



PLAAF 436
IN 35903

THE U. S. AGENCY FOR INTERNATIONAL DEVELOPMENT
NEW DELHI, INDIA

**PL 480, TITLE II, FOOD FOR WORK
IMPACT EVALUATION**

RECIPIENT PROFILE STUDY: CATHOLIC RELIEF SERVICES
(CALCUTTA ZONE, North Bihar)

Conducted By
Jagjit Narayan Mishra Institute of Economic
Development & Social Change, Patna

JANUARY, 1983

THIS IMPACT EVALUATION WAS CONDUCTED
UNDER SUPERVISION OF
FOOD FOR DEVELOPMENT DIVISION

USAID / INDIA

The U.S. Agency
for
International Development
(New Delhi, India)

PL 480, Title II, Food for Work

Impact Evaluation

Recipient Profile Study

Catholic Relief Services

(Calcutta Zone: North Bihar)

MAY, 1963

Lalit Narayan Mishra Institute of Economic
Development & Social Change, Patna-800001

Acknowledgement

The Lalit Narayan Mishra Institute of Economic Development & Social Change (LNMI) was contracted by the United States Agency for International Development (USAID) to undertake an impact evaluation of Food For Work projects carried out through Catholic Relief Services, in North Bihar of Calcutta Zone. The study was limited to recipient (those receiving food for work) profile including socio-economic characteristics of recipient's, utilization of food received and its impact on nutritional status of recipient's family, particularly his children in the age group of 1-5 years.

This is one of the several studies similarly designed to assist USAID and CRS to better understand the working of FFW Project and their impact on welfare and nutritional status of the recipients. The results of this evaluation are presented in this report.

As in the case of other recipient studies, the Centre For Research Planning and Action (CERPA) was contracted to support this study by processing of all data collected by LNMI with the help of a computer and writing of the report. In performing these functions CERPA has been ably guided by the Technical Advisory Committee (TAC) consisting of representatives from USAID, CRS and CERPA.

For successful completion of this report many thanks are due to CRS, New Delhi, in particular, Mr. T.M.Kirch, Director, CRS and Mr. V.C.Rallan, Evaluation Co-ordinator. Also, Zonal Director, Calcutta, his consignees, Project holders, their staff and recipients contacted. At the USAID, we have benefitted much from the advice and consultations from Mr. David R.Nelson, Mr. John R. Westely, Dr. F.J.Young and Mr. M.C.Gupta. Also from continuous and critical interest of Mr. John P.Chudy at all stages of the progress of this study. We owe a debt of gratitude to Dr. Richard Brown and Mr. Harry H. Houck for the understanding that we received from them from time to time, while working on this study. Thanks are also due to Dr. Padam Singh for his able guidance as member of TAC.

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0. Summary of Findings

0.1 Introduction

0.1.1 This summary refers to an evaluation study carried out among recipients of FFW commodities in Calcutta Zone (North Bihar)

0.1.2 The study has been carried out in 6 consignee areas, i.e. Bhojpur, East Champaran, Patna, Darbhanga, West Champaran and Monghyr.

0.1.3 The evaluation covered 8 different activities namely: Road Construction, Land Levelling, Low-cost Housing, Construction of Tanks, Wells and Dams, Storage Construction and School Community Buildings.

0.1.4 In all, 322 recipients were contacted of whom 30.5 per cent were active i.e. currently working on a projected and 69.5 per cent non-active i.e. that they had worked on an FFW project earlier.

0.2 Socio-Economic Characteristics

0.2.1 81.9 per cent of the recipients are male and 18.1. per cent female.

0.2.2 41.70 per cent recipients are in the age group 41-50 years 23.8 per cent in 31-40 years, and 17.3 per cent between 21-30 years of age. Those above 50 years account for 10.7 per cent of the recipients and those below 20 years for 6.5 per cent.

0.2.3 83.9 per cent of the recipients are illiterate, and 10.1 per cent literate but without formal education. Only 2.8 per cent have primary education, 1.6 per cent each middle and secondary education.

0.2.4 84.3 per cent of the recipients belonged to Scheduled Castes/tribes and 11.7 per cent to backward classes. Only 4 per cent belonged to other castes, showing that this programme is almost entirely devoted to help the weak, as defined by caste.

0.2.5 77.2 per cent of the recipients are Hindus, 20.3 per cent Christians and 2.5 per cent Muslims.

0.2.6 78.9 per cent of the recipients are married and 9.5 per cent unmarried. Others are either widows and/or separated.

0.2.7 About 67 per cent of the recipients are non-agricultural labour. Very few own land. Among those, who own land majority are marginal/small farmers.

0.2.8 93.5 per cent of the recipients described their occupation as "labour", agricultural or non-agricultural. Only 3 per cent mentioned agriculture as their occupation. The rest 3.5 per cent mentioned business/profession/service as their profession.

0.2.9 51.5 per cent of the recipients received a monthly income of Rs. 101-200 and another 19.2 per cent between Rs. 201-300. Very few received income above Rs. 300/-. Those receiving between Rs. 51-100 accounted for 18.2 per cent of the recipients.

0.2.10 63.2 per cent procured drinking water from a well located outside the house, 30.2 per cent from a handpump located outside their house. Very few received piped water or well water from a well inside the house.

0.2.11 76.5 per cent of the recipients did not have any access to electricity. 23.4 per cent had the benefit of public lighting i.e. electricity outside the house. Almost no one lived in an electrified house.

0.2.12 98.8 per cent of the recipients owned the house they lived in. Renting the house in rural India is an unusual phenomenon.

0.2.13 46.5 per cent of the recipients lived in huts and 30.2 per cent in kuccha houses. 19.8 per cent had mixed houses and only 3 per cent pucca houses.

0.2.14 No one had latrine/bathroom attached to their house.

0.2.15 All of them belonged to the district where the project was located.

0.3 Organization of FFW Projects

0.3.1 79.2 per cent of the recipients learned about FFW project from the gang leader and 14.4 per cent through direct information or "self knowledge", 3.5 per cent learned about the project from project beneficiaries or supervisors. The rest learned it from the village panchayat and/or social workers.

0.3.2 For employment, 77.4 per cent were recommended by gang leader and 19.6 per cent came in through direct application. Very few joined the project on the recommendation of "Father" or project beneficiary/supervisor.

0.3.3. In about 74 per cent of the cases attendance register was marked by the supervisor and for 25 per cent, by the gang leader Only 1.4 per cent signed the attendance register themselves.

0.3.4 Only 38.5 per cent signed the food distribution register themselves. For the rest attendance register was signed by the gang leader.

0.3.5 Ninety-nine per cent of the recipients were paid food wages in time. However, all recipients did receive the commodities themselves ultimately.

0.3.6 In 51 per cent cases commodities were paid on a holiday, and for 43.1 per cent on a working day after working hours. 3.1 per cent of the recipients received food on a working day during lunch and 2.8 per cent on a working day during working hours.

0.3.7 61.0 per cent joined the project because they were unemployed and 11.9 per cent because they could benefit from the asset. 20.1 per cent liked the attribute of assured employment. Timely payment of wages also attracted some.

0.3.8 In about 75 per cent of the cases commodities were paid weekly while 17 per cent of the workers reported daily payment. Only 8.4 per cent of the cases commodities were paid fortnightly.

0.3.9 Preference-wise, 52.5 per cent wanted it weekly and 44.5 per cent daily. 1.5 per cent even desired commodities to be paid in advance.

0.3.10 To 67.3 per cent of recipients commodities paid were bulgar and oil. For 29.5 per cent the commodities paid were corn, bulgar and oil. In very few cases corn and oil, corn and bulgar and bulgar alone were supplied.

0.3.11 Preference-wise 27.0 per cent recipients desired corn only and 28.0 per cent corn plus bulgar plus oil. 20 per cent desired bulgar plus oil and 15 per cent corn plus oil. Only 5 per cent desired bulgar alone or corn plus bulgar.

0.3.12 For 82.2 per cent of the recipients payment was made at store, and for 16.3 per cent at project site. Preference-wise 80.4 per cent of the recipients desired payment at project site and only 15.4 per cent at warehouse.

0.3.13 94.8 per cent of the recipients mentioned they knew where the food came from. Of these 72 per cent mentioned these commodities were from America. 18 per cent considered these were provided by Panchayat and 10 per cent attributed these to the supervisor.

0.3.14 In 98.6 per cent of the cases tools for work belonged to the recipient. Only a few got them from the project holder/contractor.

0.4 Easter Characteristics

- 0.4.1 19 per cent of the recipients received their wages in FFW commodities daily. 75 per cent received commodities weekly and about 6 per cent fortnightly.
- 0.4.2 On the average those receiving wages daily collected about 3.4 kg. of cereals every day. Those getting weekly wages received 18 kg. and those collecting fortnightly about 36 kg. of cereals at each payment. In addition those who were receiving wages were provided with 100 gms. of oil per day. This increased to 600 gms. for those getting their wages weekly and to 1260 gms. for those receiving commodities fortnightly.
- 0.4.3 94.9 per cent of the recipients shared FFW commodities with family, rest consumed those themselves.
- 0.4.4 39.2 percent shared these with wife, 48.5 per cent with children, 6.5 per cent with father and 4.3 per cent with mother. A few also shared them with brothers/sisters.
- 0.4.5 About 39 per cent of those relations sharing FFW commodities belonged to the age group of upto 14 years. Sharer relations in the age group 15-50 years accounted for another 53 per cent. Relations above 50 years of age were only 8 per cent.
- 0.4.6 However, in a separate question to respondents as to with whom the commodities were shared, 48 per cent mentioned 'children'.
- 0.4.7 62 per cent consumed the food received as FFW wages in less than one week, and 33.8 per cent in one to two weeks. Only 3 per cent said that commodities lasted for more than 2 weeks.
- 0.4.8 41 per cent of the recipients stored commodities for future consumption and the rest 59.0 per cent consumed these when received.
- 0.4.9 When out of stock, 33.0 per cent of the respondents stated they spend money to buy non-FFW commodities, 22.5 per cent secured food from stock and 9.1 per cent borrowed FFW commodities, and finally 11.4 per cent said they purchased or used "other things".
- 0.4.10 41.1 per cent of the recipients converted FFW commodities into khichri and 56.8 per cent into "bread". It appears that "bread" here stands for non-leavened cake-like food described as chapati or "roti" in most parts of India.

0.5 Benefits from FFW projects

0.5.1 Before working on FFW projects, 41.1 per cent were doing labour and 29.2 per cent other work. 22 per cent of the recipients were living on borrowed money and 6.4 per cent by selling assets.

0.5.2 50.2 per cent expected benefits from the project when completed in the form of built up house, levelled land etc., 47.7 per cent did not expect any such benefit. They were interested only in compensation for their labour.

0.5.3 About 80 per cent of the respondents said they were willing to work on FFW even if no benefits were to accrue directly to them from the completed projects.

0.5.4 74.0 per cent of the recipients mentioned that working on FFW projects did not add to their assets. However, 7.3 per cent considered that it did add to their assets. Others gave no response.

0.5.5. Only 3.2 per cent considered FFW payment helped them better perform social obligations. The majority did not think so.

0.5.6 Average employment provided to the recipients by FFW projects was for 96 days over the year. The employment provided by non-FFW avenues accounted for 126 days. Thus, of the total employment 43.3 per cent of a recipients work year was provided by FFW activities. This proportion was about 18 per cent in the case of two other working members of the family for whom the employment data was also collected.

0.5.7 On the average a beneficiary had a work opportunity for about 61 per cent of the days in a year. This ratio was lower at 50.9 per cent for two other working members of the family in whose case employment data was analysed. This shows that FFW projects bring about a substantial improvement in the employment level of those workers who get associated with FFW activities.

0.5.8 The contribution of employment by FFW activities is observed to be quite high for land levelling in Monghyr district. The per beneficiary employment is substantial in the case of most activities except for low cost housing (Patna) and school building (Bhojpur). Low-cost housing activity as part of FFW programme is generally a short term activity lasting a few days.

0.5.9 Average income accrued to the recipient family (comprising the worker and the other working members of the family) was of the order of Rs. 626/- per annum. This additional income accounted for about 29 per cent of the post-project total income of the family.

0.5.10 However, there also appears to be a simultaneous income increase in activities outside FFW. This increase may have been partially because of price change. The income outside FFW had increased by about 79.7 per cent during the year of survey as compared to a year before FFW activity was started.

0.5.11 A substantial overall change in the income of the recipient beneficiary is observed when income is compared to pre-FFW situation. This increase is of the order of 252 per cent. As explained before, this could partly be because of change in price level.

0.6 Nutritional Status of Recipient Families

0.6.1 The minimum calorie consumption norm, calculated on the basis of family composition, stood at 2121 for Patna Zone as a whole.

0.6.2 As against this, actual per household consumption is 2619 calories. This places 73 per cent of recipient families above the minimum consumption norm.

0.6.3 Protein deficiency is lower among recipient families as compared to calorie deficiency. About 82 per cent of the families had a protein intake above the required minimum. The actual per household consumption of protein for Patna Zone is estimated to be between 69 and 77 grams per day.

0.6.4 Both on account of calorie and protein intake, non-active recipient families are observed to enjoy better status.

0.6.5 Calorie intake levels among SC/ST/Backward classes is generally lower than those of other castes, although in the case of protein intake differentials are negligible.

0.6.6 Analysis also suggests that recipient families with higher landholdings tend to have larger intake of calories and proteins.

0.6.7 A positive correlation is also noticed between nutritional status and income levels of recipient families.

0.7 Nutritional Status of Children

0.7.1 When analysed according to weight for age index by Indian standard norms, the percentage of normal children among active recipients families was 16 percent and with mild malnutrition 39 percent. The corresponding percentage for children of non-active recipients families was 26 and 46 percent respectively. Results separately for boys and girls did not show any statistically significant difference in the nutritional status.

0.7.2 When analysed according to American standard norms the extent of nutritional deficiency was higher for all children regardless of sex and work status of their parents.

0.7.3 When analysed according to height for age index, by Indian standard norms, children belonging to active recipients families showed higher nutritional status. Furthermore, boys showed a relatively higher nutritional status.

0.7.4 According to American standard the extent of malnutrition is generally very severe and is relatively more among the children of non-active recipient's families.

