Report on Some Aspects of Food Security Policy Interventions

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June 2014

Preface

This report is based on secondary data from mostly official sources and on primary surveys conducted in the three sites of Jeypore in Odisha, Wayanad in Kerala and Kolli Hills in Tamil Nadu where the M. S. Swaminathan Research Foundation (MSSRF) is engaged in science-based social intervention for development. The report has been made possible by funds from the project on alleviating poverty and malnutrition (APM), supported by the IDRC, Canada. The specific project work, of which this report is an outcome, was conceived of by Dr. R. Rukmani, the Programme Director of Food Security at MSSRF and me in consultation with Dr. V. Arivudai Nambi, the Director of the APM project. As the principal author of this report, I wish to express my sincere thanks to Dr. Nambi and Dr. R. Rukmani.

Besides the principal author of this report, the research team for the project work of which this report is an outcome, consisted of Dr. A. Rajagopal, Senior Researcher and Project Consultant, Dr. N. Jayakumar, Junior Researcher and Consultant. Dr. Rajagopal provided inputs to the draft of the project Report, guided the field surveys and supervised the work of Dr. Jayakumar. Substantial research assistance was provided by Dr. Jayakumar. I am grateful to both of them for their inputs.

I wish to express my sincere thanks to Mr. T. R. Prabhakaran, Senior Economist, and Mr. N. N. Kalaiselvan, Research Economist, both with the APM project at MSSRF, Chennai. I am also grateful to Dr. R. Gopinath, Senior Scientist and Mr. A. Sakthi Velan, Senior Secretary of the Food Security programme for their help in the final preparation of this report. Thanks are due to Ms. A Uma, Secretary of the APM project secretariat for her support.

I am most grateful to the following colleagues of the APM project at Jeypore, Odisha, Wayand, Kerala and Kolli Hills, Tamil Nadu, for their help with the planning and conduct of the field surveys:

At Jeypore, Odisha

1. Dr. Chaudhury Shripati Mishra – CoPI
2. Ms. Sarita Das – Field Assistant
3. Ms. Mamina Behera – Field Technician
4. Ms. Ashutos Nanda - Field Assistant
5. Mr. Santosh Sahu – Field Assistant

6. Mr. Mantu Mandal – Field Assistant
7. Mr. Amin Baig – Field Assistant
8. Mr. Prashant Pradhan – Field Assistant

At Wayand, Kerala

1. Mr. GiriganGopi, Co-PI (Overall Coordination)
2. Mr. Arunraj R, Social Scientist (Supervision)
3. Mr. Johnson K M, Field Technician (Survey Team)
4. Ms. Nisha T A, Field Technician (Survey Team)
5. Ms. Renju Peter, Field Technician (Survey Team)
6. Ms. Semeena K, Field Technician (Survey Team)

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Abbreviations

AAY	Antyodaya Anna Yojana
AEO	Assistant Education Officer
AIE	Alternative and Innovative Education
APL	Above Poverty Line
AWC	Anganwadi Centres
BGREI	Bringing Green Revolution to the Eastern Region of India
BMI	Body Mass Index
BPL	Below Poverty Line
CARE	Cooperative for Assistance and Relief Everywhere
CSCP	Civil Supplies and Consumer Protection
CRY	Child Rights and You
CED	Chronic Energy Deficiency
DPAP	Drought Prone Area Programme
EGS	Education Guarantee Scheme
EFYP	Eleventh Five Year Plan
EFP	Emergency Feeding Programme
FFS	Farmers' Field School
FPS	Fair Price Shops
GC	General Council
GCF	Gross Capital Formation
GDP	Gross Domestic Product
GOI	Government of India
ICDS	Integrated Child Development Services
INSIMP	Initiatives for Nutritional Security through Intensive Millet Promotion
ITDA	Integrated Tribal Development Agency
ITDP	Integrated Tribal Development Programme
KBK	Koraput Bolangir & Kalahandi
KVK	Krishi Vigyan Kendras
MSSRF	M.S. Swaminathan Research Foundation
MDMS	Mid-Day Meal Scheme
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MPCE	Month *Per Capita* Expenditure

MT	Million Tonne
NCAER	National Council for Applied Economic Research
NREGA	National Rural Employment Guarantee Act
NRM	Natural Resource Management
NSSO	National Sample Survey Organisation
NFSM	National Food Security Mission
NFSA	National Food Security Act
NDC	National Development Council
NFHS	National Family Health Survey
NMBS	National Maternity Benefit Scheme
NMO	Noon Meal Organizer
NGO	Non-Governmental Organisation
NPNSPE	National Progamme of Nutrition Support to Primary Education
OBC	Other Backward Classes
PRI	Panchayat Raj Institutions
PDS	Public Distribution System
RSFIRI	Report on the State of Food Insecurity in Rural India
RKVY	Rashtriya Krishi Vigyan Yojana
SC	Schedule Caste
ST	Schedule Tribe
SNP	Supplementary Nutrition Programme
SSA	Sarva Shiksha Abhiyan
SHG	Self Help Group
TNCSC	Tamil Nadu Civil Supplies Corporation
TPDS	Targeted Public Distribution System
WFP	World Food Programme
WHO	World Health Organisation

Report on some aspects of Food Security Policy Interventions

Introduction

This Report presents some aspects of the state of food security in India, in three of its states-Odisha, Kerala and Tamil Nadu - and in the field sites of operation of the MSSRF in the bio-diversity hotspots in these three states, located respectively in Jeypore block of Odisha, Wayanad region of Kerala and Kolli Hills of Tamil Nadu. The Report is divided into three parts. In the first part, we take a look at some recent developments pertaining to food security policy interventions in India as a whole. In the second part, we discuss some aspects of the food security interventions and the state of food security in the states of Odisha, Kerala and Tamil Nadu. In the third part, we present the findings from a primary survey on the working of food security interventions carried out among households and with programme functionaries and elected local body members.

Part I: Some aspects of the Food Security Situation in India

1.1 Scope

In two earlier *Reports* presenting the research carried out on food security at the M.S. Swaminathan Research Foundation (MSSRF), we had examined the state of food insecurity in rural and urban India.[1] The *Reports*, published in 2008 and 2010 respectively, and based on data available up to 2005-06, primarily from the National Sample Surveys, the Census of India and the National Family Health Surveys, had developed a set of indicators of various aspects of food security and a composite index of food insecurity as well based on these indicators. These indicators and the Index were then used to compare the state of food insecurity across different states and to draw out the implications for food security policies.

The focus in the present Report is quite different and much more limited. This Report will review the food security policies pursued since the earlier studies were completed and will also draw on available new data to reflect on their implications.

1.2 Food Security Policy Interventions 1991 – 2006

The MSSRF Report on the State of Food Insecurity in Rural India (hereafter, RSFIRI), after reviewing the global evolution of concepts and concerns in respect of food and nutrition security, went on to study the situation of India and its major States with regard to food security by looking at the three aspects of availability, access and absorption. Following a discussion of trends in availability, access and absorption at the All India level, the RSFIRI carried out an exercise of constructing an Index of food and nutrition insecurity for the major States of India. The focus was on chronic food and nutrition insecurity, and the problems of transitory and silent hunger were not dealt with. Four outcome measures, the percentages respectively, of ever married women age 15-49 years who are anaemic, of women (15-49 years) with

1 MSSRF(2009) and MSSRF (2010)

chronic energy deficiency (CED), of children in the age group 6-35 months who are anaemic and of children in the age group 6-35 months who are stunted, entered into the Index. Three input measures, the percentages respectively, of rural population consuming less than 1890 Kcal /cu/diem, of rural households not having access to safe drinking water and of rural households not having access to toilets within the premises were considered. Two variants of the Index were computed. One used all the three input measures listed above. In the other variant, the indicator of the percentage of rural households not having access to safe drinking water was excluded. The exercise brought out the fact of a general worsening of the food security situation across the country as between 1998-2000 and 2004-2006.

The RSFIRI concluded that, between1998-2000 and 2004-06, economic reforms and GDP growth had not led to an improvement in food security but to deterioration for the majority of Indian states, which, moreover, accounted for a majority of the Indian population. This should not be altogether surprising. Many analysts have pointed out that the period of reforms, at least in some of its years, has been marked by deflationary macroeconomic policies that have hurt the purchasing power of the bulk of the working population, especially in the case of rural areas. Attention has been drawn by scholars to the overwhelming crisis in agriculture, marked not only by the tragic and visible phenomenon of farmers' suicides in several states, but by the near stagnation in food grain output for several years since the mid-1990s. In fact, the annual compound rate of growth of food grain output between 1994-95 and 2004-05 was just 0.7%, well below the rate of growth of population.[2] A number of factors had contributed to the crisis of the rural and agrarian economy, including the cutbacks in rural development expenditures of the government, the sharp increase in input costs for farmers because of the reduction in input subsidies as part of the fiscal squeeze, the fall in output prices on account of removal of quantitative restrictions on agricultural imports, the credit squeeze as a consequence of financial liberalization resulting both in higher real interest rates and in lower rates of growth of institutional credit for agriculture and allied activities, and the reduction in government investments and other expenditure on agricultural research and development and extension. Growth of employment in rural India was extremely poor in the period between 1993-94 and 1999-2000, going by the data from the 50th and 55th rounds of the National Sample Survey Organisation (NSSO), and the increase in the rate of growth of rural employment between 1999-2000 and 2004-05 as seen from the 61st round of the NSSO was still not sufficient to reach the rural employment growth rates of the period 1983-1993/94. Further, much of the growth in employment in the period 1999-2000 to 2004-05 was in self-employment and in informal sector activities, raising serious questions about the quality and terms of employment and the impact on food security of such employment. On the whole, it is clear that the period between the mid-1990s and the mid-2000s had seen deterioration in the state of India's food security.

Reviewing the flagship food security intervention, the public distribution (PDS), the RSFIRI noted that the PDS had served the country well as it expanded from a few urban centres in early 1950s to more or

2 C.P. Chandrasekhar and Jayati Ghosh (2007)

less the whole country by the early 1980s. There were no doubt several operational problems including inefficiencies and leakages, but few would deny that the PDS had played a crucial role in ensuring access to food grain for a significant proportion of the population that would otherwise have gone hungry. The RSFIRI also noted that this role of the PDS was closely linked to the strategy for agricultural development evolved in the mid-1960s and to the leading role of the state in India's growth and development. However, as the country embarked on a structural adjustment programme in 1991, the policy thrust on reduction of budgetary deficits primarily through expenditure reduction meant curtailing of subsidies and a sharp rise in the issue prices of food grains through the PDS. Subsequently, the policy framework, which saw a reduction in food subsidy as a policy imperative, led to the introduction of the targeted PDS in 1997. The deleterious consequences of the targeted PDS for both food security and the viability of the PDS were examined in RSFIRI on the basis of available data and research studies, and the conclusion was drawn that the PDS can be improved and made more effective through certain policy interventions and reforms. Given that, under normal circumstances, the food subsidy has been around or less than one-half of 1 per cent of GDP, and given the importance of food and nutrition security from both the rights perspective and a human development viewpoint, the RSFIRI argued that the case for universal PDS with a uniform, affordable price - which will also restore the market stabilizing function of the PDS - was compelling.

Following the discussion of the PDS, the RSFIRI went on to examine rather briefly two other important interventions of the State in the arena of food and nutrition security, namely the integrated child development services (ICDS) scheme and the national programme for nutritional support to school education, popularly known as the mid-day meal scheme (MDMS). It noted that while the period of economic reforms since 1991 had seen a policy move from a universal PDS to a targeted PDS, the developments in respect of the MDMS and the expansion of ICDS were important policy moves towards strengthening food security.[3]

3 For more on the ICDS and MDMS schemes, see MSSRF (2008), MSSRF(2010) and MSSRF (2011)

The RSFIRI noted that thanks both to judicial intervention in the form of a series of path-breaking interim orders by the Supreme Court of India, following the sustained work put in by the 'right to food' movement and a number of activist organizations and individuals, and to the outcome of the parliamentary elections of 2004 which led to the formulation of a National Common Minimum Programme (NCMP) by the government of India on the basis of an understanding arrived at between the ruling coalition and the Left Parties supporting it from outside, the MDMS and the ICDS programmes moved forward in important ways. The programme where the largest gains in terms of food security had come was the MDMS. The RSFIRI further noted that the MDMS has become nearly universal, with hot cooked meals being served to millions of primary school children across the country.

The picture in respect of ICDS, the RSFIRI noted, was rather mixed. There had been a substantial increase in the number of ICDS centres. However, financial allocations to ICDS had fallen far short of the requirements for even running the existing ICDS centres properly, let alone meet the requirements of universalization. The problems of quality - addressing some of which require substantial modifications in the design of the scheme itself – and of social exclusion remained a major challenge, as did universalization. RSFIRI concluded that ICDS and PDS are two schemes where a policy framework with insistence on deficit reduction almost solely through expenditure reduction would not help in enhancing food and nutrition security. RSFIRI noted that even though universalizing PDS will involve a higher quantum of food subsidy, given the hardening of wheat and rice prices in the world market and the higher procurement prices that would have to be provided to Indian farmers, its beneficial consequences in addressing food and nutrition security far outweigh these costs. Such universalization should of course go hand in hand with measures to improve the functioning of the PDS

1.3 Food Security Policy: New Interventions, 2006-2014

There have been a number of important policy interventions relating to food security in the period since 2006. These interventions have addressed issues of availability as well as access. The most important intervention with respect to availability came in the form of the establishment of a National Food Security Mission (NFSM). As for access, a key intervention was the passing of the National Rural Employment Guarantee Act (MGNREGA) which came into force with its notification in September 2005. The third and possibly the most important development since 2006, from a long term viewpoint, has been the passing of the National Food Security Act (NFSA) in 2013. We turn now to a discussion of these three interventions.

1.3.1 The National Food Security Mission

The National Development Council (NDC) in its 53rd meeting adopted a resolution to enhance the production of rice, wheat and pulses by ten, eight and two million tonnes respectively over the benchmark levels of production by the end of the Eleventh Five Year Plan (EFYP) period, namely 2011-12. A National Food Security Mission (NFSM) with an outlay of Rs 4,882.50 crore during the EFYP

period was set up to operationalize this resolution. Under the NFSM, State and district level FSMs were set up as autonomous bodies to participate in and monitor the implementation of the Mission. Under implementation since 2007-08, the Mission sought to achieve additional production of 10, 8, and 2 million tonnes of rice, wheat and pulses, respectively on an area of 20 million, 13 million and 4.5 million hectares respectively, by the end of the year 2011-12. The Mission had been implemented in 312 identified districts of 17 States covering 136 districts under rice, 141under wheat and 171 under pulses till 2009-10. At the national level a General Council (GC) under the chairmanship of the Union Agriculture Minister was set up to direct and guide the Mission and review the overall progress and development of the scheme. Though the GC is required to meet at least twice a year, it met only once in each of the years 2007-08, 2008-09 and 2009-10. Since the inception of the mission and up to 2011, the total fund allocated was about 74% of the total outlay for NFSM to be spent by 2011-12. The States have been able to utilize 95% of the released amount. The mid-term review of the programme has indicated that the involvement of Krishi Vigyan Kendras (KVKs) was only nominal in most of the districts, though KVKs were envisaged to play important roles. According to the mid-term evaluation of the scheme, it has had good impact on area, production and yield. It was estimated that about 23% of the farmers covered by the scheme had increased their acreage under rice cultivation by diverting area from other crops and 89% had adopted package of improved practices. NFSM districts recorded output growth rates of 3.99% and 7.40% during 2007-08 and 2008-09 against the corresponding figures of 2.91% and 5.48% in non-NFSM districts. As regards wheat, about 41% had shifted from other crops, mainly pulses and oilseeds to wheat. Initially, NFSM districts did not do well in wheat production. However the programme showed better results during the year 2009-10 with increase in production by 29%. The NFSM districts showed better performance in area coverage under pulses. Overall, the *Review* states: "Although the Mission has met with commendable success in achieving the goals in terms of enhanced production and reaching out with quality inputs to the relatively weak districts, there is a lot which could be done to improve their implementation, monitoring and evaluation"(GoI-2012).

While the NFSM is a key and focused intervention aimed at enhancing availability of rice, wheat and pulses, there have been other measures taken by the central government since 2006 to further this objective of enhancing food grain availability, such as increased public investment in agriculture and enhanced outlays and spending on agriculture and allied activities through such schemes as the Rashtriya Krishi Vigyan Yojana (RKVY), launched in August 2007. The RKVY incentivizes state governments to increase public investment in agriculture and provides resources for programmes such as Initiatives for Nutritional Security through Intensive Millet Promotion (INSIMP) and Bringing Green Revolution to the Eastern Region of India (BGREI). Gross Capital Formation (GCF) in agriculture & allied sectors as percentage of agricultural GDP has increased from 14.9% (Public 3.7%, Private 11.2%) in 2006-07 to 19.8% (Public 3.0%, Private 16.8%) in 2011-12. These developments are consistent with the increase in annual food grain production between 2006-07 and 2012-13 shown in Table 1.1.

Between 2006-07 and 2011-12, there has been a consistent rise in both output and yield of food grains, except for the drought year of 2009-10. The average annual rate of growth of food grain output was 1.29% in the tenth plan period from 2002 to 2007. It rose to 3.80% in the eleventh plan period from 2007 to 2012. While the annual rate of expansion of area under food grains fell from 0.29% in the tenth plan period to 0.19% in the eleventh, the yield growth rate per year jumped from 0.59% to 3.55%. Though there was a dip in food grain output in 2012-13 to 250.15 MT from 259.32 MT in 2011-12, the estimated output for 2013-14 is 263.20 MT.

Table 1.1: Area, Output and Yield of Food Grain in India, 2006-07 to 2012-13

Year	Area (MHA)	Production (MT)	Yield (Kg/ha)
2006-07	123.71	217.28	1756
2007-08	124.07	230.78	1860
2008-09	122.83	234.47	1909
2009-10	121.33	218.11	1798
2010-11	126.67	244.49	1930
2011-12	124.76	259.32	2079
10th Plan Average	-	217	-
11th Plan Average	-	238	-
2012-13	119.92	250.15	2086
2013-14	NA	263.20	NA

MHA: million hectares; MT: million tonnes; Kg/ha: Kilograms per hectare NA: not available
Source: GoI Ministry of Consumer Affairs, Food & Public Distribution.

Overall, one can say that there has been an increase in availability of food grain in India from 2006-07. Per capita daily availability of food grain rose from 422.4 grams in 2005 to 462.9 grams in 2011, a modest increase, but an increase nonetheless.

1.3.2 The National Rural Employment Guarantee Act (NREGA)

The National Rural Employment Guarantee Act (NREGA) was passed by the Indian parliament in 2005. It received the assent of the President of India on September 5, 2005 and was notified and thus came into force on September 7, 2005. The Act seeks to enhance livelihood security in rural areas by providing at least 100 days of guaranteed wage employment in a financial year to every household whose adult members volunteer to do unskilled manual work. The intent of the Act is also to create productive assets. The Act is implemented through the National Rural Employment Guarantee Scheme (MGNREGS). The central government provides funds to State governments and the States implement the scheme through Panchayat Raj Institutions (PRIs). The guidelines specify that:

- The shelf of projects for a village will be recommended by the gram sabha and approved by the zilla (district) panchayat.
- At least 50% of works will be allotted to Gram Panchayats for execution.
- Permissible works predominantly include water and soil conservation, afforestation and land development works.
- A 60:40 wage and material ratio has to be maintained. No contractors and machinery is allowed.
- The Central Government bears the 100% wage cost of unskilled manual labour and 75% of the material cost including the wages of skilled and semi-skilled workers. The Act was notified in 200 districts in the first phase with effect from February 2, 2006 and then extended to additional 130 districts in the financial year 2007-2008 (113 districts were notified with effect from April 1, 2007, and 17 districts in UP were notified with effect from May 15, 2007). The Act came into force initially in February 2006 in 200 of the country's poorest districts and was expanded to another 130 districts during the financial year 2007-08. The remaining districts were notified under the NREGA with effect from April 1, 2008. Thus the NREGS has been in place across the entire country with the exception of districts that have a hundred %urban population, for more than five years. The Act has placed a judicially enforceable obligation on the state to provide unskilled, manual work within 15 days of a person making an application, within a radius of 5 kms from the applicant's residence.

Table 1.2: Mahatma Gandhi National Rural Employment Guarantee Scheme, Key Indicators, 2006-11 (1)

Particulars	(FY 06-07) 200 Districts	(FY 07-08) 330 Districts	(FY 08-09) 615 Districts	(FY 09-10) 619 Districts	(FY 2010-11) 626 Districts
Total Job Cards issued	3.78 Crore	6.48 Crore	10.01 Crore	11.25 Crore	11.98 Crore
No of households provided employment	2.10 Crore	3.39 Crore	4.51 Crore	5.26 Crore	5.49 Crore
Total Person Days in Crores, of which:	90.5	143.59	216.32	283.59	257.15
SCs:	22.95 [25%]	39.36 [27%]	63.36 [29%]	86.45 [30%]	78.76 [31%]
STs:	32.98 [36%]	42.07[29%]	55.02 [25%]	58.74 [21%]	53.62 [21%]
Women:	36.40 [40%]	61.15 [43%]	103.57 3[48%]	136.40 [48%]	122.74 [48%]
Others:	34.56 [38%]	62.16 [43%]	97.95 [45%]	138.40 [49%]	124.78 [48%]
Person days per HH	43 days	42 days	48 days	54 days	47 days
No. of hhs completed 100 days of wage employment (In lakhs)	21.61	36.02	65.21	70.84	55.62
Budget Outlay: (In Rs Crore)	11300	12000	30000	39100	40100
Central Release:	8640.85	12610.39	29939.6	33506.61	35768.95

(In Rs Crore)					
Total available fund [including OB]: In Rs. Crore.	12073.55	19305.81	37397.06	49579.19	54172.14
Expenditure (In Rs. Crore.) [percentage against available funds]	8823.4 [73%]	15856.9 [82%]	27250.1[73%]	37905.2 [76%]	39377.3 [73%]
Expenditure on Wages (In Rs. Crore.)	5842.4 [66%]	10738.5 [68%]	18200.0 [67%]	25579.3 [70%]	25686.5 [68%]
Total works taken up (In Lakhs)**:**	8.35	17.88	27.75	46.17	50.99
Works completed:	3.87	8.22	12.14	22.59	25.9
Water conservation:	4.51 [54%]	8.73 [49%]	12.79 [46%]	23.43 [51%]	24.26 [48%]
Provision of Irrigation facility to land owned by SC/ST/ BPL and IAY beneficiaries:	0.81 [10%]	2.63 [15%]	5.67 [20%]	7.73 [17%]	9.15 [18%]
Rural Connectivity:	1.80 [21%]	3.08 [17%]	5.03 [18%]	7.64 [17%]	9.31 [18%]
Land Development:	0.89 [11%]	2.88 [16%]	3.98 [15%]	6.38 [14%]	7.04 [14%]
Any other activity:	0.34 [4%]	0.56 [3%]	0.28 [1%]	0.98 [2%]	1.06 [2%]

Source: MGNREGA website http://nrega.nic.in

Failing this, the state government is to provide an unemployment allowance. Under the provisions of the act, workers are entitled to a statutory minimum wage for their labour, to be paid within seven days after the work is done. Men and women are to be paid equal wages. The Act, in principle, provides an opportunity for villagers to play an active role in the implementation of employment guarantee schemes through *Gram Sabhas* social audits, participatory planning and other means. (Jhilam Roy Chowdhury, 2010)

Tables 1.2 and 1.3 provide some data on MGNREGS, the scheme through which the MGNREGA is implemented, at the national level. Table 2 covers the period from 2006-07 to 2010-11. Table 3 provides data for the three financial years 2011-12 to 2013-14.

Table 1.3: Some Data on MGNREGS, India 2011-12 to 2013-14

ITEM		2011-12	2012-13	2013-14
No. of Households registered (crores)		12.6	13.2	13.3
No. of workers as per job cards (crores)		27.8	29.3	29.4
No. of works taken up (in lakhs)		80.8	104.6	138.8
Expenditure incurred (Rs crores)		37072.7	39735.4	38333.9
No. provided employment (in lakhs) Figures in parantheses are percentages to total number of persons employed	Households	506.4	498.9	477.6
	Males	446.6(54.5)	422.1(59.67)	382.9 (52.07)
	Females	373.3(45.5)	375.3(40.33)	352.5(47.93)
	Persons	819.9 (100)	797.4 (100)	735.4 (100)
	SCs	185 (22.56)	181.7 (25.69)	167.2 (22.74)

	STs	147.4(17.98)	142.9 (17.92)	129.2 (17.57)
No. of hhs completed 100 days of wage employment (In lakhs)		41.7	51.7	46.4
Average Daily wage	Rupees	114.5	121.4	132.7
Average days of employment	Days per household	43.2	46.2	45.9

Source: **Mahatma Gandhi NREGA at a Glance**, Ministry of Rural Development, Government of India, accessed at http://MGNREGA.nic.in/netMGNREGA/home.aspx

Since its inception in 2006, as of March 2014, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) had provided nearly 1700 crore person days of employment and the total expenditure incurred was close to 2,50,000 crores or 2.5 trillion rupees. The MGNREGS is easily the largest publicly funded wage-employment programme in independent India's history, and may well be the largest such programme across the world.

The total employment provided under the scheme rose from 90.5 crore person days in 200 districts in 2006-07 steadily as the scheme expanded to cover all districts in the country by 2008, reaching a peak of 283.6 crore person days in 2009-10, a drought year as well as the year when elections to the Lok Sabha were held. Since 2009-10, however, the number of person days of employment under MGNREGS has declined steadily, falling to 219.4 crore person days in 2013-14. The number of days of employment per household rose from 43 days in 2006-07 to 54 days in 2009-10, but fell thereafter to 47 in 2010-11 and further to 43.2 in 2011-12 before rising to 46.2 in 2012-13 and falling marginally to 45.9 in 2013-14. The peak figure of 54 days in 2009-10 may reflect the fact already noted that this was a drought year as also the year of elections to the Lok Sabha. Thus, the quantum of employment provided per household obtaining MGNREGS employment has been consistently well short of the 100 days guaranteed in the Act. In every year of implementation of MGNREGA so far, less than 10% of the households registered under the scheme have got 100 days of employment.

The number of households provided employment rose from 2.1 crores in 2006-07 when only 200 districts were under the scheme to a peak of 5.49 crores in 2010 -11 when the scheme was implemented in 626 districts. Subsequently, it declined to 5.06 crores in 2011-12, 4.99 crores in 2012-13 and further to 4.78 crores in 2013-14.

The average daily wage was 65 rupees in 2006-07. It rose to 100 rupees in 2010-11 and to 132 rupees in 2013-14, thus doubling in nominal terms over the period 2006 to 2014. This was a period of rapid price rise, especially in food articles, and it is clear that the daily wage paid in MGNREGS on the average declined in real terms over this period.

Water conservation works have generally accounted for about half of all works under MGNREGS. Most of the work on MGNREGA (about 80 percent) relates to natural resource management like watersheds, rain fed area development etc. which in principle could address mitigation of climate change risks. Of the

2.7 million works being undertaken in over 600 districts, nearly 80 per cent are water, land and forestry-related.

Contrary to the popular perception that it is mostly women who seek employment under MGNREGA, it can be seen that a majority of workers receiving employment under the scheme are men. In 2006-07, the year the scheme was initiated, female person days accounted for 40% of total person days. This rose to 48% by 2008-09 and stayed there thereafter. The percentage of women to the total number of persons employed tended to fluctuate, but had reached the figure of nearly 48% by 2013-14, about the same as their share in person days of employment.[4]

The proportion of total person days of employment that SCs get has generally been between 25% and 30%. That of the STs has fallen from more than a third in the first year of the scheme to around one-fifth in recent years. SCs and STs together make up around two-fifths of all persons employed under MGNREGS and almost half of total person days of employment in MGNREGS. These proportions are significantly higher than their combined share in the population at about 26%, and reflect the fact that the scheme is pro-poor.

