Evaluation Study on Integrated Child Development Schemes (ICDS)

Volume I

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on
Integrated Child Development Services

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Foreword

The Government of India launched the Integrated Child Development Services (ICDS) in 1975 in recognition of the importance of early childhood care as the foundation of human development. The ICDS has expanded over the years and is now one of the world's largest and most unique outreach programmes responding to the challenge of meeting the holistic needs of a child. The programme has undergone many transformations in terms of scope, content and implementation, but the primary goal of breaking the inter-generational cycle of malnutrition, reduction of morbidity and mortality caused by nutritional deficiencies, by reaching out the children, pregnant women, lactating mothers and adolescent girls have remained unaltered.

The Planning Commission felt the need for evaluating the ICDS to know the ground reality about the programme design, implementation process, outcome and impact of the programme and wanted to assess the relevance of this programme in achieving its aims and goals. An evaluation study was taken up by the Programme Evaluation Organisation (PEO) of Planning Commission. The National Council of Applied Economic Research, New Delhi has carried out the evaluation and covered 19,500 households across 100 districts in 35 states and UTs. The study has come up with important findings and observations.

The study done at the grass root level has also brought out some significant observations about the delivery system and implementation process of ICDS scheme, on which the Ministry of Women and Child Development has disagreed. The differences between the Ministry and Evaluating Agency with regard to the evaluation findings have been annexed in the report. The results obtained deserve careful consideration, as the study has suggested some measures for improvement and insights for restructuring the scheme in the Twelfth Five Year Plan.

I would like to thank Mr. Suman Bery and his study team of NCAER for their hard work in bringing out this report. I hope, this evaluation study will immensely help all the stakeholders to have an analytical insight into the programme and taking corrective actions, so that the full potential of the ICDS is realized.

(Montek Singh Ahluwalia)

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Preface

The Government of India launched the Integrated Child Development Services (ICDS) in 1975 in recognition of the importance of early childhood care as the foundation of human development. The ICDS has expanded over the years and is now one of the world's largest and unique outreach programmes responding to the challenges of meeting the holistic needs of a child. Over the years the programme has undergone many transformations in terms of scope, content and implementation, but the primary goal of breaking the inter-generational cycle of malnutrition, reducing morbidity and mortality caused by nutritional deficiencies, reaching out to children, pregnant women lactating mothers and adolescent girls have remained unaltered.

The Planning Commission felt the need for evaluating the ICDS to know the ground reality about the programme design, implementation process, outcome and impact of the programme and wanted to assess the relevance of this programme in achieving its aims and objectives. An evaluation study was commissioned by the Programme Evaluation Organisation (PEO) of Planning Commission. This study has covered 19,500 households spread across 100 districts in 35 states and UTs.

Some of the key findings that emerged from the evaluation study are: (i) wide divergence between official statistics on nutritional status, registered beneficiaries and number (norms) of days food/supplementary nutrition (SN) served, and grassroots reality with regard to these indicators; (ii) around half of the total eligible children are currently enrolled at anganwadi centres and the effective coverage as per norms is only 41% of those registered for the ICDS benefits; (iii) anganwadi workers are overburdened, underpaid and mostly unskilled, which affects the implementation of the scheme; (iv) a majority of anganwadi centres have inadequate infrastructure to deliver the six designated services under the ICDS and this has affected the quality of service delivery adversely; (v) performance of the programme has been mixed in the selected sample states; and (vi) impact of the ICDS scheme on the intended beneficiaries is largely dependent on the quality of service delivery.

The study has also come up with various suggestions. Some of these are: (i) per capita norms of financial allocation for the supplementary nutrition programme need revision every year and must be in keeping with the rising food prices; (ii) vertical implementation of programmes cannot help realise the potential benefits unless the issue of convergence of interrelated services is meaningfully addressed; and (iii) existing mechanism of "flow of funds" and its use for providing supplementary nutrition should be restructured.

The study was outsourced to National Council for Applied Economic Research, New Delhi. I extend my thanks to Dr. Suman Berry, Director-General, NCAER and his study team for conducting the field study and preparing the draft report. The necessary cooperation and suggestions by the officers of the Ministry of Women and Child Development and concerned division of the Planning Commission is gratefully acknowledged.

The study has received constant support and encouragement from Hon'ble Deputy Chairman, Planning Commission and Member Secretary, Planning Commission. The study was designed and conducted under the supervision of the officers of the Programme Evaluation Organisation, Planning Commission.

I hope that the study, which provides useful information on the impact assessment and shortcomings in the process of implementation of the ICDS, would be useful to the policy makers, concerned Central Ministries and implementing agencies at various levels to introduce improvements and take suitable corrective actions so that the scheme delivers the intended benefits.

(Ratna Anjan Jena)
Adviser (PEO)

Place: New Delhi
Dated: March, 2011

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Note: The Study team mentioned in this report means NCAER study team & field staff

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Executive Summary

INTRODUCTION

Systematic evaluations of development interventions often lead to the evolution of sharper policies based on hardcore evidence. It is standard practice to look into the relevance, effectiveness, efficiency, impact and sustainability of the intervention in question. The present evaluation exercise vis-à-vis ICDS considers the first four components. It examines the relevance of ICDS in the context of attaining important national goals (which are in line with the United Nations Millennium Development Goals – MDGs) like reducing child mortality and morbidity rates resulting from malnutrition, and moving towards the ideal of Universal Elementary Education. The effectiveness of the programme in delivering the designed services has also been probed. The efficiency of ICDS has been scrutinised in terms of the present status of utilisation of financial resources made available for its implementation. Attempts have been made to identify the impact of the programme by constructing suitable counterfactuals.

S-1: THE PROGRAMME

The primary goal of ICDS is to break the inter-generational cycle of malnutrition, reduce morbidity and mortality caused by nutritional deficiencies by providing the following six services as a package through the network of *Anganwadis*.

- Supplementary nutrition (SNP)
- Non-formal pre-school education (PSE)
- Immunisation
- Health check-up
- Referral services
- Nutrition and Health Education (NHE)

The three services, viz. immunisation, health check-up and referral, are designed to be delivered through the primary health care infrastructure. While providing SNP, PSE and NHE are the primary tasks of the Anganwadi Centre, the responsibility of coordination with the health functionaries for provision of other services rests with the *Anganwadi* worker (AWW).

ICDS is designed to provide services to children, pregnant women (PW), lactating mothers (LM) and adolescent girls (AG). While services to children are expected to yield results in the short run by contributing to reduction in child mortality and morbidity, those provided to PW are aimed at reducing the Maternal Mortality Rate (MMR) in the short run. The inclusion of LM is intended to address the high rate of Infant Mortality Rate (IMR), while the programmes for AGs address malnutrition with a long-term perspective. In this way, ICDS is expected to contribute to attainment of the following Millennium Development Goals (MDGs):

- Reduction in severe to moderate malnutrition among children (MDG-1)
- Reduction in IMR, CMR, MMR (MDG 4,5)
- Increase in enrollment, retention rates and reduction in dropout (MDG-2) by laying foundation at AWC.

S-2: THE EVALUATION STUDY

The study was undertaken to seek answers to a number of ***process, outcome and impact*** related questions identified by the Planning Commission. Some important evaluation questions are (details in Chapter 3):

- What is the extent of coverage of target groups of ICDS programme vis-à-vis the universalisation goal?
- What are the factors responsible for low coverage, if any?
- Whether services intended to be delivered through the programme to the target groups are actually reaching them?
- What are the gaps in service delivery?
- Are the beneficiaries satisfied with the quality of delivery of services under the programme?
- What are the constraints to quality service delivery?
- Whether ICDS has been successful in creating awareness on the importance of hygiene, sanitation, dietary habits and other practices that have a bearing on the nutritional status, education and health seeking behavior among beneficiaries?
- Has ICDS contributed to reduction in IMR/CMR/MMR (based on data maintained by AWC) and improvement in nutritional status of children (age group, 6-72 months)?

S-3: METHODOLOGY

To seek answers to the above questions NCAER collected secondary data from the websites of MWCD and generated the required primary data base through a sample survey covering **19,500 households, 3,000 community leaders and 1,500 AWC from 300 projects** spread over **100 districts in 35 states and UTs.** For process-related information, questionnaires were separately designed for various nodes of project administration. The details of Sample Design (**sample districts and sizes at different levels were fixed** by Planning Commission), **computation of weights** for sample units, questionnaires and their contents are available in Chapters 3 & 4. The study design factored in the concept of **"with-and without"** methodology of outcome and impact assessment as also the concept of **"theory of change"** in Log-frame hierarchy. The complications in the study design arising out of universalisation of ICDS were adequately addressed in Chapters 4, 8 and 9.

Some process related questions posed above could not be satisfactorily answered because of inadequate and untimely responses, and in some cases, non-response. The non-response and partial response rates from State Nodal Office, DPO & CDPO has together been 77.1 per cent, 89 per cent and 61 per cent respectively (see Chapter 3, Appendix Table 3.1 for detailed info on responses received) from various nodes of project administration. For example, questionnaires for State Nodal Officers, DPO, CDPO and other implementing agencies were developed to identify the problems relating to financial flows, delegation of authority for decision making, time gaps in flow of resources, inter-agency coordination, etc. so that adequacies or otherwise of processes put in place in different states could be analysed and their impact on service delivery studied. To this extent, the diagnostic analyses of observed phenomena in the study are inadequate. **Incidentally, the simple correlation coefficient between the non-response rate**

from CDPOs and performance indicators (PI) works out to be -0.51, implying inadequate response from states which ranked low in the performance ladder.

Major Findings:

S-4: PROCESS RELATED

S-4.1: COVERAGE OF TARGET GROUPS

Coverage under ICDS has been examined from two perspectives:
A. **Quantitative** and
B. **Qualitative**

A: Quantitative:
Coverage Gap in ICDS has been conceptualised as follows:

Coverage Gap = Estimated (vide Census) number of eligible children in 2009 – Estimated number of beneficiaries actually receiving the major benefits = (**Survey Gap + Service Gap + Delivery Gap)**= (Estimated number of eligible beneficiaries in 2009 – Estimated number of eligible beneficiaries covered in Survey Register) + (Estimated number of eligible beneficiaries covered in Survey Register - Estimated number of eligible beneficiaries in the Delivery Register) + (Estimated number of eligible beneficiaries in the Delivery Register – Estimated number of beneficiaries actually receiving benefits). All the gaps were worked out for children in the age group 6-72 months, while for women and adolescent girls, only delivery gaps are computed.

(i) ***Children:***

- AWC surveys cover about 62 per cent of the estimated number of children; the gap seems to be primarily due to out-dated information available in the AWC survey registers; survey gap is very large in most States, except in **Assam, Jharkhand, Karnataka, Kerala, Orissa and West Bengal.**
- 49 per cent of the size of the eligible group (vide census) are actually registered for ICDS benefits.
- **At the national level,** of those recorded in the delivery register for ICDS benefits, 64 per cent **received SN** (may not be for all 300 days), immunisation and other benefits, 12 per cent received other benefits but not supplementary nutrition and 24 per cent did not receive any benefits;
- The proportion receiving all ICDS benefits **(not necessarily as per norms)** varies across States:

High Performers: States with more than 70 per cent of those recorded in the delivery register received benefits **(not necessarily as per norms; see Chapters 5 & 7)** are**:** Andhra Pradesh, Assam, Chhattisgarh, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Tamil Nadu, Uttarakhand and West Bengal. The **Low Performers are** Bihar (53%), Haryana (52%), Rajasthan (56%) and Uttar Pradesh (41%).

It may be added that NCAER study (IHDS, 2004-05) reported coverage of 35 per cent of 0-5 year old children. The coverage estimated in the present study is around 31 per cent for children in the age group 6 months to 72 months.

(ii) ***Women and Adolescent girls***

- Around 78 per cent of the women (pregnant and lactating) and 42 per cent of adolescent girls recorded in the delivery register actually received benefits under SNP (not necessary for all 300 days and as per entitlement).

B: Qualitative- effective coverage

The effective coverage of ICDS beneficiaries, defined as the product of proportion of beneficiaries actually getting supplementary nutrition and the proportion of days (out of 300 days) in a year SN was delivered, is as follows:

- At the national level, **41 per cent of children, 38 per cent of women and 10 per cent adolescent girls** are estimated to have received supplementary nutrition in 2008-09.

S-4.2: FREQUENCY OF DELIVERY OF SN TO CHILD BENEFICIARIES

SN is required to be delivered to child beneficiaries for 300 days in a year. The proportion of days SN was actually available is shown below in three categories:

Good performers (More than 80%)	Medium performers (64-80%)	Low performers (Less than 64%)
Haryana	Andhra Pradesh	Assam
Karnataka	Chhattisgarh	Bihar
Kerala	Gujarat	Madhya Pradesh
Maharashtra	Himachal Pradesh	Rajasthan
Orissa	Punjab	Uttar Pradesh
Tamil Nadu		Uttarakhand
West Bengal		

S-5: AWC INFRASTRUCTURE

The most important pre-condition for success of the ICDS programme is the adequacy of infrastructure of Anganwadi Centres (AWC). Their capacity to deliver the six designated services depends on whether the AWC have adequate infrastructure and resources to undertake the required activities. The AWC are required to maintain a large number of registers, keep utensils, weighing scales, PSE/ TLM & medical kits and food items, but most of the centres do not have a safe accommodation for storing these basic items. **In view of the fact that most AWC are not well equipped to deliver the designated services** to the target groups, any evaluation of ICDS must judge its performance in the light of this inadequacy.

The study was designed to collect the relevant information on availability and quality of different facilities that are required at AWC to enable the AWWs to deliver services. An **Infrastructure/Facility Index (FI)** is computed to rank the states (see Chapter-6) in descending

order in terms of adequacy of infrastructure. The methodology proposed by Anand and Sen (1990) for computation of deprivation index is adopted to estimate the **degree of deprivation** of AWC with respect to each facility (as per norms). The result is:

Top 10 States (higher to lower rank): Tamil Nadu, Kerala, Maharashtra, Andhra Pradesh, Gujarat, Karnataka, Himachal Pradesh, Jharkhand, Haryana & Orissa.

Does lack of basic infrastructure at AWC affect quality of service delivery? To answer this, a **performance index (PI)** of AWC is also computed using survey data and adopting the same methodology. The performance indicators considered for **PI** are: regularity of food delivery, immunisation, attendance at PSE & NHE, delivery of health services etc. (see Chapter-5).

The top 10 states (higher to lower rank): Karnataka, Maharashtra, Andhra Pradesh, West Bengal, Jharkhand, Tamil Nadu, Orissa, Kerala, Madhya Pradesh and Haryana.

Though one does not find one-to-one correspondence in the two sets of ranks, there is high degree of association between **FI** and **PI.** For the 20 large states the simple correlation coefficient between the two indices is **0.70**, which is statistically significant. In other words, **a large part of the poor performance and insignificant impact of ICDS** on nutritional status (see Chapters 7, 8 &9) could be explained by the **inadequacy of infrastructure of AWC.**

The detailed analysis carried out in Chapter-7 leads to an inescapable conclusion that **services having direct and immediate impact on malnourishment, morbidity and mortality have not been effectively delivered, while the other services, which are expected to play a subsidiary role appear relatively better delivered**.

S-5.1: WHAT WORKS – IS INFRASTRUCTURAL CONSTRAINT BINDING?

In spite of several weaknesses in the implementation of the ICDS programme, some AWC do work. The survey results indicate that four types of beneficiaries attend AWC:

- Children / other beneficiaries from poor families for whom the SNP is the main attraction;
- Children of mothers who work as daily wage earners or as maid servants in urban periphery/slums; they prefer to use AWC as crèche where children are safe and get food and PSE;
- The beneficiaries for whom the services like immunisation , pre and post-natal care are not easily accessible through the primary health care system;
- Close proximity of AWC is another factor that influences attendance.

S-6: BEHAVIORAL CHANGES & OUTCOMES

The impact of ICDS, which is designed to deliver a package of services to children, pregnant and lactating women and adolescent girls to break the inter-generational cycle of malnutrition, morbidity and mortality, takes a long time to achieve its intended goal. A number of behavioral changes with respect to health, sanitation, hygiene, education, dietary habits/practices, etc. in the target population must precede realisation of its ultimate goals. The study was designed to generate the required data base to assess whether and to what extent ICDS has been successful in bringing about the intended behavioral changes in the target groups. Some salient findings are (see Chapter-8):

- Intended behavioural changes of varied intensity have been observed in Kerala, Himachal Pradesh, Andhra Pradesh, Tamil Nadu, Maharashtra, West Bengal and Jharkhand;
- Bihar, Uttar Pradesh, Rajasthan, Haryana and Punjab ranked very low in terms of intended behavioral changes among ICDS beneficiaries.
- In general, the practice of breast feeding within an hour of birth is found to be more widespread among ICDS beneficiaries;
- ICDS has also positively influenced formal school enrollment and reduction in early discontinuation among beneficiaries;
- No significant differences are observed between beneficiaries and non-beneficiaries so far as immunisation rates are concerned, except in the case of measles.

S-7: IMPACT OF ICDS

Past evaluation studies on ICDS were primarily concerned with answering evaluation questions relating to implementation. The emphasis of all-India level studies carried out by NCAER (2000) and NIPCCD (1992-93, 2006) was on adequacy and quality of infrastructure and some issues related to quality of service delivery. The latter study of NIPCCD devoted a section on impact, but did not use an appropriate methodology. Some studies made use of NFHS data, which showed a decline in the proportion of malnourished children (under 3 years) from 51.5 per cent in 1992-93 to 42.7 per cent in 1998-99 and further to 40.4 per cent in 2004-05, to examine as to what extent this decline can be **attributed** to ICDS. Evidence of lower malnourishment in villages with ICDS centres has been thrown up by World Bank studies, Bredenkamp and Akin (2004) and Dasgupta *et al* (2005) using NFHS data. The report titled "Focus on Children under Six (FOCUS)" brought out by Citizen's Initiative for the Rights of Children Under Six (CIRCUS, 2006) includes results of a survey of 122 villages. A diagnostic analysis carried out in the study linked "effectiveness" of service delivery in ICDS with increased beneficiary participation and improvement in nutritional status. However, conclusive evidence of positive impact of ICDS is not available. Nor did these studies adopt rigorous impact evaluation designs.

There are problems in adopting rigorous impact evaluation design for a scheme like ICDS as it is difficult to construct **"counterfactuals"** for two reasons: (a) the programme is universal and non-beneficiaries are generally willing non-participant; in case they are not, it is a stupendous task to identify such non-participants; (b) there are many programmes which either have similar goals as ICDS or are complementary (**contamination & spillover effects**) to it for improvement of nutritional status of children. These two preclude construction of meaningful **counterfactuals** in a study design. However, the second best option is to generate data bases for both "users" and "non-users" of ICDS and do an ex-post "propensity score matching" to construct comparison groups or compare likes with likes. This is attempted in the present study, though without much success because of the smallness of the sample size.

The findings of impact analysis are not conclusive (the limited sample size prevented finer sub-division to get homogenous household groups). While for some states and some categories (expenditure, occupation or asset groups) there is evidence of **positive impact of ICDS** on nutritional status, some other states and population groups show perverse results. This happened because with **limited sample size (**see Appendix tables of Chapter 9**,** which show how this distorts the household characteristics) it was not possible to bring out a meaningful comparative picture of "treatment" and "comparison" groups after controlling for other intervening factors that have a bearing on nutritional status.

To circumvent this problem an attempt is made to explain inter-state variations in Child Mortality Rates and proportion of malnourished children in multivariate analyses. The results tend to suggest that, *ceteris paribus,* **effectiveness of the delivery system of ICDS contributes to reduction in CMR and child malnutrition.** The results also point to the importance of **convergence of interrelated services,** such as benefits of anti-poverty programmes (MGNREGA) and other initiatives for improving access to public services NRHM, *Bharat Nirman* and RD schemes) in realising the potential of ICDS. The emphasis then should be placed on **effectiveness of implementation and meaningful convergence** of services. Survey data reveal that coordination among providers of complementary services, such as, health facilities, safe drinking water, sanitation, etc. and facilitators like PRIs, Coordination Committees and other grassroots-level institutions were ineffective in most states. This observation is not new and has been made in many concurrent evaluation studies of similar development interventions. Out-of-box thinking and evidence-based policy formulation are necessary for designing an innovative implementation mechanism.

S-8: QUALITY OF PUBLIC SPENDING: *THE CASE OF SNP*

Based on per capita financial norms for different categories of beneficiaries (whose names figure in the Delivery Register), the requirement for funds for SNP in 2008-09 works out to be Rs 5,383 crore at the national level. Expenditure as reported in the MWCD website is 8.4 per cent less. The state-wise picture of high and low spenders is shown below (**Percentage deviations from normative requirement**).

High spenders	Low spenders
Bihar (+104%) **Haryana (+43%)** **Himachal Pradesh (+41%)** **Jammu & Kashmir (+37%) and** **Kerala (+39%)**	**Assam (-43%)** **Gujarat (-26%)** **Madhya Pradesh (-32%)** **Orissa (-32%)** **Punjab (-46) and** **Uttarakhand (-71%)**

On the basis of this survey information on the proportion of registered beneficiaries receiving SN and actual number of days SN was served, only 40 per cent of the reported expenditure could be accounted for at the national level. **For Chhattisgarh, Gujarat, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu and West Bengal more than 60 per cent of the reported expenditure could be justified on the basis of survey data.** For some states the unspent balance is very high.

States	Unspent amount (%)
Assam	**95**
Bihar	**71**
Madhya Pradesh	**64**
Punjab	**56**
Rajasthan	**71**
Uttar Pradesh	**77**
Uttarakhand	**72**

The divergence between reported expenditure on SNP and spending that could be justified on the basis of grassroots reality is a matter of serious concern. It may be possible that states have used a part of the reported expenditure on SNP for other components of ICDS. However, collateral evidence gathered during field survey, discussions with functionaries and knowledgeable individuals as also the case studies conducted by the study team tend to suggest that in many states **a large proportion of the unused funds meant for SNP was most likely siphoned off (for FY 2008-09 the amount of SNP allocation diverted is estimated at Rs 2,943 Crore).** Several irregularities were noted in methods of functioning of grassroots level institutions of ICDS (for typologies of AWC, see Appendix Text E.1 and Case Studies in Chapter 11).

- In some areas where AWC are given cash every month, there is a nexus among CDPO, Supervisors, Bank, *Panchayat* and AWWs to siphon off cash
- In some areas, contractors/NGOs are engaged for supply of food items and money gets diverted through manipulation of accounts and entries in AWC Registers
- In addition, complaints about quality & quantity of food were widespread in some states.

Wherever large scale diversions have been found the *modus operandi* involves:

- Irregularities in the Registers of AWC; and
- The officers and powerful functionaries have taken advantage of the insecurity and vulnerability of AWs

While AWW normally plays a passive role, they are willing and active participants in this process in some cases. This finding also brings to focus the absence of an effective results-oriented **Monitoring Mechanism** in **ICDS.**

S-9: SUGGESTIONS

The study shows that evidence of outcome and impact of ICDS on behavioral changes in target groups, nutritional status of children, morbidity and mortality is mixed— with some states and population groups showing positive results, while others do not. Impact studies of such programmes require a more **scientific sample design and much larger sample size** to bring out conclusive results. In spite of such weak evidence of positive outcome/impact, there is no doubt that **ICDS is well conceived and well placed** to address the major causes of child under-nutrition in India. Findings of the study warrant that **ICDS needs restructuring** for realisation of its potential.

1. There are difficulties in pursuing the goal of universalisation for several reasons:

(i) Huge infrastructure and resource requirement.
(ii) Dilution of focus on the really malnourished.
(iii) Possibility of leakage/wastage arising out of weak M&E and voluntary abstention by registered beneficiaries. The programme outcome is likely to be better if ICDS becomes a targeted intervention.

2. AWWs are overburdened, underpaid and mostly unskilled:

They are vulnerable because of job insecurity. Their recruitment procedures and service conditions need restructuring. The results show that most AWWs do not have much idea

of the growth monitoring processes and medical assistance required by malnourished children. The evidence of impact of **training programmes** on AWWs' skill and knowledge is weak. The day-to-day AWC-related work takes not less than 5-6 hours every day. But they are asked to perform works of other agencies, with or without incentives. An assessment of time disposition of AWWs should be done to understand if it is possible for them to satisfactorily carry out their AWC-related activities.

3. **AWCs lack adequate infrastructure** to deliver the six designated services. An independent assessment of the infrastructural deficiency at AWC needs to be undertaken for necessary corrective actions. The results show that this **deficiency has adversely affected the quality of delivery** of services and hence, impact of ICDS.

4. **Convergence of complementary services**, which is essential for realisation of ICDS goals, is a weak link. The coordination committees are ineffective. It is unrealistic to expect that AWW would accomplish this task. Since the **role of health services is crucial** in attaining ICDS goals, it is appropriate that the **grassroots level health functionaries become an integral part of day-to-day management of AWC.** A study may be undertaken to identify the steps that are required (including strengthening of infrastructure, human resources and incentive structure of health workers) to ensure that health functionaries become **responsible and accountable partners** not only for delivery of health related services, but also for realisation of ICDS goals. This linkage among providers of health, nutrition/education services **should not be merely functional, but organic too.**

5. **Wide divergence between official statistics on nutritional status, registered beneficiaries, number (norms) of days food/SN served on one hand and grassroots reality with regard to these indicators on the other** has been observed in this study as well as in others (e.g. *Evaluation of ICDS in Madhya Pradesh by SANKET, 2009*). The existing monitoring system of ICDS needs to be strengthened and revamped. The responsibility of data generation at source (i.e. at AWC) should not be with the staff of DWCD, primarily because some aspects like, classification of children according to standard grades of malnourishment, growth monitoring, assessing types of medical interventions required, use of weighing machines etc. warrant involvement of trained/technical personnel. The study also reveals that official statistics on nutritional status of children **generated departmentally** do not represent grassroots reality. Misuse of available SN-funds can be linked to unreliable/unrepresentative data. Secondly, given the primary objective of the intervention, the monitoring system should generate not only process data, but also **output and outcome data** with appropriate periodicity to ensure gradual movement towards programme goals.

   Responsibility of **data (on output and outcome) generation at AWC should be with a third party**, preferably with the health functionaries (which may call for measures to strengthen grassroots level institutions providing health services); most existing M&E staff at CDPO may be transferred to the Health Department and State Nodal Office; the data should then be transmitted to the **state-level Nodal Office of ICDS for processing,**

consolidation, diagnostic analysis and onward transmission. The CDPO may concentrate on **routine process monitoring of inputs and activities.**

6. Per capita norms of financial allocation for SNP (Ref: Table 10.7 in Chapter 10) need revision every year and must be in keeping with the rising food prices. It was noted during field survey that low per capita allocation often lead to compromises with quantity and quality of food. It is also possible that AWC overstate attendance rates to overcome problems arising out of lower per capita norms. A rationalisation of the cost norms, not only for SNP, but also other components is warranted. Feedback from the states reveal that the revised financial norms (Vide order No. F.14-1/2008-CD-I dated 18.11.2008, MoWCD) were yet to be implemented.

7. **Supplementary Nutrition Programme** is the most important component of ICDS but, **a large part (around 60 per cent) of budgetary allocation/spending (2008-09) is not being used for SNP**. For any tangible improvement in the nutritional status of children this problem need to be addressed. It is suggested that the existing mechanism of "flow of funds" and its use for providing SN be restructured. Making funds available to AWC seems to be a better option than supplying food items/ready-to-eat food. Letting the SN funds flow from State Nodal Office to the bank account of AWW directly and **not through DPO/CDPO** as is being done now, while the responsibility of cooking and delivery of SN may be **outsourced to women-SHGs** (as is the practice in some areas).

8. **The institution of *Gram Sabha* should be utilised to sensitise people** about entitlement of food/medicine/other facilities, the rights of child and services available at AWC. Awareness about the services available at AWC, entitlement of supplementary nutrition and other services is very poor both among beneficiaries and non-beneficiaries.

Chapter 1

Evolution of ICDS

INTRODUCTION

Children are the first call on the agenda of human resource development – not only because young children are the most vulnerable, but because the foundation for lifelong learning and human development is laid in these crucial, early years. It is now globally acknowledged that investment in human resources development is a pre-requisite for any nation's economic development. Child survival, growth and development have to be looked at as a holistic approach, as one cannot be achieved without the others. There have to be balanced linkages between education, health and nutrition for proper development of a child.

Children are the future human resources of the country and for this reason the Ministry of Women and Child Development implemented various schemes for welfare, development and protection of children. ICDS was one of them. ICDS is the world's most unique and largest programme for early childhood development programme, which is being operated for the past three decades.

In India, ICDS is currently the most significant government intervention for reducing maternal and childhood malnutrition, and has emerged as the world's largest programme of its kind. The importance of a programme like ICDS is realised when we consider some facts regarding the child population of India. India is home to the largest child population in the world with 158 million children, constituting 15.42 per cent of the population below 6 years as per 2001 census. A significant proportion of them lives in economic and social environment of poverty, poor environmental sanitation, disease, infection, inadequate access to primary health care, inappropriate child caring and feeding practices etc impeding the child's physical and mental development. ICDS is the foremost symbol of India's commitment to her children - India's response to the challenge of providing pre-school education on one hand and breaking the vicious cycle of malnutrition, morbidity, reduced learning capacity and mortality, on the other. Also, early childhood (0-6 years) is the most crucial period in life of a child; it is during this period that the foundations are laid for the cognitive, social, emotional, physical/mental development of the child.

Since its inception in 1975, ICDS has expanded remarkably in its scope and coverage, and today it covers around 7.6 million expectant and nursing mothers and over 36 million children less than six years of age. The programme provides a well-integrated package of services through a network of community-level Anganwadi centres (AWC). There was more than 10.44 lakh such operational AWC nationwide as on March 31, 2009 spread over 6,120 operational projects (http://wcd.nic.in/icdsimg/sanoperAWCbenf311209.pdf as retrieved on March 28, 2010). ICDS services include immunisation, health check-up and referral, child growth monitoring, nutrition and health education for women, supplementary feeding for children and pregnant and lactating mothers, and pre-school education for children aged 3-6 years. In 2000, an additional component focusing on adolescent girls' nutrition, health, awareness, and skill development was introduced in some areas. As on March 31, 2009 more than 721.96 lakh children in the age group of 6

months to 6 years and about 151.47 lakh pregnant and lactating mothers were provided with supplementary nutritional benefits whereas a little over 340.60 lakh of children (aged 3-6 years) received pre-school education services under ICDS.

ICDS objectives are consistent with the MDGs for reducing child mortality, improving maternal health, and eradicating extreme poverty and hunger. ICDS has the potential not only to improve the nutrition status of children and women, but also to break the lifecycle of malnutrition by improving health and nutrition of pregnant women and adolescent girls. The biology of reproduction makes the nutrition of adolescent girls and pregnant women intrinsic to the attainment of improved nutrition for all.

ICDS is one of the most studied interventions, and many studies indicate its positive role in tackling India's health and nutrition problems. The available data indicates that maternal and child interventions have played an important role in substantially lowering infant and under-5 mortality rates, though direct attribution cannot be made to any specific programme (Cleason *et al* 2000). While the levels of both severely and moderately malnourished children have declined, it is not always clear whether these are due to ICDS intervention.

1.1. OBJECTIVES OF THE ICDS PROGRAMME

In the broadest perspective the goal of the ICDS programme is to improve the quality of human resources in India by addressing the most vital and vulnerable section of the population – women and children. The programme has five main objectives (DWCD 2004):

1. Improve the nutritional and health status of children below the age of six years and that of pregnant and lactating mothers as well as of adolescent girls
2. Lay the foundations for proper psychological, physical and social development of the child
3. Reduce the incidence of mortality, morbidity, malnutrition, and school dropout
4. Achieve effective coordination of policy and implementation among various departments to promote child development
5. Enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper health and nutrition education.

1.2. PROGRAMME INCEPTION AND GROWTH

ICDS was launched on October 2, 1975 in 33 Community Development Blocks. The foundations for the introduction of ICDS programme were laid with the organised support to childcare, which was an objective promoted by the National Planning Committee appointed during the freedom struggle in 1939-40. The Constitution of India affirmed the State's commitment to the welfare of children in its Directive Principles of State Policy. Based on the Directive Principles, the Central Social Welfare Board was set up on August 13, 1953 which in turn started schemes for providing care and medical attention to children and pregnant women and for setting up child welfare centres under the Community Development Blocks.

The schemes that were subsequently taken up included the Applied Nutrition Programme (1963) and the Special Nutrition Programme (1970-71) aimed at increasing nutritional awareness, encouraging food production and distribution of nutrition-rich diet. These programmes were implemented through various agencies like balawadi, mahila mandal, panchayats, and municipalities. The balawadi nutrition programme was started in 1970-71 with the objective of providing nutrition-rich food to children of the 3-5 years age group from low-income families.

Though many welfare schemes for children were being implemented through various agencies and departments, a study conducted by the Planning Commission brought to light that the benefits reached only a small percentage of the target groups at the local level. Besides, it was also observed that the various health care, educational and social welfare activities of different departments, which were all to be implemented in a co-ordinated manner, had no linking among them at the local-level.

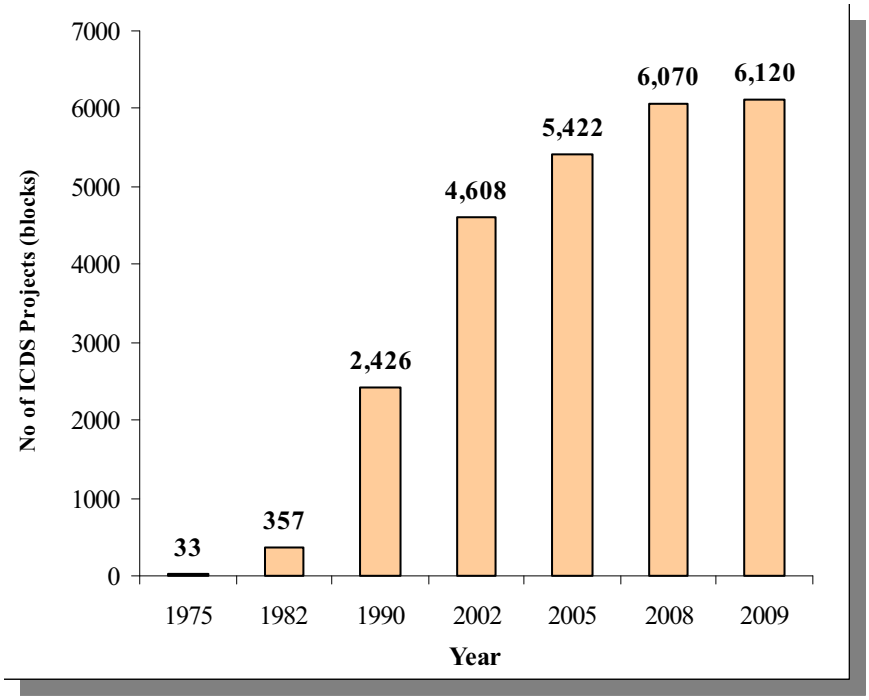
As a response to the weakness brought out by the Planning Commission study, a National Policy for Children was adopted by Government of India in August 1974 declaring children as, "supremely important asset." It further said: "And children's programmes should find a prominent part in the national plans for the development of human resources. It was felt that it shall be the policy of the State to provide adequate services to children, both before and after birth and through the period of growth, to ensure their full physical, mental and social development". This policy provided the required framework for assigning priority to different needs of the child. Also, during 1975, the maternal mortality rates (MMR) and infant mortality rates (IMR) were extremely high (MMR – 853 per 1, 00,000 live births and IMR – 134 per 1,000 live births) due to the severe drought the country faced. To stop the soaring rate of MMR and IMR, the then Prime Minister, Smt. Indira Gandhi, launched ICDS in a few places which were affected acutely by drought. ICDS was inaugurated in 33 blocks across the country on October2, 1975. Spread over 22 states and the Union Territory of Delhi, 19 of the blocks were rural, 10 tribal and 4 urban.

1.3. EXPANSION OF ICDS PROJECT

The ICDS programme has grown rapidly, especially in recent years. It started on an experimental basis in 33 development blocks[1] in 1975. Today, 35 years later, it covers about 90 per cent of all blocks in the country. Figure 1.1 shows the trend in the number of blocks (operational) covered by ICDS.

[1] A development block is an administrative unit covering about 115 villages on average. The administrative structure of India consists of states and Union Territories (UTs), districts, and blocks, in decreasing order by size. There are 35 states and UTs (28 states and 7 UTs), 593 districts, and 5,886 blocks. According to the 2001 Census, India has 638,667 villages.

Figure 1.1: Trend in the number of blocks covered by ICDS (1975-2009)



Source: Ministry of Women and Child Development, various years.

Between 1975 and 1997, ICDS, which was launched in 33 blocks (Projects) (each block covers a population of 1, 00,000 and has on an average 115 AWC), was expanded to 5,652 projects (4,533 rural, 759 tribal and 360 urban projects) till the end of the Ninth Plan. The implementation of the Scheme continued in the Tenth Plan period within the existing 5,652 projects, with no expansion activity due to resource constraint. The ICDS scheme has since been expanded twice— in 2005-06 and 2006-07. The ICDS scheme was expanded in 2005-06 as all states/UTs were required to furnish their requirements of additional projects and/or AWC within the existing population norms of the scheme (i.e. one AWC per 1,000 population in rural/urban areas and 700 population in tribal areas) to comply with the directions of the Supreme Court and to implement the National Common Minimum Programme (NCMP), 2004 (for the universalisation of ICDS) of the government. Based on the requirements received from the states/UTs, in the first phase of expansion, 466 additional projects and 1.88 lakh AWC were sanctioned.

In the second phase of expansion, to ensure coverage of all uncovered habitations/settlements, population norms for sanctioning an AWC were relaxed in May 2005 (i.e. one AWC for a population of 500-1500 in rural and urban projects and a population of 300-1500 for tribal projects). States were asked to furnish their requirements of additional Projects/AWC based on these revised population norms. The total number of ICDS projects has gone up to 6070 in March 2008 and further to 6,120 in March 2009. As of March 31, 2009 the number of operational AWC was 10.44 lakh.

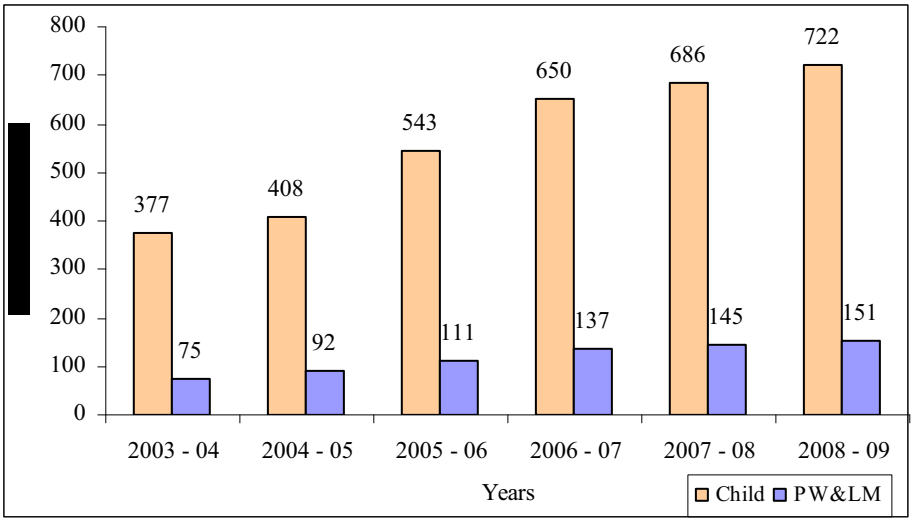
Universalisation of ICDS under the third phase of expansion has got to bring the total number of AWC to 14 lakh (Supreme Court) with the following norms to set up an AWC (Table 1.1).

Table 1.1: Statement showing existing and revised population norms under Integrated Child Development Services (ICDS) Scheme

Existing	Revised
For Rural/Urban projects **Population**	**Anganwadi Centres (AWC)**
500 – 1500 – 1 AWC	**For Rural / urban projects** **Population** 400 – 800 1 AWC 800 – 1600 2 AWC 1600 – 2400 3 AWC Thereafter in multiplies of 800 one AWC
Mini AWC 150 – 500 - 1 Mini AWC	**Mini AWC** 150 – 400 - 1 Mini AWC
For Tribal Projects **Population** 300 – 1500 - 1AWC 150 – 300 1 Mini AWC	**For Tribal /Riverine /Desert, Hilly and other difficulties areas / projects** **Population** 300 – 800 1AWC 150 – 300 1 Mini AWC

Figure 2 illustrates the growth in the number of ICDS beneficiaries (total of under-6 children and pregnant and nursing mothers) in recent years. The number of programme beneficiaries grew at an average annual rate of 9.2 per cent from 2002 to 2008 – a rate five times higher than the national population growth rate of 1.6 per cent. As of March 31, 2009 the services under the scheme are being provided to about 873.43 lakh beneficiaries, comprising of about 721.96 lakh children (0-6 years) and about 151.47 lakh pregnant and lactating mothers.

Figure 1.2: Growth in the number of ICDS beneficiaries (2003-09)



Source: Ministry of Women and Child Development, various years.

1.4. SERVICES AND PROGRAMME NORMS

The ICDS programme provides an integrated package of health, nutrition and education services targeted to children aged below 6 years; pregnant and nursing mothers; and in some blocks, adolescent girls. The programme aims to cover economically or socially marginalised sections of women and children as primary beneficiaries.

Specific services provided through the programme include:

1. Supplementary feeding
2. Immunisation
3. Growth monitoring
4. Health check-up
5. Referral services
6. Treatment of minor illness
7. Pre-school education to children aged 3-6 years
8. Nutrition and health education to women.

1.5. TARGET GROUP

The pre-school age is the most vulnerable and critical phase in the overall development of an individual, so children up to 6 years form the target group. As the child's health and nutritional status is affected to a large extent by the mother's health status during pregnancy and lactation as well as by the attention and care given by the mother during childhood, women in the reproductive age (15-45 years) are also included in the programme with special attention to the nutritional and health needs of pregnant and lactating mothers. Even though the minimum legal age of marriage for women is 18 years, incidence of teenage pregnancy (below 18 years) is still quite significant in India (NFHS survey I, II and III).

For different services the target groups are: For Supplementary Nutrition, Immunisation, Health Check-ups and Referral services, the target group is children below 6 years and pregnant and lactating mothers. For Pre-school education, the target group is children of 3-6 years. For Nutrition and Health Education, the target group is women of the age group 15-45 years. With development, ICDS programme has expanded its range of interventions to include components focused on adolescent girls (11-18 years) (introduced in 2000) nutrition, health, awareness, and skill development, as well as income-generation schemes for women. Specific services provided to various target groups are summarised in Table 1.2.

Table 1.2: Services provided to target groups by ICDS

Target Group	Health check-ups and treatment	Nutrition related services	Educational services
Children below 3 years	• Health check-ups • Immunisation • Deworming • Basic treatment of minor illnesses • Referral services for more severe illnesses	• Supplementary feeding • Growth monitoring (monthly weighing, weight recorded on growth chart) • Take home rations (THR)[a]	
Children ages 3-6 years	• Health check-ups • Immunisation • Deworming • Basic treatment of minor illnesses • Referral services for more severe illnesses	• Supplementary feeding • Growth monitoring (quarterly weighing, weight recorded on growth chart)	• Early Childhood Care (Day-care) • Pre-school education • Nutrition and health education
Adolescent girls ages 11-18 years[b]	• Health check-ups • Treatment of minor illnesses • Referral services for more severe illnesses	• THR	• Non-formal education focusing on home-based and vocational skills • Nutrition and health Education
Pregnant women	• Health check-ups • Immunisation • Referral services	• THR	• Nutrition and health Education
Nursing mothers	• Health check-ups • Referral services	• THR	• Nutrition and health Education
All women (15-45 years)			• Nutrition and health Education

Note: [a]Under the *Pradhan Mantri Gramodaya Yojana* (PMGY), for children belonging to below poverty line (BPL) families.
[b]Covered under the *Kishori Shakti Yojana,* launched in 2000-01 as part of ICDS.

1.6. COVERAGE NORMS

On November 28, 2001, the Supreme Court of India directed the central and state governments to universalise the ICDS programme. This would require revising the existing norms of coverage, which is yet to be done. Now, with the Univeralisation of the ICDS programme, all children below 6 years are in the target group. (The earlier criteria of Below Poverty Line— BPL— are not followed any more as the use of BPL status as a criterion for the selection of beneficiaries is against the notion of universalisation of ICDS services. The use of the BPL criterion to select beneficiaries is also highly problematic given the gaps in identification of poor families as being "BPL families" and the fact that malnutrition is far from being limited to families currently identified as BPL). Universalisation of ICDS means that every hamlet/settlement should have a functional AWC, and that the coverage of ICDS should be extended to all children under 6 and all eligible women (Common Minimum Programme, 2004; UPA Government)

The prevailing coverage norms are: The scheme covers rural areas, tribal areas and slums in urban areas. In non-tribal areas each AWC covers 40 beneficiaries in case of 0-3 years and for 3-6 years category, and the coverage is 20 beneficiaries in case of pregnant and lactating mothers (P& LM) (including 4 being those recommended by the Auxiliary Nurse Midwife (ANM)/Doctor on medical grounds).

The coverage per AWC for Tribal Areas is as follows: In tribal areas each AWC covers 42 beneficiary in case of 0-3 years and 3-6 years category, and the coverage is 25 in case of P&LM.