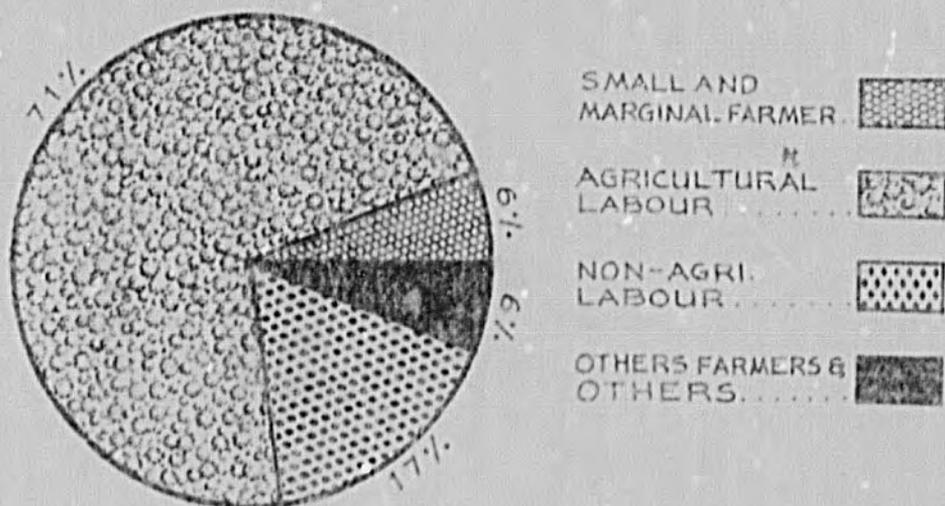
0.7.5 By weight for height index, by Indian standard norms, the percentage of normal children is more among non-active recipient's as compared to active recipients. Between boys and girls no significant difference in nutritional status has been observed.

0.7.6 When analysed according to American standards the results did not show any significant difference in the nutritional status between children of Active and Non-Active recipients and also between boys and girls.

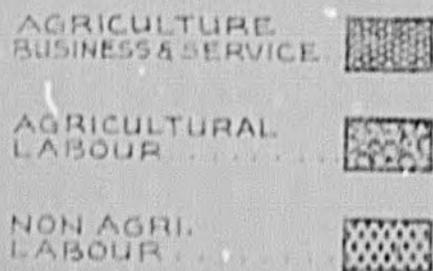
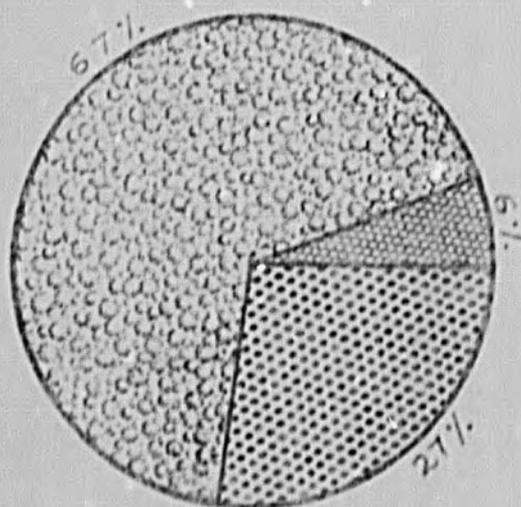
0.7.7 When analysed by combined height-for-age and weight-for-height index the results indicate that the percentage of normal children was negligible both in case of active and non-active recipient's families, irrespective of sex. When analysed in terms of American norms the results are similar to those by Indian norms.

Selected Recipient Characteristics

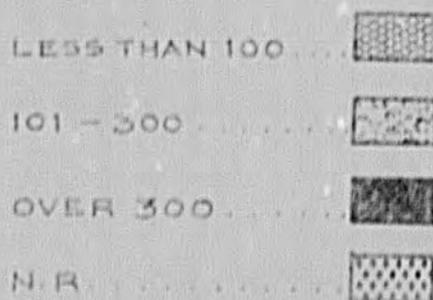
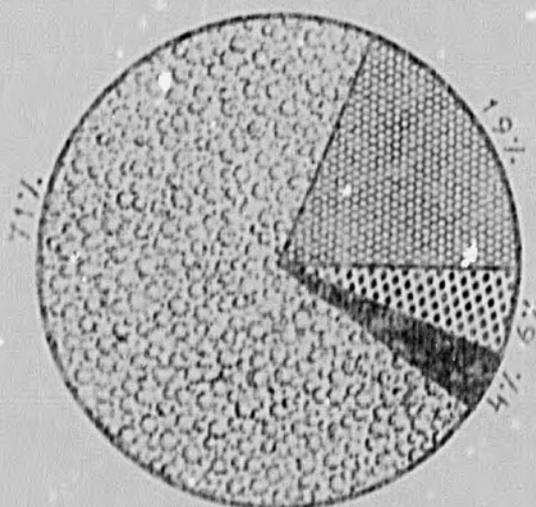
FARMER CATEGORY



OCCUPATION



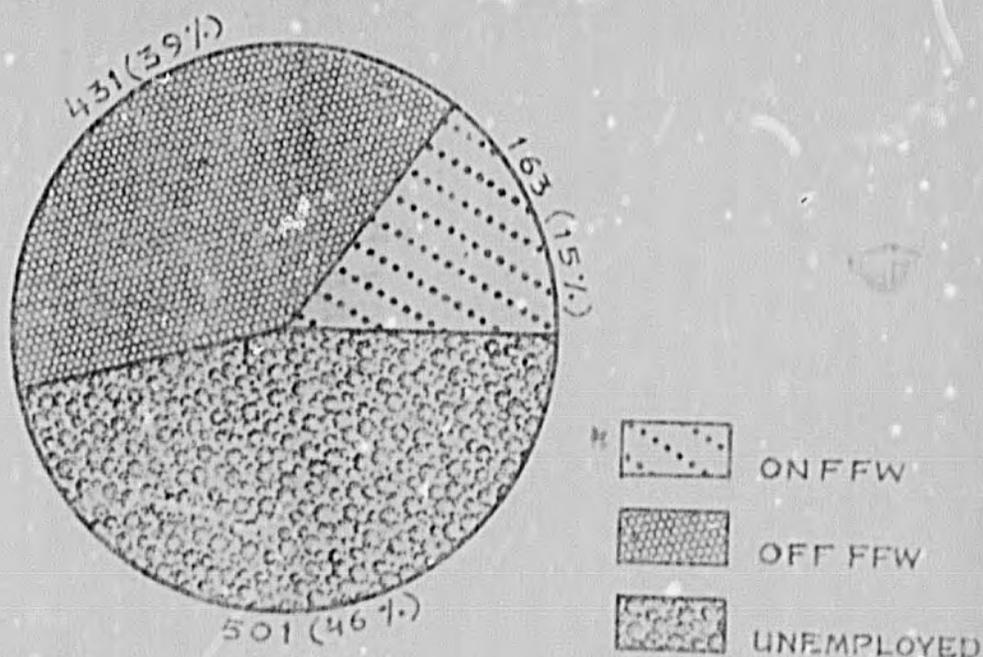
MONTHLY INCOME (Rs/month)



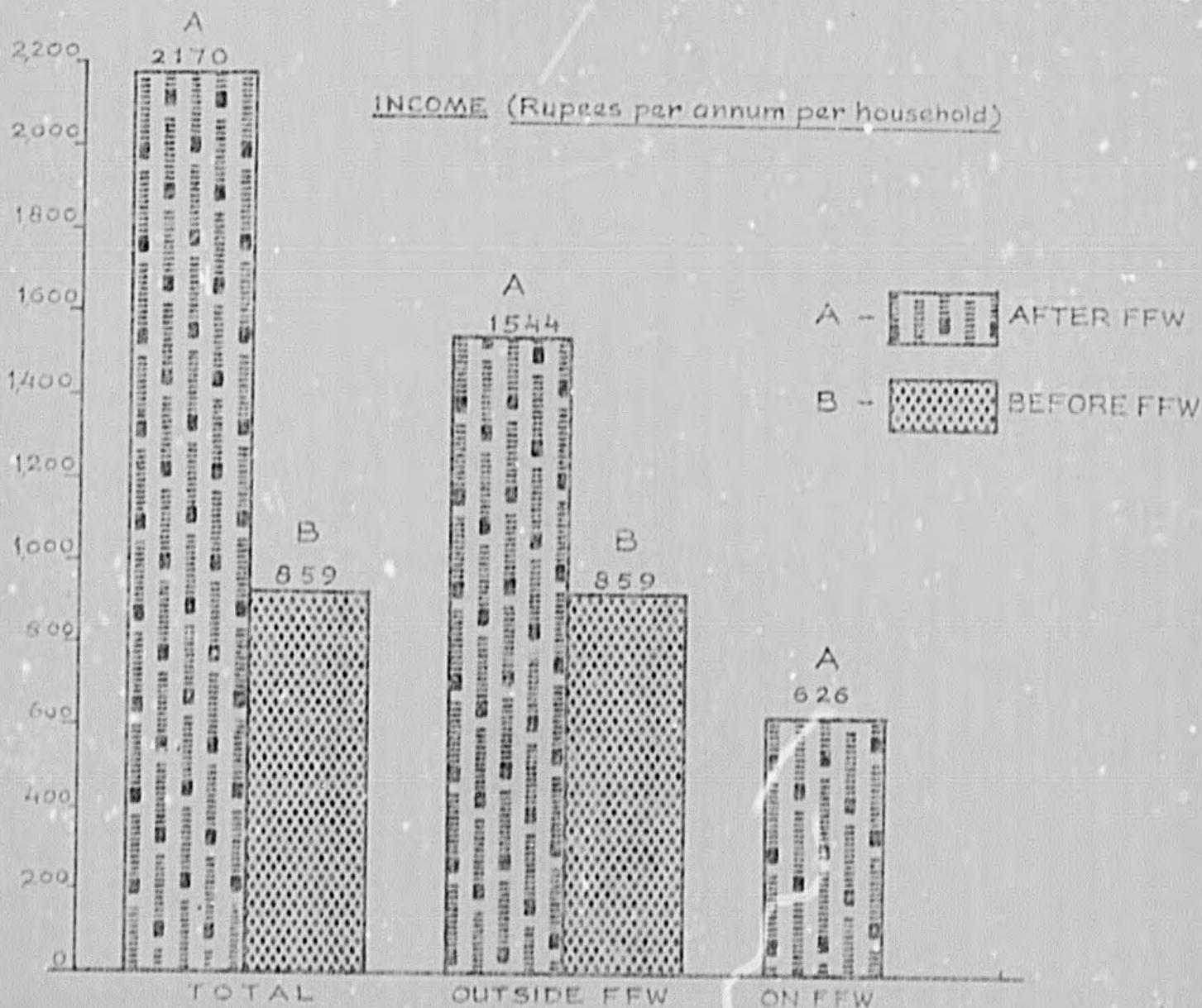
10

EMPLOYMENT AND INCOME STATUS OF RECIPIENT HOUSEHOLDS

EMPLOYMENT (Mandays per year per household)



INCOME (Rupees per annum per household)



NUTRITIONAL STATUS OF CHILDREN BY WORK STATUS OF RECIPIENTS

Weight for Age Index
(No. of children in %)

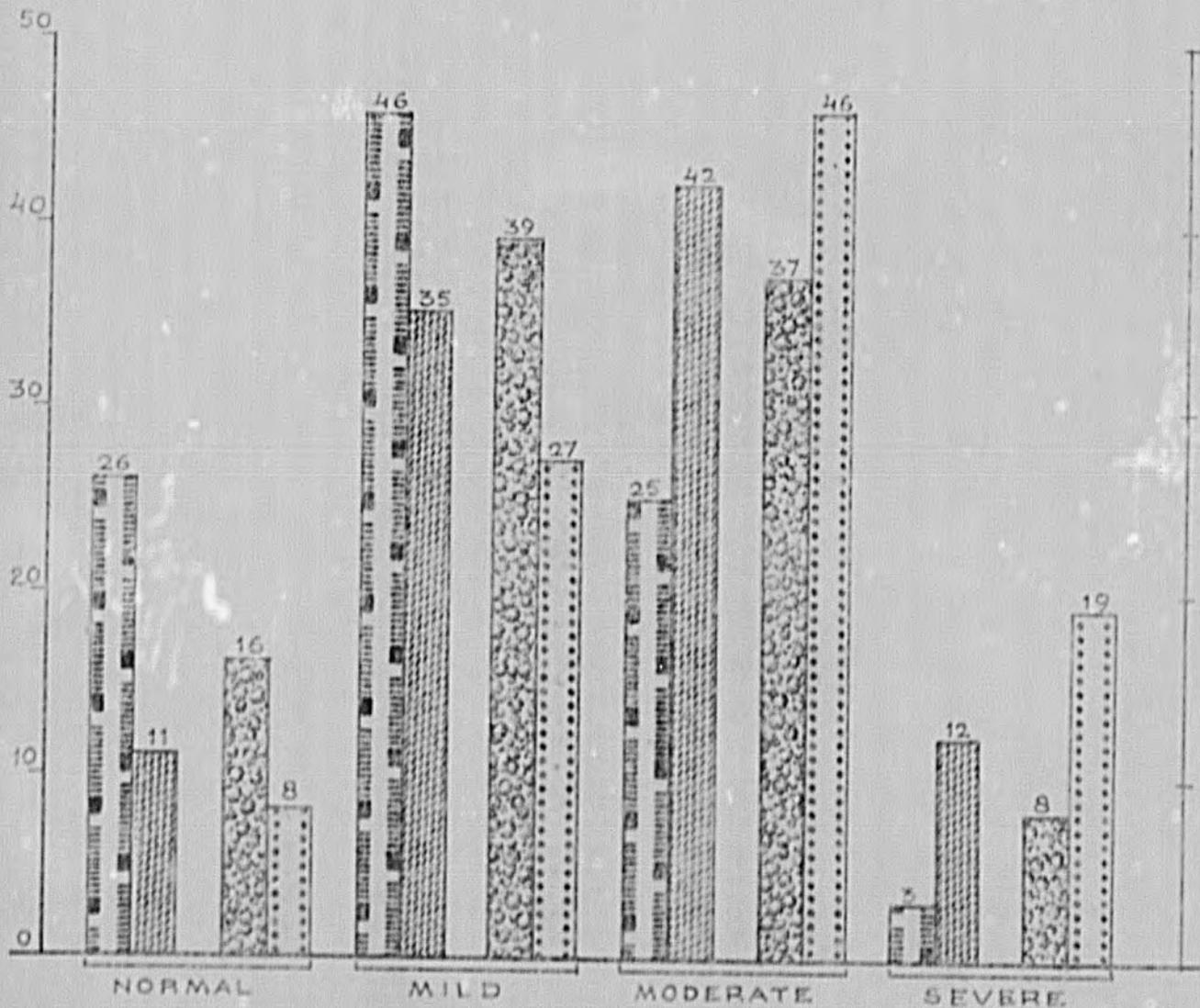
STANDARDS

N.A. - INDIAN... 
(non-active)