There is considerable variation across States in the effectiveness of implementation of MGNREGS. The average number of days of employment for households registered in the scheme in 2011-12 varied from less than 30 in Assam, Punjab and Uttar Pradesh to more than 85 in Tripura and Mizoram. Tripura recorded the highest figure in this respect in 2011-12 at 38%. There has been considerable fluctuation in performance across the years in several states. For instance, Rajasthan reported 85.4 days of employment per household in 2006-07, but only 52.25 days in 2011-12. Likewise, the proportion of households receiving 100 days of employment in Rajasthan under MGNREGS fell from 54% in 2006-07 to 10% in 2011-12, reflecting partly the extension of the scheme to all rural areas in the state.

There have been lacunae in the implementation of the scheme. Studies from Jharkhand, Bihar and Rajasthan have reported large scale lack of awareness about MGNREGA. Corruption has been one of the problems associated with MGNREGS implementation. Another is the lack of provision of work-site facilities mandated under the Act such as drinking water and on-site crèche, which especially inhibit the participation of women in the scheme. Sometimes, workers have to walk up to 5 km to reach the worksite.

Notwithstanding various limitations of the MGNREGS, studies have noted a positive impact of this scheme on household income, monthly per capita expenditure, and access to food of those employed under the scheme. Thus, Azam notes that 'MGNREGA has improved the situation of women workers by

4 It is also the case that the percentage of women to total employed in MGNREGS varies across the states considerably. There are states where women do form a much higher proportion of the total than men.

providing higher wages and more opportunities. This positive impact may well have longer term beneficial effects on social and economic dynamics in rural India.' (Azam, 2012) Bhargava notes that 'There is evidence so far that the rural poor's incomes are increasing, village infrastructure is improving, and agricultural wages are going up.' (Bhargava, 2014). Shah and Makwana (2011) note in a study of MGNREGS implementation in Gujarat done in 2009 that the landless and marginal farmers, the SCs, STs and OBCs and women were the sections for whom the MGNREGS was particularly helpful. While noting the generally positive impact of the employment provided by MGNREGS, Shah and Makwana also noted a number of aspects of the scheme that needed to be looked into to make the scheme more effective in terms of poverty reduction, enhancement of food security and creation of public assets of quality in rural areas. The scheme, it is clear from many field studies, has made a contribution in terms of poverty alleviation and food security. It has also been of particular value to SC and ST households in most states and to women in many. Research points to the role of MGNREGA in reducing distress rural migration to urban areas. It is a matter of some concern that the expenditure on the scheme has been declining in real terms in the period from 2010 onwards, that the specified wages are not being paid in several places and that there is inadequate monitoring of the process of creation of real assets. However, these concerns do not detract from the significant contribution that the scheme has made to food security for the rural poor.

1.3.3 The National Food Security Act

The Indian National Food Security Act (NFSA), 2013 was signed into law September 12, 2013. This law aims to provide subsidized food grains to approximately two thirds of the population. Under the provisions of the Act, beneficiaries can purchase 5 kilograms per eligible person per month of cereals at the following prices, to begin with: Rice at Rs.3 per kg, Wheat Rs 2 per kg coarse grains at Re.1 per kg. Pregnant women, lactating mothers, and certain categories of children are eligible for daily free meals. Some key features of the Act are:

- Nationally, 75% of rural and 50% of the urban population are entitled to five kg food grains per capita per month, subject to a maximum of 25 kg per household, at the following prices: Rs 3 per kg for rice, Rs.2 per kg for wheat and Re.1 per kg for millets. These prices are valid for three years from the date of the Act coming into force. Subsequently, the prices for each grain are to be fixed by the central government from time to time, subject to a maximum of half the minimum support price in force for the grain. The Central government will issue guidelines regarding eligibility, and states are responsible for determining beneficiaries in line with the guidelines.

- Pregnant women and lactating mothers are entitled to a nutritious "take home ration" of 600 Calories per day and a total maternity benefit of at least Rs.6,000 for six months. Children 6 months to 14 years of age are to receive free hot meals or "take home rations".

- The central government will provide funds to states in case of short supplies of food grains.
- The current food grain allocation of the states will be protected by the central government for at least six months.
- The state governments will provide a food security allowance to the beneficiaries in case of non-supply of food grains.
- The eldest woman in the household, 18 years or older, is the head of the household for the issuance of the ration card.
- There will be state- and district-level redress mechanisms.
- State Food Commissions will be formed for implementation and monitoring of the provisions of the Act.

The legislation marks a shift in addressing the problem of food security – from a welfare-based approach to a rights-based approach, though the rights are far from being absolute and the shift is only partial. About two thirds of the population is entitled to receive subsidized food grains under the targeted PDS (GoI, 2013). The standing committee on food, consumer affairs and public distribution of the Government of India (2012-13) estimated the annual expenditure at Rs.1,20,000 crore with total requirement of food grains of about 61.55 million tons. Some critics (S. Bhalla, 2013; A. Gulati et al, 2012; Prachi Mishra, 2013) have decried the legislation arguing that it will cost a lot more than the government has estimated. However, these claims have been effectively rebutted by A. Kotwal et al (2013) and by Sinha (2013). Sinha points out that the much higher estimates of the cost of implementing the NFSA arise from flawed assumptions and incorrect calculations. Her estimate of Rs.1.32 lakh crore rupees is close to the estimate of Rs.1.3 lakh crores provided by the then Union Minister for Food in 2013. Critics who feel that the Act does not go far enough have made the point that the Act does not provide for a universal PDS and that errors of exclusion will impair the provision of universal food security. Nevertheless, this legislation constitutes a move in the direction of greater food security. As Sinha (2013, p. 33) points out, 'Some of the poorer states will see a massive expansion in PDS. Assam, Bihar and Jharkhand will have coverage of about 85% of the population in rural areas under the NFSA, UP, Odisha and Madhya Pradesh around 80-82%.' Sinha also clarifies (Ibid, p. 33) that, 'The current procurement at about 30% of production is sufficient for the implementation of the NFSA. Even without including coarse cereals, the required procurement will not be higher than about 32% of production'.

However, the full impact will be felt in the years to come, and we are not in a position to analyse its actual impact at present.

1.4 Ongoing Schemes, 2006 -2014

Besides the new food security-related initiatives of NFSM, MGNREGA and the NFSA, a significant contribution to food security of the Indian people comes from schemes already in place in 2006 which have continued and have been strengthened , expanded or functioned better in this period. We discuss the three most important schemes in this regard below.

1.4.1 Public Distribution System

In 2006, there were 4,83,195 Public Distribution System (PDS) retail outlets catering to 22.45 crore card holders, of whom 9.49 crores were classified as Below Poverty Line (BPL) / Antyodaya Anna Yojana (AAY). By 2013, the number of outlets had increased to 5.15, 996 and the number of card holders to 24.28 crores, with11.14 crores of them being classified as BPL/AAY. The number of cards handled by a retail outlet rose marginally from 465 in 2006 to 471 in 2013. The number of BPL cards rose from 7.45 crores in 2006 to 8.71 crores in 2013 while the corresponding figures for Above Poverty Line (APL) cards were 12.95 crores and 13.14 crores respectively. By and large, the number of outlets seems to have kept pace with the growth in the number of ration card holders, but the growth in the number of BPL card holders at a little over one-sixth between 2006 and 2013 is much higher than the growth in the number of retail outlets over the same period at just about 6%. There is a need to increase the number of retail outlets, and to ensure that, across the country, there is retail outlet which can be easily reached by a household in all rural areas.

With the growth in production of cereals picking up since 2004-05, there has been a steady increase in procurement of grains and consequently in the availability of grains for the PDS. Procurement of cereals (rice, wheat and coarse cereals) rose from 35.9 million tonnes (MTs) in 2000-01 to nearly twice this figure at 70.6 MTs in 2012-13. Annual procurement averaged 61.38 MTs between 2008-09 and 2012-13, as against 39.2 MTs between 200-01 and 2004-05. As percentage of production, procurement rose from an average of about 21% of production in 2001-04 to an average of 27% during 2010-13. With expansion in food security programmes, off-take of rice and wheat also rose steadily.

The off-take of rice and wheat from the PDS rose substantially from 31.37 MTs in 2006-07 to 44.88 MTs in 2012-13, with the off-take of rice nearly doubling from 10.25 MTs to 19.65 MTs. The off-take on account of BPL, which was averaging 16 MTs per annum in the period from 2003-04 to 2005-06, rose to an average of 17.6 MTs per annum in the period 2010-11 to 2012-13. But there was a dramatic increase in the off-take on account of APL cards from around 6.4 MTs per annum during 2003-04 to 2005-06 to nearly 16 MTs per annum from 2010-11 to 2012-13. This reflects the price differential between rising open market prices and stable APL prices of rice and wheat as well as better functioning of PDS. However, the ten %increase in the amount of BPL off-take of food grain is less than the one-sixth

increase in the number of BPL cards, which is a matter for some concern. The off-take on account of the AAY, meant for the poorest households, rose from 5.6 MTs in 2003-06 to 9.8 MTs in 2010-13.

With rising procurement and off-take of cereals through the PDS, the PDS has come to play an increasingly important role in household cereal consumption. As Khera and Dreze (2013, p. 55), 'With market prices of PDS commodities (mainly wheat and rice) going up year after year, and issue prices being kept unchanged or even reduced in some states, the implicit value of PDS entitlements has substantially increased. Further, the functioning of the PDS has improved in many states in recent years'.

The data from the national sample surveys of the 61st and 66th rounds presented in Tables 1.4 and 1.5 show the percentages of households that report consumption of rice and wheat respectively from PDS for 2004-05 and 2009-10 respectively. While the overall picture for 2004-05 has been supplemented by a more disaggregated presentation of the percentages for three groups - the bottom three deciles, the middle four deciles and the top three deciles - separately, such a disaggregation for 2009-10 was not possible in view of the absence of the necessary data.

One can see that there is a big increase overall in the percentage of households reporting consumption of rice from PDS from 24.4% in 2004-05 to 39.20% in 2009-10. It is reasonable to assume that in states showing significant increase in overall percentage, the increase would have very likely occurred across all three grouped-decile categories.

Table 1.4: Percentage of Rural Households Reporting Consumption of Rice from PDS, India and Major States, 2004 – 05 and 2009-10

States	2004-05				2009-10
	Bottom 30%	Middle 40%	Top 30%	All	All
Andhra Pradesh	69.43	70.76	49.60	62.20	83.90
Assam	21.30	9.67	3.33	9.00	29.80
Bihar	1.24	0.88	0.58	1.00	12.20
Chhattisgarh	28.63	16.87	10.45	21.70	67.40
Gujarat	49.75	38.64	19.46	31.50	33.80
Haryana	0.00	0.00	0.10	0.10	7.22
Himachal Pradesh	70.42	60.71	43.61	50.00	81.60
Jharkhand	8.08	2.46	0.44	4.40	26.40
Jammu and Kashmir	69.95	39.07	26.53	30.80	58.10
Karnataka	79.30	56.58	40.12	58.50	74.60
Kerala	67.93	52.25	26.93	34.60	54.30
Madhya Pradesh	26.38	14.43	6.62	17.90	23.00
Maharashtra	39.93	28.52	17.64	27.50	46.80
Orissa	31.91	10.89	3.56	21.50	51.60
Punjab	0.00	0.00	0.10	0.10	0.17
Rajasthan	0.00	0.00	0.06	0.00	0.39

Tamil Nadu	88.95	88.15	62.23	78.90	91.00
Uttar Pradesh	11.12	4.31	2.89	5.80	21.10
West Bengal	22.50	13.68	6.09	12.80	25.70
All India	**30.94**	**25.43**	**18.19**	**24.40**	**39.20**

Source: NSS Report 510 (GoI, 2007) and NSS Report 545 (GoI, 2010).

The picture across the major states is one of improvement in most states in the percentage of households reporting rice consumption from PDS. Leaving out Punjab and Rajasthan, both States where wheat is the grain of choice, the least improvement is in Gujarat where the percentage increase is from 31.5% to 33.5%. Interestingly, Haryana shows a noticeable increase in the percentage of households reporting consumption of rice from PDS 0.10 in 2004-05 to 7.22 in 2009-10, not far behind Bihar where rice is a main staple at 12.2% in 2009-10, itself up from 1.0% in 2004-05. The highest increase is in Chattisgarh from 21.7% to 67.4%, reflecting both a vastly improved and more inclusive PDS and the general impact, valid across the country, of a sharp rise in open market prices of rice. In both periods, Tamil Nadu reports the highest percentage of households reporting consumption of rice from PDS followed by Andhra Pradesh. In 2009-10, however, Himachal Pradesh had almost caught up with Andhra Pradesh. Karnataka was in the fourth place in 2009-10. Besides Chattisgarh, Jharkand, Jammu and Kashmir, Odisha and Maharashtra also show impressive increases.

As with rice, there is a significant rise in the overall proportion of rural households reporting consumption of wheat from the PDS. The percentage rises from 11.42 in 2004-05 to 27.60 in 2009-10.

Table 1.5: Percentage of Rural Households Reporting Consumption of Wheat from PDS, 2004-05 and 2009-10

State	**2004-05**				**2009-10**
	Bottom 30%	**Middle 40%**	**Top 30%**	**All**	
Andhra Pradesh	3.14	2.97	1.72	2.24	1.70
Assam	0.00	0.19	0.63	0.36	1.20
Bihar	2.04	1.94	0.66	1.76	12.70
Chhattisgarh	3.65	6.59	7.75	5.30	27.50
Gujarat	48.92	34.59	18.48	29.80	34.50
Haryana	9.21	7.11	2.19	3.97	20.30
Himachal Pradesh	45.92	30.21	17.48	23.15	75.80
Jharkhand	6.72	2.64	2.91	4.30	25.20
Jammu and Kashmir	59.85	35.67	18.71	24.80	46.70
Karnataka	78.27	57.18	41.21	59.30	68.20
Kerala	41.92	28.23	17.42	19.71	32.80
Madhya Pradesh	26.24	18.17	7.02	19.44	45.70
Maharashtra	44.28	30.45	17.83	28.96	44.20
Orissa	0.64	0.67	0.31	0.56	5.20

Punjab	1.02	0.53	0.15	0.30	28.80
Rajasthan	27.17	17.23	7.17	14.13	17.90
Tamil Nadu	40.15	32.45	26.77	30.17	57.30
Uttar Pradesh	10.11	4.05	2.71	5.41	21.20
West Bengal	24.53	15.85	8.77	14.42	33.10
All India	**15.10**	**12.01**	**8.01**	**11.42**	**27.60**

Source: NSSO Reports No. 510 and 545, GoI, (2007, 2010).

Again, as with rice, the picture in the case of wheat is also one of a general increase across all states. The exception is Andhra Pradesh, where rice and not wheat is the grain of choice of most of the people. Assam with a very small increase from a very low base is like Andhra in this regard. Particularly impressive are the increases recorded by Himachal Pradesh, followed by Madhya Pradesh. Chattisgarh, Jharkhand, Haryana, Punjab and Tamil Nadu have also shown significant increases in the share of households reporting consumption of wheat from PDS.[5] The lowest increase among major wheat consuming states is in Rajasthan.

Tables 1.6 and 1.7 present the data on the share of PDS rice and wheat respectively in total consumption of these grains in India and its major states.

Table 1.6: Percentage of PDS rice in total Rice Consumption of Rural Households, 2004–05 and 2009-10, India and Major States

States	**2004-05**				**2009-10**
	Bottom 30%	**Middle 40%**	**Top 30%**	**All**	
Andhra Pradesh	45.95	42.60	34.04	40.18	32.90
Assam	17.69	8.87	3.26	8.33	11.20
Bihar	1.23	0.88	0.58	1.00	5.10
Chhattisgarh	23.76	15.37	9.72	18.92	41.20
Gujarat	39.66	31.55	18.34	27.32	20.30
Haryana	0.00	0.00	0.12	0.12	0.50
Himachal Pradesh	65.97	56.23	42.77	48.08	44.82
Jharkhand	7.58	2.42	0.46	4.29	14.00
Jammu and Kashmir	67.79	33.20	23.90	27.35	50.89
Karnataka	63.37	45.96	36.02	48.51	45.00
Kerala	55.77	38.12	22.38	27.93	27.90
Madhya Pradesh	28.60	16.87	8.30	20.53	20.10
Maharashtra	40.03	27.98	17.79	27.39	34.20
Orissa	24.85	10.08	3.57	18.20	24.80
Punjab	0.00	0.00	0.13	0.14	0.10
Rajasthan	0.00	0.00	0.12	0.00	0.30
Tamil Nadu	51.88	49.49	40.45	47.02	52.70
Uttar Pradesh	10.90	4.41	3.02	5.89	17.60

5 Rahman (2014) notes that, 'in 2004-05, 24 percent of the households reported consumption of rice from the PDS while 11 percent of the households purchased wheat from the PDS. In 2011-12, it increased to 46 and 34 for rice and wheat respectively suggesting that the access to PDS has increased.' Thus, the improvement in PDS has continued for rice, but there is a small setback in the case of wheat.

West Bengal	18.65	12.14	5.85	11.50	6.30
All India	**27.31**	**22.90**	**17.28**	**22.24**	**23.50**

Source: NSSO Report No. 510, 545, GoI, 2007, 2010

While the overall picture for 2004-05 has been supplemented by a more disaggregated presentation of the percentages for three groups - the bottom three deciles, the middle four deciles and the top three deciles - separately, such a disaggregation for 2009-10 was not possible in view of the absence of the necessary data.

Table 1.7: Percentage of PDS wheat in Total Wheat Consumption of Rural Households, 2004 – 05 and 2009-10, India and Major States

States	**2004-05, Bottom 30%**	**2004-05, Middle 40%**	**2004-05, Top 30%**	**2004-05 ALL**	**2009-10 ALL**
Andhra Pradesh	0.30	0.69	0.69	0.60	5.10
Assam	0.00	0.10	0.42	0.20	1.50
Bihar	1.97	1.89	0.63	1.70	5.10
Chhattisgarh	18.55	16.75	14.99	16.77	39.10
Gujarat	43.79	37.22	16.60	28.70	15.60
Haryana	8.99	7.35	2.19	4.00	14.20
Himachal Pradesh	56.30	33.21	17.81	24.40	46.34
Jharkhand	10.09	3.50	3.89	6.01	20.60
Jammu and Kashmir	51.14	23.37	11.02	15.20	37.18
Karnataka	63.24	43.99	30.04	45.60	51.40
Kerala	12.54	12.95	12.02	12.20	39.70
Madhya Pradesh	28.17	18.77	7.06	20.30	21.80
Maharashtra	36.45	27.88	16.31	25.80	32.70
Orissa	0.11	0.33	0.24	0.20	17.00
Punjab	1.02	0.53	0.15	0.30	14.60
Rajasthan	23.00	15.24	6.69	12.70	10.50
Tamil Nadu	5.91	7.62	12.20	8.90	85.80
Uttar Pradesh	10.96	4.15	2.72	5.60	6.80
West Bengal	12.60	9.72	6.15	9.00	41.40
All India	**14.64**	**11.68**	**7.58**	**11.00**	**14.60**

Source: NSSO Report No. 510, 545, GoI, 2007, 2010

At the all India level, it appears that, in contrast to the share of households reporting consumption of rice from PDS which showed a significant rise between 2004-05 and 2009-10, the share of PDS in total rice consumption has increased only marginally between 2004-05 and 2009-10. However, this appearance of a marginal increase overall conceals the significant increases in some states which have been offset by declines in other states. Chattisgarh and Jammu and Kashmir show considerable increase in the share of PDS rice in total rice consumption, while Tamil Nadu (from an already higher level than all other states),

Maharashtra and Odisha show modest increases. States like UP and Jharkhand have shown significant improvement, starting from low initial values. Assam shows a modest rise from a low initial value. Three states where rice is a major staple – Andhra Pradesh, Gujarat and West Bengal – show significant declines. Karnataka and Himachal Pradesh show small declines in 2009-10 from relatively high shares in 2004-05.

In 2009–10, Tamil Nadu reports the highest share of PDS rice in total rice consumption at 52.7%, followed by Jammu and Kashmir and Karnataka. Punjab, Haryana and Rajasthan remain almost entirely non-rice consuming states. It is clear that in states such as Tamil Nadu and Chattisgarh, where state governments have taken the initiative to make PDS rice more accessible to the poor by appropriate policies, the share of PDS in total rice consumption has increased over the years.

As with rice, the overall increase in the share of PDS in household wheat consumption is modest at 3.6 percentage points, distinctly higher than in the case of rice, but not by a great deal. Again, this conceals important inter-state differences. Traditionally rice consuming states like Tamil Nadu, Kerala and West Bengal have shown a big rise on the share of PDS in total wheat consumption, but the average quantities consumed would of course be comparatively lower in these states. Some wheat consuming states, like Punjab and Haryana, have shown impressive growth, but starting from low initial values. Chattisgarh, Jharkand, Jammu and Kashmir and Himachal Pradesh have shown large increases. But Rajasthan shows a fall from an already modest level while Gujarat shows a steep decline. Madhya Pradesh shows the least change. Andhra Pradesh, Assam and Bihar report low shares of PDS in total wheat consumption. The large state of Uttar Pradesh shows only a very modest increase in the share of PDS in total wheat consumption of households.

The overall trend, between 2004-05 and 2009-10, of PDS becoming a more important contributor to total household cereal consumption, especially of rice and wheat, seems to have been sustained in the period since then. As Rahman (2014) notes, 'Notable is the lower consumption from other sources for both rice and wheat from 2004-05 to 2011-12 implying a greater reliance on the PDS. This can be explained by a greater access to PDS and a rise in the prices in the open market while the PDS prices have gone down during the same period'.

The conclusion arrived at by Dreze and Khera (2013, p. 59) that there is '…clear evidence that India's public distribution system now has a significant impact on rural poverty. The impact is particularly large in states with a well-functioning PDS, reinforcing recent evidence of the fact that the PDS is now an important source of economic security for poor people in many states.' seems eminently valid. But, as they also point out, '..in 2009-10, the PDS still had very little impact on rural poverty in a number of large states such as Bihar, Jharkhand, Uttar Pradesh and West Bengal where PDS reforms are long overdue.' (Ibid, p. 59)

Overall, since 2004-05, in an economic environment of rapidly rising open market prices of cereals such as rice and wheat, especially since 2009, the PDS has been clearly a crucial contributor to household food security. The fact that the share of PDS in household wheat/rice consumption has risen most rapidly in states such as Chattisgarh, Tamil Nadu, Himachal Pradesh and Jharkand, all of which have expanded the PDS in an inclusive manner, strengthens the argument for a universal PDS.

1.4.2 Mid Day Meals Scheme

Originally known as the National Programme of Nutrition Support to Primary Education (NPNSPE) when it was initiated in the mid 1990s, drawing on the successful mid-day meals scheme of the state of Tamil Nadu, the scheme is now popularly known as the Mid Day Meals Scheme, abbreviated as MDMS. It was launched as centrally sponsored scheme in August 1995, initially covering 2408 panchayat unions in the country.[6] Its rapid expansion across the country has been followed a series of orders from the Supreme Court of India, beginning with its order of 28 November 2001, directing all state governments to introduce cooked mid-day meals in primary schools.[7] By 2004, about 50 million children were receiving cooked meals in government and government-aided schools.

The rationale for the MDMS went beyond the objectives of increasing school enrolment and attendance and meeting a part of the food and nutrition requirements of children. As a document of the government of India observed in 2006, "There is also evidence to suggest that apart from enhancing school attendance and child nutrition, mid-day meals have an important social value and foster equality. As children learn to sit together and share a common meal, one can expect some erosion of caste prejudices and class inequality. Moreover, cultural traditions and social structures often mean that girls are much more affected by hunger than boys. Thus the mid-day meal programme can also reduce the gender gap in education, since it enhances female school attendance" (GoI, 2006). In this *Report*, we are of-course primarily concerned with the role of MDMS in enhancing food security.

From April 1, 2008, the programme covers all children studying in Government, Local Body and Government-aided primary and upper primary schools and the EGS/AIE centres including Madarsa and Maqtabs supported under SSA of all areas across the country. It was estimated that 84.1 million children in primary education (classes 1 to 5) and 33.6 million children in upper primary education (classes 6 to 8) -

6 Data from the file 'About MDM' accessed at www.mdm.nic.in

7 The Court Order stated, inter-alia: "Cooked mid-day meal is to be provided in all the government and government aided primary schools in all the states. In states, where the scheme is not operational, it is to be started in half the districts of the state (by order of poverty) by Feb 28th, 2002. By May 28, 2002, it is to be started in the rest of the districts too." Later, the Court went further. See MSSRF(2011)

a total of 117.7 million children - benefited from MDM Scheme during 2009-10. The coverage has risen further since then. Most of the children covered under MDM receive hot cooked meals in school premises. The number of children receiving such meals was 107 million in 2013-14. Over the recent years, the infrastructure for the scheme has been strengthened with substantial funding from the central government and some spending by the state governments as well. In 2013-14, there were 6.72 lakh kitchen- cum-stores to ensure provision of hygienic meals. The scheme employed a total of 2.55 million cooks-cum-helpers drawn mostly from among SCs/STs/OBCs.

Some basic data on the central government expenditure on the scheme as it has evolved is shown in Table 1.8.

Table 1.8: Union Government Allocation for Mid Day Meal Scheme, 2007-08 to 2013-14

Year Wise Outlay under Mid Day Meal Scheme (Rs. in Crores)			
Year	**Budget Estimate**	**Revised Estimate**	**Releases**
2007-08	7324.00	6678.00	5835.44
2008-09	8000.00	8000.00	6539.52
2009-10	8000.00	7359.15	6937.79
2010-11	9440.00	9440.00	9128.44
2011-12	10380.00	10239.01	9901.91
2012-13	11937.00	11500.00	10867.90
2013-14	13215.00	12189.16	10927.21

Source: website www.mdm.nic.in

While the revised estimates have fallen consistently short of budget estimates – an unusual phenomenon for government expenditure! –and releases have been lower than the revised estimates,, possibly reflecting problems related to implementation, it is still true that there has been a substantial increase in central government expenditure on MDMS, in excess of 80%, between 2007-08 and 2013-14. Even allowing for inflation, this would constitute an increase in real terms. Over the same period, most state governments have also increased funding for the scheme. The fact that the number of children covered under the scheme more than doubled between 2004-05 and 2009—10 and has increased further since then shows that the scheme has been expanding, and that it is making an important contribution to improving food security of the more vulnerable sections of the population who are more likely to attend government and government-aided schools than unaided private schools. Besides expanded coverage, with the inclusion of children in upper primary classes and improved infrastructure in terms of cooking and storage facilities, there have also been significant improvements in the quality and the nutritional values of the food being served in schools under this scheme. It is still the case that the scheme needs to be strengthened financially to ensure that the staff employed in the scheme are reasonably paid, the infrastructure upgraded and out-of-school children covered.

Nevertheless, as with PDS, there has been both significant expansion and improvement in delivery mechanisms, planning, concurrent monitoring and evaluation and implementation. There are continuing lacunae in terms of streamlining timely flow of funds to the state governments and down below to the implementing entities on the ground, ensuring hygiene, overcoming social discrimination practices, enhancing community involvement and other aspects of implementation. However, we can still conclude that the MDMS has, in the last decade, helped enhance food security for vulnerable sections of the population to a significant extent.

1.4.3 Integrated Child development Services Scheme

The Integrated Child Development Services (ICDS) Scheme, an important nutrition intervention based on the life cycle approach to food and nutrition security, was launched nearly forty years ago in 1975. As the official website of the department of women and child development **(http://wcd.nic.in/icds.htm)** tells us, its objectives were:

i. to improve the nutritional and health status of children in the age-group 0-6 years;
ii. to lay the foundation for proper psychological, physical and social development of the child;
iii. to reduce the incidence of mortality, morbidity, malnutrition and school dropout;
iv. to achieve effective co-ordination of policy and implementation amongst the various departments to promote child development; and
v. to enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

These objectives are to be achieved by providing a set of services: supplementary nutrition, immunization, health check-up, referral services, pre-school non-formal education and nutrition & health education.

