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**VALUATION OF SPECIAL NUTRITION  
PROGRAMME (SNP) AND ICDS UNDER REVISED  
LONG TERM ACTION PLAN (RLTAP) IN THE  
K.B.K. DISTRICTS OF ORISSA**



Anganwadi Centre (AWC) and Infrastructure

Submitted to:

**PLANNING AND COORDINATION DEPARTMENT  
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# EXECUTIVE SUMMARY

## **Introduction:**

With a view to improving the health and nutritional status of children in the age group of 0-6 years, pregnant women and lactating mothers, the Special Nutrition Programme has been included as one of the most important components of the ICDS Programme. Malnutrition, endemic poverty and low household incomes over the years have resulted in poor nutritional status of the population in these households resulting in food distress and food insecurity. Food insecurity impacts some more adversely. When families and people suffer, children and women suffer most due to their greater vulnerability and higher biological need for nutritional protection and security. Growing infants and children, adolescent girls, pregnant women and nursing mothers face far greater risk from the nutritional depletion than others. This nutritional insecurity pre-eminently of pregnant and nursing women and children in the formative years is addressed through the Special Nutrition Programme. Malnutrition impairs physical and mental development and hence providing nutritional support to children in the vulnerable age group is essential to prevent the onset of malnutrition and growth faltering in the formative years. With a view to reducing morbidity and mortality among the vulnerable sections of the population, the Special Nutrition Programme through the ICDS scheme has proved to be one of the most important food--based interventions in the State.

The intensity of poverty in the KBK region caused by low productivity of agriculture and the devastation of forest-based livelihoods has, over the years, resulted in poor, nutritional status of the population and low life expectancy. It is very much essential to provide such facilities to the poor people by the government in this KBK region.

## **An overview of the Programme:**

In order to combat malnutrition, poverty and infant mortality rate in KBK districts "Special Nutrition Programme for under three" under RLTAAP is launched to cover the uncovered 0-3 age group Children of KBK district during 2002-03. But due to ban imposed by GEAC, CARE/WFP could not be able to import CSB and discontinued their support for which entire beneficiaries of KBK were covered out of funds received under RLTAAP. After discontinuance of CARE/WFP Support, all 8 KBK districts were covered through local food like Wheat, Dal and Guda during 2002-03. During the year 2003-04, WFP supported by providing India mix in exchange of equal quantity of wheat in the districts of Koraput, Nawarangpur and Malkangiri district. During 2004-05, Orimix one fortified blended RTE food was introduced in rest 5 KBK districts with help of WFP where WFP taken the entire cost of RTE and only support the cost of bagging and fortification. The said arrangement is containing so far in these 8 districts. In Koraput, Malkangiri and Nawarangpur district the India mix is available for the beneficiaries and the rest five districts are Orimix.

Among the rest five districts Rayagada, Kalahandi, Bolangir and Nuapada are available Orimix with Vegetable Oil and Sonepur district is available only Orimix.

### **Objectives of the Study:**

After the implementation of the Programme for a period of 8 months, it was felt essential to undertake a Quick Evaluation to assess and find out the acceptability and operational advantages of present foodstuff (India mix/Orimix) amongst the beneficiaries, especially in the community in which it is under implementation. Since more than four years have been completed from the inception of the intervention and huge investment has been made, Government of Orissa in the Planning and Coordination Department very rightly have taken a decision to undertake an in-depth evaluation to ascertain the effectiveness of the Programme and also its implementation keeping the Programme objectives in view. However, the evaluation study has been designed with the following specific objectives:

- To assess and find out the impact of the Programme in improving the nutritional level of the children and the mother among the beneficiaries covered in the area of operation.
- To assess the effectiveness of the Programme in terms of reducing the IMR, MMR and incidence of disease owing to lack of nutrition.
- To assess the utilization of funds on each of the components of the Programme as against the planned budget.
- To identify to what extent the overall health status of the women and children of the region has improved as a result of the introduction of the Special Nutrition Programme and ICDS in the area.
- To identify the constraints or factor responsible for failure or poor implementation of the Special Nutrition Programme in particular and ICDS in general.
- To ascertain special efforts, if any made by the implementing agency to avoid failures and to promote success of the Programme.
- To identify best/good practices if any, in any specific site/place and highlight such activities as replicable mode for the project.
- On the basis of the findings of the study, recommend specific measures to improve the Programme implementation for achieving greater success of the Scheme/Programme.

### **Sample Size:**

The study was carried out in 8 KBK districts covering 24 Blocks, 24 Gram Panchayats and 48 Anganwadi Centers (AWCs) and 480 beneficiaries @10 from each sample AWCs. All categories of beneficiaries under the ICDS were covered under the study and besides the beneficiaries, different kinds of stakeholders such as ICDS

Supervisors, CDPOs, school teachers, PRI members and other opinion makers and important persons were covered to assess the functioning of the Programme and also to identify what kind of strategy change is required if at all.

### **Methodology of the Study:**

The following are some of the important tools that were used in order to collect data in the empirical study. Focused Group Discussions (FGDs) were organized in each of the 48 locations in which the sample AWCs is located. Like wise, PRA exercise has also been carried out in all the 48 villages in which the Anganwadi Centers are situated. Besides, 10 Sample Beneficiary Households from each of the sample AWCs (480 Households in total) have been interviewed for the purpose of study using schedule method. Apart from the above tools, some typical Case Studies have been conducted to have a deeper insight in to the implementation process of the Programme. In addition to the aforementioned methods, Stakeholder Analysis and Key Informants Interview have been under taken to elicit in-depth information in respect of the Programme utilization and impact of the Programme.

Two structured schedules were used to collect Primary data i.e. Beneficiary Household survey schedule and AWC profile schedule. Since a number of aspects and data pertaining to those during the empirical study could not be captured through the study tools such as Schedule, Interview, Focused Group Discussion methods, they were collected through Participant Observation method and Participatory Walk Through method as well.

### **Profile of the Area:**

With poor socio-economic infrastructures, especially in KBK region, the villages surveyed by us are found deficient in basic social and economic amenities like education, health, potable water, sanitation, road and transport, animal resource, electricity, market, irrigation, village organization and credit institutions. Our survey of 48 villages and focus group discussions held with people of different castes and class reveals that the principal means of livelihood of people in these villages is forest.

Maximum villages of our study area have very poor road and transport facilities. Some of the villages are situated within the forest and hilly regions. Due to hilly terrains, it is extremely expensive and difficult to connect fair road to the habitations. Due to lack of these facilities, they suffer a lot and they fail to know about all the facilities which is given by the government and even find it difficult to go the government officials for their requirements. The internal roads in the villages are also in bad shape, which worsens during the rainy season.



## **Profile of the Beneficiaries:**

Distribution of sample beneficiaries reveals that out of the total sample of 480, the share of ST community is the highest (45.00%), followed by other communities (30.63%) and SC communities (24.38%). The similar trend is observed in all the four categories of beneficiaries i.e. children below 3 years and 3-6 years of age and in case of both lactating and pregnant mothers.

The beneficiaries are classified into two categories according to their economic status. The beneficiaries who are living above the poverty line are coming under APL category, whereas, the beneficiaries who are living below the poverty line are taken as BPL beneficiaries. Almost all the beneficiaries are coming under BPL category, as revealed from the analysis of data (99.58%). Only 2 beneficiaries are from APL category. One APL beneficiary belongs to 'below three years' of age category and the other is from 'lactating mother' category.

## **Impact of the Programme:**

295 children have been covered for this study. Out of these 295 children 176 (59.66%) are found to be of normal category and 119 (40.44%) are found as malnourished. The malnourished children are further classified into four categories, such as Grade-I, Grade-II, Grade-III and Grade-IV according to the degree of malnourishment. Out of the 119 children who are malnourished, 57, 33, 20 and 9 belong to Grade-I, Grade-II, Grade-III and Grade-IV respectively and they constitute 19.32, 11.19, 6.78 and 3.05 per cent of the total children surveyed, respectively.

About 160 children have family size of 3-4 members. Out of them 79 are normal and 81 are malnourished. Among the malnourished children 38 are of Grade-I, 23 are of Grade-II, 14 are of Grade-III and only 6 are of Grade-IV type malnourished. Similarly, 113 children have family size of 5-6 members. Out of them 83 are normal and 30 are malnourished. Among the malnourished children 17 are of Grade-I, 8 are of Grade-II, 4 are of Grade-III and the rest one child is Grade-IV type malnourished. Though, 19 children have family size of 7-8 members none of them is severely malnourished i.e. malnourished of Grade-IV category and only one child is malnourished of Grade-III category. In this family size group only two children are Grade-I type malnourished and equal numbers of children are of Grade-II type malnourished.

There are 80 beneficiaries whose head of the households are agriculturist. Here, 51 children are normal and 29 are malnourished. Among the malnourished children 16 are of Grade-I, 9 are of Grade-II, 3 are of Grade-III and one is of Grade-IV category. Most of the beneficiaries are the children of labourer family. Out of 213 beneficiaries in this

category 123 are normal and 90 are malnourished. Among the malnourished children 41 are of Grade-I, 24 are of Grade-II, 17 are of Grade-III and the rest 8 are of Grade-IV type. Therefore, malnutrition exists among the children of agriculture and labourer families and not among the children of businessman family. However, the degree of malnutrition is high among the children of the labourer family than that of the agriculturist family.

Regarding the impact of the programme of ICDS the views from the mother beneficiaries, head of the beneficiary household, and other key informants like Sarpanch, ward member, school teachers, block officials, village community leader were taken. All of them are of the opinion that the programme has a positive impact on the health status of the children and mother beneficiaries. However, the level of impact varies from location to location depending on the skill of the concerned officials, awareness level of local people, co-operation from the head of the household and most importantly availability of manpower. They made some valuable suggestions which has been discussed in the subsequent chapters. The Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) are reducing in the state as a whole. Similarly, dropout rate among the school going children has been reduced in the sample districts. The awareness level among the people improved. Therefore, it can be safely said that the programme has a positive impact on the nutritional status of the children and mother beneficiaries. However, still there is scope for further improvement in some areas.

### **Anganwadi Centres:**

- No of AWCs having own building:

Out of 48 surveyed AWCs, 77% (37 nos.) have own building and rest 23% (11 nos.) have no building. Among 37 AWCs having own building, 60% are in bad condition because of low quality construction. In the remaining 11 AWCs without having own building and classroom are continuing in Club house (2 nos.), Gudi Ghar (1 no.), Dhangada House (1 no.), Gram Panchayat veranda (1 no.), School veranda (2 nos.), Mahila Samiti (1 no.), Anganwadi Worker's house (1 no.), private house veranda (1 no.) and also in private rented house (1 no.) with Rs.50/- per month rented cost.

- Food stuff/ Ration Store:

In the AWCs 77% (37 nos.) centers have their own building out of which in 45.83% (22 nos.), workers used to keep foodstuff at center and others (31.17%) use their own house or helper's house to store the foodstuff. The different reasons for not storing at centers are apprehension of theft, leakage of water, unsafe condition of door and window. About 23% (11 nos.) centers do not have own building and they use space in buildings like School, Club, Mahila Samiti etc. to store the foodstuff. This place is not a safety place for storage of the foodstuff.

- Visiting by CDPO/ Supervisor:

There is a great necessity to visit AWCs by the CDPO and Anganwadi Supervisor at regular intervals. Without supervision by the higher officer all work can't be done successfully. The study revealed that out of 48 AWCs surveyed only in about 20 percent cases the CDPOs are visiting the centers and the field observation indicates that as high as 20 to 30 percent CDPOs post are lying vacant. So one Supervisor is in charge of the office where CDPOs are not in place.

### **Other Components of ICDS:**

- Immunization:

It was observed that more than 98 percent of the children covered under the empirical study were immunized. However, in some cases the full doze of immunization has not been availed by the beneficiaries and they have been irregular. Reasons attributed to such discontinuance are due to cultural, economic and lack of awareness factors.

- Health Check-up & Referral Services:

The study findings reveal that health check up camps are attended to by almost all the people belonging to the General Caste and relatively higher economic and educational category families. But among the Scheduled Tribe in particular the attendance in the Health Check up camps is relatively poor and among the Scheduled Caste categories of people, it is higher than the ST and lower than the General Caste people.

- Pre-school non-formal Education:

Pre-school non-formal education has certainly drawn more number of children to school in the study area and this also has helped in creating an environment for the pre-school children to go to school for formal education afterwards, the study finding has revealed that the children are more interested for the food component in the school and least interest is shown towards learning.

- Health Education:

Health education has achieved a great deal of success in considerable increase in the awareness level of the people of the locality towards health aspects. There has been marked change in their attitude towards health and they are accessing to modern health care system than before.

### **Positive Aspects of the Programme compared to the Earlier Programme:**

- Acceptability:

One of the major questions posed to all the respondents including the key stakeholders and beneficiaries was the acceptability of present food stuff.

Majority of the respondents stated that it is highly acceptable. The study clearly states that as high as 92.70 per cent beneficiaries indicated present food stuff to be more acceptable than the conventional wheat based take home ration (THR) whereas only 5.27 per cent opined that there is no change in its acceptability as compared to the wheat based ration and 1.80 per cent did not give any response.

- **Taste:**

The study revealed that all the beneficiaries, beneficiary household members, key stakeholders and all those who were interviewed opined that the present foodstuff tastes very good. In fact, its taste has contributed to its acceptance level. All the respondents stated it is a sweetened blended food. Its taste is so good that the children at home take it raw as and when they feel hungry which has led to its consumption within a much shorter span than it is supplied for. In case of children below 3 years, who normally create problem in eating food were reported to be eating this food with greater acceptance than the food prepared under the earlier system.

### **Best Practices:**

Regarding positive impact of this programme the ICDS of Office of Bangomunda block of Bolangir district introduces a method called as "Aame bi Paribu". In this Staggs like CDPO, Supervisors etc. This process is continuing one week regularly. In this method 10 children beneficiary's mother will come to ICDS Office with their beneficiary child and cook here the food and also feeding their child in presence to ICDS.

### **Constraints:**

- No awareness has been created among beneficiaries about SNP because there is no awareness Programme held in the area of study. Some AWW stays out side the AWC village and they are coming to AWC for 3 to 4 hours a day. This stay for limited period is not sufficient for Anganwadi Center. Some of the AWWs are not highly educated.
- The cost towards transportation of foodstuff is fixed by government @ Rs.22 per quintal irrespective of distance. This is very difficult for the workers especially in hilly areas to meet the expenditure. It is observed from the field study that some of the AWW hire bullock cart for the purpose where as in other areas tempo or trekker is hired for the purpose. Sometimes, more than one AWW make a group to carry the items to reduce the cost.
- The foodstuff is distributed for 25 days in a month but consumed by the beneficiary much ahead. About 60% beneficiaries finish it within 10 days where as

35% keep for 15 days. Only 5% beneficiaries were found to be eating it on all the 25 days a month.

### **Recommendations:**

The study team has come up with some specific suggestions which may be looked into for addressing the problem areas existing both at the levels of food processing and implementation. However, on the basis of the findings of the study, the following important issues have been revealed which need to be given stress for better functioning of the ICDS Programme:

1. Each AWC be supplied with a standard measuring Container to avoid scope for less supply of foodstuff to the beneficiaries.
2. The network of transportation of foodstuff needs to be strengthened. In fact, steps should be taken to deliver the foodstuff at the point of AWCs or else the carriage cost to be paid to the AWW taking into account distance as the indicator and the flat rate or carriage cost not withstanding the distance should be discontinued.
3. The current practice of food distribution to the beneficiaries (except the 3 to 6 years children category) for 25 days at one go should be discontinued and there should be provision for weekly distribution of the food ration. This will minimize food sharing by the non-beneficiaries at the household level.
4. All actual BPL and lower economic level of families need to be covered under the Programme.
5. The number of Supervisory Staff is inadequate. Hence the vacancies should be filled in for better implementation.
6. Beneficiary awareness on storage and use of foodstuff needs to be systematically addressed.
7. The study team suggested that there should be differentiated food for different types of beneficiaries in consultation with nutritionists and food bags should bear printing on it for different category of beneficiaries. For example, for the Pregnant Women, for Lactating Mother and for Children below 3 years of age bags with separate brand name are needed. Such a brand name earmarked for different categories of beneficiaries on the pack will reduce sharing by the non-beneficiaries.
8. While filling in the positions of AWWs in future, the existing rules of picking such workers from the same village where she will have to work may be insisted upon.
9. One monthly village meeting be conducted at the village level with all stakeholders such as PRI Members, village opinion leaders, youths, SHG Members and beneficiary household heads which will increase the accountability level of the ICDS personnel

- and the system will be more transparent. Interfacing between worker, supervisor and beneficiaries should be periodically done.
10. Beneficiary home visit by supervisors and workers will be beneficial for target group to consume foodstuff properly.
  11. Transparency of food quantity among villager and ICDS needs to be developed regarding the change foodstuff and its value.
  12. Members of food committee should not be only among the beneficiaries.
  13. Periodical meeting with change agents instead of at THR day may also be helpful to improve the consumption pattern.
  14. Meeting with SHG members should not be on only thrift and credit rather health and nutrition aspects especially foodstuff utility and use pattern should be focused.
  15. Proper growth monitoring of children to be done.
  16. IEC materials to be exhibited at conspicuous places in the villages (AWCs/ SHG offices/ ANM centers) so that the villagers as well as all the stakeholders can understand and appreciate the good aspects of the foodstuff and this will go a long way in reducing the sharing by non-beneficiaries.
  17. Adding message to wall painting on Indiamix/ Orimix as a baby food will generate awareness.
  18. Since during the study it was noticed that the timely supply of food was not done at some places, it may be considered to set up one production unit in each district. This will reduce the transportation cost. Under the present system, the foodstuff is transported all the way from Khurda and Jatani, located at a fairly long distance from the districts where the foodstuff is in operation. This will also reduce the transportation cost and ensure timely delivery of food ration.
  19. Attempt should be made for better packing system like separate sealing of internal pack.
  20. Steps should be taken for periodical food sample analysis to ensure the proportion of ingredients.
  21. Periodical monitoring, at least once in 6 months be done by an independent agency so that the delivery system can be improved further.
  22. Eligible beneficiaries survey to be done every year and allotment needs to be revised.
  23. Multiple record maintenance (for oil and Orimix) be stopped and there should be single register for maintaining the record for oil and Orimix/ Indiamix.
  24. The study revealed that most of the mothers at the household level are unaware of the food content in terms of nutrition and they are also not aware of the specific necessity of food supplied for the beneficiaries leading to more sharing of this.

- The study team therefore suggested that the mother of the beneficiary be imparted education by the AWW. Alternatively, awareness creation Programme among the SHGs may be a useful mechanism for this purpose.
25. Preschool should not be a stopgap arrangement of children to come at the time of food distribution (in many cases found school activities are not properly undertaken).
  26. It should be made mandatory for the AWW to stay in that village, where she has been posted (12% workers are not staying in their respective working villages and getting up and down from their own village, and 21% are from other places by staying either in the center or working village).
  27. Measuring process needs to be made scientific for distribution of foodstuff to beneficiaries. Instead of different shaped and size container one standard type of unit should be provided to Anganwadi Workers. This needs to be tested and verified in village in the presence of staff of ICDS, PRI and beneficiary (including SHG members and change agents).
  28. Rate of the empty container must be communicated immediately to avoid future complicacy (in some places the cost is deducted from AWWs, in some cases no decision, in some cases AWWs as well as accounts section will face problem. It should be cleared whether the cost of empty container needs to be collected or not. As reported, office is deducting Rs.2.50/sack where as the market value is less than one rupee.
  29. Foodstuff should reach in or around third week of the month to avoid delay in THR. It will also help the hired agency to transport in time. As the ICDS month ends on 25th day of the month, the foodstuff should be made available for distribution to AWWs.
  30. Smaller size of food packets will be more beneficial for inaccessible area.
  31. The remuneration of the AWW should be increased. Periodical external monitoring and some rewards will create a sense of sincerity and seriousness among the workers.
  32. Honorarium and transportation allowance of supervisor for visit to villages needs to be fixed.
  33. Expansion and timely repairing of ICDS go down will increase the efficiency.
  34. Posting of full time CDPO will increase the work efficiency of ICDS activities and better coordination among the staff to fulfill the ICDS objectives.
  35. Food being a part of culture and to gain the belief and trust of people, it would be better if processed and packed in concerned locality.
  36. Record keeping by AWWs was found to be a problem during the study. It needs to be simpler and less cumbersome.

# CHAPTER - I

## AN OVERVIEW OF SPECIAL NUTRITION PROGRAMME AND ICDS IN THE KBK DISTRICTS UNDER RLTA P

### 1.1 Introduction

Children are the mirror of a nation and hope of the world. Unless children develop, no nation can prosper. Hence, investment in child development is the need of the hour. Large numbers of children around the world, particularly in poor countries are found to be undernourished and malnourished. These children are to be supported by food, adequate in quantity and rich in quality. Unless they get right quantity and proper quality of food, their physical and mental development will not be improved. Absence of nutritious food results in several diseases and physical deficiencies among children and this also affects the physical growth and development. Hence, supply of nutritious food is essential for healthy growth and development of children.

### 1.2 Special Nutrition Programme in KBK District under Revised Long Term Action Plan (RLTAP)

The intensity of poverty in the KBK region caused by low productivity of agriculture and the devastation of forest-based livelihoods has, over the years, resulted in poor, nutritional status of the population and low life expectancy. It is very much essential to provide such facilities to the poor people by the government in this KBK region. The impoverishment of the people in this region over a sustained period has resulted in the poor health and nutritional status of the population. This is manifest particularly in children in the 0-3 age group. The burden of malnutrition in this age group is also carried out from the mother's womb and the problems of poor health and nutrition are mostly of maternal origin. Their low health and nutrition conditions arise not only from inappropriate childcare and feeding practice, inadequate access to primary health care, poor environmental sanitation, disease and infection but also due to their deprivation from nutritious food in these formative years.

In order to combat malnutrition, poverty and infant mortality rate in KBK districts "Special Nutrition Programme for under three" under RLTA P is launched to cover the uncovered 0-3 age group Children of KBK district during 2002-03. As many as 341727 children below 3 years of age were covered under Special Nutrition Programme in all the 8 KBK districts. District-wise coverage is indicated in Table 1.1.