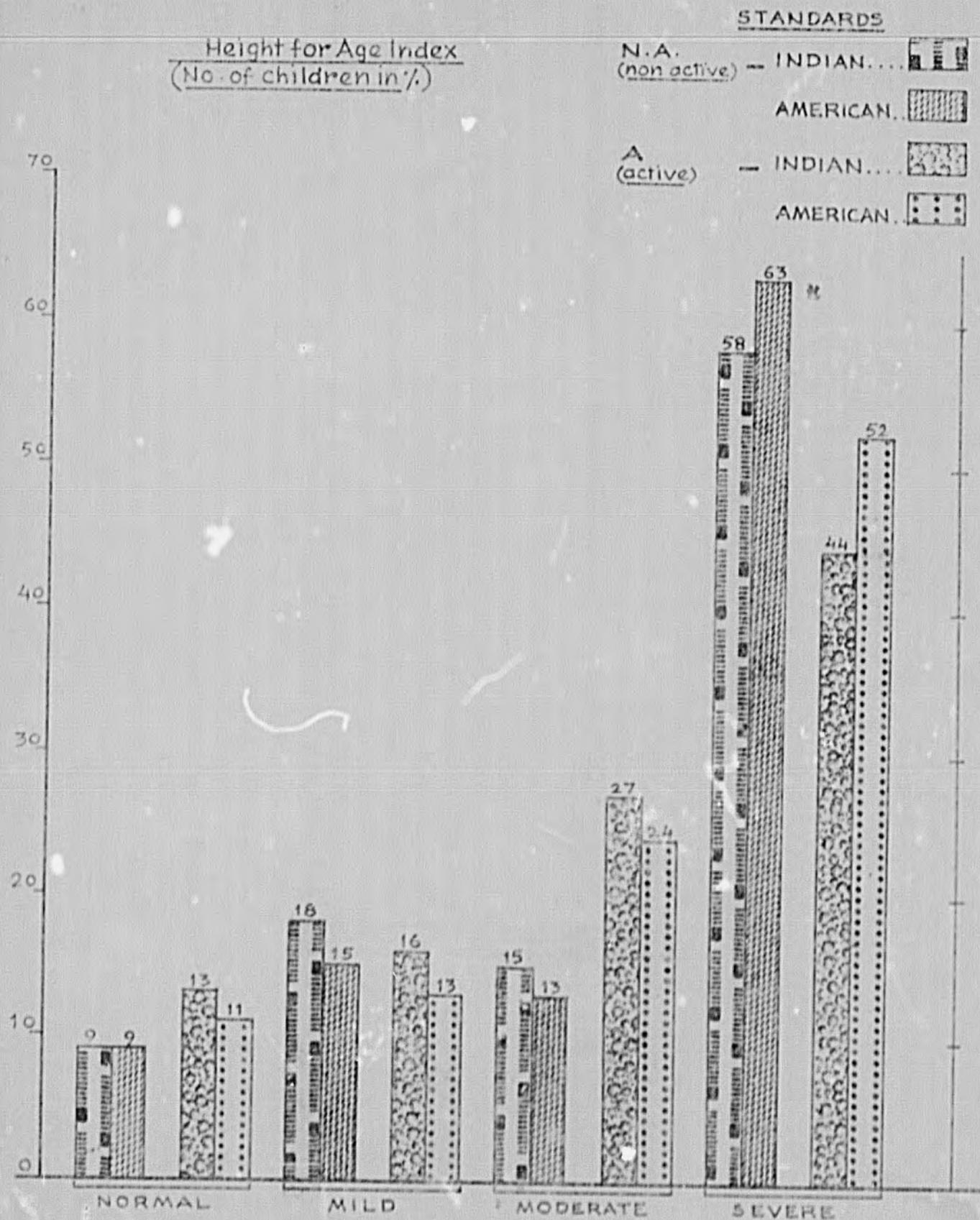
AMERICAN... 

A - INDIAN... 
(active)

AMERICAN... 



NUTRITIONAL STATUS OF CHILDREN BY WORK STATUS OF RECIPIENTS



1. Introduction and Method

1.1 The United States Agency for International Development assigned the Lalit Narain Mishra Institute of Economic Development and Social Change (LNMI), Patna to conduct an evaluation study in regard to recipients of Title II Commodities Food For Work Projects in the North Bihar area of CRS Calcutta Zone. The objectives of the recipients (Workers receiving the food) evaluation study were to provide, inter alia, information on recipient characteristics including average recipient family income, number of days worked annually and days per year worked on FFW Projects. The eater characteristics were to be ascertained to determine what happens with the FFW commodities once these are delivered to the recipients. The study was also intended to know the effects of FFW commodities on the nutritional status of children.

1.2 Food For Work Projects

1.2.1 The Catholic Relief Services with its headquarters at New Delhi carries out a substantial programme intended at rural development through Food For Work Projects. The Catholic Relief Services implements this programme through its five regional offices located at Bombay, Calcutta, Cochin, Delhi, and Madras.

1.2.2. During FY 1980 Catholic Relief Service distributed food under this programme corresponding to 21.8 million mandays. 30.3 percent of these mandays were accounted for by Bombay Zone, 39.0 per cent by Calcutta Zone, 11.6 per cent by Cochin Zone, 5.1 percent by Delhi Zone and 14.0 per cent by Madras Zone.

1.1. Distribution of Mandays Utilised by Zones :FY - 1980

Zones	Mandays (in 000)	Percentage Share
1. Bombay	6619	30.3
2. Calcutta	8516	39.0
3. Cochin	2536	11.6
4. Delhi	1106	5.1
5. Madras	3051	14.0
Total	21828	100.0

1.2.3 The evaluation studies of FFW Projects are extended to all zones. Different activities/projects and project areas were selected in different zones keeping in view the share of each activity/project area in total mandays utilized. Further, administrative and financial constraints were also kept in view.

1.3 Sample Selection

1.3.1 For selection of activities and projects in North Bihar area of Calcutta zone all the project types initiated during the period November, 1980 to October, 1981 were first ordered according to intensity of projects in terms of mandays utilised i.e. project with the highest number of mandays utilised was put first followed by the next lower and so on. The first six such project types were selected. These project types are A1 (Well), A5 (Dam), A6 (Land levelling) B1 (Road Construction), B4 (Storage etc.) and B5 (Low a cost housing).

1.3.2 All projects in each of the selected six project types were arranged district-wise in descending order and total mandays utilized in such projects were calculated for each district. The first five districts according to mandays utilised were selected. These districts are Patna, Monghyr, Bhojpur, West Champaran and Darbhanga. Out of these five districts three districts namely: Patna, Monghyr and Bhojpur are south of river Ganges and the other two districts, West Champaran and Darbhanga are north of Ganges.

1.3.3 As already discussed, the selection of projects and the consignee areas within these projects, was mainly on the basis of mandays utilised. Having selected the consignee areas, the selection of recipients within each consignee area was made using simple random sampling without replacement. The number of recipients selected varied from 12 to 55 per consignee area. Further, within each consignee area efforts were made to select as many recipients as possible who were working on on-going projects. The details of the projects, consignee areas within each project, total number of recipients, number of recipients selected etc. are as given in table 1.2

1.2 Number of Recipients by Project Type and Consignee Area

Name of Project	Consignee Area	Total No. of Recipients	No. of Recipients selected
1. Road Construction	East Champran	150	41
	West Champran	120	10
2. Land Levelling	Monghyr	325	55
3. Low Cost Housing	Patna	969	50
4. Tank Construction	West Champran	370	12
5. Digging of Wells	Monghyr	541	53
	Darbhanga	376	35
6. Dam Construction	Monghyr	180	15
	Bhojpur	135	20
7. Storage Construction	Bhojpur	165	10
8. School Building	Bhojpur	165	10
	West Champran	165	21
		<u>3496</u>	<u>322</u>

1.3.5 In the project type, land levelling, (Monghyr) all the 55 recipients were working on on-going projects. In tank constructions (West Champran) all the 12 recipients selected were working on on-going projects, whereas in low-cost housing (Patna) out of 50 recipients selected 40 were working on on-going projects. The rest of the recipients were not currently working on FFV projects but they worked during the year under reference on the projects which got completed.

1.3.6 On the basis of the sampling design used for selection, an appropriate estimation procedure has been used for estimating the population averages/totals/percentages. The details of estimation procedure are given in Appendix 1.1.

1.4 The Interview setting

1.4.1 The selected recipients were contacted generally at their house, by experienced data collectors. Direct interviews of respondents were conducted. A copy of the Schedule used is attached at the end of this report. This Schedule was carefully prepared and pre-tested and approved in a joint meeting of the representatives of USAID, CRS and CERPA, and LNMI.

1.4.2 The data collectors were given comprehensive training by project leaders including a survey statistician. The training also included a field work demonstration. The interviews conducted in the course of training/pre-test have not been included in the analysis.

1.4.3 In addition, the data collectors were provided with instructions both for selection of respondents and canvassing of the schedule. The instruction book, besides explaining the various terms used, also provided aids to the data collectors to assist them in memory recall. For example, to identify the age of a respondent a calendar of festivals and other major events was used. Likewise, to correctly assess the age of children various methods were employed including counting the number of teeth showing at the time of interview. The instruction book also provided equivalents of local weights in metric units. These instructions also provided the standard terminology for whatever local terms may be observed to be in use with regard to land, area, crops etc.

1.4.4. For the measurement of height and weight of 1-5 year old children, specific instructions were given to the data collectors. This was followed by demonstrations in the pretest/training programme. The children were required to stand erect against a wall and a triangular wooden frame with two of its sides making vertical angle was used to make sure that the height measured was correct. The wooden frame was placed on the head of the child and the point so indicated was marked against the wall. Wherever a straight wall was not available, the children were made to stand against the wooden frame of a door which is generally straight and vertical. Wherever the children were too young to stand they were made to lie on a table butted against a wall with legs stretched with feet to the wall and the necessary measurement was taken using the wooden triangle against the head.

1.5 The Report

1.5.1 This report apart from introduction has 6 sections. The socio-economic & demographic characteristics of the recipients are discussed in sections 2. The organisational framework of FFW Programme vis-avis recipient performance and reactions are discussed in sections 3. The eater characteristics concerning mainly the consumption of FFW commodities are presented in section 4. The impact of FFW Projects on employment and income, is discussed in section 5, whereas nutritional status of recipient families is discussed in section 6. Section 7, provides comparison of health and nutritional status of children with established norms, both U.S. and Indian.

1.5.2 Whereas data was analysed by consignee areas and activities, most of the tables presented here are at the aggregate (zonal) level. This has been done for simplification in presentation of the Report. However, wherever found relevant, consignee wise/activity-wise information has also been utilized to draw attention to certain important magnitudes.

1.6 Cooperation between LNMI and CERPA

1.6.1 Whereas the study was commissioned to the Lalit Narain Mishra Institute of Economic Development and Social Change (LNMI), it was expected that the Centre for Research, Planning and Action support this effort by finalizing the questionnaire, processing the data collected and preparing the Report.

1.6.2 This Report is based on data collected at LNMI. The methodology for data collection, training for this purpose, the selection of sample respondents, the supervision of field work was all decided at and executed by LNMI and to this extent responsibility and credit for the findings of the study rests with LNMI Patna. To the extent CERPA has contributed to this study, it feels privileged and is responsible for its part of the work.

2. Socio-Economic and Demographic Characteristics

2.1 Introduction

2.1.1. The socio-economic and demographic profile of recipients in Patna Zone is discussed in this chapter. The results presented throughout refer to the entire Patna Zone at the aggregate level. However, the inter-consignee variations have been commented upon, wherever necessary.

2.2 Sex

2.2.1 The distribution of recipients by sex presented in table 2.1 shows that about 82 per cent of recipients were males. The percentage of males was more than the percentage of females, in almost all consignee areas.

2.1 Distribution of Recipients by Sex

<u>Sex</u>	<u>Per cent of Recipients</u>
Male	81.9
Female	18.1
Total	100.0

2.3 Age

2.3.1 The distribution of recipients by age presented in table 2.2 shows that at the aggregate level more than 65 per cent of recipients were in the age group of 31-50 years. This percentage however, varied from 52 in digging of wells (Monghyr) to 92 in tank construction (West Champaran).

2.2 Distribution of Recipients by Age

Age in years	Per cent of Recipients
Up to 20	6.5
21-25	9.0
26-30	8.3
31-40	23.8
41-50	41.7
51-65	9.3
Above 65	1.4
Total	100.0

2.4 Education

2.4.1 The distribution of recipients by education is presented in table 2.3/the aggregate level about 84 per cent of recipients were /at illiterate and other 10 per cent, literate but with no formal education.

2.4.2 Those with primary, middle and secondary education taken together were only 6 percent. The percentage of illiterates, however, varies from 69.5 in project low cost housing (Patna) to 100 in project (Darbhanga) dam construction.

2.3 Distribution of Recipients by Education

Education	Per cent of Recipients
Illiterate	83.9
Literate but no formal education	10.1
Primary	2.8
Middle	1.6
Secondary	1.6
Total	100.0

2.5 Caste

2.5.1 Table 2.4 presents the distribution of recipients by caste. It is observed from this table that (at the aggregate level) there were 69 percent Scheduled Castes (SC), 15 percent Scheduled Tribe (ST), 12 percent Backward classes and 4 per cent belonged to other (higher) castes. Project Dam Construction (Darbhanga) had 5 per cent SC and 95 per cent ST. In the remaining, excepting Tank Construction (West Champaran), the percentage of SC/ST together was more than 70. The percentage of castes other than SC, ST and backward classes was 20 in Tank construction (West Champaran), 17 in Road construction (West Champaran) and less than 10 in the rest.

2.4 Distribution of Recipients by Caste

Caste	Percent of recipients
Scheduled Castes	69.2
Scheduled Tribes	15.1
Backward Classes	11.7
Others	4.0
Total	100.0

2.6 Religion

2.6.1 Table 2.5 presents the distribution of recipients by religion. At the aggregate level there were 77 per cent Hindus, 20 per cent Christians and 2.5 percent Muslims.