Starting from a modest beginning in 1975, the ICDS has been expanded considerably, especially in the last ten years or so, again fuelled in part by the directives of the Supreme Court. In its order of November 2001, the Supreme Court said: 'An *anganwadi* must be provided in each settlement and every child under six, adolescent girl, pregnant woman and lactating woman is entitled to supplementary nutrition under ICDS as per prescribed norms.' In its order of April 29, 2004, the Court said: 'All sanctioned anganwadis to be made fully operational immediately and supplementary nutrition to be served for a minimum of 300 days.' In a far reaching order dated December 2006, the Supreme Court stated, in effect, the following:[8]

- Government of India shall sanction and operationalize a minimum of 14 lakh Anganwadi Centres (AWCs) in a phased and even manner starting forthwith and ending December 2008. In

8 http://www.righttofoodindia.org/icds/icds_orders.html

doing so, the Central Government shall identify SC and ST hamlets/habitations for AWCs on a priority basis.

- Government of India shall ensure that population norms for opening of AWCs must not be revised upward under any circumstances. While maintaining the upper limit of one AWC per 1000 population, the minimum limit for opening of a new AWC is a population of 300 may be kept in view. Further, rural communities and slum dwellers should be entitled to an "Anganwadi on demand" (not later than three months) from the date of demand in cases where a settlement has at least 40 children under six but no Anganwadi.

- The universalisation of the ICDS involves extending all ICDS services (Supplementary nutrition, growth monitoring, nutrition and health education, immunization, referral and pre-school education) to every child under the age of 6, all pregnant women and lactating mothers and all adolescent girls.

The series of proactive Supreme Court orders, essentially strengthening a rights-based approach and the change in government in India in 2004 which led to the adoption of a national common minimum programme that included commitment to welfare initiatives provided an environment in which the ICDS scheme was expanded rapidly. With expansion of the ICDS scheme, there was a significant increase in the budgetary allocation for it from Rs.10391.75 crore in 10th Five Year Plan (2002-2007) to Rs.44,400 crore (2007 – 2012) in XI Plan Period. From 4608 projects and 5,45,714 operational AWCs at the end of March, 2002, the ICDS expanded to 6719 projects and 12,41,789 AWCs by the end of December 2010. The number of beneficiaries receiving supplementary nutrition rose, in millions, from 37.51at the end of March 2002 to 91.87 at the end of December 2010. The number of pre-school education beneficiaries more than doubled over the same period from 16.66 million to 35.50 million. In 2013-14, the number of projects rose to 7076 and the number of AWCs to 1.4 million. The number of children benefiting from the scheme aged 6 months to 3 years reached 46 million, the number aged 3 to 6 years reached 38.1 million and the number of pregnant and lactating women benefiting from the scheme reached the figure of 19.1 million, making the total number of beneficiaries 103.2 million. Essentially, the number of AWCs has doubled between 2005 and 2014, enabling the target of universalization to be reached in terms of the number of AWCs.

While there has been significant physical expansion and increase in the number of beneficiaries, critics have pointed out several weaknesses in the scheme. Thus, the Working Group for Children Under Six of the Right to Food Campaign and *Jan Swasthya Abhiyan*, in its publication of April 2012, states as follows: 'Currently, it is seen that the ICDS has poor infrastructure, is under-staffed and under-resourced. This has resulted in neglect of children under two years of age who are mostly at home, and not reached by the ICDS. On the other hand, although there is a better coverage of children in the age group of 3 to 6 years, the quality of services provided to them (especially pre-school education) has been very poor.' The

budgetary allocations have been inadequate in relation to the requirements of 'universalization with quality', of which the Supreme Court spoke and for which it laid down certain norms.

Notwithstanding such problems in implementation as may exist on the ground, such as, for instance lacunae in physical infrastructure or human resources, the scale of expansion of the ICDS in physical and financial terms in the period since 2006 has been significant. It is beyond the scope of this Report to go into a detailed evaluation of ICDS performance across the country. We therefore confine ourselves to the limited inference, from the scale of expansion of ICDS and the putting in place of more effective monitoring systems over the years, that the ICDS would have played a significant role in enhancing food security in the period since 2006.

1.5 Conclusion

It is clear that the period since 2006 has seen a number of new interventions intended to enhance food and nutrition security in India. These include, most importantly, the following:

- MGNREGA which improved the access dimension of food security by generating employment and income for the rural population, and could in principle improve availability and absorption dimensions, if the assets created by the MGNREGS are of the appropriate kind and quality.
- NFSA, which has established a rights-based food security policy framework, with the potential to enhance food and nutrition security significantly in the future.
- NFSM, which has as its main focus increasing the domestic availability of cereals and pulses, specifically rice, wheat and pulses, by enhancing productivity.

In the period since 2006, which was our focus since food security policy interventions up to 2006 had been dealt with in greater detail in an earlier work that we had summarized in section 1.2 above, we found that both MGNREGS and NFSM had played important roles in enhancing food security by improving both availability and access dimensions of food security. Besides, the interventions that were already present in the period before 2006, namely the PDS, the MDMS and the ICDS, have been strengthened in the period from 2006 to 2014 through enlarged financial allocations and more effective functioning mechanisms. On balance, then, we can conclude that while enormous challenges remain in addressing India's food and nutrition security requirements, the period since 2006 has seen some progress in terms of inputs. However, this view must be qualified. The progress in terms of provision of various policy inputs and interventions backed up by financial allocations and implementation mechanisms need not translate automatically into better nutritional status of the population. Ideally, we should have nutritional outcome indicators for the most recent period in order to address this question. Unfortunately, we do not have such indicators after the third National Family Health Survey (NFHS) of 2005-06. However, we have some limited data on three input indicators used in the food insecurity index developed in the Report on Food Insecurity in Rural India for the period since 2006. One relates to the percentage of rural

population consuming less than 1890 kilocalories per consumer unit per day, an indicator that seeks to capture the access dimension of food security. A second indicator is the percentage of rural households with access to a safe source of drinking water. The third is the percentage of rural households without access to a toilet. These two relate to the absorption dimension of food security. The data relating to these two indicators are shown in Tables 1.10 and 1.11. Table 1.9 presents data for 2004-05 and 2009-10, drawn from the NSS, in this regard.

Table 1.9: Percentage of Population Consuming less than 1,890 Kcal/cu/day (Rural, 2004 – 05, 2009-10), India and Major States

States	2004 – 05 (61st round)	2009-10 (66th round)
Andhra Pradesh	12.5	8.8
Assam	8.9	10.8
Bihar	10	15.5
Chhattisgarh	16.2	18.1
Gujarat	17.1	11.1
Haryana	7.8	9
Himachal Pradesh	2.8	0.2
Jammu and Kashmir	2.4	0.2
Jharkhand	13.8	16.9
Karnataka	20.5	13.6
Kerala	17.5	14.6
Madhya Pradesh	16	17.6
Maharashtra	19.7	6.6
Orissa	15.4	7.4
Punjab	6.4	6.3
Rajasthan	5.2	5.3
Tamil Nadu	23.4	16.7
Uttar Pradesh	8	9.6
West Bengal	11.9	16.4
All India	**13.2**	11.6

Source: National Sample Survey (2010), Report 540.

Despite several food security interventions in the period since 2005, the picture in respect of the input indicator of percentage of rural population consuming less than 1890 kilocalories per consumer unit per day is a mixed one. Comparing 2004-05 with 2009 -10, we find that there is a marginal decline from 13.2% to11.6% at the All India level in this proportion, indicating a marginal improvement in terms of this indicator of food security. The states of Maharashtra, Odisha, Tamil Nadu, Karnataka, Kerala, Gujarat and Andhra Pradesh have shown significant decline in the proportion. However, the situation has worsened significantly in states such as Bihar, West Bengal and Jharkand. In other states such as Chattisgarh, Assam, Haryana Uttar Pradesh and Madhya Pradesh, there is a marginal worsening.

Table 1.10 provides data from the Census of India on the second input indicator, namely the percentage of rural households without access to safe drinking water, for India and it major States, for the years 2001 and 2011. It is clear that there is a substantial reduction in the percentage of rural households without access to safe drinking water, at the All India level and in practically all the states. While the data does not tell us about the adequacy and quality of water availability at the household level, it does show distinct improvement between 2001 and 2011. In respect of this indicator relating to absorption or biological utilization of food, we can say that there is some improvement in food security across the country in the last decade or so.

Table 1.10: Percentage of Rural Households without access to safe drinking water, 2001 and 2011, India and Major States

States	2001	2011
Andhra Pradesh	23.1	9.5
Assam	43.2	30.1
Bihar	13.9	6
Chhattisgarh	33.8	13.7
Gujarat	23.1	9.7
Haryana	18.9	6.2
Himachal Pradesh	12.5	6.3
Jammu and Kashmir	45.1	23.2
Jharkhand	64.5	39.9
Karnataka	19.5	12.5
Kerala	83.1	66.5
Madhya Pradesh	38.5	22
Maharashtra	31.6	16.6
Orissa	37.1	24.7
Punjab	3.1	2.4
Rajasthan	39.6	21.9
Tamil Nadu	14.7	7.5
Uttar Pradesh	14.5	4.9
West Bengal	13	7.8
All India	**26.8**	**14.5**

Source: Census of India

Table 1.11 presents the data in respect of rural households not having access to a toilet, for India and its major states, for the Census years 2001 and 2011.

Between 2001 and 2011, there is a significant decline in the percentage of rural households without access to a toilet within the premises. The decline is across the board, being true for all major states. Kerala continues to be the best performing state in this regard in 2011 as well as in 2001. While the improvement in respect of this indicator of the absorption dimension of food security is to be noted, it is disturbing that more than half the rural households did not have access to a toilet within the premises even in 2011.

Table 1.11: Percentage of Rural Households not having access to a toilet within the premises, 2001 and 2011, India and Major States

State	2001	2011
Andhra Pradesh	81.85	50.4
Assam	40.43	35.1
Bihar	86.09	76.9
Chhattisgarh	94.82	75.4
Gujarat	78.35	42.6
Haryana	71.34	31.4
Himachal Pradesh	72.28	30.9
Jammu and Kashmir	58.2	48.8
Jharkhand	93.43	78
Karnataka	82.6	48.8
Kerala	18.67	4.8
Madhya Pradesh	91.06	71.2
Maharashtra	81.79	46.9
Orissa	92.29	78
Punjab	59.09	20.7
Rajasthan	85.39	65
Tamil Nadu	85.64	51.7
Uttar Pradesh	80.77	64.3
West Bengal	73.07	41.1
All India	**78.08**	53.1

Source: Census of India

Our review of government interventions relating to food security during the period since 2006 and of the effects of the ongoing schemes, based on available secondary data, provide a picture of expanded financial allocations, improvements in physical infrastructure and sizeable increases in the population served by various schemes. While this is a positive feature, the limited evidence on input indicators of food security such as the proportion of the rural population not meeting specified calorie needs, proportion of rural households having access to safe drinking water and the proportion of rural households having a toilet within the premises, for India and its major States, gives us a mixed picture. There is modest improvement in the indicator relating to inadequate calorie intake at the national level, with some states doing better, but also some states showing a worsening between 2004-05 and 2009-10. One must also keep in mind that 2009-10 was a drought year. There was greater improvement in respect of the other two indicators of access to safe drinking water and to toilets within premises. Overall, it seems fair to conclude that progress has been made in tackling the challenge of food insecurity in rural India, but that huge challenges remain. The other sobering conclusion is that there is uneven progress across states, with states such as Bihar, Jharkand, Rajasthan, Madhya Pradesh and Uttar Pradesh lagging. We turn now to the second part of this Report that deals with the situation in the states of Tamil Nadu, Kerala and Odisha.

Part-2

Section 1- Tamil Nadu

2.1.1 Introduction

Some basic demographic data on Tamil Nadu is provided in Table II.1.1 below:

Table 2.1.1: Tamil Nadu – Some Basic Demographic Information, 2001 and 2011

Description	2011	2001
Population	**72,147,030**	**62,405,679**
Share of Urban Population in Total	**48.45%**	**44.04%**
Decadal Population Growth	**15.61%**	**11.19%**
State Population as% Indian Population	**5.96%**	**6.07%**
Sex Ratio, females per 1000 males	**996**	**986**
Child Sex Ratio, No. of girls per 1000 boys in the 0-6 years age group	**943**	**959**
Density/km2	**555**	**480**
Area in km2	**130,060**	**130,058**
Total Child Population (0-6 Age)	**7,423,832**	**7,235,160**
Literacy Rate, in the age group 7 years and older	**80.09%**	**73.45%**
Male Literacy Rate in the age group 7 years and older	**86.77%**	**83.28%**
Female Literacy Rate in the age group 7 years and older	**73.14%**	**64.91%**

Source: Census of India, 2001 and 2011

The provisional population figure from the 2011 population Census of India, for the state of Tamil Nadu, located in the southern peninsula of India, stands at 72.15 million persons. . This makes the State comparable in terms of population to Germany and the United Kingdom. Being a constituent State within the Indian Union, however, the State has limited policy space. Nevertheless, there is some scope for experimenting and innovating, and for setting and implementing policy priorities.

Among the Indian States, Tamil Nadu is one of the better performers in respect of human development. The state's literacy rate in 2011, measured as the percentage of population aged 7 years and above that is literate, is about 80% (India: 74.4%), the third highest among major States. . While male literacy rate is higher at 86.8% (India: 82.1%), the female literacy rate is 73.9% (India: 65.5%). The urban literacy rate at87.24% is higher than the rural rate at 73.8%, a large gap, but one that has been declining in recent decades. The State has the highest percentage of urban population to total among the major Indian States at 48.5%.

The State of Tamil Nadu has been a pioneer among Indian States with regard to food security initiatives by the government. Take, for instance, the issue of school feeding. School meals were introduced in 1956. The coverage expanded with public and private contributions, both from within the State and from outside. These early efforts, while laudable, were not sustainable. They were not integrated into the education and social policies of the government. Things changed dramatically in 1982 when the government started the noon meal scheme. As has been noted, 'The introduction of the noon meal scheme in 1982 was a watershed which marked the beginning of a continuous expansion to the pre-school ages, moving towards universalization, provision of dedicated staff and infrastructure, systematic training, and budgeting for recurring and non-recurring expenses'.[9] The experience of Tamil Nadu with the mid-day meal scheme of school feeding that provided the inspiration for the National Programme of Nutritional Support to Primary Education (NPNSPE) and this has grown into the much larger nation-wide MDMS today.

The Government of Tamil Nadu has opted to keep the PDS universal, although the government of India follows the policy of targeted PDS. It provides every ration card holding household a maximum of 20 kilograms of rice a month free of cost. It also provides limited additional quantities of rice at 20 rupees a kilo, well below open market prices It has also, more recently, introduced innovative food security measures such as state-run subsidized canteens in its municipal corporations and procuring vegetables in bulk through the cooperatives and selling them at affordable prices in the capital city of Chennai. The government also provides some essential articles other than rice and wheat, such as oil, pulses and kerosene at subsidized prices in specified limited quantities. The MDMS run in Tamil Nadu has been commended for several best practices. The state also runs the ICDS, not merely with central funds, but with additional inputs from the state government.

In what follows, we briefly review the major food security interventions of PDS, MDMS, ICDS, MGNREGS and NFSM in Tamil Nadu.

2.1.2 Public Distribution System in Tamil Nadu

Tamil Nadu follows a universal PDS to ensure that genuinely poor households do not get excluded from the PDS owing to administrative errors in enumeration of families BPL. The PDS in Tamil Nadu is administered by the Civil Supplies and Consumer Protection (CCS&CP) Department. The Tamil Nadu Civil Supplies Corporation (TNCSC) acts as the facilitator in procurement and storage. The fair price shops (FPS) in the State, which constitute the PDS retail outlets, are run mostly by the Cooperatives (95 percent) and TNCSC and women SHGs.

9 Anuradha Khati Rajivan (2006)

Fair Price Shops

Presently there are 33,407 Fair Price shops serving 1.95 crore families in the state (Table 2.1.2).On an average, each fair price shop serves 585 cards which is higher than the national average of 471 cards per shop in 2013.[10] Compared to 2007, there is an increase in the number of outlets as well as a reduction in the number of cards per outlet. To improve accessibility to PDS, it is necessary that the PDS retail outlets are located in close proximity to habitations. It is understood that the state plans to open new fair price shops so that no card holder has to walk more than 1.5 km to reach a PDS outlet. (GoTN, 2012).

Family Cards

Family Cards are issued to households based on their requirements of commodities. The family cards are classified as Rice Cards (rice with all other commodities), Antyodaya Anna Yojana Scheme Cards, Sugar Cards (additional sugar in lieu of rice and all other commodities) and "No commodity" Cards (cards sought by applicants for identification purposes). Out of 197,82, 593 family card issued in 2013 , rice cards constitute 84.5% , AAY cards 9.5%, sugar cards 5.4% , 'No commodity' cards 0.3%. Besides, Police personnel are issued with family cards in distinct colour. (Table 2.1.3) Transgenders living in a house as a group are treated as family and family cards are issued to them. Under the AAY Scheme of the Government of India, which targets the poorest of the poor, the Government of Tamil Nadu provides 35 kg rice per month to all the AAY family cards in the State. The essential commodities supplied through the PDS in Tamil Nadu include rice, wheat, sugar and kerosene. The 'Special PDS', which was initiated to protect people from steep increase in prices of essential commodities, includes pulses like tur dhal, urad dhal, palmolein oil and fortified flour.

Table 2.1.2: Fair Price Shops and Ration Cards, by Category, Tamil Nadu and India, 2006, 2013

Year	Details		Tamil Nadu	All India
	No. of fair price shops	(FPS)	27,995	4,83,195
2006	Ration cards (in 00,000)	BPL	153.53	745.32
		APL	*	1294.73
		AAY	14.77	204.48
	Total		168.3	2244.53
	No. of cards per FPS		**601**	**465**
2013	No. of fair price shops		33521**	515996
	Ration cards (in 00,000)	BPL*	176.78	871
		APL	*	243
		AAY	18.65	1314
	Total		195.43	2428
	No. of cards per FPS		**585**	**471**

Note: *No APL/BPL distinction in Tamil Nadu
** As of February 28, 2013. The figure includes 8291 part time shops. The rest are full time shops.
Source: a) Ministry of Consumer Affairs, Food and Public Distribution GoI, 2007;
b) www.indiastat.com; c) http://cms.tn.gov.in/sites/default/files/documents/food_3.pdf

10 It needs to be kept in mind that the state is the most urbanized in the country with a pattern of dense settlements so that a higher number of cards per retail outlet does not necessarily imply a greater average distance from an outlet.

Table 2.1.3: Types of family cards issued in Tamil Nadu

Sl. No.	Type of Ration Card	Commodities entitled	No. of Cards	In per cent
1.	Rice Cards	All Commodities	1,67,21,538	84.5
2.	Antoydaya Anna Yojana Cards	All Commodities	18,62,615	9.5
Total Rice Cards			1,85,84,153	94.0
3.	Sugar Cards	All Commodities except rice	10,76,552	5.4
4.	Police Cards	All Commodities	61,061	0.3
5.	"No Commodity" Cards	No Commodity	60,827	0.3
Total			1,97,82,593	100

Source: GoTN-Department of Civil Supplies-TNCSC website. Data relate to 2014

Extent of entitlement under PDS

Under Public Distribution System, rice is distributed free of cost. Wheat, sugar and kerosene are being distributed at subsidized prices as follows (Table 2.1.4).

Table 2.1.4 Entitlements under PDS in Tamil Nadu

Sl. No.	Name of the Commodity	Price per kg	Scale of supply
1	Rice	Free of Cost	4 Kgs per adult and 2 kgs per child per month subject to a minimum of 12 Kgs and maximum of 20 kgs per month per card except Nilgiris District. In Nilgiris District minimum of 16 kgs and maximum of 24 kgs per card Under AAY 35 Kg. per month
2	Sugar	Rs.13.50 per Kg.	500 gms per head per month subject to a maximum of 2 kgs. per month. Additional 3 kgs. are supplied to sugar option card holders in lieu of rice
3	Wheat	Rs.7.50	10 kgs per card per month in Chennai city and District headquarters and 5 kg card per month in other areas
4	Kerosene	Rs.13.60 to Rs.14.20 per litre	Ranges from 3 to 15 litres per card depending on the location

Source: GOTN-Department of Civil Supplies-TNCSC

Role of PDS in meeting the requirements of food grains

During eleventh five year plan, the state government had introduced the 'Special Public Distribution System'. Under the scheme, Tamil Nadu Civil Supplies Corporation procured essential commodities like

tur dhal, urad dhal and palmolein oil in the open market and supplied them under highly subsidised prices to card holders.

It can be seen from Tables 2.1.4 and 2.1.5 below that the PDS plays an important role in the food security of people in the state especially poor. As per the data from the 61st round of the national sample survey (NSS), about 79 %of rural households in Tamil Nadu have reported utilisation of PDS for their rice consumption in 2004-05. This figure increased to 91 %in 2009-10, as per the 66th round of the NSS.

Table 2.1.5 Percentage of rural households reporting consumption of rice from PDS, Tamil Nadu and India, 2004-05 and 2009-10

State	Bottom 30% MPCE Deciles, 2004-05	Middle 40% MPCE Deciles, 2004-05	Top 30% MPCE Deciles, 2004-05	All, 2004-05	All, 2009-10
Tamil Nadu	88.95	88.15	62.23	**78.9**	**91**
All India	30.94	25.43	18.19	**24.4**	**39.2**

Source: NSSO Report No. 510 & 545, GoI, 2007, 2010

Table 2.1.6: Percentage of PDS rice consumption to total household rice consumption, Tamil Nadu and India, 2004-05 and 2009-10

States	Bottom 30%MPCE Deciles 2004-05	Middle 40% MPCE Deciles 2004-05	Top 30% MPCE Deciles 2004-05	All, 2004-05	All, 2009-10
Tamil Nadu	51.88	49.49	40.45	**47.02**	**52.7**
All India	27.31	22.9	17.28	**22.24**	**23.5**

Source: NSSO Report No. 510 & 545, GoI, 2007, 2010

The role of the PDS in meeting the rice consumption needs is greater in the case of the households in the lower monthly per capita consumer expenditure (MPCE) deciles, as can be seen from Table 2.1.6. Roughly half of the monthly rice consumption of all rural households in the bottom 70% of the MPCE decile classes was met from PDS. Even for the top 30%, PDS accounted for two-fifths of the total consumption. Both in terms of the percentage of rural households reporting rice consumption from PDS and in terms of the share of rice consumption met from PDS, Tamil Nadu tops the list among all major states. Even with regard to wheat consumption, though wheat is not the cereal of choice in the state, the percentage of rural households reporting consumption of wheat from PDS is much higher than the national average, both in 2004-05 and in 2009-10. This is shown in Table 2.1.7.

Table 2.1.7 Percentage of rural households reporting consumption of wheat from PDS, Tamil Nadu and India, 2004-05 and 2009-10

State	Bottom 30% MPCE Deciles, 2004-05	Middle 40% MPCE Deciles, 2004-05	Top 30% MPCE Deciles, 2004-05	All, 2004-05	All, 2009-2010
Tamil Nadu	40.15	32.45	26.77	**30.17**	**57.3**
All India	15.1	12.01	8.01	**11.42**	**27.6**

Source: NSSO Report No. 510, 545, GoI, 2007, 2010

The same is true in 2009-10, though not in 2004-05, with regard to the share of wheat consumption met from PDS as shown in Table 2.1.8. It must be noted, of-course that the quantum of per household wheat consumption in rural Tamil Nadu would be much smaller than in the wheat consuming regions, but that fact that as per NSSO data, the PDS meets a high proportion of the wheat needs of rural households in Tamil Nadu in 2009-10 is also of note and somewhat puzzling.

Table 2.1.8: Percentage of PDS wheat consumption to total household wheat consumption, Tamil Nadu and India, 2004-05 and 2009-10

State	Bottom 30% MPCE Deciles	Middle 40% MPCE Deciles	Top 30% MPCE Deciles	All, 2004-05	All, 2009-10
Tamil Nadu	5.91	7.62	12.2	8.9	85.8
All India	14.64	11.68	7.58	11	14.6

Source: NSSO Report No. 510, 545, GoI, 2007, 2010

2.1.3 Mid-Day Meals Scheme in Tamil Nadu

The Government of Tamil Nadu started the noon meal scheme, to begin with, for children aged 2 to 5 years (pre-school) and 5-9 years (primary school) in rural areas. This scheme started on July 1, 1982. From September 15, 1982, the scheme was extended to urban areas as well. Citizens above 60 years of age who were eligible for old age pension were allowed to take their meals from the noon meal centres from January 15, 1983. It was then extended to children in the age group of 10 to 15 years from September 15, 1984. From December 7, 1995, pregnant women beneficiaries of the National Maternity Benefit Scheme (NMBS) were allowed to take their meal at the noon meal centres.

One can see that the scheme had a holistic social protection approach underlying it, since it started with pre-primary and primary school children, and was later extended not only to students in elementary and high schools, but also to old age pensioners and pregnant women. A document of the government of Tamil Nadu describes the objectives of the programme thus: 'The foremost objective of the Nutritious Meal Programme is to motivate children from economically backward families to pursue education by providing adequate nutritious meal to them in order to reduce school drop-out rates. It also aims to

eradicate malnutrition and increase literacy rates. With a view to enhancing enrolment, retention and attendance and simultaneously improving nutritional levels among children, Puratchi Thalaivar MGR Nutritious Meal Programme was launched on 01.07.1982'. Some basic data on the extent of coverage and of expenditure on the scheme is given in Table 2.1.9 below:

Table 2.1.9: Some Data on the School Feeding Programme in Tamil Nadu, 2003-04 to 2013-14

Year	No. of Centres	No. of Beneficiaries	Expenditure in Rupees Crores
2003-04	41,336	62,96,809	252.79
2004-05	41,738	62,62,333	198.94
2005-06	39,597	54,98,309	219.72
2006-07	39,522	55,51,011	288.73
2007-08	41,916	58,69,910	506.90
2008-09	42,078	56,41,502	550.74
2009-10	42,824	57, 74,673	788.35
2010-11	42, 824	57,74,673	1060.81
2011-12	42, 886	54,80,340	1267.74
2012-13	43,187	50,14,245	NA
2013-14	42,500 (approx.)	54 lakhs(approx.)	NA

Source: Performance Budgets for various years, Department of Social Welfare and Nutritious Meal Programme, Government of Tamil Nadu

The coverage of the school meal component alone, even leaving out the pre-school part, has been quite massive throughout. In 2001-02, the nutritious meal scheme for school children aged 5 to 15 years covered 6.46 million beneficiaries, consisting of 5.98 million in rural areas and the rest in urban areas. In 2013-14, including the AWCs and the mini AWCs (together numbering about 54,000) catering to the food needs of children aged 2 to 5 years, there were 97000 noon meal centres covering 6.7 million beneficiaries. Of them 1.4 million are pre-school children. It is clear from these figures that the number of school children in the age group of 5 to 15 years availing MDMS is declining in Tamil Nadu in recent years. There are two reasons for this. One is the demographic transition that has seen a decline in the very young, pre-adult population. The other is the mushrooming of unaided schools right from the primary or even pre-primary level to which an increasing number of children are getting admitted, and the consequent decline in student strength in government and government aided schools, including those run by local bodies.