1.6.1 POPULATION NORMS FOR SANCTIONING OF AWC

For Rural/Urban Projects the norms are as follows:

For a population of 400-800, there is one AWC; for population of 800-1,600, there are two; for 1,600-2,400 population, there are three and, thereafter, one AWC for multiples of 800. Apart from the main AWC, mini AWCs can be set up to cover remote and low populated hamlets/villages in tribal blocks having a population of 150-400 for rural/urban projects. Also in hilly or desert areas, which may be sparsely populated, villages may be very small or divided into small hamlets, for which there are different norms. For Tribal/Riverside/Desert, Hilly and other difficult areas, the population norms are as follows: For a population of 300-800, there will be one AWC and for a population of 150-300, one mini AWC.

These existing population norms were revised from previous norms to the current norms in three successive revisions. The earliest population norms were as follows: one AWC for a population of 1,000 for urban/rural and an AWC for a population of 700 for tribal areas. The change in population norms from the earliest to the second revision occurred because an inter-ministerial task force was set up in 2004 to review the existing population norms for sanction of an ICDS project/AWC and suggested revised norms. The task force submitted its report/recommendations in May 2005 after which a new set of population norms were made effective to bring all uncovered habitations/settlement under ICDS which were as follows: one AWC for a population of 500-1500 for rural and urban projects and 300 -1500 for tribal projects. To achieve universalisation of the ICDS Scheme, the task force revised these population norms and recommended further relaxation and gave the existing population norms (third revision). In this latest revision (existing norms), the task force also recommended that blocks with more than 2

lakh population could opt for more than one project (one per 1 lakh population) or opt for one project only.

1.7. ORGANISATION OF ICDS

Organisation of ICDS is at five different levels i.e. Central Level, state/Union Territory Level, District Level, Block Level and Village Level.

At the Central Level, The Department of Women and Child Development within the Human Resource Development Ministry is the nodal department, responsible for budgetary control and implementation of the programme.

At the State Level, the secretary of the Department of Women and Child Development, Social Welfare, Health, Rural Development, Community Development, Tribal Welfare or any other nodal department designated by the state government is responsible for the implementation of the programme within the state. At the state level ICDS cells have been set up to monitor the programme. Within the state, the administration of ICDS is decentralised at the district, block and village levels, and Anganwadi Centre.

At the District Level, the district officer (Collector/District Development and Programme Officer/Deputy Commissioner) is responsible for coordination and implementation of the scheme. The administrative unit of the ICDS within the districts is called an ICDS project. An ICDS project covers a community development block in a rural area, a tribal development block in a tribal area, and a group of slums in an urban area. Districts having five or more ICDS projects have ICDS monitoring cells.

At the Block level, the Child Development Project Officer (CDPO) is in overall charge of implementing the programme at the block level. Each block has, on an average 100 AWC. To facilitate supervision, the block is further divided into 4-5 circles depending upon the number of AWC; each circle has a Supervisor and who monitors between 20-25 AWC and who reports to the CDPO. In large rural and tribal blocks, an Additional Child Development Project Officer (ACDPO) is also recruited who forms the link between the supervisors and the CDPO and assists the CDPO in day-to-day functioning and field visits.

At the village level, the package of health, nutrition and educational services are provided at the Anganwadi centre (AWC) located in the village or urban slum area the programme serves. *Anganwadi* literally means "courtyard." AWC is the focal point for ICDS service delivery that normally operates daily for four hours except Sundays and holidays. The *Anganwadi* worker (AWW), a woman, is the key functionary of ICDS at the grassroots level. AWW is a voluntary worker and paid an honorarium of Rs 1,500 per month, usually recruited from within the local community. She is assisted by an A*nganwadi* helper (AWH)[2] who receives a monthly honorarium of Rs 750. Neither the AWW nor her helper is a regular government employee.

In carrying out her health related tasks, the AWW receives support from health officials of local primary health centres (PHC) and sub-centres. Each block has at least one Primary Health Centre (PHC) and Sub Centre (SC). Health officials at PHCs and SCs include Medical Officer (MO), Lady Health Visitor (LHV), Auxiliary Nurse Midwife (ANM), and female health workers. The

[2] The helper's duties include rounding up the children to attend the AWC, preparing food for supplementary nutrition, cleaning the centre, and so on.

MO along with a Health Assistant looks after the implementation of the health component. LHV and ANM conduct regular health check-ups of children, adolescent girls and pregnant and nursing women at the AWC, diagnose minor ailments and, if needed, provide basic medicines. These health officials along with AWW and AWH help in delivering three services of the ICDS programme i.e. immunisation, health check-up and referral services. In this process, two separate government departments – Health and Child Development – work together under the ICDS programme to achieve holistic development of children and maternal health and nutrition.

The core department functionaries working under ICDS are as follows: District programme officer, child development project officer, supervisor who supervises various AWC, the AWW at each AWC level and the AWH who assist the AWW in the functioning of the AWC.

The main responsibilities of different functionaries are:

1.7.1 Child Development Project Officer (CDPO)

- The CDPO is the principal executive functionary at the block level who reports to the DPO.
- The CDPO provides the link between ICDS functionaries and the government administration. She/he supervises and guides the supervisor and AWW in the delivery of services within the Block.
- The CDPO is responsible for securing the premises for AWC, identifying beneficiaries, ensuring supply of food to centres and flow of health services, and monitoring the Programme and reporting to the State Government. The CDPO also coordinates with the Health Department and the Block Development Officer.
- Through periodic meetings and field visits, the CDPO gives supportive inputs to the supervisors and AWWs and imparts training from time to time to upgrade the skills of these functionaries.
- Other responsibilities of CDPO include storage, transportation, and distribution of supplies as well as coorindation among state departments concerned with ICDS, local voluntary agencies and institutions.
- Further, the CDPO is responsible for overseeing the work of supervisors or Mukhya Sevikas, who in turn are responsible for about 17 to 25 anganwadis, depending on the size and nature of the project. The Mukhya Sevika supports and guides the anganwadi workers and assists her in recording home visits, organising community meetings and visits of health personnel, and providing on-the-job orientation to anganwadi workers (DWCD 2000).
- An important task of the CDPO is to monitor the functioning of AWWs and AWHs through routine and unannounced inspections of AWC. CDPO has the authority to suspend an AWW's honorarium if on the day of her visit she finds malfunctioning of the AWC due to AWW (e.g. matters such as number of children attending the AWC that could be observed during inspection).[3] Moreover, these inspections serve to ensure accountability of AWWs in maintaining various records.

[3] If on the inspection day a CDPO finds that the AWC is not functioning properly, she docks the AWW's pay for that day and leaves a note demanding explanation. Repeated nonresponse (or delays) to the

1.7.2 SUPERVISORS

- The Supervisor is responsible for 20 to 25 AWC depending on the nature of the project (tribal, rural, or urban).
- She guides and supervises the AWWs in her circle. She provides on the job training to the AWW and assists her in recording home visits and other activities conducted at the AWC, organises community meetings and visits of health personnel. She also imparts training to adolescent girls.

1.7.3 ANGANWADI WORKER (AWW)

- Providing supplementary feeding to children, which is often a hot meal or snack cooked and served at the AWC
- Distributing take-home rations from the AWC
- Organising immunisation sessions or "Mother-Child Protection Days" on a fixed day each month and maintaining immunisation records to ensure full coverage.
- Distributing iron and folic acid (IFA) tablets.
- Treating minor illnesses and referring cases to medical centres whenever necessary.
- Weighing children and recording weights on a growth chart for growth monitoring and to detect growth faltering.
- Providing nutritional and health related advice to women and adolescent girls in the community.
- Maintaining birth records of all children born in the community covered by the AWC.

1.7.4 ANGANWADI HELPER (AWH)

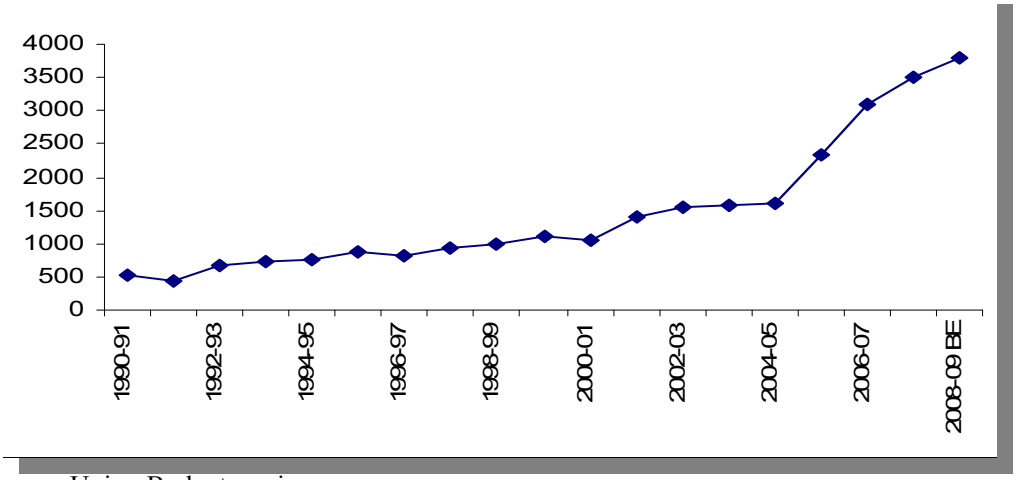
The AWH is supposed to assist the AWW in her tasks. Her main duties are to bring children to the Anganwadi, cook food for them, and help with the maintenance of the AWC.

1.8. FINANCIAL ALLOCATIONS

ICDS is an ongoing, centrally-sponsored scheme implemented through the State Governments with 100 per cent financial assistance from the Central Government for all inputs other than supplementary nutrition for which Central assistance to States is given by GOI to the extent of 50 per cent of the actual expenditure incurred by states or 50 per cent of the cost norms, whichever is less. The central allocations for the ICDS programme during last two decades are given below at 1999-00 constant prices (Figure 1.3).

CDPO's queries could result in extended pay cuts for the AWW. It is however not easy to terminate employment of an AWW, a step which requires a great deal of documentation and careful groundwork by the CDPO (Gupta 2001).

Figure 1.3: Centre allocation (Rs. Crore) at 1999-00 prices



Source: Union Budget, various years.

1.9. DELIVERY MECHANISM OF VARIOUS SERVICES

1.9.1 SUPPLEMENTARY NUTRITION

It includes supplementary feeding (supplement to the daily diet of beneficiary to be consumed at AWC) and growth monitoring; prevention against vitamin A deficiency and control of nutritional anemia. To provide supplementary nutrition all families in the community are surveyed to identify children below the age of 6 and pregnant & nursing mothers (up to six months of nursing). Supplementary feeding support is provided for 300 days in a year. By providing supplementary feeding, the Anganwadi attempts to bridge the protein energy gap between the recommended dietary allowance and average dietary intake of children and women.

For growth monitoring, children below the age of 3 are weighed once a month and children 3-6 years of age are weighed every quarter. Weight-for-age growth cards are also maintained for all children below 6 years. This helps to detect growth faltering and helps in assessing nutritional status of the child and if the child is malnourished, the grade of malnutrition. If the malnutrition is mild (Grades I and II), the mother is advised on the food and other health care requirements of the child. For severely malnourished children, they are given special supplementary feeding and referred to Health Sub-Centres, Primary Health Centres as and when required.

The nature and type of food under supplementary nutrition programme varies from state to state. It usually consists of a hot meal, containing a varied combination of pulses, cereals, oil, vegetables and sugar. Some states provide ready-to-eat meals containing some basic ingredients. There is flexibility in selection of food items to respond to local needs. Supplementary Nutrition Programme (SNP) also provides a crucial opportunity to counsel pregnant women enabling utilisation of key services, i.e. antenatal care, iron folic acid supplementation and improved care, adequate extra care from family and rest during pregnancy. Special care is also taken to reach children below the age of 2 years, and to encourage parents and siblings to either take ration home or to bring them to the Anganwadi for supplementary feeding.

1.9.2 Norms for Supplemental Nutrition

The nutritional norms for supplementary nutrition as given by the Ministry of Women and Child Development are:

- 300 Kilocalories and 8-10 grams of protein to children in the age group 0-6 years. (Breastfeeding as in IYCF guidelines. National Guidelines on Infant Young Child Feeding (IYFC) as given by Ministry of Women and Child Development, mentions that infants should be exclusively breastfed for the first six months, complementary foods should be introduced after six months along with continued breastfeeding for two years or beyond).
- 600 Kilocalories and 16-20 grams of protein to severely malnourished children under 6 years of age
- 500 Kilocalories and 20-25 grams of protein to adolescent girls and pregnant and lactating women.

As per Supreme Court Order dated April 22, 2009 the Central Government has revised the nutritional and financial norms as follows:

Nutritional norms:

- 500 calories and 12-15 grams of protein to children in the age group 0-6 years
- 800 calories and 20-25 grams of protein to severely malnourished children under 6 years of age
- 600 calories and 18-20 grams of protein to adolescent girls and pregnant and lactating women.

1.9.3 Financial Norms

The state/UT governments are responsible for providing supplementary nutrition as per norms of the scheme out of their own resources. The cost of supplementary nutrition varies depending upon recipes and prevailing prices. This is as under:

Table 1.3 –Revision of cost norms of SNP

Category	Since 1991 to 2004-05	Existing (w.e.f. 19.10.04)	Revised as per Supreme Court Order dated April 22, 2009
(i) Children aged 6-72 months	95 paise	Rs 2.00	Rs 4.00
(ii) Severely malnourished children aged 6-72 months	Rs 1.35	Rs 2.70	Rs 6.00
(iii) Pregnant women and Nursing mothers	Rs 1.15	Rs 2.30	Rs 5.00

1.9.4 Pre-School Education (PSE)

Pre-School Education contributes to the universalisation of primary education, by providing to the child the necessary preparation for primary schooling and offering substitute care to younger siblings, thus freeing the older ones – especially girls – to attend school. Under this, child centreed play way activities, which is built on local culture and practices, using local support

materials and developed by Anganwadi workers through enrichment training are promoted. It is considered the most joyous daily activity of the ICDS programme, which is visibly sustained for three hours a day.

The activities which are undertaken as part of PSE include story telling, counting numbers, free conversations to speak freely and apply their mind in order to organise small activities, painting, drawing, threading and matching colour related to fine muscle coordination and development, reading simple words, writing alphabets words, distinguish objects, recognise pictures etc. The constitution of the PSE kit may vary within a state/UT keeping in view the specific local needs and resources. A suggestive list is as follows: Flash cards for story telling; models on pictures/picture books of animals; Fruits, vegetables, parts of the body, pictures/picture books; building blocks- plastic or card board or wood; Stuffed toys, dolls for role play, colours, numbers, alphabets, matching cards; Stacking rings/Shape Towers, balls, threading boards/beads & wires, kitchen set, wheel toys; Dhapli/Small Drum and simple puzzles, etc. though the list is not exhaustive.

Under PSE, children are fully prepared for entering Class I at the age of 6 years under the Sarva Shiksha Abhiyan (SSA) and District Primary Education Programme (DPEP). So there is strong convergence between ICDS, SSA and DPEP.

1.9.5 IMMUNISATION

Immunisation of infants protects children from six vaccine preventable diseases, viz. Poliomyelitis, Diphtheria, Pertussis, Tetanus, Tuberculosis and Measles. These diseases are major and preventable causes of child mortality, disability, morbidity and related malnutrition. Pregnant women are immunised against Tetanus, which reduces chances of maternal and neonatal mortality.

The services of immunisation, health check-up and referral services are provided through the public health infrastructure, i.e. Health Sub-Centre, Primary Health Centre and Community Health Centre, as these are the joint responsibility of ICDS and the Ministry of Health and Family Welfare. Immunisation services are delivered by the Ministry of Health and Family Welfare under its Reproductive Child Health (RCH) Programme. The AWW assists the health functionaries in coverage of the target population for immunisation. She helps in the organisation of fixed day immunisation sessions. She maintains immunisation records of ICDS beneficiaries and follows up to ensure full coverage.

The Iron and Vitamin "A" Supplementation (IFA tablets) are provided to children and pregnant women under the immunisation programme, which are also delivered under the RCH Programme of the Ministry of Health and Family Welfare.

The frequency of various vaccine deliveries under the immunisation programme is as follows:

- BCG - at birth
- Oral Polio - at birth, 6,10,14 weeks
- DPT - at 6,10,14 weeks
- Hepatitis B - at 6,10,14 weeks
- Measles – at 9 week

- DPT+ Oral Polio - at 18 to 24 months
- DT - at 5 years
- Vitamin A - at 9,18,24,30 and 36 month
- Tetanus Toxoid - to Pregnant Women in different trimesters

1.9.6 Health Check-Up

It includes health care of children less than six years of age, antenatal care of expectant mothers and postnatal care of nursing mothers. These services are provided by the ANM, Medical Officers In-charge of Health Sub-Centres and Primary Health Centres under the RCH programme of the Ministry of Health and Family Welfare. Health services include regular health check-ups, recording of weights, immunisation, management of malnutrition, treatment of diarrhoea, deworming and distribution of simple medicines, etc. At the Anganwadi, children, adolescent girls, pregnant women and nursing mothers are examined at regular intervals by the Lady Health Visitor (LHV) and Auxiliary Nurse Midwife (ANM) who diagnose minor ailments and distribute simple medicines. They provide a link between the village and the Primary Health Care Sub-Centre.

1.9.7 Referral Services

During health check-ups and growth monitoring, sick or malnourished children, who are in need of prompt medical attention, are referred to the Primary Health Centre or its sub-centre by AWW. The AWW has also been oriented to detect disabilities in young children. She enlists all such cases and refers them to the ANM and Medical Officer in charge of the Primary Health Centre/ Sub-centre. These cases referred by the AWW are to be attended by health functionaries on a priority basis.

1.9.8 Nutrition and Health Education (NHE)

NHE has the long-term goal of capacity building of women in the age group of 15-45 years so that they can look after their own health, nutrition and development needs as well as that of their children and families. The main objective of education in nutrition is to help individual to establish food habits and practices that are consistent with the nutritional needs of the body and adapted to the cultural pattern and food resources of the area in which they live.

NHE comprises basic health, nutrition and development information related to childcare and development, infant feeding practices, utilisation of health services, family planning and environmental sanitation, maternal nutrition, ante-natal care, prevention and management of diarrhoea, acute respiratory infections and other common infections of children.

NHE is delivered through inter-personal contact and discussion and involves the following services/activities which are discussed at these meetings: Services for children - taking care and monitoring of child's growth, timely immunisation , knowledge about breast feeding, colostrum feeding, treatment of diarrhoea/minor illness, not to provide home-made medicine during illness, preparation of nutritious food/feeding practices, importance of education of the child, about cleanliness and hygiene, preparation of oral dehydration solution, care of severely malnourished children. Services for Mother - About immunisation during pregnancy, about institutional delivery, about feeding practices during pregnancy and lactating period, about correct posture during pregnancy, correct posture during breast feeding, about self care & health, about diseases

illness, about nipple hygiene, purification of water to mothers and adolescent girls, small family norms, etc.

1.9.9 Adolescent Girls Scheme

ICDS, with its opportunities for early childhood development, seeks to reduce both socio-economic and gender inequalities. For this a special intervention has been devised for adolescent girls using the ICDS infrastructure – the Kishori Shakti Yojana (KSY). This intervention focuses on school dropouts, girls in the age group of 11-18 years, with a view to meet their needs of self-development, nutrition, health, education, literacy, recreation and skill development. KSY is being implemented in 6,118 ICDS projects. Under KSY, various programme options are available to the states/UTs to selectively intervene for the development of the adolescent girls on the basis of specific needs of the area. KSY also seeks convergence with the schemes of the Health Department in order to improve the nutritional and health status of the adolescent girls. Special emphasis is placed on reducing nutritional anemia among this group. The scheme also attempts to motivate and enhance the potential of adolescent girls as social animators. It seeks to improve their capabilities in addressing nutrition and health issues through centre based instructions, training camps and hands on learning as well as sharing of experiences.

1.10. ROLE OF DONORS IN ICDS[4]

1.10.1 World Bank and UNICEF Assistance

Besides the Central and State Governments, the World Bank and UNICEF are the major promoters of the scheme. UNICEF assists the ICDS programme mainly through the provision of vehicles, growth monitoring charts, photocopiers and weighing scales.

1.10.2 World Bank assistance

The World Bank has supported efforts to improve nutrition in India, in general, since 1990 through five projects. Support to ICDS, in particular, has been provided in overlapping phases during the period 1990-2006 [ICDS-I (TINP-I i.e. Tamil Nadu Integrated Nutrition Project, from 1980-89 and funding for 110 blocks in Andhra Pradesh and 191 blocks in Orissa since 1990-91. ICDS-I closed on December 31, 1997), TINP-II (1991-1998), ICDS-II, ICDS-III and ICDS-APER Projects (Andhra Pradesh Economic Restructuring Project, 1999-2004)] with total IDA assistance of over $ 650 million.

ICDS II Project (1993-2002): ICDS II Project, which ended on September 30, 2002 was in operation in 461 new Blocks in Bihar, Jharkhand, Madhya Pradesh and Chhattisgarh. These projects were later on covered under the restructured ICDS III Project.

ICDS-III Project (1999-2004): The World Bank-assisted ICDS-III Project was being implemented in 318 Projects in the States of Kerala, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh. During 2002-03, the project was re-structured to include Madhya Pradesh, Bihar, Chhattisgarh, Jharkhand, Orissa and Uttarakhand with effect from 1.10.2002. The Women & Child Development (ICDS-III) Project has ended on March 31, 2006 after 6.5 yrs of implementation.

[4] A short review of other donors has been presented in this report.

1.10.3 UDISHA – THE ICDS TRAINING PROGRAMME (1999-2004)

UDISHA is a World Bank-assisted, country-wide training programme for all ICDS functionaries. It has three main components, viz.

i. Regular Training (wherein basic job training is provided to ICDS functionaries);

ii. Other Training (wherein innovative, area specific trainings are provided); and

iii. IEC (Information, Education and Communication), etc.

The Ministry has formally requested for IDA assistance for:

i. Next phase of nutrition project, and

ii. Early childhood education through a combined project (ICDS-IV). Preparation of the Project is underway.

The nutrition component would primarily focus on the "window of opportunity" between pre-pregnancy through 3 years of age, and the ECE component is to focus on pre-school education for children 3-6 years of age.

Chapter 2

Past Studies on ICDS – A Brief Overview

India has the highest number of undernourished/malnourished people in the world. About 48 per cent of under-5 year-old children in India were recorded underweight during 2003-2008/ Only Timor Leste returning a larger figure (54%) among all the countries in the world[5]. As per World Health Organization (WHO) standards, 48 per cent of children below 5 years of age in India are stunted, with seven countries recording a higher or similar rate. These alarming features about the state of Indian children call for wide scale intervention to improve the status of children in the country. Simultaneously, a large number of global undernourished/malnourished children are born to Indian mothers. About 28 per cent of children in India are born with low birth-weight during 2003-08. India performed better than only four countries in the world – Mauritania (34%), Yemen (32%), Pakistan (32%) and Sudan (31%). Such a scenario also demands policy intervention to ensure proper nutrition and health care facilities to pregnant and lactating mothers.[6]

To address this problem of malnourishment, GoI has developed several major programmes for increasing access to food, e.g. the Public Distribution System, Food for Work programme, Employment Guarantee Programme and the Mid-Day Meal programme. But by far the biggest nutrition supplementation programme is ICDS, which is intended to reach out to the most neglected sections of the population. With support from UNICEF and other donors, it emerged from small beginning in 1975 to become one of India's flagship programmes today. The blocks covered have increased rapidly, from 33 in 1975 to 6,120 on March 2009. ICDS envisages combating the problem of malnutrition through a package of six holistic services, namely supplementary nutrition programme (SNP), Non-formal pre-school education (PSE), Immunisation, Health Check-up, Referral services, Nutrition and Health Education (NHE).

A large number of evaluation and research studies have so far been conducted to evaluate and assess the effectiveness and impact of the programme. The present chapter summarises the findings from these studies. At the national level there have been only three evaluations of ICDS schemes – NIPCCD (1992) and (2006) and NCAER in (1998). Das Gupta (2005) used NFHS data base to assess the ICDS programme in terms of placement and its impact on the nutritional status of children. Apart from these, studies related to unversalisation of the ICDS scheme, state specific evaluation of the scheme, enhancing the social and economic empowerment of disadvantaged women, etc. were conducted.

NIPCCD (1992, 2006) along with being a process evaluation study also looked at the impact of ICDS. NCAER (2001) was also a process evaluation study which aimed to analyse the performance of the ICDS scheme on the ground and to assess the capability of the functionaries to meet the objectives of the programme.

[5] ftp://ftp.fao.org/docrep/fao/012/i0876e/i0876e.pdf see page 48-50 for data
[6]Reference:http://www.unicef.org/rightsite/sowc/pdfs/SOWC_Spec%20Ed_CRC_Main%20Report_EN_090409.pdf and excel tables at http://www.unicef.org/rightsite/sowc/statistics.php

While both NIPCCD (1992) and NIPCCD (2006) used the multi-staged stratified random sampling methods. The former covered 100 ICDS projects (9% of total) and the latter selected 150 ICDS projects as a sample of all the Blocks which were operational as on April 1, 2000. Both studies used interview and observation methods to collect information pertaining to the delivery system. NCAER (2001) covered all the operational blocks in the country as on March 31, 1996.Uniform sample design was adopted to sample nearly 60,000 Anganwari centres, 1.80 lakh beneficiary households, 4,000 CDPOs, and 4,000 circle supervisors in all states/UTs.

In addition to these evaluation studies carried out at the national level and commissioned by agencies of the Central Government, a large number of state-specific evaluation studies of ICDS commissioned by government as well as non-governmental agencies are available. Research papers on ICDS are also available in large numbers. The present chapter provides a brief on the findings of these studies.

The salient features that come out of these studies are given below. More details about the studies and their findings are given in the Appendix. It should, however, be noted that the findings are not identical across states.

- Coverage under SNP is much less than the intended level, more so when there is an order from the Apex Court to universalise the programme. The extent of coverage under ICDS is significantly low in Bihar.
- The AWC are not possessing strong infrastructural inventories to be able to provide the services expected of them. A considerable number of them operate from buildings that are not suitable for the purpose – some even operate from verandahs of buildings meant for other uses. A sizeable number AWC lack safe drinking water, toilets, teaching aids to impart pre-school education, weighing machines and even space for children to play. There are no legal instruments for the provision of necessary infrastructure and for professional support to ICDS.
- The effectiveness of immunisation programme has been mixed – better in some states and poor in some others.
- PSE activities are often linked to availability of food under SNP.
- The system of record maintenance in most of the AWC is poor.
- Level of awareness among the intended beneficiaries about their entitlement from out of this scheme is pretty low.
- Corrupt practices prevail in recruitment of AWWs.
- Exclusion from ICDS benefits on the basis of caste has been observed in some cases.
- Significant prevalence of chronic under-nourishment among children below 5 years.
- Ineffective training programme for AWWs.
- Poor quality monitoring of AWC.
- Poor maintenance of growth charts for the child beneficiaries.
- Under and/or mis-utilisation of existing weighing machines.
- Too much emphasis on food security and not other interventions that increase nutrition at lower cost.

- Service delivery not focused on children under three. Also, wealthier children participate more than poor ones.
- The poorest states have lower levels of funding and coverage than other states. The states with the greatest need for the programme – the poor northern states with high levels of child malnutrition and nearly half of India's population have the lowest programme coverage and the lowest budgetary allocations from the central government

The report not only seeks to validate or otherwise the issues raised so far but also identifies new issues not covered in the literature vis-à-vis the performance of ICDS in India.

Chapter 3

Study Objectives, Evaluation Questions, Approach and Methodological Issues

This Chapter is concerned with articulating the study objectives as specified by the Programme Evaluation Organisation, Planning Commission. Specifically, we plan to translate the Terms of Reference (ToR) for the study into a set of evaluation questions and identify the relevant indicators that would help us in assessing the data requirement for the study and in answering the evaluation questions.

3.1. THE TERMS OF REFERENCE (TOR)

NCAER undertook the evaluation of ICDS at the instance of PEO, Planning Commission. The Terms of Reference (ToR) of the study are:

(i) To assess the quality, outreach and the range of services being offered, including infrastructure under ICDS on the ground.

(ii) To assess the extent to which lCDS has been successful in rendering the six services to children and pregnant and lactating women as per objective of the scheme viz:

  (a) How far ICDS has improved the nutritional status of children in the age group of 0-6 years

  (b) Quality of pre-school education and as to how far lCDS has been successful to enhance enrolments and reduce school dropouts

  (c) How far has lCDS been successful in reducing the incidence of infant mortality/child mortality/maternal mortality and morbidity (based on data available in *Anganwadi* Centres).

  (d) The impact on enhancement of the capacity of mothers to look after the health and nutritional needs of child through proper health and nutrition education.

(iii) To assess the quality, outreach and the range of services being offered under KSY component of ICDS for Adolescent Girls and their impact.

(iv) To find out as to how far ICDS has been successful in converging services of various departments for promoting child development.

(v) To make suitable recommendations for improving the quality of implementation of lCDS and services provided under the scheme.

(vi) To identify and document the best practices in implementing lCDS.

3.2. EVALUATION QUESTIONS

The evaluation questions posed by the above ToR can be broadly divided into two categories:

- Process related
- Outcome and impact related.

The Planning Commission has sought grassroots level information on a number of implementation related parameters, such as:

- What is the extent of coverage of target groups of the ICDS programme?
- What are the factors responsible for low coverage, if any?
- Whether services intended to be delivered through the programme to the target groups are actually reaching them?
- What are the gaps in service delivery?
- Are the beneficiaries satisfied with the quality of delivery of services under the programme?
  - What are the constraints to quality service delivery?
  - In addition to these process-related evaluation questions, the TOR includes the following outcome and impact related evaluation questions:
  - Whether ICDS has been successful in creating awareness about the importance of hygiene, sanitation, dietary habits and other practices that have a bearing on the nutritional status, education and health-seeking behavior among beneficiaries?
  - Has ICDS contributed to reduction in IMR/CMR/MMR and improvement in nutritional status of children?

3.3. INDICATORS, APPROACH AND MEASUREMENT

3.3.1 GAPS IN COVERAGE OF TARGET GROUPS ARE PROPOSED TO BE MEASURED IN TERMS OF:

- Percentage of eligible members (to be computed on the basis of Census data) of the target groups identified in Survey Register at AWC
- Percentage of eligible members of each sub-group registered
- Percentage of those registered being actually served (Delivery Register of AWC)
- Percentage deviation from population norms (for assessing gaps in projects & AWC) at state & sample district level.

3.3.2 GAPS IN INFRASTRUCTURE AND INPUTS AT PROJECT & AWC LEVEL:

- Percentage of projects/AWC without specified norms for manpower/facilities/training/ equipments/kits/TLM
- Percentage of AWC without functional facilities.

3.3.3 QUALITY OF SERVICE DELIVERY/OUTPUT (SUPPLY SIDE) FOR EACH GROUP IS PROPOSED TO BE MEASURED BY THE FOLLOWING INDICATORS:

- Percentage of registered beneficiaries provided with each service as per norms
- Percentage of registered given some of the services
- Percentage of registered not provided with any service

3.3.4 GAPS IN CONVERGENCE OF SERVICES ARE PROPOSED TO BE MEASURED AS:

- Percentage of AWC unable to deliver (quality) services because of non-availability of complementary inputs/manpower/support from (or, inaction of) other linked agencies.
- An attempt will be made to identify the weak areas for each State.

3.3.5 QUALITY OF DELIVERY (DEMAND SIDE):

- Percentage of households not adequately aware of ICDS
- Percentage of eligible households not availing services because of supply side inadequacies.
- Percentage of beneficiaries facing constraints in availing service.
- Percentage of beneficiaries satisfied with delivery of services.

3.3.6 BEHAVIORAL CHANGES (HOUSEHOLD SURVEY) IN WOMEN & ADOLESCENT GIRLS:

- Percentage aware of good habits/methods related to health and nutrition and importance of education
- Percentage actually putting lessons learnt to use
- Percentage facing different constraints in using
- Percentage availing services;
- Percentage satisfied with delivery/usefulness of services.

3.3.7 THE FOLLOWING OUTCOME/IMPACT INDICATORS ARE PROPOSED TO MEASURE ENROLLMENT AND DROPOUT:

- Educational status of 7-11 yrs "with and without" AWC background
- Impact on nutritional status of children
- Data on age, weight and height of children "with and without" ICDS will be generated to compute the relevant statistics
- *IMR, CMR and MMR:* as per TOR the AWC level data (if available) will be collected and analysed to reflect on different death rates.

Both primary and secondary data were collected through structured instruments at different levels for measuring the identified indicators. The secondary data were to be obtained through the State, District, Block and Village level questionnaires besides the documents published by Ministry of Women and Child Development, Government of India. The primary data base would be generated through a sample survey of about 19,500 households of various categories spread across 1,500 ***Anganwadis***, 300 projects and 100 districts in 35 states/UTs of the country. The details of the sample design are presented in the following chapter of the report. The list of questionnaires and its contents canvassed to selected respondents for generation of the required data base is given in Appendix Text 3.1.

It may be mentioned that Schedules 1-5 were canvassed directly to the respondents by the field teams of NCAER, while Schedules 6-9 were to be filled in by officers at different nodes of the

implementation machinery. These questionnaires (Schedules 6-9) were designed to elicit the relevant information to track flow of funds and materials, inter-agency coordination processes, delays, role of different functionaries etc. in the implementation process.

The Study Team ensured delivery of blank "Process-related" questionnaires to the concerned officers for making the required data set available to the Council at the earliest. Periodic reminders were also sent to the officers responsible and the importance of "process- related" data for the evaluation study was reiterated. However, with our best efforts, we could get very few responses from states (see Appendix Table 3.1). From data sets received till May 15, 2010 there were information gaps for each state at each level. The study team had to depend primarily on the process data posted in the website of the MWCD and those of states. The study team could, however, generate the necessary primary data base to reflect on the functioning of the grassroots level institutions, officials, household response with regard to implementation of ICDS.

Chapter 4

Survey Methodology, Data Collection Strategy and Reliability of Estimates

4.1. MAIN FEATURES OF SAMPLE DESIGN

Children are the future human resources of the country and it is now globally acknowledged that investment in human resources development is a prerequisite for economic development of any nation. Child survival, growth and development have to be looked at holistically. There should be balanced linkages between education, health and nutrition for proper development of a child and for this reason the Ministry of Women and Child Development implemented various schemes for the welfare, development and protection of children. ICDS was one of them. It is the world's most unique and certainly the largest programme of health and nutrition services for early childhood development, which is being operated since three decades.

The ICDS programme provides an integrated package of health, nutrition and education services targeted to children aged below six years; pregnant and nursing mothers; and in some blocks, adolescent girls. It is being implemented by Government of India through the network of "Anganwadis". The programme especially aims to cover poor and low-caste women and children as primary beneficiaries.

4.2. THE SCHEME COVERS RURAL AREAS, TRIBAL AREAS AND SLUMS IN URBAN AREAS

The main objective of this evaluation study is to undertake a detailed national survey in 100 districts, to assess the quality, outreach and the range of services being offered by ICDS. The study attempts to find out how far ICDS has been successful in improving the overall status of the target group and also in converging services of various departments involved in effective implementation of this programme.

The target population of the study comprises all types of beneficiaries[7] of ICDS, with AWC, states and rural/tribal/urban (slum) categories as sub-populations, for whom representative estimates have been sought. Information related to non-beneficiaries[8] is also collected for determining the causes responsible for improper implementation of ICDS. The geographical coverage of the survey includes the entire country comprising all states and UTs.

The survey methodology and sampling design adopted was drawn after reviewing various evaluation studies covering all major aspects of survey approach and methodology such as sample design, calculation of sample size and allocation, selection of sample, content of questionnaire and other practical issues. Though this was a household survey, the ultimate unit of

[7] Beneficiary includes: children in the age group of 0-6 years, pregnant & lactating women and adolescent girls. Those children are considered as beneficiary who either receive only food or both food and immunization under the scheme.

[8] Non-beneficiary includes only children in the age-group of 0-6 years who are either not enrolled at the AWC or receive only immunization from the AWC.

selection and collection of primary information was the beneficiary and non-beneficiary (respondent) of the scheme, as the aim of the survey is to evaluate the overall success of this programme.

A list of beneficiaries and non-beneficiaries (sampling frame) was a prerequisite before selecting the representative sample from which to collect the desired information. The sampling frame had to be up-to-date and free from errors of omission and duplication (which is particularly problematic). The survey design adopted a four-stage stratification in which a ready-made frame could be used at least for the first three stages, and a sampling frame was developed in the last stage.

A notable feature of the survey design is that before the selection of final respondents, a sample of AWC has been selected by arranging all the AWC of a sample project in descending order according to their respective distance from the CDPO office. Then, dividing all AWC into five equal parts and randomly selecting one AWC from each bracket resulted in a total of 5 AWC from each sample project. In total the study covered 300 ICDS projects including rural/tribal/urban projects from the entire country keeping in view the importance of geographical spread with regard to the statistical efficiency of estimates.

While the first two stages of stratification in the survey used pre-existing sampling frames from Census 2001 and list of projects supplied by respective state department of women and child development, the survey collected a list of AWC in the selected projects from the respective district offices at the third stage and developed a sampling frame of beneficiary and non-beneficiary at the fourth and last stage. This was done by undertaking a listing of all types of beneficiaries and non-beneficiaries in the selected sampling area from which the individual respondents were randomly selected. Developing the sampling frame at the fourth – individual respondent selection stage did add some costs to the survey, but it was deemed highly desirable as no such frame was readily available.

4.3. COVERAGE AND REFERENCE PERIOD

It is a nation-wide survey covering all states and UTs. The information for most of the questions was collected primarily for the past 12 months from the date of interview. For some specific questions the reference period was mentioned as “last three months” which is defined as 90 days preceding the date of enquiry/interview.

4.4. SAMPLE DESIGN

A four-stage stratified sample design has been adopted for the survey to generate representative samples. Sample districts, projects, AWC and beneficiary/non-beneficiary (respondent) formed the first, second, third and fourth stage sample units respectively for selection of the rural/tribal/urban sample. Sampling was done independently within each state/UT and estimates were generated at the state/UT level. All-India estimates were arrived at through an aggregation of estimates for all states/UTs. The sample sizes at first, second, third and fourth stages were determined on the basis of available resources and the derived level of precision for key estimates from the survey, taking into account the experience of NCAER in conducting the various primary surveys.

4.4.1 SAMPLE DESIGN FOR RURAL/TRIBAL/URBAN AREAS

The list of 100 sample districts (first stage units) was already provided by the sponsor of the study, the Programme Evaluation Organisation (PEO), Planning Commission, Government of India. Districts in each state have been selected by using the random sampling technique with minimum one district in smaller states as the first stage units (FSUs). District-wise list of projects by rural/urban/tribal type was provided by the respective state department of women and child development of each sample district. From each of the sample district, allocated number of sample projects set up before March 2005 were randomly selected as the second stage units (SSUs). The study covered 300 (about 5 per cent) of all the operational ICDS projects for the purpose of impact evaluation.

AWC formed the third stage of selection for the sample. The project-wise list of AWC in each sample district was collected from the respective district offices in a prescribed *Pro forma* and 5 AWC were randomly selected from each project. Thus a total of 1,500 AWCs, all set up before 2004-05, formed the third stage units (TSUs) for the study.

In each sample AWC, 10 beneficiary households and 3 non-beneficiary households had to be interviewed. Among the 10 beneficiary households, 5 were child beneficiary households (having minimum one child aged between 6 months and 6 years), three were those households from which at least one pregnant woman (PW)/lactating mother (LM) is beneficiary and two were adolescent girl (AG) beneficiary households. For this, all three types of register (survey[9] register, child[10] register and delivery[11] register) available in each AWC were consulted to fill the specially designed listing proforma. The listing proforma sought list of children aged between 7 months and 6 years from the delivery register, collecting information about age of child, father/mother's name, caste, occupation of father and type[12] of beneficiary. The list of all PM/LM and AGs from the AWC register, along with the other information (caste, husband's name, occupation etc.), was also collected in the same *pro forma*. Besides, the list of eligible children (from the child register) not covered in the delivery register was also listed in the same *pro forma*. These eligible children were considered as a type of non-beneficiaries for the current study. Besides them, those children who get only immunisation under the scheme were also considered as 'non-beneficiary'.

For the selection of beneficiary children, the list of children who received either 'only food' or 'both food and immunisation' under the scheme was considered. From each sample AWC, five children beneficiary households have been randomly selected with an equal probability for collecting primary information. Likewise, the list of those children who received either 'only immunisation' or belong to 'pure non-beneficiary' category were considered for random selection of the three non- beneficiary children households. In addition, care was taken to avoid the representation of more than one respondent from a household. Three PW/LM beneficiary households and two AG beneficiary households were also randomly selected with an equal probability for collecting primary information.

[9] Survey register contains all households covered by the AWC.

[10] Child register contains all eligible children "0-6" years.

[11] Delivery register contains all the lists of beneficiary children.

[12] Type of beneficiary has been categorised as 'only food beneficiary', 'only immunization beneficiary', 'both food and immunization beneficiary' and 'non-beneficiary'.

A total of 19,500 respondents (beneficiaries & non-beneficiaries) were randomly selected as the total sample for collection of the primary information. Detailed distribution of the sample is given in **Appendix Table 4.1**.

4.5. DATA COLLECTION PROCEDURES

In this study, two listing *pro forma* and nine detailed questionnaires were used to collect primary information. The questionnaires were pretested with a small number of respondents and accordingly desired changes were made in the content, question wording and ordering of questions. Locally recruited graduate interviewers were engaged for the collection of primary data by conducting face-to-face interviews of respondents.

Rigorous training of the field investigators who would canvass the survey schedules was accorded one of the highest priorities in the survey. The main objective of the training was to ensure that not only were the investigators thoroughly comfortable with the schedules and the underlying concepts but, perhaps more importantly, they could convey the same to respondents who even if cooperative might be uninformed and in most cases illiterate. The training consisted of two parts, namely, training of the supervisors, and another round of "on-site" training in different parts of the country, of the actual investigators who would canvass the survey schedules under supervision. Interviews were conducted during the period July 15, 2009 through December 15, 2009.

4.5.1 WEIGHTING AND ANALYSIS

The interviewed sample information collected through individual questionnaire was weighted to match some parameters obtained from secondary sources (such as number of AWC's, children beneficiaries, PW/LM beneficiaries etc.). These parameters came from data available on the site of the Ministry of Women and Child Development. Weights were trimmed to prevent individual interviews from having too much influence on the final results. The use of these weights in statistical analysis ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the national population. Estimation procedure in details is given in Appendix Text – 4.1.

4.5.2 RELIABILITY OF ESTIMATES

Sample surveys often tend to bring to fore certain stark trends and statistics. And invariably, doubts are raised over the reliability of such data. While there is no foolproof method by which one can establish the reliability of all survey results, there are procedures which when adopted raise the degree of confidence one could place in the findings of a survey. The most common among them is the evaluation of sampling and non-sampling errors. Sampling errors are measurable within the framework of the sampling design and are also controllable by varying the size of the sample. **Table 4.1** gives estimates of per cent standard errors for some of the selected variables.

It may be observed that the estimates of beneficiaries across different characteristics have been obtained quite precisely with standard errors mostly around 2-3 per cent or less, but in any case less than 5 per cent. For instance, the average number of days the children received food in a month at the national level has been estimated at 16 days with a coefficient of variation (CV) of 1.7 per cent. Similarly, standard errors in other cases involving the estimation of percentage of children or women with respect to different characteristics are also within permissible limits. It is

estimated that 49 per cent of children at national level are able to write alphabets/words with a CV of 4.8 per cent. It is also observed that the estimates at the state level are quite precise as the sampling errors are broadly around 2-5 per cent for most of the characteristics. These results are on expected lines and are satisfactory showing further that the sample size was adequate and the sampling design was efficient enough to yield precise estimates.

Table 4.1: Estimates of standard errors

Characteristics	Sample size	Estimated totals	CV (%)
Average number of days received food	7,416	16	1.70
Percentage of children (12-23 months) fully immunised	707	51	3.71
Percentage of children able to write alphabets/words	2,289	49	4.86
Percentage of women reporting attended NHE meetings	1,956	24	1.15
Percentage of mother reporting received de-worming tablets from AWC	1,139	56	4.08
Average attendance (number of children aged 3-6 years) based on 3 sudden visits by the study team	1,490	14	1.62
Percentage of children attending PSE	3,891	90	1.15
Average number of days AWC open	7,445	23	0.56
Percentage of AWC housed in Owned buildings	1,490	42	4.09
Percentage of AWC with Adequate Space-Storage	1,490	58	2.89
Percentage of AWC with Adequate Space-Cooking	1,490	56	3.44
Percentage of AWC having toilet with Flush System	1,490	12	7.24
Percentage of AWC where drinking water available- within premise	1,490	65	2.99
Mean Area of Room in AWC(Sq Ft)	1,469	315	2.30

Another important source of error which could vitiate the estimates is the non-response rate. In the case of this survey, it was about 3 per cent, and largely due to unanticipated reasons such as the psychology of the respondent. Non-sampling errors arise mainly from three sources. One, respondents refuse to cooperate and deny information; they supply partial information that may not be usable; or they deliberately provide false information. Two, the interviewers are also prone to have some preconceived notions whereby some biases creep into the schedules. Three, respondents may not remember all the relevant numbers sought by the interviewers. And this tends to considerably increase the margin of error in the data collected. There is no satisfactory procedure for a precise measurement of non-sampling errors. A team of trained interviewers and supervisors (225), state/zone coordinators (15) and NCAER professionals (6) from different language groups were engaged for about six months to undertake the task of primary data collection. The field team was thoroughly trained through all the phases of the surveys. Every care was taken to implement maximum possible quality control in recording the answers of the respondents.