2.5 Distribution of recipients by Religion

Religion	Percent of recipients
Hindu	77.2
Muslim	2.5
Christian	20.3
Total	100.0

2.7 Marital Status

2.7.1 Marital Status of recipients presented in table 2.6 reveals that for Patna Zone as a whole 79 percent of the recipients were married, 9.5 percent unmarried and 10.9 percent widow/widower.

2.6 Distribution of Recipients by Marital Status

<u>Marital Status</u>	<u>Percent of Recipients</u>
Married	78.9
Unmarried	9.5
Widow/widower	10.9
Separated	0.7
<hr/>	
Total	100.0

2.8 Farmer Category

2.8.1 Table 2.7 presents the distribution of recipients by farmer category. At the aggregate level there are 71 percent agricultural labourers, 17 per cent non-agricultural labourers, 4 percent marginal farmers and 2 percent small farmers.

2.7 Distribution of Recipients by Farmer Category

<u>Farmer Category</u>	<u>Per cent of Recipients</u>
Small Farmer above 2.5 upto 5 acres.	1.9
Marginal Farmer (upto 2.5 ac.	4.0
Agricultural Labour	71.0
Non-Agricultural Labour	16.7
Other Farmers (more than 5 acres)	1.5
Others	4.9
<hr/>	
Total	100.0

2.9 Occupation

2.9.1 Distribution of recipients by occupation presented in table 2.8 shows that majority of these were agricultural labour (76 percent) followed by non-agricultural labour (27 percent). Those engaged in agriculture (cultivation) were 3 percent, business 2 percent and service 1.5 percent.

2.8 Distribution of Recipients by Occupation

<u>Occupation</u>	<u>Percent of Recipients</u>
Agriculture	3.0
Agricultural Labour	66.6
Non-Agricultural Labour	26.9
Business	2.0
Service	1.5
<u>Total</u>	<u>100.0</u>

2.10 Income

2.10.1 Table 2.9 presents the distribution of recipients by approximate monthly income. About 6 percent of the recipients did not reply to this question. Of the remaining 94 percent, 52 percent had income of Rs. 101-200 and around 90 percent had income less than Rs. 300. Those with income less than Rs. 100 per month were 54 percent in Tank Construction (West Champaran) 34 percent in Land levelling (Monghyr), 30 percent in Dam Construction (Monghyr), 29 percent in Digging of Wells (Monghyr), 23 percent in School Community (West Champaran) and less than 10 percent in the rest. Those with income of Rs. 101-200 per month varied from 28 percent in Dam Construction (Monghyr).

2.9 Distribution of Recipients by Monthly Income

<u>Monthly Income (Rs.)</u>	<u>Percent of Recipients</u>
0-50	0.5
51-100	18.2
101-200	51.5
201-300	19.2
301-500	2.1
501-750	2.0
Unwilling to disclose	6.5
<u>Total</u>	<u>100.0</u>

2.11 Drinking Water Supply

2.11.1 The distribution of recipients by source of drinking water supply presented in table 2.10 reveals that 63 per cent of them had well water outside their house and 30 percent had pump outside the house.

2.10 Distribution of Recipients by Source of Drinking Water

Source	Percent of Recipients
Handpump Outside Well Water Inside The House	30.2
Tap Water Outside The House	2.1
Well Water Outside The House	0.5
The House	63.2
N.R.	4.0
Total	100.0

2.12 Electricity

2.12.1 Distribution of recipients by availability of electricity presented in table 2.11 reveals that little more than three fourths had no electricity whereas the remaining had it outside the house only.

2.11 Distribution of Recipients by Availability of Electricity

Electricity	Percent of Recipients
Inside the house	0.0
Outside the house	23.5
No Electricity	76.5
Total	100.0

2.13 House

2.13.1 The distribution of recipients by possession of house presented in table 2.12 reveals that 99 percent of them had a house of their own.

2.12 Distribution of Recipients by
Ownership of House

House	Percent of Recipients
Yes	98.8
No	1.2
Total	100.0

2.14 Structure of House

2.14.1 Table 2.13 presents the distribution of recipients by structure of house. It is seen from this table that 47 percent of them had hut, 30 percent kutcha house, 20 percent mixed house and only 3.5 percent pucca house.

2.13 Distribution of Recipients by
Structure of House

Structure of House	Percent of Recipients
Hut	46.5
Kutcha	30.2
Mixed house	19.8
Pucca house	3.5
Total	100.0

2.15 Sanitation

2.15.1 The distribution of recipients by sanitation facilities (latrine and bathroom) presented in table 2.15 reveals that almost all of them had no such facility.

2.14 Distribution of Recipients by availability of Sanitation Facilities (in per cent)

	Latrines	Bathroom
Yes	0.3	0.0
No	99.4	99.7
No response	0.3	0.3
	100.0	100.0

2.16 District of Domicile

2.16.1 The distribution of recipients by whether they belong to the district where the project is located reveals that all of them belonged to the district where the project was located.

3. Organisational Framework of FFW Projects.

3.1 Introduction

3.1.1 This chapter describes the organisational framework of FFW programme. The discussion covers all aspects such as knowledge about FFW projects, recommendation for employment, reasons for working, awareness of source of FFW commodities, timeliness, periodicity, place and mode of payment of commodities and wages. Recipients' preferences and reactions have also been discussed wherever necessary.

3.2 Knowledge and Recommendation for Employment

3.2.1 Distribution of recipients by source of knowledge about FFW projects and recommendation for employment is presented in table 3.1. It is seen from this table that at the aggregate level about 80 per cent of the recipients knew about FFW project through, "gang leader" and another about 14 per cent through "self knowledge". In Tank Construction project 23 per cent of the recipients had known about FFW project through project beneficiary. Excepting in Low Cost Housing project more than 93 per cent knew about FFW project through gang leader.

3.1 Distribution of Recipients by Source of Knowledge about FFW Project and Recommendation for Employment.

<u>Source</u>	<u>Knowledge</u>	<u>(In per cent) Recommendation</u>
Gang Leader	79.2	77.4
Self knowledge/Direct application	14.4	19.6
Village Panchayat	0.9	0.0
Father	0.9	0.5
Project Beneficiary/ Supervisor	3.5	2.5
Social worker	1.1	0.0
Total	100.0	100.0

3.2.2 As to the mode of employment more than 77 per cent of the recipients were recommended by the gang leader and about 20 per cent by the social worker.

3.3 Marking of Attendance and Signing of Food Distribution Register

3.3.1 Table 3.2 presents the distribution of recipients by mode of marking attendance. It is seen from this table that (at the aggregate level) for about 74 per cent of the recipients attendance was marked by the supervisor and in about 25 per cent of the cases by gang leader.

3.2 Distribution of Recipients by Mode of Marking Attendance/Signing Food Distribution Register

(in per cent)

	<u>Marking Attendance</u>	<u>Sign Food Distribution Register</u>	
By self	1	Yes	38
Gang Leader	25	No	62
Supervisor	74		
<hr/>			
Total	100	Total	100

3.3.2 As to the question whether they sign the Food Distribution Register the results reveal that (at the aggregate level) only about 38.5 per cent of the recipients signed the food distribution register.

3.4 Receipt of FFW Commodities

3.4.1 The distribution of recipients by whether they themselves received the FFW commodities presented in table 3.3. reveals that almost all (97 per cent) of the recipients received the FFW commodities themselves. However, all the recipients ultimately did receive their food commodities.

3.3. Distribution of Recipients by whether they themselves Received the FFW Commodities

(in per cent)

Yes	97
No	3
<hr/>	
Total	100

3.5 Payment of Wages (Commodities)

3.5.1 Table 3.4 presents the distribution of recipients by whether wages were paid in time. It is gratifying to note from this table all the recipients (99 per cent at the aggregate level) were paid wages in time.

3.4 Distribution of Recipients according to whether Wages are paid Timely

(in per cent)

Yes	99
No	1
<u>Total</u>	<u>100</u>

3.6 Time of Payment of Wages

3.6.1 Table 3.5 presents the distribution of recipients by time of payment of wages. In 51 per cent of the cases the payment is made on a holiday and in 43 per cent of the cases on a working day after working hours. In projects Road Construction, Tank Construction, Storage Construction, and school/community buildings the payments were generally made on a working day after working hours where as in the remaining projects on a holiday.

3.5 Distribution of Recipients according to when Wages are Paid

<u>Time of Payment</u>	<u>% of Recipients</u>
On holiday	51
On working day during lunch	3
On Working day during working hours	3
On working day after working hour	43
<u>Total</u>	<u>100</u>

3.7 Reasons for working on FFW Project

3.7.1 Distribution of recipients presented in table 3.6 reveals that 61 per cent the recipients worked on FFW project as they had no other employment opportunity and about 20 per cent because of assured employment till the completion of the project.

3.6 Distribution of Recipients by Reasons for work
On FFW Project

<u>Reason for Work</u>	<u>Percent of Recipients</u>
Unemployed	61.0
Assured employment	20.1
Assured payment of wages	0.7
Timely payment of wages	3.0
Fair wages	3.3
Expectation of assets	11.9
Total	100.0

3.8 Periodicity of payment

3.8.1 It is observed from table 3.7 that 74.6 per cent of the recipients were paid the FFW commodities weekly, 17 per cent daily and 8 per cent fortnightly. Looking at project level the recipient of projects Road Construction (100) and Tank Construction (58) were paid daily and in the rest generally weekly.

3.7 Distribution of Respondents by Periodicity of Payment
of Commodities

(in per cent)

<u>Periodicity of Payment</u>	<u>Actual</u>	<u>Preference</u>
Advance	0.0	1.5
Daily	19.0	44.5
Weekly	75.0	52.5
Fortnightly	6.0	1.5
Total	100.0	100.0

3.8.2 As to the preference of periodicity of payment 52.5 per cent wanted it weekly, 44 per cent preferred it daily and only 1.5 per cent wanted it fortnightly. Looking at project level there is broadly not much difference in the preference for periodicity of payment and the actual periodicity of payment except in project low cost housing, where only 5 per cent wanted the payment fortnightly as against 30 per cent in actual.

3.9 Commodities Paid

3.9.1 The distribution of commodities paid actually and recipients' preference is presented in table 3.8. About 67 per cent of the recipients were paid Bulgar and Oil and 30 per cent Corn, Bulgar and oil. The preferences at the aggregate level for the same were

27 per cent corn only, 28 per cent corn, Bulgar and Oil, 20 per cent Bulgar and oil and 15 per cent corn and oil.

3.8 Distribution of Recipients by Commodities Paid (Per cent of recipients)

<u>Commodities</u>	<u>Actual</u>	<u>Preference</u>
Corn	0.0	27.0
Bulgar	0.5	5.0
Corn and Bulgar	0.5	5.0
Corn and Oil	2.2	15.0
Bulgar and Oil	67.3	20.0
Corn, Bulgar and Oil	29.5	29.0
Total	100.0	100.0

3.10 Place of Payment

3.10.1 Table 3.9 presents the distribution of recipients by place of payment, actual and preferred. 82 per cent of the recipients were paid at warehouse and 16 per cent at project site as against their preference of 80 per cent at the project site and 15 per cent at the warehouse.

3.9 Distribution of Recipients by Place of Payment

(in per cent)

<u>Place</u>	<u>Actual</u>	<u>Preference</u>
Project	16.3	80.4
Warehouse	82.2	15.4
No Response	1.5	4.2
Total	100.0	100.0

3.11 Awareness of Sources of FFW Commodities

3.11.1 Table 3.10 presents the distribution of recipients by awareness of the source of FFW commodities together with source, according to them. Ninety-five per cent of recipients reported that they knew the source of FFW Commodities. Of these 72 per cent reported America, 18 per cent panchayat and 10 per cent Supervisor as source of supply of FFW commodities.

3.10 Distribution of Recipients according to Source of FFW Commodities
(in per cent)

Awareness		Source Mentioned (by those saying Yes)	
Yes	94.8	America	72.0
No	5.1	Panchayar	18.0
N.R.	0.1	Supervisor	10.0
Total		Total	
	100.0		100.0

3.12 Tools for Work

3.12.1 The distribution of recipients according to who provided tools for work is presented in table 3.11. Almost all the recipients used their own tools. Very few were provided by project holder, beneficiary/contractor.

3.11 Distribution of Recipients by who Provided tools for Work
(per cent)

Source	Per cent of recipient
Project holder	0.5
Contractor	0.9
Selfowned	98.6
Total	
	100.0

4. Consumption of FFW Commodities

4.1 Introduction

4.1.1. This chapter describes the quantities of FFW commodities received, consumed, shared etc. Aspects like storing of FFW commodities, time span of consumption, recipe prepared out of FFW commodities are also discussed.

4.2 Quantity Received

4.1.1. Table 4.1 presents average FFW commodities received. For Patna zone as a whole recipients received 4 Kg of corn, 14 Kg of Bulgar and 1 Kg of oil at each stage of payment. Road Construction (East Champaran), Tank Construction (West Champaran) Dam Construction (Darbhanga), Storage Construction (Bhojpur), School Building (Bhojpur and West Champaran) did not get any corn. The quantity of FFW Commodities received at each payment varied from 3 Kg to 21 Kg for Bulgar and 100 to 600 gramms of Oil.

4.2.2 Table 4.1 (a) gives, the period of payment and commodities received per payment.

4.1 (a) Period of Payment and quantities received per payment

Period	No. of Recipients	Per cent of Recipients	Quantity Received Per Payment	
			Bulgar (in kg)	Oil (in gms)
Daily	62	19	3	100
Weekly	242	75	18	605
Fortnightly	18	6	36	1260

4.2.3 Of those receiving weekly payment there were 35 recipients who received 9 Kg of bulgar and 9 kg of corn instead of 18 kg of bulgar.