Over the years, the meal quality has also improved in terms of nutrition content. The feeding scale in 2001-02 was 100 grams of rice, 15 grams of pulses and 1 gram of oil per child for children from classes 1 to 8. The scale was the same for children of classes 9 and 10 except for a higher allocation of rice of 120 grams per day per child. Besides, there was a provision for vegetables, condiments and fuel at a flat monetary rate per child, the same for all classes. In 2002-03, this was 0.23 rupee. In 2010-11, the food basket for the noon meal had been strengthened by the provision of three eggs a week or bananas in lieu of eggs for children who do not consume eggs. The provision for vegetables, condiments and fuel had been enhanced to 0.44 rupee, intended to cover for inflation, but possibly being inadequate in that

respect. Some further supplements were introduced between 2001 and 2010. These included provision of special pulses at the rate of 20 grams per child on one day of the week and 20 grams of potatoes on another day. Besides, all school meals were prepared with double fortified salt, to meet iron and iodine deficiencies. Financial provisions were also made for the routine sanitary maintenance and upkeep of the noon meal centres. By 2010-11, each child was receiving per day 476 calories and 15.34 grams of protein. In 2013-14, as against the central government norms of 450 calories and 12 grams of protein for primary school children, the state government was providing 553.3 calories and 18.12 grams of protein. For upper primary students, as against the central government's norm of 700 calories and 20 grams of protein, the state government provided 733.86 calories and 21.64 grams of protein. This was a nutritionally important supplement for the children, given the prevalence of protein energy malnutrition in the State earlier and even now.

Some Specific Features of MDMS in Tamil Nadu

While the central government, in its policy documents on school feeding programmes has acknowledged the experience of Tamil Nadu with MDMs as an important input into the initiation and design of the national programme, the SFP/MDMS in Tamil Nadu differs in some respects from the national programme guidelines. The scheme at the national level is anchored in the Literacy and School Education department of the Union Ministry of Human Resource Development. It has been made an integral part of the government's education policy, with the main goal of impacting upon enrolment and retention. By contrast, the Tamil Nadu programme has always been under the department of social welfare and viewed first and foremost as a social protection intervention, even though goals pertaining to education were also part of the stated objectives of the scheme from its inception. It has not been mainstreamed into the education policy of the government. The education department figures mainly in the involvement, if any, of the school teachers in the daily noon meal process, the site of which is the school. Involvement of teachers in the implementation of MDMS is minimal. While some may regard the location of the nodal department for implementing a SFP/MDMS outside the education sector as a weakness, the prestige of the scheme in the state has been high, as it is a pioneer programme of the State government, and is immensely popular with the people, especially so in rural areas. It is now regarded as an irrevocable scheme and is likely under most conceivable circumstances, to be strengthened and not phased out as happens to many social protection or educational interventions across the world when governments are perceived to face fiscal crises.

A second feature of the SFP/MDMS in Tamil Nadu is that it has also been viewed along with other nutrition-related interventions such as those of ICDS and the school health programme of the department of health and family welfare. While the MDM provides food and nutrition, the school health programme provides for deworming. The lunch menu of the MDMS has been repeatedly upgraded, from the viewpoint of ensuring adequate nutrition, including the provision of micronutrients.

A third feature of the SFP/MDMS in Tamil Nadu is that it has a set of paid functionaries to take care of all work related to the cooking of the noon meal on the school campus. There is a full time noon meal organizer (NMO) for every feeding centre. Cooks and helpers are engaged as paid workers to cook the meal and to carry out the task of cleaning up afterwards. This arrangement ensures that teachers do not have to divert time from teaching to the work of procuring the inputs for the noon meal and organizing the cooking-tasks which are performed by the NMO. The actual cooking is done by the cook, with the aid of a helper who also takes care of the washing and cleaning that follows the serving of the meals. There are norms for employment of cooks and helpers, with the numbers to be hired, linked to the number of children to be fed.

The question of inter-departmental/sectoral coordination does not figure prominently in the implementation of MDMS in Tamil Nadu. This has not been seen, in practical terms, as a major problem. The overall nutrition policy in the state rests on a life-cycle based approach to nutrition wherein the nutritional needs of pre-school children under six years of age and pregnant and lactating mothers are sought to be covered under the ICDS programme.

An important feature of the school feeding programme in the state of Tamil Nadu is that it is run entirely by the government with staff exclusively assigned to run the programme. It is also the case that the programme runs in a uniform manner throughout the State. There is no outsourcing of whole or part of the programme anywhere in the state in the name of involving self-help groups or of so-called 'public-private participation'.

Some criticisms of the Tamil Nadu SFP/MDMS

The scheme has generally been welcomed in the state since its inception, notwithstanding some derisive responses from political opponents at the time of its introduction in the state. Indeed, this response was the key reason for the fact that those political outfits that derided it when in opposition, sought to own and strengthen it when in office. But there have been criticisms of the manner of its implementation and questioning of the myriad benefits claimed for the scheme by successive governments. Some of the criticism has centered around the alleged non-transparency in sharing the information on the programme or on the inconsistencies in the data pertaining to the scheme from different sources in the government. The persistence of malnutrition among children is cited by some to question the claims of the scheme in relation to nutrition. Some have argued that the school feeding programme has failed to ensure universal enrolment, attendance and retention. But even these critics have conceded that providing noon-meals in schools may have helped to bring down the drop-out rate. It is of course clear that the school feeding programme, by itself, cannot obviously solve the nutritional challenges of any society nor ensure universal enrolment and attendance, much less retention or achievement. The points about the need for consistent data and for transparency are of course valid, but they do not constitute a criticism of the scheme as much as they do of the government and the bureaucracy implementing it.

Evaluation of SFP/MDMS in Tamil Nadu

Under the new national guidelines for the MDMS across the country notified in 2006, there is a system of concurrent evaluation by independent agencies of the ongoing MDMS in every State, funded from the 2% of the total MDMS budget set apart for management, monitoring and evaluation (MME). Under this provision, there have been several rounds of concurrent evaluation of the SFP/MDMS in Tamil Nadu by external evaluation agencies. Their evaluation reports of this agency provide us with a picture of how the scheme is being implemented in the state. Several points emerge from a perusal of the evaluation reports of the scheme in Tamil Nadu over the period from 2007 to 2012.

One point that comes through in all reports is that all schools serve hot cooked meals with significant variety. Besides the mandated rice and lentils-based gravy dish (known as *sambhar*), schools serve vegetables and greens such as carrots, beet root, brinjal. In the evaluations and in the identification of best practices by the central government, a number of practices of the state government find a mention. (See Box). These include supply of double fortified salt and micronutrients, a variety of dishes to keep children happy, supply of pulses, eggs and potatoes, and bananas for those who do not eat eggs and so on. In a recent pilot programme, the state has introduced nutritious millets into the MDMS and early feedback is that this has led to noticeable weight gain in the case of malnourished children.[11]

BOX:

TN Best Practices, adapted from the MHRD presentation at the PAB meeting of MDMS on February 28, 2014 in New Delhi

- ***Permanent Structure*** *for organizing and cooking noon meal in all centres*
- ***e-transfer*** *of funds at all levels. Noon meal functionaries are paid every month through e-transfer.*
- ***State Contribution for salary Noon meal functionaries is higher than the Central assistance*** *for Honorarium to CCH and special provisions for Noon Meal staff of the Centre,*
- *Pension, Festival Advance, provision of lump-sum payment on retirement (50,000/- for organizer and 20000/- for cooks), Special Provident Fund, Appointment on compassionate ground, Promotional opportunity.*
- ***Social Audit introduced*** *under mid-day meal programme from August 15th 2013 in all the Districts in selective panchayats.*
- *Regular supply of Pulses, Oil, Salt by* ***Centralized procurement through TNCSC***
- ***New initiatives*** *(4 set of School Uniforms, school Bags, chappals and Geometry box) for enhancing enrolment*
- ***Egg served*** *to all children on all 5 working days and Colouring scheme for eggs for each day of the week to prevent pilferage and staleness*
- ***Variety meal introduced*** *in one block of all districts on pilot basis.*
- *Banana weighing 100 gms is provided for non-egg eating children @ Rs. 1.25 per banana*
- ***Provision of Mixies*** *for preparation of meals*
- ***Capacity building of all CCH (***Cook cum Helper***)***

11 PowerPoint presentation by GoTN at the Project Advisory Board meeting in Delhi on February 28, 2014, accessed at mdms.nic.in

The experience of Tamil Nadu with school feeding programmes is instructive in many ways. It demonstrates the point that most such programmes in contemporary developing countries go through a process of evolution before they become embedded in the policy framework. Second, it shows the importance of sustained political will as well as the virtues of active political competition in a pluralist democracy where the poor are under-represented in most public spaces and forums. Third, it shows that fiscal constraints do not constitute a strong argument against the initiation and universalization of a school feeding programme. The per capita income of the state of Tamil Nadu was not very different from the all India average-it was possibly marginally lower-through the period from the late 1950s to the mid-1980s when the programme made a big leap. But political will led to the introduction of the state wide, state funded programme in 1982 and subsequent experience has shown that the fiscal commitment involved in running the scheme is eminently manageable.

Expenditure on SFP/MDMS in the state is a small share of the government's expenditure on social services, an even smaller share of its total revenue expenditure and a miniscule percentage of the state's net domestic product. The benefits of the SFP/MDMS, on the other hand, accrue to a large section of the population. Further, the section benefited being children in the age group of 2 to 15 years, the scheme constitutes a valuable investment in human development and in the country's future. It is also a partial fulfillment of the State's responsibilities toward children, both in terms of international covenants to which India is a signatory and in terms of the constitutional mandate of ensuring the right to life which includes, as the Supreme Court of India has reminded everyone, includes the right to food. The idea of public provisioning of food as well as the notion of food as a right have also gained traction with the passing of the National Food Security Act in 2013 in India While there is considerable scope for improving the design and delivery of the SFP/MDMS in the state and the lack of any involvement of elected local bodies is a serious flaw, the fact still remains that the SFP/MDMS has contributed significantly not only to an increase in enrolment, attendance and retention of children in schools, but also to food and nutrition security for a large number of children in both urban and rural Tamil Nadu.

2.1.4 Integrated Child Development Services

As Rajivan (2006, p.3685) points out, the ICDS in Tamil Nadu has evolved in its own distinct manner:
'Tamil Nadu (TN) is different from other Indian states. In India's federal structure, it is possible for an individual state to have priorities somewhat different from the centre. Combating child hunger and malnutrition became political priorities in Tamil Nadu well before judicial intervention triggered responses at the centre. Today, virtually any child between the ages of 2 and 15 years is eligible for a daily hot lunch at the cost of the state. Most of the feeding takes place outside the home: in ICDS centres ('anganwadis') for children under six, and at school for older children. Other vulnerable groups like pregnant and nursing women, the destitute and pensioners are also covered. In addition, a range of

complementary services are available for children under six and pregnant and nursing women through the ICDS, which is fully integrated with the noon meal programme.'

Writing in 2006, Rajivan noted:

'More than 70,000 feeding centres operate every day in the state, providing a hot mid-day meal to around 8 million persons. Of these, over 30,000 centres are exclusively for children under six (the most elusive age group), mostly under the ICDS. Here a wider range of services is provided for over a million under-six children – including complementary nutritious feed to pre-schoolers, pregnant and nursing women; growth monitoring; health services; pre-school education; and communication. Around 1.5 million young children and women benefit every day. An impressive physical infrastructure is in place as well as extensive staff. Over time the government of Tamil Nadu (GoTN) successfully leveraged the massive network of centres created under different schemes with varying objectives and priorities (the noon meal programme, the Tamil Nadu Integrated Nutrition Project (TINP) and ICDS, and consolidated staff, infrastructure and administrative capacity to focus on nutrition security.' (Ibid, p.3685).

Since 2006, the ICDS in Tamil Nadu has continued to expand while being integrally linked to other food security and nutrition interventions. The ICDS scheme is implemented in Tamil Nadu through 54,439 Child Centres (49,499 Anganwadi Centres and 4,940 Mini Anganwadi Centres) located in 434 ICDS Development Blocks (of which 385 are rural, 47 urban and 2 tribal) in the state.[12] ICDS Beneficiaries identified are as follows: : a) Children below six years b)Pregnant and Lactating Mothers c)Adolescent Girls (11-18 years) d) Old Age Pensioners. As of December 31, 2013, the ICDS in Tamil Nadu was providing supplementary nutrition to 30.91 lakh persons including preschool children and ante/post natal mothers. It was providing preschool education services to 11.04 lakh children.

According to the policy note for 2013-14 of the Department of Social Welfare which implements the scheme in the state, the ICDS in the state provided supplementary nutrition to 3.6 lakh infants between the age of six months and one year, 6.7 lakh pregnant and lactating mothers, about 4 lakh adolescent girls, 6.7 lakh children aged 1 to 2 years and 11.5 lakh children aged 2 to 5 years.

A large sample survey commissioned by the Planning Commission of the government of India and carried out by the National Council for Applied Economic Research (NCAER) in 2009-10 rated Tamil

12 The State Government implements the Programmes for Adolescent Girls in the age group of 11-18 years with Government of India financial assistance since 2001 which includes, Nutrition Programme for Adolescent Girls (NPAG), Kishori Sakthi Yojana (KSY), and Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (SABLA). Kishori Sakthi Yojana is a Training programme for empowerment of Adolescent Girls which was initiated since 2001 in 37 Projects of 11 Districts and extended to all 434 ICDS projects in all Districts in 2010. This programme aims to improve nutrition and health status of Adolescent Girls of 11-18 years and also to equip them to improve and upgrade their home based and vocational skills, to promote their overall personality development, including dissemination of information about their health, personal hygiene, nutrition, legal rights and family welfare management etc.

Nadu as a 'high performer' in terms of supplementary nutrition provision. It was also rated high in terms of infrastructure and promotion of behavioral change.

However, we get a different picture about the ICDS in Tamil Nadu from a report, prepared by *Thozhamai*, a Chennai-based non-governmental organisation (NGO), in collaboration with the well-known child rights organization CRY (Child Rights and You).The survey was conducted in 2012 covering 500 anganwadis in 20 districts to identify the status of ICDS centres. The study states that "Children face discrimination even at the pre-primary level." It notes that 97 per cent of the children who attend the ICDS centres are drawn from the economically weaker sections, and that this might be a factor in the discrimination they face. "The survey also found that "24 per cent of the centres did not function after lunch, contravening the norms laid down by the government. In about nine per cent of the centres, supplementary food was not provided to the children, which defeats the very purpose for which the anganwadi was set up. In addition, children were not vaccinated in 17 per cent of the centres".[13]

While problems and challenges remain to be dealt with in the ICDS scheme in the state, on a comparative basis, in relation to many other states, especially from the northern and eastern regions of India, the ICDS in Tamil Nadu is seen as performing well. As Rajivan noted in 2006, '… ICDS centres in Tamil Nadu are open longer, those below three attend more regularly, pre-school education is prevalent in most centres, infrastructure is much better, and workers are regularly paid.' (Ibid, p 3687) Further, 'Weight-for-age data indicate a trend reduction in malnutrition among participating rural children – a joint outcome of nutrition interventions and overall development. Data for the period 1983 to1999 among former TINP* participants show a steady decline in severe malnutrition (grades III and IV) to almost zero – from a little over 12 per cent to half of one percent. The proportion of moderately malnourished (grade II) children also declined, from over 35 per cent to under 10per cent, while the percentage of children in the "normal" category went up from under 20 to over 50. This is a significant achievement.' (Ibid, p. 3687).14

Evidence from the third National Family Health Survey (NFHS 3) for 2005-06 also shows that Tamil Nadu is, relatively speaking, a better performer among major Indian states with respect to child nutrition indicators such as stunting and under-weight. As against the national averages of 45% and 40% respectively for these two indicators among children aged 3 years or less, Tamil Nadu had corresponding figures of 31% and 26% respectively, while it was on par with the national average in respect of wasting.

13 *The Hindu,* November 7, 2013

14 Rajivan also makes the point that, 'Other achievements of ICDS in Tamil Nadu include promoting social equity due to regular common dining, washing, sleep and play (in spite of occasional incidents), and building skills among preschoolers for school readiness. Primary schoolteachers tend to prefer children who have had a few years in anganwadis as these are seen to build social and cognitive skills among children.' (Ibid, p.3687)

*TINP refers to the World Bank funded Tamil Nadu Integrated Nutrition Improvement Programme, introduced in the state on a pilot basis in 1980.

Evidence from NFHS 3 also shows that, compared with national average, the state is better placed in almost all the nutritional indicators related to children and women.

Data from the state government, shown below in Table 2.1.10, suggests that the degree of malnourishment among children in Tamil Nadu has been declining.

Table 2.1.10: Malnourishment among Children in ICDS in Tamil Nadu, 2001 to 2011

Year	Per cent of Malnourished children	Per cent of Severely Malnourished children
2001	7.49	0.21
2002	5.88	0.19
2003	5.6	0.17
2004	4.28	0.12
2005	2.99	0.08
2006	2.44	0.06
2007	2.14	0.04
2008	1.82	0.04
2009	1.73	0.04
2010	1.62	0.03
2011	1.31	0.03

Source: Dept. of Social Welfare and Nutritious Meal Programme, Government of Tamil Nadu

Recent evidence from ICDS data, accessed at http://wcd.nic.in/icds/icdsimg/QPR1213FOR WEBSITE.pdf suggest continued nutrition improvement among children under ICDS in Tamil Nadu. According to the ICDS status report of December 31, 2013, 82% of children in ICDS were of normal weight by World Health Organization (WHO) standards as against 71.6% for India as a whole.

2.1.5 Mahatma Gandhi National Rural Employment Guarantee Scheme in Tamil Nadu

The implementation of the MGNREGS in Tamil Nadu rests with the rural development department of the state government. Some data on employment under MGNREGS is provided in Table 2.1.11.

Table 2.1.11 Households employed in MGNREGS and person days of employment provided, 2009-10 to 2013-14, Tamil Nadu

Year	No. of HHs provided employment	Person days of employment generated					No. of HHs with at least 100 days of work	% of HHs completing 100 days of work to all HHs employed in MGNREGS
		SCs	STs	Others	Total	Women		
2009-10	4373257	141223000	5967000	91885000	239075000	198209000	760689	17.39
		59.07%	**2.50%**	**38.43%**	**100.00%**	**82.91%**		
2010-11	4969140	155006000	5871000	107717000	268594000	221843000	1102070	22.18
		57.71%	**2.19%**	**40.10%**	**100.00%**	**82.59%**		
2011-12	6340419	87058463	3863412	210493769	301415644	223101055	601747	9.49
		28.88%	**1.28%**	**69.84%**	**100.00%**	**74.02%**		
2012-13	7054997	113987635	5411013	288546403	407945051	302560791	1352534	19.17
		27.94%	**1.33%**	**70.73%**	**100.00%**	**74.17%**		
2013-14	6239073	108131876	4696449	252716103	365544428	307203338	909603	14.58
		29.58%	**1.28%**	**69.13%**	**100.00%**	**84.04%**		

Source: Govt. of India, Ministry of Rural Development, Department of Rural Development, accessed at http://164.100.129.4/netMGNREGA/mpr_ht/employeementstatus_mpr.aspx?lflag=local&state_code=29&page=S&month=Latest&fin_year=2013014&state_name=TAMIL+NADU&Digest=nwWC1QAC6qXJ46VpZtqqbw

From the data above, taken from the national website of the MGNREGA, it is clear that MGNREGS is an important source of employment in rural Tamil Nadu, and especially so for women. For the scheduled castes (SCs), too, the MGNREGS is a key source of employment and earnings. In 2009-10 and 2010-11, the SCs accounted for close to three-fifths of the total person days of employment. It is interesting to note that, while the other social groups accounted for a smaller share of person days of employment than SCs in 2009-10 and 2010-11, this has been sharply reversed since then. Persons from non-SC, non-ST social groups, mostly the backward classes, including the most backward classes, account for the largest share, close to 70%, of person days of employment under MGNREGS in the three years since 2010-11.

The most striking feature of the distribution of person days of employment under MGNREGS is the share of women. Females account for at least three-quarters and often more than four-fifths of the total person days of employment generated in MGNREGS in the state in all the years from 2009-10 to 2013-14, and in fact since its inception in 2006. The equality of wage rates for males and females, the much higher wage rate in MGNREGS as compared to wage rates for female agricultural labourers in most of rural India and the availability of MGNREGS employment close to where the women workers live are all important factors underlying this phenomenon.

An aspect of the nature of workers engaged in MGNREGS is their age composition. Data in this regard is presented in Table 2.1.12

Table 2.1.12: Age distribution of MGNREGS workers, Tamil Nadu 2013-14

Age	Particulars	Percentage
18-30	Registered Persons since Beginning	14.42
	Employed Persons	12.22
31-40	Registered Persons since Beginning	31.65
	Employed Persons	32.05
41-50	Registered Persons since Beginning	27.36
	Employed Persons	28.3
51-60	Registered Persons since Beginning	16.91
	Employed Persons	17.88
61-80	Registered Persons since Beginning	9.5
	Employed Persons	9.45
Greater than 80	Registered Persons since Beginning	0.16
	Employed Persons	0.1

Source: Website of the MGNREGA, Ministry of Rural Development, Government of India

It is clear that a large proportion of those seeking work and getting it in MGNREGS are from the younger age groups. But it is also noteworthy that almost 10% are 60 years or older. Another on-sixth are in the age group of 51 to 60 years. This is another indication that MGNREGS employment is crucial to income generation and food security for a significant section of the rural workforce.

The data from the rural development department as contained in the policy note of the department for 2013-14 (accessed at http://cms.tn.gov.in/sites/default/files/documents/rural_development_7.pdf), differs marginally, but not a great deal from the MGNREGS national website data used in table 2.1.11. Thus, the policy note mentions that the government was able to generate 33 crore person days of employment under MGNREGS as against the target of 30.02 crore during 2011-12, whereas the figure mentioned in Table 2.1.11 is 30.14 crore person days. The figure in the policy note of 38.99 crore person days in 2012-13 up to March 13, 2013 tallies reasonable well with the national website figure of 40.8 crores for the entire year which ended on March 31, 2013. The figure for 2010-11 tallies perfectly at 26.86 crore person days in both sources. However, the proposed figure in the policy note for 2013-14 at 42. 85 crore person days of employment under MGNREGS is much greater than the actual achievement as per the national website data which puts the figure at a much lower 36.6 crores.

Though the MGNREGA legally guarantees 100 days of employment per rural household annually, the average has generally been much lower, in practically all the states. Tamil Nadu is one of the better performers, with its average number of days of employment per household employed being higher than the national average. Table 2.1.13 presents the data in this regard for Tamil Nadu.

Table 2.1.13: Average number of days worked per household in MGNREGS, Tamil Nadu, 2009-10 to 2013-14

Year	No. of HHs provided employment	Total number of days worked	Number of days of work per household
2009-10	4373257	239075000	55
2010-11	4969140	268594000	54
2011-12	6340419	301415644	48
2012-13	7054997	407945051	58
2013-14	6239073	365544428	59

Source: Govt. of India, Department of Rural Development, accessed at http://164.100.129.4/netMGNREGA/mpr_ht/employeementstatus_mpr.aspx?lflag=local&state_code=29&page=S&month=Latest&fin_year=2013-2014&state_name=TAMIL+NADU&Digest=nwWC1QA C6qXJ46VpZtqqbw

In 2011-12, 2012-13 and 2013-14, the average number of days of employment per household at the national level under MGNREGS was, respectively, 43.2, 46.2 and 45.9. The figures were even lower for the earlier years. By contrast, Tamil Nadu reported much higher number of days of employment per household on the average for these years at 48, 58 and 59 respectively.

Wages in MGNREGS in Tamil Nadu have in general not followed the national norms announced by the central government. There have been issues on the ground, especially in terms of norms relating to out-turn and measurement of work. In several work sites, workers have alleged unrealistic work norms and gross under-payment. There have been several agitations across the state, and these have, in some instances, brought workers some relief in the form of a higher wage. The policy note of the department states: 'The wages prescribed for 8 hours of work are disbursed based on the out-turn made by the workers. Prior to 15.05.2011, on many occasions, the beneficiaries got wages in the range of Rs.80 to Rs.90. The Government conducted mass awareness campaigns adopting wide publicity measures like 'Model pits' in the worksite, awareness programmes to the workers on the quantum of work to be done, training on pre-marking and measurement to Overseer, etc., to enable the workers to get more wages. Based on the awareness campaign, the average wage rate has increased from Rs.90 to - Rs.105 during 2012-13.'[15] This suggests that the state has been paying wages lower than the nationally stipulated wages. As the policy note itself states, 'The wage notified by GOI per person per day is Rs.119 till 2011-12. GoI has increased and notified the wage as Rs.132 for the year 2012-13.' But the state government's own admission, the average daily wage rose from between 80 and 90 rupees in 2011 to 105 rupees in 2012-13, well below the central government notification. This means that the average daily wage in MGNREGS in the state in 2012-13 has been only around 80% of the nationally notified wage. For the year 2013-14, the central government had notified the wage as Rs.148 per day. The state government's Policy note states:

15 http://cms.tn.gov.in/sites/default/files/documents/rural_development_7.pdf

'The MGNREG Scheme will be implemented with the target for generating 42.85 crore mandays during 2013-14 with an approved Labour Budget of Rs.6341.80 crore.' This does work out to a daily wage of Rs 148, in line with the central government's notification.

The state government has been taking some initiatives with regard to the implementation of MGNREGS.[16] Notable among these is the scaling up of land development works in the lands of individual farmers and afforestation works in common Government lands which had been taken up on pilot basis during 2012-13, to all the eligible farmers in the year 2013-14. This, it is estimated, would cover an extent of 6.73 million hectares and benefit 14 million farm families in the state. With the policy of dividing each gram panchayat into clusters and allotting works to all clusters instead of just one work site in the panchayat, the travel distance of the worker to the work site has been reduced from as much as 5 to 6 kilometers earlier to less than a kilometre in 2012-13. The government has announced some more initiatives in 2013-14 aimed at improving the implementation of the scheme and its effectiveness.[17]

On balance, it appears that the MGNREGS in Tamil Nadu has been an important source of income for landless households as well as small and marginal farmers, and has thus helped enhance food security for them. Discussions with leaders and activists of agricultural workers' organizations also suggest that the scheme has seen massive participation from these sections as also middle peasants in some parts of the state. While complaints from a section of the farmers about the scheme causing labour shortage for farm operations may not be entirely valid, given that the average number of days of employment per household working in MGNREGS is below 60, it is true that the MGNREGS has strengthened the bargaining power of agricultural labourers, especially female labourers, in the state. By putting income in the hands of the poor and the marginalized in rural areas, the scheme would also have helped boost demand in the rural economy at a time of slow growth. To the extent that the scheme led to the creation of common assets in the countryside, that would help in boosting productivity in the medium term, though this is not an aspect we have investigated as it is beyond the scope of our study.

2.1.6 Food Security Mission in Tamil Nadu

As noted in Part I of this Report, the Government of India launched the National Food Security Mission [NFSM] in 2007- 08 to increase the production and productivity of rice, wheat and pulses which constitute nearly 85% of food grains to address the supply side of the food security .The Mission is implemented in 312 districts in 17 States covering 136 districts under Rice, 141 under Wheat and 171 under Pulses till 2009-10. From 2010-11 onwards, 302 districts of Integrated Scheme for Oilseeds, Pulses, Oil Palm and Maize (ISOPOM) have been included under Pulses component of the Mission. The

16 http://cms.tn.gov.in/sites/default/files/documents/rural_development_7.pdf , pp170-176

17 http://cms.tn.gov.in/sites/default/files/documents/rural_development_7.pdf, pp190-191

interventions under NFSM include promotion of improved technologies i.e., seed, Integrated Nutrient Management including micronutrients, soil amendments, IPM and resource conservation technologies along with capacity building of the stakeholders to get the identified crops to the next stage of development.

The Government of Tamil Nadu, according to the policy note of the department of agriculture, has adopted a two- pronged approach, wherein two types of districts have been selected for implementation of the scheme: some with larger extent but lesser productivity and some with higher productivity but lesser extent.[18] NFSM for rice is implemented in the eight districts of Cuddalore, Pudukkottai, Thanjavur, Thiruvannamalai Tiruvarur, Nagapattinam, Ramanathapuram and Sivagangai. The NFSM for pulses is implemented in all the districts, except Chennai. Under NFSM for rice, activities undertaken include cluster demonstrations on SRI / direct seeded rice/ line transplanting and hybrid rice technology, raising of community nursery, subsidized distribution of quality seeds of high yielding varieties & hybrids, micro nutrients, cono-weeders / other farm implements, plant protection chemicals, bio inputs, pump sets, rotavators, sprayers, power weeders, nursery raising machine and trays.