**Table 1.1**  
**Coverage under Special Nutrition Programme**

Sl. No.	District	Coverage of children (0-3 years)
1	Bolangir	60,600
2	Kalahandi	57,086
3	Nuapada	24,514



4	Rayagada	42,129
5	Koraput	60,557
6	Nabarangpur	52,912
7	Malkangiri	27,686
8	Subarnapur	16,243
<b>Total</b>		<b>3,41,727</b>

However, due to ban imposed by GEAC, CARE/WFP could not be able to import CSB and discontinued their support for which entire beneficiaries of KBK were covered out of funds received under RLTP. After discontinuance of CARE/WFP Support, all 8 KBK districts were covered through local food like Wheat, Dal and Guda during 2002-03. During the year 2003-04, WFP supported by providing Indiamix in exchange of equal quantity of wheat in the districts of Koraput, Nawarangpur and Malkangiri. During 2004-05, Orimix (one fortified blended RTE food) was introduced in rest 5 KBK districts with help of WFP where WFP only support the cost of bagging and fortification. The said arrangement is continuing so far in these 8 districts. In Koraput, Malkangir and Nawarangpur district, Indiamix is available for the beneficiaries and the rest five districts Orimix is supplied. Among the rest five districts, Rayagada, Kalahandi, Bolangir and Nuapada are provided Orimix with Vegetable Oil and Sonepur district is available with only Orimix.

After discontinuance of assistance under PMGY (NTN) during 2005-06 the coverage of beneficiaries under the scheme and related details are given in Table 1.2.

**Table 1.2**  
**Coverage of Beneficiaries under Various Schemes & Ration Details**

Sl. No.	Scheme and Agency	No. of Beneficiaries	No. of Dists.	No. of feeding days per month	Ration Components (in gms)		Calorific value (in Kilo Calories)	Protein Content (in gms)
1.	State-funded Programme a. SNP (CSP) (Rice & dal)	18,34,325	19	25				
					Children	Rice 80 gm Dal 15 gm	328.20	9.12
	b. SNP (Non- Plan)	1,29,044			Severely malnourished	Rice 160 gm Dal 30 gm	656.40	18.24
	c. SNP (CSP) Indiamix	1,80,800	3	25	P&L mother	Rice 200 gm Dal 35 gm	811.80	22.18
					Indiamix -80		312.00	11.50
2.	SNP (WFP/ RLTP)	4,36,562	3	25	India mix- 80		312.00 KC	11.50

	(Indiamix)							
3.	SNP/WFP (Orimix)	5,05,424	5	25 ORIMIX	Orimix-80 gm		312.00	11.50
	Total	30,86,155	30					

### 1.3 Integrated Child Development Services (ICDS)

The Integrated Child Development Services (ICDS) Scheme is the world's largest and most unique Integrated Programme for early childhood care and development. The Scheme aims to improve the nutritional and health status of all children below six years of age, lay the foundation for their proper physical, psychological and social development; reduce among young children the incidence of mortality, morbidity and malnutrition; improve the nutritional and health status of pregnant and nursing women and enhance the capability of the mothers to look after the normal health and nutritional needs of the child through proper health and nutrition education. While ICDS covers all children in the 0-6 years of age group for many of its services viz. pre-school education, it targets the most vulnerable among them through the intervention of supplementary nutrition Programme (SNP). These targeted children mostly belong to the poor families and those living in disadvantaged areas including backward rural areas and tribal areas. In addition to children below six years of age, ICDS also takes care of the essential needs of pregnant women and nursing mothers residing in socially and economically backward rural and tribal areas. The identification of beneficiaries is done through surveying the community and identifying the families living below poverty line eligible for supplementary nutrition support.

The Department of Women and Child Development was set up by the government of Orissa in the year 1995 to provide the much-needed thrust on programmes aimed at a holistic development of women and children. This is the nodal department for formulating plans, policies and programmes for the development of women and children in the state. The flagship programmes of the Department is obviously the ICDS through which umpteen services are provided to children up to 6 years of age, pregnant women and lactating mothers (nursing mothers) belonging to poor families who are not in a position to take care of their health, nutritional and educational needs.

#### 1.3.1 Objectives of Integrated Child Development Services (ICDS) Scheme

The Integrated Child Development Services (ICDS) scheme was launched in 1975 with the following objectives:

- I. To improve the nutritional and health status of children below the age of six years and pregnant and lactating mothers;
- II. To lay the foundation for the proper psychological, physical and social development of the child;

- III. To reduce the incidence of mortality, morbidity, mal-nutrition and school drop-outs;
- IV. To achieve effective coordination of policy and implementation among various departments to promote child development;
- V. To enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper health and nutrition education.

### **1.3.2 Services**

The Scheme provides a package of services, as indicated below, to children below six years and pregnant women & nursing mothers:

- 1. Supplementary nutrition,
- 2. Immunization,
- 3. Health check up,
- 4. Referral services,
- 5. Pre-school non-formal education,
- 6. Nutrition & health education

### **1.3.3 Pattern**

The Integrated Child Development Services is a Centrally sponsored Scheme wherein the Central Government is responsible for Programme planning and operating costs while the State Governments are responsible for Programme implementation and providing supplementary nutrition out of States' resources.

### **1.3.4 Population norms**

The guidelines of the scheme envisage one rural/urban project for one lakh population and one tribal project for 35,000 population, with one Anganwadi Center for a population of one thousand in rural/urban projects and seven hundred in tribal projects.

### **1.3.5 Area of Operation & Beneficiaries**

Government of India started 33 ICDS projects in the country and 1 project (Subdega block of Sundargarh district) in Orissa on a pilot basis during the year 1975-1976. Encouraged by the results of the experiment of the pilot project, the Government extended the ICDS Programme to all the blocks of the state in a phased manner. By the end of the Ninth Plan period, all the 314 blocks and 12 Urban Local Bodies have been covered under ICDS Programme making the number of projects 326. Of these 326 projects, the cost of the foodstuff for the Supplementary Nutrition Programme (SNP) was met by the State Government in 151 projects, while in 125 projects CARE and in 32 projects WFP provides food material as aid. The districts of Kalahandi, Nuapada, Bolangir and Rayagada were provided food assistance from CARE;

the districts of Koraput, Nabarangpur and Malkangiri were provided foodstuff by WFP, while the district of Subarnapur was covered from State Plan funds.

Services under the scheme are presently being made available to about 30.54 lakh beneficiaries comprising of about 25.42 lakh children (6m-6 years) and 5.12 lakh pregnant and lactating mothers through a network of 34201 Anganwadi Centers.

#### 1.4 Supplementary Nutrition Programme (SNP) & ICDS

With a view to improving the health and nutritional status of children in the age group of 0-6 years, pregnant women and lactating mothers, the Supplementary Nutrition Programme has been included as one of the most important components of the ICDS Programme. Malnutrition, endemic poverty and low household incomes over the years have resulted in poor nutritional status of the population in these households resulting in food distress and food insecurity. Food insecurity impacts some more adversely. When families and people suffer, children and women suffer most due to their greater vulnerability and higher biological need for nutritional protection and security. Growing infants and children, adolescent girls, pregnant women and nursing mothers face far greater risk from the nutritional depletion than others. This nutritional insecurity pre-eminently of pregnant and nursing women and children in the formative years is addressed through the Supplementary Nutrition Programme. Malnutrition impairs physical and mental development and hence providing nutritional support to children in the vulnerable age group is essential to prevent the onset of malnutrition and growth faltering in the formative years. With a view to reducing morbidity and mortality among the vulnerable sections of the population, the Supplementary Nutrition Programme through the ICDS scheme has proved to be one of the most important food-based interventions in the State.

Under the scheme, Supplementary Nutrition is provided to needy children and to expectant / nursing mothers from low income families for a period of 300 days a year as per nutritional norms indicated in the Table 1.3.

**Table 1.3**  
**Nutritional NORM for the Beneficiaries**

<b>Beneficiaries</b>	<b>Calories (Cal)</b>	<b>Protein (g)</b>
Children 6 months-3 years	300	8-10
Children 3-6 years	300	8-10
Severely malnourished Children	600	16-20
Pregnant & Lactating (P&L) Mothers	500	20-25

Severely malnourished children, in grade III and IV as per ICDS classification are provided with an additional dose of SNP i.e. called as double ration feeding. This intervention aims only at supplementing and not substituting the family food. Through this, an important contact point is established with the pregnant women and nursing mothers to educate them about the nutritional needs and care of pregnant women, care

of the newborn and young children. Key messages are given to them relating to exclusive breast feeding up to 6 months of age, continued breast feeding with complementary food, introducing timely complementary feeding at home for infants between 6-9 months of age with a full diet for young children by one year. Further, pregnant women and nursing mothers are provided counseling with regard to certain key services such as ante-natal care, post-natal care, iron-folic acid (IFA) supplementation and improved care during pregnancy, timely immunization and special care for children in the age group of 0-3 years for improved childcare and feeding practices.

#### **1.4.1 Coverage**

Target Group under the scheme constitutes children in the age group of 0-6 years (17% of the total population approx.), expectant and nursing mothers in the age group of 15-45 years, (4% of the total population approx.). The eligible beneficiaries under the scheme are children and nursing & expectant mothers from the families of agricultural labourers, marginal farmers and other poor section of the community living below the poverty line. Additionally, the scheme specifies what is known as at risk population among children and women and aims to cover them in totality.

The Supplementary Nutrition Programme is being carried on in 34201 functioning AWCs covering 3086155 beneficiaries. The State Government provides nutritional support to 1963369 beneficiaries in 19 districts through 222 ICDS Projects covering 23838 numbers of Anganwadi Centres. World Food Programme (WFP) is providing food assistance to 1122786 beneficiaries in 11 districts covering 104 Projects through 10363 numbers of AWCs. In the case of WFP foodstuff, (Indiamix) is supplied in 6 districts namely Koraput, Nawarangpur, Malkangiri, Kandhamal, Boudh & Gajapati and the State Govt. bears only the cost of wheat and the transportation cost from the factory point right up to the Anganwadi Centre point. Similarly in case of Orimix supplied in 5 KBK districts namely Rayagada, Bolangir, Sonapur, Kalahandi & Nuapada, State Govt. bears the entire cost except the cost of bag, fortification & quality control which is borne by WFP. Besides, CARE's administrative charges are also met by the State Government for supply of R.V.Oil only to 10,83,577 beneficiaries of 9 districts as an additional dose over and above the Supplementary Nutrition Programme run by the State Government.

#### **1.5 Role of WFP**

With a view to improving the health and nutritional status of children in the age group of 0-6 years, pregnant women and lactating mothers, supplementary nutrition has been incorporated as one of the most important components of the ICDS Programme. World Food Programme (WFP) a UN Agency has been extending food aid for supplementary nutrition in 104 ICDS Projects of 11 districts in the State covering about 11.23 lakh beneficiaries.

Needless to say, malnutrition, endemic poverty and low household incomes over the years have resulted in poor nutritional status of the population in these areas resulting in food distress and food insecurity. When the families and people suffer, children and women suffer most due to their greater vulnerability and higher biological need for nutritional protection and security. Growing infants and children, adolescent girls, pregnant women and nursing mothers face far greater risk from nutritional depletion than others. The nutritional insecurity pre-eminently of pregnant and nursing women and children in the formative years is addressed through the Supplementary Nutrition component of ICDS. Malnutrition impairs physical and mental development and hence providing nutritional support to the children in the vulnerable age group is essential to prevent malnutrition and growth faltering in the formative years. With a view to reducing morbidity and mortality among the vulnerable sections of the population, supplementary nutrition has proved to be one of the most important food based interventions in the state.

Under the scheme, Supplementary Nutrition is provided to the needy children and to expectant and nursing women from low income families for a period of 300 days a year. The aim is to supplement the nutritional intake by 300 calories and 8-10 grams of protein for expectant and nursing women. This pattern of feeding aims only at supplementing and not substituting the family food.

The Government of Orissa (GoO) under the supplementary nutrition component of ICDS generally supplies a ration consisting of wheat, pulses and jaggery throughout the State except in Koraput, Nawarangpur and Malkangiri where the World Food Programme supplies Fortified Blended Food called Indiamix.

Government of Orissa has availed itself of assistance (CIDA assistance from WFP) and supplied FBF to the Children in the flood-affected districts from 2003. The State Government has of late also installed a few small plants managed by the women SHGs to produce FBF.

As a result of the dialogue, the State Government mainly with its own resources and WFP's technical assistance has switched over to supply of Orimix, in the districts of Rayagada, Bolangir, Sonapur, Kalahandi and Nuapada since June 2004 when RLTA started functioning in these districts.

## **1.6 CARE**

Cooperative for Assistance and Relief Everywhere (CARE), an international voluntary organization had been providing Refined Vegetable Oil (RVO) for supplementary nutrition under the ICDS Scheme in 107 Projects of 9 districts in the State covering about 10.83 lakh beneficiaries. In KBK districts it covers Rayagada, Kalahandi, Bolangir and Nuapada.

## 1.7 Wheat/Rice Based Nutrition Programme (WBNP/ RBNP)

The Government of India allocates food grains (wheat & rice) at BPL prices to the State for providing supplementary nutrition to beneficiaries under the ICDS Scheme. During the year 2005-06 GoI have allocated 41109MTs of Rice and 20698MTs of Wheat under the scheme.

- Traditional Food Package of ICDS and Indiamix/Orimix:

As has already been discussed above, under the supplementary nutrition component of ICDS (irrespective of wheat based ration, Indiamix or Orimix), 4 categories of beneficiaries are extended the support. They are: Children between the Age Group 6 months to 3 years, Children between 3 to 6 years, Pregnant women and Lactating women. But according to the norms, a single dose ration is provided to the normal children of both categories and double ration is provided to the pregnant as well as lactating women and to the Grade III & IV (malnourished) children. This norm has remained uniform irrespective of the traditional ICDS food package, Indiamix and Orimix.

In this respect, it needs to be indicated here that before introduction of Orimix and Indiamix, ration of wheat, pulses and jaggery were being supplied to the beneficiaries in 27 districts of the state. While the food was cooked for the pre-school children between the age group of 3 to 6 years, in all other cases take home ration (THR) was the practice. This is still followed in most of the districts of the State. It is also essential to point out here that the ration to each beneficiary for a period of 25 days a month was provided under the system.

From June 2004, Government of Orissa (GoO) has switched over to the supply of Fortified Blended Food called Indiamix and Orimix. Indiamix is provided to three districts such as Koraput, Nawarangpur and Malkangiri and Orimix is provided into rest five districts of KBK region such as Sonepur, Bolangir, Nuapada, Kalahandi and Rayagada with the technical support of WFP. Under the new system, WFP is bearing the cost of fortification and bagging as indicated above.

Under this present system of Indiamix/ Orimix, Wheat, Soya bean and Sugar in the proportion of 65:15:20 is grinded and mixed with vitamin and mineral (Micronutrient), which is extremely nutritive for children, pregnant women and lactating mothers. The food ingredients are grinded and mixed in the prescribed proportion, gritted and pre-cooked through extrusion. The extrusion product is cooled to ambient temperature immediately thereafter and milled in to fine flour. Subsequently the flour is homogeneously mixed with the vitamin supplement and packed in 25 kg. Polypropylene bag in hygienic conditions in order that it can be stored for 6 months in tact. This food is considered very hygienic for the beneficiaries and can be used readily by mixing water or by preparing different kinds of recipes, which take

very little time since the FBF is already cooked. This food is prepared by factory in a scientific manner with emphasis on the highest standards of hygiene and cleanliness. Each beneficiary is provided 80 grams of FBF mix and 8 grams of vegetable oil supplied by CARE. For pregnant women, lactating mothers and Grade III and IV children, double the amount of ration is provided for a period of 25 days a month. Under the present system, the food is supplied once every month in case of all kinds of beneficiaries except the 3 to 6 years of children who are given the food in the Anganwadi Center. The food under the present system is very tasty and can be converted in to different kinds of tasty recipes with ease, which was not possible in the earlier ration based system. The comparison between food packages under conventional and Indiamix/Orimix is presented in Table 1.4.

**Table 1.4**  
**Comparison between Food Packages under Conventional and**  
**INDIAMIX/ORIMIX**

PRESENT FOOD PACKAGE UNDER INDIAMIX/ ORIMIX	FOOD PACKAGE UNDER CONVENTIONAL WHEAT BASED SUPPLEMENTARY NUTRITION
Normal Ration/Single Ration:	Normal Ration/ single Ration:
<ul style="list-style-type: none"> <li>• Indiamix/ Orimix 80 grams (Wheat, soyabean and sugar in 65:15:20 proportion) and Refined Vegetable Oil 8 grams per day in Rayagada, Kalahandi, Bolangir and Nuapada</li> <li>• Ration for 25 days a month</li> </ul>	<ul style="list-style-type: none"> <li>• Wheat 80 grams, Dal 14 grams, Jaggery 20 grams and Refined Vegetable Oil 8 grams per day</li> <li>• Ration for 25 days a month</li> </ul>
Double Ration: <ul style="list-style-type: none"> <li>• Indiamix/ Orimix 160 grams (Wheat, soyabean and sugar in 65:15:20 proportion) and Refined Vegetable Oil 16 grams per day in Rayagada, Kalanhandi, Bolangir and Nuapada</li> <li>• Ration for 25 days a month</li> </ul>	Double Ration: <ul style="list-style-type: none"> <li>• Wheat 160 grams, Dal 28 grams, Jaggery 40 grams and Refined Vegetable Oi116 grams per day</li> <li>• Ration for 25 days a month</li> </ul>



## 1.8 Growth Monitoring and Promotion

Growth monitoring, nutritional surveillance and analysis of the nutritional status at the district level are important activities under ICDS at the field level. Both are important for assessing the impact of the health and nutrition related services. Children below the age of 3 years are weighed once a month and children from 3-6 years are weighed quarterly. Fixed-day immunization sessions or days when mothers come to take home rations for younger children (below two years of age) are used as an opportunity for growth monitoring and promotion of younger children. Weight-for-age growth cards are maintained for all children below six years. Their growth is charted both to detect growth faltering, stagnation and to assess their nutritional status.

The concept of community-based nutritional analysis has been introduced in the ICDS. A community chart for nutritional status monitoring is maintained at each Anganwadi. This chart reflects the nutritional status of all children registered with the Anganwadi, at any given point of time, helping the community to understand the nutritional status of their children and measures to be taken to improve this. This mobilizes the community in promoting and enabling better childcare practices and in improving service delivery and utilization.

## 1.9. Organizational Structures & Implementation Strategy

The present system of implementation and monitoring the Special Nutrition Programme & ICDS is basically a four tier structure. Women & Child Development Dept. at the state level headed by a Secretary is the nodal Department. S/he is assisted by a Director & other supporting officers and ministerial staff. At the district level, District Social Welfare Officer (DSWO) is functioning under the direct supervision of the District Collector. S/he has subordinate officers & staff to assist in monitoring the programme. DSWO is the main link between state head quarter and field functionaries. At the project/ block level, project officers are functioning under the direct control of sub-collectors at the sub-divisional level and DSWO at the district level. At the village level, there are Anganwadi Centres (AWCs) managed by the Anganwadi Workers (AWWs) are the real grass-root level functionaries of the programme. In KBK districts, there are 82 nos. of ICDS projects & 8341 AWCs. District-wise no. of ICDS projects & AWCs in KBK districts are indicated in the Table 1.5 as under.

**Table 1.5**  
**District-wise ICDS projects & AWCs**

Sl. No.	District	No. of ICDS projects	No. of AWCs
1	Bolangir	14	1325
2	Kalahandi	14	1383
3	Nuapada	05	585

4	Rayagada	11	1052
5	Koraput	15	1488
6	Nabarangpur	10	1366
7	Malkangiri	07	641
8	Subarnapur	06	501
<b>Total</b>		<b>82</b>	<b>8341</b>

The Project Strategy envisages widening of the coverage of the 0-3 age group taking into account the general economic status of the families in the region, the social customs and the general health and nutrition status in the area. It is estimated that 100% coverage of the 0-3 age group in the tribal areas and 75% in the non-tribal of the KBK region will be necessary to meet the objectives of the Programme. The strategy would entail a coverage of 5,67,481 children in the 0-3 age group. The present level of coverage is 3,41,727. Thus, bringing an additional 2,25,754 children in this age group under the umbrella of the Supplementary Nutrition Programme is envisaged. However, Government of Orissa have conceptualized to adopt following strategy for reduction of malnutrition.

- i. A baseline survey will be conducted in each district to assess the current nutritional status of children, anaemia among women, incidence of low birth weight babies. This will be helpful for preparing the district Annual Action Plan.
- ii. Emphasis will be laid on 100% measurement of weight of all children in the age group of 0-6 year by each AWW every month.
- iii. All children (0-6 year) in each sector will be weighed in the presence of the Supervisor once every quarter.
- iv. 100% registration of all pregnant women in the AWC will be ensured and appropriate ante-natal checks will be prescribed for ensuring delivery of a healthy child. This will lead to reduction of the incidence of low birth weight babies as well as anaemia among pregnant women.
- v. IEC activities and nutrition and health education will be intensified to create an awareness among the community in general, and adolescent girls and women in particular, about the need for addressing the problem of anaemia and malnutrition among them.
- vi. Each ICDS project will be provided with the referral funds @Rs.3000/- per AWC per annum.
- vii. These referral funds will be spent for the 'at risk mothers' belonging to BPL families in accordance with a detailed set of guidelines which will be circulated to all AWW and Supervisors.

The field findings and our observation reveal that the present system is not proving to be effective at the ground level because of three main reasons and they are:

- Greater coverage area is given to each functionary as a result of which proper attention is not given to the beneficiaries
- A large number of AWWs are not recruited from the village where the AWC is located, which is a clearly defined principle of recruitment. Hence majority of such AWWs are not residing in the village where the AWCs are located. This is resulting in poor care of the beneficiaries resulting in unsatisfactory implementation of the ICDS Programme in particular
- The supervision and monitoring of the ICDS Programme is not done on a regular basis by the CDPOs and ICDS Supervisors because of greater coverage area and also due to inaccessibility. In fact, the ICDS supervisors in particular, who is the focal point of the Programme, should be provided with a two-wheeler by the Government for easy mobility, which will certainly enhance the success of the ICDS Programme
- One of the problems which was observed during the empirical study in the AWCs is the transportation of foodstuff from the Block Head Quarters to the AWCs. A large number of AWCs are located far away from the Block and the AWW usually takes the responsibility of the carriage of the foodstuff from the Block to the AWC. There is a very nominal amount earmarked for the carriage. Places which are located close to the Block Head Quarter do not face the difficulty, but in case of AWCs located at a relatively distant place, the money earmarked becomes too insufficient and this creates hardship for the AWWs. This needs to be addressed.

Achievement and short falls of the different components of the programme have been analyzed in the chapter on Impact of the Programme (Chapter V).