Chapter 5

Coverage of Target Groups – An Analysis of Secondary Data and Evidence from Survey

INTRODUCTION

An attempt is made in this chapter to assess the extent of effective coverage of ICDS which is being universalised by the Government of India. Whereas according to programme design the AWC are required to deliver the following six services as a package, emphasis is particularly placed on delivery of supplementary nutrition to the target groups.

- Supplementary nutrition,
- Immunisation ,
- Health check-up,
- Referral services,
- Pre-school non-formal education and
- Nutrition & health education.

The supplementary nutrition component also assumes importance in the ICDS programme both in terms of financial allocation and policy makers' concerns. Out of the total expenditure on ICDS, about 37 per cent have been spent on supplementary nutrition programmes in 2008-09. Expenditure on general administration and all other schemes included in the programme consumes the rest. As per data available on the website of the Ministry, more than Rs 4,928 crore has been spent on the Supplementary nutrition programme during 2008-09 by both Central and State Governments. As one includes the expenses incurred by the states in providing supplementary nutrition, it is found that about 57 per cent of the total expenditure on ICDS was spent alone on providing nutritional supplement to children, pregnant and lactating mothers and the adolescent girls.

The reiterated demand for universalisation of ICDS also has the issue of malnutrition at the centre of attention. The Supreme Court judgment dated April 22, 2009 (in respect of WRIT PETITION (C) NO. 196 OF 2001) directing immediate implementation of revision of norms for extension of coverage of ICDS and upward revision of nutritional and feeding norms as well as the financial norms of supplementary nutrition under the ICDS Scheme as proposed by the Union Government finds its origin to this fundamental concern [available at http://judis.nic.in/supremecourt/helddis.aspx as on May 4, 2010] The sub-group report prepared on ICDS and Nutrition in the Eleventh Five Year Plan simultaneously notes with concern that reduction in malnutrition in India has failed to keep pace with the rapid growth in GDP experienced during the last decade [available at http://wcd.nic.in/wgicds.pdf as on May 4, 2010] Even though we shall consider all the services covered under ICDS as we look into the pattern of coverage of ICDS in this section, a disproportionately higher emphasis would be accorded to identify the extent of coverage under efforts at providing supplementary nutrition with special attention to that aimed at children falling in the age group of 6 months-6 years.

5.1 GAPS IN COVERAGE OF ICDS - TYPES AND CONCEPTS

Coverage of a scheme or a project may be understood from two perspectives – quantitative and qualitative. The former approach gives an idea about the extent of the outreach of the scheme or project in reality compared to some specific quantitative targets or norms on the assumption that the qualitative norms are automatically taken care of once the quantitative norms are reached. The latter tries to delve a little deeper and tests if such achievements of quantitative targets automatically implies the achievements of the other. The present chapter takes up both these perspectives in understanding the coverage of ICDS.

5.1.1 GAP IN COVERAGE OF CHILD BENEFICIARIES - A QUANTITATIVE ANALYSIS

In the context of ICDS, estimate of quantitative gap, against the backdrop of the demand for its universalisation, gives an idea about the extent to which the states have fallen short in making available its services to all the eligible beneficiaries – children, pregnant and lactating mothers and adolescent girls. Such estimates are based on the assumption that all the beneficiaries are receiving the services as per the design of the programme, i.e., the stipulated type of services for the stipulated numbers of days in a year. For example, it is assumed that a child aged between 6 and 72 months would receive supplementary nutrition benefits that provide an extra 500 calories containing 12-15 grams of protein each day for 300 days in a year, as per the revised norms. The nutrition norm increases to 800 Kilo-calories for a child severely undernourished. Thus, the quantitative gap in coverage captures the difference between the number of beneficiaries who should have been brought under the coverage of the programme and the number of beneficiaries who actually received the stipulated services. The gaps may arise in **four different** ways. As per the procedure followed, each AWC is expected to carry out a survey of the population lying within its jurisdiction and make an exhaustive list of eligible beneficiaries and note their names and other relevant details in the survey register. The first possible gap may arise between the number of eligible beneficiaries[13] and that captured in the survey register by AWW. We call this a **"survey gap"**. AWC also maintain two other registers. The first of them includes the names of beneficiaries who registered themselves in confirmation of their willingness to receive the benefits – a register of registered beneficiaries. It is possible that not all those who exist on the survey register is registered to receive the stipulated benefits due to causes that may range from denial of access in the one extreme to lack of interest to claim the benefits provided under ICDS. This gap may be called a **"registration gap"**. In view of the non-availability of data we could not estimate the registration gap. The final register maintained by the AWC – named the delivery register -- records the beneficiaries to whom ultimately the benefits are recorded to have been delivered. The gap between those registered and those actually delivering the services may be named the **"service gap"**. Finally, the fourth gap occurs when those beneficiary recorded in the delivery register do not receive the food services to be provided under ICDS. This may be called **"delivery gap"**.

[13] To estimate the number of child population (7 months to 6 years) by States, the study team took the total population for the year 2008-09 from 'Projection of population up to 2026' by GOI. Again, the single age-wise data of each States were estimated from NSSO 2004-05 survey data and verified from other two large surveys namely; NFHS and NCAER IHDP conducted in 2004-05. It is estimated that these age groups constitute about 15% of the total population at the national level. In Census 2001, the child population was 15.9% of the total population.

Thus the actual coverage may be defined as follows:

- as % of children in the survey register
- as % of children in the delivery register
- as % of estimated eligible children in the country (we called it as *effective coverage*)

In view of the non-availability of data we could not estimate the registration gap. Table 5.1 provides the estimates of other three gaps across the states as well as the actual coverage in terms of survey number, delivery number and estimated total eligible children.

Table: 5.1 Estimated effective coverage in supplementary nutrition programme for children under ICDS

State/UT	Survey Gap: Proportion of children not registered as % to total eligible children as per census	Service Gap: Proportion of children not in the delivery register as % to total number in survey register	Delivery Gap: Proportion of children not receiving SNP as % to total number in delivery register	Actual coverage (Proportion of children receiving food from AWC)		
				as % to children in survey register	as % to children in delivery register	as % to eligible children estimated (Census)
Andhra Pradesh	41.4	14.4	26.3	63.1	73.7	37.0
Assam	17.9	15.4	26.5	62.2	73.5	51.0
Bihar	52.5	30.3	47.4	36.6	52.6	17.4
Chhattisgarh	41.0	8.1	14.4	78.7	85.6	46.5
Gujarat	58.7	11.1	13.5	76.8	86.5	31.7
Haryana	47.3	32.2	48.1	35.2	51.9	18.6
Himachal Pradesh	15.8	35.4	22.9	49.9	77.1	42.0
Jammu & Kashmir	54.5	20.5	8.5	72.8	91.5	33.1
Jharkhand	14.9	48.8	11.7	45.2	88.3	38.5
Karnataka	8.4	32.3	19.6	54.4	80.4	49.9
Kerala	26.8	60.2	24.2	30.2	75.8	22.1
Madhya Pradesh	36.8	14.8	31.8	58.1	68.2	36.7
Maharashtra	41.8	7.1	30.4	64.7	69.6	37.6
Orissa	26.3	1.4	30.1	69.0	69.9	50.9
Punjab	53.9	29.7	40.9	41.6	59.1	19.2
Rajasthan	36.9	47.5	44.4	29.2	55.6	18.4
Tamil Nadu	43.4	35.9	24.2	48.6	75.8	27.5
Uttar Pradesh	39.8	7.8	59.4	37.4	40.6	22.5
Uttarakhand	46.1	29.5	18.1	57.7	81.9	31.1
West Bengal	18.2	23.3	21.7	60.0	78.3	49.1
All India	**37.9**	**21.6**	**36.0**	**50.1**	**64.0**	**31.1**

- About 38 per cent of them do not figure in the survey register – **survey gap.**
- A little more than one fifth (21.6%) of the eligible children of the country, in spite of being recorded in the survey register by AWW, are left out of the delivery register – **service gap**.
- About 36 per cent of the eligible children are not covered by SNP, even though their names figure in the delivery register – **delivery gap.**

Huge variations are observed at state-level disaggregations in all types of gap. Survey gap ranges from a high of 58.7 per cent in Gujarat to a low of 8.4 per cent in Karnataka followed by Jharkhand (14.9%), Himachal Pradesh (15.8%) and West Bengal (18.2%). High gaps (>50%) are also observed in Jammu & Kashmir, Punjab and Bihar. Service gap ranges from a high of little over 60 per cent in Kerala to a low of 1.4 per cent in Orissa, among the major states. Delivery gap is estimated to be the highest in Uttar Pradesh (59.4%) among the major states, the lowest being measured in Jammu & Kashmir (8.5%). Among the smaller states and the UTs, the gap is the highest in Manipur. There is no gap in Andaman & Nicobar Islands, implying all children recorded in the delivery register have been receiving food under SNP.

5.1.2 Actual Coverage

- About two-third (64%) of the children received SNP out of total children recorded in the delivery register by AWW.
- About half (50.1%) the children received SNP from AWC as per cent to children recorded in the **survey register by AWW.**
- Only 31.1 per cent of the intended children beneficiaries received SNP out of total eligible children in the country.

Large variation is found among the states in effective coverage. It is about one-fifth in Bihar, Haryana, Punjab, Rajasthan, Uttar Pradesh and Kerala among the major states; and in Puducherry, Delhi, Chandigarh, Daman & Diu and Goa among the smaller states and UTs. It is rather high (little more or less than half) in Assam, Orissa, Karnataka and West Bengal among the major states and in Mizoram, Nagaland and Andaman & Nicobar Islands among the smaller states and UTs.

In this context, it is pertinent to compare the findings of this study to other studies. The IHDS study done by NCAER in 2004-05 asked each household with at least one child born since January 2000, whether she or her children had received any ICDS service. It shows a disappointing coverage for a 30-year-old programme. The IHDS study found that overall about 35 per cent of households with a child born since 2000 had received some ICDS service, 22 per cent had received maternity-related services, 35 per cent have received services related to children. Rural areas have more than twice the coverage of urban areas. About 26 per cent of rural mothers and 41 per cent of rural children have received the ICDS services, compared with 11 per cent of urban mothers and 18 per cent of urban children. State differences reveal great gaps among the state government in how they have been able to mobilise resources to provide ICDS services. In Tamil Nadu, 75 per cent of the households participate in the ICDS whereas only 7 per cent do so in Bihar. Only Tamil Nadu has made a significant impact in towns and cities with 58 per cent of households receiving the services. In no other state does urban ICDS

coverage reach even 30 per cent. Some wealthy states cover majority of the households (for example, Haryana at 68%) but so do some poor states (for example, Chhattisgarh at 62 per cent and Orissa at 67 per cent). Poor states like Bihar have weak ICDS coverage (7%), but so does rich Punjab (8%).

Overall, these estimates of gaps provide some idea about the extent of efforts that are needed to make ICDS a universal programme. Considerable level of efforts would be necessary to ensure that the survey that is taken up to enlist all eligible beneficiaries into the survey register is carried out in a proper manner and at regular intervals. Such an exercise would provide a clear idea about the required resources – financial, human and institutional – to make this programme effective and successful. Secondly, the positive service gap perhaps indicates the extent of voluntary withdrawal from the services or withdrawal at least partially, if not totally. Further investigation, however, is necessary to disaggregate the service gap into voluntary and involuntary withdrawals. A significant extent of voluntary withdrawal may perhaps call for a relook into the demand for universalisation of ICDS. To top it all, the extent of delivery gap is also an uncomfortable irritant vis-à-vis the effectiveness of ICDS .The intricacies involved will reveal themselves in a much clear detail as we shall look into the issue in the next section where we look into the coverage gap from a qualitative perspective.

5.1.3 GAP IN COVERAGE OF CHILD BENEFICIARIES- QUALITATIVE ASPECTS

Having thrown some light on the nature and extent of quantitative coverage gaps across the states and that at the national level and looking into the possible role of inadequacies in the physical coverage of ICDS as per the norms set by the Supreme Court, it will be interesting to assess the extent of effective coverage as we factor in the quality perspectives. Since quality can be ascertained with respect to only those beneficiaries who figure in the delivery registers, the domain of analysis is confined to only those who have been recorded as effective recipients of services under ICDS. Thus, unlike the previous section we do not consider those who already figured within the survey, service and delivery gaps. This section takes care of only those beneficiaries who find their existence recorded on the delivery register. As noted earlier, the quality of services can be ascertained from the deviation of services from the stipulated norms. Such norms are defined in terms of the frequency of service as well as the quantity of services to be provided. In case of supplementary nutrition the calorific values of the food supplements and the number of days such supply is to be provided have been designed into the scheme. It is possible that there may be deviations from each of these norms while food supplements are given to the eligible beneficiaries. The beneficiary level survey carried out for this study collected information about the number of days the services are made available to the beneficiaries. We factor in the deviations in the frequency of service from the stipulated norm to estimate the effective coverage. Thus

Effective Coverage = [(Percentage of beneficiary recorded in the delivery register actually receiving food) × (Proportion of number of days food received in a month)]

The estimate thus captures the extent of coverage of **supplementary nutrition scheme** with a beneficiary receiving food supply for 25 days a month being taken as a unit of analysis. Tables 5.2-5.4 reveal the extent of effective coverage across the states in respect of the Supplementary nutrition component of ICDS for children, pregnant and lactating mothers and adolescent girls. A methodological note at this point is relevant. The estimates of effective coverage for children are based on a population recorded in the delivery register that received food under SNP at least

for one day during the previous 12 months. While surveyed they were asked if they received food during the last three months or not. Thus the estimates in columns related to those not receiving or taking food refer to those who received food at least for a day during the past 12 months but did not do so in the past three months. The estimates for pregnant women, lactating mothers and adolescent girls are based on samples picked up from a population that consisted of all beneficiaries recorded in the delivery register. Table constructed for the children reveals:

- At the national level, about 64 per cent of the children recorded in the delivery register received supplementary nutrition support at least for a day during the survey period of three months.
- Against the norm of 25 days a month, on an average, they received food for 16 days in a month.
- Factoring in the deviation in frequency of delivery from the norm of 25 days, the effective coverage works out to be around 41 per cent for the country as a whole.
- About 29.5 per cent of the children on delivery register who did not get food cited supply side constraints like food was not distributed, food was not available for most of the days & AWC often remained closed
- A little over 6.5 per cent of the children did not avail themselves of the benefits of supplementary nutrition services, in spite of showing initial interest in getting them registered on the delivery register. The constraints mentioned are: **AWC far away, food quality is not good, family does not allow, loss of work/ no time & not aware of services**.
- While being asked if they were aware of the food entitlement under ICDS, mothers of only 33.89 per cent of the children featuring on the delivery register replied in the affirmative, implying that about two-third of them are not aware of their entitlements. This general lack of awareness may result in the beneficiaries not receiving the stipulated amount of food, thereby reducing the effective coverage rate further.
- However, the inter-state variations across these indicators are worth noting.
- While more than 80 per cent of children recorded in the delivery register received food in states of Arunachal Pradesh, Sikkim, Mizoram, Jammu & Kashmir, Jharkhand, Gujarat, Chhattisgarh, Uttarakhand and Karnataka, the corresponding figures are less than 60 per cent for Uttar Pradesh, Haryana, Bihar, Rajasthan, Delhi, Punjab, Dadra & Nagar Haveli, Daman & Diu and Puducherry. The rest of the states and UTs more or less maintained the national average.
- To take up the average number of days the children received food in a month, the best performances have been recorded by the UTs like Andaman & Nicobar Islands, Dadra and Nagar Haveli, Daman and Diu, Chandigarh, Delhi being the sole exception to have figured in this list in spite of technically being among the states. Among the larger states, Haryana, Tamil Nadu, Karnataka, Maharashtra, Orissa, West Bengal and Kerala fared better than others.
- On the other hand, Assam, Nagaland, Arunachal Pradesh and Uttarakhand failed miserably to stick to the norm of 25 days.
- As we factor in the impacts of both coverage and the frequency of supply, the effective coverage rate appears to be the highest in Mizoram (69.76%), followed by Karnataka

(67.53%), Jammu & Kashmir (65.90%), West Bengal (65.76%), Gujarat (65.70%), Chhattisgarh (65.06%), Tamil Nadu (63.66%), Jharkhand (63.56%) and Kerala (60.67%).

- Least effective coverage has been recorded in Assam (5.88%). The others to follow are: Nagaland (19.79%), Manipur (21.56%), Uttar Pradesh (22.71%), Uttarakhand (26.21%), Bihar (29.44%), Arunachal Pradesh (30.20%) and Rajasthan (33.35%).
- It is be of interest to identify the factors that influence the non-delivery of food supply to the intended child beneficiaries. Supply side constraints are prominent in Manipur, Bihar, Uttar Pradesh, Orissa, Rajasthan and Punjab, whereas demand side constraints dominate in Haryana and Delhi.
- Finally, to consider the awareness about food entitlement, we observe that it is the highest among mothers in Goa and Puducherry (100%). More than 90 per cent of the mothers in Kerala, Nagaland and Dadra & Nagar Haveli are well aware of the entitlements. Karnataka, Mizoram, Tamil Nadu and Andhra Pradesh also fare well on this account.
- Awareness level is found to be the least in Arunachal Pradesh. Mothers from Andaman and Nicobar Islands, Sikkim, Jammu & Kashmir, Uttar Pradesh, Manipur, West Bengal and Madhya Pradesh also appear to be alarmingly unaware of the entitlements.

Table 5.2: Status of effective coverage of supplementary nutrition programme for children

State	Receiving Food		Effective Coverage as % of children recorded in delivery register	Not Receiving Food due to Constraints on		Awareness of Food entitlement (%)
	As % of children recorded in delivery register	Average number of days per month		supply side	demand side	
				as % of children recorded in delivery register	as % of children recorded in delivery register	
Andhra Pradesh	73.7	16	47.2	26.3	0.00	86.39
Assam	73.6	2	5.9	24.3	2.12	40.11
Bihar	52.6	14	29.4	43.9	3.58	16.44
Chhattisgarh	85.6	19	65.1	13.1	1.33	17.97
Gujarat	86.5	19	65.7	11.9	1.64	66.48
Haryana	51.9	21	43.6	0.0	48.07	14.56
Himachal Pradesh	77.1	17	52.4	11.7	11.20	31.93
Jammu and Kashmir	91.5	18	65.9	7.0	1.44	10.91
Jharkhand	88.3	18	63.6	9.7	1.99	20.07
Karnataka	80.4	21	67.5	15.7	3.88	89.97
Kerala	75.8	20	60.7	14.0	10.46	95.89
Madhya Pradesh	68.2	14	38.2	27.3	4.45	14.51
Maharashtra	69.6	21	58.4	19.0	11.44	67.68
Orissa	69.9	21	58.8	30.1	0.00	17.46
Punjab	59.1	17	40.2	26.8	14.01	18.27
Rajasthan	55.6	15	33.4	29.6	14.84	25.92
Tamil Nadu	76.0	21	63.7	15.0	9.25	87.67
Uttar Pradesh	40.6	14	22.7	40.6	18.80	11.58
Uttarakhand	81.9	8	26.2	12.9	5.25	19.35
West Bengal	78.3	21	65.8	18.1	3.65	14.48
All India	**64.0**	**16**	**41.0**	**29.4**	**6.7**	**33.8**

Note: *Demand Side factors include:* AWC far away, Food quality is not good, Family does not allow, Loss of work/ no time & Not aware of services. *Supply side factors include:* Not distributed, most of the days the food is not available & AWC often remain closed.

5.2 COVERAGE GAPS - PREGNANT WOMEN AND LACTATING MOTHERS

Table 5.3 has been similarly constructed for analysing the coverage of supplementary nutrition programme vis-à-vis **pregnant women and lactating mothers**. The salient features arising out at the national level are:

- 78.26 per cent of the beneficiaries recorded in the delivery register received food support during the year under review.
- On an average, they received such support for 12 days a month against the stipulated norm of 25 days.
- The effective coverage rate thus works out to be 37.56 per cent
- 18.4 per cent cited supply side constraints in availing themselves of the service while 3.3 per cent did not access the service.
- Only 26.83 per cent of the beneficiaries were aware of their entitlements under supplementary nutrition programme.
- State-level variations across all the indicators are quite significant.

Table 5.3: Status of effective coverage of supplementary nutrition programme for pregnant women & lactating mothers

State	Receiving Food		Effective Coverage as % of those recorded in delivery register	Not Receiving Food due to Constraints on		Awareness of Food entitlement (%)
	As % of those recorded in delivery register	Average number of days per month		supply side as % of those recorded in delivery register	demand side as % of those recorded in delivery register	
Andhra Pradesh	87.8	10	35.1	5.9	6.2	70.4
Assam	7.7	0	0.0	87.6	4.7	6.8
Bihar	68.0	10	27.2	29.2	2.8	14.3
Chhattisgarh	76.8	16	49.2	23.2	0.0	17.0
Gujarat	76.5	14	42.8	11.3	12.2	42.1
Haryana	93.1	18	67.0	2.7	4.3	0.7
Himachal Pradesh	75.3	16	48.2	22.4	2.3	23.1
Jammu and Kashmir	90.4	16	57.9	7.8	1.8	21.6
Jharkhand	91.4	20	73.1	6.5	2.2	14.2
Karnataka	90.7	11	39.9	6.8	2.5	74.8
Kerala	93.8	19	71.3	1.8	4.4	87.7
Madhya Pradesh	78.4	8	25.1	16.6	5.0	8.1
Maharashtra	93.3	20	74.7	4.0	2.7	57.3
Orissa	90.1	20	72.0	8.8	1.1	15.1
Punjab	87.8	16	56.2	4.1	8.1	27.4
Rajasthan	83.8	4	13.4	10.2	6.1	24.0
Tamil Nadu	89.5	13	46.5	7.9	2.6	71.9
Uttar Pradesh	69.5	9	25.0	29.1	1.4	10.0
Uttarakhand	92.3	10	36.9	5.6	2.2	13.7
West Bengal	96.9	20	77.5	2.1	1.0	12.4
All India	**78.3**	**12**	**37.6**	**18.4**	**3.3**	**26.8**

Note: *Demand Side factors include:* AWC far away, Food quality is not good, Family does not allow, Loss of work/ no time & Not aware of services. *Supply side factors include*: Not distributed, most of the days the food is not available & AWC often remain closed.

5.3 COVERAGE GAPS- ADOLESCENT GIRLS

Table 5.4 captures the extent of effective coverage for adolescent girls. It is found that

- Only 41.7 per cent of the adolescent girls recorded in the delivery registers receive nutrition support in the country
- On an average, they receive such support for only 6 days in a month, against a stipulated norm of 25 days
- Effective coverage at the national level is only 10 per cent

- 54.9 per cent of those recorded in the delivery register did not receive the support due to supply constraints
- Only 3.5 per cent did not receive the support due to demand related reasons
- Only 26.8 per cent of them are aware of their quantitative entitlement of food support.
- State level variations across all the indicators are quite significant.

Table 5.4: Status of effective coverage of supplementary nutrition programme for adolescent girls

State	Receiving Food		Effective Coverage as % of those recorded in delivery register	Not Receiving Food due to Constraints on		Awareness of Food entitlement
	As % of those recorded in delivery register	Average number of days per month		supply side as % of those recorded in delivery register	demand side as % of those recorded in delivery register	
Andhra Pradesh	44.5	3	5.3	53.7	1.9	40.7
Assam	42.8	3	5.1	49.8	7.4	37.3
Bihar	67.6	9	24.3	31.6	0.8	20.9
Chhattisgarh	26.3	3	3.2	68.6	5.0	16.8
Gujarat	91.9	17	62.5	4.9	3.3	80.3
Haryana	17.0	3	2.0	83.0	0.0	0.0
Himachal Pradesh	87.2	17	59.3	12.8	0.0	17.5
Jammu and Kashmir	89.8	17	61.0	10.3	0.0	8.4
Jharkhand	86.7	18	62.5	13.3	0.0	0.0
Karnataka	81.2	10	32.5	14.5	4.3	66.8
Kerala	95.6	20	76.4	4.5	0.0	98.1
Madhya Pradesh	89.1	7	24.9	10.1	0.8	6.5
Maharashtra	70.9	13	36.9	25.8	3.3	57.6
Orissa	0.4	0	0.0	99.0	0.7	0.2
Punjab	91.9	15	55.1	4.3	3.8	43.3
Rajasthan	93.0	6	22.3	6.4	0.6	30.9
Tamil Nadu	0.8	0	0.0	91.3	7.9	1.4
Uttar Pradesh	82.6	15	49.5	17.3	0.1	14.7
Uttarakhand	79.0	9	28.4	21.0	0.0	23.5
West Bengal	46.4	7	13.0	53.6	0.0	11.2
All India	**41.7**	**6**	10.0	**54.9**	**3.5**	**26.8**

Note: *Demand Side factors include:* AWC far away, Food quality is not good, Family does not allow, Loss of work/ no time & Not aware of services. *Supply side factors include:* Not distributed, most of the days the food is not available & AWC often remain closed.

5.4 DO SUPPLY CONSTRAINT MATTER?

The existing gap from achievement of universalisation in the previous section has been estimated above with an assumption that there is no supply side constraint in terms of number of AWC that should have ideally been in place. We now drop the assumption and find out the extent of shortfall of excess prevailing in the states and the UTs vis-à-vis the number of AWC that should have been ideally existing. Once such gaps are in hand, it would be interesting to find out if any specific relationship exists between the gap in the number of child beneficiaries from the norm of universalisation and that in the number of AWC from the stipulated norms.

The ICDS project design stipulates a given norm fixing the number of AWC to be set up in a state. The norms suggest that for every 400-800 population in rural/urban areas there should be one AWC; for 800-1,600 population it is two and for 1,600-2,400 population it is three. For tribal/riverline/desert, hilly and other difficult areas the norm suggest that there should be one AWC for every 300-800 population.

We made an estimate of the requirement of AWC in each state as per norms specified above. The steps in estimating involved:

- State-wise data for projected population has been taken from Planning Commission
- Estimates of proportion of tribal, rural and urban population were derived from Census 2001 data and applied to the projected population data mentioned above to arrive at the estimates of tribal, rural and urban population in 2008.
- A weighted average of total population using the norms as respective weights have been constructed there of to arrive at an estimate of norm of average population per AWC.
- The norm values were used to estimate the required number of AWC per state.
- Data for existing and operational AWC were collected from the Ministry of Women and Child Development for 2008-09.

Table 5.5 provides state-level estimates of the shortfall. At a national level, the shortfall in the number of AWC has been recorded at 29.3 per cent. Smaller states and UTs are found to be lying on two extremes of the distribution – some recording high shortfalls (Chandigarh, Delhi) and some recording excesses (Arunachal Pradesh, Himachal Pradesh, Manipur). Incidentally the hilly and mountainous states characterised by low population density have generally recorded excess above the existing norms, perhaps suggesting a relook at the existing norm for such regions. Higher shortfalls among the major states have been recorded in Gujarat, Maharashtra, Rajasthan and Punjab. However, as we compare the results from Table 3.6 with those obtained from Table 3.1, no specific relationship emerges between coverage of children under SNP and shortfall/excess of the number of AWC across the states. There are states like Bihar where high coverage gap in SNP cohabits with a relatively low shortfall in number of AWC vis-à-vis the norms. On the other hand, excesses in number of AWC beyond the norm did not translate into relatively lowered coverage gap – Sikkim, Jammu & Kashmir, for example. Thus one may infer that increasing number of AWC does not necessarily bring an increase in the coverage of children under SNP.

Table 5.5: Projected shortfall/excess of AWC by states

States/UTs	Average population per AWC as per norm	Requirement of AWC as per norm (in '000)	Actual Operational AWC (in '000) as on 31.3.2009, MWCD	Shortfall/Excess of AWC (in '000)	Shortfall/Excess to requirement (%)
Andhra Pradesh	780	105.6	73.0	32.6	30.8
Assam	763	38.6	36.8	1.7	4.5
Bihar	797	117.4	80.2	37.2	31.7
Chhattisgarh	705	33.0	34.9	-1.9	-5.7
Gujarat	756	74.9	43.8	31.2	41.6
Haryana	800	30.2	17.4	12.8	42.3
Himachal Pradesh	788	8.4	18.2	-9.9	-118.0
Jammu & Kashmir	767	14.7	18.8	-4.1	-28.1
Jharkhand	721	41.9	32.1	9.7	23.2
Karnataka	780	73.8	54.7	19.1	25.9
Kerala	797	42.4	32.2	10.2	24.0
Madhya Pradesh	739	93.0	69.2	23.8	25.6
Maharashtra	773	139.6	82.6	57.0	40.8
Orissa	734	54.0	41.8	12.3	22.7
Punjab	800	33.4	20.2	13.2	39.6
Rajasthan	762	84.7	50.9	33.7	39.8
Tamil Nadu	797	82.9	50.4	32.5	39.2
Uttar Pradesh	800	237.9	150.9	87.0	36.6
Uttarakhand	791	12.0	9.2	2.9	23.9
West Bengal	784	111.0	89.0	22.0	19.8
All India	**775**	**1479**	**1044**	**435**	**29.4**

The entries in the last column of Table 5.5 are only indicative as these are derived on certain assumptions. More realistic estimates need to be derived by making use of micro-level data on population and its composition as well as the norms. However, what emerges from the Table is that for universalisation of ICDS a close look at improving the physical access to AWC is required. It is possible that a section of the target group is outside the purview of ICDS because of lack of physical access to AWC.

To conclude, it may be argued that ICDS requires considerable efforts to achieve its objectives of attacking malnutrition – especially among children. In spite of being committed to universalise the service, **a little more than 31 per cent of the children in the age group of 6-72 months have been actually covered by the supplementary nutrition programme**. On the other hand, of those registered in the delivery registers, about 41 per cent of the children, 38 per cent of pregnant women and lactating mothers and 10 per cent of the adolescent girls effectively receive support from ICDS nutrition programme if we factor in the actual number of days in a month they receive the food support.

Chapter 6

Delivery Mechanism of ICDS – Adequacy and Appropriateness of Infrastructure

INTRODUCTION

Anganwadi Centres (AWC) plays an important role in the delivery of services to the target population. Each AWC should have the minimum infrastructure and equipment required for effective delivery of ICDS services. The functional effectiveness of an AWC depends on a variety of factors: physical environment; inputs of ICDS and other functionaries involved in the programme; adequacy of supplies; participation of the community; and so on. The quality and the extent of the infrastructure facilities available at the AWC also have an important bearing on the effective implementation of the programme objectives.

The whole analysis of this chapter has been divided into six sections. The first section examines the overall performance of the states in terms of infrastructural at AWC followed by detailed state-wise discussion on each indicator. The status of different kind of services provided at AWC reported by AWWs has been explained in the third section. The fourth section deals with the profile of the functionaries. Observations of the investigator have been put in section five. The final section analysed the perception of the community leaders about the ICDS services.

6.1 STATUS OF INFRASTRUCTURE AT AWC

To see the status of infrastructural facility at AWC an attempt has been made in this section to compute Infrastructure/Facility Index (FI) for the major states of India and examine the variations in the rankings of the Indian states in terms of infrastructure facilities at AWC. The Infrastructure Index has been developed to assess the supply side performance of the ICDS programme. For successful implementation, it is necessary to know where different states stand in terms of infrastructure availability. It is equally important to know the extent and causes of relative performance so that suitable action could be taken to improve the infrastructure facility at AWC.

The overall assessment is based on the information collected from the AWC as well as observations of the Field Investigators. The following 12 indicators have been identified to get a composite FI. An analysis of these factors helps in understanding the constraints within which an AWW works and hence provides us with possible clues for efficient improvement of the infrastructure at AWC in each state.

1. Percentage of AWC housed in Owned Buildings
2. Percentage of AWC with Adequate Space- Cooking
3. Percentage of AWC with Adequate Space- Storage
4. Mean Area of Room in AWC (Sq Ft)
5. Percentage of AWC having Toilet with Flush System
6. Percentage of AWC where Drinking Water Available (Within Premises)

7. Percentage of AWWs Attended Training: Includes different types of training provided to AWWs like Job training (Pre Service training), Refresher course in growth monitoring, Refresher course in pre-school education, Joint training with health workers, Skill training/Special training.
8. Percentage of AWC with Functional Weighing Scale (Baby)
9. Percentage of AWC having Adequate Toys
10. Percentage of AWC having Adequate Posters
11. Percentage of AWC having Adequate PSE Kits
12. Percentage of AWWs whose Education Above Middle School

The mean, standard deviation and co-efficient of variation of the above indicators are given in Table 6.1.

Table 6.1: Mean, Standard Deviation and Co-efficient of Variation

Indicators	Mean[14]	SD	CV
Percentage of AWC housed in owned buildings	43.8	26.5	60.4
Percentage of AWC with adequate space for cooking	59.9	22.9	38.2
Percentage of AWC with adequate space for storage	59.8	21.9	36.6
Mean area of room in AWC (Sq Ft)	299.8	67.1	22.4
Percentage of AWC having toilet with flush system	15.6	16.5	106.0
Percentage of AWC having drinking water facility within premises	62.7	15.8	25.2
Percentage of AWWs attended training	82.8	21.1	25.5
Percentage of AWC with functional weighing scale (Baby)	73.7	23.7	32.1
Percentage of AWC having adequate toys	37.1	22.3	60.2
Percentage of AWC having adequate posters	57.0	23.2	40.6
Percentage of AWC having adequate PSE kits	47.1	22.4	47.7
Percentage of AWWs whose education above middle school	80.8	15.4	19.0

The idea implicit in construction of FI is as follows. The AWCs need to be equipped with certain basic facilities to deliver the six services and discharge other functions, such as, growth monitoring, record keeping etc. It must be appreciated that different AWCs are in a different position w.r. the identified basic facilities, while all the facilities are important for quality delivery by AWCs. The only way to arrive at an average quality of infrastructure (of AWC) in a state is to integrate the differential position of AWCs through an index. Before doing this the standard method of converting each into a factor that is free from unit of measurement[15]. A standard technique of index analysis used by UNDP in its first "Human Development Report,

[14] It should be clarified that the national average of these indicators mentioned in the previous section has been computed from data for 35 states and UTs while the mean values presented in this section are estimates for the major 20 states mentioned in the tables.

[15] When there are two many factors are impinging on a phenomenon, it is customary to construct an index to ensure that each has been given due condideration in the analysis where it is easy to understand whether the components considered are relevant to the purpose at hand and accordingly due attention needs to be paid to each area of concern by the implementing agencies and not the composite index value per se.

1990" has been applied to construct the composite indices (IF=1-[(Maximum-Actual)/Range]. It is the relative value of states that was measured with reference to the 'Actual' and 'Minimum' values of the concerned indicator. Division of the value of a state by the range makes it "scale free". The scale free values of the twelve indices were then combined, giving equal weight to each, to get the state specific Infrastructure Index (FI). The basic data (estimates from the survey data) of all the indicators used for indices are given in the Tables 6.3 – 6.9 & 6.32· The higher is the value of FI, higher is the availability of infrastructure and vice-versa.

All the identified facilities have been taken as stock of facilities at a point of time (i.e 2009) in a state affecting quality of delivery of services by AWCs. We have not looked at the facilities from the perspective of investment requirement of MWCD/states. Our limited concern is to examine how service delivery is affected by lack of facilities.

The major findings are:

- Large variation among the states is observed in case of AWC having toilet with flush system and AWC housed in owned buildings (Table – 6.1).
- Of the 20 major states in the country, Tamil Nadu, Kerala, Maharashtra, Andhra Pradesh and Gujarat were ranked as the top five states. However these states except Tamil Nadu show very poor performance in terms of the toilet facility (Table – 6.2).
- Rajasthan, Uttar Pradesh, Punjab, Jammu & Kashmir and Bihar are ranked as the bottom five states.

Table 6.2: State-wise Performance of ICDS Programme in Infrastructure Facility: Estimated Indices

State	Rank	Housed in Owned buildings	Adequate Space-Cooking	Adequate Space-Storage	Mean Area of Room in AWC(Sq Ft)	Toilet with Flush System	Drinking water available-within premise	AWWs attended Training	Functional Weighing Scale (Baby)	Adequate Toys	Adequate Posters	Adequate PSE Kits	AWWs whose Edun above middle school	Overall Infrastructure Index
Tamil Nadu	1	0.92	1.00	1.00	0.88	1.00	0.75	0.94	1.00	0.56	0.72	0.76	0.82	0.862
Kerala	2	0.70	0.88	0.69	0.77	0.26	0.87	0.87	0.75	0.73	0.84	0.69	0.93	0.749
Maharashtra	3	0.74	0.65	0.67	0.75	0.37	0.57	1.00	0.93	0.65	0.89	0.55	0.65	0.700
Andhra Pradesh	4	0.42	0.65	0.90	0.65	0.13	0.70	1.00	0.79	0.58	0.89	0.67	0.67	0.670
Gujarat	5	0.66	0.84	0.84	0.44	0.27	0.52	0.93	0.90	0.48	0.76	0.65	0.68	0.664
Uttarakhand	6	0.37	0.25	0.17	0.45	0.78	0.62	0.79	0.95	0.66	1.00	0.59	1.00	0.636
Karnataka	7	0.70	0.77	0.81	0.78	0.16	0.53	0.49	0.87	0.42	0.57	0.65	0.82	0.632
Himachal Pradesh	8	0.10	0.67	0.32	0.00	0.38	0.85	0.33	0.93	1.00	0.97	1.00	0.76	0.607
Jharkhand	9	0.46	0.65	0.76	0.57	0.00	0.64	1.00	0.76	0.25	0.47	0.78	0.92	0.604

Contd...

Table 6.2: State-wise Performance of ICDS Programme in Infrastructure Facility: Estimated Indices (Contd....)

State	Rank	Housed in Owned buildings	Adequate Space-Cooking	Adequate Space-Storage	Mean Area of Room in AWC(Sq Ft)	Toilet with Flush System	Drinking water available-within premise	AWWs attended Training	Functional Weighing Scale (Baby)	Adequate Toys	Adequate Posters	Adequate PSE Kits	AWWs whose Edun above middle school	Overall Infrastructure Index
Haryana	10	0.29	0.21	0.10	0.69	0.68	0.68	1.00	0.91	0.47	0.66	0.47	0.97	0.595
Orissa	11	0.57	0.40	0.39	0.89	0.03	0.58	0.98	0.95	0.43	0.58	0.51	0.79	0.591
Madhya Pradesh	12	0.52	0.75	0.73	0.69	0.07	1.00	0.73	0.86	0.28	0.31	0.26	0.71	0.576
Chhattisgarh	13	1.00	0.98	0.88	0.23	0.08	0.85	0.41	0.90	0.42	0.38	0.14	0.40	0.556
Assam	14	0.75	0.07	0.59	0.72	0.27	0.69	0.96	0.90	0.24	0.46	0.17	0.84	0.554
West Bengal	15	0.36	0.43	0.50	0.57	0.03	0.80	0.97	0.80	0.19	0.28	0.48	0.71	0.510
Rajasthan	16	0.42	0.68	0.77	1.00	0.10	0.43	1.00	0.53	0.05	0.28	0.11	0.00	0.448
Uttar Pradesh	17	0.06	0.15	0.13	0.64	0.06	0.82	0.39	0.23	0.20	0.41	0.26	0.84	0.350
Punjab	18	0.11	0.41	0.47	0.31	0.39	0.56	0.00	0.38	0.15	0.46	0.01	0.85	0.342
Jammu and Kashmir	19	0.00	0.84	0.61	0.00	0.09	0.00	0.46	0.00	0.08	0.26	0.09	0.76	0.266
Bihar	20	0.16	0.00	0.00	0.43	0.05	0.27	0.88	0.14	0.00	0.00	0.00	0.87	0.235
All India		**0.45**	**0.51**	**0.54**	**0.64**	**0.21**	**0.66**	**0.77**	**0.66**	**0.34**	**0.50**	**0.40**	**0.72**	**0.533**

6.2 INFRASTRUCTURE FACILITY AT AWC

6.2.1 HOUSING OF THE AWC

A large number of AWC (more than 80 per cent) were functioning from their own buildings in Tamil Nadu and Chhattisgarh. Assam, Maharashtra, Karnataka, Kerala and Gujarat had more than 60 per cent AWC with their own building. This is better than the national average of AWC with their own buildings which is only 42.5 per cent (Table 6.3). Jammu and Kashmir and Uttar Pradesh had the least percentage (<10%) of AWC with their own buildings. About 17.4 per cent of the AWC operate in rented buildings and 17.3 per cent use the primary school for their activities. 22.9 per cent of the AWC use other buildings such as AWW/AWH's house, Panchayat house and community buildings to conduct their activities.

Table 6.3: Percentage of AWC having type of housing facility

States	Owned	Rented	Primary School	Others*
Andhra Pradesh	39.8	50.0	4.5	5.8
Assam	69.6	0.0	18.1	12.4
Bihar	16.1	55.0	12.5	16.5
Chhattisgarh	92.6	4.4	0.0	3.0
Gujarat	61.5	11.2	0.8	26.5
Haryana	28.0	33.0	14.4	24.7
Himachal Pradesh	10.1	30.0	2.6	57.3
Jammu and Kashmir	1.3	7.7	0.0	91.0
Jharkhand	43.4	34.8	2.0	19.8
Karnataka	65.3	7.2	6.2	21.4
Kerala	65.0	35.0	0.0	0.0
Madhya Pradesh	48.9	18.6	7.1	25.4
Maharashtra	68.5	8.1	9.6	13.9
Orissa	53.5	5.5	14.8	26.2
Punjab	11.6	0.0	23.8	64.6
Rajasthan	39.6	30.4	3.8	26.3
Tamil Nadu	85.6	6.5	1.4	6.5
Uttar Pradesh	6.7	3.2	70.2	20.0
Uttarakhand	35.2	1.9	40.5	22.4
West Bengal	34.5	4.4	16.0	45.2
All India	**42.5**	**17.4**	**17.3**	**22.9**

Note:* AWW/AWH house, Panchayat and Community building

6.2.2 Adequacy of Space

Space for carrying out various ICDS activities remains central to the programme mainly in terms of cooking, storage and space for recreation (indoor activities). In the evaluation study, ICDS functionaries were asked whether the space within the AWC was "adequate" for the purpose. Cooking space assumes importance in view of the ICDS objective of providing supplementary nutrition. Across the country about 55 per cent of the AWC reported adequate cooking space. This is true especially for five major states: Tamil Nadu, Chhattisgarh, Kerala, Jammu & Kashmir and Gujarat. In a few states (Karnataka and Madhya Pradesh) more than 70 per cent of the AWC reported adequate cooking space. The situation was alarming in Bihar, Uttar Pradesh, Assam, where less than 30 per cent of the AWC reported adequate provision for cooking space (Table 6.4).

Space for storage was found to be adequate only in half of the AWC with a national average of 57.5 per cent. Tamil Nadu, Andhra Pradesh, Chhattisgarh and Gujarat had maximum number of AWC (over 80%) reporting adequate space for storage while Bihar and Haryana were in bad condition with <30 per cent of the AWC reporting adequate space for storage (Table 6.4).

Space for indoor activities was generally reported to be adequate across the country. On an average, 72 per cent of the AWC reported that they had adequate space for indoor activities (Table 6.4). More than 85 per cent of AWC in Maharashtra, Gujarat, Haryana, Andhra Pradesh and Tamil Nadu were found to be having adequate space for indoor activities.

Table 6.4: Percentage of AWC have adequacy of space for different type of activities

State	Cooking	Storage	Indoor Activities
Andhra Pradesh	66.6	84.5	86.7
Assam	23.0	61.4	71.0
Bihar	17.5	17.8	50.2
Chhattisgarh	91.0	83.1	81.9
Gujarat	80.6	80.3	89.1
Haryana	33.7	25.4	88.9
Himachal Pradesh	67.5	41.5	78.8
Jammu and Kashmir	80.7	63.2	83.7
Jharkhand	66.0	73.9	48.5
Karnataka	75.2	78.1	79.1
Kerala	83.5	69.2	83.7
Madhya Pradesh	74.2	71.6	80.5
Maharashtra	66.1	67.3	89.8
Orissa	47.6	46.3	68.2
Punjab	48.0	52.9	76.2
Rajasthan	68.7	75.0	68.9
Tamil Nadu	92.6	91.8	86.5
Uttar Pradesh	28.9	27.6	63.2
Uttarakhand	36.0	30.6	78.8
West Bengal	50.0	54.5	47.4
All India	**55.6**	**57.5**	**71.8**

6.2.3 AREA OF THE ROOM

Our survey also incorporated the information about the area of the room. Almost all the states had similar dimensions of the AWC. The average area of the AWC is 315 square feet. AWC in Rajasthan, Orissa and Tamil Nadu reported an abundance of space with more than 370 square feet of area. Punjab, Chhattisgarh, Himachal Pradesh and Jammu & Kashmir had AWC rooms with an average area of less than 240 square feet, whereas AWC of Himachal Pradesh and Jammu & Kashmir reporting an average area of only 160 square feet. Bihar's AWC also fared badly in this sphere with 266 square ft area of the average room size (Table 6.5).

Table 6.5: Area of the room where beneficiary sits

State	Room(Sq Ft)
Andhra Pradesh	319
Assam	335
Bihar	266
Chhattisgarh	216
Gujarat	267
Haryana	328
Himachal Pradesh	160
Jammu and Kashmir	160
Jharkhand	299
Karnataka	350
Kerala	348

Table 6.5: Area of the room where beneficiary sits (Contd....)