Under NFSM for pulses, activities such as cluster demonstrations on inter cropping , improved varieties and farm implements, subsidized distribution of certified seeds, gypsum, micronutrient mixture, rhizobium, plant protection chemicals, weedicides, plant protection equipments, sprinklers / mobile sprinklers/ rainguns, pumpsets, rotavators besides cropping system based trainings were carried out during 2012-13. The total expenditure incurred in 2012-13 on NFSM was about 30 crore rupees.

A perusal of the performance budget of the Department of Agriculture for 2013-14 suggests that most of the scheme inputs have been delivered as per the targets set. It is difficult to disentangle the specific contribution of the NFSM inputs to the increase in food grain availability in the state, since it accounts for a very small part of the total budget, and outcomes depend on factors outside the control of the Mission authorities. But it can be noted that, in the period since 2008-09 when the Mission came into operation in the state, food grain output has been rising after almost a decade of stagnation since 2000-01. Thus paddy (rice) output in the state rose from 51.83 lakh tonnes in 2008-09 to 74.59 lakh tonnes in 2011-12. The yield of paddy in kilograms per hectare rose between these two points in time from 2683 to 3918.

Summary and conclusion

Before concluding this section on Tamil Nadu, one may note the improvements in the state in respect of some important input indicators of food security. Though the percentage of rural population reporting a calorie intake less than 1,890 Kcal per cu per diem in 2009-10 for Tamil Nadu at 16.7% is higher than the

18 http://cms.tn.gov.in/sites/default/files/documents/agriculture_9.pdf, pp57-59

national average of 11.6 percent, it should be noted that there is a significant decline in this figure for the state from 28.2 %in 1993-94 to 16.7 % in 2009-10.

With respect to the percentage of households in rural Tamil Nadu without access to a safe source of drinking water, this has come down from 14.7% in 2001 to 7.5% in 2011 as per Census data. This compares with corresponding figures of 26.8% and 14.5% at the national level, making the state one of the better performers in this regard. In terms of the percentage of households in rural Tamil Nadu without access to a toilet within the premises, the state has shown more rapid improvement than the national average. The figure declined from 85.64% in 2001 to 51.70% in 2011 for the state while the corresponding figures for the country were 78.08% and 53.1% respectively. Thus, in respect of two input indicators of food security which pertain to the absorption dimension, the state has done relatively well in the last decade or so. However, it is a scandal that we still have more than half of rural households without access to a toilet within the premises, with important implications for gender and for human dignity, apart from its nutritional and health consequences. Likewise, the figures on access to safe drinking water tell us nothing about the adequacy or timely availability of safe water or even of how appropriate is the definition of safety adopted in the underlying database.

Finally, while this brief review has spoken of improvements in the food security scenario in the state in the recent period, based on available secondary data, it needs to be kept in mind that ground realities will differ significantly across different parts of the state.

Section 2 Odisha

2.2.1 Introduction

Some basic demographic features of Odisha are presented in Table 2.2.1.

Table 2.2.1: Some Demographic Information on Odisha

Description	2011	2001
Actual Population	41,974,218	36,804,660
Population Growth in% over previous Census	14.05%	15.94%
State Population as% of total Population of India	3.47%	3.58%
Sex Ratio, Females per 1000 males	979	972
Child Sex Ratio, girls per 1000 boys in the age group of 0 to 6 years	941	979
Density/km2	270	236
Area km2	155,707	155,707
Literacy Rate,% literates to population aged 7 years and older	72.87%	63.08%
Male Literacy Rate	81.59%	71.28%
Female Literacy Rate	62.46%	50.51%

Source: Census 2011, Government of India, http://www.census2011.co.in/census/state/orissa.html

Odisha has for long been considered one of the most backward States in India, with most of its development indicators below the corresponding national averages a decade ago. It is true, however, that there has been some significant progress over the years in the performance of Odisha with respect to social development. In fact, the Census 2011 figures for literacy rate (among the 7 plus population) suggest that Odisha's rates are marginally better than the rates for India as a whole. Nevertheless, its overall ranking among the Indian States is still quite poor. "It is bracketed with states such as Bihar, Chattisgarh, Jharkhand, Madhya Pradesh, Rajasthan and Uttar Pradesh as being among the laggards in development." (Athreya (2011), in MSSRF(2011))

According to the National Family Health Survey 3(NFHS-3) of 2005-06, about 41.4 %of women in the 13 to 49 years' age group had a body mass index (BMI) below 18.5, indicating a high prevalence of nutritional deficiency. Data from NFHS 3 suggested that 62% of women in rural Odisha aged 13 to 49 years suffered from anemiaas against the national average of 55.3 %while 65% of children under 5 years of age were anemic. There has been some improvement since then.

To begin with, as Table 2.2.2 makes clear, the NSSO data showed an overall improvement in one input indicator of food security in the state between2004-05and 2009-2010.The percentage of Odisha's rural population consuming less than 1890 kilocalories/cu/diem had earlier risen from 21.4% in 1993-94 to

26.4% in 2004-05. However, it declined to 7.4% in 2009-10, well below the corresponding national figure of 11.6%.

Table 2.2.2: Percentage of Population Consuming less than 1,890 Kcal/cu/day (Rural)

State	1993 – 94 (50th Round)	1999 – 2000 (55th Round)	2004 – 05 (61st round)	2009-10 (66th round)
Orissa	21.4	24.7	26.4	7.4
All India	26.4	28.9	24.1	11.6

Source: NSSO Reports

Another indicator of food security which relates to its absorption dimension is the percentage of households with access to safe drinking water. Between 2001 and 2011, Odisha has done rather well in terms of coverage of rural and urban habitations with safe sources of drinking water including piped water supply. The percentage coverage of households in the State using tap water, tube well water and well water were 13.8 percent, 61.5 %and 19.5 %respectively in 2011 as against 8.7 percent, 55.5 %and 28.6 %in 2001. In rural areas, 7.5 percent, 66.9 %and 19.8 %households use tap water, tube well water and well water respectively, in 2011. In many pockets, water quality is a serious issue. Another indicator of food security relating to absorption is the state of sanitation. As per the 2001 Census estimates, only 7.7 %of total households in Odisha had access to the basic sanitation facility of a toilet within the premises. By 2011, there was some improvement but not much. In 2011, 22% of rural households in Odisha had access to a toilet within the premises.

Modest as these improvements are, they emanate, among other things, from a number of food security interventions in recent years by both central and state governments. Food security interventions in Odisha include the provision of subsidized rice at the rate of Rs.2 a kg for all BPL households through the TPDS, implementation of AAY programme of provision of 35 kilograms of rice for the poorest households, the MDMS, the emergency feeding programme (EFP) and the supplementary nutrition programme (SNP) under ICDS scheme. Besides these food delivery programmes, the MGNREGS seeks to enhance the access dimension of food security and the NFSM seeks to strengthen the availability dimension. In what follows, we briefly review each of the major food security interventions of the Government in Odisha.

2.2.2 Public Distribution System in Odisha

Odisha government implements the TPDS. Table 2.2.3 presents some data on the PDS in Odisha and provides the data on PDS in India for comparison.

The number of PDS retail outlets, called FPS have increased from about 26,000 in 2006 to about 30000 in 2013. On an average, each shop handled 274 cards in 2013 which is significantly lower than the 471 cards handled by a shop at the all India level. There were a total of about 79 lakhs family ration cards

distributed to people in the state in 2006, of which 38.35 were BPL cards. This increased to about 84 lakhs cards in 2013, of which 37 lakh were BPL cards. The number of APL cards rose by about 4 lakhs while that of AAY rose by about 26.5% over its level in 2006.

Table 2.2.3: Fair Price Shops and Ration Cards, by State and Category, 2006, 2013

No. of shops/Cards	Type of Cards	Odisha		All India	
		2006	2013	2006	2013
No. of fair price shops (FPS)	**(FPS)**	26,217	30710	4,83,195	515996
Ration cards (in 00,000)	**BPL**	38.35	36.78	745.32	871
	APL	30.66	34.58	1295	1314
	AAY	10	12.65	204	243
	Total	79.02	84.01	2244.5	2428
No. of cards per FPS		301	274	465	471

Source: a) Ministry of Consumer Affairs, Food and Public Distribution GoI, 2007;
b) www.indiastat.com, March 2007, 2013

Odisha took two important measures in 2008 to improve the PDS The first was to reduce the price of PDS Rice for all BPL and Antyodaya families to Rupees 2 per kilogram. It has further reduced the price to 1 rupee per kilogram from February 2013. The second was to also extend the same entitlement to APL households in the Koraput, Bolangir and Kalahandi (KBK) districts. As a result, the state showed better performance in monthly per capita consumption of rice in 2009-10 than many other states in India. The entitlements in Odisha under the PDS are shown in Table 2.2.4. A variety of entitlements are seen. The total number of beneficiaries exceeds 10 million.

The PDS has become an important source of rice for people in rural Odisha. Table 2.2.5 shows the percentage of rural households in Odisha and in India reporting consumption of rice from PDS. The percentage of rural households reporting consumption of rice from PDS has increased substantially in Odisha from 21.5 in 2004-05 to 51.6 in 2009-10. The corresponding rise at the all India level was from 24.4% to 39.2%. Importantly, the share of rural household rice consumption met by PDS rose for Odisha from18.2% to 24.8% as against a more modest increase from 22.24% to 23.5% at the national level over the same period.

While the PDS contribution to Food Security in Rural Odisha has increased significantly in the last ten years, this is not to say that the PDS faces no implementation problems.PDS outlets operating in odd hours, long distance between shop and home, dealers refusing to provide rations on installment basis, under-weighment and poor quality of rations due to malpractices , lack of adequate infrastructure like weighing scales, lack of transparency and information on PDS service norms and complaint procedure due to both lack in government oversight and shop owners not posting required PDS information on

their display board–these are some problems listed in a recent study of the PDS in Odisha.(See www.ysdindia.org)

Table 2.2.4: PDS Entitlements in Odisha, 2013

Sl. No.	Scheme and item	No. of beneficiaries	Scale of Entitlement	Consumer price per kg (Rs.)
1	BPL Rice	36,90,027	25 kg, Family	1.00
2	KBK* APL Rice	5,32,133	25 kg, Family	1.00
3	AAY Rice	12,53,164	35 kg, Family	1.00
4	ST/SC Hostel Rice	4,15,357	15 kg, Individual	1.00
5	Rice for Differently-abled Persons (RDP)	76,534	10 kg, Individual	1.00
6	Welfare Institutions, rice	11,705	15 kg, Individual	6.30
7	Annapurna (Rice for destitute over 65 not receiving old age pension)	63,759	10 kg, Individual	Free of cost
8	APL rice for Prisoners of Jails	Bulk Consumer	Bulk Consumer	9.30
9	ST/SC Hostels managed by NOGs, Rice	12,302	15 kg, Individual	9.30
10	Adrut Children Homes, Rice	256	15 kg, Individual	9.30
11	APL, Rice	35,91,809	7 kg, Family	7.00
12	Levy Sugar	49,43,191	2 kg, Family	13.50

Source: http://oscsc.in/doc/Entitlement.pdf *Koraput, Bolangir and Kalahandi districts

Table 2.2.5: Percentage of Rural Households reporting Consumption of Rice from PDS, 2004–05 and 2009-10

State	2004-05				2009-10
	Bottom 30%	Middle 40%	Top 30%	**All**	**All**
Orissa	31.91	10.89	3.56	**21.5**	**51.6**
All India	30.94	25.43	18.19	**24.4**	**39.2**

Source: NSSO Report No 510, 545

BOX: Ankita Aggarwal, Economic & Political Weekly, September 3, 2011

Ankita Aggarwal (2011) has surveyed six villages in Sundargarh and Nuapada districts of Odisha. The PDS outlets are run by gram panchayats, private dealers and self-help groups. The outlets are open only for three days a month but on a fixed schedule. The entitlements are 30 kg per month for BPL families and 35 kg per month for Antyodaya cardholders- at Rs.2 per kg for both the categories. In the KBK region, the PDS is made universal by the state government. Even APL households are entitled to 25 kg per month at Rs.2 per kg.

Due to a Supreme Court order in November 2010, BPL households have been entitled to an additional 5 kg per month. In the state, the BPL and Antyodaya beneficiaries are also entitled to 2 kg of sugar a month at Rs 13.5 per kg and four litres of kerosene a month at Rs 13-14.5 per litre. The kerosene price depends on the proximity of the PDS outlet to the warehouse.

The price of PDS rice was reduced to Rs 2 per kg from August 2008 for all cardholders. Earlier, Antyodaya cardholders got 35 kg of rice at Rs 3 per kg. BPL cardholders in Integrated Tribal Development Programme (ITDP) and Drought Prone Area Programme (DPAP) blocks were issued 25 kg of rice- with 16 kg at Rs 4.75 per kg and the rest at Rs 6.30 per kg. BPL cardholders in other areas and APL cardholders in the KBK districts were entitled to 25 kg of rice at Rs 6.30 per kg. With such varied entitlements, lack of clarity among beneficiaries could have been possible.

While supply of sugar and kerosene is less regular than that of rice, the distribution of rice is regular every month. For 74 per cent of the respondents, the overall functioning of the PDS has improved when compared its functioning five years ago. The PDS outlets are closer than they were five years ago and the supply of grain is more regular now. A large proportion of the respondents also feel that they are buying more grain than five years ago.

2.2.3 Mid-Day Meals Scheme in Odisha

The Union government had initiated in 1995 a programme called the NPNSPE under which nutritional support was to be provided to children in primary schools across the country. It may be recalled that the objective of the programme was to promote universalization of primary education and also enhance the nutritional levels of students in primary classes. However, many states did not implement the scheme, citing fiscal constraints. Odisha was one of the states that did not implement the scheme immediately. In July 2001, the state government started implementing a programme of provision of cooked meals for primary school children in all government and government-aided schools, but without covering the entire state, confining it to specific regions considered especially poor. The programme covered primary school children enrolled and attending in the government and government-aided schools in the rural areas of 8 districts consisting of 80 blocks including 44 blocks coming under the ITDA and collectively known as the KBK districts. It also covered primary school children in another 74 ITDA blocks of the remaining

districts. In the rest of the state, the government implemented a scheme of distribution of 3 kilograms of rice per month as dry ration to each primary school student. This meant that a large part of the state remained uncovered by the scheme of provision of hot cooked meals at school. But even as late as August 31, 2004, only half the blocks- 157 out of 314-had been covered by the scheme of provision of cooked meals while the remaining half was covered under the dry ration scheme. Thus, nearly three years after the Supreme Court orders of November 28, 2001 mandating the provision of cooked meals to children in government and aided schools, and several months after the Court's more detailed orders of April 2004, Odisha was yet to implement the scheme of universal provision of cooked meals in primary schools. This changed with effect from September 1, 2004. From that date, Odisha is implementing a school feeding programme of universal provision of cooked mid-day meals to children in government and government-aided primary schools and children enrolled in centers under the education guarantee scheme (EGS) and Alternative and Innovative Education (AIE) scheme (Athreya, 2011).

Table 2.2.6 presents details of enrollment and beneficiaries in MDMS in Odisha from 2008-2013

Table 2 2.6: Enrollment and Beneficiary Data, MDMS, Odisha 2008-13[19]

	Enrollment			Beneficiary		
Year	I-V	VI – VIII	Total	I-V	VI - VIII	Total
2008-09	4690000	1777000	6467000	4451000	1581000	6032000
				94.90%	88.97%	93.27%
2009-10	4236747	1933347	6270094	4110291	1913745	6024036
				97.02%	98.99%	97.63%
2010-11	4129000	1900000	6029000	4000000	1600000	5600000
				96.88%	84.21%	92.88%
2011-12	4129953	1933348	6063301	4129953	1900000	6029953
				100.00%	98.28%	99.45%
2012-13	3800000	2000000	5800000	3300000	1600000	4900000
				86.84%	80.00%	84.48%

Source: Economic Survey of Odisha, 2012-13, Government of Odisha.

Table 2.2.7 and Table 2.2.8 provide information on drop-out rates in the primary and upper primary schools respectively for the period from 2005-06 to 2011-12. The steep decline in drop-out rates among the SC and ST children is spectacular, but the trend is equally strong among others. The steep decline in drop-out rate among tribal girls is especially noteworthy. The MDMS has obviously played an important role in bringing down the drop-out rates at both primary and upper primary levels, especially among the most vulnerable section, namely the scheduled tribes, the scheduled castes and the other rural poor. Such sustained retention of children in schools where the MDMS is functioning also implies sustained

19 The calorific value of the meal in Odisha is currently 459 kcalories and 13.gm of protein for Primary Classes and 736 kcalories and 18.48 gm of protein for Upper Primary Classes.

provision of a degree of food security to the children. In turn, this helps the households from where the children come to achieve a certain modicum of food security for the other members of the households as well.

It is fair to say that the stabilization and improvement in the functioning of MDMS in Odisha is an important contribution to the food security of the children and their families as well.

Table 2.2.7: Drop-out Rates in Primary Schools, Odisha 2005-06 to 2011-12

	All Category			Scheduled Castes			Scheduled Tribes		
Year	**Boys**	**Girls**	**Total**	**Boys**	**Girls**	**Total**	**Boys**	**Girls**	**Total**
2005-06	18.12	18.16	18.49	19.09	19.82	19.46	12.44	24.34	23.32
2006-07	10.34	10.72	10.53	15.91	18.02	16.97	18.7	27.05	22.88
2007-08	7.76	7.83	7.79	11.93	13.16	12.54	14.03	19.75	16.89
2008-09	5	4.89	4.95	7.7	8.22	7.96	9.05	12.34	10.69
2009-10	2.57	3.1	2.83	4.06	4.36	4.21	6.27	6.66	6.46
2010-11	2.35	2.86	2.6	3.08	3.89	3.38	4.12	5.35	4.85
2011-12	0.25	0.62	0.43	2.15	2.68	2.41	3.51	2.8	3.1

Source: Economic Survey, Odisha: 2012-13

Table 2.2.8: Drop-out Rate in Upper Primary Schools, Odisha 2005-06 to 2011-12

	All Category			Scheduled Castes			Scheduled Tribes		
Year	**Boys**	**Girls**	**Total**	**Boys**	**Girls**	**Total**	**Boys**	**Girls**	**Total**
2005-06	27.86	28.96	28.39	28.46	30.21	29.33	35.89	38.46	37.07
2006-07	17.63	18.47	18.05	23.71	27.46	25.59	29.91	34.97	32.44
2007-08	13.05	13.49	13.27	17.55	20.05	18.8	22.13	25.53	23.83
2008-09	8.42	8.43	8.42	11.32	12.53	11.92	14.28	15.96	15.12
2009-10	8.13	8.24	8.19	8.42	9.61	8.89	8.47	6.82	9.72
2010-11	7.15	7.31	7.23	6.86	6.05	6.21	7.18	6.96	7.85
2011-12	3.85	2.23	3.07	2.2	1.23	1.73	3.2	6.31	4.7

Source: Economic Survey, Odisha: 2012-13

Brief Assessment of MDMS in Odisha

MDMS is widely acknowledged as one of the most successful schemes of the government in recent years. Significant increase in enrollment and attendance of children in primary and upper primary schools has been noticed in many states after the introduction of MDM. We have seen this in the case of Odisha. A performance audit (2011) was conducted by Centre for Environment and Food Security on food security schemes in Orissa and Uttar Pradesh. A sample survey in 130 villages spread over 12 districts of Orissa and Uttar Pradesh (Bundelkhand) was carried out and it was concluded that the performance of the MDM scheme was far better in Odisha in comparison with the Uttar Pradesh. About 87 per cent of Odisha's children were found to be getting second best category of MDM (regular but inadequate and unsatisfactory meal)whereas only 52 per cent of children in UP were in this category.

(http://mdm.nic.in/Files/*Order*Circulars/Findings_of_Research_studies.pdf). In another study of the MDM programme in Odisha, it was found that '…the rate of increase in enrolment during the cooked meal scheme (3.8 per cent per annum) has been much higher compared to the rate of growth of enrolment when the dry ration scheme (1.5 per cent per annum) was in operation' (Rani and Naresh Kumar,2008). However, lacunae exist, and some of the weaknesses were noted in a joint review mission of GoI and the state government that visited Odisha in 20*12*. It found that the MDMS was not being monitored effectively due to lack of proper organizational structure at the Directorate, District, Sub-district and the school level. It noted that On-line Management Information System (MIS) is not available in Odisha for capturing real time data on MDMS. It observed that the State has engaged one cook and one helper in each of the schools irrespective of their enrolment and that the honorarium to cook and helpers was not being paid as per procedures and on time. It made a number of suggestions as well. A more recent review by a joint review mission, covering the period from April to December 2013, referred to thenon-use of majority of the constructed kitchens due to poor ventilation leading to unbearable smoke, and suggested that the State needs to adopt and encourage the use of LPG.

It is beyond the scope of the present study to go into an evaluation of MDMS in Odisha. The evidence we have examined makes it clear that, implementation problems notwithstanding, MDMS has made a significant contribution to enhancing food security of children in Odisha.

2.2.4 Integrated Child Development Services Scheme in Odisha

The ICDS scheme was introduced in the country in 1975 as a holistic intervention to address nutrition issues facing women and children, especially focusing on infants and children below the age of six years as well as pregnant and lactating mothers. It offers a set of six services including supplementary nutrition,. preschool education, immunization, health check-up, referral services and nutrition and health education. It has been expanding since then, but the real impetus for expansion came from a series of orders of the Supreme Court, culminating in an order of 2004 which called, inter alia, for the universalization of the scheme. By 2011-12, the state of Odisha had also expanded the number of ICDS projects and the anganwadi centres. The scheme covers all blocks in the State of Odisha through 60,918 Anganwadi Centres and 10,216 mini Anganwadi Centres in 2011-12. The number of beneficiaries of various services provided by the ICDS in Odisha for recent years is shown in Table 2.2.9.

Table 2.2.9 Beneficiaries Covered under ICDS Programme (In lakh numbers)

Programme / Scheme	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Supplementary nutrition	30.86	33.86	49.85	48.79	49.1	49.1	45.51
Health check up	9.3	8.8	8.5	8.66	10.68	12.65	14.56
Nutrition and health education	5.7	5.9	6.3	6.5	7.3	8.7	8.7
Referral services	6.62	6.7	6.6	6.5	7.05	7.1	4.9
Pre-school education enrolled	10.58	10.7	13	14.38	16.08	16.8	16.05
Immunization	NA	33.99	32.7	31.9	33.8	30.1	22.8

Source: Economic Survey, Odisha: 2012-13 Annexure Table 8.34

During 2011-12, there were 44.19 lakh children (0-6 years) and 8.58 lakh pregnant and lactating mothers benefiting from the programme (Government of Odisha, 2013). The supplementary nutrition programme (SNP) has been implemented by 69,038 functional AWCs covering 45.51 lakh beneficiaries. An examination of the trend in the number of beneficiaries availing various services suggests that programme delivery has distinctly improved since 2005-06, at least in respect of some of the services. This is true, in particular, of SNP as well as preschool enrolment. Given the focus in this study on food security, the increases in coverage over time of SNP, health and nutrition education and health check-ups can be seen as positively contributing to food and nutrition security. The progress has continued. Data as of December 2013 relating to some features of ICDS in Odisha is presented in Table 2.2.10. It confirms that the progress in terms of the number of beneficiaries availing pre-school education services and those availing SNP services and in terms of ICDS physical and human resource infrastructure is continuing.

The ICDS data suggest that there has been an improvement in the nutritional status of children in terms of the percentage of children of normal weight. Thus, as of December 2013, the percentage of children underweight in the ICDS programme was 71.53%, almost the same as that for India at 71.62%.

According to an Evaluation by Planning Commission (GOI, 2011), Odisha has been ranked as one of the better performing states in India in the implementation of ICDS in terms of provision of supplementary nutrition to beneficiaries and of facilities of AWCs. The Report has mentioned that Odisha's frequency of delivery of SNP services is more than 80% of 300 days in a year. The Supreme Court panel has appreciated Odisha's ICDS intervention in decentralization of SNP saying that involving local women groups in the programme is one of the best practices to be taken as a model for imitation in other states.

Table 2.2.10 Details about ICDS Odisha - As of December 2013

Projects	Details	Odisha (12/2013)
No. of ICDS Projects	Sanctioned	338
	Target under TPP-06	338
	Operational	338
	Reporting	338
	Interrupted	11
No. of Anganwadi Centre /Mini AWCs	Sanctioned	72873
	Target under TPP-06	71830
	Operational	71306
	Reporting	70325
No. of CDPOs/ACDPOs	Sanctioned by GOI	371
	In Position	316
	Vacant	55
No. of Supervisors	Sanctioned by GOI	2881
	In Position	1998
	Vacant	883
No. of Anganwadi Workers(AWWs)	Sanctioned by GOI	72873
	In Position	68119
	Vacant	4754
No. of Anganwadi Helpers(AWHs)	Sanctioned by GOI	62657
	In Position	58962
	Vacant	3695
No. of SNP Beneficiaries	0-3 years	20008804
	3-6 years	1880716
	Total children	3889520
	Mothers, total	818129
	Total Children and Mothers	4707649
No. of PSE Beneficiaries	Boys	753089
	Girls	746025
	Total	1499114

Source: Status Report of the ICDS http://wcd.nic.in

As we saw, there have been improvements in the performance of ICDS over time in Odisha. This does not imply that there are no weaknesses. In the evaluation of ICDS done for the planning commission by the NCAER in 2009-10, Odisha does not get mentioned among the high performing states. It is, of course not among the very poorly functioning ones either, but this in itself suggests that there is room for much improvement in the ICDS scheme in Odisha.

2.2.5 Mahatma Gandhi National Rural Employment Guarantee Scheme in Odisha

MGNREGS was formulated to implement the MGNREGA of 2005, and in the first phase beginning in 2006, 200 districts were included in the scheme which is mandated to provide 100 days of employment per year to every rural household on demand. In Odisha, this scheme was launched in 19 districts in 2006, extended to another 5 districts in April 2007, and to 6 more districts in 2008. It is being implemented in all 30districts from April 2008.

A separate entity - a registered society – has been formed to implement the employment scheme in the state .The implementation of the programme is governed by national MGNREGA Guidelines 2013. As noted in the national plan review on MGNREGA, the programme is mostly used for natural resource management (NRM) activities such as water conservation and water harvesting, drought proofing, including afforestation and tree plantation, micro and minor irrigation ,land development etc. Works of renovation of traditional water bodies, de-silting of tanks, flood-control and protection works including drainage in water logged area are quite relevant for Odisha which have both drought and floods as major issues.

Employment by Social Groups and Gender in MGNREGS in Odisha

According to the Government of Odisha, since inception of MGNREGS, till the end of March, 2012, 61.61 lakh households have been registered and 61.37 lakh households including 11.73 lakh SC and 17.32 lakh ST have been issued job cards in Odisha. The *Economic Survey of Odisha 2012-13* states: 'Out of 227,600 employment generating projects taken up, 68,455 projects have been completed by the end of 2011-12. In the process, funds to the extent of Rs.1032.56 crores have been utilised out of the total available funds amounting to Rs.1371.14 crores, showing the percentage of expenditure as 75 percent'.[20]

Table 2.2.11 presents some data on MGNREGS employment in Odisha from 201 to 2014. There was steep fall of about 35% in the number of households getting employment under MGNREGS between 2010-11 and 2011-12. There has been some rise since then, but the number in 2013-14 at about 17 lakhs is still below the 20 lakhs of 2010-11.The high volume of employment generated by MGNREGS in Odisha in 2010-11 was not sustained in the following year, which saw the volume dip from nearly 98 million person days in 2010-11 to around 45 million person days in 2011-12.Since then, there has been some increase in employment days under MGNREGS in Odisha, with the figure rising to 54.5 million person days in 2012-13 and further to 71.1 million person days in 2013-14

The scheme seems to be especially important as a source of food and livelihood security for the scheduled tribes in Odisha who formed 22.8% of the state's population as per the 2011 Census, but account for 35 to 40% of employment days under MGNREGS.