## **CHAPTER - II**

### **OBJECTIVES AND METHODS OF EVALUATION**

#### **2.1 Objectives of the Study:**

Since more than four years have been completed from the inception of the intervention and huge investment has been made, Government of Orissa in the Planning and Coordination Department very rightly have taken a decision to undertake an in-depth evaluation to ascertain the effectiveness of the Programme and also its implementation keeping the Programme objectives in view. However, the evaluation study has been designed with the following specific objectives:

- (i) To assess and find out the impact of the Programme in improving the nutritional level of the children and the mother among the beneficiaries covered in the area of operation.
- (ii) To assess the effectiveness of the Programme in terms of reducing the IMR, MMR and incidence of disease owing to lack of nutrition.
- (iii) To assess the utilization of funds on each of the components of the Programme as against the planned budget.
- (iv) To identify to what extent the overall health status of the women and children of the region has improved as a result of the introduction of the Special Nutrition Programme and ICDS in the area.
- (v) To identify the constraints or factors responsible for failure or poor implementation of the Special Nutrition Programme in particular and ICDS in general.
- (vi) To ascertain special efforts, if any made by the implementing agency to avoid failures and to promote success of the Programme.
- (vii) To identify best/good practices if any, in any specific site/place and highlight such activities as replicable model for the project.
- (viii) On the basis of the findings of the study, recommend specific measures to improve the Programme implementation for achieving greater success of the Scheme/Programme.

#### **2.2 The Sample and its Rationale:**

As has been discussed earlier, Special Nutrition Programme has been in operation in 8 districts such as Rayagada, Koraput, Malkangiri, Nawarangpur, Kalahandi, Nuapada, Bolangir and Sonepur since June 2004. Stratified random sampling method was adopted to select the sample area and sample beneficiary households for the empirical study.

The study has covered all the 8 KBK districts, where the Programme is under implementation. In our sample selection we have selected first three most inaccessible blocks of each district having highest incidence of malnourished children and least number of Anganwadi Centers. In second stage, one sample Gram Panchayat in each of the selected blocks having the highest incidence of malnourished children have been selected and in the third stage, two Anganwadi Centres from each of the 24 GPs (@3 GPs from each of the 8 districts) which are regarded as most inaccessible and where the interventions are ongoing were chosen for the study. Thus, a total number of 48 Anganwadi Centers, 24 GPs (3 in each of the 8 districts) in 8 KBK districts comprised the geographical coverage of the study as indicated in Table 2.1.

**Table 2.1  
Coverage of the Study (Sample Size)**

<b>COVERAGE</b>	<b>UNITS TO BE COVERED</b>
Districts	08
Blocks	@3 per district = 24
Gram Panchayats	1 per sample block = 24
Anganwadi Centers	2 per sample G.P. 48
<b>SAMPLE TYPE</b>	<b>SAMPLE SIZE</b>
Beneficiary Households	480 (@ 10 from AWC)
Key Stake Holder	50
Focused Group Discussion	48 (@ in each habitation)

### 2.2.1 Socio-economic profile of the Sample Blocks:

Socio-economic profile of the sample blocks i.e. district and block wise number of Gram Panchayat, AWCs and their percentage of different Indicators of the Study Area have been indicated in Table 2.2.

**Table 2.2  
District and Block wise number of Gram Panchayat, AWCs and their percentage of different Indicators of the Study Area**

Sl. No.	Name of the Study Districts	Name of the Study Blocks	Distance from D. HQ	No. of GP	No. of AWCs	Literacy Rate	Female Literacy Rate	% of SC Population	% of ST Population	BPL Family (1997)
1.	Rayagada	Kashipur	77	17	170	24.11	11.22	20.00	61.65	241582
		Gunupur	80	18	93	34.51	22.62	5.29	72.45	11210
		Padmapur	72	12	69	44.01	30.42	9.88	47.46	9817
2	Koraput	Lakshmipur	72	12	79	27.71	16.28	13.36	68.67	12688
		Bandhugaon	80	9	77	19.85	13.25	8.63	77.70	11637
		Narayanpat	102	7	55	20.17	16.28	13.36	68.67	12688

		na								
3	Malkangiri	Khairput	66	8	47	23.44	12.90	7.39	72.78	8371
		Kudumuluguma	52	9	69	16.83	9.67	9.11	73.57	11172
		Mathili	45	12	45	24.24	14.14	7.95	75.07	15004
4	Nawarangpur	Raighar	90	19	225	41.29	26.62	17.94	65.02	18170
		Jharigaon	80	17	165	22.14	11.47	11.26	62.24	20072
		Umerkote	72	15	195	27.17	15.96	15.96	62.56	15177
5	Kalahandi	Thuamul Rampur	73	12	94	28.06	12.09	25.65	57.55	15226
		Dharmagarh	65	16	115	42.85	24.39	17.56	17.61	19063
		Golamunda	70	15	100	37.95	21.32	17.08	25.65	17570
6	Sonepur	Binika	33	13	84	62.06	45.65	22.43	14.50	10391
		Dungurpali	48	17	116	65.54	50.37	22.43	13.46	17514
		Tarava	39	16	70	54.98	38.34	25.04	8.47	12732
7	Bolangir	Tureikela	96	14	76	41.19	22.63	17.36	35.17	14122
		Bangomunda	99	17	92	43.22	25.24	19.70	16.95	18609
		Titlagarh	67	18	101	45.53	26.47	18.24	20.65	17830
8	Nuapada	Sinapali	105	16	107	39.49	21.98	13.27	29.24	15784
		Boden	98	13	90	36.43	18.82	13.09	40.63	16781
		Khariar	70	16	101	42.53	25.92	15.58	27.45	21015

### 2.3 Geographical Coverage:

As regards the geographical coverage of the study area, 8 districts covered such as Rayagada, Koraput, Malkangiri, Nawarangpur, Kalahandi, Nuapada, Bolangir and Sonepur and 3 blocks under each 8 districts were taken for the study. While the three blocks selected under Rayagada district were Kashipur, Gunupur and Padmapur, the three sample blocks under Koraput district constituted of Lakshmipur, Narayanpatna and Bandhugaon. Similarly, Khairput, Kudumuluguma and Mathili were the three sample blocks under Malkangiri district, Raighar, Jharigaon and Umerkote were the three blocks under Nawarangpur district, Thuamul Rampur, Dharmagarh and Golmunda were the three sample blocks under Kalahandi district, Binika, Dunguripali and Tarava were the three sample blocks under Sonepur district, Tureikela, Bongomunda and Titilagarh were the three sample blocks under Bolangir district while the three sample blocks covered for the study under Nuapada district comprise of Sinapali, Boden and Khariar.

Under each selected Block, two Anganwadi Centers located in as many villages were covered for the study and thus altogether 48 Anganwadi Centers in about 48 villages spread over 24 blocks under 8 districts constituted the geographic coverage of the study as indicated in Table 2.3.

**Table 2.3**  
**District, Block and GP wise number of Study Villages and AWCs**

Sl. No.	Name of the Study Districts	Name of the Study Blocks	No. of the Gram Panchayats	No. of the Study Villages	No. of AWCs:
1	Rayagada	Kashipur	1	2	2
		Gunupur	1	2	2
		Padmapur	1	2	2
2	Koraput	Lakshampur	1	2	2
		Bandhgaon	1	2	2
		Narayanpatna	1	2	2
3	Malkangiri	Khairput	1	2	2
		Kudumuluguma	1	2	2
		Mathili	1	2	2
4	Nawarangpur	Raighar	1	2	2
		Jharigaon	1	2	2
		Umerkote	1	2	2
5	Kalahandi	Thuamul Rampur	1	2	2
		Dharmagarh	1	2	2
		Golamunda	1	2	2
6	Sonepur	Binika	1	2	2
		Dunguripali	1	2	2
		Tarava	1	2	2
7	Bolangir	Tureikela	1	2	2
		Bangomunda	1	2	2
		Titlagarh	1	2	2
8	Nuapada	Sinapali	1	2	2
		Boden	1	2	2
		Khariar	1	2	2
Total	8 Districts	24 Blocks	24 GPs	48 Villages	48 AWCs

#### 2.4 Target Respondents:

The target respondents for the study were the Household Heads and the mothers of the 480 sample households selected for the study under which 480 beneficiaries belonging to children between 0 to 6 years of age, pregnant women and lactating mothers were covered. Besides the beneficiary households, Key Stakeholders such as the CDPOs of all the Study blocks, ICDS Supervisors, Anganwadi Workers (AWW), School Teachers, BDOs of the Block, PRI Members residing in the village where the AWC is located, SHG Members, NGO working in this area, and the village

community leaders were also interviewed during the empirical study. Table 2.4 indicates the position.

**Table 2.4**  
**District, Block and Gram Panchayat wise Sample Villages and number of Beneficiaries of the Study Area**

Name of the District	Name of the Block	Name of the GP	Name of the Village/ Anganwadi Center	Sample Beneficiaries	Group Discussion	Key Informants
Rayagada	Kashipur	Talajhari	Talajhari	10	1	1
			Kodikipadar	10	1	1
	Gunupur	Regeda	Regeda	10	1	1
			Badaguda	10	1	1
	Padmapur	Akhusingh	Akhusingh	10	1	1
			Khilamunda	10	1	1
Koraput	Lakshmipur	Champi	Champi	10	1	1
			Adinagar	10	1	1
	Bandhugaon	Kumbhariput	Kumbhariput	10	1	1
			Gulimiguda	10	1	1
	Narayanpatna	Kumbhari	Kumbhari	10	1	1
			Bagam	10	1	1
Malkangiri	Khairaput	Rasabeda	Muduliguda	10	1	1
			Mundiguda	10	1	1
		Kudumuluguma	Parakanmela	10	1	1
			Kopeguda	10	1	1
	Mathili	Udulibeda	Udulibeda	10	1	1
			Chalanguda	10	1	1
Nawarangpur	Raigarh	Ganjapara	Ganjapara	10	1	1
			Dumurdihi	10	1	1
	Jharigaon	Dhadara	Dhadara	10	1	1
			Telakanadi	10	1	1
	Umerkote	Badabharandi	Sanabharandi	10	1	1
			Pujariguda	10	1	1
Kulahandi	Thuamul Rampur	Gunupur	Balisara	10	1	1
			Katha hara	10	1	2
	Dharmagarh	Brahman Chhendva	Brahman Chhendia	10	1	1
			Chilchila	10	1	1
	Golamunda	Manjhari	Tumura	10	1	1
			Nakatikani	10	1	1



Sonepur	Binika	Sindurpur	Sindurpur	10	1	1
			Cherupali	10	1	1
	Dungurpali	Cherupali	Baidupali	10	1	1
			Kusamal	10	1	2
	Tarava	Katapali	Katapali	10	1	1
			Bijapadar	10	1	1
Balangir	Tureikela	Dhamandnnga	Dhamandanga	10	1	1
			Kandhabahal	10	1	1
	Bangomunda	Bhalumunda	Bhalumunda	10	1	1
			Belapada	10	1	1
	Titilagarh	Jagua	Jagua	10	1	1
			Turla	10	1	1
Nuapada	Sinapali	Timanpur	Timanpur	10	1	1
			Ranimunda	10	1	1
	Boden	Tentulipada	Tentulipada	10	1	1
			Binapur	10	1	1
	Khariar	Areda	Areda	10	1	1
			Amalapali	10	1	1
				<b>480</b>	<b>48</b>	<b>50</b>

## 2.5 Period of Study:

The study took about 6 months time and the break up of activities are indicated in Table 2.5.

**Table 2.5**  
**Break up of the Study Period**

Sl. No.	NAME OF THE ACTIVITY	Time spent for the activities (in days)
1	Review of Literature, Formulation of Tools of Study & Pre-testing of Schedules	25
2	Training to the Study Team personnel	05
3	Analysis of Data	120
4	Report Writing	30
<b>Total</b>		<b>180 Days Or, 6 Months</b>

## 2.6 Evaluation Indicators:

For the empirical study, the following Key Evaluation Indicators have been used for assessing the acceptability and operational advantages of the Fortified Blended Food (FBF), Indiamix/Orimix:

- I. Acceptability
- II. Incidence of Malnutrition
- III. Reduction in the incidence of IMR, MMR and incidence of diseases owing to lack of nutrition
- IV. Utilization of Funds
- V. Health Status of women and children
- VI. Factors responsible for failure or poor implementation

Data from both Primary as well as Secondary sources have been collected for the proposed evaluation. However, the sources from which secondary and primary data had been collected are given in the following tabular form:

**Table 2.6**  
**Sources of Data Collected for the Study**

<b>TYPE OF DATA</b>	<b>SOURCES FROM WHERE DATA COLLECTED</b>
Secondary Source	<ul style="list-style-type: none"><li>• Women and Child Development Department, GoO</li><li>• Panchayati Raj Department, GoO</li><li>• CDPO's Office in the respective blocks under study</li><li>• Register maintained by the Anganwadi Supervisor and Anganwadi Worker</li><li>• Block Office</li><li>• District Statistical Handbook</li><li>• Birth and Death Registration Office of the corresponding district</li></ul>
Primary Source	<ul style="list-style-type: none"><li>• Beneficiary Households in the Sample Villages and Anganwadi Centers</li><li>• CDPO's</li><li>• ICDS Supervisors, Anganwadi Workers</li><li>• Key Stakeholders and Opinion Makers (BDO, School Teacher, PRI Functionaries, Youth Leaders, SHG Members, Food Enquiry Committee etc.) in the study area.</li></ul>

## 2.7 Tools used for the Study:

In order to collect data in the empirical study, Focused Group Discussions (FGDs) were organized in each of the 48 locations in which the sample AWCs is located. Like wise, PRA exercise has also been carried out in all the 48 villages in which the

Anganwadi Centers are situated. Besides, 10 Sample Beneficiary Households from each of the sample AWCs (480 Households in total) have been interviewed for the purpose of study using schedule method. Apart from the above tools, some typical Case Studies have been conducted to have a deeper insight in to the implementation process of the Programme. In addition to the aforementioned methods, Stakeholder Analysis and Key Informants Interview have been under taken to elicit in-depth information in respect of the Programme utilization and impact of the Programme.

However, the following are some of the important tools that were used for the study:

- I. Focused Group Discussion (FGD) Method
- II. Participatory Rural Appraisal (PRA) Method
- III. Case Study
- IV. Key Informant's Interview
- V. Stakeholder Analysis
- VI. Household Survey of the Beneficiaries (Schedule Method)

## **2.8 Instruments used for the Study**

Since a number of aspects and data pertaining to those during the empirical study could not be captured through the study tools such as Schedule, Interview, Focused Group Discussion methods, they were collected through Participant Observation method and Participatory Walk Through method as well.

Following two structured schedules were used for the study.

- i. Beneficiary Household Survey Schedule
- ii. AWC Profile Schedule

Beneficiary Household Schedule were canvassed to sample households/ beneficiaries. Information on family size, land holding pattern, occupation, educational level, economic status/ family income level, family occupation, health status of children beneficiaries, condition of malnourished children, pregnant and lactating mothers were collected through this schedule.

To elicit information on the no. of beneficiaries in different categories, i.e. normal, Grade-I, Grade-II, Grade-III, Grade-IV children for both 0-3 years & 3-6 years, pregnant mothers, lactating mothers & their health status in the surveyed village/ AWCs and the building position of AWCs, foodstuff/ ration store in AWCs, visiting by CDPO/AW Supervisor etc., AWC Profile Schedules were canvassed among Sample Anganwadi Workers.

## **CHAPTER III**

### **PROFILE OF THE AREA AND BENEFICIARY UNDER THE STUDY**

#### **3.1 PROFILE OF THE AREA:**

##### **3.1.1 Infrastructure Facilities:**

Orissa is a poor and backward state with agriculture as the main source of livelihood of majority of the people. With poor socio-economic infrastructures, especially in KBK region, the villages surveyed by us are found deficient in basic social and economic amenities like education, health, potable water, sanitation, road and transport, animal resource, electricity, market, irrigation, village organization and credit institutions. Our survey of 48 villages and focus group discussions held with people of different castes and class reveals that the principal means of livelihood of people in these villages is forest.

Education is the hallmark of progress and development. However, as education is of little importance in the life of the families (majority of whom are tribal) and earning livelihood by collection of forest products and practicing shifting cultivation are the characteristic features of the inhabitants of the study region, development of modern educational infrastructure in all the 48 sample villages has not been given much importance. The villages have less facility for primary education and more than half of the people are illiterates. The educational level of majority of the literate population in these villages are only up to primary. There are only a few villages, where there is facility for general education up to middle school level. Some of the villages have no female educated person and there is no eligible person for the position of Anganwadi Worker. In such villages, Govt. recruits persons as Anganwadi Workers from out side the village.

##### **3.1.2 Health Amenities:**

Health amenities and access of people to primary health care facilities in the sample villages are found to be very poor. Out of the 48 sample villages, no village has dispensary at their doorsteps. Owing to poor road and transport network, majority of the villages of the study areas are found to be cut off from the mainstream areas having adequate health services and, the average common people suffer a lot due to endemic diseases like malaria, diarrhoea, etc. In almost all sample villages people including small children invariably suffer from diarrhoea, malaria, gastric, hemicranias and skin diseases.

##### **3.1.3 Potable Water:**

The drinking or potable water facilities in most of the villages of surveyed areas are observed to be not only poor, but also highly unequal at the spatial level. Maximum villages have one tube well and in a large number of villages it is not properly

functioning. People are depending upon natural sources like river, stream, nala etc. in a good number of villages.

#### **3.1.4 Sanitation:**

The overall sanitation and sanitary facility of the villages surveyed by us were found to be equally poor. Only a very few among the rural households, which is less than one-tenth, have access to sanitary latrine facility. The majority of the inhabitants defecate in open fields, which are found to be decreasing day by day due to illegal encroachment of the village common property resources like fallow land, waste land, pasture and burial ground by the powerful few for various purposes. Under the scenario of rising population growth and shrinking land, in large number of villages people are defecating on area close to their habitation, thereby polluting land, air and the water bodies of the village. It was, however, observed at the time from our field study that some of the NGOs have been operating in these villages to make people aware about health and sanitation issues. Some among them are found to be implementing individual sanitary latrine scheme for the B.P.L households under the rural sanitation improvement Programme of the government.

#### **3.1.5 Road and Transport:**

Maximum villages of our study area have very poor road and transport facilities. Some of the villages are situated within the forest and hilly regions. Due to hilly terrains, it is extremely expensive and difficult to connect fair road to the habitations. Due to lack of these facilities, they suffer a lot and they fail to know about all the facilities which is given by the government and even find it difficult to go the government officials for their requirements. The internal roads in the villages are also in bad shape, which worsens during the rainy season.

### **3.2. PROFILE OF THE BENEFICIARIES:**

Total Population & Total Households category wise in surveyed villages of sample GPs/ blocks of 8 KBK districts are indicated in Table 3.1.

**Table 3.1**  
**Category wise Total Households and Population in the Surveyed Village in the Study Area**

Sl. No.	District	Block	GP	Village	Total Households					Total Population						
					SC	ST	OBC	General	Total	SC	ST	OBC	General	Total		
1	Rayagada	Kashipur	Talajhari	Talajhari	33	121	4	0	158	145	525	17	0	687		
					20.89	76.58	2.53	0.00	100.00	21.11	76.42	2.47	0.00	100.00		
				Kudikipadar	50	95	0	0	145	165	512	0	0	677		
					34.48	65.52	0.00	0.00	100.00	24.37	75.63	0.00	0.00	100.00		
		Gunupur	Regeda	Regeda	21	128	20	0	169	91	613	95	0	799		
							12.43	75.74	11.83	0.00	100.00	11.39	76.72	11.89	0.00	100.00
				Badaguda	28	58	32	0	118	137	230	104	0	471		
					23.73	49.15	27.12	0.00	100.00	29.09	48.83	22.08	0.00	100.00		
		Padmapur	Akhusingh	Akhusingh	106	22	180	0	308	522	43	730	0	1295		
							34.42	7.14	58.	0.00	100.00	40.31	3.32	56.37	0.00	100.00
				Khilamunda	15	29	56	0	100	57	411	250	0	718		
					15.00	29.00	56.00	0.00	100.00	7.94	57.24	34.82	0.00	100.00		
2	Koraput	Lakshipur	Champi	Champi	53	96	49	0	198	240	377	259	0	876		
					26.	48.48	24.75	0.00	100.00	27.40	43.04	29.5	0.00	100.00		
				Adinagar	0	74	23	0	97	0	418	115	0	533		
							0.00	76.29	23.71	0.00	100.00	0.00	78.42	21.58	0.00	100.00
				Bandhu-Gaon	Kumbhariput †	Kumbhariput	84	75	79	0	238	418	350	335	0	1103
							35.29	31.51	33.19	0.00	100.00	37.90	31.73	30.3	0.00	100.00
				Gulimiguda	4	182	2	0	188	17	993	3	0	1013		
					2.13	96.81	1.06	0.00	100.00	1.68	98.03	0.30	0.00	100.00		
		Narayan patna	Kumbari	Kumbhari	11	75	16	0	102	62	280	57	0	399		
					10.78	73.53	15.69	0.00	100.00	15.54	70.18	14.29	0.00	100.00		

				Bagam	34 29.82	78 68.42	2 1.75	0 0.00	114 100.00	171 30.65	380 68.10	7 1.25	0 0.00	558 100.00	
3	Malkangiri	Khairaput	Rasabeda	Muduliguda	16 11.03	126 86.90	3 2.07	0 0.00	145 100.00	79 13.67	490 84.78	9 1.56	0 0.00	578 100.00	
				Mundiguda	130 38.81	153 45.67	52 15.52	0 0.00	335 100.00	185 22.02	350 141.67	305 36.31	0 0.00	840 100.00	
		Kudumul Gumma	Parkanmela	Parkanmela	0 0.00	180 100.00	0 0.00	0 0.00	180 100.00	0 0.00	882 100.00	0 0.00	0 0.00	0 0.00	882 100.00
				Kopeguda	24 21.82	36 32.73	50 45.45	0 0.00	110 100.00	74 16.16	119 25.98	265 57.8b	0 0.00	458 100.00	
		Mathili	Udulibeda	Udulibeda	14 7.57	58 31.35	113 b1.08	0 0.00	185 100.00	62 7.87	267 33.88	459 58.86	0 0.00	788 100.00	
				Chalanguda	9 9.09	42 42.42	48 48.48	0 0.00	99 100.00	34 6.72	212 41.90	260 51.38	0 0.00	506 100.00	
4	Nawarangpur	Raigarh	Gan\japara	Ganjaparan	9 4.13	120 55.05	89 40.83	0 0.00	218 100.00	28 2.42	689 59.45	442 38.1	0 0.00	1159 100.00	
				Dumurdihi	18 15.38	83 70.94	16 13.b8	0 0.00	117 100.00	106 14.70	518 71.84	97 13.45	0 0.00	721 100.00	
		Jharigaon	Dhadra	Dhadra	213 37.2	254 44.41	105 18.3b	0 0.00	572 100.00	739 33.67	911 41.50	545 24.83	0 0.00	2195 100.00	
				Telakanadi	15 8.72	92 53.49	65 37.79	0 0.00	172 100.00	112 8.50	622 47.23	583 44.2	0 0.00	1317 100.00	
		Umerkote	Bada- bharandi	Sanabharandi	2 0.73	137 50.18	134 49.08	0 0.00	273 100.00	7 0.52	706 52.22	639 47.2b	0 0.00	1352 100.00'	
				Pujariguda	47 24.10	52 2b.b7	96 49.23	0 0.00	195 100.00	237 24.51	246 25.44	484 50.05	0 0.00	967 100.00	
			Gunupur	Balisara	22	77	55	I 0	154	122	456	I 299	0	877	