State	Room(Sq Ft)
Madhya Pradesh	329
Maharashtra	343
Orissa	376
Punjab	236
Rajasthan	404
Tamil Nadu	374
Uttar Pradesh	315
Uttarakhand	270
West Bengal	300
All India	**315**

6.2.4 Drinking Water

For water facilities, AWC in Himachal Pradesh, Gujarat and Tamil Nadu were the best equipped; with the availability of piped water at more than 60 per cent of AWC. AWC in Bihar, Assam, Chhattisgarh, Orissa, Uttar Pradesh and Jharkhand were found to be lacking in piped drinking water facility with less than 10 per cent of them providing piped drinking water, but had hand-pumps or alternative facilities to deal with drinking water for children (Table 6.6).

Table 6.6: Percentage of AWC having source of drinking water

State	Piped	Hand pump	Others
Andhra Pradesh	38.7	37.6	23.7
Assam	8.1	75.1	16.8
Bihar	9.3	88.6	2.1
Chhattisgarh	5.6	88.4	6.1
Gujarat	69.4	18.8	11.8
Haryana	30.7	20.9	48.4
Himachal Pradesh	78.8	12.5	8.7
Jammu and Kashmir	21.8	41.5	36.8
Jharkhand	9.7	71.4	18.9
Karnataka	42.2	39.1	18.7
Kerala	36.6	5.9	57.5
Madhya Pradesh	16.5	76.1	7.4
Maharashtra	52.2	39.4	8.4
Orissa	5.1	90.7	4.3
Punjab	29.7	70.3	0.0
Rajasthan	36.5	48.3	15.3
Tamil Nadu	60.7	15.6	23.7
Uttar Pradesh	3.0	94.4	2.7
Uttarakhand	42.9	46.4	10.7
West Bengal	21.6	73.4	5.1
All India	**28.4**	**58.8**	**12.9**

6.2.5 DISTANCE TO DRINKING WATER SOURCE

Our survey examined the distance between the AWC and a source of drinking water. We found that 64.8 per cent of the AWC had a drinking water source within the premises, 26.4 per cent had it within 50 metres of the AWC and 8.8 per cent had to go farther away from the AWC for fetching drinking water. More than 75 per cent of AWC in Madhya Pradesh, Kerala, Chhattisgarh, Himachal Pradesh and Uttar Pradesh had a drinking water source within the premise of the AWC. Bihar and Jammu and Kashmir fared the worst in this sphere with only 37 per cent and 18 per cent of their AWC reporting the availability of a drinking water source within their premises respectively (Table 6.7).

Table 6.7: Percentage of AWC having source of drinking water according to distance

State	Within premise	Up to 50 M	> 50 meter
Andhra Pradesh	67.1	31.6	1.4
Assam	66.6	26.3	7.1
Bihar	37.2	52.6	10.2
Chhattisgarh	77.6	8.4	14.0
Gujarat	54.5	25.1	20.3
Haryana	65.8	6.2	28.0
Himachal Pradesh	77.4	12.5	10.1
Jammu and Kashmir	18.4	22.7	58.9
Jharkhand	62.8	26.9	10.3
Karnataka	55.3	41.7	3.0
Kerala	78.9	13.5	7.7
Madhya Pradesh	88.1	8.0	3.9
Maharashtra	57.9	33.7	8.4
Orissa	59.0	24.4	16.6
Punjab	57.1	37.7	5.2
Rajasthan	48.6	29.8	21.6
Tamil Nadu	70.9	27.2	1.9
Uttar Pradesh	75.5	22.5	2.0
Uttarakhand	61.7	38.3	0.0
West Bengal	74.0	19.2	6.8
All India	**64.8**	**26.4**	**8.8**

6.2.6 TOILET FACILITY

Availability of toilets has a direct bearing on the surrounding environment of AWC and is also a critical indicator for assessing their sanitation status. Generally AWC were found to be lacking in toilet facilities for children. On an average across the states, about half the AWC didn't have toilet facilities. Bihar, UP and Orissa fared the worst as far as statistics go – more than 80 per cent of AWC in these states didn't have toilets. Most of the AWCs (above 75%) in Himachal Pradesh, Tamil Nadu, and Kerala had toilet facilities (Table 6.8).

Table 6.8: Percentage of AWC having toilet Facilities

State	Flush System	Pit/urinal	No facility
Andhra Pradesh	7.5	22.3	70.2
Assam	16.2	27.7	56.1
Bihar	3.2	12.5	84.3
Chhattisgarh	4.5	45.4	50.1
Gujarat	16.3	29.9	53.8
Haryana	40.8	1.7	57.5
Himachal Pradesh	22.6	74.8	2.6
Jammu and Kashmir	5.7	59.7	34.7
Jharkhand	0.0	31.2	68.8
Karnataka	9.8	25.1	65.1
Kerala	15.3	61.8	22.9
Madhya Pradesh	4.2	39.7	56.1
Maharashtra	22.4	36.0	41.6
Orissa	2.1	17.5	80.4
Punjab	23.3	17.7	59.1
Rajasthan	5.8	22.9	71.4
Tamil Nadu	60.0	19.0	21.0
Uttar Pradesh	3.6	13.3	83.1
Uttarakhand	46.7	8.9	44.4
West Bengal	1.8	26.7	71.5
All India	**12.4**	**26.1**	**61.5**

6.2.7 WEIGHING SCALES AND OTHER INVENTORIES

The AWC inventory usually consists of weighing scales, cooking/serving utensils, almirahs/boxes, toys, posters/charts and PSE Kits. Weighing scales are separate for babies and adults. It was found that weighing scales available for babies were much more than those available for adults across all states. Tamil Nadu, Orissa and Uttarakhand had the highest number of AWC having weighing scales for babies (95.5%, 91.8% & 91.3% respectively) and Haryana had the highest number of weighing scales for adults (90.5%). Maharashtra, Kerala and Andhra Pradesh had the most number of AWC with utensils, cooking vessels and almirahs/boxes. Himachal Pradesh and Jharkhand had the most number of PSE kits in their AWC (90.1% & 72.9% respectively) and Bihar and Punjab had the least (12.9% and 13.9% respectively) (Table 6.9).

In this context it may be noted that in many AWC, records of weights and grades of children, growth monitoring information, etc. are also being maintained, though many of them do not have weighing scales and/ or trained AWWs who could carry out these tasks. At the other extreme, some AWC were found to record incorrect weights/no weight measures of children even though weighing scales were available with them. All this tends to suggest that information on ***coverage*** and ***progress reports on nutritional standards*** being produced by the states and the Ministry of WCD do not represent the grassroots reality. This mismatch is a major source of leakage of resources under the programme.

Table 6.9: Percentage of AWC having functional weighing scales and other inventories

State	Weighing Scale (Baby)	Weighing Scale (Adult)	Utensils	Cooking Vessels	Almirahs	Toys	Posters	PSE Kits
Andhra Pradesh	78.6	60.5	91.4	81.7	58.6	53.2	85.3	64.4
Assam	87.5	10.4	41.9	39.9	38.2	23.6	48.4	26.2
Bihar	27.4	30.1	14.3	30.6	2.5	3.1	10.0	12.9
Chhattisgarh	87.4	31.7	37.1	52.4	20.0	39.9	41.7	23.8
Gujarat	87.5	44.7	51.8	58.2	29.0	44.4	73.7	63.0
Haryana	88.7	90.5	22.3	51.4	23.5	44.1	65.3	49.2
Himachal Pradesh	89.9	8.7	98.8	50.1	31.1	89.9	91.3	90.1
Jammu and Kashmir	16.4	1.7	49.2	31.1	9.7	9.6	32.1	20.1
Jharkhand	76.8	26.7	39.5	41.6	30.2	25.1	49.7	72.9
Karnataka	85.4	9.7	62.9	66.5	40.8	39.8	58.1	62.8
Kerala	76.1	48.3	86.8	88.5	75.7	66.4	80.9	66.5
Madhya Pradesh	84.1	60.5	51.6	60.9	49.4	27.2	36.1	33.0
Maharashtra	89.8	87.0	87.8	81.9	71.6	59.6	84.5	55.7
Orissa	91.8	50.2	40.6	45.3	25.3	40.3	58.9	52.3
Punjab	46.7	33.5	38.1	43.0	28.1	16.4	48.7	13.9
Rajasthan	58.5	43.5	56.1	53.1	36.6	7.8	33.4	21.6
Tamil Nadu	95.5	52.4	74.2	79.7	55.7	51.3	70.5	71.6
Uttar Pradesh	34.9	23.9	30.1	15.8	18.9	20.4	44.6	32.9
Uttarakhand	91.3	30.5	85.8	72.5	80.3	60.3	94.2	58.1
West Bengal	79.6	21.9	13.1	19.2	24.5	19.9	33.3	50.1
All India	**68.9**	**39.9**	**49.0**	**48.3**	**35.5**	**32.5**	**51.7**	**44.0**

6.3. FUNCTIONING OF AWC (REPORTED BY AWWS)

Services provided at the AWC as part of the ICDS include Supplementary Nutrition, Immunisation, Health Check-ups, Referral Services, Pre-School Education, Nutrition & Health Education, Kishori Shakti Yojana. It was found that almost every AWC in each state provided supplementary nutrition to children. No state did badly in this regard. Even immunisation was provided diligently in most of the AWC in all the states except West Bengal. In providing heath checkups Haryana, Orissa and Andhra Pradesh topped the list while Bihar, Uttar Pradesh, Rajasthan and Jammu & Kashmir didn't perform well. However, this service did not perform as good as the immunisation service in most of the states and this can be seen from the data given in (Table 6.10). Referral services were the least popular but were still implemented impressively in a majority of the states. Orissa, Gujarat did particularly well in providing this service, while Uttar Pradesh, West Bengal and Jharkhand didn't perform up to the mark with only about 20 per cent of AWC providing referral services in these states. Pre-school education and Nutrition and Health Education have been implemented well across most states with many states having all their AWC providing these. A reason might be that this doesn't require too much infrastructure. Kishori Shakti Yojana is also implemented through the AWC, though the percentage of AWC providing this service at the national level remains low at 67.1 per cent. KSY includes a variety of different services. These are explained in the later section of this chapter.

Table 6.10: Percentage of AWC providing different types of services - Reported by the AWW

State	Supplementary Nutrition	Immunisation	Health Check-ups	Referral Services	Pre-School Education	Nutrition & Health Education	Kishori Shakti Yojana
Andhra Pradesh	100.0	99.0	95.1	96.7	96.7	97.8	79.5
Assam	98.8	92.9	75.1	36.9	97.8	95.2	47.3
Bihar	97.5	98.7	18.9	73.5	66.4	96.1	88.5
Chhattisgarh	100.0	100.0	79.2	86.7	69.1	100.0	80.8
Gujarat	100.0	100.0	90.4	97.7	100.0	87.4	22.8
Haryana	100.0	100.0	100.0	83.3	98.3	87.2	16.4
Himachal Pradesh	100.0	98.6	89.9	69.9	100.0	100.0	90.1
Jammu and Kashmir	100.0	78.1	36.0	34.6	100.0	94.4	37.9
Jharkhand	100.0	83.7	73.9	22.7	100.0	93.5	89.0
Karnataka	100.0	100.0	89.7	76.6	98.7	98.7	86.3
Kerala	100.0	92.2	85.0	87.8	96.9	98.6	20.9
Madhya Pradesh	98.1	96.9	76.4	87.9	72.1	98.8	96.9
Maharashtra	99.0	99.0	86.1	97.4	100.0	100.0	96.2
Orissa	99.2	98.4	98.4	97.8	91.1	98.2	98.8
Punjab	100.0	100.0	88.7	86.6	93.0	100.0	76.6
Rajasthan	100.0	95.5	36.0	34.3	98.7	96.3	47.7
Tamil Nadu	98.6	85.9	86.8	92.1	96.3	98.0	65.2
Uttar Pradesh	100.0	94.9	35.9	20.3	63.6	86.3	82.8
Uttarakhand	100.0	96.1	78.3	29.2	100.0	91.1	56.1
West Bengal	99.5	55.4	54.9	14.3	99.5	96.2	7.1
All India	**99.4**	**91.4**	**66.1**	**62.9**	**87.8**	**94.9**	**67.1**

6.3.1 AVERAGE TIME SPENT ON FEEDING, PRE-SCHOOL EDUCATION AND RECORD KEEPING

On comparing the time spent on feeding, PSE and record keeping in minutes by AWWs across different AWC in India, it was found that on an average, most time was spent by the AWWs on record keeping followed by PSE and then on the feeding activity. AWWs in Madhya Pradesh, Assam and Gujarat spent most of their time on feeding while those in Himachal Pradesh and Haryana spent the least. AWWs in AWC of Jharkhand, Orissa, West Bengal and Chhattisgarh spent the maximum time on PSE, with more than a 100 minutes spent. AWWs in Bihar and Uttar Pradesh spent the least time on this activity, as shown in table (Table 6.11). However, they spent the most time in record keeping along with Rajasthan, around 120 minutes in a day.

Table 6.11: Average daily time spent by AWW (in minutes)

State	Feeding	PSE	Record Keeping
Andhra Pradesh	41	99	90
Assam	73	91	90
Bihar	46	60	120
Chhattisgarh	48	109	90
Gujarat	67	80	96
Haryana	27	88	92
Himachal Pradesh	29	95	90
Jammu and Kashmir	38	80	91
Jharkhand	58	120	89
Karnataka	44	101	94
Kerala	58	87	91
Madhya Pradesh	75	96	91
Maharashtra	63	104	90
Orissa	50	116	91
Punjab	40	91	90
Rajasthan	61	64	120
Tamil Nadu	58	96	103
Uttar Pradesh	38	58	121
Uttarakhand	41	104	90
West Bengal	48	117	90
All India	**51**	**89**	**99**

6.3.2 AWWs INVOLVEMENT IN OTHER GOVERNMENT/PRIVATE SCHEMES

AWW have also been involved in other schemes besides the ICDS and this takes up considerable amount of their time. The average time that an AWW spends on other schemes is 6 hours per day and 14 days in a year, which is quite a substantial, as shown in Table 6.12. On an average, more than 80 per cent of AWWs were involved in one or the other schemes apart from ICDS. Orissa, Maharashtra, Chhattisgarh, Andhra Pradesh and Bihar had more than 90 per cent of their AWWs working in other schemes while the least percentage was in Punjab and West Bengal (<60%).

Table 6.12: Percentage of AWW involved in other government scheme during last year

State	% AWW	Days	Hours/Day
Andhra Pradesh	93.4	7	5
Assam	69.4	6	7
Bihar	91.8	21	7
Chhattisgarh	95.5	10	6
Gujarat	83.2	13	5
Haryana	87.5	9	7
Himachal Pradesh	88.5	14	6
Jammu and Kashmir	70.8	5	6
Jharkhand	71.9	12	7
Karnataka	89.5	8	7
Kerala	87.6	6	6

Contd...

Table 6.12: Percentage of AWW involved in other government scheme during last year (Contd....)

State	% AWW	Days	Hours/Day
Madhya Pradesh	89.5	14	6
Maharashtra	97.5	21	4
Orissa	98.8	59	3
Punjab	51.8	4	7
Rajasthan	69.2	7	7
Tamil Nadu	80.7	6	6
Uttar Pradesh	82.2	16	7
Uttarakhand	69.9	7	7
West Bengal	58.4	13	6
All India	**82.1**	**14**	**6**

6.3.3 ANMs REGULARITY OF VISITS TO THE AWC

ANM is a part of the medical staff of the ICDS and it is his/her duty to look into the health and growth of children attending the AWC. It was found that in Haryana, Punjab and Orissa, ANMs made regular visits, with more than 90 per cent of AWWs reporting this in these states, as shown in Table 6.13. AWC in Bihar, Uttar Pradesh and Jammu & Kashmir were the worst in this regard, with less than 35 per cent of AWWs reporting regularity in visits made by ANMs. AWC in Jammu & Kashmir, West Bengal and Rajasthan also performed badly in this sphere.

Table 6.13: Percentage of AWW reporting regularity of visits of ANM

State	Yes	No
Andhra Pradesh	88.6	11.4
Assam	73.9	26.1
Bihar	27.2	72.8
Chhattisgarh	71.7	28.3
Gujarat	85.9	14.1
Haryana	98.5	1.5
Himachal Pradesh	86.1	13.9
Jammu and Kashmir	34.7	65.4
Jharkhand	72.3	27.7
Karnataka	79.7	20.3
Kerala	79.3	20.7
Madhya Pradesh	73.0	27.0
Maharashtra	84.0	16.0
Orissa	92.7	7.3
Punjab	97.3	2.7
Rajasthan	41.7	58.3
Tamil Nadu	71.7	28.3
Uttar Pradesh	33.4	66.6
Uttarakhand	72.5	27.5
West Bengal	37.4	62.6
All India	**61.7**	**38.3**

6.3.4 MAINTENANCE AND UPDATING OF REGISTERS

Maintaining records of all activities carried out at the AWC is an important responsibility of the AWW. Record maintenance facilitates supervision and ensures better implementation of the ICDS. Registers maintained by the AWW include the survey register for the entire area covered by the AWC, the attendance register, the SNP register, the PSE register, register of stock, the daily diary etc. In addition, the AWW also maintains a record of all immunisations carried out for children and pregnant women, the growth chart of all children up to 6 years, the record of referral cases, etc. The status of maintaining record is given in Table 6.14.

Overall, less than 50 per cent of the AWC updated the survey register. In AWC of Himachal Pradesh, West Bengal and Tamil Nadu more than 80 per cent of survey registers were reported as updated while the same for AWC in Rajasthan, J&K and Uttar Pradesh were only less than 10 per cent.

Child registers[16] were maintained slightly better with national average being 65 per cent. AWC in West Bengal, Himachal Pradesh, Chhattishgarh, Jharkhand and Maharashtra, all had more than 85 per cent of their child registers updated while AWC in Gujarat and Uttar Pradesh did the worst in this regard with only 20-40 per cent of their child registers being updated.

Daily diary/Delivery register was also maintained comparatively well in AWC across states in India with 76 per cent of AWC having updated registers. AWC in Uttarakhand, Haryana, West Bengal, Jharkhand, and Uttar Pradesh performed the best in this regard, with more than 90 per cent of their registers being properly updated while Punjab and Rajasthan had less than 25 per cent of their registers updated.

The medicine stock register was maintained very poorly, with only 33.7 per cent of AWC at the national level reporting their registers to be updated. No state had more than 60 per cent of their AWC with updated registers except for Tamil Nadu. Punjab, Chhattisgarh, Bihar and J&K had less than 5 per cent of their medicine registers updated.

Child weight and growth chart registers were also poorly maintained with only 42.3 per cent and 41.2 per cent respectively of AWC reporting their registers to be updated at the national level. No state performed extremely well in this regard. Bihar and J&K performed the worst in this regard with less than 10 per cent of their AWC having updated child weight and growth registers.

The immunisation register is extremely important as this service has a direct impact on the health of children and adults. Looking at the data given in Table-6.14 we found that less than 60 per cent of AWC had updated this register at the national level. AWC in Himachal Pradesh and Haryana did well in this regard with more than 90 per cent of them updating their registers regularly. Of AWC in Gujarat, J&K and Rajasthan less than 11 per cent had updated their immunisation registers.

[16] Where the information related to child is available.

All the AWC in Uttarakhand, Jharkhand, Haryana, West Bengal and Punjab updated their attendance registers regularly, while AWC in Gujarat faired the worst in this sphere, the national average being 84.9 per cent. Most of the AWC in Haryana, Himachal Pradesh, Jharkhand, Uttarakhand and West Bengal updated the food stock register regularly while for Gujarat the figures were the lowest at 54 per cent.

The birth and death register was updated by 95.6 per cent of the AWC in Haryana while the figure was the lowest for Bihar (8.4%).The national average of this was 49 per cent only.

The percentage of the AWC that had updated the KSY registers showed a wide range across the states, with the figures ranging from 3.6 per cent in Gujarat to 100 per cent in Haryana and the national average being 53.5 per cent.

Table 6.14: Percentage of AWC updated different types of registers

State	Survey	Mother	Child	Attendance	Delivery	Child weight	Child growth chart	MPR	Food stock
Andhra Pradesh	64.2	77.9	84.3	83.6	65.9	47.2	44.4	61.5	75.3
Assam	53.1	52.2	76.1	87.4	65.6	22.5	64.4	85.9	63.8
Bihar	16.4	36.6	43.3	82.3	78.1	6.2	3.2	50.7	72.1
Chhattisgarh	55.9	55.6	87.8	91.3	71.6	65.0	69.6	70.2	77.2
Gujarat	22.1	40.0	27.1	54.5	58.8	23.5	20.7	58.5	54.0
Haryana	38.0	98.3	80.0	98.3	98.3	84.3	59.8	98.3	100.0
Himachal Pradesh	88.5	88.5	88.5	89.9	89.9	87.3	78.6	71.3	91.3
Jammu and Kashmir	6.2	7.0	52.5	68.6	65.1	3.3	2.7	27.4	79.8
Jharkhand	77.6	84.1	87.5	98.9	91.8	53.0	45.9	91.2	92.7
Karnataka	37.1	54.3	69.9	81.5	80.0	43.4	47.6	69.8	73.1
Kerala	70.8	68.7	72.5	70.4	72.0	66.6	63.5	61.5	70.4
Madhya Pradesh	48.6	59.6	66.3	88.1	78.1	61.8	52.1	77.8	79.4
Maharashtra	62.1	73.8	87.4	94.9	83.5	62.0	68.1	92.5	67.0
Orissa	67.6	83.0	76.9	87.6	83.7	63.0	65.3	83.1	86.5
Punjab	69.6	77.4	53.0	96.6	22.3	23.7	17.5	79.1	86.1
Rajasthan	5.1	40.7	43.8	71.3	17.9	16.9	9.9	50.7	89.6
Tamil Nadu	80.1	81.0	78.8	91.1	83.7	69.9	66.3	83.6	88.1
Uttar Pradesh	7.7	26.0	33.3	80.8	90.0	15.5	12.2	40.5	87.2
Uttarakhand	49.2	87.0	79.9	100.0	100.0	51.5	35.1	68.0	91.1
West Bengal	82.0	89.7	92.3	97.7	93.6	63.1	62.6	96.1	97.2
All India	**45.8**	**59.2**	**65.7**	**84.9**	**76.6**	**42.3**	**41.2**	**68.2**	**79.9**

Table 6.14: Percentage of AWC updated different types of registers (Contd..)

State	Immunisation	PSE	KSY	Mothers meeting	Birth & death	Referral	Medicine stock
Andhra Pradesh	68.8	65.2	22.7	43.9	50.6	11.1	22.4
Assam	57.6	90.2	31.5	64.7	46.8	4.3	23.3
Bihar	52.4	34.6	44.0	36.6	8.4	1.6	4.5
Chhattisgarh	78.3	80.2	21.7	16.5	63.1	4.8	0.6
Gujarat	7.1	8.8	3.6	22.6	40.7	1.6	24.9
Haryana	96.7	56.4	100.0	96.7	95.6	33.2	36.7
Himachal Pradesh	98.6	87.1	73.4	88.5	78.8	20.0	60.3
Jammu and Kashmir	10.5	37.2	21.6	6.9	9.4	1.6	0.8
Jharkhand	64.4	81.0	89.3	74.7	71.1	8.7	9.4
Karnataka	80.9	50.8	16.9	59.7	56.7	27.3	54.9
Kerala	62.8	42.9	47.7	64.5	60.7	8.7	57.6
Madhya Pradesh	69.1	72.7	57.9	65.7	47.1	21.3	25.9
Maharashtra	83.0	68.7	77.0	69.1	71.9	68.9	59.9
Orissa	88.7	89.4	60.5	74.4	78.1	74.4	58.3
Punjab	60.1	77.4	67.2	51.5	49.5	0.0	0.0
Rajasthan	10.7	11.4	12.1	34.7	14.7	6.5	20.4
Tamil Nadu	60.6	82.6	72.1	79.1	73.2	46.1	79.9
Uttar Pradesh	38.4	51.3	76.7	55.2	30.2	5.4	23.8
Uttarakhand	42.2	53.5	61.5	44.5	27.6	0.0	47.1
West Bengal	65.7	64.4	16.9	94.0	71.4	3.1	54.2
All India	**57.9**	**57.6**	**53.5**	**57.5**	**49.0**	**17.9**	**33.7**

It may be concluded that the AWWs who are required to keep records of survey results, registered beneficiaries, grades of children, daily attendance, weight/growth charts of children, etc. have very little knowledge of these record keeping activities, except a very small proportion of them who are educated and trained. The survey team noted that only attendance/delivery registers and the MPR are updated in most cases, while in many AWC other registers are simply not traceable. On probing, it was revealed that these registers are being updated with the help of supervisors and /or other people to keep the flow of resources to AWC uninterrupted. In Bihar and Uttar Pradesh in particular, the survey team was informed by most of the AWWs that the registers had to be brought either from Supervisor or from the CDPO office to make these available to the team. This is evidence enough that registers are not being maintained at AWC.

6.3.5 Medical Kits and Use of Medicine

More than 90 per cent of AWC in Haryana, Gujarat and Andhra Pradesh received medical kits. None of AWC in Chhattisgarh, Jammu & Kashmir and Punjab received medical kits, while in Bihar and Jharkhand less than 10 per cent of the AWC received medical kits (Table 6.15).

Table 6.15: Percentage of AWC received medical kit

State	Yes	No
Andhra Pradesh	91.4	8.6
Assam	83.7	16.3
Bihar	3.6	96.4
Chhattisgarh	0.0	100.0
Gujarat	93.9	6.1
Haryana	94.8	5.2
Himachal Pradesh	82.6	17.4
Jammu and Kashmir	0.0	100.0
Jharkhand	9.0	91.0
Karnataka	85.7	14.3
Kerala	70.3	29.7
Madhya Pradesh	19.1	80.9
Maharashtra	87.5	12.5
Orissa	78.2	21.8
Punjab	0.0	100.0
Rajasthan	72.7	27.3
Tamil Nadu	86.1	13.9
Uttar Pradesh	69.2	30.8
Uttarakhand	71.1	28.9
West Bengal	80.3	19.7
All India	**62.4**	**37.6**

The medicines given to the AWC were Iron/Folic Acid (Big and small), Almebendazol/ Mebedazol, ORS, Vitamin A, Paracetamol, Paracetamol Cyrup, Metrogyl, Vitamin B Complex, Eye Ointment Tubes, Betnovate, Iodine, Dettol and Cotton bandages.

More than 90 per cent of the AWC in Kerala, Haryana, Jharkhand, Bihar and Andhra Pradesh utilised Iron/Folic Acid (Big) tablets while AWC in Chhattisgarh, Punjab and J&K's did not receive only this medicine, let alone its utilization.

Distribution of Small Iron/Folic Acid tablets was good in almost all the states, exceptions being; Chhattisgarh, Jammu and Kashmir, Jharkhand and Punjab, which did not receive any of this medicine. More than 90 per cent of AWC in Bihar, Haryana, Kerala, Madhya Pradesh, Maharasthra and Orissa utilised this medicine while West Bengal and Uttarakhand only had less than 50 per cent of their AWC utilizing this medicine.

Almebendazol/Mebedazol was utilised in very few AWC with only 39.2 per cent of AWC reporting its Utilisation across India. In all the AWC of Punjab and Jharkhand this medicine was utilised while Uttar Pradesh, Bihar and Uttarakhand fared the worst in this sphere with less than 20 per cent of their AWC utilising this medicine. `

ORS was given to quite a large number of AWC, with 87 per cent of AWC across India on an average utilising it. All the AWC in Andhra Pradesh, Assam and Jharkhand utilised ORS. It was only in Uttar Pradesh where less than 50 per cent of AWC utilised ORS.

Very few bottles of Vitamin A and paracetamol syrup were received by AWC across India, with the average being less than 5. On an average, less than 70 per cent of AWC reported utilisation of these medicines.

On an average, more than 90 per cent of AWC reported to have received Metrogyl medicine; however its usage across the various states was less than 50 per cent and less than 10 per cent of AWC received eye ointment tubes, betnovate, iodine, Dettol and Cotton/Bandages and their usage also remained low in AWC across India.

Table 6.16: Percentage of AWC reported Availability and Utilisation of Medicine during last one year

State	Iron /Folic Acid Tabs (Big)		Iron /Folic Acid Tabs (Small)		Almebendazol/ Mebedazol		ORS	
	Received (No.)	% Utilised	Received (No.)	% Utilised	Received (No.)	% Utilised	Received (No. in packet)	% Utilised
Andhra Pradesh	539	91.2	263	80.0	349	67.0	15.0	100.0
Assam	200	75.0	300	56.7	414	54.3	12	100.0
Bihar	282	94.4	429	100.0	375	18.7	32	91.6
Chhattisgarh	0	-	0	-	0	-	0	-
Gujarat	1175	48.7	1067	50.0	528	22.9	11	77.5
Haryana	517	97.6	527	99.1	203	58.5	14	97.9
Himachal Pradesh	442	49.0	578	63.4	185	48.5	27	86.5
Jammu and Kashmir	0	-	0	-	0	-	0	-
Jharkhand	981	97.5	0	-	78	100.0	10	100.0
Karnataka	129	88.8	59	84.6	290	43.3	7	81.9
Kerala	412	100.0	324	99.8	216	95.0	20	90.9
Madhya Pradesh	604	85.3	305	116.9	278	66.1	31	92.1
Maharashtra	563	74.6	810	123.8	314	55.2	24	84.4
Orissa	302	83.6	263	91.9	210	50.0	35	93.5
Punjab	0	-	0	-	120	100.0	0	-
Rajasthan	866	51.8	1003	74.2	381	40.0	29	80.4
Tamil Nadu	749	53.4	64	77.3	110	60.0	49	84.5
Uttar Pradesh	364	79.8	246	62.6	411	19.2	10	49.0
Uttarakhand	302	53.1	172	48.3	250	15.3	62	59.1
West Bengal	839	73.0	386	42.6	408	37.5	32	88.7
All India	**581**	**67.0**	**479**	**96.6**	**357**	**39.2**	**29**	**87.0**

Contd...

Table 6.16: Percentage of AWC reported Availability and Utilisation of Medicine during last one year (Contd.)

State	Vitamin A		Paracetamol		Paracetamol Cyrup		Metrogyl		Vitamin B Complex	
	Received (No. in bottle)	% Utilised	Received (No.)	% Utilised	Received (No.in bottle)	% Utilised	Received (No.)	% Utilised	Received (No.)	% Utilised
Andhra Pradesh	0	-	361	62.8	3	76.2	348	35.6	0	-
Assam	1	100.0	327	55.3	4	81.8	109	55.5	0	-
Bihar	2	44.5	389	81.0	3	93.4	0	-	0	-
Chhattisgarh	0	-	0	-	0	-	0	-	0	-
Gujarat	1	100.0	561	33.5	1	34.7	100	22.3	189	50.7
Haryana	1	100.0	214	87.4	0	-	61	98.3	50	60.0
Himachal Pradesh	2	83.6	427	52.1	4	76.9	20	60.0	30	96.0
Jammu and Kashmir	0	-	0	-	0	-	0	-	0	-
Jharkhand	0	-	0	-	6	66.7	0	-	0	-
Karnataka	5	58.0	126	57.8	3	73.2	28	47.6	55	83.0
Kerala	1	100.0	829	94.6	2	97.9	20	64.7	20	60.0
Madhya Pradesh	2	83.9	264	38.4	3	73.8	105	69.5	31	69.4
Maharashtra	3	70.6	439	68.6	2	82.0	74	69.6	55	78.2
Orissa	4	81.0	132	46.8	3	84.7	30	61.3	100	100.0
Punjab	0	-	100	100.0	0	-	0	-	0	-
Rajasthan	2	42.7	385	50.9	2	55.7	384	7.8	23	62.9
Tamil Nadu	2	87.5	224	60.3	2	62.0	27	56.0	61	53.8
Uttar Pradesh	2	27.8	470	23.8	2	29.4	118	16.0	100	100.0
Uttarakhand	1	0.0	462	9.3	3	38.0	20	50.0	200	50.0
West Bengal	5	82.8	471	37.3	1	50.3	120	97.8	175	77.5
All India	**3**	**66.7**	**401**	**48.0**	2	63.3	**94**	**45.6**	**87**	**74.8**

Contd...

Table 6.16: Percentage of AWC reported Availability and Utilisation of Medicine during last one year (Contd.)

State	Eye Ointment Tubes		Betnovate		Iodine		Dettol		Cotton/Bandages	
	Received (No. in tube)	% Utilised	Received (No.)	% Utilised	Received (No.)	% Utilised	Received (No. in bottle)	% Utilised	Received (No. in piece)	% Utilised
Andhra Pradesh	8	68.2	2.0	60.7	2	54.6	2	72.2	2	52.6
Assam	5	71.0	0	-	12	0.0	0	-	2	79.3
Bihar	10	10.0	1	100.0	0	-	0	-	2	76.8
Chhattisgarh	0	-	0	-	0	-	0	-	0	-
Gujarat	9	37.4	3	13.9	7	39.7	7	57.6	5	30.6
Haryana	4	96.8	2	100.0	3	99.2	1	100.0	4	83.6
Himachal Pradesh	4	78.4	10	80.0	5	81.1	8	62.9	1	56.7
Jammu and Kashmir	0	-	0	-	0	-	0	-	0	-
Jharkhand	0	-	0	-	0	-	3	100.0	2	100.0
Karnataka	2	63.7	1	38.1	3	58.1	1	63.1	8	62.4
Kerala	7	93.9	4	85.1	1	91.8	1	100.0	1	97.4
Madhya Pradesh	9	60.9	4	85.5	4	97.2	2	32.3	7	77.5
Maharashtra	6	68.0	3	77.9	4	42.3	1	63.2	6	57.8
Orissa	9	81.9	2	85.9	3	68.3	3	75.8	5	89.1
Punjab	0	-	0	-	0	-	1	100.0	12	100.0
Rajasthan	7	56.1	5	32.8	5	43.8	3	50.2	6	34.7
Tamil Nadu	12	48.1	8	42.7	9	41.4	5	33.6	11	42.1
Uttar Pradesh	9	36.7	5	40.6	5	35.1	5	10.9	6	33.3
Uttarakhand	12	28.3	5	60.7	12	-	2	25.0	9	15.5
West Bengal	8	33.7	3	85.5	5	43.2	0	-	6	50.0
All India	**8**	**51.2**	**4**	**52.4**	**4**	**47.2**	**2**	**54.7**	**6**	**48.2**

6.3.6 PRE-SCHOOL EDUCATION

The pre-school education component of the ICDS focuses on overall development of children in the 3-6 years of age brackets. The programme is directed towards providing children with a joyful and stimulating environment which is conducive for learning. It also prepares the child for primary schooling. Activities involved in PSE include; enabling children to have free conversations, to tell stories, sing songs or recite poems, Counting, Drawing/ Paintings, Out-door games, Puzzles, Matching colors, etc. On an average, PSE activities not involving infrastructure such as stories, counting and free conversation were conducted at more than 90 per cent of AWC while those like drawing, puzzles were less popular and available at only around 50 per cent of the AWC. Himachal Pradesh, Kerala, Assam and Haryana had about 90 per cent of their AWC providing all these activities.

The most important thing in the success of PSE is whether or not workers in AWC have adequate training to conduct them. It was found that AWWs in most states were trained well with an average of approximately 94 per cent having obtained training to conduct PSE.

Table 6.17: Percentage of AWC trained adequately to conduct PSE

State	Yes	No
Andhra Pradesh	94.4	5.6
Assam	93.4	6.6
Bihar	93.9	6.1
Chhattisgarh	98.7	1.3
Gujarat	94.4	5.6
Haryana	100.0	0.0
Himachal Pradesh	91.3	8.7
Jammu and Kashmir	98.4	1.6
Jharkhand	92.4	7.6
Karnataka	93.8	6.2
Kerala	82.9	17.1
Madhya Pradesh	91.2	8.8
Maharashtra	97.5	2.5
Orissa	94.4	5.6
Punjab	96.5	3.5
Rajasthan	98.7	1.3
Tamil Nadu	91.0	9.0
Uttar Pradesh	93.5	6.5
Uttarakhand	79.4	20.6
West Bengal	90.2	9.8
All India	**93.6**	**6.4**

6.3.7 Implementation of KSY in the AWC reported by AWW

KSY was found to be implemented in 66.6 per cent of AWC nation-wide. The services that the AWC is supposed to provide under the KSY scheme include Food/ SN, Health checkup, Immunisation, Referral services, De-worming tablets, Iron & folic acid and Family-life education. On an average, about 80 per cent of AWC provided Food/SN service while referral services were present in only about 50 per cent of the AWC in India.

AWC in Orissa were found to have the highest implementation of KSY (98.8%) followed closely by Madhya Pradesh and Maharashtra where KSY was implemented in more than 95 per cent of AWC. Kerala, Haryana and West Bengal were found to be the worst off among all the states with the programme present in less than 20 per cent of AWC. The Food/SN service was functioning well across most states, with Bihar, Karnataka, Jharkhand, Punjab, Gujarat, Haryana, Himachal Pradesh and Uttrakhand having almost every AWC (close to 100 per cent) giving out food as reported by AWW. AWC in Orissa and West Bengal did not perform well in delivering the SN service with less than 10 per cent of them offering this service. 80 per cent of AWC across all states provided food/SN.

In health checkups, AWC in Madhya Pradesh, Maharashtra, Haryana, Himachal Pradesh, Chhattisgarh and Gujarat performed the best with implementation in more than 90 per cent of

AWC while Assam and West Bengal fared the worst with less than 20 per cent of AWC having health checkups. On an average, 70 per cent of AWC nation-wide provided health check-ups as part of KSY. In providing immunisation, Kerala, Madhya Pradesh, Maharashtra and Uttarakhand did exceptionally well with implementation in more than 90 per cent of AWC as part of KSY. West Bengal had zero implementation across AWC. Haryana, Assam and Andhra Pradesh were the other states that fared badly with less than 35 per cent implementation. On an average, 70 per cent of AWC nation-wide provided immunisation as part of KSY.

In providing referral service, Haryana and Andhra Pradesh did the best among states, while Assam, Uttrakhand, Bihar and Jharkhand did the worst. Referral services were present in only around half (50%) of the AWC in India. In providing de-worming tablets, AWC in Haryana, Chhattisgarh and Orissa performed well while AWC in Bihar and Jammu & Kashmir made the worst provisions. (Table 6.18)

Provision of Family-life education is also a very important function of AWC. In Haryana and Punjab they disseminated good Family life education, while in West Bengal villagers were the least informed about this. Family life education was provided in 77.1 per cent of AWC across states.

Table 6.18: Percentage of AWC provided types of services reported by AWW

State	Percentage AWC Implemented KSY scheme	Food/ SN	Health check-up	Immuni-sation	Referral services	De-worming tablets	Iron & folic acid	Family-life education
Andhra Pradesh	79.5	20.1	58.6	26.8	93.6	80.8	86.8	97.2
Assam	47.3	95.0	11.0	32.6	2.6	40.5	23.9	52.0
Bihar	88.5	100.0	36.0	67.2	7.4	15.2	25.5	55.3
Chhattisgarh	79.0	80.3	100.0	77.3	74.3	89.0	89.4	84.5
Gujarat	22.8	100.0	100.0	46.7	63.7	47.3	90.0	67.7
Haryana	16.4	100.0	95.0	17.1	95.0	95.0	95.0	100.0
Himachal Pradesh	81.4	100.0	100.0	79.4	52.4	86.2	98.6	89.3
Jammu and Kashmir	37.9	95.5	75.5	76.9	26.6	13.2	19.0	92.1
Jharkhand	89.0	100.0	56.8	47.5	5.9	31.9	57.3	63.6
Karnataka	85.6	100.0	80.3	79.0	66.6	65.6	66.6	67.8
Kerala	15.0	33.4	25.6	100.0	25.6	58.3	100.0	70.7
Madhya Pradesh	96.9	95.4	95.3	93.8	70.9	77.8	93.2	98.2
Maharashtra	96.2	85.0	91.8	95.6	87.0	84.3	96.9	85.1
Orissa	98.8	8.8	64.3	50.2	37.7	88.5	97.3	58.8
Punjab	76.6	100.0	83.7	70.0	73.6	73.6	70.0	100.0
Rajasthan	47.7	97.3	79.4	59.7	28.6	50.5	86.9	47.3
Tamil Nadu	65.2	28.5	73.3	62.5	70.4	64.2	85.2	87.7
Uttar Pradesh	82.8	99.3	64.5	83.5	30.8	63.9	48.0	79.2
Uttarakhand	56.1	100.0	58.8	93.1	7.0	80.8	96.6	90.5
West Bengal	6.4	7.4	18.6	0.0	25.4	33.7	72.3	26.1
All India	**66.6**	**79.9**	**69.6**	**69.4**	**50.4**	**63.3**	**70.5**	**77.1**

6.3.8 SEPARATE PROGRAMME FOR 15-45 YEAR-OLD WOMEN

AWC in Kerala had the most percentage (74%) of AWC with a separate programme for 15-45 year old women. Himachal Pradesh followed with 60 per cent, but after that all the others had less than 50 per cent of their AWC with separate programmes. Generally, very few AWC had this provision, with an average of only 26 per cent implementing it. Bihar and Uttar Pradesh had no AWC with this provision while Andhra Pradesh had it in only 13.8 per cent of its AWC (Table 6.19).

Table 6.19: Separate programme for 15-45 years women reported by AWW

State	% AWW reported separate programme for women aged 15-45 years	If no, do they attend NHE sessions with other women
Andhra Pradesh	13.8	5.7
Assam	14.4	54.5
Bihar	0.0	64.9
Chhattisgarh	30.4	32.9
Gujarat	45.7	38.7
Haryana	28.0	58.3
Himachal Pradesh	60.0	68.2
Jammu and Kashmir	47.6	73.5
Jharkhand	18.2	2.6
Karnataka	41.5	27.4
Kerala	74.3	46.9
Madhya Pradesh	36.7	33.3
Maharashtra	47.9	26.1
Orissa	25.2	50.0
Punjab	43.6	69.9
Rajasthan	20.1	42.6
Tamil Nadu	43.3	22.3
Uttar Pradesh	0.0	48.5
Uttarakhand	27.7	36.1
West Bengal	18.8	0.7
All India	**26.0**	**36.2**

6.3.9 COORDINATION BETWEEN THE AWW AND OTHER OFFICIALS

Data on the number of visits made and the performance of functions like providing guidance for preparing charts, maintaining records, setting targets/priorities making links with the administration, etc. by the ANM, the ICDS supervisor, CDPO/ACDPO, Block Education Officer, Sarpanch and the medical officer was collected and the following observations were made:

- On an average the ANM made 8 visits in six months, with the visits in Haryana, Chhattisgarh, Gujarat, Madhya Pradesh, Orissa, Andhra Pradesh, Karnataka, Punjab, Maharashtra and Tamil Nadu being more than the national average. In most of the states' ANM mainly focused on record keeping. (Table 6.20)

- At the national level, the ICDS supervisor made only five visits in six months with the highest number of visits being made in Haryana and the least in Bihar. In most of the AWC across India the supervisor focused mainly on book keeping and like the ANM, its links with the administration were found to be weak. (Table 6.21)
- Visits made by the CDPO were found to be very low in almost all the states, with the average being just one in six months. Again, for almost all the AWC across India, CDPOs were mainly concerned with book keeping and almost ignored the function of preparing growth charts. (Table 6.22)
- The block education officer and the district project officer made no visits to the AWC across India. (Table 6.23)
- Number of visits made by the Sarpanch was also found to be very low, with the average for three months being just 4. Most of them were mainly concerned with ensuring food supply in comparison with the other tasks performed but the average for this task also remained low at 28 per cent. (Table 6.24)
- The numbers of visits made by the medical officer was quite low, with the average for six months being only one. He/she did better in maintaining links with the administration as compared to the other functions performed by it, as shown by the data in Table 6.25.