4.1 FFW Commodities Received at each Payment

<u>Activities/Consignee</u>	<u>Corn (Kg)</u>	<u>Bulgar(Kg)</u>	<u>Oil (In OC gms)</u>
1. Road Construction			
East Champaran	-	3.0	1.0
West Champaran	3.0	3.0	1.0
2. Land Levelling			
Monghyr	10.7	13.7	6.0
3. Low-Cost Housing			
Patna	9.0	21.3	7.9
4. Tank Construction			
West Champaran	-	10.5	3.5
5. Digging of wells			
Monghyr	11.9	16.5	6.0
6. Dam Construction			
Darbhanga	-	18.0	6.0
Monghyr	9.0	14.0	6.0
7. Storage Construction			
Bhojpur	-	18.0	6.0
8. School Building			
Bhojpur	-	16.2	6.0
West Champara	-	18.0	6.0
Aggregate	4.0	13.8	5.0

4.3 Disposal of FFW Commodities

4.3.1 Table 4.2 (a) presents the distribution of recipients by how they use commodities received. It is observed from the table that as large as 95 per cent of the recipients share these with their family. Only 5 per cent consumed the commodities themselves.

4.2 (a) Distribution of Recipients by Use of FFW Commodities

<u>Use of FFW Commodities</u>	<u>Per cent of Recipients</u>
Consume Self	5.1
Share with the Family	94.9
Total	100.0

4.3.2 As to with whom these commodities are shared (table 4.2 (b) 30 percent with wife, 49 per cent with children, 7 per cent with father and 4 per cent with mother. /shared

4.2 (b) Distribution of Recipients by Relation with whom the recipient shares the FFW Payments

<u>Relations sharing FFW Commodities</u>	<u>Per cent of Recipients</u>
Father	6.5
Mother	4.3
Wife	39.2
Children	48.5
Brother	1.1
Sister	0.4
Total	100.0

4.2 (c) Age-wise Distribution of Relations Sharing Food with Recipients

<u>Age in Years</u>	<u>No. of Persons</u>
Less than 1	4 (0.25)
1-5	156 (9.57)
6-10	312 (19.14)
11-14	166 (10.18)
15-25	358 (21.96)
26-30	88 (5.40)
31-35	95 (5.83)
36-40	127 (7.79)
41-50	197 (12.04)
51-65	108 (6.63)
Above 65	19 (1.16)
Total	1630 (100.00)

- NoteL 1) Figures in bracket are percentages to total.
- 2) Persons upto 14 years of age add up to 39 per cent as against 48.5 per cent 'children' mentioned in table 4.2 (b). This discrepancy is due to the fact that children as intended in table 4.2 (b) were not necessarily persons upto 14 years of age.

4.4 Time Span of Consumption of FFW Commodities

4.4.1 Table 4.3 presents the distribution of recipients according to time span of consumption of FFW commodities. It is observed from this table that 40 percent of the recipients consumed FFW commodities in less than a week and 52 per cent between one to two weeks.

4.3 Distribution of recipients by duration for which FFW commodities last

<u>Duration</u>	<u>Per cent of Recipients</u>
Less than 1 week	40.0
1-2 weeks	52.9
3-4 weeks	3.7
N.R.	4.3
<u>Total</u>	<u>100.0</u>

4.5 Storage of FFW Commodities for Later Consumption

4.5.1. It is observed from table 4.4 that 41 per cent of recipients store FFW commodities for later consumption.

4.4 Distribution of recipients by whether they store FFW commodities (in per cent)

<u>Response</u>	<u>Percent of recipients</u>
Yes	41.0
No	59.0
Total	100.0

4.6 Action if FFW commodities exhaust before next payment

4.6.1 The distribution of recipients according to the action if FFW commodities exhaust before next payment becomes due is presented in table 4.5. It is observed from this table that in such case 33 percent of the recipients borrow money to buy-non-FFW commodities, 23 per cent draw upon home stock, 9 per cent purchase other things and 9 per cent borrow FFW food.

4.5 Distribution of recipients according to Action if FFW commodities exhaust before next payment

<u>Action</u>	<u>Percent of recipients</u>
Borrow FFW Food	9.1
Borrow money to buy non- FFW Food	33.0
Draw upon home stock	22.5
Purchase other things	8.9
Use other things	2.5
N.R.	24.0
Total	100.0

4.7 Standard Recipes

4.7.1 The distribution of recipients by standard recipes prepared out of FFW commodities is presented in table 4.6. It is observed that 57 per cent of them prepared Bread and 41 per cent Khichari Apparently bread is not leavened bread but a form of chapati, which is round, flattened cake-like and is generally described in some parts of India as "roti".

4.6 Distribution of recipients by standard recipe prepared from FFW Commodities

<u>Recipe</u>	<u>Percentage of recipients</u>
Roti	0.0
Khitchdi	41.1
Bhat	1.1
Bread	56.8
N.R.	1.0
Total	100.0

5. Benefits from FFW Projects

5.1 Introduction

5.1.1. This chapter describes benefits to recipients from FFW projects. The discussion in this Chapter is on the aspects such as expectations of benefits, nature of benefits, addition of assets and increase in employment and income.

5.2 Financial Status before FFW

5.2.1 Table 5.1 presents the financial status of recipients before FFW. It is observed that before FFW projects started 41 per cent of the recipients used to do labour, 22 per cent used to borrow, 29 per cent used to do whatever other work was available and 6 per cent used to sell their assets to be able to live.

5.1 Distribution of recipients by financial status before FFW

Sell assets	6.4
Borrow	22.0
Do labour	41.4
Service	1.0
Other work	29.2
Total	100.0

5.3 Expectation of benefits

5.3.1 When FFW workers were asked if they expected to receive any benefits from the completed assets, about 50 per cent answered Yes, and 48 per cent said no. There was no response from 2 per cent.

5.2 Distribution of recipients according to expectation of benefits from the project when completed (In per cent)

Yes	50.2
No	47.7
N.R.	2.1
Total	100.0

5.4 Nature of Benefits from Completed Projects.

5.4.1 Table 5.3 presents the expectation of recipients by nature of benefits from completed FFW Projects. There was non-response of the order of 62 per cent. Of the remaining 38 per cent respondents 18 per cent reported that there will be more production. 17 per cent reported availability of more water and 4 per cent better communication facilities.

5.3 Distribution of recipients by Nature of Benefits.
(in per cent)

More Production	17.5
Communication facility	4.0
Availability of more water	16.8
N.R.	61.7
Total	100.0

5.5 Intention to work even when no benefits accrue

5.5.1 As large as 80 per cent of the recipients reported that they would still work even if there are no benefits from the assets created through FFW projects flowing to them.

5.4 Distribution of recipients by willingness to work without benefits.
(in per cent)

Yes	79.5
No.	10.5
N.R.	10.0
Total	100.0

5.6 Addition to Assets

5.6.1 It is observed from table 5.5. that 7 per cent of the recipients only added to the assets with additional FFW income and 74 per cent did not add to the assets. As large as 19 per cent gave no response to this question.

5.5 Distribution of recipients by whether they have been able to add to their assets with additional income from FFW Commodities.

<u>Addition to Assets</u>	<u>Per cent of recipients.</u>
Yes	7.3
No	74.0
N.R.	18.7
Total	100.0

5.7 Performance of Social Obligations

5.7.1. When asked whether they have been able to better perform social obligation/functions with the income from FFW project, only 3 per cent answered in affirmative.

5.6 Distribution of recipients by whether they have been able to better perform their social function with FFW Income

	(per cent)
Yes	3.2
No	95.5
N.R.	1.3
Total	100.0

5.8 Employment

5.8.1 Table 5.7 presents the employment of the recipients and 2 other major members of their families. The information tabulated relates to employment on the FFW projects, outside the FFW projects and the number of days unemployed in the year for the recipients as also for other two major members of recipient family. For the Patna Zone, as a whole, the recipients worked on an average for 96 days on the FFW projects, 126 days outside FFW projects and

remained unemployed for 143 days. Other two major members of the household worked for 67 days on FFW project, 385 days outside the project and remained unemployed for 358 days. However, there are variations in the number of days employed from project to project and also between consignee areas within each project. Project wise details are given in table 5.7

5.7 Employment of Recipients and two other working members. (No. of mandays per year per worker)

	Self		Others (two)	
	Actual	Percent	Actual	percent
On FFW	96.3	26.4	66.7	9.1
Off FFW	126.2	34.6	304.6	41.8
Unemployed	142.5	39.0	358.5	49.1
Total	365.0	100.0	730.0	100.0

5.7 (a) Employment of recipients and other two major members

Activity/Consignee area	Self			Other two major members		
	On FFW	Outside FFW	Unemployed	On FFW	Outside FFW	Unemployed
1. Road Construction						
East Champaran	84.3	177.6	103.1	24.9	353.5	351.7
West Champaran	120.8	97.1	147.1	37.6	433.5	258.9
2. Land Levelling						
Monghyr	134.3	73.9	156.8	57.2	244.8	428.0
3. Low Cost Housing						
Patna	58.9	199.5	106.6	72.1	296.3	361.6
4. Tank Construction						
West Champaran	90.0	72.5	202.5	81.5	226.6	421.9
5. Digging of Wells						
Darbhanga	104.0	140.8	120.2	120.7	260.3	349.0
Monghyr	119.6	100.0	145.4	109.4	248.8	371.8
6. Dam Construction						
Darbhanga	104.0	140.8	120.2	120.7	260.3	349.0
Monghyr	102.8	117.2	145.0	111.4	220.6	398.0
7. Storage Construction						
Bhojpur	110.5	144.0	110.5	22.5	347.1	360.4
8. School Building						
Bhojpur	44.0	136.0	185.0	10.5	289.0	430.5
West Chamapran	90.5	129.8	-	30.7	431.7	267.6
Aggregate	96.3	126.2	142.5	66.7	304.8	358.5

5.9 Income

5.9.1 Table 5.3 presents the income of the recipient families before and after FFW Project. The total income is broken up into two components i.e. income from FFW Project and income from outside FFW Project. It is observed from this table that there is many-fold increase in income of the recipients as compared to income before commencement of the project. The income on the average became two and half times as compared to before FFW level. However, there are variations in absolute as well as percentage increase in income in different consignee areas. Figures in table below present family income of recipient and 2 other major members of the family.

5.8 Income of Recipient Families, before and after FFW

	(Rs. per annum)			
	<u>After FFW</u>		<u>Before FFW</u>	
	<u>Actual</u>	<u>Percent</u>	<u>Actual</u>	<u>Percent</u>
From FFW	626	28.8	-	-
Outside FFW	1544	71.2	859	100.0
Total	2170	100.0	859	100.0

5.8(a) Income of recipient families

Activity/Consignee area	(Rupees per year)			Before FFW
	CURRENT INCOME			
	From FFW	Outside	Total	
1. <u>Road Construction</u>				
East Champaran	810	1470	2280	870
West Champran	800	2030	2030	1000
2. <u>Land Levelling *</u>				
Monghyr	750	640	1390	250
3. <u>Low Cost Housing @</u>				
Patna	510	1870	2380	870
4. <u>Tank Construction *</u>				
West Champaran	540	930	1470	NR
5. <u>Digging of Wells</u>				
Monghyr	810	1130	1940	560
6. <u>Dam Construction</u>				
Darbhanga	750	4030	4780	1900
Monghyr	710	830	1540	620
7. <u>Storage Construction</u>				
Bhojpur	550	1480	2030	NR
8. <u>School Building</u>				
Bhojpur	430	1200	1630	600
West Champaran	230	2170	2400	1060
<u>Aggregate</u>	626	1544	2170	859

* All recipients were working on on going projects.
 @ One-fourth of the recipients were working on ongoing projects.

6. Nutritional Status of Recipient Families

6.1 Introduction

6.1.1. This Chapter describes the nutritional status of recipient families in terms of calorie/protein intake. Comparison of nutritional level of active and non-active recipients has been focussed. The active recipients are those who are working on FFW Projects and are eating FFW commodities/ whereas non-active recipients are those who worked on FFW projects which have been completed and thereby currently not eating FFW commodities unless already stored for contingency. A comparison of nutritional status of families by caste categories, farmer categories and income categories has also been attempted.

6.2 Per Capita Minimum Calorie Requirement Norm

/- /ments

6.2.1 Per capita minimum calorie requirement norm has been worked out separately for different consignee areas making use of the information on average family size (i.e. number of males, females and children) and the ICMR recommended minimum calorie require- The results are presented in table 6.1. It can be seen from this table that for the Patna Zone as a whole the minimum calorie requirement norm is 2121. However, because of difference in the family composition it varied from 2065 in Monghyer (Land Levelling) to 2292 in West Champaran (Tank Construction).

6.1 Family Composition and Minimum Norm of Consumption.

Active/Consignee	Minimum Calorie Norm	No. of Families	Family Composition		
			Adult Male	Adult Female	Children
I. <u>Road Construction</u>					
1. East Champaran	2116	41	76	63	93
2. West Champaran	2182	10	14	13	13
II. <u>Land Levelling</u>					
1. Monghyer	2065	55	63	79	101
III. <u>Low Cost Housing</u>					
1. Patna	2102	50	110	81	145
IV. <u>Tank Construction</u>					
1. West Champaran	2292	12	18	13	10
V. <u>Well Construction</u>					
1. Monghyer	2186	53	90	67	82
VI. <u>Dam Construction</u>					
1. Durbhanga	2090	35	52	56	80
2. Monghyer	2088	15	14	32	23
VII. <u>Storage Construction</u>					
1. Bhojpur	2085	20	29	33	42
VIII. <u>School Community</u>					
1. West Champaran	2247	21	29	23	20
2. Bhojpur	2214	10	26	19	21
Aggregate	2121	322	521	478	630

6.3 Average Calorie Consumption

6.3.1 The average calorie consumption for active and non-active recipient families together with percentage of families above minimum calorie norm and in different groups according to the norm are presented in table 6.2 It is seen from this table that there are as high as 73 percent families above the minimum calorie requirement norm. Excepting Monghyer (Dam Construction) and Monghyer (Land-Levelling) the percentage of families above the norm were greater than the 70. The average calorie consumption was higher than the minimum calorie requirement norm throughout. Further, there is no evidence in support of better nutritional status of active recipient families as compared to non-active recipient families at the aggregate level. However, in Patna area the average consumption of calorie was different for nonactive & active recipients.