20 Economic Survey of Odisha 2012-13, accessed at www.odisha.gov.in/pc/Download/Economic%20Survey_2012-13.pdf

Table 2.2.11: Some Data on MGNREGS in Odisha, 2010-11 to 2013-14

Year	No. of HHs provided employment in lakhs	Person days generated in lakhs					No. of HHs completing 100 days	% of HHs completing 100 days	Average days of employment per HH
		SCs	STs	Others	Total	Women			
2010-11	20.05	177.03 18.13%	347.21 35.55%	452.35 46.32%	976.59 100.00	384.82 39.40%	204229	10.19	49
2011-12	13.79	79.42 17.50%	173.18 38.17%	201.15 44.33%	453.75 100.00	175.36 38.65%	47664	3.46	33
2012-13	15.98	95.89 17.59%	205.23 37.64%	244.05 44.77%	545.16 100.00	196.05 35.96%	76152	4.77	34
2013-14	17.09	116.32 16.36%	290.23 40.82%	304.60 42.83%	711.22 100.00	238.77 33.57%	156632	9.16	42

Source: Govt. of India, Ministry of Rural Development, Department of Rural Development
http://164.100.129.4/netMGNREGA/mpr_ht/employeementstatus_mpr.aspx?lflag=local&state_code=24&page=S&month=Latest&fin_year=2013-2014&state_name=ODISHA&Digest=JmcKkPKdEYLagoJOosqJkQ

The participation of SCs in MGNREGS measured by their share in the total person days of employment under the scheme varies between 16% and 18% of the total, and is roughly in line with the share of SCs in Odisha's population as per 2011 Census at 17.1%. As for women, unlike Tamil Nadu where women accounted for between three quarters and four-fifths of total employment under MGNREGS, the proportions are much lower in Odisha. They also seem to be declining. Females accounted for nearly two-fifths of total employment days in MGNREGS in Odisha in 2010-11, but this figure came down to one-third in 2013-14. It is not clear why this is happening. Of the total decline in person days of employment of 26.5 million between 2010-11 and 2013-14, 14.6 million is accounted for by females.

Though the MGNREGA guarantees 100 days of employment in a year for every rural household that seeks it, the percentage of households in Odisha getting 100 days of employment is very low. Even in 2010-11, the year of the highest volume of employment in MGNREGS in the state, it was only 10%. In later years, it has been much less. Likewise, the average days of employment per household employed in MGNREGS in Odisha has been below 50 in all the years from 2010-11 to 2013-14, declining from a high of 49 in 2010-11 to 33 and 34 respectively in 2011-12 and 2012-13 and then recovering somewhat to 42 days in 2013-14.

Wages in MGNREGS in Odisha

The daily wage rate for MGNREGS work in Odisha, as periodically revised, is shown in Table 2.2.12. It can be seen that the wage rate has practically tripled between 2005 and 2014. Over this period, the consumer price index for agricultural as well as for rural labour in Odisha had more than doubled. So, in real terms, the wages notified in April 2014 represent a modest increase, especially when one takes into account the many sources of under-estimation in arriving at the consumer price index for rural/agricultural labour.

More important, there is no guarantee that the wages notified by the government of Odisha are necessarily paid to workers in all work sites across the state. There has been some evidence of under-payment as well as delayed payment.

Assuming the notified wage rate to have been paid (a rather strong assumption), a rural household in Odisha employed in MGNREGS on the average for 42 days in 2013-14 would have got an income of Rs 6888 in the year from MGNREGS . Allowing for expenses incurred by the worker in travel and incidentals in connection with MGNREGS , the net additional income would have been around Rs.6000 or so, about 500 rupees a month or 17 rupees a day. This would be a useful supplement, but by no means a very large contribution.

Table 2.2.12: Wage Rate (Rs per day) in MGNREGS, Odisha 2005-2014

Year	MGNREGS daily wage rate in Odisha
2005-06	55
Jan-09	70
Jan-11	125
Apr-12	125
Apr-14	164

Source: State Wise Notified Wages for MGNREGA accessed at http://MGNREGA.nic.in/nerega_statewise.pdf

The trade unions of the country had got together and proposed a national minimum wage of Rs 300 per day about three years back. This would be closer to 400 rupees per day. The MGNREGS wage rate in Odisha and most other states does not even come to half this figure.

Age Distribution of workers in MGNREGS in Odisha

There is a perception that the persons seeking employment in MGNREGS are generally from the older age groups. Table 2.2.13 presents some evidence on the age distribution of workers in MGNREGS in Odisha for the year 2013-14.

About 70% of persons employed in MGNREGS in Odisha in 2013-14 were 50 years or younger. However, at the other end, about one-ninth of those employed were 61 years or older. Citizens who should be entitled to a reasonably decent pension in their status as senior citizens were presumably being compelled by their economic circumstances to seek strenuous manual employment on what were no more than, and often less than, minimum wages. Of these persons, about 5% were in fact over 80 years of age. This alone demonstrates that the MGNREGS fulfils a felt need for income to meet basic needs of existence. It clearly makes a contribution to enhancing food security by improving access to food through wage earnings from employment in the scheme.

Table 2.2.13: Persons Employed in MGNREGS in 2013-2014 by age group, Odisha

Age Group in years	Particulars	Percentage
18-30	Registered Persons since Beginning	18.9
	Employed Persons	12.73
31-40	Registered Persons since Beginning	27.75
	Employed Persons	28.38
41-50	Registered Persons since Beginning	22.4
	Employed Persons	29.15
51-60	Registered Persons since Beginning	15.1
	Employed Persons	18.65
61 and above	Registered Persons since Beginning	15.85
	Employed Persons	11.09

Source: Ministry of Rural Development, Government of India

While the MGNREGS make an important contribution to enhancing Food Security In Rural Odisha, it is also clear that the scheme performance has been far short of potential. The fact that the average number of days of employment per household provided in MGNREGS in the state is below 10% of the 100 days guaranteed in the MGNREGA is disappointing. Odisha has a pressing need to strengthen its natural resource base, and especially to conserve land and water resources, and to cope with climate change. The MGNREGS would have been an ideal instrument to help build rural assets that would address these needs. Ensuring 100 days of employment at decent wages in works that are carefully planned and executed under the watchful eyes of an empowered community of the rural poor in order to strengthen the rural asset base should be considered a prime policy goal. This is clearly not the case at present. It has been observed by evaluation agencies that the guideline that the annual plans under MGNREGA should be formulated by the *gram sabha* (assembly of the village electorate) has not been followed in Odisha.

There are other problems of poor implementation. In a field survey, it has been reported that only about 60% of the days of employment as per official records could be confirmed by labourers employed in the scheme. Likewise, the maintenance of records in respect of works completed and their quality has been found to be unsatisfactory. There is also the issue of delayed wage payments to workers. Some suggestions put forward by evaluation agencies and others concerned include: Use of new ICT technologies such as smart cards for ensuring prompt payment of wages; starting MGNREGS work before the migration season; continuing the MGNREGS through the lean season for agriculture; and improving the quality of work by inspection and social audit by Gram Sabha committees thus enhancing the effectiveness of this scheme in addressing employment, poverty and food security.

2.2.6 National Food Security Mission in Odisha

The National Food Security Mission (NFSM) is a centrally sponsored scheme lunched in 2007 for "increasing production of rice and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the state."(GoO, 2012) The Mission's strategies are: promotion of improved inputs and technologies like seeds, integrated nutrient management including use of micronutrients, soil amendments, IPM and resource conservation along with capacity building of farmers for adoption of technologies. The proposed interventions are to be integrated with the district agriculture plan with fixed targets.

The Odisha page on the national website of the NFSM states as follows:[21]

The National Food Security Mission is a Centrally sponsored scheme (which) has been lunched in the year 2007. The following are the objectives of this scheme: A. Increasing production of rice and pulses through area expansion and productivity enhancement in a sustainable manner in the identified districts of the state. B. Restoring soil fertility and productivity at the individual farm level. C. Creation of employment opportunities and D. Enhancing farm level economy i.e. farm profits to restore confidence amongst the farmers. To achieve the envisaged objectives, the Mission is mandated to adopt following strategies, i. Implementation of programmes in a mission mode through active engagement of all the stakeholders at various levels. ii. Promotion and extension of improved technologies i.e., seed, Integrated Nutrient Management including micronutrients, soil amendments, IPM and resource conservation technologies along with capacity building of farmers. iii. Flow of fund would be closely monitored to ensure that interventions reach the target beneficiaries on time. iv. The proposed interventions would be integrated with the District Plan and fixed targets for each identified district. v. Constant monitoring and concurrent evaluation for assessing the impact of the interventions for a result oriented approach by the implementing agencies.

21 http://www.nfsm.gov.in/Default.aspx

The NFSM scheme for Odisha covers all the 30 districts for pulses. It covers 14 districts for rice. It covers the districts of Gajapati, Ganjam, Keonjhar, Koraput, Nabarangpur and Rayaguda for coarse cereals.

Table 2.2.14: Performance of NFSM in Odisha over the period 2007 to 2013

Crops	Year	Financial Target in Rs. Crores	Financial Achievement in Rs. Crores	Released Total in Rs Crores	Percentage Utilisation
	2008-2009	40.02	40.02	6.46	100.01
	2009-2010	40.25	40.2	35.64	88.77
	2010-2011	43.13	41.56	40.25	105.21
	2011-2012	35.97	37.58	39.45	104.47
Rice	2012-2013	111.85	102.26	38.03	255.09
	2007-2008	4.57	1.53	35.94	33.53
	2008-2009	28.43	28.43	4.57	98.24
	2009-2010	24.74	22.61	25.9	99.77
	2010-2011	17.42	15	22.16	114.35
	2011-2012	13.21	15.01	13.07	67.87
Pulses	2012-2013	44.47	38.89	22.29	310.36
	2010-2011	0.06	6.01	13.22	100
	2011-2012	4.44	3.21	6.01	72.3
A3P*	2012-2013	5.94	3.19	4.44	54.31
	2007-2008	0.31	0.21	4.09	67.74
Publicity	2008-2009	0.81	0.81	0.31	101.25

Source: National Food Security Mission, Ministry of Agriculture, State Profile, http://www.nfsm.gov.in/nfmis/stateprofile/BudgetProgress.aspx
*Accelerated Programme of Pulses Note: Financial utilization ratios can exceed 100% when the state spends ahead of central release of funds

Table 2.2.14 and 2.2.15 show the performance of NFSM in Odisha over the period 2007 to 2013 in terms of percentages of physical and financial achievements and utilization of funds.

The physical achievement percentages are generally quite high, often 100% and not less than 65% except in the case of rice in 2007-08 when the program had just commenced. The financial achievements are also generally impressive, except for the initial year of the programme, 2007-08. Utilisation of funds is generally not unimpressive except for pulses in 2007-08. In several instances, the state seems to have expended resources prior to the release of central funds. It would appear that the degree of commitment of the state to the programme has been quite good.

Table 2.2.15: Percentage of Physical and Financial Achievements, NFSM in Odisha, 2007-08 to 2012-13

Year	Crops	% of physical achievement	% of Financial achievement
2007-2008	Rice	31.6	32.2
	Pulses	105.8	33.5
	A3P		0.0
	Publicity		67.7
	Total		33.7
2008-2009	Rice	105.2	100.0
	Pulses	65.1	100.0
	Publicity		100.0
	Total		100.0
2009-2010	Rice	95.3	99.9
	Pulses	150.6	91.4
	Publicity		0.0
	Total		93.7
2010-2011	Rice	91.3	96.4
	Pulses	72.0	86.1
	A3P	100.0	
	Total		103.2
2011-2012	Rice	109.1	104.5
	Pulses	97.2	113.7
	A3P	100.0	72.3
	Total		104.1
2012-2013	Rice	87.6	91.4
	Pulses	95.3	87.5
	A3P	100.0	53.8
	Total		89.0

Source: National Food Security Mission, Ministry of Agriculture, State Profile, http://www.nfsm.gov.in/nfmis/stateprofile/TS_State.aspx

A mid-term evaluation of NFSM was conducted. The following are some of the findings from the evaluation of the programme implementation in Odisha. The state fared quite well in terms of many technology interventions under NFSM. The programme of distribution of Zero Till Seed Drills had been rated as successful in Odisha as it has achieved its targets. This is mainly because of the favourable soil structure and other agro climatic conditions. It has been observed that rotavators are becoming more popular with the farmers in the district of Puri in Odisha. Other technology interventions which are rated as successful are: distribution of sprinkler sets; distribution of diesel pump sets; programme of integrated pest management; participation in Farmers' Field School (FFS); and agricultural extension support to farmers. The NFSM in Odisha has helped to increase yields of rice in some of the programme districts.The yield increase has been reported the districts of Kalahandi (38%), Dhenkanal (34%) and Duapada (34%). Odisha received the award for the Eastern region in 2008-09 for its NFSM performance in the pulses component.

The state has, however, not been able to generate significant local initiatives.

2.2.7 Conclusion

Odisha, over the many decades since Independence has been considered one of the more backward States in the India, whether measured in terms of per capita state income or in terms of human development indicators. Prevalence of severe malnutrition among children and mothers, high infant mortality rates, widespread poverty and acute malnutrition among the vulnerable segments of the state's rural population, especially the scheduled tribes and the scheduled castes, are among the major concerns relating to the issue of the lives of ordinary people in Odisha. However there has been some progress over the years in all these aspects. The literacy rates of the population have gone up, for both males and females, and were about the same as the national averages, as per the 2011 Census. Infant mortality rates have come down from rates in excess of 100 per thousand live births to levels not much above the national averages in recent years. It would appear that the several measures taken by successive governments at the centre and in the state and general economic growth have led to some amelioration of the conditions of the people. However, the levels of deprivation, though possibly less than earlier, remain high. Unemployment and mass poverty, relatively slow growth rates of output of food grains, extremely high levels of asset inequality and the especially poor status of the scheduled tribe population of the state are still very much part of the reality of rural Odisha. It is therefore, gratifying, that implementation problems notwithstanding, the several food security related interventions of the past seven or eight years have made a positive impact.

In the period since 2005-06, the state has vastly expanded the PDS, improving access to the poor through a series of entitlement measures and lower prices charged for grains. Difficulties and inefficiencies have of course not disappeared, but the picture is one of greater access to food for the poor through the PDS than was the case earlier. The proportion of household consumption of grain from PDS has gone up significantly between 2004-05 and 2009-10, and though we do not have the break up by decile classes of MPCE yet, this is very likely to have occurred to a greater extent among the poorer deciles. Likewise, the more or less universal MDMS has contributed both to improved nutrition among school going children and to a steep decline in drop-out rates at both primary and upper primary schools, especially among tribal girls and boys. The data relating to beneficiaries of the ICDS, for SNP, for preschool education and for other services such as health and nutrition education, health check-ups and referrals, and immunization, suggest that, on the input side at least, progress is being made. The data from ICDS on the percentage of children underweight shows that Odisha is doing no worse than the national average. In all these direct food delivery interventions, there is clearly much room for improvement, better monitoring, greater decentralization to elected local bodies to encourage greater people's participation and so on, but the progress made is unmistakable.

The MGNREGS in the state, while making an important contribution to improving the access dimension of food security, seems to be falling far short of its potential. There is an urgent need to scale up the MGNREGS, ensure that all households applying for job cards get them promptly, and to ensure that

each household gets the guaranteed 100 days of employment at notified daily wage rates. Likewise, greater community participation in the choice of projects through the *grama sabhas* and careful monitoring of productive asset creation as well as its subsequent maintenance are important. The potential of MGNREGS to improve natural resource management and help the people cope with climate change consequences has to be fully utilized. Finally, the NFSM is, in financial and functional terms, a relatively smaller intervention, but one that can trigger wider change if its gains are communicated effectively to the cultivating population. This seems to be quite weak at the moment.

Section 3 - Kerala

2.3.1 Introduction

Kerala is among the smaller of the major states of the Indian Union. It is well known for its impressive record in terms of human development. It appears to be moving close to population stabilization. Some basic demographic data on Kerala is presented in Table 2.3.1

Table 2.3.1: Some Demographic Data on Kerala, 2001 and 2011

Description	2011	2001
Population	**33,406,061**	**31,841,374**
% Increase in Population over previous Census	**4.91%**	**9.42%**
Percentage of total Population of India	**2.76%**	**3.10%**
Sex Ratio (Females per 1000 Males)	**1084**	**1058**
Child Sex Ratio (Girls per 1000 boys, in the age group of 0 to 6 years)	**964**	**965**
Density/km2	**860**	**819**
Area in km2	**38,852**	**38,863**
Literacy Rate for the population aged 7 years and older	**94.00 %**	**90.86 %**

Source: Census 2011, Govt of India, http://www.census2011.co.in/census/state/kerala.html

Kerala ranks the highest among major Indian states in terms of Human Development Index (UNDP, 2013). In terms of several important health and education indicators, it ranks at the top among the major states of India. Overall, the human development index (HDI) value in 2007-08 for Kerala at 0.79 was the highest in the country, and much higher than the all India value of 0.467. Kerala's HDI improved from 0.677 in 1999-2000 to 0.790 in 2007-08. (UNDP, 2013). Kerala's pioneering land reforms paved the way for the empowerment of the rural poor, and has been a key to the progress of the state in human development, along with enlightened policies on education and health. The presence of strong people's movements and a generally high level of political consciousness are among other important features of the state.

In this section of the Report, we shall briefly review the major food security interventions in Kerala over the last decade. The interventions that we will review include the PDS, MDMS, ICDS scheme, MGNREGS and the NFSM.

2.3.2 The PDS in Kerala

Kerala has a good track record compared to most other states in terms of providing food and nutrition security. Prior to the introduction of the targeted PDS in India in 1997, Kerala had a model PDS which was the best in the country. The TPDS created a number of new problems for the PDS in Kerala

between the end of the 1990s and early part of the first decade of the new millennium.[22] Things have improved more recently.

The *Economic Review of 2013* for Kerala notes: 'The Public Distribution System was launched in Kerala in 1962 with the implementation of the Kerala Rationing Order. Kerala made pioneering achievements in the implementation of a Universal Rationing System.'[23] It rightly defines food security in the following terms: 'Food security ensures economic and social access to adequate food for all persons in the country at all times, in pursuance of their fundamental right to live with dignity.' The PDS assumes critical importance in ensuring food security in a state like Kerala which produces only 15% of the food grain it needs. Given its high man-land ratio and the constraints in expanding its production of food grains, the importance of PDS for the state is obvious.

Cards and Outlets in PDS in Kerala

There were 81 lakhs ration card holders in Kerala in 2012-13, an increase of 3% over the figure of 78.6 lakhs card holders for 2011-12. Of the 81 lakh ration card holders, 14.56 lakh belonged to the "below the poverty line" or BPL category, 5.92 lakh to the AAY category of the 'poorest of the poor' and 59.25 to the 'above the poverty line' or APL category.

Table 2.3.2 provides data on FPS, meaning PDS retail outlets, and the numbers of card holders with various entitlements, for 2006 and 2013, as shown by the Ministry of Agriculture, Government of India. There are some marginal differences between the numbers cited earlier from the *Economic Review 2013* published by the Kerala State Planning Board and the figures in Table 2.3.2, but these are indeed practically negligible.

[22] See MSSRF(2008)

[23] Kerala State Planning Board(2013), *Economic Review 2013,*

Table 2.3.2: Fair Price Shops and Ration Cards, by State and Category, 2006, 2013

		2006					2013					
States	No. of fair price shops	Ration cards (in 00,000)				No. of cards per FPS	No. of fair price shops	Ration cards (in 00,000)				No. of cards per FPS
	(FPS)	BPL	APL	AAY	Total		(FPS)	BPL	APL	AAY	Total	
Kerala	14,153	15.02	46.35	5.41	66.78	472	14267	14.47	59.01	5.96	79.44	557
All India	4,83,195	745.32	1295	204	2244.5	465	515996	871	243	1314	2428	471

Source: a) Ministry of Consumer Affairs, Food and Public Distribution GoI, 2007; b) www.indiastat.com, March 2007, 2013

It can be seen from Table 2.3.2 that there were 67 lakh ration card holders in Kerala in 2006. They were served by 14,153 FPS involved in PDS. Thus, one FPS had to serve, on the average, 472 ration card holders. By 2013, the number of ration card holders to be served had risen to about 81 lakhs, but the number of FPS had risen only marginally to 14, 267 from 14,153 in 2006. This meant that the FPS in 2013 had to serve, on the average, 557 ration card holders, an increase of about one-sixth.

A more detailed picture of the distribution of cards and shops under PDS in Kerala for the years from 2007-08 to 2012-13 is available in the *Economic Review 2013* of the Kerala State Planning Board and is reproduced in Table 2.3.3. A feature of the PDS in Kerala is the reliance on private retail outlets, unlike in Tamil Nadu where most of the FPS are with the cooperative sector.

Table 2.3.3: Cards, Depots and Shops in PDS in Kerala, 2007-08 to 2012-13

Sl. No.	Item	Unit	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
1	No of Ration Cards and permits							
	a. Ration cards for families as on 1st April	No	7025638	7034886	6835945	7340488	7863698	8100536
	b. Ration permits for institution as on 1st April	No	13330	10952	8709	7603	6311	6311
2	No of FCI Sub Depots as on 1st April	No	20	22	22	22	22	22
3	No of wholesale shops as on 1st April							
	a. Co-operatives	No	36	35	25	36	35	36
	b.Supply com	No			10	10	9	10
	c. Others	No	302	301	300	288	288	287
	d. Total wholesale shops	No	338	336	335	334	333	333
4	No of Retail shops as on 1st April							
	a. Cooperatives	No	472	425	423	419	413	411
	b. Others	No	13776	13819	13816	13833	13854	13890
	c. Total Retail Shops	No	14248	14244	14239	14252	14267	14301
5	Sugar (Allotted)	000 kilograms	57236	49236	49338	49362	62855	58076
6	Kerosene (Allotted)	000 litres	277988	277968	277944	225096	197124	125196

Source: Kerala State Planning Board, *Economic Review, 2013*, Appendix Table 2.92

Prices, entitlements and supplies in PDS in Kerala

The prices at which the food grains are supplied to card holders through the PDS vary by the category of card holder. They have also been varying across the years, as the government has tried to grapple with the needs of the people for food security.

The supply prices of rice for APL and BPL cards in Kerala during 2012-13 were, respectively, 8.90 and Re 1 per kilogramme. The supply price for wheat was Rs 6.70 per kg for APL cards and Rs 2 per kg for BPL cards.[24] However the government of Kerala had earlier, in January 2011, approved a scheme for providing food grain at Rs 2 per kg to a set of prescribed special category of beneficiaries. All BPL and APL beneficiaries in the state were provided with rice and wheat at Rs 2 per kg in 2012-13. Since September 2011, the state government has begun implementing schemes for issuing rice at Rs 1 per kg to all BPL beneficiaries in the state. The AAY card holders in Kerala (numbering 5.96 lakhs in 2013) are being provided 35 Kgs. of rice per month at Re 1 per kg since December, 2001. The government of India, however, charges the state government Rs 3 per kg for the AAY allotment. Under the Annapoorana scheme, 10 Kg of rice per month is distributed free of cost to destitute persons of the age of 65 years and above. The number of beneficiaries in Kerala under the Annapoorna scheme was 34,307 as on 31-03-2012.

The PDS in Kerala provides, besides rice and wheat, kerosene and sugar as well. Some idea of the extent of supplies under PDS of these items is provided by Table 2.3.4. Supply of sugar is confined to BPL and AAY card holders.

Table 2.3.4: Distribution of Rice, Wheat, Kerosene and Sugar through PDS from 2007-08 to 2012-13, Kerala

Year	Rice (000 Kilograms)	Wheat (000 Kilograms)	Kerosene (000 litres)	Sugar (000 Kilograms)
2007-08	854104	258931	249871	37023
2008-09	859092	202608	243961	53786
2009-10	1013930	172287	244873	68145
2010-11	1159830	195925	196923	86776
2011-12	1276635	185259	166424	60316
2012-13	1265618	180268	125196	58076

Source: Kerala State Planning Board, *Economic Review, 2013*, Appendix Table 2.93

[24] *Economic Review 2013,* Kerala State Planning Board, Thiruvananthapuram.

During 2012-13, rice allotment to APL cardholders was 6.2 lakh MT and BPL card holders 4 lakh MT. At the same period rice allotment to AAY card holders was 2.5 lakh MT. A much smaller amount additionally went to meet the needs of the Annapoorna scheme beneficiaries.

The Kerala State Civil Supplies Corporation, a state government owned entity, plays a key role in procuring and distributing grains across the state through the PDS. It was set up in 1974 as a key element in the food security apparatus of the state. Its role in stabilising the prices of essential commodities in the State through both procurement and open market operations is a very important contribution to the maintenance of reasonable price stability for essential commodities.

Role of PDS in meeting grain consumption needs

Data from successive national sample survey (NSS) rounds show the continuing importance of the PDS for meeting the household consumption requirements of food grains. Table 2.3.5 presents data from the 61st and 66th rounds of the NSS regarding the proportion of rural households in Kerala reporting consumption of rice and wheat from the PDS in 2004-05 and 2009-10. The proportion is higher for Kerala than the national average for both grains and in both periods, reflecting the greater importance of PDS in this state as compared to the country as a whole. It is also noteworthy that the percentage of rural households reporting consumption from PDS has increased significantly for both rice and wheat in Kerala between 2004-05 and 2009-10.

Table 2.3.6 shows the percentage of PDS in total household consumption of rice and wheat in both 2004-05 and 2009-10 for rural Kerala.

Table 2.3.5: Percentage of Rural Households reporting consumption of rice and wheat from PDS, 2004–05 and 2009- 0,- Kerala

State	2004-05 Rice	2004-05 Wheat	2009-10 Rice	2009-10 Wheat
Kerala	34.6	19.71	54.3	32.8
All India	24.4	11.42	39.2	27.6

Source: NSSO Report No. 510, 545, GoI, 2007, 201 0

Table 2.3.6: Percentage of PDS consumption to total household consumption, rice and wheat, Rural Kerala, 2004-05 and 2009-10

State	2004-05 Rice	2004-05 Wheat	2009-10 Rice	2009-10 Wheat
Kerala	27.93	12.2	27.9	39.7
All India	22.24	11	23.5	14.6

Source: NSSO Report No. 510, 545, GoI, 2007, 2010

While the proportions remain practically unchanged for rice in Kerala and increase only marginally between 2004-05 and 2009-10 for India, the role of PDS in meeting wheat consumption has risen significantly in Kerala and more modestly in India as a whole.

2.3.3 Mid-day Meals Scheme in Kerala

While the NPNSPE, which later came to be called the MDMS, was launched by the Government of India in 1995, Kerala has a longer history of school feeding programmes. A school lunch programme was started in parts of present day Kerala as far back as 1941.[25] By the mid-1980s, the governments of Tamil Nadu, Kerala and Gujarat had put in place a universal 'noon meal' scheme providing hot cooked food for children in primary schools.[26] The Report of 3rd Review Mission on Mid-Day Meal Scheme of the Ministry of Human Resource Development of the Government of India states as follows:

The Mid Day Meal Scheme was introduced in Kerala 1984 in Lower Primary classes (I-IV) in 222 villages mainly inhabited by the fisher men. The scheme was extended to all LP schools in the State during 1984-85. The scheme was further extended in Upper Primary (V-VII) schools during 1987-88. Thus Kerala State was implementing the scheme ahead of launching of the scheme by Government of India which launched this scheme on 15th August, 1995 in Primary stage. The scheme was introduced in Upper Primary stage during 2007-08. Kerala also introduced this scheme in class VIII during 2007-08 because the above class was not covered under the scheme till that time.[27]

Thus, the Mid-Day Meal Scheme launched in Kerala in 1984 initially covered children in classes up to the fourth standard. Later, the scheme was extended in 1987-88 to cover children up to class 7. From 2007-08, when the Central government had universalized the scheme for all students in primary and upper primary classes, the scheme in Kerala also covered children from classes 1 to 8.