Table 6.20: Number of Visits by ANM/ LHV in AWC and Issues Discussed: Reported by AWW

State	Visits by ANM/LHV (No.)			What did he/she do? (%)			
	During last 30 days	During last 90 days	During last 6 months	Guidance for preparing growth charts	Record Keeping	Target/priority setting	Link with administration
Andhra Pradesh	2	5	9	14.2	46.1	3.4	36.3
Assam	1	3	7	15.2	47.9	29.7	7.2
Bihar	1	3	6	0.7	88.7	10.6	0.0
Chhattisgarh	2	7	13	17.3	35.3	47.4	0.0
Gujarat	2	6	12	24.1	63.1	12.8	0.0
Haryana	3	9	18	22.5	77.5	0.0	0.0
Himachal Pradesh	1	4	7	0.0	55.1	44.9	0.0
Jammu and Kashmir	1	3	6	0.6	61.3	37.2	0.9
Jharkhand	1	3	5	36.4	29.4	34.2	0.0
Karnataka	2	5	9	32.5	50.8	11.5	5.2
Kerala	1	3	6	6.2	28.3	65.4	0.0
Madhya Pradesh	2	5	11	17.2	72.8	7.4	2.6
Maharashtra	2	4	9	25.5	57.2	15.9	1.4
Orissa	2	5	10	10.6	75.3	14.1	0.0
Punjab	1	5	9	0.0	100.0	0.0	0.0
Rajasthan	1	4	8	10.9	80.4	8.7	0.0
Tamil Nadu	1	4	9	24.7	48.3	18.8	8.2
Uttar Pradesh	1	3	5	4.3	83.1	12.6	0.0
Uttarakhand	1	3	6	0.0	58.6	41.4	0.0
West Bengal	1	2	4	41.6	25.1	33.3	0.0
All India	**1**	**4**	**8**	**16.0**	**61.5**	**18.4**	**4.1**

Table 6.21: Number of visits by Supervisor in AWC and issues discussed: Reported by AWW

State	Visits by ICDS Supervisor (No.)			What did he/she do? (%.)					
	During last 30 days	During last 90 days	During last 6 months	Ensuring supply of food	Ensuring supply of other material	Guidance for preparing growth charts	Record Keeping	Target/priority setting	Link with administration
Andhra Pradesh	1	2	4	5.9	2.5	3.3	85.2	1.6	1.6
Assam	1	2	4	8.6	5.6	8.6	52.4	13.6	11.2
Bihar	0	1	2	22.2	3.9	0.8	62.7	3.9	6.5
Chhattisgarh	1	3	6	6.6	6.0	1.4	75.3	6.0	4.8
Gujarat	1	3	6	11.1	7.2	11.6	54.7	13.7	1.6
Haryana	2	3	8	1.2	1.5	0.0	94.0	1.7	1.7
Himachal Pradesh	1	2	3	14.8	0.0	0.0	67.9	14.9	2.4
Jammu and Kashmir	1	2	4	23.8	3.2	0.0	69.1	3.9	0.0
Jharkhand	1	3	5	5.2	1.1	2.8	87.2	0.0	3.7
Karnataka	1	2	3	21.1	2.5	12.2	45.0	12.5	6.7
Kerala	1	3	6	12.3	8.0	9.3	48.1	22.4	0.0
Madhya Pradesh	1	3	6	8.1	10.5	2.3	69.7	6.3	3.3
Maharashtra	1	3	6	9.0	13.0	9.9	62.3	2.9	2.9
Orissa	1	2	5	14.1	1.3	15.2	64.0	2.1	3.3
Punjab	1	3	5	70.8	0.0	0.0	29.2	0.0	0.0
Rajasthan	1	2	5	3.2	3.9	9.8	60.3	18.6	4.2
Tamil Nadu	1	2	5	13.7	11.0	3.5	55.5	5.3	11.0
Uttar Pradesh	1	2	4	19.3	3.1	2.4	68.0	6.4	0.8
Uttarakhand	1	2	4	6.1	2.2	0.0	89.6	2.2	0.0
West Bengal	1	2	5	5.8	0.7	3.6	87.5	0.0	2.5
All India	**1**	**2**	**5**	**12.8**	**5.0**	**5.3**	**67.1**	**6.6**	**3.3**

Table 6.22: Number of visits by CDPO/ ACDPO in AWC and issues discussed: Reported by AWW

State	Visits by CDPO/ACDPO (No.)			What did he/she do? (%)							
	During last 30 days	During last 90 days	During last 6 months	None	Ensuring supply of food	Ensuring supply of other material	Guidance for preparing growth charts	Record Keeping	Target/priority setting	Help in organising community meetings	Link with administration
Andhra Pradesh	0	1	1	0.0	2.5	4.2	0.0	88.0	3.2	0.0	2.1
Assam	0	0	0	4.1	8.0	0.0	0.0	19.1	20.6	27.4	20.9
Bihar	0	1	2	0.5	28.0	3.3	1.5	61.1	2.4	1.7	1.6
Chhattisgarh	0	0	1	25.5	14.9	2.7	0.0	30.4	7.2	2.2	17.2
Gujarat	0	0	1	0.0	5.1	4.7	7.6	61.6	17.0	0.0	4.1
Haryana	1	1	2	0.0	1.2	12.8	0.0	81.2	1.2	0.0	3.6
Himachal Pradesh	0	0	1	17.8	20.7	20.2	0.0	41.4	0.0	0.0	0.0
Jammu and Kashmir	0	0	1	1.2	5.1	1.3	0.0	71.4	0.0	0.0	21.1
Jharkhand	0	0	1	4.6	12.7	13.6	0.0	38.2	2.4	0.0	28.5
Karnataka	0	0	1	8.9	29.6	11.2	2.1	27.3	8.1	10.7	2.0
Kerala	0	0	1	24.8	0.0	0.0	0.0	0.0	3.8	71.4	0.0
Madhya Pradesh	0	1	1	0.0	9.0	2.4	2.7	42.9	11.6	3.0	28.5
Maharashtra	0	0	1	13.1	8.7	12.8	1.5	30.2	15.6	9.8	8.3
Orissa	0	0	1	2.8	11.0	0.0	6.2	46.0	8.5	7.0	18.6
Punjab	0	0	1	0.0	47.2	7.0	0.0	45.8	0.0	0.0	0.0
Rajasthan	0	0	1	22.2	16.3	9.3	3.0	39.0	3.7	0.0	6.4
Tamil Nadu	0	1	1	3.3	23.4	6.9	1.8	43.3	4.0	6.4	11.0
Uttar Pradesh	0	0	1	3.8	16.9	6.0	0.0	57.1	9.0	1.3	5.9
Uttarakhand	0	0	1	0.0	7.7	0.0	0.0	70.4	21.9	0.0	0.0
West Bengal	0	0	1	10.0	19.7	16.1	2.8	26.1	4.3	2.5	18.6
All India	**1**	**1**	**1**	**6.0**	**15.2**	**6.9**	**1.6**	**46.9**	**7.2**	**6.1**	**10.2**

Table 6.23: Number of visits by Block Education Officer in AWC: Reported by AWW

State	Visits by Block Education Officer (No.)			Visits by District Project Officer (No.)		
	During last 30 days	During last 90 days	During last 6 months	During last 30 days	During last 90 days	During last 6 months
Andhra Pradesh	0	0	0	0	0	0
Assam	0	0	0	0	0	0
Bihar	0	0	0	0	0	0
Chhattisgarh	0	0	0	0	0	0
Gujarat	0	0	0	0	0	0
Haryana	0	0	0	0	0	0
Himachal Pradesh	0	0	0	0	0	0
Jammu and Kashmir	0	0	0	0	0	0
Jharkhand	0	0	0	0	0	0
Karnataka	0	0	0	0	0	0
Kerala	0	0	0	0	0	0
Madhya Pradesh	0	0	0	0	0	0
Maharashtra	0	0	0	0	0	0
Orissa	0	0	0	0	0	0
Punjab	0	0	0	0	0	0
Rajasthan	0	0	0	0	0	0
Tamil Nadu	0	0	1	0	0	0
Uttar Pradesh	0	0	0	0	0	0
Uttarakhand	0	0	0	0	0	0
West Bengal	0	0	0	0	0	0
All India	0	0	0	0	0	0

Table 6.24: Number of visits by Sarpanch in AWC and issues discussed: Reported by AWW

State	Visits by Sarpanch (No.)			What did he/she do? (%)							
	During last 30 days	During last 90 days	During last 6 months	None	Ensuring supply of food	Ensuring supply of other material	Guidance for preparing growth charts	Record Keeping	Target/priority setting	Help in organising community meetings	Link with administration
Andhra Pradesh	1	2	3	4.9	49.3	0.5	4.8	2.0	0.8	35.7	2.0
Assam	1	2	4	1.8	37.1	15.5	3.6	1.8	0.0	31.5	8.7
Bihar	1	3	5	9.3	48.6	14.0	0.0	22.1	2.8	0.0	3.2
Chhattisgarh	1	4	8	21.8	18.0	10.4	0.0	0.0	5.8	2.8	41.2
Gujarat	1	3	6	32.5	19.0	0.0	0.0	0.0	1.0	45.3	2.3
Haryana	2	4	6	6.5	48.7	30.5	0.0	3.5	0.0	10.8	0.0
Himachal Pradesh	1	3	6	25.4	3.3	24.7	0.0	1.5	0.0	34.1	10.9
Jammu and Kashmir	1	2	5	8.7	27.7	1.1	0.0	37.7	0.0	6.9	18.0
Jharkhand	0	0	0	24.3	0.0	0.0	0.0	0.0	32.9	42.9	0.0
Karnataka	1	2	3	15.1	13.2	4.6	6.5	9.6	0.0	42.1	9.0
Kerala	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Madhya Pradesh	2	5	8	26.3	23.8	17.5	2.3	4.6	2.6	13.6	9.4
Maharashtra	1	4	6	28.3	41.3	8.5	5.3	0.0	0.0	11.9	4.7
Orissa	1	2	3	20.2	2.1	8.4	3.7	3.8	8.7	18.6	34.6
Punjab	2	7	11	53.3	24.4	18.7	3.7	0.0	0.0	0.0	0.0
Rajasthan	1	3	5	30.9	18.8	11.5	0.0	5.1	3.6	12.2	17.9
Tamil Nadu	0	1	2	9.5	13.7	0.0	1.6	3.2	0.0	66.0	6.0
Uttar Pradesh	1	3	5	19.3	30.0	11.9	0.0	13.5	4.4	5.9	15.1
Uttarakhand	0	1	1	11.2	0.0	25.7	0.0	47.8	5.5	0.0	9.8
West Bengal	0	0	1	3.8	0.0	3.0	0.0	0.0	0.0	16.2	77.0
All India	**2**	**4**		**19.4**	**28.0**	**9.9**	**2.3**	**7.2**	**2.2**	**19.2**	**11.9**

Table 6.25: Number of visits by Medical Officer in AWC and issues discussed: Reported by AWW

State	Visits by Medical Officer (No.)			What did he/she do? (%)			
	During last 30 days	During last 90 days	During last 6 months	Guidance for preparing growth charts	Record Keeping	Target/priority setting	Link with administration
Andhra Pradesh	0	0	1	41.9	23.6	12.4	22.1
Assam	0	0	1	11.0	8.1	42.1	38.8
Bihar	0	0	0	19.2	9.2	0.0	71.7
Chhattisgarh	0	0	1	30.2	30.3	39.5	0.0
Gujarat	0	1	2	29.6	22.8	3.0	44.7
Haryana	0	0	1	46.5	0.0	3.5	50.1
Himachal Pradesh	0	0	1	0.0	100.0	0.0	0.0
Jammu and Kashmir	0	1	1	1.3	46.0	42.4	10.3
Jharkhand	0	0	0	13.4	33.5	8.9	44.2
Karnataka	0	1	2	55.0	6.1	19.7	19.2
Kerala	0	1	1	13.3	18.4	68.4	0.0
Madhya Pradesh	0	1	1	11.2	48.2	9.8	30.8
Maharashtra	0	1	2	25.9	5.7	15.3	53.1
Orissa	0	0	1	3.3	17.3	23.9	55.6
Punjab	0	1	1	7.8	0.0	0.0	92.2
Rajasthan	0	1	2	7.4	14.8	11.6	66.2
Tamil Nadu	0	1	2	43.8	10.9	21.7	23.7
Uttar Pradesh	0	0	0	17.0	27.5	17.2	38.2
Uttarakhand	0	0	0	0.0	0.0	39.1	60.9
West Bengal	0	0	0	19.6	18.3	18.3	43.7
All India	**0**	**1**	**1**	**26.4**	**17.9**	**18.7**	**37.0**

6.3.10 ROLE OF COMMUNITY LEADERS IN THE FUNCTIONING OF AWC

Childcare is basically the responsibility of the family. A childcare programme cannot be confined to the child alone but has to be directed towards the family, particularly the mother. ICDS aims at enhancing the capabilities of family members and those around, to look after the health and nutrition needs of their children and to inculcate childcare practices. This calls for creating awareness among the community and households on childcare and involving them in the planning and monitoring process.

The ICDS programme has been envisaged and conceptualised as a community-based programme. The starting point for community participation is the appointment of a local woman as AWW who understands the attitudes, beliefs, practices and values of the people and to, ideally, function as a catalytic agent by using local resources for meeting the basic needs of the children. Further, efforts are being made to mobilise community support through involvement of Panchayati Raj institutions, promoting women's empowerment through schemes like the Indira

Mahila Yojna, and through involvement of NGOs. The evaluation study has considered support in terms of provision of space for various activities, mobilising beneficiaries, maintenance and improving services of the AWC. Overall, 15 such items of support were identified from 8 different kinds of community groups.

The survey found how much community participation was involved in running AWC. This included help from Panchayat, Village leaders/Village committee, women's group, mothers of children beneficiaries and KSY girls.

6.3.11 HELP FROM PANCHAYAT

More than 60 per cent of AWC in Kerala, Himachal Pradesh and Punjab had help from the **Panchayat** while less than 10 per cent of Uttarakhand and Jharkhand AWC had this help. On an average, 40 per cent of the AWC reported help from the Panchayat. At more than 30 per cent of the AWC Panchayat helped most in monitoring and providing infrastructure. (Table- 6.26)

Table 6.26: Percentage of AWC getting help from Panchayat

State	% AWW reported getting help from Panchayat	Kind of help				
		Mobilise children & mother	Monitoring	Providing infrastructure	Others	Total
Andhra Pradesh	41.6	35.2	33.5	18.5	12.8	100.0
Assam	44.5	2.7	76.7	20.6	0.0	100.0
Bihar	55.3	20.6	71.1	8.3	0.0	100.0
Chhattisgarh	54.1	18.3	19.5	49.8	12.4	100.0
Gujarat	39.0	34.8	15.4	36.3	13.5	100.0
Haryana	24.4	6.8	19.3	73.9	0.0	100.0
Himachal Pradesh	65.9	13.3	41.4	45.4	0.0	100.0
Jammu and Kashmir	19.0	8.9	82.4	4.4	4.2	100.0
Jharkhand	4.0	0.0	50.0	0.0	50.0	100.0
Karnataka	58.2	27.2	32.3	34.7	5.8	100.0
Kerala	87.6	20.3	17.1	62.7	0.0	100.0
Madhya Pradesh	35.9	25.3	32.4	35.2	7.2	100.0
Maharashtra	49.3	16.5	29.7	51.2	2.6	100.0
Orissa	28.7	18.8	34.5	41.3	5.5	100.0
Punjab	61.4	11.2	25.4	40.3	23.1	100.0
Rajasthan	17.6	24.4	41.7	33.9	0.0	100.0
Tamil Nadu	34.9	10.3	9.4	34.8	45.6	100.0
Uttar Pradesh	29.7	19.0	54.6	14.9	11.6	100.0
Uttarakhand	9.7	0.0	40.2	19.6	40.2	100.0
West Bengal	40.8	44.2	9.7	41.4	4.8	100.0
All India	**39.9**	**22.3**	**35.6**	**34.2**	**7.9**	**100.0**

6.3.12 HELP FROM VILLAGE LEADERS/COMMITTEE

Table 6.27 shows that 31.1 per cent of the AWC reported to have been receiving help from village leaders/ committee. A large proportion of the help has been provided in the form of 'monitoring' (40.8%) The other ways in which help is provided by the village leaders/ committee is in the form of 'mobilising children and mothers' (21.7%), 'providing infrastructure' (25.7%) and 'others' (11.8%). Assam records the highest percentage of AWWs who reported of getting help from village leaders/ committee (74.3%), while in Uttarakhand it is the least (3.9%). (Table 6.27)

Table 6.27: Percentage of AWC getting help from Village Leaders/Committee

State	% AWW reported getting help from Village Leaders/Committee	Kind of help				
		Mobilise children & mother	Monitoring	Providing infrastructure	Others	Total
Andhra Pradesh	33.6	25.8	49.3	11.8	13.1	100.0
Assam	74.3	14.7	68.3	15.5	1.5	100.0
Bihar	57.6	15.0	67.0	9.8	8.2	100.0
Chhattisgarh	28.9	32.1	38.1	10.8	19.0	100.0
Gujarat	19.5	53.8	9.6	29.6	6.9	100.0
Haryana	8.0	20.7	64.5	14.8	0.0	100.0
Himachal Pradesh	16.1	0.0	61.7	23.6	14.7	100.0
Jammu and Kashmir	33.8	10.0	45.3	44.7	0.0	100.0
Jharkhand	11.0	23.5	48.5	9.9	18.0	100.0
Karnataka	52.8	38.1	16.4	35.3	10.3	100.0
Kerala	49.5	27.2	22.3	50.5	0.0	100.0
Madhya Pradesh	30.3	31.5	13.5	31.8	23.2	100.0
Maharashtra	43.9	24.9	28.3	30.7	16.1	100.0
Orissa	42.5	13.8	40.0	40.3	5.9	100.0
Punjab	8.4	0.0	60.0	40.0	0.0	100.0
Rajasthan	15.0	8.6	68.3	0.0	23.2	100.0
Tamil Nadu	29.6	1.8	0.1	57.1	41.0	100.0
Uttar Pradesh	6.2	31.7	34.7	5.8	27.9	100.0
Uttarakhand	3.9	0.0	100.0	0.0	0.0	100.0
West Bengal	28.8	9.2	56.7	28.0	6.2	100.0
All India	**31.1**	**21.7**	**40.8**	**25.7**	**11.8**	**100.0**

6.3.13 HELP FROM WOMEN'S GROUPS

Looking at the national average, the data shows that 37.1 per cent of the AWWs reported of getting help from women's groups in some form or the other. A large proportion of this help (39.1%) was extended in the form of 'mobilising children and mothers', 28 per cent in the form of 'monitoring', 18 per cent by way of 'providing infrastructure' and 15 per cent in 'other' forms. It was seen that the maximum percentage of AWWs in Chhattisgarh (93.3%) reported to have received such help. The percentage in Uttarakhand, being 0 per cent, was the least (Table 6.28).

Table 6.28: Percentage of AWC getting help from Women's Group

State	% AWW reported getting help from Women's Group	Kind of help				
		Mobilise children & mother	Monitoring	Providing infrastructure	Others	Total
Andhra Pradesh	18.5	19.2	61.6	15.3	3.9	100.0
Assam	50.2	14.8	62.4	0.0	22.8	100.0
Bihar	10.4	39.2	30.1	30.8	0.0	100.0
Chhattisgarh	93.3	7.8	33.6	42.8	15.9	100.0
Gujarat	36.8	79.1	7.4	11.3	2.3	100.0
Haryana	17.0	11.6	62.6	16.7	9.0	100.0
Himachal Pradesh	69.9	30.3	14.5	28.6	26.6	100.0
Jammu and Kashmir	39.6	18.4	3.3	69.8	8.5	100.0
Jharkhand	45.4	71.7	24.4	0.0	3.9	100.0
Karnataka	59.4	31.5	32.6	11.1	24.9	100.0
Kerala	84.1	40.1	40.7	8.9	10.4	100.0
Madhya Pradesh	48.1	44.9	26.0	20.8	8.3	100.0
Maharashtra	60.3	30.3	29.1	15.5	25.1	100.0
Orissa	58.6	37.3	35.3	4.1	23.3	100.0
Punjab	6.1	27.6	0.0	72.4	0.0	100.0
Rajasthan	35.3	30.5	14.5	41.2	13.8	100.0
Tamil Nadu	29.9	20.9	8.6	35.2	35.3	100.0
Uttar Pradesh	15.7	66.7	8.9	18.6	5.8	100.0
Uttarakhand	0.0	-	-	-	-	-
West Bengal	26.5	82.5	9.8	2.4	5.4	100.0
All India	**37.1**	**39.1**	**28.0**	**18.0**	**15.0**	**100.0**

6.3.14 HELP FROM MOTHERS OF BENEFICIARIES

Looking at the national average, the data shows that 48.4 per cent of the AWWs reported getting help from the mothers of the beneficiary children in some form or the other. More than half the help (50.3%) was extended in the form of 'mobilising children and mothers', 21.2 per cent in the form of 'monitoring', 7.7 per cent by way of 'providing infrastructure' and 20.9 per cent in 'other' forms. It was seen that the maximum percentage of AWWs in Kerala (94%) reported to have received such help. The percentage in Uttarakhand, being 0 per cent, was the least (Table 6.29).

Table 6.29: Percentage of AWC getting help from mothers of beneficiary children

State	% AWW reported getting help from Mothers of beneficiary children	Kind of help				
		Mobilise children & mother	Monitoring	Providing infrastructure	Others	Total
Andhra Pradesh	28.0	19.6	18.1	17.9	44.4	100.0
Assam	82.7	11.4	47.1	0.0	41.5	100.0
Bihar	19.3	67.6	13.8	2.0	16.6	100.0
Chhattisgarh	57.5	50.5	6.7	19.1	23.6	100.0
Gujarat	56.2	55.5	22.1	1.5	20.9	100.0
Haryana	7.2	62.1	0.0	21.4	16.5	100.0
Himachal Pradesh	78.8	41.2	22.0	14.6	22.2	100.0
Jammu and Kashmir	42.8	57.7	10.0	0.0	32.3	100.0
Jharkhand	53.4	57.8	28.2	7.0	7.0	100.0
Karnataka	43.7	27.0	34.1	20.3	18.7	100.0
Kerala	94.0	38.2	39.3	3.7	18.7	100.0
Madhya Pradesh	46.0	68.0	14.4	12.2	5.4	100.0
Maharashtra	56.6	60.5	14.5	10.8	14.1	100.0
Orissa	61.0	51.5	25.3	5.1	18.1	100.0
Punjab	10.1	83.3	0.0	16.7	0.0	100.0
Rajasthan	35.0	41.5	33.6	2.6	22.3	100.0
Tamil Nadu	32.5	3.6	0.0	35.7	60.7	100.0
Uttar Pradesh	39.8	70.9	6.9	3.9	18.3	100.0
Uttarakhand	0.0	-	-	-	-	-
West Bengal	82.0	60.6	24.2	0.0	15.2	100.0
All India	**48.4**	**50.3**	**21.2**	**7.7**	**20.9**	**100.0**

6.3.15 HELP FROM KSY GIRLS

The data shows that a total 40.9 per cent of the AWC have reported to have been receiving help from the KSY girls in the country. A large proportion of the help has been provided in the form of 'mobilising children and mothers' (35.7%). The other forms of help provided by the KSY girls are 'Monitoring' (18.4%), 'providing infrastructure' (8.5%) and 'others' (37.4%). Chhattisgarh records the highest percentage of AWWs getting help from the KSY girls (78.4%), while in Uttarakhand it is the least (0%) (Table 6.30).

Table 6.30: Percentage of AWC getting help from KSY girls

State	% AWW reported getting help from KSY girls	Kind of help				
		Mobilising children & mothers	Monitoring	Providing infrastructure	Others	Total
Andhra Pradesh	42.2	13.3	13.2	0.0	73.6	100.0
Assam	39.9	0.0	43.1	0.0	56.9	100.0
Bihar	59.3	25.2	24.2	9.6	41.1	100.0
Chhattisgarh	78.4	31.1	11.1	10.4	47.5	100.0
Gujarat	15.3	55.0	29.7	0.0	15.3	100.0
Haryana	13.6	6.1	0.0	0.0	93.9	100.0
Himachal Pradesh	38.8	3.1	0.0	22.5	74.5	100.0
Jammu and Kashmir	29.8	60.9	11.4	4.4	23.4	100.0
Jharkhand	62.3	48.3	13.3	4.2	34.2	100.0
Karnataka	56.5	20.2	27.1	27.7	25.0	100.0
Kerala	19.7	37.8	0.0	36.0	26.3	100.0
Madhya Pradesh	73.0	41.9	29.1	17.9	11.2	100.0
Maharashtra	64.0	64.6	7.0	0.0	28.4	100.0
Orissa	58.7	33.7	10.5	5.0	50.8	100.0
Punjab	3.5	0.0	100.0	0.0	0.0	100.0
Rajasthan	13.6	25.5	27.7	22.4	24.4	100.0
Tamil Nadu	17.5	45.8	12.1	0.0	42.1	100.0
Uttar Pradesh	49.3	43.0	16.6	3.5	37.0	100.0
Uttarakhand	0.0	-	-	-	-	-
West Bengal	5.9	9.7	38.2	20.2	31.9	100.0
All India	**40.9**	**35.7**	**18.4**	**8.5**	**37.4**	**100.0**

6.4 PROFILE OF FUNCTIONARIES

Most of the AWWs are in the age group (28-49) years; with the average age being 39 years. On an average, 8.5 per cent of AWWs were observed to be unmarried, 83.8 per cent to be married and 7.8 per cent were either widowed or divorced (Table 6.31). In Orissa, the percentage of unmarried AWWs was the highest. The highest percentages of Divorced/widowed AWWs were found in Madhya Pradesh (21.9%), Chhattisgarh (13.2%) and Himachal Pradesh (11.3%). Majority of the AWWs were found to be married (83.8%).

Table 6.31: Average Age of AWWs and distribution of AWW by marital status

State	Age	Marital status		
		Unmarried	Married	Widowed / Divorced
Andhra Pradesh	35	7.2	81.9	10.9
Assam	37	12.5	85.3	2.2
Bihar	37	2.2	92.2	5.6
Chhattisgarh	41	12.9	73.9	13.2
Gujarat	37	1.9	95.8	2.4
Haryana	41	0.8	95.3	3.9
Himachal Pradesh	36	1.2	87.5	11.3
Jammu and Kashmir	39	3.8	96.2	0.0
Jharkhand	36	6.6	87.3	6.1
Karnataka	36	15.5	80.1	4.4
Kerala	41	9.5	87.1	3.4
Madhya Pradesh	39	10.1	68.0	21.9
Maharashtra	42	2.9	88.7	8.4
Orissa	39	21.8	70.9	7.3
Punjab	39	13.6	78.6	7.8
Rajasthan	36	14.3	77.5	8.3
Tamil Nadu	47	8.1	86.8	5.1
Uttar Pradesh	37	6.8	83.5	9.6
Uttarakhand	33	6.8	93.2	0.0
West Bengal	42	12.4	85.4	2.2
All India	**39**	**8.5**	**83.8**	**7.8**

6.4.1 LEVEL OF EDUCATION OF AWWS

Considering the data on education, it was observed that on an average 1.8 per cent of AWWs were illiterate, 0.4 per cent, 4.6 per cent and 14.2 per cent had obtained below primary, primary and middle level education respectively, while on an average 41.4 per cent, 22.5 per cent and 15 per cent of AWWs had obtained education up to matric/high school, higher secondary and graduate and above respectively (Table 6.32).

Looking at the data it can be said that most of the AWWs are literate, as the illiteracy rate ranges between (0-20) per cent only. The highest percentages of illiterate AWWs is found to be in Punjab while percentage AWWs with qualifications graduate and above are found to be the highest in Uttarakhand.

Table 6.32: Percentage distribution of AWW by level of education

State	Illiterate	Below primary	Primary	Middle	Matric/High school	HS	Graduate & Above
Andhra Pradesh	1.2	0.7	9.3	13.7	48.0	10.5	16.8
Assam	2.2	0.0	0.0	11.1	56.0	26.1	4.6
Bihar	4.5	0.7	1.5	3.9	43.7	28.2	17.5
Chhattisgarh	0.0	0.0	27.0	16.3	18.2	25.2	13.4
Gujarat	0.0	3.1	9.5	11.2	30.9	27.9	17.6
Haryana	1.7	0.0	0.0	2.0	58.1	35.1	3.2
Himachal Pradesh	0.0	0.0	8.7	9.9	62.7	18.8	0.0
Jammu and Kashmir	0.0	0.0	0.5	18.3	37.3	43.1	0.8
Jharkhand	0.0	0.0	0.0	7.8	50.1	32.6	9.5
Karnataka	1.3	0.0	6.4	6.5	50.7	29.3	5.9
Kerala	3.1	0.0	1.6	1.7	43.9	43.4	6.2
Madhya Pradesh	1.2	0.0	3.3	17.6	33.7	29.4	14.8
Maharashtra	0.0	0.0	7.6	18.8	50.8	12.6	10.2
Orissa	0.0	0.0	1.0	15.7	36.6	11.8	35.1
Punjab	7.0	0.0	0.0	5.2	38.4	30.3	19.2
Rajasthan	0.0	3.1	19.2	48.8	17.1	10.6	1.2
Tamil Nadu	3.7	0.0	0.0	11.0	65.1	9.5	10.8
Uttar Pradesh	4.3	0.0	0.0	8.6	28.1	27.0	32.1
Uttarakhand	0.0	0.0	0.0	1.9	11.7	20.4	66.0
West Bengal	0.0	0.0	0.0	22.1	52.5	20.0	5.4
All India	**1.8**	**0.4**	**4.6**	**14.2**	**41.4**	**22.5**	**15.0**

6.4.2 Residence of AWWs

From the given data, it could be said that on an average 81.5 per cent of AWWs were residing in the village itself while 12.5 per cent and 3.5 per cent were from other villages within a distance of 5 Km and more than 5 Km respectively. Another 2.5 per cent of the AWWs were from nearby towns (Table 6.33). It is seen that in almost all the states the majority of the AWWs live in the village only, with the figures ranging between 26.2 and 100 per cent. It is only in Tamil Nadu and West Bengal that the percentage of AWWs residing within the village is low as compared to the other states, the figures being 43.9 per cent and 52.9 per cent respectively.

Table 6.33: Percentage distribution of AWW by Residence

State	Within the village	Other village within 5 Km	Other village more than 5 Km	Nearby town	Total
Andhra Pradesh	92.7	6.4	1.0	0.0	100
Assam	87.1	10.7	0.0	2.2	100
Bihar	98.6	1.4	0.0	0.0	100
Chhattisgarh	89.0	4.8	0.0	6.2	100
Gujarat	77.7	17.4	4.9	0.0	100
Haryana	96.7	1.7	0.8	0.8	100
Himachal Pradesh	69.9	30.1	0.0	0.0	100
Jammu and Kashmir	90.6	5.1	3.3	1.0	100
Jharkhand	87.8	10.4	1.8	0.0	100
Karnataka	96.8	3.2	0.0	0.0	100
Kerala	72.8	25.8	1.4	0.0	100
Madhya Pradesh	96.4	1.5	1.6	0.5	100
Maharashtra	88.9	7.2	2.0	2.0	100
Orissa	79.8	15.3	3.1	1.8	100
Punjab	85.0	8.9	3.4	2.7	100
Rajasthan	84.9	6.2	3.4	5.6	100
Tamil Nadu	43.9	29.2	13.9	13.1	100
Uttar Pradesh	80.3	17.5	1.0	1.2	100
Uttarakhand	68.8	31.2	0.0	0.0	100
West Bengal	52.9	23.1	17.1	6.9	100
All India	**81.5**	**12.5**	**3.5**	**2.5**	**100**

6.4.3 Training of AWWs

The given data shows the percentage of the AWWs who attended the training along with its duration in days. According to the data, only 29.2 per cent of the AWWs of Punjab attended the training, while in Andhra Pradesh, Haryana, Jharkhand, Rajasthan, the rate was 100 per cent. The range of the number of days of training attended by them was between 33 and 88 days. The range of the AWWs who attended the refresher course in Growth and Monitoring was between 33 and 92.8 per cent across the states. The range of number of days the AWWs attended this course across the states was between 4 and 14 days. The range of the number of AWWs who attended joint training with health workers was between 6.5 and 94.9 per cent. The range of the number of days this programme was attended was between 2and 10 days across the states; as shown by the data.

The Skill training/ Special training taken up by the AWW was very low in Bihar (2.2%), while highest number of AWWs attended this in Punjab (93.9%). The range of the duration of the workshop attended by the AWWs across the states was 2-10 days.

Trainings organised for AWWs include job training, refresher course in growth monitoring and pre-school education, joint training with health workers, special skills/training. Job training was attended by 84 per cent of AWWs. Growth monitoring and pre-school refresher courses were attended by 70.2 per cent and 75.2 per cent of AWWs respectively. Joint trainings with health workers were attended by 55 per cent of AWWs on the average and skill training by 30 per cent (Table 6.34). Andhra Pradesh, Assam, Gujarat, Haryana, Jharkhand, Maharashtra, Orissa, Rajasthan, Tamil Nadu and West Bengal all had more than 95 per cent of their AWWs who attended job training.

Table 6.34: Percentage of AWW attended training & duration (in days)

State	Job Training		Refresher course in growth monitoring		Refresher course in pre-school education		Joint training with health worker		Skill training/special training	
	% of AWW Attended	Duration (in days)	% of AWW Attended	Duration (in days)	% of AWW Attended	Duration (in days)	% of AWW Attended	Duration (in days)	% of AWW Attended	Duration (in days)
Andhra Pradesh	100.0	69	85.7	9	76.6	7	26.7	4	30.6	5
Assam	97.2	68	39.2	8	61.7	9	30.1	4	25.4	6
Bihar	91.7	51	84.2	11	95.2	11	94.9	2	2.2	6
Chhattisgarh	58.5	52	74.8	12	79.7	11	48.9	5	43.5	7
Gujarat	95.1	73	73.6	11	70.4	8	63.1	6	26.8	4
Haryana	100	62	82.8	14	76.8	11	91.9	6	28.4	4
Himachal Pradesh	52.5	88	73.9	11	73.9	10	47.9	5	43.7	4
Jammu and Kashmir	62.0	70	33.0	13	45.1	14	38.8	5	7.3	7
Jharkhand	100	45	46.3	10	33.9	8	12.0	7	11.3	7
Karnataka	64.1	42	64.4	4	63.8	7	70.8	4	29.1	2
Kerala	90.6	55	78.8	11	77.8	8	6.5	7	29.4	3
Madhya Pradesh	80.9	51	68.3	9	74.0	11	69.0	4	30.6	5
Maharashtra	99.7	72	81.7	12	82.1	12	69.7	7	45.3	5
Orissa	98.3	71	92.4	12	91.5	11	71.4	6	37.7	6
Punjab	29.2	61	92.8	14	90.1	14	90.1	10	93.9	10
Rajasthan	100	48	58.5	6	72.1	6	57.8	3	34.7	5
Tamil Nadu	96.0	33	83.4	7	94.3	8	75.7	5	62.7	4
Uttar Pradesh	57.1	43	46.0	7	64.3	12	58.4	3	29.7	6
Uttarakhand	85.4	37	89.2	7	98.1	10	56.4	5	36.4	5
West Bengal	98.0	66	77.2	8	84.0	7	23.2	5	7.4	5
All India	**84.0**	**58**	**70.2**	**9**	**75.2**	**10**	**55.2**	**5**	**29.9**	**5**

Considering the data on percentage of AWWs who received the handbook (Table 6.35), it was found that the AWWs who had received the handbook ranged from 3.4 per cent in Punjab to 97.5 per cent in Gujarat. In states like Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Punjab and Uttarakhand; 100 per cent of the AWWs referred to the handbook. The main reason given by the AWWs for not referring to the handbook was that they found it very difficult to use, as 90 per cent of the AWWs reported. 4.1 per cent said that the handbook was not relevant, 3.4 per cent said that they knew it very well, while 2.5 per cent gave other reasons.

Table 6.35: Percentage of AWW received ICDS handbook and reasons for not used

State	Received ICDS hand book	Referred ICDS hand book		Reasons for not referring			
		Yes	No	Not relevant	Difficult to use	Know it very well	Other reasons
Andhra Pradesh	41.2	71.0	29.0	1.1	96.1	0.0	2.9
Assam	78.9	97.3	2.7	0.0	86.8	0.0	13.2
Bihar	59.2	66.1	33.9	0.0	98.0	0.0	2.0
Chhattisgarh	74.5	100.0	0.0	0.0	100.0	0.0	0.0
Gujarat	97.5	100.0	0.0	0.0	50.4	0.0	49.6
Haryana	84.0	70.2	29.8	0.0	100.0	0.0	0.0
Himachal Pradesh	88.7	100.0	0.0	0.0	100.0	0.0	0.0
Jammu and Kashmir	43.0	92.7	7.3	0.0	97.7	0.0	2.3
Jharkhand	21.4	100.0	0.0	1.4	98.6	0.0	0.0
Karnataka	75.7	56.1	43.9	25.7	66.5	7.9	0.0
Kerala	17.1	74.6	25.4	7.3	92.7	0.0	0.0
Madhya Pradesh	54.0	96.7	3.3	0.0	70.0	30.0	0.0
Maharashtra	71.7	90.7	9.3	2.6	86.6	4.8	5.9
Orissa	39.6	74.9	25.1	0.0	98.0	0.0	2.0
Punjab	3.4	100.0	0.0	0.0	100.0	0.0	0.0
Rajasthan	94.4	93.9	6.1	0.0	100.0	0.0	0.0
Tamil Nadu	88.4	97.1	2.9	7.0	82.8	0.0	10.2
Uttar Pradesh	75.4	87.8	12.2	2.1	88.6	0.0	9.3
Uttarakhand	89.2	100.0	0.0	0.0	100.0	0.0	0.0
West Bengal	40.1	86.6	13.4	7.4	90.6	2.1	0.0
All India	**62.1**	**86.8**	**13.2**	**4.1**	**90.0**	**3.4**	**2.5**

6.4.4 PROFILE OF AWHS

The age of the AWHs working in the AWC across the states ranges from 35-45 years (Table 6.36). The national average shows that 71.6 per cent of them are married, 20 per cent are widowed/divorced, whereas 8.4 per cent are unmarried. The highest percentage of married AWHs was in Assam (93.1%).

Table 6.36: Average Age of AWHs and percentage distribution marital status

State	Age	Marital status		
		Unmarried	Married	Widowed / Divorced
Assam	37	7.0	93.1	0.0
Bihar	36	10.3	77.6	12.2
Chhattisgarh	45	14.0	62.0	24.0
Gujarat	41	3.8	87.4	8.8
Haryana	44	0.8	79.9	19.3
Himachal Pradesh	41	0.0	86.1	13.9
Jammu and Kashmir	40	17.7	76.8	5.5
Jharkhand	35	11.5	77.8	10.7
Karnataka	43	7.5	64.1	28.4
Kerala	44	15.2	81.4	3.4
Madhya Pradesh	40	10.1	68.8	21.1
Maharashtra	43	2.4	74.9	22.6
Orissa	45	9.4	49.1	41.5
Punjab	45	9.3	65.2	25.5
Rajasthan	43	3.7	58.1	38.3
Tamil Nadu	43	11.5	64.1	24.4
Uttar Pradesh	36	10.9	78.2	10.9
Uttarakhand	36	3.4	81.9	14.7
West Bengal	39	3.8	72.2	24.0
All India	**40**	**8.4**	**71.6**	**20.0**

6.4.5 LEVEL OF EDUCATION OF AWHS

Considering the data on education, it was observed that on an average 26.2 per cent AWHs were illiterate, 15.8 per cent, 17.3 per cent and 30.4 per cent had obtained below-primary, primary and middle level education respectively, while on an average 7.8 per cent and 2.6 per cent of AWHs had obtained education up to matric/high school and higher secondary and above (Table 6.37).

Looking at the data it could be said that 3/4th of the AWHs are literate. The highest percentages of illiterate AWHs is found to be in Andhra Pradesh (64.7%) while the percentage AWHs with qualifications HS and above are found to be the highest in Jammu & Kashmir (15.5%).

Table 6.37: Percentage distribution of AWH by level of education

State	Illiterate	Below primary	Primary	Middle	Matric/High school	HS & Above
Andhra Pradesh	64.7	24.4	6.8	2.1	2.0	0.0
Assam	1.2	1.2	0.0	77.2	14.1	6.2
Bihar	42.5	12.9	11.3	15.8	16.5	1.1
Chhattisgarh	5.7	63.3	24.4	6.0	0.0	0.6
Gujarat	25.9	14.8	25.5	26.1	0.0	7.8
Haryana	60.5	2.4	17.2	17.3	2.7	0.0
Himachal Pradesh	9.9	8.7	36.5	18.9	26.1	0.0
Jammu and Kashmir	59.3	2.1	2.6	17.8	2.7	15.5
Jharkhand	4.4	13.5	17.4	48.6	12.0	4.2
Karnataka	55.0	35.4	9.6	0.0	0.0	0.0
Kerala	6.1	0.0	2.1	37.7	49.9	4.3
Madhya Pradesh	29.1	21.1	18.8	16.3	8.3	6.5
Maharashtra	10.3	20.8	23.8	38.1	5.8	1.3
Orissa	14.1	40.6	28.1	14.9	2.4	0.0
Punjab	56.8	6.1	15.0	11.7	10.4	0.0
Rajasthan	48.9	25.3	19.4	3.9	2.5	0.0
Tamil Nadu	31.1	15.8	21.5	19.6	9.0	3.0
Uttar Pradesh	18.3	0.5	19.0	52.4	7.1	2.7
Uttarakhand	1.9	3.9	14.5	71.0	5.3	3.4
West Bengal	2.3	7.0	23.2	64.6	2.9	0.0
All India	**26.2**	**15.8**	**17.3**	**30.4**	**7.8**	**2.6**

6.4.6 RESIDENCE OF AWHS

From the given data, it can be said that on an average 88.6 per cent of AWHs were residing in the village itself while 9.2 per cent and 1.2 per cent were from other villages within 5 Km and more than 5Km respectively. In almost all the states, the majority of the AWWs live in the village, with the figures ranging between 67.2 and 100 per cent.

Table 6.38: Percentage distribution of AWH by Residence

State	Within the village	Other village within 5 Km	Other village more than 5 Km	Nearby town	Total
Andhra Pradesh	99.6	0.4	0.0	0.0	100.0
Assam	74.0	23.0	3.1	0.0	100.0
Bihar	98.6	0.7	0.7	0.0	100.0
Chhattisgarh	98.6	0.0	0.0	1.5	100.0
Gujarat	97.0	3.1	0.0	0.0	100.0
Haryana	95.9	0.0	1.7	2.5	100.0
Himachal Pradesh	72.5	10.1	0.0	17.4	100.0
Jammu and Kashmir	96.0	2.6	0.8	0.5	100.0
Jharkhand	91.7	8.3	0.0	0.0	100.0
Karnataka	90.4	9.6	0.0	0.0	100.0
Kerala	78.5	17.7	3.8	0.0	100.0
Madhya Pradesh	96.7	2.8	0.0	0.5	100.0
Maharashtra	95.9	3.5	0.6	0.0	100.0
Orissa	97.4	2.6	0.0	0.0	100.0
Punjab	100.0	0.0	0.0	0.0	100.0
Rajasthan	93.6	2.7	0.0	3.8	100.0
Tamil Nadu	81.0	16.1	0.0	2.9	100.0
Uttar Pradesh	83.8	14.5	1.7	0.0	100.0
Uttarakhand	79.9	20.1	0.0	0.0	100.0
West Bengal	67.2	26.1	5.9	0.8	100.0
Delhi	78.3	21.7	0.0	0.0	100.0
All India	**88.6**	**9.2**	**1.2**	**1.0**	**100.0**

6.5. OBSERVATION OF THE INVESTIGATOR

6.5.1 INVESTIGATOR'S OBSERVATION ABOUT MAINTENANCE OF RECORDS

Maintaining records of all activities carried out at the AWC is a very important responsibility of the AWW. Record maintenance facilitates supervision and evaluation, and helps ensure better implementation of the ICDS programme. Registers maintained by the AWW include the survey register for the entire area covered by the AWC, the attendance register, the SNP register, the PSE register, register of stock, the daily diary, etc. In addition, the AWW also maintains a record of all immunisations carried out for children and pregnant women, a growth card for all children up to 6 years, a record for referral cases, etc.

AWC in Haryana, Punjab, Maharashtra and Tamil Nadu scored high, with more than 70 per cent of them maintaining registers. AWC in Bihar, Chhattisgarh and Rajasthan fared comparatively low with only 10 per cent of them maintaining accurate registers. In most states attendance registers were updated pretty accurately and regularly while the growth and health referral registers received comparatively less attention (Table 6.39).

Table 6.39: Investigators' observations on accuracy of maintenance of different records (%AWC)

State	Maintenance registers	Maintenance of attendance	Recording individual growth cards
Andhra Pradesh	43.9	45.2	44.6
Assam	37.5	44.4	19.2
Bihar	10.8	21.8	1.7
Chhattisgarh	10.0	43.1	18.7
Gujarat	30.4	45.7	22.2
Haryana	94.0	95.1	95.5
Himachal Pradesh	60.0	71.3	54.0
Jammu and Kashmir	26.9	29.0	2.6
Jharkhand	59.6	73.9	36.9
Karnataka	36.4	52.8	28.2
Kerala	62.8	74.8	65.8
Madhya Pradesh	21.4	30.6	10.5
Maharashtra	73.4	88.1	70.8
Orissa	52.9	50.5	50.0
Punjab	71.3	71.3	0.0
Rajasthan	8.7	14.7	3.9
Tamil Nadu	71.3	69.8	58.8
Uttar Pradesh	33.5	55.4	7.3
Uttarakhand	49.7	55.4	9.7
West Bengal	56.4	75.4	27.1
All India	**41.4**	**53.9**	**28.2**

6.5.2 INVESTIGATOR'S OBSERVATION ON CLEANLINESS

The investigator observed a number of factors to assess the overall cleanliness of the AWC such as the cleanliness of water storage containers, state of building and equipment, toilets, utensils for food preparation and utensils used for serving food. Among the big states Kerala, Chhattisgarh and Tamil Nadu fared well with more than 60 per cent of their AWC keeping the premises very clean (Table – 6.40). Less than 10 per cent of AWC in Bihar and Assam were clean. They fared the worst of all states. While water storage and utensils were generally found to be clean, most states' toilets were unhygienic.