6.2 Average Calorie Consumption & Percentage of Families according to different calorie cut off.

Activity	No of families	Average Calorie/ consumption	Per cent of Families				
			a	b1	b2	b3	
<u>Road Construction</u>							
East Champaran	41	2639 ± 183	73	18	8	--	--
West Champaran	10	3627 ± 320	100	-	-	--	--
<u>Land Levelling</u>							
Monghyer	(55)	(2483) ± 139	58	(15)	(12)	(15)	(15)
<u>Low Cost Housing</u>							
Patna	10 (40)	2079 ± 272 (2412) ± 164	50 (90)	25 (10)	25	--	--
<u>Tank Construction</u>							
West Champaran	(12)	(3187) ± 248	(83)	(17)	--	--	--
<u>Well Construction</u>							
Monghyer	53	2496 ± 143	83	11	6	--	--
<u>Dam Construction</u>							
Darbhanga	35	2464 ± 370	54	26	10	10	10
Monghyer	15	2163 ± 243	46	40	14	--	--
<u>Storage Construction</u>							
Bhojpur	20	3371 ± 266	85	10	5	5	5
<u>School Community</u>							
West Champaran	21	2827 ± 182	71	29	--	--	--
Bhojpur	10	2912 ± 313	90	10	-	--	--
<u>Aggregate</u>	322	2619	73	18	6	3	3
Active	107	2535 ± 95	72	14	4	5	5
Non-active	215	2661 ± 73	74	19	6	1	1

1. ± figures are the standard errors of the averages.
2. Figures in brackets correspond to active recipients.
3. a= above the norm b1= between 75 to 100 percent of the norms b2=between 50 to 75 percent of the norms and b3 below 50 per cent of the norms.
4. **** Significant at 1 per cent level.

6.4 Average Protein Consumption.

6.4.1 The results of average protein consumption and the percentage of families above the norm etc. classified according to activity types are presented in table 6.3. It is observed that the protein deficiency is lower than the calorie deficiency. There were 82 percent of families above the minimum protein requirement norm. Further, there is no evidence in support of better nutritional status of active recipients as compared to non-active recipients even in terms of protein consumption at the aggregate consigned area level.

6.3 Average Protein Consumption & Percentage of Families According to different protein cut off points and Activity Types.

Activity	No of Families	Average Protein	Percent of Families			
			a	b1	b2	b3
<u>Road Construction</u>						
East Champaran	41	76 ± 4	93	2	5	--
West Champaran	10	105 ± 5	100	-	-	--
<u>Land Levelling</u>						
Monghyer	(55)	(65) ± 4	(77)	(7)	(16)	--
<u>Low Cost Housing</u>						
Patna	10	54 ± 7	90	10	-	--
	(40)	(67) ± 5	(75)	(15)	10	--
<u>Tank Construction</u>						
West Champaran	(12)	(86) ± 6	(90)	(10)	-	--
<u>Well Construction</u>						
Monghyer	53	79 ± 4	92	2	6	--
<u>Dam Construction</u>						
Durbhanga	35	66 ± 10	77	9	14	--
Monghyer	15	55 ± 11	67	13	20	--
<u>Storage Construction</u>						
Bhojpur	20	95 ± 8	90	10	-	--
<u>School Community</u>						
West Champaran	21	85 ± 9	86	10	4	--
Bhojpur	10	86 ± 6	100	-	-	--
Aggregate	322	73 ± 4	82	9	9	--
Active	107	68 ± 3	78	11	11	--
Non-Active	215	76 ±	85	7	8	--

1. + Figures are the standard errors of the averages.
2. Figures in brackets correspond on-going projects (i.e. active recipients) whereas others correspond to completed projects (i.e. non-active recipients).
3. A= above the norm, b1=between 75 to 100 percent of the norm, b2= between 50 to 75 percent of the norm and b3= Below 50 percent of the norm.

6.5 Calorie and Protein intake by Caste Categories.

6.5.1. The average calorie and protein consumption by caste categories for active and non-active recipients are presented in table 6.4. Analysis shows that both on account of calorie and protein intake, non-active recipients show higher standards as compared to active recipients. On average, non-active recipient consumed 2661 calories and 76 gms of proteins per day as against the corresponding levels of 2535 calories and 68 gms of proteins for active workers. Furthermore, the differential in intake of calories is about 5 percent as compared to 12 percent differential for protein intake. Calorie intake levels among SC/ST/backward classes is generally lower than that of other castes, but in the case of protein intake caste-wise differentials are negligible.

6.4 Average Calorie and Protein intake by caste categories.

Caste Category	Calorie Intake		Protein Intake (Gms)	
	Non-Active	Active	Non-Active	Active
Scheduled Castes	2643	2504	76	66
	(149)	(83)		
Scheduled Tribes	2658	2517	70	68
	(18)	(18)		
Backward Classes	2648	2816	76	73
	(36)	(4)		
Others	2939	3536	74	79
	(12)	(2)		
Overall	2661	2535	76	68
	(215)	(107)		

Note:- Figures in brackets indicate number of families,

6.6 Calorie and Protein Intake by Farmer Categories.

6.6.1 Table 6.5 presents the average calorie and protein consumption of active and non-active recipient families by farmer categories. It is seen from this table that farmers with land holding of more than 5 acres had higher calorie and protein consumption as compared to others.

6.5 Average Calorie & Protein Intake by Farmer Categories.

Farm Category	Calorie Consumption		Protein Consumption (gms)	
	Non-Active	Active	Non-Active	Active
Small Farmer	2814 (1)	-	75	-
Marginal Farmer	2738 (8)	2450 (6)	68	68
Big Farmer	2964 (1)	-	72	-
Others	2658 (205)	2540 (101)	75	70
Overall	2661 (215)	2535 (107)	76 (215)	68 (107)

Note: Figures in brackets are number of families.

6.7 Calorie and Protein Intake by Income Categories.

6.7.1 The results of average calorie and protein intake of active and non-active recipient families by income categories are presented in table 6.6. It is observed from table 6.6, that there is an increasing trend in calorie and protein intake with the increase in income for active recipients although calorie intake declined among non-active recipients belonging to the highest income category.

6.6 Average Calorie and Protein Intake by Income Categories.

Household Income Category (in Rs. per Month)	Calorie Consumption		Protein Consumption	
	Non-Active	Active	Non-Active	Active
1-200	2658 (150)	2488 (28)	70	65
201-300	2699 (29)	2496 (34)	72	68
301-500	2704 (11)	2525 (36)	74	69
Above 500	2612 (25)	2896 (9)	78	70
Overall	2661 (215)	2535 (107)	76	68

Note:- Figures in bracket are number of families.

7. Nutritional Status of Children

7.1 Introduction

7.1.1 The nutritional status of children of the recipients families has been discussed in this chapter. Throughout this chapter the emphasis is on differences in the nutritional status of children of active recipients and non-active recipients. The active recipients are those who were working on on-going projects and currently eating FFW commodities whereas non-active recipients are those who worked on the FFW projects which had been completed and were not eating FFW commodities at the time of interview.

7.1.2 The nutritional status of children has been analysed in terms of height and weight vis-a-vis the corresponding norms. The norms considered for comparison relate both to Indian standards as well as American Standards. The Indian Standard used is taken from Rao, Satyanarayana, and Sastry, Growth Pattern of Well-to-do Hyderabad pre-school Children, National Institute of Nutrition, ICMR, Hyderabad, July, 1975. The American Standards used were the National Centre for Health Statistics, standards. It may be mentioned that the data collected in the study relates to children between age 1-5 years, i.e. 12 to 60 months.

7.2 Nutritional Status by weight for Age Index

7.2.1 The weight of children in different age groups was compared with the standard norms. On the basis of the ratio of actual weight to the standard norms the nutritional status of children were classified as follows:

<u>Weight for Age Index:</u> <u>Gomez Classification</u> (percentage of Standards)	<u>Classification of</u> <u>Nutritional Status</u>
90 or more	Normal
75 to 89.9	Mild malnutrition
60 to 74.9	Moderate malnutrition
Less than 60	Severe malnutrition

7.2.2 The results of nutritional status of children according to above classifications are presented in tables 7.1 (a) and 7.1 (b) corresponding to Indian standards and American Standards respectively.

7.2.3 When analysed in relation to Indian standard norms for active recipient families the percentage of normal children was 16 and that with mild malnutrition was 39. The corresponding percentage for children of non-active recipient families were 26 and 46 respectively. Thus, the nutritional status of children of non-active recipients is better than the nutritional status of children of active recipient families. Results separately for boys and girls showed no statistically significant difference in the nutritional status (Table 7.)

7.1. (a). Nutritional Status (weight for age index Gomex classification as compared to Indian Standard) of children by age, work status of recipients and by sex

(Per cent)

Age (Months)	Sample Size	Non -Active				Sample Size	Active				Sample Size	Overall						
		N	0	1	2		3	N	0	1		2	3	N	0	1	2	3
12-24	18	22	44	28	5	13	8	15	54	23	31	16	32	39				
25-36	21	24	43	33	-	14	7	50	36	7	35	17	46	34				13
37-48	27	22	59	19	-	22	18	36	41	5	49	20	49	29				3
49-60	23	35	55	22	9	13	31	54	15	-	36	33	42	19				2
		26	46	25	3	62	16	39	37	8	151	22	43	30				5
Total	89	26	46	25	3	62	16	39	37	8	151	22	43	30				5

Age (Months)	Sample Size	Boys				Sample Size	Girls				Sample Size	Overall						
		N	0	1	2		3	N	0	1		2	3	N	0	1	2	3
12-24	15	3	26	40	20	16	19	37	38	6	31	16	32	39				13
25-36	23	13	57	26	4	12	25	25	50	-	35	17	46	34				3
37-48	29	14	55	28	3	20	30	40	30	-	49	20	49	29				2
49-60	23	35	39	22	4	13	31	46	15	8	36	33	42	19				6
Total	90	19	47	28	6	61	26	38	33	3	151	22	43	30				5

N₀ = Normal 90 percent of Standard or more
 1₀ = Mild, 75-89.9 percent of Standard
 2₀ = Moderate, 60-74.9 percent of Standard
 3₀ = Severe, 0.59.9 percent of Standard or less

* Significant at 10 per cent level
 ** Significant at 5 per cent level

7.2.4 When analysed according to American standards the extent of nutritional deficiency was higher for all children regardless of sex and the work status of their parents.

7.2.5 When the weight of children for boys and girls combined for both active and non-active recipients is analysed by age according to American standards the percentage of normal children was 9 and 33 with mild malnutrition. (Table 7.1.b)

7.3 Nutritional status by Weight for Age Index

7.3.1 For purpose of classifying the nutritional status of children according to height for age index the following have been utilized:

<u>Height for Age Index</u> <u>(Percentage of Standards)</u>	<u>Classification of</u> <u>Nutritional Status</u>
95 or more	Normal
90 to 94.9	Mild malnutrition
85 to 89.9	Moderate malnutrition
Less than 85	Severe malnutrition

7.3.2 Table 7.2 (a) & 7.2 (b) present the nutritional status of children by height for age index corresponding to Indian and American standards respectively.

7.3.3 When analysed according to Indian standards, children belonging to active recipient families showed higher nutritional status. The percentage of normal children for active recipient families was 13 as against 9 for non-active recipient families. Furthermore, boys showed a relatively higher nutritional status. Normal boys were of the order of 12 per cent as against 8 per cent of girls.

7.3.4 According to American standard norms (table 7.2. (b) the extent of malnutrition is generally very severe and relatively more amongst the children of non-active recipient families.

7.4 Nutritional Status by weight for Height Index

7.4.1 For studying the nutritional status of children by weight for height index the following classification have been used:

<u>Weight for Height Index</u> <u>(Percentage of Standards)</u>	<u>Classification of</u> <u>Nutritional Status</u>
90 or more	Normal
80 to 89.9	Mild malnutrition
70 to 79.9	Moderate malnutrition
Less than 70	Severe malnutrition

7.1. (b). Nutritional Status (weight for age index Gomex Classification compared to American Norms) of children by age, Work Status of Recipients and by Sex
(Per cent)

Age (Months)	Sample		Non-Active			Sample		Active			Sample		Overall					
	Size	N	0	1	2	3	Size	N	0	1	2	3	Size	N	0	1	2	3
12-24	18	11	22	51	16	13	8	-	69	23	31	18	14	49	19			
25-36	21	9	34	48	9	14	-	28	44	28	35	5	33	45	17			
37-48	27	49	40	11	-	22	9	36	36	19	49	4	44	38	14			
49-60	23	28	36	28	8	13	15	39	46	-	36	22	40	33	5			
Total	89	11	35	42	12	62	8	27	46	19	151	9	33	45	13			

Age (Months)	Sample		Boys			Sample		Girls			Sample		Overall					
	Size	N	0	1	2	3	Size	N	0	1	2	3	Size	N	0	1	2	3
12-24	15	13	-	66	21	16	6	25	50	19	31	18	14	49	19			
25-36	23	4	35	52	9	12	8	25	33	34	35	5	33	45	17			
37-48	29	-	48	34	18	20	10	35	45	10	49	4	44	38	14			
49-60	23	9	35	31	5	13	8	38	38	16	36	22	40	33	5			
Total	90	11	33	43	13	61	8	31	43	18	151	9	33	45	13			

N = Normal, 90 percent of standard or more

1 = Mild malnutrition 75-89.9 percent of standard

2 = Moderate malnutrition 60-74.9 percent of standard

3 = Severe malnutrition 0-59.9 percent of standard or less

7.2(a). Nutritional Status (height for age index Gomez Classification as compared to Indian Standard) of children by/work status of recipients and by Sex

(Per cent)

Age(Months)	Sample Size	Non-Active			Sample Size	N	0			Sample Size	N	Overall			
		0	0	0			0	0	0			0			
	N	1	2	3		1	2	3		1	2	3			
12-24	18	11	-	6	83	13	8	8	8	77	31	10	3	6	81
25-36	21	5	10	10	76	14	14	11	5	43	35	9	11	17	63
37-48	27	4	19	19	59	22	14	29	36	45	49	8	12	27	53
49-60	23	17	39	22	22	13	15	46	31	8	36	17	42	24	17
Total				**	**			**	**						
	89	9	18	15	58	62	13	16	27	44	151	11	17	20	52

Age(Months)	Sample Size	Boys			Sample Size	N	Girls			Sample Size	N	Overall			
		0	0	0			0	0	0			0			
	N	1	2	3		1	2	3		1	2	3			
12-24	15	7	-	7	86	16	13	6	6	75	31	10	3	6	81
25-36	23	9	13	9	69	12	8	8	24	50	35	9	11	17	63
37-48	29	7	14	10	69	20	10	10	50	30	49	8	12	27	53
49-60	23	26	35	22	17	13	-	54	31	15	36	17	42	24	17
Total			****	**			***	**							
	90	12	17	12	59	61	8	18	31	43	151	11	17	20	52

N=Normal 95 percent of standard or more
 1⁰=Mild, 90-94.9 percent of standard
 2⁰=Moderate, 85-89.9 percent of standard
 3⁰=Severe, 0-84.9 percent of standard or less.