5	Kalahandi	Thuamul Rampur			14.29	50.00	35.71	0.00	100.00	13.91	52.00	34.09	0.00	100.00
				Kathaghara	10 5.95	158 94.05	0 0.00	0 0.00	168 100.00	53 6.30	788 93.70	0 0.00	0 0.00	841 100.00
		Dharmagar	Brahman- chhendia	Brahmanchhe	24 6.67	111 30.83	225 62.50	0 0.00	360 100.00	104 b.b0	466 29.57	1006 63.83	0 0.00	1576 100.00
				Chilchila	130 38.2	42 12.35	168 49.41	0 0.00	340 100.00	660 9.00	140 48.55	755 0.00	0 100.00	1555 100.00
		Golamunda	Manjhari	Tumura	24 6.74	25 7.02	307 86.2	0 0.00	356 100.00	92 5.62	122 7.46	1422 86.92	0 0.00	1636 100.00
				Nakatikani	149 37.82	234 59.39	11 2.79	0 0.00	394 100.00	385 22.88	1262 74.99	36 2.14	0 0.00	1683 100.00
6	Sonepurr	Binika	Sindurpur	Sindurpur	42 20.19	67 32.21	99 47.60	0 0.00	208 100.00	181 18.66	315 32.47	474 48.8	0 0.00	970 100.00
				Cherupali	75 42.61	58 32.95	43 24.43	0 0.00	176 100.00	352 100.00	281 32.19	240 27.49	0 0.00	873 100.00
		Dungurpali	Cherupali	Bnidupali	40 13.11	50 16.39	215 70.49	0 0.00	305 100.00	343 19.93	196 11.39	1182 68.68	0 0.00	1721 100.00
				Kusamal	26 13.98	44 23.66	116 62.3	0 0.00	186 100.00	75 8.41	433 48.54	384 43.05	0 0.00	892 100.00
		Tarava	Katapali	Katapali	24 20.69	58 50.00	34 29.31	0 0.00	116 100.00	116 26.48	204 46.58	118 26.9	0 0.00	438 100.00
				Bijapadar	36 25.53	47 33.33	58 41.13	0 0.00	141 100.00	138 23.88	195 33.74	245 42.39	0 0.00	578 100.00
7	Balangir	Tureikela	Dhamandang	Dhnmandanga	12 8.63	59 42.45	68 48.92	0 0.00	139 100.00	62 9.89	278 44.34	287 45.	0 0.00	627 100.00
				Kandhabahal	40 27.21	71 48.30	36 24.49	0 0.00	147 100.00	281 26.86	533 50.96	232 22.18	0 0.00	1046 100.00
		Bongo- munda	Bhalu- munda	Bhalumunda	30 16.67	26 14.44	124 68.89	0 0.00	180 15.80	149 15.80	122 12.94	672 71.26	0 0.00	943 100.00



		Titilagarh	Jagua	Belapada	69	52	96	0	217	396	258	465	0	1119	
						31.80	23.96	44.2	0.00	100.00	35.39	23.06	41.55	0.00	100.00
						Jagua	88	54	102	0	244	461	319	637	0
					36.0	22.13	41.80	0.00	100.00	32.53	22.51	44.95	0.00	100.00	
				Turla	25	70	80	0	175	162	404	549	0	1115	
					14.29	40.00	5.71	0.00	100.00	14.53	36.23	9.2	0.00	100.00	
8	Nuapada	Sinapali	Timanpur	Timanpur	46	51	88	0	185	80	296	540	0	916	
					24.86	27.57	47.5	0.00	100.00	8.73	32.31	58.95	0.00	100.00	
				Ranimunda	16	45	157	0	218	342	316	623	0	1281	
					7.34	20.64	72.02	0.00	100.00	26.70	24.67	48.63	0.00	100.00	
		Boden	Tentuli-Pada	Tentulipada	0	\$5	37	0	122	0	423	194	0	617	
							0.00	69.67	30.33	0.00	100.00	0.00	68.56	31.	0.00
				Binapur	54	28	263	0	345	281	118	1195	0	1594	
					15.6	8.12	76.23	0.00	100.00	17.63	7.40	74.9	0.00	100.00	
		Khariar	Areda	Areda	68	108	0	0	176	349	535	0	0	884	
							38.	61.36	0.00	0.00	100.00	39.48	60.52	0.00	0.00
				Amalapali	64	38	111	0	213	308	151	554	0	1013	
					30.05	17.84	52.11	0.00	100.0	30.40	14.91	54.69	0.00	100.00	
			Total		2050	4024	3727	0	9801	9180	19755	18169	0	47104	
					0.92	41.06	38.03	0.00	100.0	19.49	41.94	38.57	0.00	100.00	

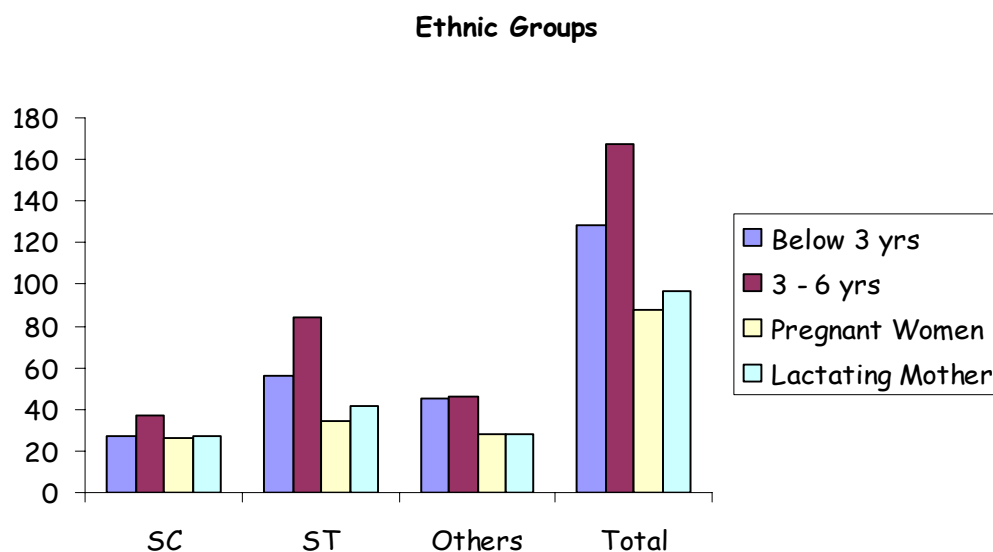
NB. Figures in decimal point refer to percentage.

Distribution of sample beneficiaries according to their ethnic group is depicted in Table 3.2, which reveals that out of the total sample of 480, the share of ST community is the highest (45.00%), followed by other communities (30.63%) and SC communities (24.38%). The similar trend is observed in all the four categories of beneficiaries i.e., children below 3 years and 3-6 years of age and in case of both lactating and pregnant mothers.

**Table - 3.2**  
**Ethnic wise Distribution of Beneficiaries (Beneficiary wise)**

Sl. No.	Types of Beneficiaries	Ethnic Groups			
		SC	ST	Others	Total
1	Below 3 Yrs	27 (5.63)	56 (11.67)	45 (9.38)	128 (26.67)
2	3 - 6 Yrs	37 (7.71)	84 (17.50)	46 (9.58)	167 (34.79)
	Sub-total	64 (13.33)	140 (29.17)	91 (18.96)	295 (61.46)
3	Pregnant Mother	26 (5.42)	34 (7.08)	28 (5.83)	88 (18.33)
4	Lactating Mother	27 (5.63)	42 (8.75)	28 (5.83)	97 (20.21)
	Sub-total	53 (11.04)	76 (15.83)	56 (11.67)	185 (38.54)
	<b>GRAND TOTAL</b>	<b>117 (24.38)</b>	<b>216 (45.00)</b>	<b>147 (30.63)</b>	<b>480 (100.00)</b>

NB: Figures in parentheses refer to the percentage



It is observed from the table that more than three-fifth of the beneficiaries are children (61.46%). Among the children, the number of 3-6 years of age children is more than that of the below 3 years of age. This trend is observed in all the three categories of beneficiaries i.e. SC, ST and Others. Similarly, among the mothers, the numbers of lactating mother is marginally higher than that of the pregnant mother.

Among the STs, 140 beneficiaries are children and only 76 are mother, which constitute 29.17 per cent and 15.83 per cent of the total sample respectively. Similarly the percentage share of pregnant mother is marginally less than that of the pregnant mother.

There are 91 children among the 'Others' category (18.96% of the total beneficiaries), out of which 45 are below 3 years and 46 are 3-6 years of age. In this category the number of pregnant mother and lactating mother are equal i.e. 28 each in both the categories.

Among the SC category, the table reveals that out of the 117 beneficiaries, 64 are children (13.33% of the total beneficiaries) and 53 are mothers (11.04%) of the total beneficiaries. Here too, the number of 3-6 years children is less than that of the number of below 3 years of age. The number of pregnant and lactating mother in this category is more or less equal.

### 3.2.1 Sex Ratio of the Sample Beneficiaries:

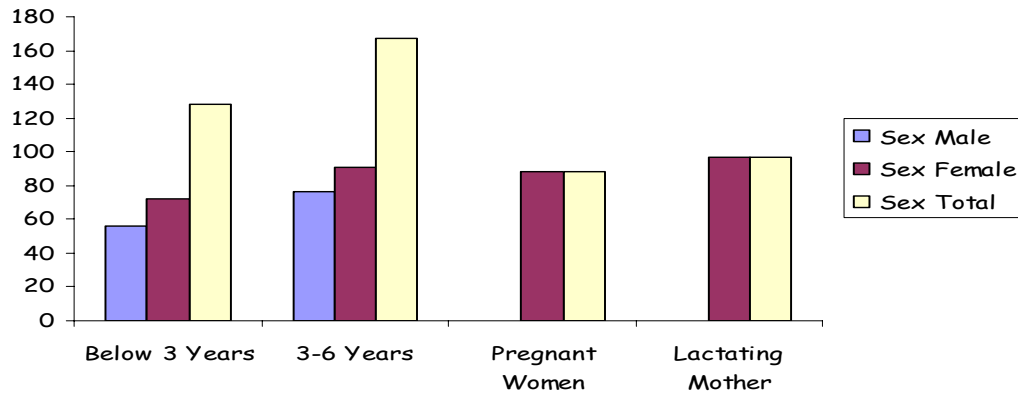
Most of the sample beneficiaries are females (72.50%) as only 132 male beneficiaries are found in the children category. Among the children, 163 are females. The number of female children is more than the male children in both the below 3 years category and 3-6 years category. Sex wise distribution of beneficiaries for both category of children & women beneficiaries is at Table 3.3.

**Table 3.3**  
**Sex wise Distribution of Beneficiaries**

Sl. No.	Types of Beneficiaries	Sex		
		Male	Female	Total
1	Below 3 Years	56 (11.67)	72 (15.00)	128 (26.67)
2	3-6 Years	76 (15.83)	91 (18.96)	167 (34.79)
	Sub-total	132 (27.50)	163 (33.96)	167 (34.79)
3	Pregnant Women	0 (0.00)	88 (18.33)	88 (18.33)
4	Lactating Mother	0 (0.00)	97 (20.21)	97 (20.21)
	Sub-total	0 (0.00)	185 (38.54)	185 (38.54)

<b>Grand Total</b>	<b>132</b> <b>(27.50)</b>	<b>348</b> <b>(72.50)</b>	<b>480</b> <b>(100.00)</b>
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NB: Figures in parentheses refer to the percentage



### 3.2.2 Economic Status:

Table 3.4 reveals the economic status of the beneficiaries. The beneficiaries are classified into two categories according to their economic status. The beneficiaries who are living above the poverty line are coming under APL category, whereas, the beneficiaries who are living below the poverty line are taken as BPL beneficiaries. Almost all the beneficiaries are coming under BPL category, as revealed from the analysis of data (99.58%). Only 2 beneficiaries are from APL category. One APL beneficiary belongs to 'below three years' of age category and the other is from 'lactating mother' category.

**Table 3.4**  
**Distribution of Beneficiaries on the basis of Economic Status**

Sl. No.	Types of Beneficiaries	Economic Status		
		BPL	APL	Total
1	Below 3 Years	127 (26.46)	1 (0.21)	128 (26.67)
2	3-6 Years	167 (34.79)	0 (0.00)	167 (34.79)
	Sub-total	294 (61.25)	1 (0.21)	167 (34.79)
3	Pregnant Women	88 (18.33)	0 (0.00)	88 (18.33)
4	Lactating Mother	96 (20.00)	1 (0.21)	97 (20.21)
	Sub-total	184 (38.33)	1 (0.21)	185 (38.54)
	<b>Grand Total</b>	<b>478</b> <b>(99.58)</b>	<b>2</b> <b>(0.42)</b>	<b>480</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage

### 3.2.3 Educational Level of Head of the Household:

Educational level of the head of the beneficiary households is very important because it normally affects the awareness level. Whether his/her family member will go to receive the benefits from the Anganwadi centers is normally determined by the head of the household. Educational level of the head of the Household is reflected in Table 3.5. It is revealed from the table that 60 per cent of the head of the beneficiary households are illiterate and 5.83 per cent of the head of the beneficiaries' households are just literate i.e. never gone to school but can read and write their name. Only 35.17 per cent head of the Households have school education i.e. 29.58 per cent have education up to Primary level, 2.71 per cent have education up to middle level and only 1.88 per cent of the head of the beneficiaries have high school education. No head of the household have attained college education from among the sample beneficiaries.

**Table 3.5**  
**Distribution of Beneficiaries on the basis of their Educational Level of Head of Household**

Sl. No.	Types of Beneficiaries	Educational Level					
		Illiterate	Just Literate	Primary	Middle	High School	Above High School
1	Below 3 Years	72 (15.00)	8 (1.67)	41 (8.54)	3 (0.63)	4 (0.83)	128 (26.67)
2	3-6 Years	103 (21.46)	9 (1.88)	49 (10.21)	5 (1.04)	1 (0.21)	167 (34.79)
	Sub-total	175 (36.46)	17 (3.54)	90 (18.75)	8 (1.67)	5 (1.04)	295 (61.46)
3	Pregnant Women	57 (11.88)	4 (0.83)	24 (5.00)	2 (0.42)	1 (0.21)	88 (18.33)
4	Lactating Mother	56 (11.67)	7 (1.46)	28 (5.83)	3 (0.63)	3 (0.63)	97 (20.21)
	Sub-total	113 (23.54)	11 (2.29)	52 (10.83)	5 (1.04)	4 (0.83)	185 (38.54)
	<b>Grand Total</b>	<b>288 (60.00)</b>	<b>28 (5.83)</b>	<b>142 (29.58)</b>	<b>13 (2.71)</b>	<b>9 (1.88)</b>	<b>480 (100.00)</b>

NB: Figures in parentheses refer to the percentage

### 3.2.4 Condition of Children Beneficiaries:

The children beneficiaries are classified into five categories i.e. Normal, Grade-I, Grade-II, Grade-III and Grade-IV depending upon their nutritional level. It is observed that 59.66 per cent children are of normal health and 40.44 per cent sample children are malnourished. Among the malnourished children, 57 are of Grade- I, 33 are of Grade-II, 20 are of Grade-III and only 9 are of Grade- IV category. Grade-II and I

type malnourished children are comparatively less in number than the other two grades i.e. Grade-III and Grade-IV. The children of these two categories are treated as severely malnourished children. Distribution of children beneficiaries on the basis of their health status is presented in **Table 3.6**. More number of children in the 'below 3 years of age' category are found malnourished compared to that of the 3-6 years of age' category. Poor economic condition, lack of awareness, low literacy level and more number of children are some of the major causes for the malnourishment of the children beneficiaries. When the conditions of the child becomes more serious due to malnourishment, the Anganwadi Workers normally refer them to the nearest ANM centers or Medical or Dispensaries.

**Table 3.6**  
**Distribution of Beneficiaries on the basis of their Status**

S1. No.	Types of Beneficiaries	Status/ Condition of Beneficiary					Total
		Normal	G-I	G-II	G-III	G-IV	
1	Below 3 Years	57 (19.32)	34 (11.53)	19 (6.44)	12 (4.07)	6 (2.03)	128 (43.39)
2	3-6 Years	119 (40.34)	23 (7.80)	14 (4.75)	8 (2.71)	3 (1.02)	167 (56.61)
	<b>Total</b>	<b>176</b> <b>(59.66)</b>	<b>57</b> <b>(19.32)</b>	<b>33</b> <b>(11.19)</b>	<b>20</b> <b>(6.78)</b>	<b>9</b> <b>(3.05)</b>	<b>295</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage

**Photo 1**

**Photo 2**



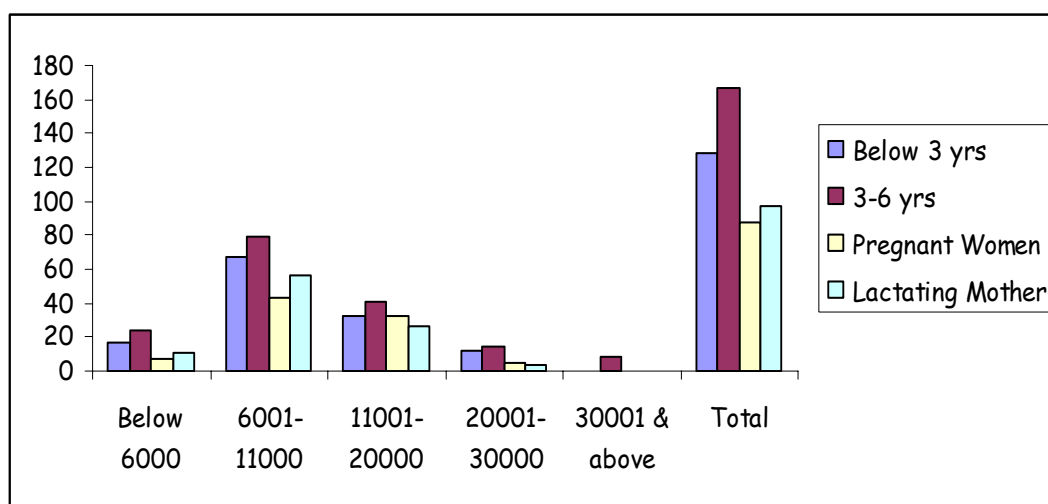
### 3.2.5 Family Income:

Table 3.7 reveals the distribution of the beneficiaries according to their level of family income. It can be observed that the annual family income of 51.04 per cent beneficiaries is between Rs.6001/- and Rs.11000/-. Like wise, the average annual income of 27.50 per cent beneficiaries lies between Rs.11001/- and Rs.20,000/- and the annual family income of 12.29 per cent beneficiaries is below Rs.6,000/-. The number of high income group beneficiaries is very low as only 7.29 per cent beneficiaries have annual family income between Rs.20,001-30,000 and 1.88 per cent beneficiaries Rs.30,000/- and above.

**Table 3.7**  
**Distribution of Beneficiaries on the basis of their Income Level**

Sl. No.	Types of Beneficiaries	Income Level					Total
		Below 6000	6001-11000	11001-20000	20001-30000	30001 & above	
1	Below 3 Years	17 (3.54)	67 (13.96)	32 (6.67)	12 (2.50)	0 (0.00)	128 (26.67)
2	3-6 Years	24 (5.00)	79 (16.46)	41 (8.54)	14 (2.92)	9 (1.88)	167 (34.79)
	Sub-total	41 (8.54)	146 (30.42)	73 (15.21)	26 (5.42)	9 (1.88)	295 (61.46)
3	Pregnant Women	7 (1.46)	43 (8.96)	33 (6.88)	5 (1.04)	0 (0.00)	88 (18.33)
4	Lactating Mother	11 (2.29)	56 (11.67)	26 (5.42)	4 (0.83)	0 (0.00)	97 (20.21)
	Sub-total	18 (3.75)	99 (20.63)	59 (12.29)	9 (1.88)	0 (0.00)	185 (38.54)
	<b>Grand Total</b>	<b>59</b> <b>(12.29)</b>	<b>245</b> <b>(51.04)</b>	<b>132</b> <b>(27.50)</b>	<b>35</b> <b>(7.29)</b>	<b>9</b> <b>(1.88)</b>	<b>480</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage



Beneficiary wise distribution of the sample reveals that more percentage of children are found in the lower income groups like 'below Rs.6000/-' and 'Rs.6,001-11,000/-' compared to the mothers. Further, about 30.42 per cent beneficiaries are children whose family income lies between Rs.60001/- to 11000/-and only 9 beneficiaries have family income of more than 30,000/- rupees per annum. All these 9 beneficiaries are children of 3-6 years age group. No mother beneficiary is found in this income group. Similarly, only 9 mothers are found in the income group of Rs.20,001/- to Rs.30,000/-, as compared to 26 children in the same income group. Therefore, it can be said that the economic disparity is more among children (both below 3 years and 3-6 years) compared to the mothers (both pregnant and lactating).