Table 6.40: Observation of the investigator about cleanliness of the AWC (% AWC)

State	Very clean	Satisfactory	Unclean/Unhygienic
Andhra Pradesh	43.9	43.7	12.4
Assam	5.8	84.6	9.6
Bihar	7.8	77.4	14.8
Chhattisgarh	63.9	33.0	3.1
Gujarat	56.6	32.4	11.0
Haryana	59.1	40.9	0.0
Himachal Pradesh	57.6	42.4	0.0
Jammu and Kashmir	24.1	74.1	1.8
Jharkhand	17.5	62.6	19.9
Karnataka	37.4	57.9	4.7
Kerala	75.7	19.4	4.9
Madhya Pradesh	15.6	79.1	5.3
Maharashtra	45.0	50.7	4.3
Orissa	38.8	55.8	5.4
Punjab	16.2	80.5	3.4
Rajasthan	33.9	53.5	12.6
Tamil Nadu	61.4	27.5	11.1
Uttar Pradesh	21.4	73.8	4.8
Uttarakhand	54.6	45.4	0.0
West Bengal	11.0	60.9	28.1
All India	**32.0**	**58.4**	**9.6**

6.5.3 INVESTIGATORS' OBSERVATION ABOUT CLEANLINESS OF TOILETS

The cleanliness of the toilets of the AWC was examined by the investigators and it was found that on an average only 9.9 per cent of the total toilets were 'Very clean', 28.7 per cent were 'Satisfactory' and 61.3 per cent of the toilets were 'Unclean/unhygienic'. It was observed that the maximum number of 'Very clean' toilets of the AWC were in Kerala (58.8%) while the least number of 'Very clean' toilets were found in Punjab (0%) and Bihar (0.4%). Also, the maximum percentage of 'unclean/unhygienic' toilets were found in Bihar (94.8%) (Table 6.41).

Table 6.41: Observation of the investigator about cleanliness of toilet (% AWC)

State	Very clean	Satisfactory	Unclean/Unhygienic
Andhra Pradesh	12.5	29.1	58.5
Assam	11.4	28.0	60.7
Bihar	0.4	4.9	94.8
Chhattisgarh	4.8	28.2	67.0
Gujarat	13.8	29.4	56.8
Haryana	3.6	37.3	59.1
Himachal Pradesh	44.8	41.4	13.9
Jammu and Kashmir	16.2	53.1	30.8
Jharkhand	5.0	27.4	67.6
Karnataka	17.4	24.4	58.2
Kerala	58.8	28.8	12.3
Madhya Pradesh	5.1	32.7	62.2
Maharashtra	14.1	38.1	47.8
Orissa	7.8	18.3	73.9
Punjab	0.0	35.4	64.6
Rajasthan	1.3	21.6	77.1
Tamil Nadu	31.6	29.1	39.3
Uttar Pradesh	1.1	24.7	74.3
Uttarakhand	5.3	25.3	69.4
West Bengal	2.7	44.5	52.9
All India	**9.9**	**28.7**	**61.3**

6.5.4 INVESTIGATORS' OBSERVATION ABOUT CLEANLINESS OF THE COOKING AREA

The cleanliness of the cooking area of the AWC was examined by the investigators and it was found that on a national average, 17 per cent of the AWC had a 'Very clean' cooking area, 50.4 per cent had a 'Satisfactory' cooking area, while 32.5 per cent of the AWC had 'Unclean/unhygienic' cooking areas. Among the states, it was seen that in Kerala, the highest percentage of AWC had 'Very clean' cooking area (70.9%). The maximum percentage of AWC with 'Unclean/unhygienic' cooking areas was found in Haryana (84.1%) (Table 6.42).

Table 6.42: Observation of the investigator about cleanliness of the cooking area (% AWC)

State	Very clean	Satisfactory	Unclean/Unhygienic
Andhra Pradesh	25.1	58.8	16.1
Assam	5.9	26.8	67.3
Bihar	3.2	51.2	45.7
Chhattisgarh	26.9	54.4	18.7
Gujarat	53.8	24.0	22.2
Haryana	6.7	9.2	84.1
Himachal Pradesh	40.2	59.8	0.0
Jammu and Kashmir	24.1	74.1	1.8
Jharkhand	4.6	60.1	35.4
Karnataka	14.2	66.7	19.0
Kerala	70.9	26.0	3.2
Madhya Pradesh	7.3	73.9	18.8
Maharashtra	20.5	55.6	23.9
Orissa	9.8	68.8	21.4
Punjab	0.0	88.3	11.7
Rajasthan	19.6	65.0	15.4
Tamil Nadu	51.5	36.2	12.3
Uttar Pradesh	4.9	34.9	60.2
Uttarakhand	12.6	40.2	47.2
West Bengal	2.8	53.2	44.1
All India	**17.0**	**50.4**	**32.5**

6.5.5 INVESTIGATOR'S OBSERVATION ABOUT DIFFERENT ITEMS FOR PSE

Our investigators reported that insofar as availability of items like toys, building blocks, learning kits, paint brushes and story books for children's preschool education, Maharashtra, Kerala and Himachal Pradesh performed the best. Bihar had the least number of AWC with adequate facilities for PSE with only around 10-20 per cent having the required items for PSE. On an average the performance of all the states was pretty good (Table 6.43).

Table 6.43: Investigators observations on about items of PSE (% AWC)

State	Toys	Building Blocks	Counting frames	Paint/ brushes	Posters/ charts	Learning aids/kits for non-formal education	Pamphlets	Story books/picture books	Material made by AWW
Andhra Pradesh	53.1	36.1	40.6	30.8	82.4	71.4	63.5	69.2	40.3
Assam	48.5	44.1	60.6	49.7	83.5	57.1	53.4	76.8	50.7
Bihar	10.4	0.0	15.1	4.3	50.3	7.9	14.3	21.3	3.8
Chhattisgarh	75.2	49.5	68.9	16.8	75.6	58.4	60.5	62.8	14.8
Gujarat	85.7	68.1	62.6	33.8	75.8	45.8	20.8	32.4	27.3
Haryana	84.3	63.9	94.3	27.1	98.8	97.3	96.0	96.8	44.3
Himachal Pradesh	100.0	83.5	98.8	60.3	98.8	97.6	87.5	96.2	82.4
Jammu and Kashmir	60.2	44.8	48.3	3.3	85.4	51.5	76.2	79.5	78.8
Jharkhand	30.8	7.0	26.0	11.8	78.1	47.0	28.9	35.9	5.9
Karnataka	79.1	53.3	82.2	41.5	89.9	78.7	63.7	78.1	34.5
Kerala	96.9	95.1	96.9	69.3	95.1	96.9	79.9	87.7	29.6
Madhya Pradesh	44.3	19.8	48.9	8.8	73.9	47.1	39.9	38.7	30.1
Maharashtra	87.3	82.0	95.7	67.1	96.3	84.3	83.2	85.5	67.2
Orissa	86.8	77.6	89.8	56.9	91.3	87.4	84.5	87.3	40.9
Punjab	47.8	22.5	12.7	0.0	89.5	17.1	5.1	42.3	28.9
Rajasthan	69.4	27.6	36.0	8.3	81.5	41.8	52.6	52.8	40.5
Tamil Nadu	73.4	78.9	76.5	57.2	77.1	78.3	65.8	75.3	66.5
Uttar Pradesh	73.9	62.3	83.6	23.1	80.5	57.5	25.6	52.1	25.2
Uttarakhand	57.2	56.9	64.4	19.6	87.7	62.2	28.8	52.6	51.4
West Bengal	41.6	21.8	25.5	8.1	47.8	20.5	16.6	30.8	4.8
All India	**62.3**	**47.0**	**60.0**	**28.5**	**77.7**	**55.8**	**46.5**	**57.5**	**33.2**

6.5.6 INVESTIGATOR'S OBSERVATION ABOUT MEDICAL KITS

The investigators also observed the availability and condition of the medical kits in the AWC. It was found that in most AWC (almost 100%) of Himachal Pradesh, Gujarat, Karnataka, Tamil Nadu and Uttarakhand the medical kit were available (Table– 6.44). In Punjab, Jharkhand, Kerala, Chhattisgarh and J&K only a single digit 0-10 per cent percentage of their AWC had medical kits. On a national average, 58 per cent of all AWC owned medical kits. Of this, the data shows that 13 per cent of the medical kits so examined had already expired. It was seen that in Tamil Nadu the percentage of expired medical kits was as high as 40.9 per cent.

Table 6.44: Investigators' observations on medical kits (%AWC)

State	% AWC having medical kits	% AWC found medical kits in proper order	% AWC found medical kits expired
Andhra Pradesh	83.2	60.3	7.2
Assam	79.9	77.0	26.3
Bihar	14.8	60.2	26.0
Chhattisgarh	0.0	-	-
Gujarat	95.7	91.7	18.2
Haryana	76.6	97.8	2.2
Himachal Pradesh	100.0	97.6	18.6
Jammu and Kashmir	0.0	-	-
Jharkhand	8.0	100.0	28.2
Karnataka	94.6	84.6	9.5
Kerala	6.3	100.0	52.8
Madhya Pradesh	22.3	64.6	16.2
Maharashtra	84.3	86.2	8.8
Orissa	76.7	70.8	13.7
Punjab	5.5	50.0	50.0
Rajasthan	64.9	84.5	20.8
Tamil Nadu	93.3	91.6	40.9
Uttar Pradesh	51.4	85.6	0.0
Uttarakhand	91.1	95.7	0.0
West Bengal	73.3	61.3	4.8
All India	**58.0**	**79.0**	**13.1**

6.5.7 INVESTIGATORS' OBSERVATION ABOUT DISPLAY OF ESSENTIAL INFORMATION

Investigators also observed the display of essential information about children/ women/adolescent girls; food stocks, health status and other information on a black board. It is found that only 20.9 per cent of the total AWC had displayed full information. More than half the AWC (57.6%) had no information written on the blackboard of the AWC. It was observed that in Punjab, 100 per cent of the AWC had no information written on their blackboards, while in Tamil Nadu, 60 per cent of the AWC had full information written on their blackboards (Table-6.45).

Table 6.45: investigation about the display of important information on the blackboards

State	Full Information written	Partial Information written	Information not written
Andhra Pradesh	19.8	22.6	57.7
Assam	8.3	43.3	48.5
Bihar	1.8	13.9	84.4
Chhattisgarh	39.7	23.6	36.8
Gujarat	22.6	5.5	71.9
Haryana	22.5	1.7	75.9
Himachal Pradesh	56.2	2.4	41.4
Jammu and Kashmir	6.7	15.5	77.8
Jharkhand	11.6	11.9	76.5
Karnataka	31.3	35.9	32.8
Kerala	70.7	18.4	10.9
Madhya Pradesh	22.3	31.2	46.5
Maharashtra	39.1	46.4	14.5
Orissa	36.1	23.6	40.4
Punjab	0.0	0.0	100.0
Rajasthan	9.6	12.2	78.2
Tamil Nadu	60.0	27.4	12.6
Uttar Pradesh	8.7	13.0	78.3
Uttarakhand	11.1	7.3	81.6
West Bengal	4.5	19.0	76.5
All India	**20.9**	**21.5**	**57.6**

6.6 PERCEPTION OF COMMUNITY ABOUT ICDS SERVICES

6.6.1 COMMUNITY LEADER'S PERCEPTION ABOUT BENEFIT OF AWC IN THE VILLAGE

About 70 per cent of community leaders felt that the ICDS programme was very beneficial to the community and 26.5 per cent of them regarded the programme to be beneficial to 'some extent' in the country. In Bihar and Assam only 39 per cent of the community leaders are of the opinion that the AWC are 'very beneficial'. This is the lowest among all the states. In Gujarat, Kerala and Uttarakhand more than 90 per cent of the community leaders think that AWC are very beneficial (Table 6.46).

Table 6.46: Percentage of AWC has been beneficial to the community

State	Very Beneficial	To some extent	Not at all Beneficial
Andhra Pradesh	88.8	9.0	2.1
Assam	39.0	58.5	2.4
Bihar	38.6	52.9	8.5
Chhattisgarh	87.0	11.7	1.3
Gujarat	93.3	5.0	1.7
Haryana	67.9	23.2	8.9
Himachal Pradesh	90.0	10.0	0.0
Jammu and Kashmir	72.9	24.3	2.9
Jharkhand	54.6	43.6	1.8
Karnataka	84.7	14.3	1.0
Kerala	91.7	8.3	0.0
Madhya Pradesh	79.9	17.8	2.4
Maharashtra	74.1	25.9	0.0
Orissa	40.5	51.8	7.7
Punjab	69.6	26.1	4.4
Rajasthan	76.2	18.5	5.4
Tamil Nadu	88.5	10.0	1.5
Uttar Pradesh	70.7	26.8	2.5
Uttarakhand	92.0	6.0	2.0
West Bengal	66.7	32.2	1.1
All India	**70.4**	**26.5**	**3.0**

6.6.2 COMMUNITY LEADER'S PERCEPTION ABOUT COMMON DISEASES OF CHILDREN IN THE VILLAGE

About common diseases suffered by children, the community leaders in India are in opinion that about two-thirds of them are suffers from cough, cold, common fever and dysentery. Rajasthan has the highest percentage of children (79.2%) free from all diseases, followed by Punjab (75.4%) as reported by the leaders. Community leaders in Assam, Jharkhand, Orissa and West Bengal reported that more than 90 per cent of their AWC child beneficiaries suffered from one disease or the other (Table 6.47). According to community leaders, about 51 per cent village children nationwide suffer from cough/ cold and common fever (most common of all diseases), with Jharkhand having the highest percentage (90%) followed by West Bengal, where the it is 87.2 per cent. Gujarat has the highest percentage of children (23.3%) suffering from the diarrhea and dysentery.

Table 6.47: Percentage of children (aged below 6 year) suffered from the most common diseases during last one year

State	None	Diarrhea/ dysentery	Cough/Cold & Common fever	Others
Andhra Pradesh	32.5	15.4	45.2	6.9
Assam	4.9	9.8	73.2	12.2
Bihar	31.8	14.8	45.0	8.5
Chhattisgarh	35.1	11.7	49.4	3.9
Gujarat	28.3	23.3	35.0	13.3
Haryana	48.2	7.1	41.1	3.6
Himachal Pradesh	57.5	10.0	30.0	2.5
Jammu and Kashmir	44.3	10.0	30.0	15.7
Jharkhand	1.8	0.9	90.0	7.3
Karnataka	10.2	17.4	71.4	1.0
Kerala	16.7	2.8	80.6	0.0
Madhya Pradesh	50.9	7.7	38.5	3.0
Maharashtra	23.9	7.6	62.4	6.1
Orissa	5.4	17.9	72.6	4.2
Punjab	75.4	2.9	18.8	2.9
Rajasthan	79.2	3.1	13.1	4.6
Tamil Nadu	53.5	4.5	37.5	4.5
Uttar Pradesh	33.8	18.4	39.0	8.9
Uttarakhand	26.0	6.0	60.0	8.0
West Bengal	1.7	7.2	87.2	3.9
All India	**31.1**	**11.7**	**50.9**	**6.2**

6.6.3 COMMUNITY LEADER'S PERCEPTION ABOUT PERCENTAGE CHANGE IN IMR

As can be seen in the data, on an average the majority of the community leaders said that the IMR in the last one year has decreased in most of the states. About 6.4 per cent of the leaders said that the IMR in the past one year has remained the same, 2 per cent said that it has increased, while 6.5 per cent of all the community leaders couldn't not say much about the change in the IMR over the year (Table 6.48).

Table 6.48: Community Leader's perception about percentage change in IMR during last one year

State	Can't say	Increased	Decreased	Remained same
Andhra Pradesh	1.1	0.5	95.7	2.7
Assam	1.2	0.0	97.6	1.2
Bihar	4.8	2.7	88.4	4.2
Chhattisgarh	3.9	1.3	92.2	2.6
Gujarat	2.5	2.5	90.8	4.2
Haryana	5.4	0.0	82.1	12.5
Himachal Pradesh	12.5	0.0	50.0	37.5
Jammu and Kashmir	4.3	1.4	80.0	14.3
Jharkhand	0.0	0.0	100.0	0.0
Karnataka	9.2	5.1	82.7	3.1
Kerala	8.3	0.0	86.1	5.6
Madhya Pradesh	8.3	0.0	79.3	12.4
Maharashtra	16.8	4.1	77.7	1.5
Orissa	0.6	0.0	92.9	6.6
Punjab	11.6	0.0	85.5	2.9
Rajasthan	13.1	1.5	80.8	4.6
Tamil Nadu	21.0	9.5	60.5	9.0
Uttar Pradesh	3.2	2.0	83.1	11.7
Uttarakhand	2.0	0.0	98.0	0.0
West Bengal	0.6	0.0	98.9	0.6
All India	**6.5**	**2.0**	**85.1**	**6.4**

6.6.4 COMMUNITY LEADER'S PERCEPTION ABOUT CHANGE IN CMR

The data shows that 86.9 per cent of the community leaders across the states say that the CMR has decreased over the last one year, whereas 1.7 per cent says that it has increased. Another 6.2 per cent say that the CMR has remained the same while 5.2 per cent of them cannot assert anything about the change in the CMR over the past one year.

All community leaders in Jharkhand and West Bengal stated that the child mortality rate had come down. Himachal Pradesh fared badly with only 57.5 per cent of community leaders reporting a decrease. No community leaders reported increase in CMR in Assam, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Kerala, Orissa, Punjab, Uttarakhand and West Bengal. Karnataka had the highest percentage of community leaders (6.1%) reporting increase in CMR (Table- 6.49)

Table 6.49: Community Leader's perception about percentage of CMR of change during last one year

State	Can't say	Increased	Decreased	Remained same
Andhra Pradesh	1.1	0.5	96.3	2.1
Assam	0.0	0.0	98.8	1.2
Bihar	3.7	2.7	88.9	4.8
Chhattisgarh	3.9	1.3	93.5	1.3
Gujarat	2.5	2.5	90.8	4.2
Haryana	5.4	0.0	85.7	8.9
Himachal Pradesh	10.0	0.0	57.5	32.5
Jammu and Kashmir	2.9	0.0	81.4	15.7
Jharkhand	0.0	0.0	100.0	0.0
Karnataka	8.2	6.1	82.7	3.1
Kerala	8.3	0.0	86.1	5.6
Madhya Pradesh	8.3	0.6	79.9	11.2
Maharashtra	15.7	5.1	76.1	3.1
Orissa	0.6	0.0	93.5	6.0
Punjab	7.3	0.0	89.9	2.9
Rajasthan	13.9	2.3	79.2	4.6
Tamil Nadu	9.5	5.0	76.0	9.5
Uttar Pradesh	2.2	1.0	85.1	11.7
Uttarakhand	4.0	0.0	96.0	0.0
West Bengal	0.0	0.0	100.0	0.0
All India	**5.2**	**1.7**	**86.9**	**6.2**

6.6.5 COMMUNITY LEADERS' HELP IN AWC ACTIVITIES

On the national average, more than 50 per cent community leaders admitted that did not contribute to the functioning of AWC. In Kerala it was as much as 86.1 per cent, making it the state with the least community leader participation. This was followed closely by Bihar, where 82 per cent did not contribute. In Chhattisgarh 85.7 per cent of community leaders said that they contributed to the functioning of AWC (Table 6.50).

Table 6.50: Percentage of community leader helps in AWC activities

State	Yes	No
Andhra Pradesh	60.6	39.4
Assam	42.7	57.3
Bihar	18.0	82.0
Chhattisgarh	85.7	14.3
Gujarat	31.7	68.3
Haryana	37.5	62.5
Himachal Pradesh	65.0	35.0
Jammu and Kashmir	57.1	42.9
Jharkhand	48.2	51.8
Karnataka	49.0	51.0
Kerala	13.9	86.1
Madhya Pradesh	47.9	52.1
Maharashtra	64.0	36.0
Orissa	20.8	79.2
Punjab	30.4	69.6
Rajasthan	43.9	56.2
Tamil Nadu	36.5	63.5
Uttar Pradesh	67.5	32.5
Uttarakhand	70.0	30.0
West Bengal	52.8	47.2
All India	**48.1**	**51.9**

6.6.6 COMMUNITY LEADERS' CONTRIBUTION IN DIFFERENT ACTIVITIES OF AWC

It is expected that the community workers should play a very important role in the success of an AWC. They could help in the following activities; selection of location, space, getting beneficiaries, helping in ensuring adequate infrastructure for an AWC and other activities like solving problems of beneficiaries and motivating people to avail the services of this facility etc. But the survey shows that less than 50 per cent of the community leaders reported in doing help in the activities of AWC. Community leaders' contribution for almost all of the activities was good in Kerala, with the figure being 80 per cent for all the activities except provisioning of materials to conduct pre-school activities, for which the community leader's contribution was 100 per cent, as can be seen from Table 6.51. In Jharkhand and West Bengal, the contribution of the leaders was abysmally low in respect of most of the activities.

Table 6.51: Community Leaders Contribution regarding the following activities

State	Selection of location of AWC and providing space	Getting space for AWC	Selection of Beneficiaries	Provided fans, chairs, durries/mattresses, etc	Providing fuel	Help & support in construction, repair and maintenance of AWC/toilets	Storage facilities for ration/equipment	Solving problems/ difficulties of AWC	provided aids/ materials to conduct pre-school activities	Motivating community to avail services	Admitting children in school
Andhra Pradesh	56.1	54.4	49.1	43.0	31.6	32.5	47.4	67.5	61.4	71.9	80.7
Assam	48.6	25.7	42.9	17.1	14.3	25.7	17.1	82.9	37.1	68.6	62.9
Bihar	50.0	41.2	44.1	29.4	26.5	11.8	20.6	41.2	29.4	58.8	64.7
Chhattisgarh	68.2	68.2	56.1	77.3	68.2	63.6	68.2	57.6	81.8	60.6	60.6
Gujarat	44.7	39.5	55.3	39.5	18.4	34.2	13.2	68.4	23.7	39.5	57.9
Haryana	71.4	61.9	76.2	42.9	23.8	23.8	23.8	61.9	38.1	66.7	66.7
Himachal Pradesh	73.1	53.9	53.9	69.2	61.5	57.7	65.4	88.5	46.2	65.4	65.4
Jammu and Kashmir	55.0	52.5	50.0	32.5	47.5	35.0	42.5	72.5	45.0	85.0	82.5
Jharkhand	5.7	3.8	26.4	9.4	1.9	0.0	5.7	88.7	5.7	41.5	49.1
Karnataka	83.3	81.3	60.4	64.6	62.5	77.1	68.8	81.3	62.5	72.9	79.2
Kerala	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	100.0	80.0	80.0
Madhya Pradesh	53.1	58.0	65.4	59.3	38.3	45.7	45.7	72.8	39.5	67.9	81.5
Maharashtra	45.2	45.2	40.5	32.5	17.5	43.7	27.0	60.3	31.8	44.4	61.9
Orissa	51.4	45.7	37.1	28.6	17.1	37.1	48.6	57.1	37.1	60.0	68.6
Punjab	19.1	38.1	19.1	61.9	61.9	33.3	47.6	28.6	33.3	61.9	28.6
Rajasthan	38.6	35.1	47.4	17.5	24.6	26.3	29.8	68.4	50.9	91.2	86.0
Tamil Nadu	46.6	41.1	34.3	52.1	31.5	48.0	30.1	50.7	50.7	48.0	53.4
Uttar Pradesh	30.2	29.4	58.8	32.0	11.0	12.9	21.3	48.5	29.4	77.6	77.2
Uttarakhand	28.6	31.4	62.9	22.9	31.4	14.3	31.4	31.4	22.9	74.3	57.1
West Bengal	21.1	13.7	53.7	15.8	2.1	6.3	9.5	86.3	0.0	35.8	55.8
All India	**45.2**	**42.2**	**50.6**	**37.2**	**25.1**	**31.5**	**32.2**	**64.2**	**37.6**	**63.9**	**68.8**

Chapter 7

Effectiveness of Delivery Mechanism - Beneficiary Response

INTRODUCTION

ICDS is expected to engender significant behavioral changes among its beneficiaries that could, in the long run, contribute to reduced maternal and infant mortality along with improved nutrition status among children and women. To this effect, several services have been combined under ICDS keeping the four important stakeholders in focus. There are stakeholder-specific schemes to introduce healthy practices that would effectively contribute to achievement of ICDS' short and long term goals. The present chapter looks into the effectiveness of delivery mechanism of ICDS services as perceived by the stakeholders around indicators considered important in operationalising the programme. The findings are presented in two sections. While the first section looks at the effectiveness of each of the interventions at the national level and identifies the corresponding performers and laggards among the states, the second section compares the variations in effectiveness of delivery mechanism across the states.

7.1 EFFECTIVENESS OF DELIVERY MECHANISM: A NATIONAL PERSPECTIVE

7.1.1 DESIGN OF ICDS FOR CHILDREN

We shall distinguish the stakeholders in four groups, namely children, pregnant women, lactating mothers and adolescent girls. Design of ICDS assumes that if implemented as planned the programme would lead to for children:

- Provision of supplementary nutrition to the children as per entitlement
- Immunisation of every child
- Weighing of babies immediately at birth and subsequent regular weighing of babies to track the dynamics of their physical growth.
- Awareness among mothers about steps to be taken to reduce the incidence of diarrhea among children
- Creation of awareness among mothers about the need for de-worming of child
- Administration of iron and folic acid tablets to children
- Sensitisation of mothers about the importance of breast feeding in increasing the immunity of children
- Provision of pre-school education informally to the children to help them acquire basic skills in reading, writing and counting
- Provision of basic hygiene education and social values to the children by the AWC

7.1.2 Pregnant Women and Lactating Mothers

- Provided supplementary nutrition as per entitlement
- Provided pre-natal care services from the AWC, including Tetanus Toxoid vaccine, iron and folic acid tablets, regular health check ups
- Provided with medicines and consultative services by AWC if a child falls sick
- Referred to SC/PHCs if necessary
- Made aware of the special care to be taken during pregnancy
- Made aware of the importance of colostrums feeding
- Made aware of methods to take care and monitor the child's growth
- Sensitised about the need for breast feeding and timely immunising the child
- Provided with tips for treatment of diarrhea and other minor illness
- Made aware about preparation of nutritious food for child and feeding practices
- Sensitised about the importance of education for a child
- Made aware of the basic cleanliness and hygiene practices to be followed in keeping the child healthy
- Immunised during pregnancy
- Provided information about the benefits of institutional delivery
- Informed about precautions to be taken in case the baby is delivered at home
- Given information about feeding practices to be followed during pregnancy and lactating period
- Informed about correct posture to be followed during pregnancy and breast feeding
- Educated about cleanliness and hygiene for self care
- Provided tips to take care of self during disease and minor illness
- Sensitised about nipple hygiene, methods of delaying and/or avoiding pregnancy, use of boiled water and iodised salt, ideal birth interval.
- Lactating mothers are also expected to be provided with similar services by the AWC functionaries.

7.1.3 Adolescent Girls

In addition, ICDS is also designed to take up – albeit on a smaller scale – efforts at taking care of the nutrition and other health and hygiene requirements of adolescent girls. As per the design of the programme adolescent girls are expected to be provided with the following services by the AWC:

- Regular weighing
- Provision of deworming tablets
- Health and nutrition education
- Sensitising about HIV/AIDS

- Information about ideal birth interval
- Creation of awareness about preventing anaemia
- Encouraging participation in income generating activities

While the interventions may be considered as contributory to the stated objectives of ICDS in reducing the child mortality rate, those designed for pregnant mothers is expected to contribute to significant reduction of maternal mortality in the shorter run. Programmes focused on lactating mothers are expected to attack infant mortality by improving the immunity level of the children. The interventions around the adolescent girls are to be considered to provide results in a long term perspective as they would ensure a higher status of health and hygiene for the prospective mothers who would, in turn, deliver healthy babies in the future.

In the following tables we provide an idea about the effectiveness of the prevailing delivery mechanism at the national level as per the perceptions of the respective stakeholders and identify the states that performed better and those who lagged behind. Detailed state-specific findings (that are self-explanatory) for each of these interventions are given in the Appendix Tables – 7.1 – 7.35.

The table on interventions aimed at children suggests that delivery of services to facilitate PSE has in relatively terms been the most effective. The delivery effectiveness of SNP services is moderate while the effectiveness of services under NHE has been the least effective (Box 7.1). In case of pregnant women also the delivery of services under NHE has been the least effective. Delivery of services linked to health and supplementary nutrition have been relatively better (Box 7.2). The same trend is observed in relation with the services offered to lactating mothers (Box 7.3). Effectiveness of delivery of services to adolescent girls has rather been the poorest (Box 7.4).

Box 7.1: Interventions aimed at children

Intervention aimed at children	National Average	Performers	Laggards
% of children received SN	64.0	Jammu & Kashmir, Jharkhand, Gujarat, Chhattisgarh	Rajasthan, Bihar, Haryana,U.P
Average number of days SN received	16	Haryana, Karnataka, Maharashtra, Orissa	Madhya Pradesh, Uttar Pradesh, Uttarakhand, Assam
% of children's mothers' awareness about food entitlement	33.8	Kerala, Karnataka, Tamil Nadu, Andhra Pradesh	Madhya Pradesh, West Bengal, Uttar Pradesh, Jammu & Kashmir
% of children received full immunisation	51.2	Tamil Nadu, Kerala, Jammu & Kashmir, Haryana	Bihar, Assam, Rajasthan, Uttar Pradesh
% of children weighed at birth	46.5	Kerala, Tamil Nadu, Maharashtra, Himachal Pradesh	Jammu & Kashmir, Bihar, Uttar Pradesh, Uttarakhand
% of children getting weighed once in every month	43.2	Orissa, Maharashtra, Chhattisgarh, Andhra Pradesh	Jammu and Kashmir, Punjab, Bihar, Uttar Pradesh

Contd ...

Box 7.1: Interventions aimed at children (Contd...)

Intervention aimed at children	National Average	Performers	Laggards
% of children having diarrhoea	30.7	Rajasthan, Gujarat, Tamil Nadu, Uttarakhand	Bihar, Himachal Pradesh, West Bengal, Jharkhand
% of children started deworming	26.8	Kerala, Maharashtra, Orissa, Assam	Gujarat, Uttar Pradesh, Uttarakhand, Punjab
% of children consumed iron and folic acid tablets	11.9	Maharashtra, Himachal Pradesh, Karnataka, Andhra Pradesh	Punjab, Kerala, Bihar, Assam
% of mothers who initiated breastfeeding within one hour of child birth	42.8	Orissa, A.P, Maharashtra, Assam	Rajasthan, Uttar Pradesh, Punjab, Bihar
% of children (those attending PSE) able to read	71.1	Himachal Pradesh, West Bengal, Maharashtra, Kerala	Rajasthan , Gujarat, Bihar, Uttar Pradesh,
% of children (those attending PSE) able to write	49.0	Assam, Kerala, Andhra Pradesh, Karnataka	Chhattisgarh, Gujarat, Uttar Pradesh, Rajasthan
% of children (those attending PSE) able to count	85.7	Kerala, Himachal Pradesh, West Bengal, Tamil Nadu	Punjab, Uttar Pradesh, Bihar, Haryana
% of children (those attending PSE) who wash hands after using toilet	82.4	Uttarakhand, Jharkhand, West Bengal, Uttar Pradesh	Assam, Orissa, Karnataka, Chhattisgarh,
% of children (those attending PSE) who wash hands before & after meals	86.9	Jharkhand, West Bengal, Uttarakhand, Maharashtra	Orissa, Bihar, Punjab, Haryana,
% of children (those attending PSE) who use soaps to wash hands	61.2	Jammu & Kashmir, Himachal Pradesh, Assam, Kerala	West Bengal, Orissa, Chhattisgarh, Karnataka,
% of children (those attending PSE) who respect elders	73.1	Jammu & Kashmir, Assam, Madhya Pradesh, Jharkhand	A.P, Haryana, Rajasthan, Orissa,

Note: State-wise results given in Appendix Tables – 7.1 to 7.9 for all indicators.

Box 7.2: Intervention aimed at pregnant women

Intervention aimed at PW	National Average	Performers	Laggards
% of PW received SN	78.3	West Bengal, Kerala, Maharashtra, Haryana	Assam, Bihar, Uttar Pradesh, Himachal Pradesh
Average number of days SN received	12	Jharkhand, Maharashtra, Orissa, West Bengal	Assam, Rajasthan, Madhya Pradesh, Uttar Pradesh
% of PW aware about food entitlement	26.8	Kerala, Karnataka, Tamil Nadu, Andhra Pradesh	Haryana, Assam, Madhya Pradesh, Uttar Pradesh
% of PW aware about the pre-natal care services at AWC	76.7	Kerala, Maharashtra, Karnataka, Tamil Nadu	Uttar Pradesh, Bihar, Jammu & Kashmir, Rajasthan
% of PW who received Tetanus Toxoid (TT) vaccine	76.7	Kerala, Maharashtra, Karnataka, Tamil Nadu	Uttar Pradesh, Bihar, Jammu & Kashmir, Rajasthan
% of PW consumed Iron & Folic Acid (IFA) tablets	63.6	Kerala, Maharashtra, Gujarat, Himachal Pradesh	Bihar, Uttar Pradesh, Jammu & Kashmir, Uttarakhand
% of PW checked for BP	55.0	Kerala, Gujarat, Tamil Nadu, Andhra Pradesh	Uttar Pradesh, Uttarakhand, Bihar, Assam
% of PW checked for Weight	56.4	Gujarat, Kerala, Tamil Nadu, Maharashtra	Uttar Pradesh, Bihar, Uttarakhand, Jharkhand
% of PW checked for Abdominal Examination	51.2	Kerala, Andhra Pradesh, Himachal Pradesh, Karnataka	Bihar, Uttar Pradesh, Uttarakhand, Assam
% of PW referred to SC/PHC during current pregnancy	18.9	Andhra Pradesh, Tamil Nadu, Maharashtra, Karnataka	Bihar, J&K, Kerala, Punjab
% of PW who have attended NHE meetings in the last month	22.4	Himachal Pradesh, Kerala, Andhra Pradesh, Orissa	Assam, Punjab, Uttar Pradesh, Jammu & Kashmir
% of PW followed the advice given on 'colostrums feeding'	22.6	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Assam, Uttar Pradesh, Uttarakhand, Punjab
% of PW following advice about timely immunizing of the child	25.8	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Assam, Uttar Pradesh, J&K, Punjab
% of PW following advice about treatment of diarrhea and other minor illness of child	21.9	Chhattisgarh, Andhra Pradesh, Kerala, Himachal Pradesh	Uttar Pradesh, Punjab, J&K, Bihar
% of PW following advice about preparation of nutritious food for child/ feeding practices	19.3	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Punjab, Bihar, Uttar Pradesh, Assam
% of PW following advice about providing medicine/consulting AWW during illness of child	20.9	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Uttar Pradesh, Bihar, Uttarakhand, Punjab
% of PW following advice about importance of education of the child	22.9	Andhra Pradesh, Himachal Pradesh, Kerala, Maharashtra	Uttar Pradesh, Assam, Punjab, Bihar

Intervention aimed at PW	National Average	Performers	Laggards
% of PW following advice about basic cleanliness and hygiene practices to be followed in keeping the child healthy	22.5	Kerala, Andhra Pradesh, Himachal Pradesh, Chhattisgarh	Uttar Pradesh, Punjab, Bihar, Assam
% of PW following advice about the benefits of institutional delivery	24.0	Andhra Pradesh, Himachal Pradesh, Kerala, Chhattisgarh	Uttar Pradesh, Uttarakhand, Bihar, Assam
% of PW following advice about precautions to be taken in case the baby is delivered at home	21.6	Chhattisgarh, Andhra Pradesh, Himachal Pradesh, Maharashtra	Uttar Pradesh, Assam, Kerala, Bihar
% of PW following advice about feeding practices to be followed during pregnancy and lactating period	21.4	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Uttar Pradesh, Assam, Bihar, Punjab
% of PW following advice about correct posture to be followed during pregnancy	22.3	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Uttar Pradesh, Punjab, Bihar, Assam
% of PW following advice about correct posture to be followed during breast feeding	21.4	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Uttar Pradesh, Assam, Bihar, J& K
% of PW following advice about self care & health (cleanliness & hygiene)	22.5	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Punjab, Uttar Pradesh, Assam, Bihar
% of PW following advice about immunisation during pregnancy	26.6	Chhattisgarh, Andhra Pradesh, Kerala, Himachal Pradesh	Bihar, Assam, Uttar Pradesh, J&K
% of PW following advice about diseases/illness	23.0	Andhra Pradesh, Chhattisgarh, Himachal, Kerala	Uttar Pradesh, Assam, Punjab, J&K
% of PW following advice about family planning	19.7	Himachal Pradesh, Kerala, Andhra Pradesh, Maharashtra	Chhattisgarh, Uttar Pradesh, Punjab, J&K
% of PW following advice about nipple hygiene	19.7	Andhra Pradesh, Kerala, Himachal Pradesh, Maharashtra	Uttar Pradesh, Assam, Bihar, Punjab
% of PW aware about methods of delaying and/or avoiding pregnancy	71.0	Rajasthan, Assam, Orissa, Kerala	Karnataka, Haryana, Andhra Pradesh, J&K
% of PW aware of using boiled water during illness of child	52.8	Kerala, Himachal Pradesh, Tamil Nadu, J&K	West Bengal, Bihar, Rajasthan, Punjab
% of PW aware of using iodised salt	76.0	Kerala, Haryana, Himachal Pradesh, Jharkhand	Punjab, Uttar Pradesh, Karnataka, Andhra Pradesh

Note: State-wise results given in Appendix Tables – 7.10 to 7.21 for all indicators.

Box 7.3: Intervention aimed at nursing mothers

Intervention aimed at LM	National Average	Performers	Laggards
% of LM received SN	78.3	Haryana, Maharashtra, Kerala, West Bengal	Assam, Bihar, Uttar Pradesh, Himachal Pradesh
Average Number of Days Food Received	12	Jharkhand, Maharashtra, Orissa, west Bengal	Uttar Pradesh, Madhya Pradesh, Rajasthan, Assam
% of LM aware about food entitlement	26.8	Gujarat, Punjab, Uttar Pradesh, Jharkhand	Madhya Pradesh, Tamil Nadu, Maharashtra, Haryana
% of LM aware about the post-natal care services at AWC	68.8	Orissa, Maharashtra, Assam, Rajasthan	Uttar Pradesh, J&K, Himachal Pradesh, Bihar
% of LM who received Tetanus Toxoid (TT) vaccine during pregnancy	93.3	Chhattisgarh, Haryana, Himachal Pradesh, J&K	Tamil Nadu, Uttar Pradesh, West Bengal, Uttarakhand
% of LM currently consuming Iron & Folic Acid (IFA) tablets	33.9	Karnataka, Maharashtra, Tamil Nadu, Andhra Pradesh	Rajasthan, Chhattisgarh, Bihar, Uttar Pradesh
% of LM who have attended NHE meetings in the last month	20.26	Chhattisgarh, Andhra Pradesh, Gujarat, Maharashtra	Punjab, Uttar Pradesh, Karnataka, Bihar
% of LM following the advice on taking care and monitoring of child's growth	24.4	Chhattisgarh, Andhra Pradesh, Gujarat, Maharashtra	Karnataka, Uttar Pradesh, Punjab, Bihar
% of LM following the advice on 'colostrums feeding'	21.4	Maharashtra, Kerala, J&K, Chhattisgarh	Assam, West Bengal, Uttar Pradesh, Gujarat
% of LM following advice about breast feeding	22.7	Maharashtra, Andhra Pradesh, Gujarat, Kerala	Uttarakhand, West Bengal, Bihar, Jharkhand
% of LM following advice about timely immunisation of the child	24.8	Maharashtra, Andhra Pradesh, Gujarat, Kerala	Uttarakhand, West Bengal, Bihar, Jharkhand
% of LM following advice about treatment of diarrhea and other minor illness of the child	21.4	Chhattisgarh, Maharashtra, Himachal Pradesh, Madhya Pradesh	Orissa, West Bengal, Rajasthan, J&K
% of LM following advice about preparation of nutritious food for child and feeding practices	18.5	Chhattisgarh, Jharkhand, Karnataka, Orissa	West Bengal, Uttar Pradesh, Punjab, Himachal Pradesh
% of LM following advice about providing medicine/consulting AWW during illness of the child	19.4	Chhattisgarh, J&k, Bihar, Haryana	Maharashtra, Uttar Pradesh, Kerala, Karnataka
% of LM following advice about the importance of education of the child	20.5	Chhattisgarh, Gujarat, Bihar, Andhra Pradesh	Punjab, Orissa, Kerala, Uttarakhand

Intervention aimed at LM	National Average	Performers	Laggards
% of LM following advice about basic cleanliness and hygiene practices to be followed in keeping the child healthy	21.4	Chhattisgarh, Gujarat, Bihar, Andhra Pradesh	Punjab, Orissa, Kerala, Uttarakhand
% of LM following advice about the benefits of institutional delivery	22.6	Chhattisgarh, Jharkhand, Maharashtra, Uttarakhand	Uttar Pradesh, Rajasthan, Haryana, Andhra Pradesh
% of LM following advice about precautions to be taken in case the baby is delivered at home	19.9	Uttarakhand, Chhattisgarh, J&K, Tamil Nadu	Bihar, Assam, Rajasthan, Maharashtra
% of LM following advice about feeding practices to be followed during pregnancy and lactating period	20.3	Uttarakhand, Madhya Pradesh, Bihar, Kerala	Gujarat, Assam, West Bengal, J&K
% of LM following advice about correct posture to be followed during pregnancy	19.6	Uttarakhand, Punjab, Gujarat, Orissa	Jharkhand, Assam, Maharashtra, Bihar
% of LM following advice about correct posture to be followed during breast feeding	19.4	Uttarakhand, Kerala, Jharkhand, Tamil Nadu	Madhya Pradesh, J&K, Assam, Gujarat
% of LM following advice about self care & health (cleanliness & hygiene)	21.9	Uttarakhand, Rajasthan, Tamil Nadu, Himachal Pradesh	Chhattisgarh, J&K, Orissa, Jharkhand
% of LM following advice about immunisation during pregnancy	24.7	Chhattisgarh, Gujarat, Andhra Pradesh, Maharashtra	Punjab, Uttar Pradesh, Karnataka, Bihar
% of LM following advice about disease and minor illness	21.3	Uttarakhand, Himachal Pradesh, Bihar, Uttar Pradesh	J&K, Assam, Punjab, Tamil Nadu
% of LM following advice about nipple hygiene	18.8	Uttarakhand, Chhattisgarh, Jharkhand, J&K	Himachal Pradesh, Assam, Orissa, Bihar
% of LM following advice about family planning	17.1	West Bengal, Uttarakhand, Madhya Pradesh, Tamil Nadu	Chhattisgarh, Rajasthan, J&K, Jharkhand
% of LM aware about methods of delaying and/or avoiding pregnancy	71.8	Jharkhand, Assam, Madhya Pradesh, Chhattisgarh	Karnataka, Uttar Pradesh, Uttarakhand, Kerala
% of LM aware of using boiled water during illness of child	57.1	Jharkhand, Assam, Madhya Pradesh, Chhattisgarh	Karnataka, Uttar Pradesh, Uttarakhand, Kerala
% of LM aware of using iodised salt	76.4	Haryana, Himachal Pradesh, Kerala, Assam	Andhra Pradesh, Karnataka, Punjab, Uttar Pradesh

Note: State-wise results given in Appendix Tables – 7.22 to 7.28 for all indicators.

Box 7.4: Intervention aimed at adolescent girls

Intervention aimed at AGs	National Average	Performers	Laggards
% of AG received SN	41.7	Kerala, Rajasthan, Punjab, Gujarat	Chhattisgarh, Haryana, Tamil Nadu, Orissa,
Average Number of Days Food Received	6	Kerala, Jharkhand, Gujarat, Himachal Pradesh	Chhattisgarh, Haryana, Orissa, Tamil Nadu,
% of AG aware about food entitlement	26.8	Kerala, Gujarat, Karnataka, Maharashtra	Tamil Nadu, Orissa, Haryana, Jharkhand,
% of AGs who were getting weighed regularly from AWC	48.9	Maharashtra, Madhya Pradesh, Andhra Pradesh, Gujarat	Bihar, West Bengal, Chhattisgarh, Jammu & Kashmir
% of AGs who consumed deworming tablets during last one year	19.0	Kerala, Himachal Pradesh, Bihar, Rajasthan	A.P, Assam, Haryana, Punjab,
% of AGs who have attended NHE meetings in the last month	24.4	Kerala, Gujarat, Madhya Pradesh, Rajasthan	Himachal Pradesh, Assam, Punjab, Haryana
% of AGs who are following advice about taking care and monitoring	27.7	Madhya Pradesh, Gujarat, Kerala, Uttarakhand	West Bengal, Uttar Pradesh, Haryana, Punjab
% of AGs who are following advice about health and nutrition	26.5	Gujarat, Madhya Pradesh, Kerala, Rajasthan	Bihar, Assam, Punjab, Haryana,
% of AGs who are following advice about growing self confidence	24.2	M.P, Kerala, Gujarat, Uttarakhand	Chhattisgarh, Assam, Punjab, Haryana
% of AGs who are following advice about treatment of minor illness	25.6	M.P, Kerala, Gujarat, Uttarakhand	Uttar Pradesh, West Bengal, Punjab, Haryana
% of AGs who are following advice about cleanliness and hygiene	27.1	Gujarat, Madhya Pradesh, Kerala, Uttarakhand	West Bengal, Himachal Pradesh, Punjab, Haryana
% of AGs who are following advice about importance of education	26.3	Madhya Pradesh Kerala, Gujarat, Uttarakhand	Bihar, Chhattisgarh, Punjab, Haryana
% of AGs who are following advice about the age of marriage	26.9	Madhya Pradesh Gujarat, Kerala, Uttarakhand	Bihar, Himachal Pradesh, Punjab, Haryana
% of AGs who have heard about AIDS	72.9	Haryana, Orissa, Kerala, Punjab	Jammu & Kashmir, Uttarakhand, Bihar, Jharkhand
% of AGs who got awareness about AIDS from AWW	27.5	Jharkhand, Madhya Pradesh, Karnataka, Himachal Pradesh	Jammu & Kashmir, Chhattisgarh, West Bengal, Punjab
% of AGs who are aware of ideal birth interval	17.0	Haryana, Tamil Nadu, Andhra Pradesh, Himachal Pradesh	Uttarakhand, Kerala, Bihar, Karnataka
% of AGs who are aware of measures to prevent anemia	47.2	Haryana, Kerala, Andhra Pradesh, Orissa	Himachal Pradesh, Karnataka, Bihar, Jammu & Kashmir
% of AGs who participated in income generating activity like stitching	9.1	Haryana, Karnataka, Jammu & Kashmir, Uttar Pradesh	Kerala, Punjab, Bihar, Rajasthan

Note: State-wise results given in Appendix Tables – 7.28 to 7.35 for all indicators.