**Significant at 5 per cent level
 ****Significant as 1 per cent level

7.2(b) Nutritional Status (Height for age index compared to American Norms) of Children by Age, Worker status of Recipients and by Sex.

(per cent)

Age(Months)	Simple Size	Non- Active				Simple Size	Active				Simple Size	Overall			
		N	0	1	2		3	N	0	1		2	3	N	0	1	2	3
12-24	18	11	6	-	33	13	8	8	-	84	31	10	3	3	84
25-36	21	5	9	5	81	14	14	7	36	43	35	8	8	17	67
37-48	27	4	15	19	62	22	9	9	18	64	49	6	12	18	64
49-60	23	17	30	23	30	13	15	31	46	8	36	17	31	30	22
Total	89	9	15	13	63	62	11	13	24	52	151	10	14	18	58

Age(Month)	Simple Size	Boys				Simple Size	Girls				Simple Size	Overall			
		N	0	1	2		3	N	0	1		2	3	N	0	1	2	3
12-24	15	7	-	7	86	16	12	7	-	81	31	10	3	3	84
25-36	23	9	13	9	69	12	8	-	33	59	35	8	8	17	67
37-48	29	7	11	14	68	20	5	15	25	55	49	6	12	18	64
49-60	23	26	30	17	13	13	-	31	54	15	36	17	31	30	22
Total	90	12	14	12	62	61	7	13	26	54	151	10	14	18	58

N= Normal, 95 percent of standard
 1₀=90-94.9 percent of standard
 2₀=Moderate 85-89.9 percent of standard
 3 =Severe 84.9 percent of standard or less

*Significant at 10 per cent level
 ***Significant at 2 per cent level

7.4.2 The results presented in table 7.3 (a) corresponding to Indian norms indicate that the percentage of normal children by weight for height index is more amongst children of non-active recipients as compared to active recipients. Between boys and girls, no significant difference in nutritional status was observed.

7.4.3 When analysed according to American standards the results did not show significant difference in the nutritional status/active and non-active recipients and also between girls and boys. between children of

7.5 Nutritional Status by Combined Height for Age & Weight for Height Index

7.5.1 For studying the nutritional status of children by both height for age and weight for height index combined the following classification were used:

<u>Waterlow Classification</u>	<u>Nutritional Status</u>
Weight for height index ≤ 80 & height for age index ≤ 90	Wasted and stunted
Weight for height index < 80 & height for age index > 90	Wated
Weight for height index > 80 & height for age index ≤ 90	Stunted
Weight for height index > 80 & height for age index > 90	Normal

7.5.2 The results according to above classification are presented in tables 7.4 (a) and 7.4. (b) corresponding to Indian and American norms, respectively.

7.5.3 The results indicate that the percentage of normal children was negligible both in case of active recipient families and non-active recipient families and for both boys and girls.

7.5.4 When analysed in terms of American norms the results are similar to those of Indan norms.

7.3. (a) Nutritional Status (Weight for Height index compared to Indian Norms) of children by age, work status of recipients and by sex.

(per cent)

Age (Months)	Simple Size	Non-Active			Simple Size	Active			Simple Size	Overall					
		N	0	0		N	0	0		N	0	0			
			1	2			3	1			2	3	1	2	3
12-24	18	89	6	5	-	13	86	7	7	-	31	87	8	5	-
25-36	21	67	24	5	4	14	28	57	7	8	35	51	37	6	6
37-48	27	81	14	5	-	22	69	14	9	8	49	76	14	6	4
19-60	23	74	17	9	-	13	77	15	8	-	36	75	17	8	-
Total	89	77	16	6	1	62	65	22	8	5	151	72	18	7	3

Age (Months)	Simple Size	Boys			Simple Size	Girls			Simple Size	Overall					
		N	0	0		N	0	0		N	0	0			
			1	2			3	1			2	3	1	2	3
12-24	15	87	6	7	-	16	87	6	7	-	31	87	8	5	-
25-36	23	58	31	11	-	12	40	50	-	10	35	51	37	6	6
37-48	29	72	17	7	4	20	80	10	-	10	49	76	14	6	1
49-60	23	78	17	5	-	13	77	17	6	-	36	75	17	8	-
Total	90	22	19	7	2	61	72	18	7	3	151	72	18	7	3

N=Normal, 90 percent of standard or more
 1⁰=Mild, 80-89.9 percent of standard
 2⁰=Moderate, 70-79.9 percent of standard
 3⁰=Severe, 69.9 percent of standard or less

*Significant at 10 per cent level.

1

7.3(b) Nutritional Status (weight for height Index compared to American Norms) of children by age, Work status of recipients and by sex

(per cent)

Age (Months)	Simple Size	Non-Active			Simple Size	Active			Simple Size	Overall					
		N	1 ^o	2 ^o		3 ^o	N	1 ^o		2 ^o	3 ^o	N	1 ^o	2 ^o	3 ^o
12-24	18	39	17	22	22	13	69	15	8	8	31	52	16	16	16
25-36	21	52	19	14	15	14	28	57	-	15	25	42	34	8	16
37-48	27	63	30	7	-	22	41	23	18	18	49	53	27	12	8
49-60	23	57	22	13	8	13	69	15	16	-	36	60	19	14	7
Total	89	54	22	11	13	62	52	27	11	10	151	53	24	11	12

Age (Month)	Simple Size	Boys			Simple Size	Girls			Simple Size	Overall					
		N	1 ^o	2 ^o		3 ^o	N	1 ^o		2 ^o	3 ^o	N	1 ^o	2 ^o	3 ^o
12-24	15	46	20	13	21	16	56	13	18	13	31	52	16	16	16
25-36	23	35	39	12	14	12	58	41	-	1	35	42	34	8	16
35-48	29	52	27	10	11	20	45	25	15	15	49	53	27	12	8
49-60	23	56	9	21	14	13	77	15	-	8	36	60	19	14	7
Total	90	48	24	14	14	61	57	24	10	9	151	53	24	11	12

N^o = Normal 90 percent of standard
 1^o = Mild, 80-89.9 percent of standard
 2^o = Moderate 70-79.9 percent of standard
 3^o = Severe. 69-9 percent of standard or less

7.4. (a) Nutritional Status (combined height for age Indian norms and weight for height index Water low classification) of children by age, work status of recipients and by sex.

(per cent)

Age (Months)	Sample Size	Non-Active			Sample Size	Active			Sample Size	Overall					
		N	1 ^o	2 ^o		3 ^o	N	1 ^o		2 ^o	3 ^o	N	1 ^o	2 ^o	3 ^o
12-24	18	-	6	11	83	13	-	-	15	85	31	-	3	13	84
25-36	21	-	-	14	86	14	-	-	29	71	35	-	-	20	80
37-48	27	-	-	22	78	22	-	-	18	82	49	-	-	20	80
49-60	23	4	-	2	43	13	-	-	62	38	36	3	-	55	42
Total	89	1	1	26	72	62	-	-	29	71	151	1	1	26	72

Age (Months)	Sample Size	Boys			Sample Size	Girls			Sample Size	Overall					
		N	1 ^o	2 ^o		3 ^o	N	1 ^o		2 ^o	3 ^o	N	1 ^o	2 ^o	3 ^o
12-24	15	-	7	7	86	16	-	-	19	81	31	-	3	13	84
25-36	23	-	-	22	78	12	-	-	17	83	35	-	-	20	80
37-48	29	-	-	21	79	20	-	-	20	80	49	-	-	20	80
49-60	23	-	-	61	39	13	8	-	16	46	36	3	-	55	42
Total	90	-	1	29	70	61	2	-	24	74	151	1	1	26	72

N= Normal 95 percent of Standard
 1^o= Mild, 90-94.9 percent of Standard
 2^o= Moderate, 85-89.9 percent of Standard
 3^o= Severe, 0-84.9 percent of Standard

7.4(b) Nutritional Status (combined height for age American Standards and weight for height index Waterlow classification) of children by age, work status of recipients

Age (Months)	Sample Size	Non-Active				Sample Size	Active				Sample Size	(per cent) Overall			
		N	1 ^o	2 ^o	3 ^o		N	1 ^o	2 ^o	3 ^o		N	1 ^o	2 ^o	3 ^o
12-24	18	-	-	11	89	13	-	-	15	85	31	-	-	13	87
25-36	21	-	-	14	86	14	-	-	21	79	35	-	-	17	83
37-48	27	-	-	19	81	22	-	-	18	82	49	-	-	18	82
49-60	23	-	-	48	52	13	-	-	46	54	36	-	-	47	53
Total	89	-	-	24	76	62	-	-	24	76	151	-	-	24	76

Age (Months)	Sample Size	Boys				Sample Size	Girls				Sample Size	Overall			
		N	1 ^o	2 ^o	3 ^o		N	1 ^o	2 ^o	3 ^o		N	1 ^o	2 ^o	3 ^o
12-24	15	-	-	7	93	16	-	-	19	81	31	-	-	13	87
25-36	23	-	2	22	78	12	-	-	8	92	35	-	-	17	83
37-48	29	-	-	17	83	20	-	-	20	80	49	-	-	18	82
49-50	23	-	-	57	43	13	-	-	31	69	36	-	-	47	53
Total	90	-	-	27	73	61	-	-	20	80	151	-	-	24	76

N= Normal
 1^o= Stunted
 2^o= Wasted
 3^o= Wasted and Stunted

Appendix 1.1

Estimation Procedure

Let t be the suffix for activities
 h be the suffix for consignee area
 i be the suffix for recipients

Further, let Y_{thi} be the value of the character under study for the i th recipient of h th consignee area of t -th activity. The estimator of population mean for the h th consignee area in the t -th activity is given by

$$\bar{Y}_{th} = \frac{\sum_{i=1}^m Y_{thi}}{m}, \text{ where } m \text{ is the number of recipients selected from the } h\text{-th consignee area of } t\text{-th activity}$$

The estimator at the activity level of the mean of the character under study is given by

$$\bar{Y}_t = \frac{1}{n_t} \sum_{h=1}^{n_t} \frac{M_{th}}{M_t} \bar{Y}_{th}, \text{ where } n_t \text{ is the number of consignee areas in the } t\text{-th activity, } M_{th} \text{ is the number of recipient in the } h\text{-th consignee area of } t\text{-th activity and } \bar{M}_t = \text{Average number of recipient in the } t\text{-th activity.}$$

The estimator at the aggregate level of the mean of the character under study is given by

$$\bar{Y}_N = \frac{1}{N} \sum_{t=1}^L N_t \bar{Y}_t, \text{ where } L = \text{Number of activities, } N_t = \text{Number of recipients in the } t\text{-th activity}$$

$$N = \sum_{t=1}^L N_t$$

GLOSSARY .

Recipients	The workers who work on FFW projects and get remuneration in FFW commodities such as bulglar, corn and oil.
Active Recipients	Recipients who were working on on-going projects and currently eating FFW commodities.
Non-Active Recipient	Thos who worked on FFW projects which had been completed before the date of interview.
Scheduled Castes	This is a section of Hindu community notified by Government of India. The castes included are generally such as have been disadvantaged over long years eg. sweepers, cobblers etc.
Scheduled Tribes	Some weaker sections of society in India are identified as scheduled tribes because they had a traditional and tribal existance and are, therefore, deserving of help. Most of these tribes live in mountain areas, deserts etc and are sometime nomadic in character.
Backward Classes	Some of the economically weaker sections outside Scheduled Castes and Tribes have been identified for special help and are classified as backward classes. These largely include persons engaged in pottery smithy etc.
Marginal Farmer	Having less than 2.5 acres of unirrigated agricultural land or upto 1.25 acres of irrigated land.
Small Farmer	Having less than 5 acres of unirrigated agricultural land or upto 2.50 acres of irrigated land.
Agricultural Labour	Those who earn their livelihood by working on agricultural activities on the fields of other farmers.
Non-agricultural labour	Those who earn their livelihood by working on other than agricultural activities such as construction workers etc.,
Artisan	Skilled vorkers in some specific field as Sculpture, Carpenter, etc.

Kutch House	House built with bricks and stone etc.
Mixed House	House built partly with bricks and partly with mud.
Village Panchayat	Refers to an assembly of village wisemen (generally elected) to whom day-to-day problems of the village are referred.
Gang leader	Himself a worker, looking after the interests of all his team mates working on a project.
Father	A distributor, generally a Parish Priest looking after FFW projects under his distributorship.
Project Beneficiary	A person who will get benefits from an asset created through food for work.
Supervisor	A person incharge of FFW work and keeping daily record of work done on the spot.
FFW Commodities	These are the remuneration to the recipients in kind as bulgar, corn, oil etc.
Chapati/Roti/Bread	An unleavened cake made of wheat flour frequently used in most parts of India.
Khichri	A recipe mixed with rice, pulses and some-times vegetables and spices too. Rice is the major component in khichri. It is very common and easy to cook, recipients add ground bulgar/Corn to it.
Bhat	Mixture of bulgar, rice and raw sugar (gur).

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USAID FFW EVALUATION : RECIPIENT PROFILE

1. Particulars of FFW Project (with reference to which the recipient has been selected for interview)
- 1.1 Name of consignee..... 1.2 Name of the distributor.....
- 1.3 Name of FFW Project..... Code No.....
- 1.4 Location of FFW Project.....

2. Profile of the Selected FFW recipient

2.1 Name and address of the selected recipient.....

- 2.2 a) Date of actual employment on FFW Project.....
- b) Whether currently working on a Project : 1 Yes 2 No

2.3 FFW Projects on which worked during preceding 12 calendar months :

Name and address of the Project	Date and month		No of days worked	No of days for which paid	Distance from place of living (in km)
	From	To			
.....
.....
.....

- 2.4 Sex : 1 Male 2 Female
- 2.5 Age (in completed years).....
- 2.6 Education : 1 Illiterate 2 Literate but no formal education 3 Primary 4 Middle 5 Secondary 6 Graduate and above
- 2.7 Caste : 1 S.C. 2 S.T. 3 Backward 4 Others
- 2.8 Religion : 1 Hindu 2 Muslim 3 Sikh 4 Christian 5 others
- 2.9 Marital Status : 1 Married 2 Unmarried 3 Widow/widower 4 Separated
- 2.10 Whether identified as : 1 Small farmer 2 Marginal farmer 3 Agr. Labourer 4 Other (specify).....