### 3.2.6 Family Size:

**Table 3.8** shows the distribution of beneficiaries according to their family size. Most of the beneficiaries have a family size of 3-4 members (56.46%). In this group of family, the share of children beneficiaries is 33.33 percentage and that of the mother beneficiary is 23.13 percentage. Out of the 160 children beneficiaries who belong to the family size of 3-4 persons, 82 are of below 3 years of age and 78 are of 3-6 years of age. Similarly, out of the 111 mothers coming under this category 68 are lactating mothers and 43 are pregnant women. Around 150 beneficiaries (31.25%) belong to family having 5-b members. Out of this 113 (23.54%) are children and only 37 (7.71%) are mothers. Again, among the children beneficiaries, 74 (15.42%) are of the age group of 3-6 years of age and the rest 39 are of the age group of 0-3 years of age. Among the mothers, 26 are lactating mothers and only 11 are pregnant mothers.

**Table 3.8**  
**Distribution of Beneficiaries on the basis of their Family Size**

Sl. No.	Types of Beneficiaries	Income				Total
		Less than 2 Person	3-4 Person	5-6 Person	7-8 Person	
1	Below 3 Years	1 (0.21)	82 (17.08)	39 (8.13)	6 (1.25)	128 (26.67)
2	3-6 Years	2 (0.42)	78 (16.25)	74 (15.42)	13 (2.71)	167 (34.79)
	Sub-total	3 (0.63)	160 (33.33)	113 (23.54)	19 (3.96)	295 (61.46)
3	Pregnant Women	— (7.08)	43 (8.9b)	11 (2.29)	0 (0.00)	88 (18.33)
4	Lactating Mother	1 (0.21)	68 (14.17)	26 (5.42)	2 (0.42)	97 (20.21)
	Sub-total	35 (7.29)	111 (23.13)	37 (7.71)	2 (0.42)	185 (38.54)
	<b>Grand Total</b>	<b>38 (7.92)</b>	<b>271 (56.46)</b>	<b>150 (31.25)</b>	<b>21 (4.38)</b>	<b>480 (100.00)</b>

NB: Figures in parentheses refer to the percentage

The next important category is family size of less than or equal to two persons. In this category 38 beneficiaries (7.92%) are there. Most of these beneficiaries are pregnant women (34 in number) and only 3 children beneficiaries and one lactating mother fall under this category.

### 3.2.7 Land Holding Size:

Table 3.9 shows the distribution of beneficiaries according to their land holding size. It is revealed from the table that 314 (82.08%) beneficiary households have less than one acre of land. The data further reveals that out of the total beneficiaries covered for the study, 238 are children beneficiaries and 156 are mother beneficiaries. Further, among the children, 145 are of 3-6 years of age, whereas, 93 are of below 3 years of age category. Similarly, among the mothers, 84 are lactating and 72 are pregnant. Only 82 beneficiary households have lands of 1-2 acres and among them 57 are children and 29 are mothers.

**Table 3.9**  
**Distribution of Beneficiaries on the basis of their Land Holding Size**

Sl. No.	Types of Beneficiaries	Land Holding Size		
		Below 1 Acre	1- 2 Acres	Total
1	Below 3 Years	93 (19.38)	35 (7.29)	128 (26.67)
2	3-6 Years	145 (30.21)	22 (4.58)	167 (34.79)
	Sub-total	238 (49.58)	57 (11.88)	167 (34.79)
3	Pregnant Women	72 (15.00)	16 (3.33)	88 (18.33)
4	Lactating Mother	84 (17.50)	13 (2.71)	97 (20.21)
	Sub-total	156 (32.50)	29 (6.04)	185 (38.54)
	<b>Grand Total</b>	<b>394</b> <b>(82.08)</b>	<b>86</b> <b>(17.92)</b>	<b>480</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage

So far as children are concerned, the picture is completely different. Here more number of beneficiaries are found in the age group of 0-3 year age group compared to 3-6 years of age. Out of the 29 mothers (beneficiaries) who have family land holding size of 1-2 acres, 16 are pregnant and 13 are lactating mothers. No beneficiary has holding size of more than 2 acres of land.

### 3.2.8 Family Occupation:

Another important aspect which throws some light on the economic status of the beneficiary is family occupation. As most of the beneficiaries are from economically poor families, their primary household occupation is wage labour. It is revealed from Table 3.10 that the family occupation of 339 beneficiaries is wage labour, which constitutes 70.63 per cent of the total beneficiary households. Similarly, the family occupation of 134 beneficiaries (27.92%) is agriculture. Very few beneficiaries have other family occupation like business (1.04%), Service (0.21%) and others like masson, tailoring etc. (0.21%).

**Table 3.10**  
**Distribution of Beneficiaries on the basis of the Primary**  
**Occupation of the Household**

Sl. No.	Types of Beneficiaries	Household Occupation					
		Agriculture	Wage Labour	Business	Service	Any other	Total
1	Below 3 Years	38 (7.92)	89 (18.54)	1 (0.21)	0 (0.00)	0 (0.00)	128 (26.67)
2	3-6 Years	42 (8.75)	124 (25.83)	1 (0.21)	0 (0.00)	0 (0.00)	167 (34.79)
	Sub-total	80 (16.67)	213 (44.38)	2 (0.42)	0 (0.00)	0 (0.00)	295 (61.46)
3	Pregnant Women	25 (5.21)	61 (12.71)	2 (0.42)	0 (0.00)	0 (0.00)	88 (18.33)
4	Lactating Mother	29 (6.04)	65 (13.54)	1 (0.21)	1 (0.21)	1 (0.21)	97 (20.21)
	Sub-total	54 (11.25)	126 (26.25)	3 (0.63)	1 (0.21)	1 (0.21)	185 (38.54)
	<b>Grand Total</b>	<b>134 (27.92)</b>	<b>339 (70.63)</b>	<b>5 (1.04)</b>	<b>1 (0.21)</b>	<b>1 (0.21)</b>	<b>480 (100.00)</b>

NB: Figures in parentheses refer to the percentage

The table also reveals that the family occupation of 80 children beneficiaries is agriculture, out of which 38 are below 3 years of age and the rest 42 are 3-6 years of age. Similarly, the family occupation of 84 mother beneficiaries is agriculture, of which 25 (5.21%) are pregnant women and 29 (6.04%) are lactating mother.

About 213 children beneficiaries (44.38%) are from labourer family, out of which 89 are below 3 years of age and 124 are of 3-6 years of age category. They constitute 18.84 and 25.83 per cent of the total beneficiaries respectively. Like wise, 126 mother beneficiary's (26.25% of the total beneficiaries) family occupation is 'Wage Labour'. Among them 61 are pregnant women (12.71%) and 65 are lactating mother (13.54%). The family occupation of two children beneficiaries and 3 mother beneficiaries is business.

### 3.2.9 House Type:

The economic condition of a person can be judged from the condition of the house where he lives. Distribution of beneficiaries according to their type of house has been shown in Table 3.11. It can be observed that most of the beneficiaries live in thatched houses. About 451 beneficiaries live in thatched houses, which is 93.96 per cent of the total beneficiaries. Only 23 beneficiaries (4.79%) live in tiled homes. The number and percentage of the beneficiaries who lives in asbestos and concrete homes is very negligible i.e. five beneficiaries live in asbestos houses and one beneficiary lives in concrete house.

**Table 3.11**  
**Distribution of Beneficiaries on the basis of Type of House**

Sl. No.	Types of Beneficiaries	Types of House				
		Concrete	Tiled	Asbestos	Thatched	Total
1	Below 3 Years	0 (0.00)	8 (1.67)	2 (0.42)	118 (24.58)	128 (26.67)
2	3-6 Years	0 (0.00)	10 (2.08)	1 (0.21)	156 (32.50)	167 (34.79)
3	Sub-total	0 (0.00)	18 (3.75)	3 (0.63)	274 (57.08)	167 (34.79)
	Pregnant Women	0 (0.00)	3 (0.63)	2 (0.42)	83 (17.29)	88 (18.33)
	Lactating Mother	1 (0.21)	2 (0.42)	0 (0.00)	94 (19.58)	97 (20.21)
4	Sub-total	1 (0.21)	5 (1.04)	2 (0.42)	177 (36.88)	185 (38.54)
	<b>Grand Total</b>	<b>1 (0.21)</b>	<b>23 (4.79)</b>	<b>5 (1.04)</b>	<b>451 (93.96)</b>	<b>480 (100.00)</b>

NB: Figures in parentheses refer to the percentage

When the data is disaggregated on the basis of type of beneficiaries, it is seen that out of the 295 children beneficiaries, 274 live in thatched houses and 18 lives in tiled houses the rest 3 beneficiaries live in asbestos houses. Similarly, among the mother beneficiaries, 177 live in thatched houses and five live in tiled houses. The only beneficiary who lives in a concrete house is a lactating mother. The other two mother beneficiaries live in concrete houses.

## **CHAPTER-IV**

### **PROFILE OF THE SAMPLE ANGANWADI CENTERS (AWCs)**

#### **4.1 Total number of Beneficiaries in the surveyed AWCs/Villages:**

Total number of Beneficiaries under both the Special Nutrition Programme & ICDS i.e. children below 3 years & 3-6 years along with their nutrition level (Normal, Grade-I, Grade-II, Grade-III & Grade-IV) and Pregnant women & lactating mother in the sample AWCs/ villages along with their GP wise Block wise locations for all the KBK districts are depicted in Table 4.1.

#### **4.2 Sample Beneficiaries in Study Area:**

Village wise sample beneficiaries of all the categories in surveyed blocks as well as their GPs for all the 8 KBK districts is shown in Table 4.2.

Under the Integrated Child Development Scheme one Anganwadi Center is allotted to a population of 1000. Anganwadi Center plays an important role for promoting child health care in the grass root level. It is the key and sole responsible institution for implementing both Special Nutrition Programme & ICDS at the village level. Out of 48 surveyed AWCs it is observed that the AWC role is very much important in the village for improving of child health care. Under Revised Long Term Action Plan (RLTAP), Govt. of India invests huge amount of funds towards promoting health condition of the children, pregnant women, lactating mother in KBK region. Anganwadi Center has one Anganwadi Worker (AWW) and one Anganwadi Helper (AWH). Anganwadi Worker plays an important role in this institution. Anganwadi Worker is trained in various aspects for health, nutrition and child development. The role and duties of Anganwadi Worker is as follows.

#### **4.3 Role and Duties of the Anganwadi Worker (AWW):**

She plays an important role of the institution, such as:

- Regular health checkup
- Immunization
- Health Education
- Non-formal Pre-school education
- Distribute Foodstuff to all beneficiaries
- Providing Cooking food to Pre-school child
- Providing Medicines to pregnant, Lactating Mother
- Maintains all records about birth, death person of the village
- Refers Malnourished child to medical health care
- Supervise/ Check to all beneficiaries about the use of foodstuff
- Create awareness about health care among villagers

Table 4.1

Category wise Total No. of Beneficiaries ins the Surveyed Villages / AWCs in the 8 KBK Districts

Sl. No.	District	Block	G.P.	Village	Below 3 years					Total	3-6 years					Total	Preg nant wome n	Lact ating Moth er	Total
					Norm al	G-I	G-II	G-III	G-IV		Norm al	G-I	G-II	G-III	G-IV				
1	Rayagada	Kashipur	Talajhari	Talajhari	10 8.26	20 16.53	15 12.40	0 0.00	1 0.83	46 38.02	17 4.05	30 24.79	10 8.26	0 0.00	0 0.00	57 47.11	12 9.92	6 4.96	12 100
				Kudikipa dar	6 10.00	8 13.3	4 6.67	2 3.3	0 0.0	20 33.3	12 20.0	10 16.6	6 10.0	0 0.0	0 0.0	28 46.6	6 10.00	6 10.00	6 100
		Gunupur	Regeda	Regeda	20 13.51	26 17.51	19 12.84	1 0.68	1 0.68	67 45.27	25 16.89	32 21.62	4 2.70	0 0.00	0 0.00	61 41.22	9 608	11 7.43	14 100
				Badagud a	17 26.15	10 15.38	11 16.92	1 1.54	0 0.00	39 60.00	5 7.69	6 9.23	4 6.15	0 0.00	0 0.00	15 23.08	9 13.85	2 3.08	65 100
		Padmapur	Akhusing h	Akhusing h	21 17.65	28 23.53	9 7.56	3 2.52	0 0.00	61 51.26	7 5.88	25 21.01	3 2.52	1 0.84	0 0.00	36 30.25	10 8.40	12 10.08	11 100
				Khilamun da	14 17.95	14 17.95	5 6.41	0 0.00	0 0.00	33 42.31	12 15.38	13 16.67	9 11.54	1 1.28	0 0.00	35 44.87	5 6.41	5 6.41	78 100
2	Koraput	Lakshipur	Champi	Champi	14 12.61	13 11.71	12 10.81	1 0.90	0 0.00	40 36.04	23 18.02	8 7.21	0 0.00	0 0.00	51 45.95	9 8.11	11 9.91	11 100	
				Adinagar	5	5	20	0	0	30	5	12	13	1	1	32	10	7	79

					6.33	6.33	25.3	0.00	0.00	37.9	6.33	15.19	16.91	1.27	1.27	40.51	12.66	8.86	100
							2			7									
		Bandhu-Gaon	Kumbhari-put	Kumbhari-put	30	21	15	1	0	67	33	37	15	0	0	85	11	14	17
					16.95	11.86	8.47	0.56	0.00	37.8	5	20.9	8.47	0.00	0.00	48.0	2	6.21	7.91
				Gulimiguda	23	34	19	0	0	76	18	43	16	0	0	77	11	18	18
					12.64	18.68	10.44	0.00	0.00	41.76	9.89	23.6	8.79	0.00	0.00	42.31	6.04	9.89	100
		Narayanpatna	Kumbari	Kumbhari	11	8	4	1	0	24	6	9	3	0	0	18	4	8	54
					20.3	14.81	7.41	1.85	0.00	44.4	4	11.11	16.67	5.56	0.00	33.3	3	7.41	14.81
					7	19	8	2	0	42	13	19	3	0	0	35	11	7	95
				Bagam	13	20.0	8.42	2.11	0.00	44.21	13.68	20.0	3	0	0	36.8	4	11.58	7.37
					13.68	0	8.42	2.11	0.00	44.21	13.68	0	3.16	0.00	0.00	4	11.58	7.37	100
3	Malkangiri	Khairapur	Rasabeda	Muduliguda	13	27	16	3	0	59	4	22	15	1	0	42	9	15	12
					10.40	21.60	12.80	2.40	0.00	47.2	0	3.20	17.60	12.00	0.80	0.00	0	7.20	12.00
				Mundiguda	17	17	13	3	0	50	32	28	10	0	0	70	6	7	13
					12.78	12.78	9.77	2.26	0.00	37.5	9	24.0	6	21.05	7.52	0.00	0.00	3	4.51
		KudumulGumma	Parkanmela	Parkanmela	10	27	33	2	0	72	23	31	25	0	0	79	11	8	17
					5.88	15.88	19.41	1.18	0.00	42.3	5	13.53	18.24	14.71	0.00	0.00	7	6.47	4.71
				Kopeguda	11	12	7	1	0	31	16	12	9	1	0	38	4	7	80
					13.75	15.00	8.75	1.25	0.00	38.7	5	20.0	0	15.00	11.25	1.25	0.00	0	5.00
		Mathili	Udulibeda	Udulibeda	9	24	18	2	0	53	8	23	15	0	0	46	10	10	11
					7.56	20.17	15.13	1.68	0.00	44.5	6.72	19.33	12.61	0.00	0.00	38.6	8.40	8.40	100



										4						6			
				Chalangu da	14 12.96	25 23.15	24 22.2 2	1 0.93	0 0.00	59.2 6	9 8.33	11 10.19	10 9.26	0 0.00	0 0.00	30 27.7 8	8 7.41	6 5.56	10 100
4	Nawaran gpur	Raigarh	Gan\japa ra	Ganjapar an	13 7.65	29 17.06	28 16.47	2 1.18	0 0.00	72 42.3 5	17 10.00	28 16.47	23 13.53	2 1.18	1 0.59	71 41.76	14 8.24	13 7.65	17 100
				Dumurdi hi	25 21.74	16 13.91	10 8.70	5 4.35	0 0.00	56 48.7 0	11 9.57	16 13.91	14 12.17	0 0.00	0 0.00	41 35.6 5	7 6.09	11 9.57	11 100
		Jharigaon	Dhadra	Dhadra	31 15.50	41 20.5 0	22 10.00	4 2.00	1 0.50	99 49.5 0	19 9.50	26 13.00	27 13.50	1 0.50	0 0.00	73 36.5 0	15 7.50	13 6.50	20 100
				Telakana di	17 11.41	21 14.09	23 15.44	4 2.68	1 0.67	66 44.3 0	15 10.07	23 15.44	16 10.74	0 0.00	0 0.00	54 36.2 4	13 8.72	16 10.74	14 100
		Umerkote	Bada- bharandi	Sanabha randi	17 7.69	52 23.5 3	29 13.12	2 0.90	0 0.00	100 45.2 5	9 4.07	43 19.46	35 15.84	0 0.00	0 0.00	87 39.3 7	20 9.05	14 6.33	22 100
				Pujarigud a	25 14.45	41 23.7 0	12 6.94	5 2.89	1 0.58	84 48.5 5	15 8.67	19 10.98	30 17.34	1 0.58	0 0.00	65 37.5 7	14 8.09	10 5.78	17 100
	Kalahand i	Thuamul	Gunupur	Balisara	8 8.16	19 19.39	15 15.31	0 0.00	0 0.00	42 42.8 6	3 3.06	25 25.51	10 10.20	0 0.00	0 0.00	38 38.7 8	8 8.16	10 10.20	98 100
		Rampur		Kathagha ra	11 6.43	34 19.88	35 20.4 7	6 3.51	2 1.17	88 51.46	3 1.75	33 19.30	16 9.36	3 1.75	2 1.17	57 33.3 3	8 4.68	18 10.53	17 100

		Dharmag rh	Brahman - chhendia	Brahman chhendia	22 15.71	20 14.29	26 18.57	4 2.86	0 0.00	72 51.43	12 8.57	18 12.86	9 6.43	1 0.71	0 0.00	40 28.5 7	12 8.57	16 11.43	14 100
				Chilchila	48 25.4 0	27 14.29	15 7.94	1 0.53	0 0.00	91 48.15	23 12.17	37 19.58	9 4.76	1 0.53	0 0.00	70 37.0 4	11 5.82	17 8.99	18 100
		6olamund a	Manjhari	Tumura	11 7.59	34 23.4 5	15 10.34	1 0.69	0 0.00	61 42.0 7	32 22.0 7	18 12.41	13 8.97	1 0.69	0 0.00	64 44.14	10 6.90	10 6.90	14 100
				Nakatika ni	8 8.00	19 19.00	8 8.00	4 4.00	0 0.00	39 39.0 0	18 18.00	12 12.00	9 9.00	2 2.00	0 0.00	41 41.00	10 10.00	10 10.00	10 100
6	Sonepur	Binika	Sindurpu r	Sindurpu r	17 21.79	8 10.26	7 8.97	3 3.85	2 2.56	37 47.4 4	15 19.23	8 10.26	7 8.97	0 0.00	0 0.00	30 38.4 6	6 7.69	5 6.41	78 100
				Cherupali	13 17.33	8 10.76	5 6.67	0 0.00	0 0.00	26 34.6 7	16 21.33	15 20.0 0	4 5.33	1 1.33	0 0.00	36 48.0 0	7 9.33	6 8.00	75 100
		Dungurpal i	Cherupali	Bnidupali	18 16.07	16 14.29	14 12.50	2 1.79	0 0.00	50 44.6 4	12 10.71	10 8.93	6 5.36	2 1.79	1 0.89	31 27.6 8	17 15.18	14 12.50	11 100
				Kusamal	14 16.67	19 22.6 2	3 3.57	0 0.00	0 0.00	36 42.8 6	15 17.86	20 23.81	1 1.19	0 0.00	0 0.00	36 42.8 6	7 8.33	5 5.95	84 100
		Tarava	Katapali	Katapali	20 13.51	26 17.5	19 12.8	1 0.6	1 0.6	67 45.2	25 16.89	32 21.6	4 2.70	0 0.00	0 0.00	61 41.2	9 6.08	11 7.43	14 100
				Bijapada r	25 14.45	41 23.7	12 6.94	5 2.89	1 0.58	84 48.5	15 8.67	19 10.98	30 17.34	1 0.58	0 0.00	65 37.5	14 8.09	10 5.78	17 100

						0				5						7			
7	Balangir	Tureikela	Dhamand anga	Dhnmand anga	10 17.24	8 13.79	6 10.34	2 3.45	0 0.00	26 44.8 3	9 15.52	8 13.79	5.17	1 1.72	0 0.00	21 36.21	7 12.07	4 6.90	58 100
				Kandhab ahal	18 18.56	14 14.43	12 12.37	3 3.09	1 1.03	48 49.4 8	15 15.46	10 10.31	5 5.15	0 0.00	0 0.00	30 30.9 3	10 10.31	9 9.28	97 100
		Bongomun da	Bhalu munda	Bhalumun da	24 17.14	26 18.57	18 12.86	4 2.86	2 1.43	74 52.8	19 13.57	12 8.57	7 5.00	2 1.43	0 0.00	40 28.5 7	14 10.00	12 8.57	14 100
				Belapada	17 18.48	13 14.13	12 13.04	3 3.26	0 0.00	45 48.91	14 15.22	11 11.96	6 6.52	0 0.00	0 0.00	31 33.7 0	9 9.78	7 7.61	92 100
		Titilagarh	Jagua	Jagua	22 18.49	26 21.85	14 11.76	3 2.52	0 0.00	65 54.6 2	10 8.40	12 10.08	7 5.88	1 0.84	0 0.00	30 25.21	12 10.08	12 10.08	11 100
				Turla	17 18.89	14 15.56	7 7.78	4 4.44	0 0.00	42 46.6 7	10 11.11	12 13.33	7 7.78	1 1.11	0 0.00	30 33.3 3	8 8.89	10 11.11	90 100
8	Nuapada	Sinapali	Timanpur	Timanpur	3 3.00	27 27.0 0	10 10.00	3 3.00	0 0.00	43 43.0 0	10 10.00	18 18.00	12 12.00	0 0.00	0 0.00	40 40.0 0	6 6.00	11 11.00	10 100
				Ranimund a	26 14.36	15 8.29	34 18.78	3 1.66	1 0.55	79 43.6 5	26 14.36	24 13.26	33 18.23	0 0.00	0 0.00	83 45.8 6	13 7.18	6 3.31	18 100
		Boden	Tentuli- Pada	Tentulipa da	16 22.5 4	12 16.90	6 8.45	2 2.82	1 1.41	37 52.11	8 11.27	6 8.45	4 5.63	2 2.82	0 0.00	20 28.17	8 11.27	6 8.45	7 100