The number of students benefiting from the scheme has grown over the years, but in recent years, there has been a decline. Chart 2.3.1 provides the relevant data for the period from 2008-09 to 2012-13. It can be seen that the number of children benefiting from mid-day meals in schools rose from 26.83 lakhs in 2007-08 to peak at 30.88 in 2008-09. Since then, the numbers have been declining every year, reaching a figure of 26.33 lakhs for 2012-13, falling below the figure for 2007-08. The picture disaggregated by the two stages of primary and upper primary classes for the period 2008 to 2013 is given in Table 2.3.7

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[25] http://nutritionfoundationofindia.res.in/Evaluation/Evaluation%20of%20%20Midady%20meal%20programme.pdf/Chapter%201%20_%20MDMP-A%20Historical%20Perspective_Evaluation%20of%20%20Midady%20meal%20programme_%20%20Pages%201-11.pdf , p1.

[26] http://www.mssrf.org/fs/pub/School-Feeding-Programmes-in-India.pdf

[27] http://mdm.nic.in/Files/Review/Reports/2011/Report_Reveiw_mission_Kerala.pdf

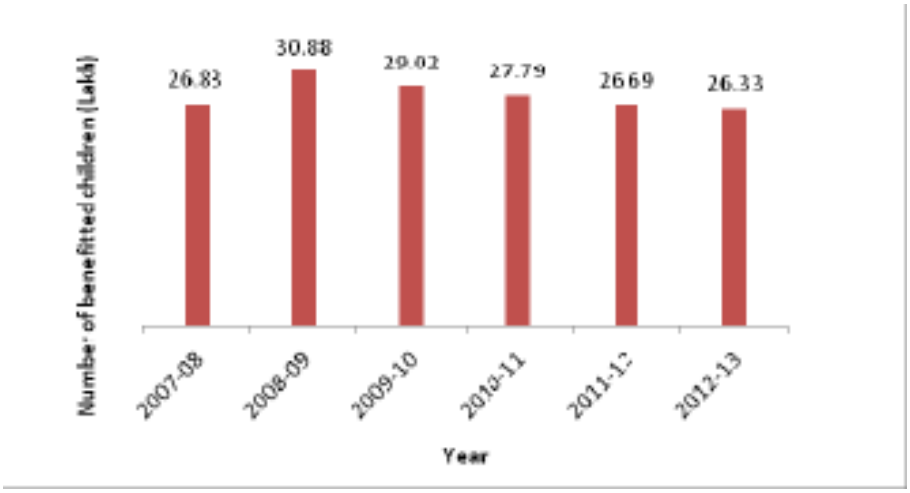

Fig 2.3.1 Mid-day Meal Programme Kerala 07 13

Source: Kerala State Planning Board, *Economic Review 2013*

Table 2.3.7: Enrolment and Beneficiaries in MDM in Kerala, 2008-09 to 2012-13

Year	Level of Education	Enrollment	MDM Beneficiaries	% of beneficiaries to those enrolled
2008-09	Primary	20.19	18.35	90.89
	Upper primary	13.79	12.52	90.79
	Total	33.98	30.87	90.85
2009-10	Primary	18.71	17.94	95.88
	Upper primary	13.61	11.08	81.41
	Total	32.32	29.02	89.79
2010-11	Primary	18.43	16.99	92.19
	Upper primary	13.34	10.82	81.11
	Total	31.77	27.81	87.54
2011-12	Primary	17.02	16.25	95.48
	Upper primary	12.96	10.66	82.25
	Total	29.98	26.91	89.76
2012-13	Primary	16.43	15.63	95.13
	Upper primary	12.22	10.68	87.40
	Total	28.65	26.31	91.83

Source: Mid-Day Meal Scheme, Ministry of HRD, Dept. of School Education and Literacy, Govt. of India, http://mdm.nic.in/

There are some marginal differences between the figures in the chart obtained from the *Economic Review 2013* published by the Kerala State Planning Board and the figures from the website of the ministry of human resource development. However, the trend is clear. With very low birth rates, net additions to school enrolment are low. Some shift of children from government and government-aided schools is also taking place. Together, these may explain the decline in the total number of children benefiting from MDMS in Kerala.

The percentage of beneficiaries –those availing the midday meal- to those enrolled is consistently high at the primary level. The figures vary between 91 and 96 %during the period 2008 to 2013. The figures for the upper primary stage are somewhat lower, varying between 81 and 91 percent. This might reflect the fact that some of the children enrolled in upper primary schools opt out of the mid-day meal for a variety of reasons, as mentioned by some parents during the visit of a review mission in 2012. (See below).

Assessments of the MDMS in Kerala

The MDMS in Kerala is implemented by the Department of School Education. At the district level, the person in charge of the scheme is a Noon Meal Supervisor. At sub- district level, an Assistant Educational Officer (AEO) looks after the work of MDMS, in addition to his other duties relating to other schemes. A review mission on MDMs by the government of India found that in the sampled districts, not all the posts of Noon Meal Supervisor were filled up. The mission felt that the institutional set up for managing a scheme of the magnitude and vastness as that of MDM is not adequate, and suggested that there should be a separate Cell at secretariat level and a separate Director at Directorate level to look after the Scheme. The mission observed that in Kerala, there was no online management information system (MIS) at present and the data was compiled manually at district levels and sub districts levels. It recommended that the State should take necessary steps immediately for putting in place an effective MIS and that the funds for this purpose may be utilized from the allocation under Management, Monitoring and Evaluation (MME) could be utilized for this purpose.

The review mission interacted with various stakeholders of the MDMS seeking their views about the scheme during the field visit to the selected districts. The field observations brought out very clearly that the programme, despite its limitations, has exerted a very positive impact on the stakeholders. The children, irrespective of their socio-economic backgrounds, were found to enjoy the sharing of food. However, a section of the children, coming from relatively affluent families, did not opt for mid-day meal and they were excluded from the meal feeding strength under the scheme.

Parents in general, and particularly those from the poorer sections, had a very positive view on the scheme. In the schools where the programme is operational, parents wanted the scheme to continue but with certain improvements like introduction of a varied menu. The MDMS was appreciated by parents for economic and social reasons. MDMS is seen as having provided a platform to the children to learn many good habits while taking the food. The involvement of Parent-Teacher Association was reported to the mission as being very good in 90 %of the schools. The PTA president and members visited the school often. Parents were found to be helping the cooks in many schools. In some schools, the parents (not many, but one or two only) were found to be supporting the distribution of food to the students.

Teachers were generally found to be very satisfied at hot cooked meals being given to the children. They mentioned that firewood and transportation cost was not sufficient. There was delay in reaching the fund to the school but the teachers managed the Scheme by contributing funds from their own resources so

that the children are not deprived of the mid-day meal. The money contributed by these teachers is recouped after receiving cooking cost from the State Government.

Looking at the secondary data and the observations of the review mission of 2012, it appears that the MDMS is well established in Kerala but also that the more well-to-do sections opting out of the meal scheme and some of them shifting children to unaided private schools for a variety of reasons may pose a challenge to the scheme in its present form in the future. That said, the contribution of MDMS in Kerala, a state with less rural poverty than many others, still seems to be quite important from the viewpoint of food security.

2.3.4 Integrated Child Development Services Scheme

On October 2, 1975, when ICDS scheme was introduced in State of Kerala, the policy of the government was to implement the supplementary nutrition programme (SNP), one of the six services that the ICDS was mandated to provide, with locally available food resources. Subsequently, the State utilized the services of 'Cooperative for Assistance and Relief Everywhere' (CARE), an international non-governmental organization, till 1986. As part of the rationalization of the programme by Govt. of India, CARE was phased out from ICDS with effect from January 1, 1987. In its place, the World Food Programme (WFP) was brought in to support the programme. With effect from 01-07-97, the WFP food assistance was limited to 3.37 lakh beneficiaries coming under the 43 ICDS Projects in the northern districts of the state. For the remaining ICDS Projects, State Government met the SNP expenditure till 31-03-98. From 02-10-1975 to 31-03-98, the State Government also provided noon-meals to children attending Pre-School class in ICDS.

The expansion in the number of ICDS projects in Kerala over time is shown in Table 2.3.8

Table 2.3.8: No. of ICDS Projects in Kerala, 1975 -2012

Year	No. of ICDS projects
1975	1
1980	10
1985	59
1990	86
1995	120
2000	163
2010	258
2012	258

Source: Statewise number of ICDS Projects and Anganwadis (AWCs) Sanctioned and operational for different years, http://wcd.nic.in/icdsdatatables.htm

With the Supreme Court delivering a far reaching order for universalization of ICDS in 2004, the pace of expansion picked up. In 2006, Kerala had 163 projects of which 151 were rural, 11 urban and one tribal AWC. There were 25393 anganwadi centres (AWCs) in 2006. Rapid expansion took place thereafter and

by 2010, Kerala had achieved universalization in terms of the number of operational AWCs, on the basis of prevailing norms.

Currently, the ICDS programme in Kerala is implemented through 33115 operational AWCs in 258 ICDS projects. Some basic data on the ICDS in Kerala is given in Table 2.3.9 As of December 2013, Kerala had universal ICDS. All sanctioned projects and AWCs were operational and reporting regularly. All projects had their key officer- the Child Development Project Officer –in place. Almost all anganwadi workers and helpers were in position, but about a fourth of the supervisors were not. Supplementary nutrition services were being provided to nearly 1 million beneficiaries, of whom about one-sixth were pregnant and lactating mothers and the rest were children aged 0 to 6 years, nearly equally divided into those below three years of age and those between 3 and 6 years of age. The number of pre-school education beneficiaries at 4.15 lakhs marginally exceeded the number of children in ICDS aged 3 to 6 years. By any standard, this was massive coverage, though a sizeable number of children in the relevant age group of children as well as pregnant and lactating mothers in the community did not avail the services provided by the ICDS.

Table 2.3.9: Some Basic Data on ICDS Kerala, December 2013

	Details	**Kerala 12/2013**
No. of Projects	Sanctioned	256
	Operational	258
No. of Anganwadi Centre /Mini AWCs	Sanctioned	33115
	Operational	33115
No. of CDPOs/ACDPOs	Sanctioned by GOI	338
	In Position	338
	Vacant	0
No. of Supervisors	Sanctioned by GOI	1462
	In Position	1078
	Vacant	384
No. of AWWs	Sanctioned by GOI	33115
	In Position	33093
	Vacant	22
No. of AWHs	Sanctioned by GOI	32986
	In Position	32974
	Vacant	12
No. of SNP Beneficiaries	0-3 years	412757
	3-6 years	414746
	Total children	827503
	Mothers total	171886
	Total children and Mothers	999389
No. of PSE Beneficiaries	Boys	208056
	Girls	206890
	Total	414946

Source: State wise number of ICDS Projects and Anganwadis (AWCs) Sanctioned and operational for different years, http://wcd.nic.in/icdsdatatables.htm

Some time series data on ICDS beneficiaries in respect of supplementary nutrition and preschool education is presented in Table 2.3.10

Table 2.3.10: ICDS Beneficiaries receiving supplementary nutrition, Kerala, 2007-07 to 2011-12

Year	No. of beneficiaries	
	0-6years	PW & LM
2006-07	9,59,868	1,67,386
2007-08	11,91,939	2,17,779
2008-09	11,67,183	2,27,564
2009-10	11,02,073	2,50,205
2010-11	10,46,677	2,10,281
2011-12	8,85,789	1,95,927

Source: PowerPoint presentation of the State Annual Programme Implementation Plan for 2012-13 for Kerala, accessed at wcd.nic.in/**icds**/apip/**Kerala**%20(16July).ppt

It can be seen that after reaching a peak in terms of children benefiting from ICDS in 2007-08, the number of children availing SNP services shows a steady decline. Likewise, after peaking in 2009-10, the number of pregnant women and lactating mothers (PW and LM) also declines during the next two years.

The picture in respect of children availing preschool education services is shown in Table 2.3.11.

Table 2.3.11: Beneficiaries availing preschool education services in ICDS, Kerala, 2006 to 2012

Year	No. of beneficiaries
2006-07	5,23,328
2007-08	5,66,415
2008-09	5,44,979
2009-10	5,31,096
2010-11	5,14,040
2011-12	4,51,171

Source: Ministry of Women & Child Development, Government of India, http://wcd.nic.in/icdsdatatables.htm

The trend in the numbers is very similar to that for SNP beneficiaries. After peaking in 2007-08, the numbers come down steadily thereafter. While demographic factors such as declining numbers of children as well as of pregnant women and lactating mothers in Kerala may be one factor for the decline in the number availing supplementary nutrition services, there may be others as well, such as the mushrooming private nursery schools of uneven quality, but attractively marketed. A discussion held on July 16, 2012 on the State's annual programme implementation plan (APIP), concern was voiced that, 'There is a steady decrease in PSE beneficiaries at the AWCs due to influx of private nursery schools which are preferred by the parents for their children.' There was also a suggestion made at the meeting

that the State government should undertake social marketing on this issue, 'to highlight the importance of early childhood education at the AWCs, without compromising the quality in early learning'. It was also suggested that, '… given the socio-economic conditions along with the highest literacy rates of women and rapid urbanization, the State government needs to devise alternative delivery models to make the ICDS programme more effective and meaningful. An integrated approach is required to address the 2nd generation issues of over-nutrition/obesity and the 1st generation issue of anaemia amongst the children and women through brainstorming with all stakeholders (including the States with similar contexts).' It is not clear what came of this frank brainstorming, but clearly the ICDS faces important challenges in the future, with the demographic transition being at an advanced stage in Kerala, and with the Kerala economy and society changing rapidly and cultural values undergoing dramatic changes as well. While this is true, it is also true that the ICDS in Kerala has contributed in important ways to improve food and nutrition security for the rural population in Kerala, especially the vulnerable sections such as the scheduled tribes, the scheduled castes and women.

2.3.5 MGNREGS in Kerala

The *Economic Review 2013*, a publication of the Kerala State Planning Board, provides a succinct summary of the key provisions of the MGNREGA: 'The National Rural Employment Guarantee Act 2005 seeks to enhance the livelihood security of the households in rural areas of the country by providing at least one hundred days of guaranteed wage employment to every house hold whose adult members volunteer to do unskilled manual work. Every household whose adult members volunteer to do unskilled manual work would be entitled to get registered with the Grama Panchayat and get a job card through the Grama Panchayat. Every registered household would be entitled to get at least hundred days guaranteed wage employment during a year. If the eligible applicant is not provided employment within 15 days of receipt of application or from the date from which the applicant seeks employment (in the advance applications), he or she shall be entitled to a daily unemployment allowance, in cash'. (Para 2.139).

What has been the record of implementation of MGNREGS in Kerala? According to the *Economic Review 2013*, (para 2.140), the scheme had generated 7.8 crore person days of employment in rural Kerala at a total project expenditure of around 1412 crore rupees. However, the data from the MGNREGA website gives a somewhat higher figure of 8.4 crore person days of employment under MGNREGS for Kerala in 2012-13. Likewise, the MGNREGA website gives a higher figure for total expenditure under the scheme for 2012-13 at Rs.1501 crores. We have not been able to identify the source of these discrepancies, but it is clear that these differences notwithstanding, the scheme has been very large in size, both financially and in terms of employment generated.

When the first phase of implementation of the MGNREGS was launched in pursuit of the implementation of the MGNREGA, the districts of Palakkad and Wayanad were chosen as the sites of implementation. The scheme was extended to all fourteen districts of the state by April 2008.

Social Composition of MGNREGS Employment

The MGNREGS is implemented through the gram panchayats in Kerala. Table 2.3. 12 provides details of the number of households employed in MGNREGS and person days of employment by social category in the scheme for the years 2009-10 to 2013-14, from the MGNREGA website of the government of India. It also gives the number and percentage of households getting 100 days of employment in the year.

Table 2.3.12: Households employed and person days of employment in MGNREGA – Kerala 2009-2014

Year	No. of HH provided employment	Person days generated					No. of HHs completing 100 days	% of HHs completing 100 days
		SCs	STs	Others	Total	Women		
2009-10	955976	5697000 **16.77%**	1811000 **5.33%**	26463000 **77.90%**	33971000 **100.00**	29961000 **88.20%**	43596	**4.56**
2010-11	1175816	7790000 **16.22%**	1489000 **3.10%**	38753000 **80.68%**	48032000 **100.00**	43417000 **90.39%**	67970	**5.78**
2011-12	1416386	9047491 **14.32%**	1499981 **2.37%**	52646442 **83.31%**	63193914 **100.00**	58675398 **92.85%**	124317	**8.78**
2012-13	1525486	12779189 **15.28%**	2136067 **2.55%**	68726604 **82.17%**	83641860 **100.00**	77782623 **92.99%**	339865	**22.28**
2013-14	1523795	13549305 **15.65%**	2309792 **2.67%**	70732635 **81.69%**	86591732 **100.00**	80849707 **93.37%**	406386	**26.67**

Source: Govt. of India, Ministry of Rural Development, Department of Rural Development
http://164.100.128.68/netMGNREGA/mpr_ht/employeementstatus_mpr.aspx?lflag=local&state_code=16&page=S&month=Latest&fin_year=2013-2014&state_name=KERALA&Digest=BurKWe7ML%2fkRHcKQDeJEcA

It is clear from the data that the MGNREGS has been picking up steam in Kerala after a relatively slow start. There is a steady rise in the number of households seeking and finding employment under MGNREGS in Kerala from 2009-10 to 2012-13, but there is a marginal dip in 2013-14. The total number of days of employment provided under MGNREGS, has, however, risen steadily, including in 2013-14, over the previous year. But the rise in 2013-14 over 2012-13 in the number of days of employment is rather small compared to year-on-year increases for earlier years. The social composition of MGNREGS employment shows that the share of SCs in total person days of employment remains fairly steady at around 15 to 16 percent, a good deal higher than their share in the population of the state in 2011, which is less than 10 %. This is in line with expectations, since SCs generally have less access to land and a high proportion of them have wage labour as the main source of income. The share of STS in total person

days of employment under MGNREGS has been declining steadily, reaching 2.67 % in 2013-14 from a high of 5.33% in 2009-10. The figure for 2013-14 is well below the share of STs in the population of Kerala in 2011.

The most striking feature of the social composition of MGNREGS employment in Kerala is the very high share of women in MGNREGS work. After falling marginally short of 90% in 2009-10, the share of women in total days of MGNREGS employment in Kerala exceeds 90% in every year thereafter. For all practical purposes, the MGNREGS in Kerala is a women's employment programme. One reason for this could be that the work is determined in a decentralized fashion at the panchayat/ward level, with many work sites close to habitations so that women find it easier to participate. The other could be that the MGNREGS wage rates are much lower than the going wage rate in rural Kerala for male labour.

A final point in relation to Table 2.3.12 is that though the MGNREGA guarantees 100 days of employment to every household seeking employment, this is rarely seen on the ground. In Kerala, the percentage of households getting 100 days or more of MGNREGS employment in the year was rather low at less than 10 % in the years from 2009 to 2011. The percentage has since increased, reaching 22.28% in 2012-13 and 26.67% in 2013-14, but still falls far short of 100%. It is of course possible that many households with less than 100 days of employment have not sought work for more days than they have obtained, but we do not have data on this.

It would be of interest to know the average number of days of employment per household working in MGNREGS. The data in this regard for the years from 2009-10 to 2013-14 is shown in Table 2.3.13

Table 2.3.13: Average number of days per households worked in MGNREGA – Kerala 2009-2014

Year	No. of HH provided employment	Total number of days worked	Average number of days worked per household
2009-10	955976	33971000	36
2010-11	1175816	48032000	41
2011-12	1416386	63193914	45
2012-13	1525486	83641860	55
2013-14	1523795	86591732	57

Source: MGNREGA, Ministry of Rural Development, Government of India, http://164.100.128.68/netnrega/homestciti.aspx?state_code=16&state_name=KERALA

The number of days of employment per year per household has increased from 36 days in 2009-10 to 57 days in 2013-14, a rise of about 60 %. In 2012-13, of the total number of households seeking employment (16.94 lakhs), about 90 %were provided employment. We have not been able to obtain information on whether the households not obtaining employment despite having sought it were compensated as specified in the MGNREGA.

Some Assessments of MGNREGS

Elected rural local bodies – the panchayati raj institutions or PRIs - were given a central role in the planning and implementation of MGNREGA under People's Plan in the period from 2006 to 2011. A strong natural resource management focus has been given to MGNREGA works. Many evaluations show that MGNREGA has increased purchasing power of the poor significantly. This is particularly true of Wayanad which had been in the grip of an agrarian crisis marked by a rise in the incidence of suicide among farmers. A study conducted by Centre for Rural Management (CRM) indicated that major defects identified during previous wage employment programmes were absent in the MGNREGS in the State. Norms such as provision of equal wages to men and women, non-involvement of contractors, very limited use of machinery, adherence to wage- material ratio etc. were followed. In the CRM study of implementation of MGNREGS the two districts of Palakkad and Wayanad, it was seen that there was no manipulation of muster rolls, unlike what had happened in earlier schemes (CRM, 2008). Preliminary studies conducted in the farm lands in Palakkad district in Kerala indicated that rice cultivation has increased in the areas where water availability has improved due the de-silting and renovation of ponds under MGNREGS. As a result of increased water availability, vegetables have also been introduced. Among the poorer sections, though land had been made available, lack of water had made it difficult to cultivate. By augmenting water resources, the MGNREGS provided an opportunity to make them cultivable, and to increase food access. MGNREGS had thus contributed to enhancing food security in this manner as well as through generating wage income. (Sanju and Sony, 2011).[28]

2.3.6 National Food Security Mission (NFSM) in Kerala

The NFSM is in operation in Kerala only in one district – Palakkad –and only for rice crop. The coverage of the programme was 27,665 Ha in 2009-10. It has increased to 37,750 in 2012-13, which works out to 77% of the area planned under NFSM in the state. On average, an amount of Rs.3 crores per annum has been spent on the program and a major part of the amount gone to two components of the programme: Seeds (36 percent) and Mechanization (24 percent) (GoI-2012-13). The NFSM intervention in Kerala is thus a fairly small one in financial and physical terms.

The achievements of NFSM in Kerala, in both physical and financial terms, are presented in Table 2.3.14. Rice is the only crop taken up under NFSM in Kerala. So figures for rice are also the total figures for the NFSM in the state of Kerala. The performance of NFSM in Kerala in physical terms is quite erratic and fluctuates from year to year. In two of the years, 2010-11 and 2011-12, the performance has been quite

[28] One study has reported that most of NREGS work was organized through the Kudumbashree system, giving the poor a stake in the work right at the beginning. Under Kudumbasree, every family below poverty line is organized into a Neighbourhood Group (NHG) at the local level consisting of 15 to 40 families with each family being represented only by a woman. The NHGs are federated into an Area Development Society (ADS) at the level of the Ward of the Village Panchayat (a Village Panchayat Ward in Kerala has a population of around 1500 to 2000). The ADSs in a Village Panchayat are federated into a registered body called the Community Development Society (CDS).Thus implementation of NREGA has contributed for women empowerment.(Viay Anand and Jithendran,2008)

poor. The financial performance is also uneven across the years. Finally there is no discernible relationship between the physical and financial performances in any year.

Table 2.3.14: Targets and Achievements of the National Food Security Mission (NFSM) - Kerala, 2008-09 to 2012-13

Year	Crop	Physical Target	Physical Achievement	% of Achievement to Target	Financial Target	Financial Achievement	% of Achievement to Target
2008-2009	Rice	31205	27655	88.62	188.85	188.85	100.00
2009-2010	Rice	50638	56132.05	110.85	390.53	277.72	71.11
2010-2011	Rice	39087	13123.83	33.58	262.35	209.881	80.00
2011-2012	Rice	36246	9811.56	27.07	304.37	141.526	46.50
2012-2013	Rice	49195	37750.56	76.74	617.83	313.26	50.70

Source: http://www.nfsm.gov.in/nfmis/stateprofile/Introduction.aspx

Though the selected district of Palakkad shown a decline in rice area, it has registered an increase in yield of about 6 percent. The Mid Term evaluation shows that the state has performed well in utilising plant protection chemicals/bio-agents, advanced machines like Cono-weeders and rotavators. It has also done quite well in the distribution of diesel pump sets, which are in high demand, for utilizing the ground water potential in the district more effectively. It is also reported that the NFSM in Kerala has a good coverage of weaker sections like SCs and that village level meetings helped in achieving the Mission targets.
Given its small size, the NFSM would have at best a modest impact on food security in Kerala

2.3.7 Conclusion

Among the major states in the country, Kerala is highly placed in terms of the standard indicators of human development pertaining to health, education, gender equality, social justice and participation of people in economic and social life. The state has recorded significant improvement in the nutritional status over time.

The status of Kerala in respect of some input indicators of food security is below the national average. Thus, the proportion of the population of rural Kerala consuming less than 1890 k.calories per consumer unit per day in 2009-10 at 14.6% is marginally higher than the national average of 11.6%, though it must also be noted that the gap between the state and the national figures in this regard has declined from 13.3 percentage points in 1993-94 to 2.5 percentage points in 2009-10. Further, the proportion for Kerala has come down from 39.7% in 1993-94 to 21.9% in 2009-10.

Similarly, the percentage of rural households without access to safe drinking water, another input indicator of food security often used, is 66.5% in 2011 as against 14.5 % for India as a whole. This is misleading, however, since in Kerala there is the cultural practice of boiling water before drinking it,

which makes a big difference to the 'safety' of the drinking water. In fact, this indicator itself is problematic, especially in how it defines 'safe' water. Nor does mere availability signify adequacy. More to the point, in respect of the standard outcome indicators of food security such as children underweight or women with chronic energy deficiency, Kerala outperforms most states. On balance, Kerala is among the better performers in the Indian Union with respect to food security. There are some points of concerns as regards food and nutritional security, however. A significant percentage of children are still reported to be severely malnourished in the state. The problem is said to be especially severe in two districts (Wayanad and Palakkad). Media reports of the death of a number of children in tribal areas have highlighted the problem.

Kerala has good public distribution system and was the forerunner for the universalisation of the system in the country. The MDMS in Kerala is well-established, though with declining additions to the child population and some migration of school children to non-aided schools, there has been a decline in the number of beneficiaries. As for ICDS, the performance seems better than many states, though a large percentage (60 percent) of eligible children registered are not availing the scheme for a variety of reasons. As regards MGNREGA, the state's performance has been improving steadily, though there is a dip in 2013-14. However, the fact that only around a quarter or less of all households working in MGNREGS get 100 days of employment is a matter of concern. Kerala being a deficit state in relation to food grain output, the national food security mission could play an important role, but it is a very small scheme at present.

Part 3

Findings of the Field surveys

3.1 Introduction

A field survey was undertaken in in three sites where the M.S. Swaminathan Research Foundation (MSSRF) has been working for a number of years in order to understand the working of different food security schemes, the extent to which people were able to benefit from them, and the problems they faced in this regard. The sites where the survey was undertaken were located as follows:

- Kolli Hills in Namakkal district of Tamil Nadu
- Wayanad district of Kerala
- Jeypore block of Koraput district in Odisha

The survey included interviewing of households, functionaries responsible for the implementation of the schemes whose working was under study, such as the elected members of village panchayat – (presidents/ward members), teachers in schools where the mid-day meal scheme was in operation, those employed as field functionaries in schemes such as MDMS and ICDS, dealers in the Public Distribution System (PDS) and so on.