7.2 EFFECTIVENESS OF DELIVERY MECHANISM: STATE LEVEL VARIATIONS

An attempt is made in this section to compute performance index of AWC (PIA) for the major states of India and examine the variations in the rankings of the Indian states. For effective targeting, it is necessary to know where different states stand in terms of the development of the programme. It is equally important to know the extent and causes of relative performance of different states, so that suitable goals and strategies could be formulated to improve the well-being of the programme.

In this section, variations in the effectiveness of the delivery mechanism of the programme across the states have been analysed on the basis of critical indicators chosen from each component of the programme for which detailed data was collected from the primary survey. The overall assessment is based on the information provided by the household. Keeping in view the ultimate objective of the programme, the following seven indicators have been identified to get a composite index of performance of the AWC.

1. Average number of days received food during last three months reported by beneficiary households which was estimated by taking the average of three months (May, June and July 2009). [Supplementary Nutrition Programme]
2. Percentage of children aged 12-23 months received full immunisation. Fully immunised include those children who received all three doses of BCG, DPT & Polio and Measles. [Immunisation]
3. Percentage of children able to write alphabets/words. It refers to those children who are in the age group of 3 - 6 years and are attending PSE regularly. [Pre-School Education]
4. Percentage of women reporting attended NHE meetings. It refers to those women who are aware of NHE sessions and are attending them regularly. [Nutrition and Health Education]
5. Percentage of mothers reporting seeking help from AWW when their child gets sick [Health Check up]
6. Percentage of mothers reporting received deworming tablets from AWC [Health service]
7. Average attendance (number of children aged 3-6 years) based on three sudden visits by the Study Team [Pre-school education].

The idea implicit in construction of performance index (PI) is as follows. The AWCs need to deliver the six services effectively, such as, distribution of food, PSE, NHE etc. It must be appreciated that different AWCs are in a different position w.r.to the delivery of different services to the registered beneficiaries. The only way to arrive at an average quality of performance of AWC in a state is to integrate the differential status of performance of AWCs through an index. Before doing this the standard method of converting each into a factor that is free from unit of measurement[17]. A standard technique of index analysis used by UNDP in its first "Human Development Report, 1990" has been applied to construct the composite indices (PI=1-[(Maximum-Actual)/Range]. It is the relative performance value of states which was measured with reference to the 'Actual' and 'Minimum' values of the concerned indicator.

[17] When there are two many factors are impinging on a phenomenon, it is customary to construct an index to ensure that each has been given due condideration in the analysis where it is easy to understand whether the components considered are relevant to the purpose at hand and accordingly due attention needs to be paid to each area of concern by the implementing agencies and not the composite index value per se.

Division of the performance value of a state *by the range makes it "scale free". The scale free values of the seven indexes were then combined, giving equal weightage to each, to get the state-specific Performance Index of AWC (PI).* The basic data (estimates from the survey data) of all the indicators used for indices are given in the Tables 7.4. The higher the value of PI, higher is the performance, and vice-versa.

This analysis will help to the policy makers and planners to think of ways and means to remove weaknesses in program design and implementation for improving program performance. It would be more appropriate for the implementing agency to focus on weak areas identified in the study and look for more appropriate solutions for improving performance of ICDS. We have indicated the areas that need the attention.

The major finding is that of the 20 major states, Karnataka, Maharashtra, Andhra Pradesh, West Bengal and Jharkhand were ranked as the top five. However, Andhra Pradesh shows average performance (less than national average) in terms of the delivery of child's immunisation and pre-school education. In case of percentage of mother reporting received deworming tablets from AWC, West Bengal and Tamil Nadu show poor performance. States like Bihar, Assam, Uttar Pradesh, Rajasthan and Uttarakhand were ranked among the bottom five states. These states show very poor performance in terms of most services, with the exception of services under PSE as compared to other states as well as the national averages. In this context, it is worth mentioning that even though Kerala performed better among the states in terms of most of the indicators, it slipped down to 8th rank because of its lower performance in terms of percentage of mothers who had reportedly sought help from AWW when their children got sick and the percentage of mothers reporting having received de-worming tablets from AWC. It may be the fact that in Kerala people take health services from SC/PHC rather from the AWC.

Table 7.1: Distribution of major states by different index value

>700	700- 600	599- 500	<500
Karnataka Maharashtra	Andhra Pradesh West Bengal Jharkhand Tamil Nadu Orissa Kerala	Madhya Pradesh Haryana Gujarat Himachal Pradesh Chhattisgarh	Jammu and Kashmir Punjab Uttarakhand Rajasthan Uttar Pradesh Assam Bihar

Table 7.2: Mean SD and CV of the Indicators used for composite index

Indicators	Mean[18]	SD	CV
Average number of days received food	16.9	4.9	29.0
Percentage of children (12-23 months) fully immunised	58.9	16.1	27.4
Percentage of Children able to Write alphabets/words among those attending PSE	53.2	18.0	33.8
Percentage of women reporting attended NHE meetings	27.9	15.9	56.8
Percentage of mother reporting seeking help from AWW when their child gets sick	11.2	8.9	79.6
Percentage of mother reporting received deworming tablets from AWC	59.9	25.1	41.9
Average attendance (number of children aged 3-6 years) based on 3 sudden visits by the Study Team	13.6	4.4	32.3

[18] It should be clarified that the national average of these indicators mentioned in the previous section has been computed from data for 35 states and UTs while the mean values presented in this section are estimates for the major 20 states mentioned in the tables.

Table 7.3: State-wise performance of ICDS programme: Estimated indices

State	Rank	Average number of days received food	Percentage of children (12-23 months) fully immunised	Percentage of Children able to Write alphabets/ words	Percentage of women reporting attended NHE meetings	Percentage of mother reporting seeking help from AWW when their child gets sick	Percentage of mother reporting received deworming tablets from AWC	Average attendanc (number of children aged 3-6 years) based on 3 sudden visits by Field Team	Overall Performance Index
Karnataka	1	1.00	0.59	0.87	0.38	0.70	0.70	0.86	0.728
Maharashtra	2	1.00	0.62	0.38	0.43	0.75	0.84	1.00	0.716
Andhra Pradesh	3	0.74	0.35	0.94	0.48	1.00	0.82	0.50	0.689
West Bengal	4	1.00	0.66	0.71	0.36	0.87	0.38	0.79	0.682
Jharkhand	5	0.84	0.37	0.86	0.34	0.74	0.68	0.93	0.680
Tamil Nadu	6	1.00	1.00	0.45	0.43	0.59	0.51	0.71	0.671
Orissa	7	1.00	0.51	0.50	0.50	0.35	0.65	0.93	0.635
Kerala	8	0.95	0.88	0.98	1.00	0.10	0.02	0.36	0.612
Madhya Pradesh	9	0.63	0.33	0.35	0.12	0.57	1.00	1.00	0.572
Haryana	10	1.00	0.79	0.28	0.11	0.61	0.92	0.29	0.570
Gujarat	11	0.89	0.45	0.13	0.48	0.69	0.87	0.43	0.563
Himachal Pradesh	12	0.79	0.76	0.45	0.57	0.41	0.80	0.00	0.540
Chhattisgarh	13	0.89	0.43	0.13	0.54	0.27	0.74	0.71	0.530
Jammu and Kashmir	14	0.84	0.85	0.80	0.17	0.04	0.76	0.00	0.494
Punjab	15	0.79	0.67	0.57	0.00	0.00	0.43	0.36	0.402
Uttaranchal	16	0.32	0.59	0.51	0.14	0.04	0.57	0.43	0.372
Rajasthan	17	0.68	0.04	0.00	0.08	0.33	0.87	0.21	0.317
Uttar Pradesh	18	0.63	0.00	0.11	0.01	0.12	0.76	0.43	0.295
Assam	19	0.00	0.13	1.00	0.19	0.10	0.00	0.36	0.253
Bihar	20	0.63	0.18	0.25	0.06	0.15	0.05	0.43	0.248
Total		**0.74**	**0.38**	**0.41**	**0.25**	**0.43**	**0.56**	**0.57**	0.476

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Table 7.4: Indicators used for composite index

State	Average number of days received food	Percentage of children (12-23 months) fully immunised	Percentage of Children able to Write alphabets/ words	Percentage of women reporting attended NHE meetings	Percentage of mother reporting seeking help from AWW when their child gets sick	Percentage of mother reporting received deworming tablets from AWC	Average attendance (number of children aged 3-6 years) based on 3 sudden visits by Field Team
Andhra Pradesh	16	49.6	78.7	39.0	28.5	78.2	13
Assam	2	37.0	82.3	20.5	2.8	9.4	11
Bihar	14	39.8	39.7	11.8	4.2	13.6	12
Chhattisgarh	19	54.0	32.9	43.0	7.6	70.9	16
Gujarat	19	55.2	32.9	39.2	19.6	82.0	12
Haryana	21	74.8	41.4	15.0	17.4	85.9	10
Himachal Pradesh	17	73.0	51.4	44.5	11.6	76.2	6
Jammu and Kashmir	18	78.0	71.2	19.1	1.0	72.8	6
Jharkhand	18	51.1	74.5	29.9	21.0	66.0	19
Karnataka	21	63.4	74.9	32.8	19.9	67.7	18
Kerala	20	79.7	81.1	72.1	2.9	11.1	11
Madhya Pradesh	14	48.9	45.4	16.0	16.2	92.8	20
Maharashtra	21	65.1	47.0	35.9	21.3	79.3	20
Orissa	21	59.1	54.0	40.3	10.0	63.7	19
Punjab	17	67.9	57.8	8.2	0.0	45.6	11
Rajasthan	15	31.9	25.6	13.6	9.5	81.6	9
Tamil Nadu	21	86.7	51.1	35.6	16.9	51.8	16
Uttar Pradesh	14	29.9	31.8	9.0	3.4	73.1	12
Uttarakhand	8	63.6	54.7	17.1	1.3	57.1	12
West Bengal	21	67.4	66.1	31.4	24.9	41.0	17
All	16	51.2	49.0	24.0	12.3	56.0	14

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We estimated the correlation coefficient between the FI elaborated in Chapter 6 and the performance index estimates given in the present chapter. It is found that the correlation coefficient is highly positive at 0.653 (statistically significant at % level), implying a positive association between infrastructure created for ICDS and the effectiveness of service delivery. Uttarakhand is an exception to this rule, recording a low performance index in spite of having a high infrastructure index. Estimate of correlation coefficient jumps to 0.703 if Uttarakhand is dropped from the dataset.

To conclude this chapter, we may argue that most of the services critical to achieving the goals of attacking IMR, CMR and MMR in both short (for children, PW and LM) and long (for AG) runs, have not been effectively delivered. Rather, services expected to play a subsidiary role in attainment of ICDS goals (e.g. PSE) seem to have been delivered in a relatively effective manner.

Chapter 8

Behavioral Changes and Intermediate Impact/Outcome of ICDS

INTRODUCTION

Impact of a development intervention is usually felt over a period of time. The causal chain of programme design indicates that output and activities induce some favorable behavioral changes in the target groups before the programme impact is felt. In the context of ICDS, which is designed to deliver a package of services to children, pregnant and lactating women and adolescent girls to break the inter-generational cycle of malnutrition, morbidity and mortality, a number of behavioral changes with respect to health, sanitation, hygiene, education, dietary habits/practices etc. in the target population must precede realisation of goals. The sample survey for the study was designed to generate the required data base to assess whether and to what extent ICDS has been successful in bringing about the intended behavioral changes in the target groups. Through the household questionnaires canvassed to both beneficiaries and non-beneficiaries information on the relevant indicators of awareness and actual behavior with regard to health/hygiene, education, dietary habits, nutritional aspects of children etc. were collected in survey. An attempt is made to examine if there are any perceptible difference in the values of the relevant indicators between ICDS beneficiaries and non-beneficiaries.

The present chapter deals with the findings from the survey that deal with

1. The incidence of behavior patterns induced by ICDS among the beneficiaries in respect of its different components and
2. The impact of ICDS on certain outcome parameters that are expected to be influenced by the programme.

8.1 BEHAVIOR PATTERN AMONG BENEFICIARIES

We first take up the issue of incidence of behavior pattern induced by ICDS among its beneficiaries (i.e. whether the mothers followed the advice (actual practice) given by AWW) and the variations therein across the states. It is to be noted that no comparison between beneficiaries and non-beneficiaries in terms of behavioural pattern has been attempted in this section. We are simply looking into the variation in behavioural pattern among the beneficiaries across the states to ascertain if some states fared better than others in terms of achievement of different programme objectives. In the next section we shall concentrate on the variations of outcome between beneficiaries and non-beneficiaries with regard to certain parameters relevant in the context of operationalising ICDS.

Other than providing supplementary nutrition benefits to children, pregnant women, lactating mothers and adolescent girls, ICDS also has built in components to provide pre-school education to children falling in the age group of 3-6 years (PSE) and nutrition health education (NHE) to mothers and adolescent girls. In addition, to ensure that ICDS contributes meaningfully to reduction in child mortality rate, components have been built in to record the weight and height

of children at regular intervals to monitor their growth profiles. The present section constructs an index of behavior of ICDS beneficiaries and attempts to identify the variations in behavior among the beneficiaries across the states. Important indicators have been identified across the different components that are included in ICDS. They are:

8.1.1 NHE-CHILD:

- Follow the Advice - Taking Care and Monitoring of child's growth
- Follow the Advice - Timely Immunisation
- Follow the Advice - About Breastfeeding
- Follow the Advice - About Colostrum Feeding
- Follow the Advice - About Treatment of diarrhoea/minor illness
- Follow the Advice - About preparation of nutritious food/feeding practices
- Follow the Advice - Provide medicine/consult AWW during illness
- Follow the Advice - Importance of education of the child
- Follow the Advice - Cleanliness and Hygiene

The indicators capture the advices given under ICDS to ensure a better health and hygiene of a child to be followed by the mother. The percentage of mothers followed the advices given by AWW on the certain components of child care is given in Appendix Table 8.2 by states.

8.1.2 NHE-MOTHER

- Follow Advice - About immunisation during pregnancy
- Follow Advice - About institutional delivery
- Follow Advice - Precautions in case of home delivery
- Follow Advice - About feeding practices during pregnancy and lactating period
- Follow Advice - About correct posture during pregnancy
- Follow Advice - About correct posture during breastfeeding
- Follow Advice - About self care & health (cleanliness & hygiene)
- Follow Advice - About disease/illness
- Follow Advice - About nipple hygiene
- Follow Advice - About family planning

These advices are given to expectant and lactating mothers. The percentage of mothers followed the advices given by AWW on the certain components of self care is given in Appendix Table 8.3 by states.

8.1.3 PSE-LEARNING SKILLS

- Read simple words
- Count Numbers
- Write alphabets/words

The indicators are estimated out of the responses given by the mothers regarding their perceptions on their child's capability. The children were not tested to verify their level of learning skills. The percentage of child able to develop PSE-learning skills is given in Appendix Table 8.4 by states.

8.1.4 PSE-HYGIENE & SOCIAL BEHAVIOR

- Wash hands after using toilet
- Respect elders

The indicators are estimated out of the responses given by the mothers regarding their perceptions about the child's behavior. The percentage of child able to develop hygiene and social behaviour is given in Appendix Table 8.4 by states.

8.1.5 HEALTH CHECKUP

- Child Weighed at Birth

8.1.6 BEHAVIOURAL INDEX

The standard method used to estimate human development index has been followed to estimate Behaviour Index for each state. Separate indices have been constructed for each of the indicators and simple average has been estimated across different components. Thus

$$Behavioural\ Index(BI) = \frac{\left\{\begin{array}{l}[NHE\_Child\ Index]+[NHE\_Mother\ Index]+[PSE\_Learning\ Index] \\ +[PSE\_Hygiene\&Social\ Behaviour\ Index]+[Health\ Checkup\_Index]\end{array}\right\}}{5}$$

The estimated values of BI for major states are given in Table 8.1. Estimated values for all administrative regions, including smaller states and UTs are given in AppendixTable 8.1. The incidence of ICDS in changing the behavioural pattern of the beneficiaries varies across the states.

- Kerala is recorded to be at the top of the list and its performance is considerably better than Himachal Pradesh, the state ranked second.
- Andhra Pradesh, Tamil Nadu and Maharashtra are recorded to have performed almost identically.
- West Bengal and Jharkhand may be clubbed together in terms of their BI.
- The worst performers are Bihar, Uttar Pradesh, Rajasthan, Haryana and Punjab, recording lower than the national average.

Table 8.1: Indices of Behavioral Pattern among ICDS Beneficiaries

(See state-wise base data in Appendix Table 8.1)

State	Rank	Behaviour Index
Kerala	1	0.908
Himachal Pradesh	2	0.699
Andhra Pradesh	3	0.668
Tamil Nadu	4	0.655
Maharashtra	5	0.650
West Bengal	6	0.585
Jharkhand	7	0.543
Gujarat	8	0.487
Jammu and Kashmir	9	0.449
Assam	10	0.445
Madhya Pradesh	11	0.430
Chhattisgarh	12	0.422
Orissa	13	0.418
Uttarakhand	14	0.400
Karnataka	15	0.400
Punjab	16	0.302
Haryana	17	0.295
Rajasthan	18	0.226
Uttar Pradesh	19	0.166
Bihar	20	0.142
Total	**-**	**0.394**

It will be now worth looking at the indices related to the five components separately. To take up the NHE-Child Index, it is found that ranks do not differ much from that obtained in respect of overall BI, except in the cases of Gujarat and Chhattisgarh which performed relatively better in terms of behavior vis-à-vis mothers following advice given to improve nutrition and health status of their children. Punjab, on the other hand, is found to have been relegated to the bottom of the table. Table 8.2 gives the relevant estimates.

Table 8.2: Indices of Behavioural Pattern for NHE-Child among ICDS Beneficiaries
(See state-wise base data in Appendix Table 8.2)

State	Rank	NHE-CHILD Index
Kerala	1	1.000
Andhra Pradesh	2	0.639
Himachal Pradesh	3	0.588
Gujarat	4	0.527
Chhattisgarh	5	0.507
Maharashtra	6	0.458
Tamil Nadu	7	0.447
Orissa	8	0.393
West Bengal	9	0.362
Jharkhand	10	0.336
Jammu and Kashmir	11	0.240
Karnataka	12	0.235
Haryana	13	0.228
Madhya Pradesh	14	0.177
Assam	15	0.135
Uttarakhand	16	0.135
Rajasthan	17	0.102
Bihar	18	0.015
Uttar Pradesh	19	0.007
Punjab	20	0.007
Total	**-**	**0.243**

Table 8.3 captures the estimated index related to NHE-Mother index. The performance across state does not differ much as compared to the index of NHE-Child.

Table 8.3: Indices of Behavioural Pattern for NHE-Mother among ICDS Beneficiaries
(See state-wise base data in Appendix Table 8.3)

State	Rank	NHE Mother Index
Kerala	1	0.909
Andhra Pradesh	2	0.678
Himachal Pradesh	3	0.638
Gujarat	4	0.534
Tamil Nadu	5	0.500
Maharashtra	6	0.447
Chhattisgarh	7	0.411
Orissa	8	0.403
West Bengal	9	0.359
Jharkhand	10	0.309
Jammu and Kashmir	11	0.266
Haryana	12	0.242
Karnataka	13	0.209
Madhya Pradesh	14	0.200
Uttarakhand	15	0.140
Assam	16	0.132
Rajasthan	17	0.099
Bihar	18	0.023
Punjab	19	0.012
Uttar Pradesh	20	0.001
Total	**-**	**0.243**

Performance across states are not, however, uniformly similar in case of PSE. As we consider the estimated index of PSE-Learning Skills, it is found that states like Assam and Jharkhand have performed relatively better in respect of PSE-Learning Skills than in NHE-Mother. On the other hand, Gujarat's performance is relatively worse.

Table 8.4: Indices of Behavioural Pattern for PSE-Learning skills among ICDS Beneficiaries
(See state-wise base data in Appendix Table 8.4)

State	Rank	Overall PSE58 Index
Kerala	1	0.980
Assam	2	0.912
Andhra Pradesh	3	0.897
Karnataka	4	0.872
West Bengal	5	0.867
Jharkhand	6	0.833
Himachal Pradesh	7	0.792
Jammu and Kashmir	8	0.766
Tamil Nadu	9	0.760
Maharashtra	10	0.746
Uttarakhand	11	0.706
Punjab	12	0.626
Orissa	13	0.592
Madhya Pradesh	14	0.576
Chhattisgarh	15	0.416
Gujarat	16	0.334
Rajasthan	17	0.306
Haryana	18	0.271
Bihar	19	0.166
Uttar Pradesh	20	0.146
Total	**-**	**0.510**

Interesting features are revealed as we look through Table 8.5 below. The incidence of PSE-Hygiene & Social Behaviour component does not follow the general trend observed in respect of the other components considered earlier. While Kerala drops down a few notches below, J&K features at the top of the table, followed by Jharkhand and Uttarakhand.

Table 8.5: Indices of Behavioural Pattern for PSE - Hygiene & Social Behaviour among ICDS Beneficiaries (See state-wise base data in Appendix Table 8.4)

State	Rank	PSE-Hygiene & Social Behaviour Index
Jammu and Kashmir	1	0.927
Jharkhand	2	0.914
Uttarakhand	3	0.834
West Bengal	4	0.797
Madhya Pradesh	5	0.758
Maharashtra	6	0.722
Uttar Pradesh	7	0.675
Himachal Pradesh	8	0.670
Kerala	9	0.650
Tamil Nadu	10	0.612
Assam	11	0.543
Gujarat	12	0.488
Bihar	13	0.466
Andhra Pradesh	14	0.408
Punjab	15	0.362
Rajasthan	16	0.332
Karnataka	17	0.271
Haryana	18	0.170
Chhattisgarh	19	0.158
Orissa	20	0.041
Total	**-**	**0.570**

As we consider the incidence of health check-up the trends observed in respect of NHE are almost repeated with J&K being an exception, dropping down a few notches.

Table 8.6: Indices of Behavioural Pattern for Health Check-up among ICDS Beneficiaries (See state-wise base data in Appendix Table 8.5)

State	Rank	Health Check-up Index
Kerala	1	1.000
Tamil Nadu	2	0.954
Maharashtra	3	0.879
Himachal Pradesh	4	0.805
Andhra Pradesh	5	0.719
Orissa	6	0.661
Chhattisgarh	7	0.618
Haryana	8	0.563
Gujarat	9	0.553
West Bengal	10	0.542
Punjab	11	0.503
Assam	12	0.503
Madhya Pradesh	13	0.438
Karnataka	14	0.411
Jharkhand	15	0.323
Rajasthan	16	0.290
Uttarakhand	17	0.185
Jammu and Kashmir	18	0.045
Bihar	19	0.037
Uttar Pradesh	20	0.000
Total	**-**	**0.404**

Individual component wise indices for all the states and UTs have been estimated. They are given separately in the Appendix. However, some of them require special attention and they are recorded below in Table 8.7. The components described in the table are:

- Incidence of initiation of breast feeding within one hour after birth (BFI)
- Non-incidence of diarrhea (DRI)
- Incidence of deworming (DWI)
- Incidence of use of iodised salt (ISI)
- Incidence of consumption of boiled water (BWI)
- Knowledge of methods to delay or avoid pregnancy (PRI)
- Knowledge about how to prevent anaemia (ANI)

Table 8.7 reveals the differential incidence in behavioural pattern across the states among the ICDS beneficiaries in respect of some selected indicators that are considered important in achieving the objectives of the programme. The base data of the above indicators is given in Appendix Table 8.5. Some salient features emerging out of the table are:

- While Kerala figures to have done better in respect of most of the indicators, it is lagging behind in terms of BFI, DRI and significantly in terms of DWI.
- Andhra Pradesh lagged behind in terms of ISI and PRI.

- On the other hand, Bihar appears to have excelled relatively in respect of DWI, even though it faulted in terms of other relevant parameters.
- Assam fared relatively better in terms of all parameters other than DWI

Table 8.7: Indices of Behavioural Pattern for some Selected Indicators among ICDS Beneficiaries (See state-wise base data in Appendix Table 8.5)

State	BFI	Rank	DRI	Rank	DWI	Rank	ISI	Rank	BWI	Rank	PRI	Rank	ANI	Rank
Andhra Pradesh	0.964	2	0.700	9	0.824	6	0.441	17	0.565	11	0.277	18	0.529	3
Assam	0.938	4	0.760	6	0.000	20	0.949	4	0.838	4	0.903	4	0.151	12
Bihar	0.000	20	0.822	4	0.050	18	0.676	14	0.000	20	0.440	16	0.020	19
Chhattisgarh	0.486	11	0.529	15	0.737	10	0.742	13	0.791	6	0.714	12	0.159	11
Gujarat	0.441	12	0.241	19	0.870	3	0.790	11	0.074	18	0.857	5	0.328	6
Haryana	0.345	13	0.680	10	0.917	2	0.995	2	0.588	10	0.363	17	0.356	5
Himachal Pradesh	0.757	8	0.929	3	0.800	7	0.980	3	0.819	5	0.769	8	0.257	8
Jammu and Kashmir	0.500	10	0.657	12	0.760	9	0.919	5	0.845	3	0.239	19	0.084	17
Jharkhand	0.288	16	1.000	1	0.678	12	0.883	7	0.318	15	0.803	7	0.114	15
Karnataka	0.770	7	0.674	11	0.699	11	0.184	18	0.726	7	0.000	20	0.000	20
Kerala	0.935	5	0.791	5	0.020	19	1.000	1	1.000	1	1.000	1	1.000	1
Madhya Pradesh	0.540	9	0.552	14	1.000	1	0.809	10	0.702	8	0.583	15	0.139	14
Maharashtra	0.953	3	0.625	13	0.837	5	0.919	6	0.371	13	0.837	6	0.143	13
Orissa	1.000	1	0.722	8	0.651	13	0.779	12	0.698	9	0.945	2	0.545	2
Punjab	0.023	19	0.745	7	0.434	16	0.000	20	0.356	14	0.754	9	0.476	4
Rajasthan	0.221	17	0.000	20	0.865	4	0.834	8	0.031	19	0.932	3	0.274	7
Tamil Nadu	0.822	6	0.295	18	0.509	15	0.649	15	0.880	2	0.589	14	0.088	16
Uttar Pradesh	0.185	18	0.409	16	0.764	8	0.098	19	0.249	16	0.749	10	0.182	10
Uttarakhand	0.295	15	0.343	17	0.572	14	0.561	16	0.454	12	0.693	13	0.241	9
West Bengal	0.330	14	0.986	2	0.379	17	0.816	9	0.247	17	0.716	11	0.076	18
Total	**0.503**		**0.585**		**0.558**		**0.575**		**0.431**		**0.688**		**0.221**	

To summarise the findings from this section, we may note that Kerala marches well ahead of all other states in terms of its behavioural pattern expected and desired of the beneficiaries from the implementation of ICDS. The behavioural response from the rest of the states is rather mixed, that necessitates further efforts on several components to bridge the gap between the desired and actual levels of achievements.

8.2 COMPARATIVE PERFORMANCE OF BENEFICIARIES AND NON-BENEFICIARIES

We now move over to the issue of comparative performance of beneficiaries and non-beneficiaries of ICDS in respect of certain parameters which are expected to be influenced by the implementation of ICDS. The parameters considered are:

- Nutritional status of children
- Immunisation status of children
- Weighing of children
- Breastfeeding of children
- Enrolment of children in primary schools after receiving pre-school education from ICDS and
- Discontinuation of education by children after receiving pre-school education from ICDS

Quantifying the impact of an intervention is often a methodologically challenging proposition. Attribution of impact is possible when it is possible to compare the variations in parameter values for a treatment group and a control group that is a credible counterfactual. A credible counterfactual implies a selection of a control group that avoids confounding factors, selection bias, spillover effects, contamination and impact heterogeneity problems[19]. A simple method to avoid biases is to select the sample of counterfactuals using propensity score matching method. The principle of this method involves selection of counterfactual samples using a statistical model to calculate the probability of participating on the basis of a set of observable

[19] **Confounding** occurs where certain factors, typically relating to socio-economic status, are correlated with both exposure to the intervention and, independent of exposure, are causally related to the outcome of interest. Confounding factors are therefore alternate explanations for an observed (possibly spurious) relationship between intervention and outcome.

Selection bias occurs where intervention participants are non-randomly drawn from the beneficiary population, and the criteria determining selection are correlated with outcomes. Unobserved factors, which are associated with access to or participation in the intervention, and are causally related to the outcome of interest, may lead to a spurious relationship between intervention and outcome if unaccounted for. Self-selection occurs where, for example, more able or organised individuals or communities, who are more likely to have better outcomes of interest, are also more likely to participate in the intervention. Endogenous programme selection occurs where individuals or communities are chosen to participate because they are seen to be more likely to benefit from the intervention. Ignoring confounding factors can lead to a problem of omitted variable bias. In the special case of selection bias, the endogeneity of the selection variables can cause simultaneity bias.

Spillover (referred to as contagion in the case of experimental evaluations) occurs when members of the comparison (control) group are affected by the intervention.

Contamination occurs when the comparison group has access to another intervention which also affects the outcome of interest.

Impact heterogeneity refers to differences in impact due by beneficiary type and context. External validity is crucial for any lessons learning from Impact Evaluation, and rigorous Impact Evaluations will assess both the extent to which different groups (e.g. the disadvantaged) benefit from an intervention as well as the potential effect of context on impact.

[Source: http://wapedia.mobi/en/Impact_evaluation]

characteristics, and matches participants and non-participants with similar probability scores. Once such a sample of counterfactual is identified, the difference between the estimated parameters for the treatment group and that for the control group provides the estimate of impact. The present study has been designed to estimate impact through the difference method using counterfactuals identified through propensity score matching. The characteristic variables of ICDS and non-ICDS samples are found to be almost matching at the national level. However, in Jammu & Kashmir, Kerala, Uttarakhand and others it did not match at the state levels. Thus the findings at those states may be perverse in some cases (Appendix Table 8.6).

The estimates obtained through such exercises are presented below. In Table 8 we provide the estimated impact of ICDS on nutritional status of children. Parameter estimates with a positive signs indicate a positive impact, while those with negative signs imply a negative impact of ICDS in influencing the nutritional status of the children surveyed. At a national level, it is found that

- There has been some positive impact of ICDS on normal children and those suffering from Grade I malnutrition.
- However, ICDS could not improve the nutritional status of children suffering from malnutrition of higher degrees (Grades II to IV)

Table 8.8: Impact of ICDS on nutritional status of children aged 7 months-60 months [20]

(See state-wise base data in Appendix Table 8.7)

State	Normal	Grade I	Grade II	Grade III	Grade IV
Andhra Pradesh	6.2	-5.8	-0.2	1.2	-1.4
Assam	0.6	4.0	-8.0	4.4	-1.0
Bihar	6.9	5.3	-11.0	1.1	-2.3
Chhattisgarh	-10.9	11.6	-3.0	1.5	0.8
Gujarat	-9.1	10.5	6.2	-9.1	1.4
Haryana	2.3	2.7	-6.4	1.4	0.0
Himachal Pradesh	-0.8	7.6	-7.3	0.3	0.3
Jammu and Kashmir	-4.1	5.8	-0.4	-1.3	-0.1
Jharkhand	-6.1	6.2	-2.5	1.2	1.2
Karnataka	-7.1	7.4	2.6	-3.5	0.6
Kerala	6.5	-11.9	4.2	1.2	0.0
Madhya Pradesh	7.5	-1.7	-6.2	0.0	0.4
Maharashtra	3.5	0.2	-0.3	-3.3	0.0
Orissa	-1.8	11.1	-5.3	-6.0	2.0
Punjab	-9.6	6.1	4.1	-1.2	0.7
Rajasthan	2.9	1.3	-2.2	-3.7	1.7
Tamil Nadu	1.4	3.2	-4.1	0.8	-1.3
Uttar Pradesh	-0.2	2.0	-1.4	-0.5	0.1
Uttarakhand	-14.7	-0.2	17.5	-2.9	0.4
West Bengal	11.7	-4.1	-4.7	-3.2	0.4
All	**1.3**	**2.1**	**-2.6**	**-0.4**	**-0.4**

[20] The standards developed by World Health Organization (WHO) are available at http://www.who.int/childgrowth/standards/Technical_report.pdf

National level performance, however, does not capture the state-level variations in impact on malnutrition. A breakup of the results for moderately and severely malnourished children incorporating variations in income, occupation and asset holding of the households are given in appendix. This exercise helps reduce the possible bias that may arise due to impact heterogeneity.

Table 8.9 captures the impact of ICDS on immunisation. At a national level, it is found that the ICDS programme on immunisation has impacted the spread of immunisation. The felt impact, however, is more in case of measles. The impact, though positive, is marginal if one considers coverage of children involving immunisation from all diseases covered under the programme. State specific variations are also significantly higher though. Special attention needs to be made for immunisation against measles in Gujarat and against BCG in Haryana, while general immunisation programme needs further focus in Jammu and Kashmir, Himachal Pradesh and Kerala. A breakup of the results incorporating variations in income, occupation and asset holding of the households are given in appendix.

Table 8.9: Impact of ICDS on immunisation Status of Children (12-23 months)

(See state-wise base data in Appendix Table 8.8)

State	BCG	Measles	All Vaccination*
Andhra Pradesh	1.5	5.5	4.1
Assam	-9.5	2.1	-2.0
Bihar	0.7	5.0	4.4
Chhattisgarh	-1.0	1.7	1.7
Gujarat	-5.9	-21.2	7.6
Haryana	-13.7	1.1	-0.9
Himachal Pradesh	0.0	1.1	-14.5
Jammu and Kashmir	-3.0	-9.7	-18.4
Jharkhand	4.0	12.8	-2.0
Karnataka	6.0	-0.8	4.6
Kerala	0.0	-1.3	-10.0
Madhya Pradesh	-1.8	-0.6	4.6
Maharashtra	1.9	10.7	-1.1
Orissa	8.1	3.1	10.1
Punjab	3.5	11.3	9.3
Rajasthan	3.3	2.8	0.0
Tamil Nadu	0.3	3.1	3.9
Uttar Pradesh	3.5	2.7	4.5
Uttarakhand	-8.6	75.6	63.6
West Bengal	-3.0	8.3	5.6
All	**1.4**	**5.5**	**0.7**

Weighing of the child at birth is considered an important component of ICDS. Table 8.10 provides the estimated impact of ICDS on this practice. At the national level, the impact is marginally negative, implying ICDS has not made much impact on getting the child weighed at birth. The practice is significantly absent among ICDS beneficiaries in Punjab, Himachal Pradesh, West Bengal and Karnataka, while the impact in Jharkhand is quite encouraging.

Table 8.10: Impact of ICDS on the practice of a child getting weighed at birth

(See state-wise base data in Appendix Table 8.9)

State	Impact
Andhra Pradesh	2.1
Assam	1.7
Bihar	-1.5
Chhattisgarh	2.0
Gujarat	-0.2
Haryana	-7.8
Himachal Pradesh	-14.2
Jammu and Kashmir	-8.8
Jharkhand	10.3
Karnataka	-12.5
Kerala	-0.4
Madhya Pradesh	-5.8
Maharashtra	2.0
Orissa	-1.3
Punjab	-22.0
Rajasthan	0.4
Tamil Nadu	-2.4
Uttar Pradesh	-1.2
Uttarakhand	0.8
West Bengal	-12.5
Total	**-0.7**

Initiation of breast feeding within one hour of a child's birth is considered to contribute to the long term immunity of the child. This is a practice traditionally considered to be harmful to the health of the new born and therefore avoided. ICDS has a built in component to popularise this practice. Table 8.11 records the impact of ICDS in popularising the practice and it is observed that ICDS has had a considerable impact. Positive value for initiation of breast feeding within one hour of birth coupled with negative parameter estimates for initiation of breast feeding within one day testifies that mothers no longer wait for a day to initiate breast feeding. However, the practice is yet to pick up among ICDS beneficiaries in Gujarat, Himachal Pradesh, Kerala, Madhya Pradesh, Orissa and Punjab.

Table 8.11: Impact of ICDS on Colostrums Feeding

(See state-wise base data in Appendix Table 8.10)

State	Within one hour	Within one day
Andhra Pradesh	19.9	-15.77
Assam	9.57	-8.13
Bihar	3.65	-3.31
Chhattisgarh	14.18	-7.93
Gujarat	-10.53	11.91
Haryana	5.71	-0.98
Himachal Pradesh	-2.68	-8.14
Jammu and Kashmir	1.9	-19.26
Jharkhand	2.15	1.53
Karnataka	1.92	-1.99
Kerala	-2.15	9.37
Madhya Pradesh	-1.01	-2.13
Maharashtra	16.32	-17.04
Orissa	-2.53	2.21
Punjab	-3.41	-3.86
Rajasthan	2.1	17.63
Tamil Nadu	1.44	3.6
Uttar Pradesh	3.56	-2.62
Uttarakhand	27.23	-41.82
West Bengal	15.9	-15.83
Total	**10.15**	**-8.73**

The pre-school education (PSE) component of ICDS has been around the objective that habit of going to school and early exposure to letters and numbers in an informal way would situate the children in a better position and help them cope with the rigours and disciplines maintained in a formal school. So it is expected that PSE would have a positive impact on enrolment in primary schools and a negative impact on discontinuation.

Table 8.12 captures the estimated impact on enrolment and discontinuation. Expectedly, at the national level the impact on enrolment is positive, while that on discontinuation is negative. However, significant variations exist across the performance of the states. Some salient findings are:

- The impact on enrolment has been significantly high in the states of Madhya Pradesh, Punjab, Andhra Pradesh, Jharkhand and Orissa.
- The impact, though positive, is lower than the national average in Bihar, Tamil Nadu, Uttar Pradesh, Rajasthan, Gujarat and Chhattisgarh,
- Negative impact – enrolment rate higher among non-beneficiaries – has been recorded in the states of Assam, J&K, Karnataka and Uttarakhand.
- Discontinuation has been significantly reduced more among ICDS beneficiaries in the states of Assam and Uttar Pradesh.

- On the other hand, discontinuity has significantly increased more among ICDS beneficiaries in Andhra Pradesh, Gujarat, J&K, Madhya Pradesh, Punjab and Uttarakhand.

Table 8.12: Impact of ICDS on enrolment of and discontinuation by children aged 7-14 years in primary and post-primary education

(See state-wise base data in Appendix Table 8.11)

States	Impact of ICDS on	
	enrolment	discontinuation
Andhra Pradesh	6.0	2.5
Assam	-0.5	-5.3
Bihar	4.5	0.9
Chhattisgarh	1.7	-0.5
Gujarat	2.0	2.1
Haryana	0.0	0.1
Himachal Pradesh	0.0	0.1
Jammu and Kashmir	-1.8	1.4
Jharkhand	7.1	-1.7
Karnataka	-3.6	-0.1
Kerala	0.0	-1.3
Madhya Pradesh	16.6	1.5
Maharashtra	1.8	0.6
Orissa	5.4	-0.1
Punjab	11.7	1.9
Rajasthan	2.2	0.1
Tamil Nadu	3.6	0.1
Uttar Pradesh	4.4	-5.0
Uttarakhand	-0.8	1.2
West Bengal	1.0	-2.4
Total	**5.0**	**-2.5**

Ideally, states should have shown a positive impact on enrolment, coupled with a negative impact on discontinuation. Chart 8.1 below locates the states in terms of the impacts on both these counts and identifies states that require urgent attention with respect to the component of PSE.

Chart 8.1: Enrolment–Discontinuation impact matrix for PSE component of ICDS

DISCONTINUATION	ENROLMENT		
	+ve	No impact	-ve
+ve	Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu	Haryana, Himachal Pradesh	Jammu & Kashmir, Uttarakhand
-ve	Chhattisgarh, Jharkhand, Orissa, Uttar Pradesh, West Bengal	Kerala	Assam, Karnataka

It is found that only Chhattisgarh, Jharkhand, Orissa, Uttar Pradesh and West Bengal have shown the ideal signs. Some of the states have been showing positive impact on enrolment, which could not be sustained resulting in an increased rate of discontinuation - Andhra Pradesh, Bihar, Gujarat, Madhya Pradesh, Maharashtra, Punjab, Rajasthan and Tamil Nadu. On the other hand, serious concerns arise as we consider Jammu and Kashmir and Uttarakhand, where enrolment among ICDS beneficiaries is lower, apart from a higher rate of discontinuation.

To summarise the findings from this section we observe that the most effective positive outcome of ICDS has been recorded in respect of initiation of breast feeding within an hour of the child's birth. Percentage of children breast fed within an hour of their birth is 10.15 per cent higher in case ICDS beneficiaries than children not covered by ICDS. The next important positive outcome is increased enrolment among children in primary education. The share of children attending primary schools is 5 per cent higher in case of ICDS beneficiaries. ICDS has also contributed meaningfully to decline in discontinuation of education. However, the impact on immunisation against all diseases covered under ICDS has been not that significant, even though significant impact has been recorded in case of vaccination against measles. The results however, have been dismal in case of initiating the practice of getting a child weighed immediately after birth and improving the nutritional status of children suffering from higher degree of malnutrition. A detailed insight on the impact of ICDS on nutritional status and mortality rate among children is given in the next chapter.

To conclude, it may be argued that as one compares among the states, Kerala marches well ahead in realising the intended benefits from ICDS. On the other hand, in terms of impact, ICDS has shown better results in popularising breast feeding and increasing the school enrolment ratio. The impact on overall immunisation status has been insignificant, while it could not have any positive impact on improving the nutritional status of malnourished children.

Chapter 9

Impact of ICDS on Nutritional Status of Children

INTRODUCTION

India's policy response to child malnutrition, ICDS is a well-conceived programme aimed at addressing the major causes of child malnutrition. The programme, however, may yield the intended results only if it is designed, implemented and monitored in a results-based framework. Instead of targeting the programme at malnourished children and women of the relevant age-groups and ensuring that intended benefits (Supplementary Nutrition, Nutrition and Health Education, Pre-school Education and Health services) are actually delivered to them, the programme has paid more attention to expansion of the coverage and universalisation. The issue of universal coverage and providing supplementary nutrition to all children has assumed a different dimension with the intervention of the Hon'ble Supreme Court of India. ICDS is now being couched in a rights-based framework. This has led to establishment of a large number of new AWC to accommodate more children who are now outside the purview of ICDS. As a result, the programme has been facing a number of operational challenges, arising out of inadequate worker skills, shortage of equipments, establishing new projects and AWC, inadequate monitoring and supervision – all of which are contributing to non-realisation of potential benefits of the programme. The evidence available from NFHS surveys tends to suggest that different nutritional interventions in the country have not impacted on child malnutrition in any significant manner. As per NFHS survey results, the proportion malnourished in the age-group under three years who are underweight was 51.5 per cent in 1992-93, 42.7 per cent in 1998-99 and 40.4 per cent in 2004-05. The policy makers and planners have been concerned with the impact/outcome of ICDS and quality of public spending under the programme. The Ministry of Women and Child Development, Planning Commission and civil society organisations have sought information on the impact of ICDS and supported evaluation/review of the scheme to get feedback on its performance. However, most large studies on performance assessment of ICDS have focused on **concurrent evaluation** of the quality of infrastructure, adequacy of inputs and activities undertaken. Information on impact of the programme is available from some small studies (see Chapter - 2 on literature review). There has been no large scale scientific evaluation of **behavioral changes** in target groups and **impact** on nutritional status and mortality/morbidity of children.

The large studies undertaken by NCAER (2000) and NIPCCD (1992, 2006) did not reflect on the outcome and impact of ICDS. The indirect evidence of impact of nutritional interventions can, however, be obtained from other studies which provide estimates of different grades of malnourished children, but these studies are not designed to assess impact of any specific nutritional intervention. **The findings of such studies are very general and any improvement in child nutrition cannot be attributed to ICDS**. The evidence (statistically weak) thrown up by NFHS studies, for example, does show that malnutrition is less in areas where ICDS is in place compared to non-ICDS areas. The World Bank study (2004) which used 1992/93 data of NFHS also found some lower probability (5%) of male children being underweight compared to their counterparts in non-ICDS areas. The same study, however, did not find any significant

difference for the girl children. Similar studies- one by Dasgupta, et al (2005) and another by Bredenkamp and Akin (2004) - made attempts to establish association between nutritional status and presence of Anganwadi Centres in a village.

Recently, a number of large household surveys have been conducted with focus on nutrition and ICDS. The report titled "Focus on Children Under Six (FOCUS" brought out by Citizen's Initiative for the Rights of Children Under Six (CIRCUS, 2006) includes results of a survey of 122 villages seeking improvement in delivery of services in ICDS and linked "effectiveness" of service delivery in ICDS with increased beneficiary participation and improvement in child nutrition. CARE-India, which extends support to ICDS, conducts population-based surveys at regular intervals, confining their scope to just the operational aspects of the programme. Though The World Bank conducted an evaluation of its ICDS-III/WCD Project (1999-2006) involving five states and a number of research institutions, the study did not help draw meaningful observations about the performance and impact of ICDS due to lack of rigor in study design.