				Binapur	18 20.0 0	14 15.56	12 13.33	4 4.44	0 0.00	48 53.3 3	12 13.33	6 6.67	2 2.22	0.00	0.00	20 22.2 2	12 13.33	10 11.11	90 100
		Khariar	Areeda	Areeda	13 18.57	14 20.0 0	5 7.14	1 1.43	0 0.00	33 47.14	11 15.71	7 10.00	5 7.14	1 1.43	0.00	24 34.2 9	9 12.86	4 5.71	70 100
				Amalapali	14 17.50	12 15.00	14 17.50	3 3.75	1 1.25	44 55.0 0	8 10.00	7 8.75	4 5.00	1 1.25	0.00	20 25.0 0	6 7.50	10 12.50	80 100
				Total	799 13.89	1004 17.45	700 12.17	108 1.88	17 0.30	2628 45.6 8	692 12.03	921 16.01	536 9.32	30 0.52	5 0.09	2184 37.9 6	471 8.19	470 8.17	575 100

NB. Figures in decimal point reference to percentage to the respective total

**Table - 4.2**  
**District, Block, GP and Village/AWC wise surveyed Beneficiary in the Study Area (Category wise)**

Sl. No.	District	Block	GP	Village	No. of Beneficiaries					
					Below 3 Yrs	3 - 6 Yrs	Pregnant Women	Lactating Mother	Total	
1.	Rayagada	Kashipur	Talajhari	Talajhari	3	2	2	3	10	
				Kudikipndnr	1	5	1	3	10	
				Gunupur	Regedn	Regeda	3	3	2	2
		Padmapur	Akhusingh		Badaguda	3	3	2	2	10
					Akhusingh	3	3	2	2	10
					Khilamunda	3	3	2	2	10
2.	Koraput	Lakshmiপুর	Champi	Champi	3	4	1	2	10	
				Adinagar	2	6	1	1	10	
				Bandhugao	Kumbharipur	Kumbaripur	3	3	1	3
		Narayanpatna	Kumbnri	Kumbhari	Gulimiguda	2	5	1	2	10
					Bagnm	1	4	1	4	10
3	Malkangiri	Khairnput	Rnsnbedn	Muduliguda	3	5	1	1	10	
				Mundiguda	4	3	1	2	10	
				Kudumu)	Pnrknnmeln	Parkanmela	3	5	1	1
		Mathili	Udulibeda	Udulibeda	Kopeguda	3	4	2	1	10
					Udulibeda	2	4	2	2	10
					Chalanguda	1	5	2	2	10
4.	Nawarangpur	Raighar	Ganjapara	Ganjaparn	1	5	Z	2	10	
				Dumurdihi	1	5	2	2	10	
				Jharigaon	Dhndrn	Dhadra	3	3	2	2
		Umerkote	Badabharandi	Sanabharandi	Telakanndi	3	3	2	2	10
					Sanabharandi	3	2	2	3	10
					Pujariguda	3	3	2	2	10
5.	Kalahandi	Thuamul Rampur	Gunupur	Balisara	3	3	2	2	10	
				Kathaghara	4	2	2	2	10	
				Dharmagarh	Brahmanchendia	Brahmanchendia	3	3	2	2
		Golamunda	Manjhari	Tumura	Chilchila	3	3	2	2	10
					Tumura	3	3	2	2	10
					Nakatikani	3	3	2	2	10
6.	Sonapur	Binika	Sindurpur	Sindurpur	3	4	2	1	10	
				Cherupali	3	3	2	2	10	

		Dungurpali	Cherupali	Baidupali	3	3	2	2	10
				Kusamal	3	3	3	1	10
		Tarava		Katapali	3	3	2	2	10
			Katapali	Bijapadar	3	4	2	1	10
7	Balangir	Tureikela	Dhamandanga	Dhamandanga	3	3	2	2	10
				Kandhabahal	3	3	2	2	10
		Bangomunda	Bhalumunda	Bhalumunda	3	3	2	2	10
				Belapada	3	3	2	2	10
		Titilagarh	Jagua	Jagua	3	3	2	2	10
				Turla	3	3	2	2	10
8	Nuapada	Sinapali	Timanpur	Timanpur	3	3	2	2	10
				Ranimunda	3	3	2	2	10
		Boden	Tentulipada	Tentulipada	2	3	2	3	10
				Binapur	1	5	2	2	10
		Khariar	Areda	Areda	3	4	2	1	10
				Amalapali	3	3	2	2	10
<b>Total</b>					<b>128</b>	<b>167</b>	<b>88</b>	<b>97</b>	<b>480</b>
					<b>26.</b>	<b>34.</b>	<b>18.33</b>	<b>20.</b>	<b>100.00</b>
					<b>67</b>	<b>79</b>		<b>21</b>	

NB: The figure in decimal point refer to percentage

#### 4.4 Number of AWC having own building:

Out of 48 surveyed AWCs, 77% (37 nos.) have own building and rest 23% (11 Nos.) have no building. Among 37 AWCs having own building, 60% are in bad condition because of low quality construction. In the remaining 11 AWCs without having own building and classroom are continuing in Club house (2 nos.), Gudi Ghar (1 no.), Dhangada House (1 no.), Gram Panchayat Varanda (1 no.), School veranda (2 nos.), Mahila Samiti (1 no.), Anagan Wadi Worker's house (1 no.), private house veranda (1 no.) and also in private rented house (1 no.) with Rs.50/- per month rented cost.

#### 4.5 Foodstuff/ Ration Store:

In the AWCs 77% (37 Nos.) centers have their own building out of which in 45.83% (22 nos.), workers used to keep foodstuff at center and others (31.17%) use their own house or helper's house to store the foodstuff. The different reasons for not storing at centers are apprehension of theft, leakage of water, unsafe condition of door and window. About 23% (11 nos.) centers do not have own building and they use space in buildings like School, Club, Mahila Samiti etc. to store the foodstuff. This place is not a safety place for storage of the foodstuff.

#### 4.6 Anganwadi Worker Living Place:

AWW needs to be either from same village or should stay in that village (12% workers are not staying in their respective working villages and commuting from own

their village, and 21% are from other places by staying either in the center or working village). Due to non-availability of educated persons from the same village government appoints outside persons as AWW, but it creates more problem both for the Worker and the functioning of the Anganwadi Center. The Anganwadi Worker gets a monthly salary of Rs.1200/-, which is not sufficient for her, and she spends about half of the salary towards her transport cost. To solve this problem, she avoids coming regularly to the center. All AWWs revealed during the study that they have more works and feels to be loaded with work.

#### **4.7 Visiting by CDPO/ Supervisor:**

There is a great necessity to visit AWCs by the CDPO and Anganwadi Supervisor at regular intervals. Without supervision by the higher officer all work can't be done successfully. The study revealed that out of 48 AWCs surveyed only in about 20 percent cases the CDPOs are visiting the centers and the field observation indicates that as high as 20 to 30 percent CDPOs post are lying vacant. So one Supervisor is in charge of the office where CDPOs are not in place.

In order to motivate the Anganwadi Workers (AWWs) and give recognition to their voluntary work, Government presents Annual Awards to Anganwadi Workers selected on the basis of their dedication and exemplary performance. Under the scheme, the awards are given at two levels, first at State level and then at the National level. The State Governments are required to nominate the 5 best Anganwadi Workers in the State for the National Award, which carries a cash prize of Rs.25,000/- with a Citation and is presented at a National level ceremony. For the State Awards, 73 best Anganwadi Workers are to be selected each year. They receive a cash prize of Rs.5,000 and a Certificate at a State Level function. During 2005-06, 73 Anganwadi Workers were found eligible and were selected for the State Awards. They received a cash prize of Rs.5000/- and a Certificate on 8<sup>th</sup> March 2006 at a State Level function International Women's Day. One Anganwadi Worker of our study village (Chilchila village of Dharmagarh block in Kalahandi district) has got the best Worker award. She also received Rs.5,000/- and a Certificate at a State level function.

**Photo 3**



**Photo 4**

## CHAPTER-V

### IMPACT OF THE SPECIAL NUTRITION PROGRAMME & ICDS

#### 5.1 Health & Nutritional Status

##### 5.1.1 Socio-Economic Condition of Malnourished Children:

It has been mentioned earlier that 295 children have been covered for this study. Out of these 295 children 176 (59.66%) are found to be of normal category and 119 (40.44%) are found as malnourished. The malnourished children are further classified into four categories, such as *Grade-I*, *Grade-II*, *Grade-III* and *Grade-IV* according to the degree of malnourishment. Out of the 119 children who are malnourished, 57, 33, 20 and 9 belong to *Grade-I*, *Grade-II*, *Grade-III* and *Grade-IV* respectively and they constitute 19.32, 11.19, 6.78 and 3.05 per cent of the total children surveyed, respectively.

Distribution of beneficiaries according to the family income has been shown in Table 5.1. It is observed that the number of beneficiaries in 6,001-11,000/- income group category is the highest, followed by 11,001-20,000/-, below 6,000/-, 20,000-30,000/- and Rs.30,000/- & above category and there are 146, 73, 41, 26 and 9 beneficiaries in these income groups respectively. Percentage wise they contribute 49.49, 24.75, 13.90, 8.81 and 3.05 per cent of the total children surveyed, respectively.

Out of the 41 children beneficiaries who have a family income of below 6,000/- rupees, 35 are found to be malnourished and only 6 are found as normal. Among the malnourished children in this income group, as many as 8 are of *Grade IV* type and 7 are of *Grade-III* type. Similarly, 12 children beneficiaries are of *Grade-II* and 8 children beneficiaries are of *Grade-I* type who has a household income level of below 6,000/- rupees per annum.

**Table 5.1**  
**Status of Beneficiaries on the basis of their Household Income**

Sl. No.	Types of Beneficiaries	Income Level					Total
		Below 6000	6001-11000	11001-20000	20001-30000	30001 & above	
1	Normal	6 (2.03)	107 (36.27)	42 (14.24)	13 (4.41)	8 (2.71)	176 (59.66)
2	G-I	8 (2.71)	18 (6.10)	22 (7.46)	8 (2.71)	1 (0.34)	57 (19.32)
	G-II	12 (4.07)	14 (4.75)	4 (1.36)	3 (1.02)	0 (0.00)	33 (11.19)
3	G-III	7 (2.37)	6 (2.03)	5 (1.69)	2 (0.68)	0 (0.00)	20 (6.78)
4	G-IV	8	1	0	0	0	9

		(2.71)	(0.34)	(0.00)	(0.00)	(0.00)	(3.05)
	Total	41 (13.90)	146 (49.49)	73 (24.75)	26 (8.81)	9 (3.05)	295 (100.00)

NB: Figures in parentheses refer to the percentage

About 146 children beneficiaries have annual household income of Rs.6,001-11,000/-. Among them, 39 are malnourished. In this income group 18, 14, 6 and one beneficiaries belong to *Grade-I*, *Grade-II*, *Grade-III* and *Grade-IV* malnourished type respectively. No grade-IV type malnourished child is found in the households having annual household income category of above Rs.11,000/-. However, other type of malnourished children (i.e. of *Grade-I*, *Grade-II* and *Grade-III*) are found in these income groups. In fact, the number of *Grade-I* type malnourished children is highest in the income group of Rs.11,001 - 20,000/- compared to other income groups. Therefore, it can be said that household income is not the only factor, which determines the degree of malnourishment among the children. Only one child beneficiary belongs to APL family and the rest belongs to BPL families as indicated in Table 5.2. Here it can be mentioned that the BPL families are taken on the basis of what the respondent said and not on the basis of their income level. It is found during the study that many higher income group beneficiaries are BPL cardholders. In our study we found only two APL beneficiaries (as per the nomenclature of Government) but there are 35 beneficiaries whose family income is more than Rs.20,000/- per annum.

**Table 5.2**  
**Status of Beneficiaries on the basis of APL and BPL**

Sl. No.	Types of Beneficiary	Economic Status		
		BPL	APL	Total
1	Normal	175 (59.32)	1 (0.34)	176 (59.66)
2	Grade - I	57 (19.32)	0 (0.00)	57 (19.32)
3	Grade - II	33 (11.19)	0 (0.00)	33 (11.19)
4	Grade - III	20 (6.78)	0 (0.00)	20 (6.78)
5	Grade- IV	9 (3.05)	0 (0.00)	9 (3.05)
	<b>Total</b>	<b>294 (99.66)</b>	<b>1 (0.34)</b>	<b>295 (100.00)</b>

NB: Figures in parentheses refer to the percentage

### 5.1.2 Ethnic Group and Sex:

Table 5.3 shows the distribution of children beneficiaries according to their ethnic group and sex. Out of the 295 beneficiaries, 132 are males and 163 are females.

Among the male beneficiaries, 71 are normal and 61 are malnourished. Again, among the 61 malnourished children 14 are severely malnourished (10 are of Grade-III type and 4 are of Grade-IV type) and 47 are less severely malnourished (27 are of Grade-I type and 20 are of Grade-II type). Similarly, among the 163 female beneficiaries 105 are normal and 58 are malnourished. Among the 58 female beneficiaries who are malnourished 15 are severely malnourished (i.e. 10 are of Grade-III type and 5 are of Grade-IV type) and 43 are less malnourished (i.e. 30 are of Grade-I type and 13 are of Grade-II type). Therefore, malnourishment is found both among male and female children. However, more percentage of malnourished children are found among males than that of the females.

Among the Schedule Caste children 31 are males and 33 are females. Again, among the SC males 13 are normal and 18 are malnourished. Among the malnourished males 8 are of Grade-I type, 6 are of Grade-II type, 3 are of Grade-III type and the rest 1 is of Grade-IV type. Similarly, among the 33 SC females, 15 are found to be normal and 18 are malnourished. Out of them two are severely malnourished (one each from grade-III and grade-IV categories) and 16 are less malnourished (12 from Grade-I type and 4 from Grade-II type).

**Table 5.3**  
**Status of Beneficiaries on the basis of their Ethnic Group and Sex**

Sl. No.	Types of Beneficiaries	Ethnic Group						Total		Total
		Male	Female	Male	Female	Male	Female	Male	Female	
1	Normal	13 (4.41)	15 (5.08)	31 (10.51)	47 (15.93)	27 (9.15)	43 (14.58)	71 (24.07)	105 (35.59)	176 (59.66)
2	&-1	8 (2.71)	12 (4.07)	10 (3.39)	11 (3.73)	9 (3.05)	7 (2.37)	27 (9.15)	30 (10.17)	57 (19.32)
	G - TI	6 (2.03)	4 (1.36)	12 (4.07)	8 (2.71)	2 (0.68)	1 (0.34)	20 (6.78)	13 (4.41)	33 (11.19)
3	G -111	3 (1.02)	1 (0.34)	6 - (2.03)	8 (2.71)	1 (0.34)	1 (0.34)	10 (3.39)	10 (3.39)	20 (6.78)
4	G-IV	1 (0.34)	1 (0.34)	3 (1.02)	4 (1.36)	0 (0.00)	0 (0.00)	4 (1.36)	5 (1.69)	9 (3.05)
	Total	31 (10.51)	33 (11.19)	62 (21.02)	78 (26.44)	39 (13.22)	52 (17.63)	132 (44.25)	163 (55.25)	295 (100.00)

NB: Figures in parentheses refer to the percentage

Among all the ethnic groups the malnourishment is highest among the Schedule Tribes compared to other categories. A total number of 140 ST children are surveyed and among them 62 are males and 78 are females. Among the males equal numbers of children are found to be normal and malnourished. It is found that 9 ST male children are severely malnourished (6 are of Grade-III type and 3 are of Grade-IV type) which is highest among all the males. Similarly, 12 ST females are severely malnourished (8

are of Grade-III type and two are of Grade-IV type) which is also highest among all the females. In this ethnic group, 22 male children (10 are of Grade-I type and 12 are of Grade-TI type) and 19 female children (11 are of Grade-I type and 8 are of Grade-II category) are coming under 'less malnourished' category. Therefore, both incidence and intensity of malnourishment is highest among the ST children. In the 'Others' category, 70 children are normal and 21 children are malnourished. Among the malnourished children, 16 are of Grade-I (9 male, 7 female), 3 are of Grade-TI (2 male, 1 female) and 2 are of Grade-III (1 male, 1 female) category. No children from 'Others' category is Grade IV malnourished.

### 5.1.3 Family Size:

Family size is an important indicator to determine the level of malnourishment. It is believed that the risk of malnourishment increases with the increase in family size. However, the study results showed the opposites situation. It is revealed from Table 5.4 that all the 3 children who belong to small families of less than two members are severely malnourished. About 160 children have family size of 3-4 members. Out of them 79 are normal and 81 are malnourished. Among the malnourished children 38 are of Grade-I, 23 are of Grade-II, 14 are of Grade III and only 6 are of Grade-IV type malnourished. Similarly, 113 children have family size of 5-6 members. Out of them 83 are normal and 30 are malnourished. Among the malnourished children 17 are of Grade-I, 8 are of Grade-II, 4 are of Grade-III and the rest one child is Grade-IV type malnourished. Though, 19 children have family size of 7-8 members now of them is severely malnourished i.e. malnourished of Grade-IV category and only one child is malnourished of Grade-III category. In this family size group only tow children are Grade-I type malnourished and equal number of children are of Grade-II type malnourished. Therefore, it can be said that the risk of malnourishment decreases with the increase in the size of the family. This may be due to better sharing of food and other materials among the family members or may be due to availability of more number of adults to look after the children. With the increase in the size of the family the chance of earning members also increases, which further reduces the risk of malnourishment.

**Table 5.4**  
**Status of Beneficiaries on the basis of Family Size of the Household**

Sl. No.	Types of Beneficiary	Family Size					Total
		Less than 2 persons	3-4	5-6	7-8	9 & above	
1	Normal	0 (0.00)	79 (26.78)	83 (28.14)	14 (4.75)	0 (0.00)	176 (59.66)
2	Grade - I	0 (0.00)	38 (12.88)	17 (5.76)	2 (0.68)	0 (0.00)	57 (19.32)
3	Grade -II	0 (0.00)	23 (7.80)	8 (2.71)	2 (0.68)	0 (0.00)	33 (11.19)
4	Grade - III	1	14	4	1	0	20

		(0.34)	(4.75)	(1.36)	(0.34)	(0.00)	(6.78)
5	Grade - IV	2 (0.68)	6 (2.03)	1 (0.34)	0 (0.00)	0 (0.00)	9 (3.05)
	<b>Total</b>	<b>3</b> <b>(1.02)</b>	<b>160</b> <b>(54.24)</b>	<b>113</b> <b>(38.31)</b>	<b>19</b> <b>(6.44)</b>	<b>0</b> <b>(0.00)</b>	<b>295</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage

#### 5.1.4 Land Holding Size:

The correlation between land holding size and malnourishment is very high. Those who are malnourished normally have very little or no agricultural land. It is clearly observed from the table that the severity of malnourishment is very high among the children who belong to the families having agricultural land less than one acre compared to that of the children of the families who have 1-2 acres of agricultural land. Table 5.5 speaks the position.

**Table 5.5**  
**Status of Beneficiaries on the basis of Land Holding Size of the Household**

Sl. No.	Types of Beneficiary	Land Holding Size		
		Below 1 Acre	1- 2 Acre	Total
1	Normal	147 (49.83)	29 (9.83)	176 (59.66)
2	Grade - I	43 (14.58)	14 (4.75)	57 (19.32)
3	Grade - II	22 (7.46)	11 (3.73)	33 (11.19)
4	Grade -III	17 (5.76)	3 (1.02)	20 (6.78)
5	Grade - IV	9 (3.05)	0 (0.00)	9 (3.05)
	<b>Total</b>	<b>238</b> <b>(80.68)</b>	<b>57</b> <b>(19.32)</b>	<b>295</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage

#### 5.1.5 Occupation of the head of the Household:

The children of a labourer family are more prone to malnutrition compared to the children of the families of other occupations like agriculture and business. A labourer has no other economic asset except his/her own labour. But an agriculturist has minimum assets like land and a businessman has capital. Therefore, a labourer is economically poorer than others. It is found to be true from our field findings. Table 5.6 clarifies the beneficiaries according to the occupation of the head of the household. The head of the beneficiaries' households are classified into three categories, viz, agriculturist, businessman and labourer. There are only two beneficiaries whose head of the household is a businessman. Both these two

beneficiaries have normal children. There are 80 beneficiaries whose head of the households are agriculturist. Here, 51 children are normal and 29 are malnourished. Among the malnourished children 16 are of Grade-I, 9 are of Grade-II, 3 are of Grade-III and one is of Grade-IV category. Most of the beneficiaries are the children of labourer family. Out of 213 beneficiaries in this category 123 are normal and 90 are malnourished. Among the malnourished children 41 are of Grade-I, 24 are of Grade-II, 17 are of Grade-III and the rest 8 are of Grade-IV type. Therefore, malnutrition exists among the children of agriculture and labourer families and not among the children of businessman family. However, the degree of malnutrition is comparatively high among the children of the labourer family than that of the agriculturist family. This may be due to labourer's lower economic condition.

**Table 5.6**  
**Status of Beneficiaries on the basis of Primary Occupation of the Household**

Sl. No.	Types of Beneficiary	HH Occupation			
		Agriculture	Labourer	Business	Total
1	Normal	51 (17.29)	123 (41.69)	2 (0.68)	176 (59.66)
2	Grade - I	16 (5.42)	41 (13.90)	0 (0.00)	57 (19.32)
3	Grade -II	9 (3.05)	24 (8.14)	0 (0.00)	33 (11.19)
4	Grade -III	3 (1.02)	17 (5.76)	0 (0.00)	20 (6.78)
5	Grade- IV	1 (0.34)	8 (2.71)	0 (0.00)	9 (3.05)
	<b>Total</b>	<b>80</b> <b>(27.12)</b>	<b>213</b> <b>(72.20)</b>	<b>2</b> <b>(0.68)</b>	<b>295</b> <b>(100.00)</b>

NB: Figures in parentheses refer to the percentage

#### 5.1.6 Roof of the House:

Roof of the house is a good indicator of the economic condition of a family. No sample child beneficiary lives in houses which have a concrete roof in the study area. It is revealed from **Table 5.7** that the children beneficiaries are lives only under tiled, asbestos and thatched roof. All the 3 children who live under asbestos roof are normal. That means malnourished children lives only under tiled (Khapar) and thatched roofs. Out of 18 children who live under tiled roof, 12 are normal and 6 are malnourished. Among the malnourished 4 are of Grade-I and 2 are of Grade-II type. No one is of Grade-III and Grade-IV type. Children who live under thatched roofs in comparatives more malnourished than the other children. A total number of 274 children live under thatched roofs, are out of them 161 normal and 113 are malnourished. Among the malnourished 53 are of Grade-I, 31 are of Grade-II, 20 are of Grade-III and 9 are of Grade-IV. Therefore, both incidence and intensity of malnourishment is very high among the children who live under thatched roofs compared to those who live under

other roofs. This may be due to the fact that the economic condition of the families who live under thatched roof is comparatively poorer than those who live under other roofs.