3.2 Methodology

Selection of villages/Hamlets

The MSSRF works in 31 hamlets in Kolli Hills, 32 hamlets in Wayanad and 32 hamlets in Jeypore. At the first stage of sampling for household survey, six hamlets each from Kolli Hills and Wayanad and five hamlets from Jeypore were chosen so as to represent hamlets of varying population sizes. The hamlets vary in population size in each site, and the hamlet population sizes also vary substantially across the sites. In addition to ensuring that the chosen hamlets were of different sizes, considerations such as convenience in terms of access, distance, and avoiding "survey fatigue" on the part of respondents (since the MSSRF field personnel had been carrying out various surveys in the site areas from time to time) also figured in the final selection of hamlets. Thus, the hamlets were chosen purposively. Hamlets in each site were first divided on the basis of the range of population into several groups. From each group, an appropriate number of hamlets were taken up for household survey. The details are shown below for each of the three sites:

1. Kolli Hills, Tamil Nadu

Sl. No.	Population Range	Total no. of hamlets	No. of hamlets to be selected
1.	Upto 50	12	2
2.	50-100	6	1
3.	101-200	8	2
4.	Above 200	5	1
Total		**31**	**6**

2. Wayanad, Kerala

Sl. No.	Population Range	Total no. of hamlets	No. of hamlets selected
1.	Upto 50	12	2
2.	50-100	5	1
3.	101-250	9	2
4.	Above 250	5	1
Total		**31**	**6**

3. Jeypore, Odisha

Sl. No.	Population Range	Total no. of hamlets	No. of hamlets to be selected
1	Up to 100	6	1
2	101-250	11	2
3	Above 250	15	2
Total		**32**	**6**

Selection of Households:

It was decided to survey 70 Households from each site. This constituted in each site about 20% of the total number of households in the site. This number was distributed among the chosen hamlets in accordance with the total number of households in each of the hamlets.

Survey Instruments[29]

A Household Survey Schedule was prepared and pilot tested in the field. Similarly, the questionnaires meant for interviewing the functionaries were prepared and pilot tested. The field survey interviews were carried out by the experienced research investigators already working in the site. These investigators were familiar with the local areas and communities residing there.

29 The questionnaires can be found in Appendix 1

In what follows, we present the results of the survey by each site .The report is divided into four sections: one each on three field sites and the fourth on findings, conclusions and recommendations

3. 3 Survey Results for Kolli Hills, Tamil Nadu

Table 3.3.1 presents details about the number of sample households who benefited from different food security schemes.

Table 3.3.1: Distribution of Sample Households by scheme availed, Kolli Hills, Tamil Nadu

Description	Scheme			
	MDMS	ICDS	PDS	MGNREGS
Total No. of sample households	72	72	72	72
Beneficiary sample households	33	21	67	45
% Beneficiary HHs to all sample HHs	45.83	29.17	93.06	62.50

It is clear that PDS is utilised by almost all households in the sample. 67 out of 72 sample households availed benefits from the PDS. Five households did not have a ration card and were therefore unable to access the PDS. The reason the percentages are less in the case of MDM and that of ICDS is quite simply that only households with eligible beneficiaries can benefit. It was found that all households with children aged 6 months to 6 years, pregnant or lactating mothers or adolescent girls benefited from ICDS. Likewise, all households with children going to government or aided schools benefited from MDMS. So, all eligible households have availed the benefits in the case of MDM and ICDS.

MDMS

Of the 72 sample households, only 33 were eligible to access the MDMS since they had school going children. All of them were able to avail them. In all, 20 boys from 18 households and 28 girls from 23 households benefited from the MDMS. There was of course overlap, with some households having both boys and girls eligible for MDMS. One respondent from one of the 18 households whose boys were going to school reported that four meals were provided in a week, but all others said meals were served on five days a week on the average. Among the 23 respondents from whose households girls were going to school, 20 said meals were being served five days a week. One person said they were being served six days in a week, while one said it was three to four days and another said it was only on one or two days. Allowing for some confusion in the responses and for the fact that the children from a hamlet may have not all been enrolled in the same school, it seems reasonable to conclude that on an average five meals were being served in a week in the Kolli Hills. This conclusion is strengthened by the fact that all 33 respondents from households availing MDMS said that MDMS was functioning regularly.

In terms of satisfaction with the meals being served, none of the respondents reported being dissatisfied. 42% (14 out of 33) said they were satisfied while the remaining said they were 'partially satisfied'.

ICDS

Of the 72 sample households, only 21 had one or more members eligible for availing the ICDS. All the eligible households reported accessing the scheme. Of these 21 households, four had children aged between 6 and 36 months. Eight households had children in the age group of 3 to 6 years. Of the remaining nine households, two had access to benefits meant for lactating women and one to benefits meant for pregnant women .The remaining six had access to benefits meant for adolescent girls.

Of the four households with children in the age group of 6 – 36 months who received ssupplementary food from ICDS, none reported getting it regularly, seven days in a week. Two respondents said supplementary food was provided 3 to 4 days a week, one said it was given five to six days a week and the fourth respondent said it was given only once or twice. Of eight respondents from households with children in the age group of 3-6 years who received supplementary food from ICDS, four said it was given for upto two days in a week, three said it was given five to six days a week and one said it was given for three to four days in a week. The respondents from the six households availing benefits for adolescent girls reported that the girls received supplementary food during the last six months. Four of them said it was received six times in the last six months while the other two said it was received twice. The household reporting availing supplementary nutrition for pregnant women said it was received twice during the pregnancy and the two households reporting availing benefits for lactating women said it was received six times in the last six months.

Of the twelve households whose children availed the ICDS, ten respondents said the ICDS teachers were very kind to the children. Two respondents said they had not had an opportunity to observe the behaviour of the teacher and could not therefore comment.

It is reported that Anganwadi workers visited only 2 of the 21 households availing ICDS. Of the twelve AWCs serving the households availing ICDS, ten were open for between three and six hours. The other two were open for less than three hours. Of the 12 AWCs, 8 served hot cooked meals while the other four provided ready to eat food. Out of the respondents from the 21 households of ICDS beneficiaries, 12 have commented on the cooked meals at the AWCs and also the ready-to-eat food. Four of them felt the food was good while the other eight had no comments to offer.

PDS

As already noted, 67 of the 72 sample households availed the PDS. Of them, 65 had BPL cards and two had AAY cards. All the card holders have used the PDS regularly. The average amount purchased per household per month were as follows: 21 kgs of rice, about 2 kgs of sugar, 3 kgs of wheat, 1 kg of dhal and 1 kg of rava (refined wheat flour). Households also purchased 2.5kgs of iodized salt on the average.

All 67 households purchased rice. All but two purchased sugar. All but five purchased oil. 26 households purchased wheat. The same number purchased salt. Nine households purchased rava, but only five households purchased dhal and pulses.

Of the 67 households availing the PDS, 34 felt that the quality of PDS grain was average, while 31 felt it was good. Only two households reported the grain as being of poor quality. In terms of distance and time, PDS retail outlets were generally within a kilometer of the card holder's place of residence and it took about three hours to go to an outlet, complete the purchase and return home.

MGNREGS

Of 72 sample households only 45 (63%) had job cards and all of them participated in MGNREGS. The households which did not have MGNREGA job cards had not chosen to get them because they were quite busy with their own cultivation and other tasks, and did not desire to participate in MGNREGS. Among the 45 households who did, 24 (53%) were engaged in works related to road construction. About 40% of them (18) were employed in cleaning and digging of drainage structures. The workers from the three remaining households were employed in a variety of tasks. On an average, households who participated in MGNREGA work received about 97 days of work. The daily wage paid for MGNREGS work was Rs.111. This is an improvement over previous years, and apparently higher than in many other states.

Hunger

Despite the presence of many reasonable accessible food security related interventions by the government, it was still the case that a few households faced the problem of hunger. Five out of the 72 sample households reported having to go to sleep without food on at least some days in the last six months, because of lack of food.

3.4 Survey Results for Wayanad, Kerala

Table 3.4.1 provides details about beneficiaries of various food security schemes in the sample of households surveyed. Out of total of 70 sample households, all but one had availed the PDS. There were 48 households in the sample with children going to school. All these children were availing the MDMS. Similarly, there were 28 sample households, one or more of whose members qualified for benefiting from the ICDS, and all these households availed the ICDS. Out of 70 households, 46 had job cards for MGNREGS and had obtained employment under the scheme.

Table 3.4.1: Distribution of Sample Households by scheme availed, Wayanad, Kerala

Description	Scheme			
	MDMS	ICDS	PDS	MGNREGS
To No. of HHS	70	70	70	70
Beneficiary HHS	48	28	69	46
% Beneficiary HHs to all sample HHs	68.57	40.00	98.57	65.71

MDMS

37 boys and 41 girls from 48 sample households were going to school, and all of them were participating in the MDMS. Of the respondents from the 28 households sending boys to school, 25 reported that meals were being served five days a week. Two said it was being served only on one or two days and one said it was served four days a week. In the case of the 35 households which had girl children in school, all but four said meals were served five days a week. The remaining four said meals were being served only once or twice a week. However, respondents from all 48 households whose children were taking meals in schools said that MDMS was functioning regularly. Three households reported their children not receiving a mid-day meal at school at least once in the last six months. All others reported that there were no such instances.

A majority of the respondents from households whose children were availing meals – 31 out of 48 or 65% - stated that they were satisfied about the food /meals served in the MDMS. 14 respondents – 30% - reported being partially satisfied. The remaining three respondents, however, were dissatisfied with the meals served in MDMS.

ICDS

Of the 28 sample households benefiting from the ICDS, eight had children who were aged between six months and three years. Eleven had children in the age group of three to six years. One household had access to benefits meant for lactating women and two had members availing the ICDS services for pregnant women. Six households had adolescent girls who benefited from the ICDS.

Of the eight sample households with children aged 3 to 36 months availing the ICDS, only two reported receiving supplementary nutrition on five or six days a week. One said that it was being provided only three or four times a week. Five out of the eight households, however, reported that food was provided only once or twice a week. Of the 11 households with children in the age group of 3 to 6 years availing the ICDS, five said food was being provided five to six days a week while an equal number said it was only given once or twice a week. The remaining household reported that it was being given three or four days a week.

The six households with adolescent girls availing ICDS reported that the girls received supplementary nutrition during the last six months. Three households reported that it was provided twice over the previous six months. One reported that it was provided five times while the other two households reported supplementary nutrition being provided six times. Similarly three pregnant women received supplementary nutrition two times and five lactating women (out of 6) received it six times during last six months while one lactating woman received it five times over the same period.

Of the 19 households sending children to AWCs that responded to the questions on the attitude of the AWC teachers to the children, 11 said they were kind while eight said they had not been able to observe the behaviour of teachers and could not answer the questions. It was also reported by 10 sample households benefiting from ICDS that they had been visited by AWC workers. Eleven of the AWCs serving the sample households were reported to be functioning for three to six hours a day while another six worked less than three hours per day. All the 19 households whose children were eating hot cooked meals and ready-to-eat foods at the AWCs reported that both kinds of food were good.

PDS

As already noted, 69 of the 70 sample households had ration cards. Of the 69 households with ration cards, 31 had BPL cards, 34 had APL cards and three had AAY cards. All the households who had a ration card have used it regularly for the purpose of PDS.

All 69 ration card holders bought rice from PDS. On an average, a household bought 18 kgs of rice in a month. 34 households bought sugar from the PDS. The average purchased per household per month was 1.53 kgs. One household bought half a kilo of oil from the PDS, and it was the sole buyer of oil among the 69 households with ration cards. Three households bought wheat, and the average purchase per household buying wheat was 2 kgs. Two households bought atta flour from PDS and the amount bought was 2 kgs per month on the average. Of the 69 households buying goods from the PDS, 46 found the quality good while another 20 found it average. Three respondents however felt the quality was poor.

The average distance to a PDS outlet was 1.7 km for the sample households. It took them on the average nearly 70 minutes to visit a PDS and complete the purchase from it.

MGNREGS

Of 70 sample households 46 had job cards and all of them participated in the MGNREGA work. The ones who did not have job cards were households not keen on taking up employment in MGNREGS. A majority of households working in MGNREGS (53%) participated in works related to land levelling combined with road construction and cleaning of drainage cleaning. The households who participated in MGNREGS work received employment for 46 days of work on the average. The daily wage rate was Rs.175, higher than in most states.

Hunger

One of the 70 sample households reported going to sleep hungry for lack of food.

3.5 Survey Results from Jeypore, Odisha

Table 3.5.1: Distribution of Sample Households by Schemes Availed, Jeypore, Odisha

Description	Scheme			
	MDMS	**ICDS**	**PDS**	**MGNREGA**
Total Sample HHS	72	72	72	72
Sample HHS availing scheme	59	65	60	56
% Beneficiary HHs to all sample HHs	81.94	90.28	83.33	77.78

Out of72 sample households in Jeypore, only 60 avail the PDS. On the other hand, 65 benefit from the ICDS, which is somewhat unusual. As many as 59 households in the sample have school going children and all of them report availing the MDMS. 56 households avail the MGNREGS. This is a different pattern from what we found in Kolli Hills and Wayanad. Except for the PDS where the participation rates are higher in Kolli Hills and Wayanad, the utilization of government schemes is higher in Jeypore. It reflects the demographic composition of the sample households in Jeypore in terms of the presence of infants and school going children in most households, for whom MDMS and ICDS become relevant and the need for employment which accounts for the high rate of participation in MGNREGS.

MDMS

A total of 118 children, consisting of 58 boys and 60 girls from 59 sample households were participating in the MDMS. The male children came from 40 households, and the female children from 39 households. Of course, some of these households had both male and female children availing MDMS in school. Among the respondents from the 40 households whose male children benefited from MDMS, 37 said meals were served five days in a week. Two said meals were served six days a week while one respondent said meals were served only four times a week. The corresponding numbers in the case of the 39 households whose girl children were availing the MDMS were 33, 3 and 3 respectively. It would thus appear that five days of serving of hot cooked meals in schools is the norm in Jeypore, while occasionally a school may serve mid-day meals on six days and another may serve four. All households whose children were availing the MDMS said the meals were being regularly served. However, one household reported that there were four occasions in the month preceding the date of survey when meals were not served. Another 16 reported the occurrence on three occasions while 14 said this had happened twice and two said it had happened once. There were no other households participating in MDMS that reported meal

not being served on any occasion during the previous month. The frequency of missed mid-day meals is thus distinctly higher than in Kolli Hills and Wayanad. 35 of the 59 households availing the MDMS reported that they were satisfied with the quality of the mid-day meals another 21 said they were partially satisfied and three respondents said they were dissatisfied.

ICDS

65 out of 72 sample households were benefiting from the ICDS in Jeypore. Of them, 32 had children aged 6 to 36 months and 21 had children aged 3 to 6 years. Four households had lactating women utilizing the ICDS while three had pregnant women. Five households had adolescent girls who were utilizing the ICDS.

Of the 32 households which had children aged 6 to 36 months utilizing ICDS, one reported that meals were being provided all seven days of the week. Eighteen said it was given five or six days a week while eleven said it was being given three or four times a week. The remaining two said it was only being served twice a week. It would thus appear that about 60% of the children are getting supplementary nutrition for at least five days a week and another 30% three to four days a week.

Of the 21 households whose children aged 3 to 6 years are beneficiaries of ICDS, 14 or two-thirds reported that meals are being provided five to six days in a week while another 5 reported receiving meals only three or four times a week. Two out of the 21 households reported receiving only one or two meals a week.

Of five households with adolescent girls utilizing the ICDS, three reported that the girls received supplementary nutrition six times in the last six months. One household reported that supplementary nutrition was given to the girls five times in the last six months while one household said it was given only twice. The pattern in relation to five households with pregnant women was the same: three reported getting supplementary nutrition six times during the period of pregnancy, one reported getting it five times and the remaining household reported that it was given only twice. Of five households reporting utilizing the ICDS for lactating mothers, three reported that supplementary nutrition was received six times, and one each that it was given five times and three times. Of the 53 households whose children aged 6 months to 6 years were ICDS beneficiaries, on being asked about the attitude of the AWC teacher to the children, 33 reported that the AWC teacher was kind to the children while 15 said they were indifferent. Three said they had not observed the teachers and two said they did not know the answer to the question.

Of the 65 households utilizing ICDS, 41 or nearly 65% reported that the AWC worker had visited their house. Of the 53 households whose children were in AWCs, only one reported that the AWC works for six hours daily. 28 households reported that the AWC worked three to six hours while 24 households said they worked less than three hours every day.

Thirty two households reported beneficiaries availing ready-to-eat foods at the AWC while fifteen reported that cooked meals were provided. Six reported that take-home dry rations were provided.42 out of the 53 households, one or more members of which were regularly availing food at the AWC, reported that the food served in the AWC was good. The other 11 had no opinion on this.

PDS

Of the 72 households, 61 had ration cards and were able to access the public distribution system. Of these, 34 (47%) had BPL cards, 16 (22%) had AAY cards, 8 (11.1%) had APL cards and three had other ration cards. The remaining 11 sample households (15%) had no ration card. All of the households who had ration cards have used it regularly.

60 out of the 61 households with some ration card bought rice from the PDS. The average amount purchased per household was 27 kgs. Only three households purchased sugar from the PDS, the average purchase per household per month being 2 kgs. No household reported purchasing from the PDS the other commodities such as dhal, oil, wheat, salt, atta, kerosene and so on. 44 of the 60 households that purchased rice from PDS felt the quality of rice in PDS was good. Ten households felt that PDS rice was of average quality. Six felt it was poor.

The PDS retail outlets were generally far from the habitations of our sample households. The reported average distance to the retail outlet was 4.6 kilometers and the time it took to complete a purchase from PDS was nearly four hours.

MGNREGS

Of 72 sample households, 56 (78%) had job cards and all of them participated in the MGNREGS work On an average, a household that participated in MGNREGS received about 32 days of work, which is quite significantly lower than 100 days guaranteed under the MGNREGA. The average wage is about Rs 100 per day.

As regards the nature of work done, 23 households were engaged in road construction. Six households were engaged in digging and cleaning work and one in land levelling work. The remaining 26 households were engaged in a variety of tasks.

Hunger

It is reported that seven of the 72 sample households (10 percent) reported hunger during the last six months That is, the household members did not have food to eat and had to go to sleep hungry.

3.6 Overall Observations

Several points emerge from the survey results. First and foremost, almost all the food security related schemes are being implemented with some (varying) degree of seriousness on the ground in all three sites.

Families eligible for any scheme do not seem to face serious difficulties in accessing the scheme. Among all the schemes/interventions, the public distribution system is the one most widely accessed in Kolli Hills and Wayanad, and most households in Jeypore also make use of it.

The MDMS seemed to be functioning in all three sites with regularity and with no discernible difficulties in terms of access for school going children. Generally, the households availing the scheme have found the scheme useful and the food acceptable. There is some variation across households in each site in their responses regarding the number of days in a week on which meals are served in schools. The MDMS in Jeypore seems to be in need of strengthening, with a greater proportion of households reporting fewer days of meals being served in a week than in Kolli Hills and Wayanad. In all three sites, while there is general satisfaction about the meals served, there is also a desire for more variety. In this context, the initiative taken by Tamil Nadu on a pilot basis to increase the variety in the meals served in schools is worthy of being scaled up in the state and of emulation in Kerala and Odisha.

The ICDS is functioning in all three sites, but demographic factors have made it a more important and widely utilized scheme in Jeypore than in the other two sites. But the functioning of the scheme clearly needs improvement in ensuring that supplementary nutrition is provided to all categories of beneficiaries as per norms and regularly. This is especially true for Jeypore where a very high proportion of sample households have members eligible for one or more of the ICDS components.

MGNREGS being a scheme where the beneficiaries select themselves, it seems to be an important contribution to food security. The response in terms of the number and proportion of households seeking employment in the scheme in all three sites shows that it is fulfilling a felt need for income from work. The food security impact of the scheme can possibly be enhanced by enabling elected local bodies to play a greater role in selecting the works.

The PDS in Kolli Hills was the most intensely utilised, with ration card holders buying a variety of items from rice and sugar to dhal and pulses, wheat, rava, atta flour, salt, edible oil and so on. Wayanad's PDS also seems to fill a felt need, with most sample households using it for rice and some for sugar, and with other commodities not being purchased. The effective access to PDS seems to be at its lowest in Jeypore among these three sites. One obvious reason is the average distance of the ration shop for the sample households. Linked to this is also the much greater time and effort needed in Jeypore for households to make a purchase from the PDS. It is important to note that even with all these difficulties, most households did access the PDS (almost exclusively for rice), and with all eligible households –meaning those with a ration card –buying a large quantity of rice from the PDS. The evidence from the three sites thus strengthens the case for a universal, easily accessible PDS.

The survey results also confirm the much greater extent of deprivation in Jeypore as compared to Kolli Hills and Wayanad. This is especially reflected in the stark fact of about 10% of the households reporting going to sleep hungry. The significant levels of utilization of MDMS, ICDS, PDS and the MGNREGS in

all three sites confirms that the schemes fulfil some felt needs of the people and need to be strengthened in the sense of improving quality and effectiveness as well as in terms of ensuring easy universal and regular access.

3.7 Suggestions and Recommendations

Besides a review, at the national level and at the state level in the states of Odisha, Kerala and Tamil Nadu, our study also included a field based component. Sample surveys were conducted at all three field sites where the MSSRF is engaged in development interventions, namely Jeypore in Odisha, Wayanad in Kerala and Kolli Hills in Tamil Nadu. The field surveys focused on four schemes relating to food security: PDS, MDMS, ICDS and NREGS. The following suggestions and recommendations emerge from the field surveys.

1. Overall, in all three sites, the four programmes were being implemented and had positive impacts on the lives of the sections that accessed these schemes. But there were site-specific and scheme-specific issues, relating to access and functioning of the schemes. We discuss site level feedback and each scheme by turn.

2. Let us begin with the PDS. The feedback from respondents on PDS was favourable in the Kolli Hills site. 67 out of 72 sample households had ration cards. The supplies were regular, the products sold in PDS retail outlets were seen as being of good quality, the outlets were within a kilometer of the habitation in every case and a range of commodities such as pulses, edible oil, kerosene, dhal and wheat were available in the retail outlets at the notified price and in adequate quantity as per the norms. In Wayanad, the average distance of the PDS retail outlet was 1.7 km. Only one household did not have a ration card. Rice was purchased by all eligible households. Only a small number reported buying wheat while half the eligible ones bought sugar. Oil was bought by only one household. Selling of grains in black market was also reported. In Jeypore, about 15% of sample households did not have a ration card. Rice was in regular supply, and all card holders bought it from PDS. A very few bought sugar, but none of the other commodities were purchased or regularly available. PDS outlets were located at distances of over 4 to 5 km from habitations and it took a lot of time and effort to access them. Malpractices in weighing and black marketing of PDS grains were also reported.

3. Based on the field evidence, our recommendations on PDS are as follows:

   - The PDS model of Tamil Nadu should be replicated in Odisha. There should be many more retail outlets in remote and hilly areas and the average distance to access a PDS outlet should be brought down to 1 km in both Wayanad and Jeypore. MSSRF may engage in advocacy work with policymakers, elected local bodies and state government in this regard.

- Regular supplies of a diversified basket of goods should be ensured, with dhal, pulses, edible oil, wheat, sugar, salt, atta, refined wheat flour and kerosene being made available at subsidized prices to meet demand. MSSRF may lobby with government and also engage in awareness creation work along with local partners on this issue. Jeypore needs intervention the most. MSSRF can consider conducting workshops for elected local body members in Jeypore block in collaboration with government agencies on people's entitlements in this regard.
- The use of mobile PDS retail outlets can also be mooted by MSSRF with the concerned authorities in Jeypore, citing the example from Kolli Hills in Tamil Nadu, in order to minimize the distance people have to travel to access the PDS entitlements.

4. We turn now to the MDMS. The MDMS seems to be functioning relatively smoothly and regularly in all three sites. However, there seem to be breaks in MDMS, with a meal being missed once in a while, in Jeypore while this was not the case in the other two sites. Other problems reported in Jeypore include poor infrastructure for cooking, costs of firewood and raw food materials, lack of a separate staff for running MDMS and uneven quality of meals. In all sites, and especially in Wayanad and Jeypore, the rainy season brought special problems of fuel since firewood was often used. There is provision in the scheme for building separate kitchens and for moving to gas as fuel as Tamil Nadu has been doing for some time now. Additional resources may have to be mobilised by the state government in this regard as Tamil Nadu has done. These are policy issues, and the MSSRF can lobby with policymakers after bringing local body leaders on board. The issue of variety in food in MDMS came up. While quality was considered satisfactory in both Kolli Hills and Wayanad, this was not the case in Jeypore. In all three sites, variety in food served in MDMS was desired by respondents. MSSRF can play a role in helping to identify local sources of nutritive foods including millets. Flow of funds and cost escalation are both problems in MDMS in all three sites, and suitable measures need to be taken to tackle them through enhanced financial provision. Proximity of kitchens to class rooms, reported from Jeypore, needs to be avoided at all costs. These are policy and implementation issues in which an agency like the MSSRF can at best play a lobbying role.

5. As with PDS and MDMS, the ICDS is also functional in all the three sites of Kolli Hills, Wayanad and Jeypore. The demographic composition is such that Jeypore sees the highest proportion of sample households availing ICDS. Our concern was mainly with the supplementary nutrition programme of the ICDS. This component involves as beneficiaries infants aged 6 to 36 months, children between the ages of 3 and 6 years, adolescent girls, pregnant women and lactating mothers. All three sites report implementation problems in this regard. Given the workload of the ICDS field functionaries, it is not possible for them to ensure that all adolescent girls, pregnant women and lactating mothers receive their supplementary nutrition entitlements. In Jeypore, there are interruptions in provision of supplementary nutrition to children aged 6 months to 6 years, and cases

of provision of dry rations instead of hot cooked meals, citing lack of firewood as the problem, have also been reported. In all three sites, there is room for much improvement in ICDS infrastructure provision. Awareness campaigns to ensure that people are aware of their entitlements can be taken up by the MSSRF, especially in Jeypore. The MSSRF can also conduct programmes, in partnership with the Directorate of Social Welfare or the Department of Women and Child Development for elected local body members on service provision in ICDS and on its delivery mechanisms. Larger policy issues such as the work load of ICDS field functionaries and the incentive structure for them are items where the MSSRF can engage in informed lobbying with the state government authorities.

6. The national rural employment guarantee scheme (NREGS) is being run relatively smoothly in Kolli Hills and Wayanad, judging from the responses provided by the sample households. The problems reported from Kolli Hills are that the issue of job cards is delayed, and that the second member of a household registered under the scheme finds it difficult to get a card. Men and women are paid equal daily wages in both Kolli Hills and Wayanad. But while the panchayati raj institutions are actively involved in NREGS in Wayanad, this is not the case in Kolli Hills. The scheme implementation is at its weakest in Jeypore. Here the workers are not aware of their entitlements. Job cardsare often with the contractors.In complete violation of all guidelines, the contractors get the work done through the use of machinery. They pay workers much less than the stipulated wage. Some work without job cards and get paid even less. Men get higher wages, averaging 100 rupees a day while women get 80 rupees. Workers seeking and not getting employment under NREGS are unaware that they are entitled to compensation. Payment for work is not given in time. There is considerable delay in payment. Sometimes, the labourers are paid after 2 months to six months. Some people do not get paid their wages at all.

7. Awareness should be created regarding the MGNNREGA. The workers should be made aware of all their entitlements as well as the procedures and provisions of NREGA including all the rules under the Act. MSSRF can take the initiative, in collaboration with the state government, to run workshops for both the officials/local bodies implementing the scheme and the workers employed under it. This is necessary in all three sites, though it is most urgently needed for Jeypore in Odisha. MSSRF can also do advocacy work on expanding the scope of works permitted under the Act, ensuring his provision of creche and other facilities mandated in the Act.

8. An important input for enhancing food and nutrition security is the provision of safe drinking water. Of the 15 ICDS centres that were covered in our field survey, as many as seven did not have safe drinking water facilities. Of the 8 MDM centres covered in our field work, only three have reported not having problems with access to safe drinking water in adequate amounts. A majority have problems in this regard. Given the critical importance of safe drinking water in ensuring biological

utilization of food intake which relates to the absorption dimension of food security, it is strongly recommended that access to adequate quantities of safe drinking water must be ensured in all the ICDS and MDM centres.

9. As with safe drinking water, sanitation is also critical to food and nutrition security. In the food security index developed in earlier work at the MSSRF, both the proportion of households with access to a toilet and the proportion with access to safe drinking water have been used as food security indicators. Only seven out of the fifteen ICDS centres accessed by our sample respondents have toilet facilities. We do not have the corresponding data in respect of the eight MDM centres. Here again, our strong recommendation is that all ICDS and MDM centres should have adequate, functioning toilet facilities with assured access to water for ensuring cleanliness.

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