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2.11. Occupation : 1 Agriculture 2 Agr. labour 3 Non-agriculture labour 4 Artisan
 5 Dairy farming 6 Business/profession 7 Service 8 Pension 9 Student
 10 Others (specify).....

2.12. Approximate monthly income of the household during last 12 months (in Rs)
 1 1-50 2 51-100 3 101-200 4 201-300 5 301-500 6 501-750
 7 751-1000 8 above 1000 9 Unwilling to disclose/Unable to specify

2.13. Housing, sanitation and hygiene:

Sl. No.	Item	Inside the house	Outside the house	Sl. No.	Item	Inside the house
1.	<u>Water Supply :</u>			4.	<u>Structure of House</u>	
	Hand pump	1 <input type="checkbox"/>	2 <input type="checkbox"/>		No house	1 <input type="checkbox"/>
	Well water	3 <input type="checkbox"/>	4 <input type="checkbox"/>		Hut	2 <input type="checkbox"/>
	Tap water	5 <input type="checkbox"/>	6 <input type="checkbox"/>		Katcha house	3 <input type="checkbox"/>
	Canal water	X	7 <input type="checkbox"/>		Mixed house	4 <input type="checkbox"/>
	Tank water	X	8 <input type="checkbox"/>		Pucca house	5 <input type="checkbox"/>
	Tubewell	X	9 <input type="checkbox"/>			
2.	<u>Electricity</u>			5.	<u>Number of living rooms :</u>	
	Available	1 <input type="checkbox"/>	2 <input type="checkbox"/>	6.	<u>Sanitation</u>	
3.	<u>House Owned</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No		Lairine	<input type="checkbox"/> Yes <input type="checkbox"/> No
					Bath	<input type="checkbox"/> Yes <input type="checkbox"/> No

3. Working Place :

3.1. a) Do you belong to the district where project is located? 1 Yes 2 No

b) If no, ask distance of permanent place of stay (native village) to the project site.....kms.

c) Why have you migrated? (i) 1 FFW employment (ii) 2 Other employment (iii) 3 Other reasons (specify).....

d) In case of (i) above, will you go back to your native village after completion of Project?
 1 Yes 2 No

4. Employment and FFW Commodity Payments

4.1. How did you come to know about FFW? 1 Gang leader 2 Village Panchayat 3 Self knowledge 4 Other sources (specify).....

4.2. How were you employed? 1 Recommended by village Panchayat 2 Recommended by a Social Worker 3 By direct application 4 Through Gang leader 5 Others (specify)

.....

- 4.3. How is your attendance marked ? 1 by self 2 by gang leader 3 by supervisor 4 by someone else (specify)..... 5 Not marked
- 4.4. Do you sign Food Distribution Register ? Yes No
- 4.5. If not who signs the Food Distribution Register 1 Head of family 2 Gang leader 3 Someone else (specify)..... 4 No one signs.
- 4.6. Do you receive FFW commodities your self : Yes No
- 4.6 a) If not who receives the commodities ? 1 Head of family 2 Gang leader 3 Someone else (specify).....
- 4.7. Are wages paid timely ? 1 Yes 2 No
- 4.8. When are wages paid ? 1 On a holiday 2 On a working day during lunch break 3 On a working day during working hours 4 On a working day after working hours.
- 4.9. Why do you work on FFW Projects ? 1 Assured employment 2 Assured payment of wages 3 Timely payment of wages 4 Fair wages 5 Nothing else to do 6 Other (specify).....
- 4.10. Periodicity of FFW commodities payment, kind of commodities, rate of payment and recipient preference:

Payment of Commodity Periodicity	Recipients Preference	Commodity Paid	Recipient Preference	Place	Place of Payment	
					Payment Preference	Recipient Preference
In advance <input type="checkbox"/> 1	<input type="checkbox"/> 1					
Daily <input type="checkbox"/> 2	<input type="checkbox"/> 2	Corn only <input type="checkbox"/> 1	<input type="checkbox"/> 1	Project	<input type="checkbox"/> 1	<input type="checkbox"/> 1
Weekly <input type="checkbox"/> 3	<input type="checkbox"/> 3	Bulgar <input type="checkbox"/> 2	<input type="checkbox"/> 2	At Home	<input type="checkbox"/> 2	<input type="checkbox"/> 2
Fortnightly <input type="checkbox"/> 4	<input type="checkbox"/> 4	Oil <input type="checkbox"/> 3	<input type="checkbox"/> 3			
Monthly <input type="checkbox"/> 5	<input type="checkbox"/> 5	Corn + Bulgar <input type="checkbox"/> 4	<input type="checkbox"/> 4	Any other	<input type="checkbox"/> 3	<input type="checkbox"/> 3
Post Project <input type="checkbox"/> 6	<input type="checkbox"/> 6			(specify)		
Any other <input type="checkbox"/> 7	<input type="checkbox"/> 7	Corn+Oil <input type="checkbox"/> 5	<input type="checkbox"/> 5	.....	
Specify.....		Bulgar+Oil <input type="checkbox"/> 6	<input type="checkbox"/> 6			
		Corn + Bulgar +Oil <input type="checkbox"/> 7	<input type="checkbox"/> 7			

4.11. How much commodity you received at each payment

Commodity	Unit	No. of units
Corn
Bulgar
Oil



5. Receipt, Disposal and Storage of FFW wages received in kind :
- 5.1. What do you do with FFW commodities received : 1 Sell and purchase required ones
 2 Barter 3 Consume myself 4 Share with the family
- 5.2. If bartered or sold any amount of FFW commodity received in the past 12 months, please give following details :

FFW Commodity Sold/Bartered		Local Commodity Received	
Name	Qty. kgs.	Name	Qty. kgs.
.....
.....
.....

5.3. a) If share with the family give following details of members who share.

Relation	Age	Sex	Relation	Age	Sex
1.	6. ....	.....	.....
2.	7. ....	.....	.....
3.	8. ....	.....	.....
4.	9. ....	.....	.....
5.	10. ....	.....	.....

- 5.3. (b) (i) If some family members do not share give their number : Adults..... children.....
- (ii) Reasons for not sharing.....

- 5.4. (i) How long does FFW commodity received by you at each payment last till it is consumed.
 1 Less than 1 week 2 1-2 week 3 3-4 week 4 more than one month
- (ii) What do you do if FFW commodity is exhausted before the next payment becomes due
 1 Borrow FFW food 2 Borrow money to buy non FFW food 3 Draw upon home stock 4 Others (specify)

5.5. How much of FFW commodity is prepared per day in the home (in kg).....

5.6. How is of FFW commodity normally prepared in the home (interviewer should state recipe)

5.7. If you have FFW commodities at home how many times per week are these eaten.....

- 5.8. (i) Do you store FFW commodities for use for later consumption ? 1 Yes 2 No
- (ii) If yes, when do you consume them : 1 Same day 2 Same week 3 Next week
 4 After 2-4 week 5 After 4 weeks

- 5.12. (i) Are you aware from where FFW commodities are being received ? 1 Yes 2 No
- (ii) If yes, please mention source :

Interviewer :

(ii) If source mentioned is other than U.S.A./U.S. people/U.S. donations Check ? From where he/they get the food (and record answer verbatim).....

6. Family size and Work Force :

Family size	Numbers		
	Male	Female	Total
Working Members			
Adults
Children
Total
Non-working Members			
Adults
Children
Total

7. Impact on Employment : (Preceding 12 calendar months)

Name of the Activity	Mandays worked								
	Self			Others (i).....			Others (ii).....		
	From	To	No. of Mandays	From	To	No. of Mandays	From	To	No. of Mandays
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A. On FFW									
1.									
2.									
3.									
B. Outside FFW									
1.									
2.									
3.									
C. Un-employed									
1.									
Total									

Note : Provide details for 3 working members. State relationship to self in the space provided against others above.

8. Impact on Family Income : (Preceding 12 Calendar Months)

Source	Persons	INCOME				
		Kind Type	Quantity received (kgs)	Value of col. 4 (Rs.)	Cash Rs.	Total Rs.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. From FFW (participating members)	Self					
	Others (1)					
	Others (2)					
	Total					
B. Outside FFW (participating members)	Self					
	Others (1)					
	Others (2)					
	Total					
C. Non-FFW member	(1)					
	(2)					
Total						
G. Total A+B+C						
Year Before FFW (Total)						

Note : For non-participating members provide relationship in the space provided against (1) and (2)

9. Assessment of impact on Agricultural activity (in case recipient is a cultivator)

9.1. Land Holding : (acres 00.0)

	Total Cultivated	Irrigated
Owned Land
Land leased in
Land leased out
Total operational holding

- 9.2. Crops sown, harvested and marketed (12 months preceding date of interview) (Interviewor :
Write Kharif Crops first, followed by Rabi Crops)

Crop	Area sown (acres)	Crop harvested (quintals)	Produce marketed (quintals)	Kept for home consumption (quintals)
	00.0	00.0	00.0	00.0
1.	2	3	4	5
1.	.....	.....	.....	.....
2.	.....	.....	.....	.....
3.	.....	.....	.....	.....
4.	.....	.....	.....	.....
5.	.....	.....	.....	.....

10. Assessment of impact on socio-economic life of recipient

- 10.1. Have you been able to add to your assets with the additional income from FFW employment:
 1 Yes 2 No 3 No answer
- 10.2. If yes, what items added: 1 Cooking utensils 2 Milch cattle 3 Bullocks 4 Poultry
 5 Pigs 6 Donkeys/Mules 7 House site extension 8 Construction 9 Jewellery
 10 Wrist watch 11 Radio/Transistor 12 Bicycle 13 Stove 14 Table 15 Chair
 16 Beds 17 Others (specify).....
- 10.3. What is the value of assets added _____ Rs.
- 10.4. Have you been able to better perform your social functions with additional income from FFW :
 1 Yes 2 No
- 10.5. If yes: 1 Could you with ease perform marriage of a dependent 2 Visit relatives on marriage
 3 Celebrate festival occasion 4 Go on pilgrimage 5 Repay old debts
 6 Have more social contacts 7 Others (specify).....
- 10.6. Before FFW project started were you required to : 1 Sell assets 2 Borrow 3 Do other things (specify).....to maintain yourself and family.
- 10.7. (If the worker is a woman with pre-school children ask :) what arrangement do you make for children when you go to work ? 1 Leave at home with elderly people 2 Leave at home with neighbours to look after 3 Leave at home with siblings 4 Bring them to work-site
 5 Other arrangements (specify).....

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11. Nutritional Standards :

11.1. Food eaten by the family in the last 24 hours : (if yesterday was a feast or fast day, the information for the day previous to that may be taken) All replies are to be in Standard metric units in weight or volume.

Name	Unit	Qty	Name	Unit	Qty	Name	Unit	Qty
Bajra	Jowar	.....	.....	Maize, dry	.....	.....
Ragi	Rice	.....	.....	Wheat flour	.....	.....
Other cereals and millets	Bengalgram	.....	.....	Blackgram	.....	.....
Greengram	Khesari dal	.....	.....	Lentil	.....	.....
Redgram	Soyabean	.....	.....	Other pulses	.....	.....
Leafy vegetables	Other vegetables	.....	.....	Carrot	.....	.....
Onion, big	Potato	.....	.....	Tapioca	.....	.....
Other roots and tubers	Groundnut	.....	.....	Other nuts and oilseeds	.....	.....
Condiments and spices	Amla	.....	.....	Apple	.....	.....
Banana, ripe	Lime & Orange	.....	.....	Mango, ripe	.....	.....
Melon, water	Papaya, ripe	.....	.....	Gauva ripe	.....	.....
Tomato, ripe	Other fruits	.....	.....	Fish, fresh	.....	.....
Prawns	Meat	.....	.....	Fish dry	.....	.....
Chicken	Liver, goat	.....	.....	Egg, hen	.....	.....
Milk	Skimmed milk liquid	.....	.....	Cheese	.....	.....
Butter	Ghee	.....	.....	Hydrogenated oil	.....	.....
Cooking oil	Hotel leaves	.....	.....	Biscuits	.....	.....
Bread	Sugar	.....	.....	Jaggery	.....	.....
Papad	Fago	.....	.....	Toddy	.....	.....
Bulgur (FFW)	Corn (FFW)	.....	.....	Oil (FFW)	.....	.....

11.2. Weight for height screening of children : (information to be recorded for children 1 to 5 years)

	Name	Sex	Age		Whether Eats FFW commodities
			Year	Month	
1
2
3

11.3. a) Measure and record child's height to nearest 1/10 is of a centimeter.

	1st Child	2nd Child	3rd Child
Age in months
Trial 1	□□□□	□□□□	□□□□
Trial 2	□□□□	□□□□	□□□□
Trial 3	□□□□	□□□□	□□□□
Average	□□□□	□□□□	□□□□

11.3 b) Measure and record child's weight to nearest 1/10 is of a kilogramme.

	1st Child	2nd Child	3rd Child
Trial 1	□□□□	□□□□	□□□□
Trial 2	□□□□	□□□□	□□□□
Trial 3	□□□□	□□□□	□□□□
Average	□□□□	□□□□	□□□□

12.1. Assets owned

12.1. Does the worker own any of these assets :

Livestock	Number	Other Assets	
Buffaloes	Bicycle	<input type="checkbox"/> 1
Cows	Wristwatch	<input type="checkbox"/> 2
Goat/Sheep	Jewellery gold	<input type="checkbox"/> 3
Bullock	Jewellery silver	<input type="checkbox"/> 4
Pigs	Stove	<input type="checkbox"/> 5
Others (specify)	Radio	<input type="checkbox"/> 6
		Chair	<input type="checkbox"/> 7
		Table	<input type="checkbox"/> 8
		Brass/Steel utensils	<input type="checkbox"/> 9
		Vessels/Utensils	<input type="checkbox"/> 10
		Sewing machine	<input type="checkbox"/> 11
		Bed	<input type="checkbox"/> 12

13. Miscellaneous

13.1. (i) Do you expect to receive any benefits from the project when completed ? 1 Yes 2 No

(ii) If yes, describe the nature of benefits.

.....

.....

13.2. (Ask those receiving benefits) If no benefits were to come from the project when completed will you still work on the FFW project 1 Yes 2 No13.2. Who provided the tools of work: 1 Project holder 2 Contractor 3 Self owned

Name of the Interviewer.....

Date.....

Place.....

Time.....

Checked by.....

(Name)