**Table 5.7**  
**Status of Beneficiaries on the basis of House Type**

S1. No.	Types of Beneficiary	Types of House				
		Concrete	Tiled	Asbestos	Thatched	Total
1	Normal	0 (0.00)	12 (4.07)	3 (1.02)	161 (54.58)	176 (59.66)
2	Grade - I	0 (0.00)	4 (1.36)	0 (0.00)	53 (17.97)	57 (19.32)
3	Grade- II	0 (0.00)	2 (0.68)	0 (0.00)	31 (10.51)	33 (11.19)
4	Grade -III	0 (0.00)	0 (0.00)	0 (0.00)	20 (6.78)	20 (6.78)
5	Grade - IV	0 (0.00)	0 (0.00)	0 (0.00)	9 (3.05)	9 (3.05)
	<b>Total</b>	<b>0 (0.00)</b>	<b>18 (6.10)</b>	<b>3 (1.02)</b>	<b>274 (92.88)</b>	<b>295 (100.00)</b>

NB: Figures in parentheses refer to the percentage

#### 5.1.7 Educational Level of Head of the Household:

The correlation between the educational levels of the head of the household and the malnourishment level among the children is very significant. It is revealed from [Table 5.8](#) that both the incidence and intensity of malnourishment decreases with the increase in the educational level of the head of the household. Out of the total number of 29 children who are severely malnourished (malnourished of Grade-III and Grade-IV type), 28 belong to the household whose head is either illiterate or just literate i.e. can read and write his/her own name. Therefore, it is essential to educate and aware the head of the household, in order to decrease the malnourishment among children.

**Table 5.8**  
**Status of Beneficiaries on the basis of Educational Status**

SI. No.	Types of Beneficiary	Educational Level					Total
		Illiterate	Literate	Primary	Middle	High School	
1	Normal	115 (38.98)	6 (2.03)	45 (15.25)	6 (2.03)	4 (1.36)	176 (59.66)
2	Grade - I	23 (7.80)	4 (1.36)	28 (9.49)	1 (0.34)	1 (0.34)	57 (19.32)
3	Grade - II	14 (4.75)	2 (0.68)	16 (5.42)	1 (0.34)	0 (0.00)	33 (11.19)
4	Grade - III	16	3	1	0	0	20



		(5.42)	(1.02)	(0.34)	(0.00)	(0.00)	(6.78)
5	Grade - IV	7 (2.37)	2 (0.68)	0 (0.00)	0 (0.00)	0 (0.00)	9 (3.05)
	<b>Total</b>	<b>175</b> <b>(59.32)</b>	<b>17</b> <b>(5.76)</b>	<b>90</b> <b>(30.51)</b>	<b>8</b> <b>(2.71)</b>	<b>5</b> <b>(1.69)</b>	<b>295</b> <b>(100.00)</b>

**NB:** Figures in parentheses refer to the percentage

## 5.2 Other Components of ICDS

The programme was initiated in the 1992 with several objectives which is discussed in the chapter - I. The primary objective of this programme was to improve the nutritional level of the children of below 6 years of age and that of the pregnant women and lactating mother. Regarding the impact of the programmes of ICDS the views from the mother beneficiaries, head of the beneficiary household, and other key informants like Sarapanch, ward member, school teachers, block officials, village community leader were taken. All of them are of the opinion that the programme has a positive impact on the health status of the children and mother beneficiaries. However, the level of impact varies from location to location depending on the skill of the concerned officials, awareness level of local people, cooperation from the head of the household and most importantly availability of manpower. They made some valuable suggestions which has been discussed in the subsequent chapters. The Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) is reducing in the state as a whole. Similarly, dropout rate among the school going children has been reduced in the sample districts. The awareness level among the people improved. Therefore, it can be safely said that the programme has a positive impact on the nutritional status of the children and mother beneficiaries. However, still there is scope for further improvement in some areas.

### 5.2.1 Immunization:

It was observed that more than 98 percent of the children covered under the empirical study were immunized. However, in some cases the full doze of immunization has not been availed by the beneficiaries and they have been irregular. Reasons attributed to such discontinuance are due to cultural, economic and lack-of awareness factors. It is desirable that the ICDS workers on a continuous basis monitor the immunization of both the children and the mother and persuade them for the same. They are also required to wipe out the cultural stigma attached to this by the community, especially among the tribals.

### 5.2.2 Health Check-ups & Referral Services:

The study findings reveal that health check up camps are attended to by almost all the people belonging to the General Caste and relatively higher economic and educational category families. But among the Scheduled Tribe in particular the attendance in the

Health Check up camps is relatively poor and among the Scheduled Caste categories of people, it is higher than the ST and lower than the General Caste people. The factors that are responsible for poor attendance of people belonging to the ST categories are cultural factors, economic factors and lack of low awareness level. It is necessary for the ICDS workers as well as the Health Workers to motivate people belonging to such categories to avail the opportunity of Health Check up camps for a healthy living.

#### **5.2.3 Pre-School non-formal Education:**

Pre-School non-formal education has certainly drawn more number of children to school in the study area and this also has helped in creating an environment for the pre-school children to go to school for formal education afterwards, the study finding has revealed that the children are more interested for the food component in the school and least interest is shown towards learning. Besides, the teachers are also devoting considerable time in arrangement of cooking/preparing the food recipes for the children and less time for the classroom teaching. In view of this, befitting strategy should be done.

#### **5.2.4 Nutrition:**

So far as Nutritional aspect is concerned, the study findings reveal that the fortified blended food which is now provided to the beneficiaries is much more nutritious in its content compared to the Wheat Based Ration, supplied earlier. But in reality, the Food Packet provided to the beneficiaries is shared by the other family member. In other words, the same is going to the family food basket as a result of which, the beneficiaries on an average are eating the food for 20 days a month in stead of a full month. Hence this is leading to the over all lack of nutrition leading to health complicacy of both the mother and the children. This is an aspect which needs to be given top most attention and strategy should be developed to overcome this problem.

#### **5.2.5 Health Education:**

Health education has achieved a great deal of success in considerable increase in the awareness level of the people of the locality towards health aspects. There has been marked change in their attitude towards health and they are accessing to modern health care system than before. However, there are still stigma attached to modern health care system due to cultural, economic and lack of awareness factors.

### **5.3 Anganwadi Centres**

At the Anganwadi Centers, children, adolescent girls and pregnant and nursing women are examined at regular intervals by the Health functionaries like Lady Health Visitor (LHV) and Auxiliary Nurse Midwife (ANM) who also diagnose minor ailments and distribute simple medicines. They provide a link between the village and the PHC.

Immunization of pregnant women against tetanus and immunization of infants against six vaccine-preventable diseases protect children from - poliomyelitis, diphtheria, pertussis, tetanus, tuberculosis and measles. These are major preventable causes of child mortality, disability, morbidity and related malnutrition. Immunization of pregnant women against tetanus also reduces maternal and neonatal mortality.

The PHC and its subordinate health infrastructure carry out immunization of infants and expectant mothers as per the national immunization schedule. Children are also given booster doses. The AWW assists the health functionaries in coverage of the target population for immunization. She helps in the organization of fixed-day immunization sessions and maintains the immunization records of ICDS beneficiaries and follow up to ensure full coverage.

During health check-ups and growth monitoring, sick or malnourished children in need of prompt medical attention are provided referral services through the ICDS. The AWWs have also been oriented to detect disabilities in young children. She enlists all such cases in a special register and refers these to the Medical Officers. The effectiveness of this service depends on timely action, co-, operation from health functionaries and the willingness of families to avail of these services.

Early Childhood Care and Pre-school Education under the ICDS non-formal pre-school education is a crucial component of the package of services envisaged under the ICDS Scheme and this aims at universalization and qualitative improvement of primary education especially in remote and socio-economically backward areas with primary attention given to the girl child. It brings young children together at the Anganwadi Centre and this activity motivates parents and the community. The early-childhood pre-school education Programme, conducted through the non-formal and play-way method, aims at providing a learning environment for the all-round development of the child.

As revealed from the empirical findings and also from secondary source data, there has been a significant impact of the ICDS Programme in general and the Supplementary. Nutrition Programme in particular on the health status of the beneficiaries. To be brief, the following are some of the areas, which clearly show positive impact on the health status of the beneficiaries:

- Improvement in the nutritional level among the beneficiaries both of the children and the mother
- Reduction in the IMR, MMR and incidence of diseases
- Improvement in the overall health status of the women and children
- Reduction in the incidence of (number of) malnourished children

#### **5.4 Positive Aspects of the Programme compared to the Earlier Programme**

The purpose of this section is to make a comparative analysis between the Fortified Blended Food (FBF), which is the Present Foodstuff (Indiamix/Orimix) with the conventional Wheat Based take home ration (THR) supplied under the Special Nutrition component of ICDS Programme. As has been indicated in the foregoing sections, wheat based ration was provided to the beneficiaries earlier throughout the state, but for the sake of convenience and to increase the effectiveness of the supplementary nutrition component of the ICDS, a Fortified Blended Food Orimix with micronutrients has been introduced in five districts and Indiamix in three districts of Orissa with the technical support of WFP since June 2004 on an experimental basis.

Certain indicators were used for the study on Acceptability and Operational Advantages of the Fortified Blended Food (FBF) present foodstuff (Indiamix/Orimix). For the analysis, while some of the indicators were tested drawing data from the Beneficiaries and Key Stakeholders, some others were tested purely on the basis of the Perception of the Study Team as an outcome of the interactions with the beneficiaries, key stakeholders and also scanning the available literature.

While eight indicators have been taken for identifying beneficiaries' perception on acceptability and operational advantages of present foodstuff (Indiamix/Orimix), seven parameters have been separately used on the basis of which the Agency's perception on the acceptability and operational advantages of present foodstuff (Indiamix/Orimix) have been brought out.

##### **Beneficiaries' Perception:**

For identifying Beneficiaries' perception on the Acceptability and Operational Advantages of Present FBF (Indiamix/Orimix), the following parameters were used:

- I. Acceptability
- II. Taste
- III. Recipes
- IV. Cooking
- V. Sharing of the Ration
- VI. Perception of Mother on the Therapeutic Nature
- VII. Incidences of Pilferage
- VIII. Shelf Life

As has been discussed in the earlier chapters, a total number of 480 Beneficiaries and about 50 Key Stakeholders from 48 Anganwadi Centers (AWCs) spread over 8 districts and 24 blocks were covered for the study and on the basis of empirical data collected and subsequent analysis done, the following perceptions have emerged out from the interactions with the beneficiaries which have been discussed on 8 heads below:

#### 5.4.1 Acceptability:

One of the major questions posed to all the respondents including the key stakeholders and beneficiaries was the acceptability of present food stuff. Majority of the respondents stated that it is highly acceptable. The analysis table given below clearly states that as high as 92.70 per cent beneficiaries indicated present food stuff to be more acceptable than the conventional wheat based take home ration (THR) whereas only 5.27 per cent opined that there is no change in its acceptability as compared to the wheat based ration and 01.80 per cent did not give any response. The **Table 5.9** narrates the response of beneficiaries and respondents on acceptance of food stuff.

**Table 5.9**  
**Response of Beneficiaries and Respondents on**  
**acceptance of Food Stuff**

Sl. No.	Level of Acceptance of Present Food Stuff	Response of Different Kinds of Beneficiaries and Respondents						
		< 3 Years	3-6 Years	Pregnant Women	Lactating Mother	ICDS Functionaries	Key stakeholders	Total
1	More acceptable than the wheat based ration	94.33	89.65	93.27	93.88	100.00	84.67	92.70
2	Less acceptable than before	Nil	Nil	Nil	Nil	Nil	02.67	00.23
3	No change	04.22	07.90	05.29	05.10	Nil	08.00	05.27
4	No response	01.45	02.45	01.44	01.02	Nil	04.66	01.80

(Response of Beneficiaries regarding extent of acceptability of Present Food Stuff)

The analysis clearly reveals that present foodstuff is overwhelmingly acceptable among beneficiaries, stakeholders and the key ICDS functionaries. Further analysis indicates that present foodstuff is highly acceptable because of the following reasons as revealed by the beneficiaries covered under the study:

- Palatable taste
- Choice for wider variety of recipes
- Usability without cooking
- Less fuel consumption to cook since it is pre-cooked
- Decrease in the workload of the functionaries.

#### 5.4.2 Taste:

One of the key indicators used for acceptability of food commodity on its users in any part of the world is obviously Taste of the food/recipes. This aspect was asked to all the 480 beneficiary households, beneficiaries and all key stakeholders who were

interviewed for the empirical study. The study revealed that all the beneficiaries, beneficiary household members, key stakeholders and all those who were interviewed opined that the present foodstuff tastes very good. In fact, its taste has contributed to its acceptance level. All the respondents stated it is a sweetened blended food. Its taste is so good that the children at home take it raw as and when they feel hungry which has led to its consumption within a much shorter span than it is supplied for. In case of children below 3 years, who normally create problem in eating food were reported to be eating this food with greater acceptance than the food prepared under the earlier system. In fact, in the earlier wheat based food system, the mothers normally prepare jau and do not add sugar as a result of which it does not give good taste to the children as well as to other beneficiaries resulting in less acceptance of the food prepared out of the raw material.

#### 5.4.3 Recipes:

It was revealed from the empirical study that in case of Present Food Stuff, since the AWW has explained procedure of preparation in respect of different kinds of recipes out of present foodstuff to the mothers, a variety of recipes are prepared in most of the households. In fact, it was revealed by the beneficiaries, that 8 kinds of recipes with good taste are prepared at the household level. It was reported during the study by the beneficiaries (in case of the pregnant women and lactating mother) and the mothers in case of the beneficiaries belonging to below 3 years of age that 8 different kinds of recipes are prepared at home and they are: Roti, Upama, Khetchdi, Chakuli Pitha, Jau, Chatua, and Ladu. For pre-school children (3-6 years children) the ICDS offices fix a weekly food chart to the Anganwadi Centers. Such as Monday- Kata Pitha, Tuesday- Kakara, Wednesday- Upama, Thursday- Ladu, Friday- Kakara and Saturday- Khiri. Thus a wide range of options for making recipes are there from present foodstuff provided to the beneficiaries.

During the empirical study, beneficiaries were found to be preparing 8 different kinds of recipes from the mixture provided to them. The analysis of data reveals that while 21.9 per cent of the beneficiaries were found to be eating Chatua, 20.1 per cent were making Pitha, 17.15 per cent Chakuli, 15.7 per cent Upama, 8.0%, 6.5%, 5.7% and 4.7% beneficiaries reported to be eating the mixture by making recipes such as Roti, Khetchdi, Ladu and Jau respectively.

But on the other hand, in the wheat based ration, mainly three types of recipes were prepared as expressed by the beneficiaries. The analysis of data indicators that Gahama Jau, Roti and Chatua were the three kinds of recipes which were eaten by the beneficiaries in the wheat based take home ration, the details of which can be seen from that **Table 5.10** given below.

**Table 5.10**

Type of Recipes produced from Proposed Food Stuff and Wheat Based Ration				
51. No.	Present Food Stuff		Wheat	Based Ration
	Type of	% of Beneficiaries	Type of	% of Beneficiaries

	Recipes	reported to be preparing	Recipes	reported to be
1	Chatua	21.9	Chatua	9.33
2	Upama	15.7	Upama	-
3	Pitha	20.1	Pitha	-
4	Khetchdi	6.8	Khetchdi	-
5	Chakuli	17.1	Chakuli	-
6	Roti	3.0	Roti	4.2.67
7	Ladu	5.7	Ladu	-
8	Jau	1.7	Jau	48.00
Total	08	100.00	08	100.00

Thus, it is clear from the above comparative analysis that while in present food stuff there is wider choice of making food dishes, in case of the wheat based take home ration (THR), the choice of food dishes is limited. Secondly, while the food dishes prepared under present foodstuff were very tasty, food dishes prepared under the conventional wheat based ration were not so very tasty. Empirical study reveals that 98.23 per cent beneficiaries indicated present foodstuff to be much better for making varieties of food dishes compared to the earlier wheat based ration.

#### 5.4.4 Cooking:

Cooking has been taken as an important parameter in this study. The response from the beneficiaries as indicated in Table 5.11 that 87.33 per cent expressed more fuel use for preparing recipes in the earlier wheat based ration whereas in case of present food stuff, since the food is pre-cooked it either does not require any fuel or require very nominal wood depending on the type of recipe the beneficiary wants to do. Secondly, the AWWs in all the 48 AWCs expressed that they are provided a very nominal amount to meet the fuel expenses for cooking mid-day meal in the school for the pre-school children (beneficiaries of 3-6 years of age) and even the paltry amount of funds for fuel is not provided on time. Thirdly, cooking food in the school also increases the workload of the functionaries as reported by 83.33 per cent key ICDS functionaries interviewed during the course of the empirical study.

**Table 5.11**  
**Response of Respondents on Cooking**

Sl. No.	Present Food Stuff		Wheat Based Ration	
	Response by the Respondents	% of Respondents	Response by the Respondents	% of Respondents
1	Since pre-school takes no or minimal cooking time	9.00	More Fuel cost	87.33
2	Safe from	79.00	Funds for fuel is	92.00

	hygienic point of view while coking food under the stem		not adequate & not provided on time	
3	Lowers fuel cost	100.00	Increase the work load of the functionaries	83.33
4	--	--	Scope for contamination of food while cooking	46.67

But when the response from the beneficiaries in respect on present foodstuff is analyzed, 91 per cent opined that since it is pre-cooked it takes no (if the food is taken mixing water in it) or minimal cooking time. Thus, the comparative analysis stated above clearly indicates that the food dishes take very less time for cooking, saves fuel and decreases the workload of the ICDS functionaries apart from ensuring hygienic recipes in present food stuff whereas in case of wheat base take home ration (THR), it takes a lot of time for cooking, more fuel is spent, increases the workload of the ICDS functionaries and the respondents (mostly the stakeholders) expressed that there is greater possibility of contamination of food. On the whole, the preparation of the beneficiaries and other respondents reveal that present foodstuff is far easier, safer, cost effective and hygienic than the conventional wheat based ration so far as cooking is concerned.

#### 5.4.5 Sharing of the Ration:

The empirical study done on the beneficiaries revealed that the foodstuff is going to the family food basket even in the Present foodstuff and there is hardly any change in this regard from the earlier wheat based ration. In this study, to assess the sharing of the food by other members of the family in both the systems, five indicators were used, the details of which are given below in Table 5.12.

**Table 5.12**  
**Response of Respondents on Sharing of Ration**

Highlights of Food Sharing	Present Food Stuff		Wheat Base Ration		
	Response of the Respondents	% of Respondents responding	Highlights of Food Sharing	Response of the Respondents	% of Respondents re
High incidence of sharing of food among the family	50% to 75% of food of the beneficiaries are shared among the non	61.27	High incidence of sharing of food among the family	50% to 75% of food of the beneficiaries are shared among the non	60.00



members	beneficiary		members	beneficiary	
	-family members			family members	
	25 to 50%	30.23		25 to 50%	22.67
	Less than 25% <sup>10</sup>	06.24		Less than 25%	10.67
	Non Sharing	02.26	Non Sharing	06.67	
The ration is not sold out like in case of wheat base ration	95.68%		The ration is sold out in the market in many cases	79.33%	
More Shared among family members in case of children below 3 years of age and lactating women	58.40%		More Shared among family members in case of children below 3 years of age and lactating women	47.33%	
Less shared from the pregnant mother	58.60%		Less shared from the pregnant mother	50.66%	

The analysis table given above indicates that the extent of sharing of food ration by the non-beneficiaries has remained almost unchanged. But what improved after the changeover to present foodstuff is that the ration which was sold out in the market by the beneficiaries earlier in a substantially high percentage of cases is no more existing in the present system. This is a very important change in Present foodstuff, which reveals that even though there is sharing among the family members, at least the entire food provided is consumed by the family members including the beneficiaries and not sold out. It is therefore suggested that if the entire bulk of present foodstuff is not provided at one go to the beneficiaries as is the present practice, and is distributed on a weekly basis, the extent of sharing can be reduced substantially.

#### 5.4.6 Perception of Mother on the Therapeutic Nature:

On the basis of the analysis of the empirical data collected from the beneficiaries and their household members, it is revealed that in present foodstuff, perception level of the mother about the therapeutic nature of the food is slightly higher as compared to the wheat-based ration. Analysis of data further revealed that only 6.7 per cent of mothers are aware of the therapeutic nature of the food to some extent whereas the rest of the mothers are totally unaware about this so far as

present foodstuff is concerned. On the other hand, when present foodstuff is compared with the wheat based ration, the situation is even worse. The statistical figure indicates that only 5.33 per cent mothers are partially aware of the therapeutic of the food and the rest are unaware of this.

#### 5.4.7 Incidences of Pilferage:

In this empirical study, attempt was made to assess and find out the incidences of pilferage as well as wastage of food materials in both the systems. The empirical findings based on the responses of the beneficiaries on pilferage of food materials are given below:

- As high as 79.33 per cent respondents indicated that in case of the wheat based ration, porters were taking out wheat as well as other food rations from the gunny bags during transportation before they are opened resulting in shortage of food material at many distribution points. But in case of present foodstuff, as the food mixture is packed in double layered polypropylene bags, there is no scope and incidence of pilferage. Such an opinion was given by all the respondents during the study.
- It was also reported during the empirical study that in the earlier system (wheat base ration), since gunny bags were used, often food ration was coming out almost from each bag in varying degrees during loading and unloading and even before reaching the ultimate destination. As high as 72.67 per cent respondents including the ICDS functionaries reported that this was happening in the earlier system. But all the respondents (100%) opined that it has totally prevented due to the use of double-leveled poly bags.

