the various departments to promote child development.
 - Enhance the capability of the mother to look after the health and nutritional needs of the child through proper nutrition and health education.
3. Programme components of ICDS's scheme are supplement nutrition, immunization, periodic health and check-ups, treatment of minor ailments and referral services, growth monitoring, non-formal preschool education, health and nutrition education, adolescent girls scheme, and safe drinking water.

Check Your Progress Exercise 3

1. The various nutrient deficiency control programmes are:
 - a) National Prophylaxis Programme for Prevention of Blindness due to vitamin A deficiency.
 - b) National Nutritional Anaemia Control Programme.
 - c) National Iodine deficiency Disorders Control Programme (NIDDCP).

The objectives of NIDDCP are:

- Supply of iodized salt in place of common salt to the entire country. The emphasis will be on establishing IDD plants at consumption level with active private sector participation.
 - Re-survey to assess the impact of supply of iodized salt.
2. Various dietary actions one would take to promote foods rich in vitamin A include:
- Regular dietary intake of vitamin A rich foods by pregnant and lactating mothers and by children under 5 years of age must be promoted.
 - Breastfeeding including feeding of colostrums must be encouraged.
 - Feeding of locally available β -carotene (precursor of vitamin A) rich food such as green leafy vegetables and yellow and orange vegetables and fruits like pumpkin, carrots, papaya, mango, oranges etc. along with cereals and pulses to a weaning child must be promoted widely. In addition, whenever, economically feasible, consumption of milk, cheese, paneer, yoghurt, ghee, eggs, liver etc. must be promoted.
3. Dosage recommended for pregnant and preschool children for iron are as follows:
- a. Pregnant Women: One big (adult) tablet per day for 100 days (each tablet containing 60 mg/100 mg of elemental iron of 500 mg folate, in the first trimester of pregnancy).
 - b. Preschool Children (1-5 years): One pediatric (small) tablet containing 20 mg iron and 100 mg folic acid daily for 100 days every year.

The recommended dosage of vitamin A for the pregnant and preschool children is:

- a) Infants (6-11 months): one dose of 100 000IU every 6 months
- b) Preschool children: a dose of 200 000IU every 6 months

Check Your Progress Exercise 4

1.
 - a) True
 - b) False. The MDM programme is operated by department of education
 - c) True
 - d) True

The SNP was launched by Central Social Welfare Board (CSWD) in 1970-71. It involved provision of nutrition for pregnant women, lactating women, and children. The main component of programme was food supplementation of 300 Kcal and 10 g protein for children and 500 Kcal and 10 g protein for children and 500 Kcal and 25 g protein for pregnant/lactating women. Feeding of the beneficiaries was undertaken for 300 days a year.

3. The major components of the MDM programme is food supplementation, this consists of:
 - 100 g of food grains (wheat or rice) per child per school day where cooked meals are served; 3 kgs food grains per student per month where food grains are distributed.
 - Transport subsidy up to maximum Rs.50 per quintal for movement of food grains from the nearest FCI depot to schools.

- Food grains (wheat/rice) is supplied through FCI the cost of which is reimbursed at BPL.

Check Your Progress Exercise 5

1. a) PDS/TPDS
b) Gram Panchayat, nagar Palikas
c) Antyodaya Anna
d) National Food for Work
e) State
2. The Food Security programmes were initiated in order to give access to all people enough food for an active and healthy life. It aimed at the concept of food security, that is to remove the imbalance between demand and supply.

The various food security programmes are:

- i) Antyodaya Anna Yojana (AAY)
 - ii) Annapurna Scheme
 - iii) National Food for Work Programme
3. The PDS is an essential part of the GOI to alleviate poverty in our country, and in turn ensure food security. The backbone of the PDS is the extensive network of 4.62 lakh Fair Price Shops (FPS) that distributes essential commodities such as, wheat, rice, sugar, imported edible oil and kerosene worth more than 30,000 crore annually to 160 million families.

The main highlights of the TPDS are as follows:

- a) The commitment of the GOI to meet the requirement of food grains at the scale 10 Kg per month at specially subsidized rates for BPL families.
 - b) The provision to states, a transitory allocation to Above Poverty Line (APL) population.
 - c) The issuing of special cards to BPL families and selling essential articles under TPDS at subsidized rates, thus streamlining the PDS.
4. The beneficiaries of Annapurna Scheme are the senior citizens who have remained uncovered under the new Age Pension Scheme (NOAPS). The eligibility criteria for this scheme is –
 - a) the age of beneficiary should be 65 years or above, b) The beneficiaries must be a destitute, and c) The beneficiary should not be in receipt of pension under the NOAPS or State Pension Scheme.
 5. The salient features of National Food for Work programmes are:
 - to provide additional resources apart from the resource available under Sampoorna Gramin Rozgar Yojana (SFRY) to 150 most backward districts.
 - Distribution of food grains as part of wages under the WFFWP is also one of the focus of this programme.