**Table 5.13**  
**Response of Respondents on Incidence of Pilferage**

Indicators	Present Foodstuff (% of respondents Subscribing to the indicator)	Wheat Based Ration (% of respondents Subscribing to the indicator)
Porters takes away from the bag during transport	Nil	79.33
The bags are spoiled and food come out of it and are lost	Nil	72.67
Often due to contact with rain water food gets damaged in side the bags	Nil	46.00
Sold out & used for personal purpose at functionary level	18.7	38.67
Given as donation to the youth club etc. during festive occasion	Nil	68.67

- Similarly, as high as 46 per cent respondents during the empirical study reported that the food ration was getting damaged during transportation and also due to lack of proper storage space, but all the respondents reported that there was almost no occurrence of damage in case of present foodstuff as revealed from the study.
- Another significant thing which was revealed from the study is that, earlier in the wheat based ration, (since the ration was centered round wheat) during festive occasions like Saraswati and Ganesh puja and club functions, usually youth clubs of the locally ask for commodity donation. This was compelling the ICDS functionaries as reported by 68.67 per cent AWWs to contribute from out of the allotted quota. But this commodity donation is not happening at all as reported by all the 48 AWWs during the study under present foodstuff, as this is not ration centered.
- 38.67 per cent beneficiaries reported that in the earlier system (wheat based ration), food was sold out and used for personal purpose by the ICDS functionaries whereas after the changeover to present foodstuff, the F8F is not sold out at all, but though reduced, still use of the food for personal purpose continues as reported by 18.71 per cent beneficiaries.

However, on the whole the study revealed that pilferage and wastage have been reduced considerably in the present foodstuff compared to the earlier ration based system.

#### 5.4.8 Shelf Life:

Shelf Life was used as an important evaluation indicator in the study. The beneficiaries as well as the ICDS functionaries reported that while in polypropylene bags, present foodstuff remains unaffected or damaged within a period of about 3 to 4 months, the ration such as wheat and dal gets spoiled or damaged within a period of 1 to 2 months. Thus, the respondents invariably opined that the Shelf Life of the food ration is much less in case of the rations supplied under the traditional system than the Fortified Blended Food Indiamix/Orimix supplied by WFP.

**Table 5.14**  
**Comparative Analysis of Present Foodstuff (Indiamix/Orimix) and Wheat Based Ration (At a Glance)**

Sl. No.	Indicator of Comparison	Present Foodstuff (Indiamix/Orimix)	Wheat Based Ration
1	Composition	<ul style="list-style-type: none"> <li>• 65% Wheat, 15% Soya and 20% Sugar</li> <li>• Micronutrients (Vitamin + Mineral)</li> </ul>	80 Grams Whole Wheat 14 Grams Dal + 20 Grams Jaggery
2	Ration Size	• 80 Grams Single Ration	• 114 Grams Single Ration
3	Nutrient	• Energy: 312 Kcal	• Energy: 330 Kcal

	Values	• Protein: 11.5 Gram	• Protein: 11.00 Gram
4	Micronutrient	• Fortified with Calcium, Iron, Vitamin A, Thiamine, Riboflavin, Niacin, Vitamin C, folic Acid, Vitamin B 12 and Zinc	• Not Fortified
5	Hygienic	Prepared mechanically in factories with highest standard of cleanliness and hygiene  • Workers use gloves, caps etc, so that there is no manual touch and no scope of any contamination  • Water used for the processing of the raw materials tested every quarter • Food Mixture is tested by quality control agencies of international & national repute before declared fit for human consumption	• Presence of coliform counts in the SNP blend is quite high in the sample tested by the OUAT  • Presence of Coliform in food material is hazardous and it increases & contaminates the food stored in general conditions in the AWCs.
6	Shelf Life	• At least 6 months.	• Relatively less.
7	Taste	• Sweetened Blended Food of 'WFP has high degree acceptance by Children, Pregnant Women and Nursing mothers.	• Not as tasty as Present foodstuff and is often not liked by children and other beneficiaries.
8	Recipes	• A good variety of recipes/wider choice of recipes with minimum cooking time has been developed and standardized without using additional oil or fuel. Even one can it the mixed food without cooking at all.	• Jau and Chhatua are the dishes that can be prepared generally by grinding at the beneficiaries end.
9	Cooking	• Pre-cooked commodity, require no or minimal cooking  • It is safer over the preparation of	• Condiments and fuel required  • Funds for fuel

		food	provided
		at the center which is often to be	are not adequate & not
		unhygienic	available in time
		• It saves cooking time	• Increase the workload
		• Lowers fuel cost	of the functionaries.
		• Reduction in transport loss	
		• More palatable.	
10	Packaging	• Scientific packed in 25 Kgs	• Not packed in
		Polypropylene two layer bags leaving no scope	Polypropylene bags, but
		for contamination or wastage during carriage.	packed in gunny bags.
11	Extrusion Process	Food is prepared by using Extrusion Process. This	• No Extrusion Process is involved.
		has many positive effects such as:	
		• Increases the digestibility of protein	
		• Improves the digestibility of starch through	
		a combination of gelatinization and expansion	
		• Improves stability of fat because enzymes	
		such as lipase which cause rancidity are	
		destroyed	
		• Increase the proportion of digestible fiber	
		• Increases palatability by breaking down the	
		starch component into sweeter, simpler	
		components and flushing off components with unpleasant volatile flavour.	
		• Manufacturing of blended food through	
		extrusion process not only maintains, but also enhances the bioavailability of	
		nutrients by converting the nutrients	
		into a more easily digestible form.	
12	Community	• Improves the functioning of the AWCs	• Difficult to administer
	Involvement and other	• Motivates the mothers to adopt more	• Provokes conflict within the
	Impacts	child friendly complementary feeding	community
		• Increases the number of feeding days	• Food is often sold in the
		• It is easily served to the beneficiaries	market by the

			beneficiaries.
13	IEC Messages are printed for information sharing of the beneficiaries	<p>and also brings logistic ease for the functionaries</p> <ul style="list-style-type: none"> <li>• Less or no pilferage during the transportation and storage because of secured packaging.</li> <li>• Almost no scope of selling of supplied food in the market.</li> <li>• Printed on the Bags, which are extremely useful for the beneficiaries.</li> </ul>	<ul style="list-style-type: none"> <li>• No scope for printing</li> </ul>
14	Acceptability	<p>The Food Mixture is highly acceptable to all categories of beneficiaries for:</p> <ul style="list-style-type: none"> <li>• Its palatable taste</li> <li>• Wider scope of more number recipes</li> <li>• For its usability without cooking</li> <li>• Involves less fuel in case of beneficiaries needing to cook since it is already cooked earlier</li> <li>• Hygienic qualities</li> </ul>	<ul style="list-style-type: none"> <li>• It is a relatively less acceptable than the present foodstuff.</li> </ul>
15	Sharing of the Ration	<ul style="list-style-type: none"> <li>• Share among all the members including the adults and other non-beneficiaries. More than the earlier system.</li> <li>• But the good aspect is that though shared, it is consumed among all the family members and not sold as in case of the ration based food package.</li> </ul>	<ul style="list-style-type: none"> <li>• Shared among the family members or goes to the family food basket</li> <li>• Often sold in the market by the beneficiaries.</li> </ul>
16	Logistic Issues	<ul style="list-style-type: none"> <li>• On the whole, there is logistical ease to administer present foodstuff (Indiamix/Orimix)</li> </ul>	<ul style="list-style-type: none"> <li>• Logistically it is difficult to administer wheat based SNP.</li> </ul>

## 5.5 Best Practices

Regarding positive impact of this programme the ICDS of Office of Bangomunda block of Bolangir district introduces a method called as "Aame bi Paribu". In this method 10 children beneficiary's mother will come to ICDS Office with their beneficiary child and cook here the food and also feeding their child in presence to ICDS.

In order to motivate the Anganwadi Workers (AWWs) and give recognition to their voluntary work, Government presents Annual Awards to Anganwadi Workers selected on the basis of their dedication and exemplary performance. Under the scheme, the awards are given at two levels, first at State level and then at the National level. The State Governments are required to nominate the 5 best Anganwadi Workers in the State for the National Award which carries a cash prize of Rs.25,000/- with a Citation and is presented at a National level ceremony. For the State Awards, 73 best Anganwadi Workers are to be selected each year. They receive a cash prize of Rs.5,000/- and a Certificate at a State Level function. During 2005-06, 73 Anganwadi Workers were found eligible and were selected for the State Awards. They were receiving a cash prize of Rs.5000/- and a Certificate on 8<sup>th</sup> March 2006 at a State Level function International Women's Day.

## CHAPTER-VI

### **CONSTRAINTS FACED BY THE IMPLEMENTING AGENCIES & THE BENEFICIARIES**

There are a large number of constraints faced both by the implementing agencies as well as beneficiaries which are responsible for the poor effects of the Programme, and some of the important one's are the following:

#### **6.1 IMPLEMENTING AGENCIES**

- I. No awareness has been created among beneficiaries about SNP because there is no awareness Programme held in the area of study. Some AWW stays out side the AWC village and they are coming to AWC for 3 to 4 hours a day. This stay for limited period is not sufficient for Anganwadi Center. Some of the AWWs are not highly educated.
- II. In all 8 districts covered under the study, the foodstuff is being delivered to all the AWCs through transporting agencies. In case of some inaccessible AWCs, the foodstuff is being received by AWWs from ICDS godown and taken over to the concerned centers on their own arrangements. This cost born by the AWW is reimbursable at the end of the year at a govt. fixed rate. This reimbursed amount as revealed from the empirical study are found to be half of the actual cost they pay for the transportation of the foodstuff.
- III. The cost towards transportation of foodstuff is fixed by government @ Rs.22 per quintal irrespective of distance. This is very difficult for the workers especially in hilly areas to meet the expenditure. It is observed from the field study that some of the AWW hire bullock cart for the purpose where as in other areas tempo or trekker is hired for the purpose. Sometimes, more than one AWW make a group to carry the items to reduce the cost.
- IV. Workers in accessible areas, where vehicle do not reach, carry their commodity by physically carrying those from nearest vehicle spot and this cost is paid by the Anganwadi Worker.
- V. Distribution at project level is also found not be systematically planned considering the THR date and requirements. It is distributed either sector-wise or sometimes to easily accessible centers considering convenience of hired transporting agency.
- VI. All the AWCs use a container of one kg. for measuring and distribution of foodstuff. But this is not of equal size and shape in all the centers. It varies from one another. But in practice, it was found the weight is around 800 grams (when the mouth of container is plained and not fully filled up). Different kind of container like aluminum mug, plastic daba,



used amul or other 1kg daba etc. are used for distribution in different AWW Centers.

- VII. Another problem identified by the study team in the study area is that some of the villages have more beneficiaries but govt. provides food to limited number of beneficiaries for which number of beneficiaries enrolled is much less than the number of eligible beneficiaries. In this case the AWW distribute the foodstuff among all the eligible beneficiaries because the parents of the eligible beneficiaries officially not covered under the Programme are creating conflict with AWW. This is resulting in reduced quantum of ration for the eligible beneficiaries.
- VIII. Storage pattern: Storing of foodstuff under proper hygienic condition was found to be a serious aspect at the beneficiary level. The different type of container used for keeping the foodstuff as revealed from the study are polythene, gunny bags, bamboo made baskets (bhogai, baunsia), aluminum pots, plastic containers, earthen pot, steel carrier, etc. Mostly 70 per cent beneficiaries keep in n polythene or gunny bag where as only 5 per cent use steel carrier. It was observed during the study that black insects, clots, ants and some other particles were found along with the foodstuff kept in the houses of the beneficiaries.
- IX. In case of AWCs, 77% (37 nos.) centers have their own building out of which 45.83% (22 nos.) workers used to keep foodstuff at center and others use their own house or helper's house to store the foodstuff. The different reasons for not storing at centers are apprehension of theft, leakage of water, unsafe condition of door and window. About 23% (11 nos.) centers do not have their own building and they use spaces in School, Club, and Mahila Samiti etc. to store the foodstuff and such places are not safe to storage the foodstuff.
- X. Most of Anganwadi Workers don't show interest in their job due to less amount of remuneration.
- XI. Majority of the Anganwadi Workers are uneducated and their awareness level is much low than the desired level.
- XII. The amount of food ration supplied by the AWCs under the Programme is inadequate. Hence there is necessity to increase the amount of food ration.

## 6.2 BENEFICIARIES

- I. All the eligible beneficiaries have not been covered under this Programme because govt. has fixed number of beneficiaries to be covered under each block.
- II. Sharing of foodstuff by other members is another main problem of this Programme. The data reveals that the sharing is more because the food

is tastier, easy to cook and sweeter as compared to the earlier foodstuff. However, it was observed that only in case of first pregnancy, it is less shared, but in other cases all the family members of the beneficiary are eating the foodstuff.

- III. Days of consumption: The foodstuff is distributed for 25 days in a month but consumed by the beneficiary much ahead. About 60% beneficiaries finish it within 10 days where as 35% keep for 15 days. Only 5% beneficiaries were found to be eating it on all the 25 days a month.
- IV. It was observed in the study villages that this foodstuff is not consumed regularly during summer season, as the people are busy in collection and processing of mangos, mahula, cashew and others. Especially women are mostly busy for various activities during this period and do not find time to cook the foodstuff everyday. During rainy season they consume it on most of the days. It was found that the tribal beneficiaries located in habitations away from the AWCs under the Programme are not coming to the center for receiving their ration regularly. Many tribal women are sending their relatives to receive the ration. Many families reported eating in evening but not actually taking. This is for which they are busy and neglect foodstuff. Another problem is that they go to paddy field (shifting cultivation) in hills with their children in the early morning and return at evening. So their children are not send to pre-school. Some of the beneficiary household heads have also expressed that they do not need the type of foodstuff that are distributed under the Programme.
- V. From health angle, it is reported that people were experiencing indigestion and stomach problem in the earlier system, which is not found to be happening in the present system.
- VI. Another aspect is likingness of children, which is found more in case of the present system of foodstuff compared to the earlier system.
- VII. The study revealed that there is irregular availability of ration in block level in a number of sample blocks
- VIII. The packaging is not good which is responsible for spoiling the foodstuff.

## CHAPTER VII

### **AREAS OF CONCERN AND RECOMMENDATIONS FOR BETTER IMPLEMENTATION OF SPECIAL NUTRITION PROGRAMME & ICDS**

The study team has come up with some specific suggestions which may be looked into for addressing the problem areas existing both at the levels of food processing and implementation:

1. The network of transportation of foodstuff needs to be strengthened. In fact, steps should be taken to deliver the foodstuff at the point of AWCs or else the carriage cost to be paid to the AWW taking into account distance as the indicator and the flat rate or carriage cost notwithstanding the distance should be discontinued.
2. The current practice of food distribution to the beneficiaries (except the 3 to 6 years children category) for 25 days at one go should be discontinued and there should be provision for weekly distribution of the food ration. This will minimize food sharing by the non-beneficiaries at the household level.
3. All actual BPL and lower economic level of families need to be covered under the Programme.
4. The number of Supervisory Staff is inadequate. Hence the vacancies should be filled in for better implementation.
5. Beneficiary awareness on storage and use of foodstuff needs to be systematically addressed.
6. The study team suggested that there should be differentiated food for different types of beneficiaries in consultation with nutritionists and food bags should bear printing on it for different category of beneficiaries. For example, for the Pregnant Women, for Lactating Mother and for Children below 3 years of age bags with separate brand name are needed. Such a brand name earmarked for different categories of beneficiaries on the pack will reduce sharing by the non-beneficiaries.
7. While filling in the positions of AWWs in future, the existing rules of picking such workers from the same village where she will have to work may be insisted upon.
8. One monthly village meeting be conducted at the village level with all stakeholders such as PRI Members, village opinion leaders, youths, SHG Members and beneficiary household heads which will increase the accountability level of the ICDS personnel and the system will be more transparent. Interfacing between worker, supervisor and beneficiaries should be periodically done.

9. Beneficiary home visit by supervisors and workers will be beneficial for target group to consume foodstuff properly.
10. Transparency of food quantity among villager and ICDS needs to be developed regarding the change foodstuff and its value.
11. Members of food committee should not be only among the beneficiaries.
12. Periodical meeting with change agents instead of at THR day may also be helpful to improve the consumption pattern.
13. Meeting with SHG members should not be on only thrift and credit rather health and nutrition aspects especially foodstuff utility and use pattern should be focused.
14. Proper growth monitoring of children to be done.
15. IEC materials to be exhibited at conspicuous places in the villages (AWCs/ SHG offices/ ANM centers) so that the villagers as well as all the stakeholders can understand and appreciate the good aspects of the foodstuff and this will go a long way in reducing the sharing by non-beneficiaries.
16. Adding message to wall painting on Indiamix/ Orimix as a baby food will generate awareness.
17. Since during the study it was noticed that the timely supply of food was not done at some places, it may be considered to set up one production unit in each district. This will reduce the transportation cost. Under the present system, the foodstuff is transported all the way from Khurda and Jatani, located at a fairly long distance from the districts where the foodstuff is in operation. This will also reduce the transportation cost and ensure timely delivery of food ration.
18. Attempt should be made for better packing system like separate sealing of internal pack.
19. Steps should be taken for periodical food sample analysis to ensure the proportion of ingredients.
20. Periodical monitoring, at least once in a months be done by an independent agency so that the delivery system can be improved further.
21. Eligible beneficiaries survey to be done every year and allotment needs to be revised.
22. Multiple record maintenance (for oil and Orimix) be stopped and there should be single register for maintaining the record for both oil and Orimix/ Indiamix.
23. The study revealed that most of the mothers at the household level are unaware of the food content in terms of nutrition and they are also not aware of the specific necessity of food supplied for the beneficiaries

leading to more sharing of this. The study team therefore suggested that the mother of the beneficiary be imparted education by the AWW. Alternatively, awareness creation Programme among the SHGs may be a useful mechanism for this purpose.

24. Pre-school should not be a stopgap arrangement of children to come at the time of food distribution (in many cases found school activities are not properly undertaken).
25. It should be made mandatory for the AWW to stay in that village, where she has been posted (12% workers are not staying in their respective working villages and getting up and down from own their village, and 21% are from other places by staying either in the center or working village).
26. Measuring process needs to be made scientific for distribution of foodstuff to beneficiaries. Instead of different shaped and size container one standard type of unit should be provided to Anganwadi Workers. This needs to be tested and verified in village in the presence of staff of ICDS, PRI and beneficiary (including SHG members and change agents)
27. Rate of the empty container must be communicated immediately to avoid future complicacy (in some places the cost is deducted from AWWs, in some cases no decision, in some cases AWWs as well as accounts section will face problem). It should be cleared whether the cost of empty container needs to be collected or not. As reported, office is deducting Rs.2.50/sack where as the market value is less than one rupee.
28. Foodstuff should reach in or around third week of the month to avoid delay in THR. It will also help the hired agency to transport in time. As the ICDS month ends on 25th day of the month, the foodstuff should be made available for distribution to AWWs.
29. Smaller size of food packets will be more beneficial for inaccessible area.
30. The remuneration of the AWW should be increased. Periodical external monitoring and some rewards will create a sense of sincerity and seriousness among the workers.
31. Honorarium and transportation allowance of supervisor for visit to villages needs to be fixed.
32. Expansion and timely repairing of ICDS go down will increase the efficiency.
33. Posting of full time CDPO will increase the work efficiency of ICDS activities and better coordination among the staff to fulfill the ICDS objectives.
34. Food being a part of culture and to gain the belief and trust of people, it would be better if processed and packed in concerned locality.
35. Record keeping by AWWs was found to be a problem during the study. It needs to be simpler and less cumbersome.

On the basis of the entire study and critical analysis of data, it can be said in brief that the change over from conventional wheat based SNP to the Fortified Blended Food Indiamix/Orimix has immensely benefited the beneficiaries and though only about 4 years have passed by from the date of its effective implementation, its positive impact has been clearly visible. It can also be said that Indiamix/Orimix with Supplementary Nutrition (SNP) input with micro nutrient can be used as a replicable model, which can be extended to all the districts of the state. But it will be really worthwhile to consider the suggestions indicated above before the Indiamix/Orimix is extended to other parts of the state.

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## Annexure I

### LIST OF ANGANWADI CENTERS (AWCs) WITH THEIR LOCATIONS

NAME OF THE VILLAGE WHERE THE SAMPLE AWC LOCATED	GP UNDER WHICH LOCATED	BLOCK UNDER WHICH LOCATED	DISTRICT UNDER WHICH LOCATED
1. Talajhari	Talajhari	Kashipur	1. Rayagada
2. Kudikipadar			
3. Regeda	Regeda	Gunupur	
4. Badaguda			
5. Akhusingh	Akhusingh	Padmapur	
6. Khilamunda			
7. Champi	Chami	Lakshmipur	2. Koraput
8. Adinagar			
9. Kumbhariput	Kumbhariput	Bandhugaon	
10. Gulimiguda			
11. Kumbhari	Kumbari	Narayanpatna	
12. Bagam			
13. Muduliguda	nsabeda	Khairaput	3. Malkangiri
14. Mundiguda			
15. Parkanmela	Parkanmela	Kudumul Gumma	
16. Kopeguda			
17. Udulibeda	Udulibeda	Mathili	
18. Chalanguda			
19. Gajapara	Ganjapara	Raighar	Nawarangpur
20. Dumurdihi			
21. Dhadra	Dhadra	Jharigaon	
22. Telakanadi			
23. Sanabharandi	Badabharandi	Umerkote	
24. Pujariguda			
25. Balisara	Gunupur	Thuamul Rampur	5. Kalahandi
26. Kathaghara			
27. Brahmanchhenda	Brahmanchhenda	Dharmagarh	
28. Chilchila			
29. Tumura	Manihari	Laumunda	
30. Nakatikani			
31. Sindurpur	Sindurpur	Binika	
32. Cherupali			6. Sonapur
33. Baidupali	Cherupali	Dunguripali	
34. Kusamal			

35. Katapali	Katapali	Tarava	
36. Bijapadar			
37. Dhamandanga	Dhamandanga	Tureikela	7. Bolangir
38. Kandhabahal			
39. Bhalumunda	Bhalumunda	Bangomunda	
40. Belapada			
41. Jagua	Jagua	Titilagarh	
42. Turla			
43. Timanpur	Rimanpur	Sinapali	8. Nuapada
44. Ranimunda			
45. Tentulipada	Tentulipada	Boden	
46. Binapur			
47. Areda	Areda	Khariar	
48. Amalapali			
<b>TOTAL: 48</b>	<b>24</b>	<b>24</b>	<b>08</b>



**Pre-School Child Beneficiaries and Taking Food at the Centre**



**Twin Child having severe Malnourishment**



**Twin Child having severe Malnourishment**



**Different Types of SNP Beneficiaries**



**AWC with Anganwadi Supervisor and Beneficiaries**



**AWC runs in Gram Panchayat Veranda**





**Severe Malnourished Child**



**Severe Malnourished Child**