Though none of the studies came up with any conclusive evidence of positive effect of ICDS on the nutritional status of children, it must be borne in mind that the existence of such positive association in other studies does not necessarily establish the effectiveness of ICDS as these studies did not have a design that could have resolved the intricate issue of **"attribution"** in impact analysis.

9.1 METHODOLOGY FOR IMPACT ASSESSMENT

The present study was designed to collect all the relevant information on inputs, outputs, activities, outcome/impact of ICDS using the **Log-frame** hierarchy. For impact analysis, ideally one needs a "**with-and-without"** approach in which the values of relevant indicators for the **treatment** group will have to be compared with those of the **control** group. However, ICDS being a universal programme now, it was not possible conceptually to separate the non-beneficiaries from beneficiaries. Also, even if some children are not receiving benefits from AWC, it would not be valid to compare the values of any outcome/impact measure of beneficiaries with that of non-beneficiaries, without controlling for the influence of other variables, which have a bearing on the nutritional status of children. Thus, income, assets and occupation on one hand and access to education and health services on the other are important variables that can explain inter-household variation in nutritional status.

This survey revealed that though a large proportion of the target group has been registered as beneficiaries of ICDS, some of those registered did not access ICDS benefits and some others accessed only one or two services (**immunisation , medical assistance but not supplementary nutrition**) delivered by AWC. The differential benefit-seeking behavior by different groups of registered beneficiaries could be due to a number of factors, such as lack of demand for a service (SN, for example), lack of physical access to AWC (distance, for instance), high opportunity cost of accessing services, irregularity of functioning of AWC and the like. This differential behavior could perhaps, be explained by the differences in socio-economic characteristics of those registered with AWC. Under such circumstances, the comparison of numerical values of outcome/impact indicators of beneficiaries with those of **dissimilar** non-beneficiaries will not yield realistic conclusion about the impact of the programme.

In the present study, it was decided to collect information on household profiles of all those children who are registered with AWC so that it becomes possible to construct **control**

(comparison) groups for comparing values of outcome/impact indicators of two groups. As described in Chapter 4, the Study Team carried out a **listing of all children** (age group 6-72 months) whose names were found in Survey Register and divided them into the following two categories:

1. Those not registered.
2. Those registered with AWC. This group was further sub-divided into the following four mutually exclusive groups:
   (a) those receiving **SN** (with or without PSE/medicine);
   (b) those receiving **SN and immunisation** (with or without PSE/medicine);
   (c) those receiving **immunisation** with or without other benefits, **but not SN**;
   (d) those registered, but not receiving SN, immunisation and other benefits.

For the purpose of the present study, children in categories 2(a) and 2(b) have been defined as major beneficiaries[21] as they received (as per records available with AWC) the important services of ICDS, while those in categories 1, 2(c) and 2(d) are termed as non-beneficiaries of important services. Implicit in this classification is the assumption that the impact of the programme would be felt on indicators of child malnutrition only if a child received the important services like, SN, PSE, immunisation and medicines as a package or in combination of some important services. However, on verification from beneficiary households at the time of listing it was noted that only a small proportion of beneficiaries received all or the important services as a package. It is this grassroots reality that led to classification of registered beneficiaries into the above categories.

As per ToR supplied by Planning Commission, an impact analysis design was not required for assessing the impact of the programme on nutritional status of pregnant women (PW), lactating mothers (LM) and adolescent girls (AG). The scope of the study was limited to assessing whether awareness and desirable behavioral changes in such beneficiaries with regard to nutrition, health and hygiene have taken place. The Study Team, therefore, confined the study to only actual (PW, LM and AG) beneficiaries among those registered (read **Delivery Register)** with AWC for ICDS benefits.

9.2 CHILD MORTALITY AND ICDS

The ICDS programme is designed to improve the nutritional status of children. Improvement in nutritional status gets reflected in lower mortality rates (IMR, CMR, MMR) and normal weight-for-age (WFA) and standard body-mass-index (BMI). As per ToR, NCAER was required to

[21] While the study team has examined the impact of PSE, NHE etc., the primary objective in the study is to analyze impact of ICDS on child malnutrition. Since a large proportion of ICDS budget is spent on SNP, it is expected that SNP is the primary focus, while other components of ICDS indirectly impact on nutrition and child development. It is important to point out that ICDS is not the sole provider of immunization and health services, even for the recipients of SNP. The study has clearly distinguished between short-to-medium term impact and relatively long-term impact of ICDS. SNP and immunization with health services are important for the former and PSE/NHE/PM&LM etc. are important from the perspective of long-term impact.

analyse the **mortality data available with the AWC**. However, it was noted during the field survey that most AWC do not keep records of mortality rates. As a result, the **causal relationship** between IMR/CMR and performance of ICDS could not be studied using survey data. However, an attempt is made to explain the inter-state variations in available secondary data on CMR by variables representing performance of ICDS along with other relevant variables. The following relationship between Child Mortality Rate (CMR) and some relevant explanatory factors is proposed for empirical estimation:

$$\mathbf{CMR = a + b\,(PVR) + c\,(PI) + d\,(FLR) + e} \qquad (9.1)$$

where,

CMR : Child Mortality Rate (under 5); using National Family Health Survey (NFHS-3), 2004-05.
PI : Index of performance of ICDS (Chapter - 6 for computational details); values of this variable have been generated using this survey data;
FLR : Female literacy rate; using NSSO 2004-05 data;
PVR : Poverty ratio; using Tendulkar Committee's estimates (Planning Commission, 2009);
e : the error term; and **a, b, c** and **d** coefficients to be empirically estimated.

Apriori hypotheses about causal relationships are: $b \geq 0$, $c \leq 0$ and $d \leq 0$.

Table 9.1: Data set used for the four variables

States	CMR	FLR	PVR: Poverty Ratio	PI: Performance Index
Andhra Pradesh	10.2	48.8	29.9	0.689
Assam	20.2	72.4	34.4	0.253
Bihar	24.7	41.0	54.4	0.248
Chhattisgarh	21.0	53.7	49.4	0.530
Gujarat	11.9	61.9	31.8	0.563
Haryana	11.1	59.2	24.1	0.570
Himachal Pradesh	5.6	70.9	22.9	0.540
Jammu and Kashmir	6.8	55.5	13.2	0.494
Jharkhand	26.1	44.7	45.3	0.680
Karnataka	12.1	58.5	33.4	0.728
Kerala	1.0	89.2	19.7	0.612
Madhya Pradesh	26.5	48.7	48.6	0.572
Maharashtra	9.5	68.5	38.1	0.716
Orissa	27.6	54.6	57.2	0.635
Punjab	10.8	68.0	20.9	0.402
Rajasthan	21.5	41.0	34.4	0.317
Tamil Nadu	5.3	67.2	28.9	0.671
Uttar Pradesh	25.6	47.0	40.9	0.295
Uttarakhand	15.5	62.1	32.7	0.372
West Bengal	12.2	64.8	34.3	0.682
All India	**18.4**	**57.1**	**37.2**	**0.476**

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Using cross section data on the dependent and explanatory variables for 20 States [see Table 9.1 for data set used], the following empirical relationship is obtained:

CMR = 17.75 + 0.47 (PVR) – 13.80 (PI) – 0.19 (FLR) …….. (9.2)
(6.54) (3.08) (2.70) R-Bar.Sq. = 0.87, d.f =17.
F (3, 17) = 40.66.

In the estimated relationship, the coefficients of all the three variables have expected signs and are statistically significant. The results tend to suggest that, *ceteris paribus*, good performance of ICDS (PI) and a higher rate of female literacy rate (FLR) have contributed towards reduction in child mortality rates (CMR). This result appeals to common sense and is encouraging in the sense that the effort of the government to reach the poor and deprived through various anti-poverty and social sector programmes has paid off in the form of reduced child mortality rates. What is more important in the context of the present study, however, is that in the existing policy-mix, **improving the operational performance of ICDS** has the potential of contributing to reduction in child mortality[22].

9.3 WEIGHT FOR AGE (WFA)

Other measures of nutritional improvement in children include increase in weight-for-age (indicator) in the "treatment" group as compared to the "control" group. Information on age in months and weight for both beneficiary and non-beneficiary children was generated (actual age and weight of all the sample children were collected during survey work) to categorise children into "moderately malnourished (MM)", "normal (N)" and "severely malnourished (SM)". The WFA measure for the treatment and comparison groups will help assess the impact of ICDS when controlled for influences of other intervening factors[23].

The relevant data set has been used to place children into five grades as defined by the Ministry of Women and Child Development (MoWCD). Grades I & II have been merged into one group labeled MM (moderately malnourished), Grades III & IV have been put into another group called SM (severely malnourished), and normal children have been designated as N. The percentage distribution of MM & SM children is presented in Table-9.2 for both beneficiaries and non-beneficiaries. While WFA is generally a little more among ICDS beneficiaries, a large number of States [Chhattisgarh, Gujarat, J&K, Jharkhand, Karnataka, Orissa, Punjab and Uttarakhand] show perverse results. It may be pointed out here that this comparison of values of

[22] Though the variables included in the regression may not be exhaustive, but it can be linked CMR with poverty, nutrition, immunization/other health services and female literacy. The study team thinks for the report this analysis has thrown the important message for the policy makers.

[23] In this regard it should be mentioned that we have not attempted to derive alternate/comparable statistical estimates of "child malnutrition", for which the sample size was inadequate. That is why no attempt was made to derive comparable estimates of malnutrition available in the literature. The objective of studies and reports referred to is not "impact evaluation", but derivation of statistically valid estimates of the extent of mal-nourishment among children. With large sample size one can play with data to derive alternate statistical estimates and test hypotheses. In impact studies, here it has been concentrated on testing of hypotheses, but more on the program being evaluated, constructing "treatment groups" and "counterfactuals" to get an idea as to how the program is impacting on the beneficiaries and why. The focus is on causality and attribution.

WFA of beneficiaries and non-beneficiaries is not valid as both the groups include children of households with different socio-economic background. It is necessary to construct comparable groups for valid comparison. The survey instruments were designed to elicit information on socio-economic profile of each household. An attempt is made to place the sample households into suitable homogenous groups with respect to three characteristics:

- **Expenditure**: Both beneficiary and non-beneficiary children are placed into three categories with monthly household expenditure: less than Rs.2000, between Rs. 2001-3000, and above Rs. 3000.
- **Occupation:** Both beneficiary and non-beneficiary households have been classified in three occupation groups, i.e. cultivators, wage earners and others.
- **Asset holding:** Beneficiary and non-beneficiary households are put in two asset-holding categories, i.e. those with expensive assets (Asset-I) and those without such assets (Asset-II). It may, however, be pointed out that sub-division of sample observations in the above three groups (expenditure, occupation and asset) into smaller sub-groups cannot be justified because of smallness of sample size.

The relevant results are presented in Tables 9.2 through 9.5. Though for a number of states the extent of malnourishment among beneficiary children is less than that among non-beneficiary children, some states show perverse results. All this tends to suggest that although access (or lack of it-as represented by receipt of ICDS benefits, income/expenditure/occupation/asset holding, etc.) to food/supplementary nutrition is an important determinant of nutritional status, there must be other factors which also have a bearing on the nutritional status of children. This survey collected relevant **AWC-level data to assess operational efficiency of the delivery system of ICDS** as also household level information on a large number of household characteristics with regard to health seeking behavior, sanitation, hygiene and awareness about practices that contribute to nutritional status of children. An attempt is made to assess the impact of ICDS in a situation where we are able to control for other intervening factors that have a bearing on the nutritional status of children. We propose that the inter-state variation in the proportion of malnourished children could be explained by a set of factors that include indicators of efficiency of delivery of designated services in ICDS, household characteristics and behavior. Symbolically, the following relationship is proposed:

$$\mathbf{PMNC(i) = a + b[EICDS(i)] + c[PPH(i)] + d[PHNST(i)] + e\ (i)} \qquad \mathbf{(9.3)}$$

PMNC **:** Percentage of malnourished children (6-72 months) in state (i); includes Categories II, III and IV of malnourished children, but excludes Category I;

EICDS **:** efficiency of delivery in ICDS as measured by the product and linear combination of a number of indicators of operational efficiency of AWC (**see Appendix Text – 9.1** for details of definition and measurement);

PPH **:** Perecntage of households below the monthly expenditure level of Rs2,500/;

PHNST **:** Perecentage households not seeking treatment when their children fell ill.

e **:** error term.

A priori, the signs of the coefficients are expected to be as follows:

$b \leq 0$, $c \geq 0$ and $d \geq 0$

The above variables have been measured using this survey data. Since for some States the sample size was not adequate to generate reliable state level indicators, data from 20 states have been used for estimating the proposed relationship. The estimated relationship is as follows:

PMNC = -5.99 – 0.19 EICDS + 0.46 PPH + 0.31 PHNST – 6.39 D ……. 9.4
(4.04) (6.68) (3.65) (5.30)
R-Bar Sq. = 0.83, No. of observations = 20, F-value = 24.9;

D is a Dummy variable used to integrate the data sets of good performing (nutritional status-wise) states like Haryana, Punjab, T. Nadu and West Bengal with that of other states. Inter-state variations in the values of the four variables are large. The coefficients of variation of the four variables are: PMNC=29 per cent; PHNST =71 per cent; PPH=13.25 per cent; EICDS=30.49 per cent. The four states mentioned exhibit much lower malnourishment among children compared to the rest, perhaps, because Haryana and Punjab are food surplus states with easy access to food while, Tamil Nadu and West Bengal have better food security system in place. Given the limited number of observations in hand, the use of Dummy variable was needed to integrate these four states (hence, four observations) for statistical reasons to bring out the "true" impact of ICDS on child malnutrition, keeping other intervening factors constant.

The coefficients are significant at 5 per cent level and the proposed relationship is able to explain a large part of the observed inter-state variations in the percentage of malnourished children. The results show that the **interaction between effective coverage and effectiveness of delivery system of ICDS**, other things remaining the same, has the potential of having a favorable impact on malnourishment. Another important observation that could be made is that other development interventions, such as, MGNREGA (Income generating), access to health services, female literacy, hygiene and sanitation programmes have a role in influencing the nutritional status of children. The role of ICDS is visible only when its "effectiveness" is fully accounted for (as in EICDS) and the role of other factors that have a bearing on malnutrition are explicitly considered in the multivariate relationship.

In other words, the strategy of delivering a package of services through ICDS and the emphasis on convergence of services like, provision of safe drinking water, sanitation facilities, etc. is unquestionable. However, the impact of ICDS on the malnutrition syndrome is also contingent upon the performance of other programmes designed to improve access to public services by the poor and disadvantaged.

What is important in the present context is improvement of the effectiveness of ICDS by ensuring that services to beneficiaries are delivered as designed and intended. Can the existing delivery mechanism ensure effectiveness of complementary programmes for improved impact of individual schemes? The results of this study and evidence from other evaluation studies suggest that vertical implementation of programmes cannot help realise the potential benefits unless the issue of convergence of interrelated services is meaningfully addressed. It is suggested that any new effort towards convergence of interrelated services must take into consideration the grassroots reality and heterogeneity of local conditions.

Table 9.2: Nutritional status of children aged 7 months-60 months

State	ICDS		Non-ICDS		MWCD, 2009*	
	Moderately Malnourished	Severely Malnourished	Moderately Malnourished	Severely Malnourished	Moderately Malnourished	Severely Malnourished
	1	2	3	4	5	6
Andhra Pradesh	43.1	4.6	49.2	4.8	49.9	0.1
Assam	46.1	6.7	50.1	3.2	35.0	0.6
Bihar	43.0	10.2	48.6	11.4	66.7	33.3
Chhattisgarh	49.5	9.4	40.9	7.1	52.3	0.7
Gujarat	53.1	6.1	36.3	13.8	56.1	0.8
Haryana	42.6	2.1	46.3	0.8	43.8	0.1
Himachal Pradesh	43.2	0.6	43.0	0.0	37.2	0.1
Jammu and Kashmir	35.0	2.0	29.5	3.4	31.1	0.1
Jharkhand	43.9	7.8	40.2	5.5	42.8	0.8
Karnataka	49.7	5.3	39.7	8.3	51.6	0.4
Kerala	35.2	1.2	42.9	0.0	37.1	0.1
Madhya Pradesh	51.6	9.5	59.5	9.1	43.5	0.4
Maharashtra	42.3	2.5	42.4	5.8	37.8	0.1
Orissa	45.2	8.9	39.3	12.9	51.9	0.8
Punjab	32.7	3.7	22.5	4.3	34.8	0.1
Rajasthan	43.6	8.5	44.5	10.5	46.6	0.7
Tamil Nadu	41.4	3.3	42.3	3.8	36.5	0.0
Uttar Pradesh	52.6	8.8	52.1	9.1	52.2	0.5
Uttarakhand	43.9	6.5	26.7	9.0	93.5	2.1
West Bengal	38.4	3.8	47.2	6.7	49.0	0.6
All India	**46.1**	**6.6**	**46.7**	**7.3**	**45.5**	**0.4**

Note: The information for smaller states is available in the Appendix. These are placed separately in Appendix because of smallness of sample size which does not permit finer disaggregation in a statistically valid manner. However, estimates of these relevant 'statistics' at the state level for these smaller states statistically valid.

Source: (i) MWCD Website (Under Child Development Section-Data Tables of ICDS: State-wise details of Classification of Nutritional Status of Children (as on 31.12.2009)
(ii) Figures for Bihar under ICDS Ben (MWCD, 2009) for the year Feb, 2007.

Table 9.3: Nutritional status of children aged 7 months-60 months by Expenditure classes

(Figures in %)

State	ICDS						Non-ICDS					
	Up to Rs. 2000		2001-3000		Above 3000		Up to Rs. 2000		2001-3000		Above 3000	
	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely
Andhra Pradesh	47.7	6.7	44.7	5.0	31.0	1.5	46.3	7.4	45.0	5.7	33.8	0.7
Assam	58.4	11.7	48.1	9.4	35.2	0.0	60.2	7.0	50.4	8.0	31.0	0.0
Bihar	44.9	14.2	41.5	7.0	38.0	0.6	55.3	17.7	43.2	11.2	45.9	0.0
Chhattisgarh	45.3	15.0	49.1	3.9	62.2	2.8	61.5	24.7	61.5	8.6	24.4	0.0
Gujarat	54.3	8.4	48.6	6.6	56.5	0.0	38.3	10.0	46.0	8.2	45.5	0.0
Haryana	55.9	11.0	52.7	0.0	24.3	0.0	43.0	4.3	73.4	0.0	17.3	0.0
Himachal Pradesh	50.2	2.6	46.9	0.7	37.3	0.0	63.9	0.0	47.8	0.0	29.1	0.0
Jammu and Kashmir	43.8	12.7	33.6	2.6	34.5	0.0	55.6	18.9	48.4	4.4	26.7	0.0
Jharkhand	47.1	12.5	36.7	7.5	54.0	3.8	40.7	9.3	42.0	2.4	34.8	0.0
Karnataka	53.2	6.7	42.1	2.5	36.8	0.0	44.3	19.8	57.7	0.0	2.0	0.0
Kerala	44.2	9.6	35.6	0.0	33.3	0.0	85.6	0.0	0.0	0.0	2.0	0.0
Madhya Pradesh	57.1	13.4	48.9	7.6	42.9	3.2	63.5	15.6	60.5	11.8	55.3	1.5
Maharashtra	51.7	5.6	46.3	1.2	26.5	0.0	46.0	13.2	31.8	2.5	28.8	1.7
Orissa	50.2	13.5	45.9	5.9	32.8	2.3	46.9	20.1	34.1	15.7	37.1	0.0
Punjab	38.3	12.1	30.1	0.6	30.8	0.0	36.5	8.9	22.9	6.5	17.6	0.0
Rajasthan	51.3	11.8	41.6	8.9	39.1	3.7	53.0	16.9	46.1	14.1	36.6	1.4
Tamil Nadu	44.3	5.6	41.7	2.1	34.8	0.0	41.7	6.5	42.9	5.4	42.2	0.0
Uttar Pradesh	58.2	12.2	52.7	8.4	47.4	5.9	58.7	15.4	47.6	7.5	51.7	2.4
Uttarakhand	47.4	16.4	45.7	0.0	34.8	0.0	36.4	14.0	33.6	0.0	0.0	0.0
West Bengal	41.9	6.2	37.7	2.1	29.8	1.9	48.1	12.9	44.9	2.5	37.2	1.7
All India	**51.2**	**10.2**	**45.7**	**5.8**	**39.4**	**2.7**	**52.7**	**12.7**	**45.1**	**6.9**	**38.5**	**0.8**

Note: The information for smaller states is available in Appendix Table.

Table 9.4: Nutritional status of children aged 7 months-60 months by Occupation group

(Figures in %)

State	ICDS						Non-ICDS					
	Agriculture		Wage Earners		Others		Agriculture		Wage Earners		Others	
	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely	Moder-ately	Severely
Andhra Pradesh	37.4	4.1	53.1	6.4	11.3	0.7	34.9	0.0	58.7	9.0	25.2	1.4
Assam	26.9	6.3	57.8	14.1	47.0	0.0	31.0	0.0	67.3	13.3	37.3	0.4
Bihar	47.7	5.7	45.9	17.1	37.2	2.2	45.5	3.3	49.6	14.5	48.8	9.9
Chhattisgarh	53.2	11.9	36.8	13.8	58.2	1.1	39.6	9.3	53.1	26.7	37.5	0.0
Gujarat	53.6	9.1	49.5	5.8	58.0	2.1	57.7	1.0	35.9	23.1	18.2	0.0
Haryana	43.0	0.0	42.3	4.7	42.7	0.0	30.6	0.0	68.8	2.0	32.8	0.0
Himachal Pradesh	24.6	0.0	60.7	2.0	39.3	0.0	30.0	0.0	84.6	0.0	38.1	0.0
Jammu and Kashmir	14.8	1.0	54.8	7.2	35.9	0.8	32.5	26.9	76.4	0.0	24.5	0.0
Jharkhand	39.3	2.8	42.8	11.2	50.0	0.0	37.0	0.0	40.8	8.6	40.5	0.0
Karnataka	43.8	3.5	63.8	9.7	32.7	0.0	58.0	0.6	36.6	21.5	12.2	0.0
Kerala	41.7	17.2	44.0	1.2	12.0	0.0	-	-	61.9	0.0	2.0	0.0
Madhya Pradesh	46.1	7.3	53.7	11.9	55.1	7.0	65.7	3.7	59.2	19.0	52.6	5.3
Maharashtra	46.8	3.1	52.6	2.0	22.3	2.0	36.4	1.3	31.0	17.8	35.3	1.6
Orissa	53.7	14.8	48.0	10.4	35.7	3.0	68.0	10.0	40.7	29.9	24.3	1.8
Punjab	34.9	0.0	28.7	6.6	41.5	0.0	26.1	0.0	33.3	3.4	10.0	8.8
Rajasthan	44.5	4.6	47.2	14.2	39.7	5.0	55.1	14.3	58.2	24.6	31.8	0.6
Tamil Nadu	46.6	2.1	44.8	4.3	28.8	1.4	37.5	9.5	35.2	4.2	56.0	0.2
Uttar Pradesh	48.7	8.9	59.7	9.0	39.3	7.7	48.8	5.6	54.5	15.7	56.1	2.5
Uttarakhand	40.2	0.0	44.9	9.0	42.8	2.1	0.0	0.0	45.9	12.0	35.7	0.0
West Bengal	38.4	3.7	40.9	4.3	28.2	2.1	27.4	1.7	45.7	8.8	46.4	2.8
All India	**45.7**	**6.7**	**50.7**	**8.4**	**37.4**	**3.0**	**45.5**	**4.2**	**48.8**	**11.5**	**42.4**	**3.6**

Note: The information for smaller states is available in Appendix Table.

Table 9.5: Nutritional status of children aged 7 months-60 months by Asset class

(Figures in %)

State	ICDS				Non-ICDS			
	Asset 1		Asset 2		Asset 1		Asset 2	
	Moderately	Severely	Moderately	Severely	Moderately	Severely	Moderately	Severely
Andhra Pradesh	29.4	3.5	47.5	5.4	29.7	0.8	49.9	6.9
Assam	44.5	0.0	46.3	7.9	25.9	2.0	52.1	6.1
Bihar	27.9	3.9	44.3	10.7	43.3	6.0	49.9	12.4
Chhattisgarh	68.9	6.3	36.7	11.4	23.6	0.0	65.6	17.3
Gujarat	48.6	2.0	54.9	7.8	50.8	0.0	35.8	13.7
Haryana	34.9	0.0	49.5	4.1	40.6	0.0	55.1	1.9
Himachal Pradesh	34.5	0.7	49.5	0.5	37.0	0.0	50.6	0.0
Jammu and Kashmir	41.2	1.3	32.4	2.3	3.7	0.0	74.4	7.9
Jharkhand	43.6	3.3	43.9	8.3	38.0	0.0	40.6	6.4
Karnataka	32.9	2.8	56.0	6.3	40.3	0.0	39.0	17.1
Kerala	36.1	0.0	34.7	1.9	1.4	0.0	77.0	0.0
Madhya Pradesh	46.7	5.5	54.5	11.8	58.8	1.7	60.3	18.2
Maharashtra	35.3	1.3	52.3	4.1	31.5	2.0	49.6	21.0
Orissa	34.1	5.5	49.3	10.1	36.1	0.0	42.5	25.4
Punjab	33.4	1.1	31.3	8.8	21.4	3.9	27.9	6.2
Rajasthan	41.3	2.5	44.9	11.8	33.7	3.4	58.5	19.6
Tamil Nadu	28.9	2.3	46.6	3.7	36.7	0.5	45.7	5.8
Uttar Pradesh	44.2	8.1	55.5	9.0	48.2	5.5	53.8	10.7
Uttarakhand	65.7	0.0	39.5	7.8	-	-	35.0	9.0
West Bengal	18.0	1.2	40.3	4.1	25.7	1.1	49.3	8.0
All India	**39.0**	**3.8**	**49.0**	**7.8**	**37.8**	**2.3**	**50.3**	**9.9**

Note: **Asset 1:** Households holding assets like Refrigerator or Motorcyle/Scooter or Tractor or Car/Jeep or Land more than 2 acres.
Asset 2: Others. The information for smaller states is available in Appendix Table.

Chapter 10

Budgetary Allocation, Expenditure and Quality of Public Spending in ICDS: The Case of Supplementary Nutrition

INTRODUCTION

The survey data coverage and quality of service delivery reveal that all registered children do not receive the services delivered through the network of AWC of ICDS (Chapter 5 & 7). As explained in Chapter- 5, this gap in service delivery arises because of a combination of supply and demand side factors. The supply side factors include, *inter alia,* **inadequacy of funds**, **infrastructure** and other resources, and **irregularity** in their availability at the point of delivery. The demand side factors include voluntary abstention, certain binding constraints and high opportunity costs that prevent access to ICDS services. One issue that assumes importance in this scenario concerns management of ICDS funds.

Are **adequate** funds being allocated to ICDS for delivery of different services, particularly the SN component of the programme, which requires assured supply of financial and other resources on a day-to-day basis at the delivery point (AWC)?

- How are funds allocated to specific components of the programme?
- How is the allocated fund spent?
- Is there a relationship between funds shown to have been spent under any head and benefits actually delivered?

These questions become all the more relevant because of absence of an effective and results-based management system of ICDS.

The ToR and design of the study were not oriented towards generating the relevant data base to answer all the questions raised above. However, with the help of available secondary data and some survey data it is possible to reflect on the **quality of public spending in the ICDS programme**. An attempt is made in this Chapter to examine:

- Whether adequate funds were made available to run the SN component of the ICDS programme?
- Whether available funds were spent to deliver benefits to all registered beneficiaries?
- Whether the grassroots realities as obtained in the field survey justify the spending on the SN component of the programme?

10.1 ASSESSING QUALITY OF PUBLIC SPENDING – METHODOLOGY

At the outset, it may be pointed out that the study was designed (as per ToR) to collect the complete information on coverage of the target group only with respect to the child beneficiaries and not other beneficiaries of SN component of the programme. As a result, we have restricted our detailed analysis of spending pattern to the SN component meant for children in the age group 6 months to 72 months. Even this could be attempted under some (reasonable) assumptions. The methodology followed to assess how and to what extent available funds were used to deliver SN to child beneficiaries is described in Box-1.

For this analysis both primary (current ICDS evaluation survey data) and secondary data have been used. The secondary data (expenditure on SNP and number of children aged 6 months to 6 years who received SN in 2008-09) have been collected from Ministry of Women and Child Development website and these data were verified by the study team from WCD division, Planning Commission as well as from MWCD officials. Data received from MWCD is given in Table 10.1. Financial norms per beneficiary specified by the Ministry of MWCD have been taken (Reference to the government norms on this matter has been given in the report in Chapter 1; Section 1.9.3). From the current ICDS evaluation survey data, 'proportion of delivery registerd beneficiaries who received food' and 'proportion of days SN were delivered to delivery the registered beneficiaries' captured through survey instruments were taken into account.

Box - 1

Let:
NB: total number of registered beneficiaries of supplementary nutrition (SN) component under ICDS;

NB(i): number of registered beneficiaries (of SN component)- children, pregnant women, lactating mothers and adolescent girls respectively for I = 1,…, 4;

$$NB = \sum NB(i);$$

F(i): unit financial provision in Rupees/day for registered beneficiaries, i= 1,…., 4; such that:
F(1) = [p . FM (1) + (1-p). FS (1)], where FM (1) and FS (1) are unit financial provisions/day [weighted average of two norms for two types of children] for moderately (and normal) and severely malnourished children and 'p' denotes the proportion of moderately malnourished/normal children.

Using the above notations, the total annual requirement of funds (FRQ) for providing SN to all registered beneficiaries is:

$$FRQ = 300 [\{ \sum F(i) . NB(i)\}] \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

300 represent the number of days in a year for which AWC provide SN to the beneficiaries as per Government norms.

The data on financial performance published by the MWCD in its' website, however, suggest that actual expenditure on supplementary nutrition vis-à-vis requirement varies across states. Some States, notably Bihar, Haryana, Himachal Pradesh, Jammu Kashmir and Kerala, spent much more than what could be justified on the basis of number of beneficiaries and normative provisions for per beneficiary. On the other hand, states like Assam, Gujarat, Madhya Pradesh, Orissa, Punjab, Tamil Nadu and Uttar Pradesh spent much less than the financial provisions required [as derived by using relationship (1) above]. The data also show variations in the extent of shortfall (i.e. %deviations) both across states and over time. It is not possible for us to identify the factors that have caused this excess spending or shortfall in expenditure (financial allocation)

as the field team could not get the data set (many states did not furnish required information and some did not return the filled questionnaires sent to them) that was required for this purpose. Table 10.1 gives the gaps in financial provisions for the major States during 2008-09.

Table 10.1: Requirement of financial provisions and actual expenditure

State	Number of children (6 months - 6 years) in '000 who received SN in 2008-09*	Number of PW & LM in '000 who received SN in 2008-09*	Total budgetary requirement/provision for SN for both children and PW&LM (in lakhs) as per norm**	Actual Expenditure on SN including state share (in lakhs) in 2008-09*	% Shortfall/ Excess
Andhra Pradesh	4318	1078	33349	35091	-5.2
Assam	2218	493	16736	9540	43.0
Bihar	3508	710	25978	53027	-104.1
Chhattisgarh	1977	519	15471	18362	-18.7
Gujarat	2401	481	17764	13084	26.3
Haryana	1015	285	8059	11513	-42.9
Himachal Pradesh	425	97	3221	4543	-41.0
Jammu & Kashmir	411	99	3149	4327	-37.4
Jharkhand	2359	662	18759	18897	-0.7
Karnataka	3255	804	25100	24645	1.8
Kerala	1166	219	8505	11848	-39.3
Madhya Pradesh	5363	1140	40090	27156	32.3
Maharashtra	5814	1007	41847	38837	7.2
Orissa	4112	782	30139	20449	32.2
Punjab	1057	306	8460	4560	46.1
Rajasthan	3017	810	23732	23694	0.2
Tamil Nadu	2299	523	17402	13752	21.0
Uttar Pradesh	19442	3794	143008	108780	23.9
Uttarakhand	475	107	3612	1063	70.6
West Bengal	5277	785	37137	30208	18.7
All India	**72197**	**15147**	**538302**	**492844**	**8.4**

Note: * Ministry of Women and Child Development, 2008-09
**Government norm: Rs. 2 for normal & moderately children, Rs. 2.7 for malnourished children and Rs. 2.3 for PW & LM; Number of days in a year is 300.

The extent of shortfall is large for some states. The MWCD at the centre should examine the matter and take the necessary corrective action to ensure that the quality of service delivery in ICDS does not get affected because of inadequate provision of funds. Since, actual expenditure on SN is less than the funds required to provide nutrition to all registered beneficiaries as per norms, some issues concerning management of SN in ICDS assume importance which are as following:

- Whether it is the failure of the centre or states to make adequate financial provision?
- What is the extent of shortfall and what principles are followed by programme managers to manage shortfalls or, excess?
- How do AWC adjust to lower financial provisions by governments?
- Is it necessary to make financial provisions for all the registered beneficiaries, given the grassroots reality on the rates of attendance at AWC and irregularity in their functioning (as shown in Chapter 5 & 7)?

It is not possible to reflect on the first two sets of issues as the field team did not get the necessary data from the states. However, adequate primary data on day-to-day working of the AWC were generated through sample surveys in the study and with some reasonable assumptions on fund-flows to the AWC. It would be possible to analyse whether available funds were adequate and being spent fully to improve the nutritional status of the beneficiaries.

The detailed analysis can be done only with respect to child beneficiaries and not other beneficiaries since the study design did not permit collection of the relevant data sets for other beneficiaries of SN of ICDS. However, even for other beneficiaries (PW, LM, AG) a rudimentary analysis could be attempted with available data to reflect on the quality of public spending for this component of SN as well. The procedure adopted to assess how available funds were used by AWC to provide SN to child beneficiaries is described below:

STEP-I: We assume that available funds for SN in a state were allocated to different beneficiary groups in proportion to normative requirement. The annual (for 300 days for which the AWC are required to deliver SN to registered beneficiaries) requirement for the child beneficiaries can be expressed as:

$$FRQ\ (1) = 300\ [F(1).\ NB\ (1)] \qquad (2)$$

Assuming proportional allocation of available funds to different categories of beneficiaries of SN, we get:

$$EXP\ (1) = [\{FRQ\ (1)/FRQ\}.\ FAV] \qquad (3)$$

where FAV is funds available (or spent) for SN in a year and EXP (1) is the estimated expenditure incurred on SN component for children.

In the case of lower expenditure/allocation, it is unrealistic to assume that all beneficiary children got reduced quota of SN for 300 days in a year. Instead, it would be reasonable to assume that a proportion of the beneficiary children got their full quota of SN for some days in a year. Such an assumption is supported by the survey data. Survey information reveals that only a proportion of registered child beneficiaries received SN, and that too for less than 300 days in a year. Chapter 5 also gives state-wise information on the estimated sizes of various target groups, number of beneficiaries registered for ICDS benefits (as per Delivery Register), the proportion of registered child beneficiaries availing SN (as per survey) and the average number of days (as per survey estimates) SN was delivered by AWC in a State. These data show that in all the states only a proportion of the registered children got SN and that too for less than 300 days in a year, though

there are variations across states with respect to both the parameters, namely, the proportion of child beneficiaries receiving SN and the number of days in a year SN is delivered by AWC.

Let:

α: the proportion of registered child beneficiaries receiving SN; $0 \leq \alpha \leq 1$.

β: proportion of days out of 300 days in year AWC delivered SN; $0 \leq \beta \leq 1$.

The estimated values of α and β (for all major States) as obtained from survey data are presented in Table 10.2 below:

Table 10.2: Estimated values of α and β (in %) for major States

State	Number of children (6 months - 6 years) in '000 who received SN as on 31.3.2009*	Per cent children receiving SN (α)	Days for SN delivered (%) (β)
Andhra Pradesh	4318	73.7	64.0
Assam	2218	73.5	8.0
Bihar	3508	52.6	56.0
Chhattisgarh	1977	85.6	76.0
Gujarat	2401	86.5	76.0
Haryana	1015	51.9	84.0
Himachal Pradesh	425	77.1	68.0
Jammu & Kashmir	411	91.5	72.0
Jharkhand	2359	88.3	72.0
Karnataka	3255	80.4	84.0
Kerala	1166	75.8	80.0
Madhya Pradesh	5363	68.2	56.0
Maharashtra	5814	69.6	84.0
Orissa	4112	69.9	84.0
Punjab	1057	59.1	68.0
Rajasthan	3017	55.6	60.0
Tamil Nadu	2299	75.8	84.0
Uttar Pradesh	19442	40.6	56.0
Uttarakhand	475	81.9	32.0
West Bengal	5277	78.3	84.0
All India	**72197**	**64.0**	**64.0**

Note: *Ministry of Women and Child Development, 2008-09

It is a matter of serious concern that a large proportion of registered child beneficiaries do not receive SN in Bihar, Madhya Pradesh, Maharashtra, Orissa and Rajasthan where poverty ratios are relatively high. The lack of access to ICDS benefits could be due to both supply and demand side factors, as explained in Chapter 5 & 7. Irrespective of the type of factors it is important to note in the context of our analysis that a section of the registered beneficiaries did not receive SN benefits from AWC.

All this tends to suggest that funds available for SN for child beneficiaries might not have been fully utilised for providing SN. The estimated amount, which was not spent for providing SN to child beneficiaries is:

FDSNC = SN funds not spent on SN component for child beneficiaries
= NB(1) . F (1). [1- αβ]…… (4)

The estimated proportion of expenditure from SN funds, which cannot be justified on the basis of the estimated number of actual beneficiaries of SN (for children) and actual number of days SN was made available, is presented in Table 10.3 for all major States (for other States see Appendix).

Table 10.3: Estimated Proportion of SN funds spent on children (in %)

State	Actual Expenditure on children's SN (in lakhs) in 2008-09	Expenditure on children's SN as % to total expenditure on SN	Estimated value of SN reached/ delivered to children as % to actual expenditure on children's SN in 2008-09
Andhra Pradesh	27267	77.7	47.2
Assam	7602	79.7	5.9
Bihar	43022	81.1	29.4
Chhattisgarh	14115	76.9	65.1
Gujarat	10638	81.3	65.7
Haryana	8704	75.6	43.6
Himachal Pradesh	3595	79.1	52.4
Jammu & Kashmir	3389	78.3	65.9
Jharkhand	14298	75.7	63.6
Karnataka	19198	77.9	67.5
Kerala	9745	82.3	60.7
Madhya Pradesh	21827	80.4	38.2
Maharashtra	32390	83.4	58.4
Orissa	16790	82.1	58.7
Punjab	3421	75.0	40.2
Rajasthan	18116	76.5	33.3
Tamil Nadu	10900	79.3	63.7
Uttar Pradesh	88870	81.7	22.7
Uttarakhand	845	79.5	26.2
West Bengal	25804	85.4	65.8
All India	**397154**	**80.6**	**40.9**

Source: Estimated using data provided by Ministry of Women and Child Development, 2008-09.

The figures presented in Column 4 of the table reveals the startling fact that actual expenditure on SN component for children is less than even 50 per cent of the available SN funds in Andhra Pradesh, Assam, Bihar, Haryana, Madhya Pradesh, Punjab, Rajasthan, Uttarakhand and Uttar Pradesh, while the registered child beneficiaries constitute more than 75-80 per cent of the total registered beneficiaries. Could a relatively larger proportion of the fund have been spent on other

beneficiaries? To understand if this were true we deemed it appropriate to assess the spending pattern for the SN component for other beneficiaries.

Though it is not possible to do a similar analysis to estimate the extent of use of funds meant for the SN component for PW, LM and AG, an attempt can be made to get a rough idea of the extent of actual spending of SN funds on the assumption that SN was accessible to all registered beneficiaries of this group, but some of them did not get food/THR because of some supply and demand side constraints. Table 10.4 gives the relevant information.

Table 10.4: Estimated values of α and β (in %) for major States

State	Number of PW & LM in '000 who received SN as on 31.3.2009*	Per cent PW&LM receiving SN (α)	Days for SN delivered (%) (β)
Andhra Pradesh	1078	87.8	40.0
Assam	493	7.7	0.0
Bihar	710	68.0	40.0
Chhattisgarh	519	76.8	64.0
Gujarat	481	76.5	56.0
Haryana	285	93.1	72.0
Himachal Pradesh	97	75.3	64.0
Jammu & Kashmir	99	90.4	64.0
Jharkhand	662	91.4	80.0
Karnataka	804	90.7	44.0
Kerala	219	93.8	76.0
Madhya Pradesh	1140	78.4	32.0
Maharashtra	1007	93.3	80.0
Orissa	782	90.1	80.0
Punjab	306	87.8	64.0
Rajasthan	810	83.8	16.0
Tamil Nadu	523	89.5	52.0
Uttar Pradesh	3794	69.5	36.0
Uttarakhand	107	92.3	40.0
West Bengal	785	96.9	80.0
All India	**15147**	**78.3**	**48.0**

Note: *Ministry of Women and Child Development, 2008-09.

It may be noted that not all non-child beneficiaries received SN (Col.2) and recipients did not get SN for all the 300 days (Col.3) in a year. Table 10.5 presents state-wise estimates of actual use of SN funds for FY 2008 for which detailed information on expenditure on SN component of ICDS is available.

Table 10.5: Proportion of SN funds spent for PW & LM

State	Actual Expenditure on PW & LM's SN (in lakh) in 2008-09	Expenditure on PW & LM's SN as % to total expenditure on SN	Estimated value of SN reached/delivered to PW & LM as % to actual expenditure on PW & LM's SN in 2008-09
Andhra Pradesh	7824	22.3	35.1
Assam	1938	20.3	0.0
Bihar	10005	18.9	27.2
Chhattisgarh	4247	23.1	49.2
Gujarat	2445	18.7	42.8
Haryana	2809	24.4	67.0
Himachal Pradesh	948	20.9	48.2
Jammu & Kashmir	938	21.7	57.9
Jharkhand	4599	24.3	73.1
Karnataka	5446	22.1	39.9
Kerala	2102	17.7	71.3
Madhya Pradesh	5329	19.6	25.1
Maharashtra	6447	16.6	74.6
Orissa	3660	17.9	72.0
Punjab	1139	25.0	56.2
Rajasthan	5579	23.5	13.4
Tamil Nadu	2852	20.7	46.5
Uttar Pradesh	19910	18.3	25.0
Uttarakhand	218	20.5	36.9
West Bengal	4404	14.6	77.5
All India	**95690**	**19.4**	**37.6**

Source: Estimated using data provided by Ministry of Women and Child Development, 2008-09

Table 10.6 presents the proportion of estimated expenditure (total for both components of SN) spent on SN for all the major states in the country.

Table 10.6: Proportion of expenditure spent on SN and estimated shares of different groups (%)

State	Estimated value of SN reached/delivered to children as % of total available funds for SN, 2008-09	Estimated value of SN reached/delivered to PW & LM as % of total available funds for SN, 2008-09	Estimated total value of SN reached/delivered as % of total available funds for SN, 2008-09
Andhra Pradesh	36.7	7.8	44.5
Assam	4.7	0.0	4.7
Bihar	23.9	5.1	29.0
Chhattisgarh	50.0	11.4	61.4
Gujarat	53.4	8.0	61.4
Haryana	33.0	16.3	49.3
Himachal Pradesh	41.5	10.1	51.6
Jammu & Kashmir	51.6	12.5	64.2
Jharkhand	48.1	17.8	65.9
Karnataka	52.6	8.8	61.4
Kerala	49.9	12.6	62.6
Madhya Pradesh	30.7	4.9	35.6
Maharashtra	48.7	12.4	61.1
Orissa	48.2	12.9	61.1
Punjab	30.2	14.0	44.2
Rajasthan	25.5	3.2	28.7
Tamil Nadu	50.5	9.6	60.1
Uttar Pradesh	18.6	4.6	23.1
Uttarakhand	20.8	7.6	28.4
West Bengal	56.2	11.3	67.5
All India	**33.0**	**7.3**	**40.3**

Source: Estimated using data provided by Ministry of Women and Child Development, 2008-09

Table 10.7 describes the allocation for supplementary nutrition of different type of beneficiaries per day for 2008-09. It is seen that most of the states could not provide the allocation for SN as per norms. If we take out the money which is siphoned off for each state, it is seen that nationwide only Rs 1.00 per day (37 per cent of government norm) actually reached to each severely malnourished beneficiary child during 2008-09. Assam delivered only 10 paisa per day per malnourished children followed by Uttarakhand (20 paise) and Uttar Pradesh (50 paise). As far as normal and moderately malnourished children beneficiaries are concerned, it is seen that only 70 paise (35 per cent of government norm) per child reached to them. For the PW & LM beneficiaries, it was only 80 paise (35 per cent of government norm) per beneficiary per day.

Table 10.7: Estimated average available fund for SN on different types of beneficiaries (per beneficiary per day in Rs.), 2008-09

State	Severely malnourished child		Other child		PW & LM	
	Average available fund for SN	Reached/ delivered	Average available fund for SN	Reached/ delivered	Average available fund for SN	Reached/ delivered
Andhra Pradesh	2.8	1.3	2.1	1.0	2.4	0.9
Assam	1.5	0.1	1.1	0.1	1.3	0.0
Bihar	5.5	1.6	4.1	1.2	4.7	1.3
Chhattisgarh	3.2	2.1	2.4	1.5	2.7	1.3
Gujarat	2.0	1.3	1.5	1.0	1.7	0.7
Haryana	3.9	1.7	2.9	1.2	3.3	2.2
Himachal Pradesh	3.8	2.0	2.8	1.5	3.2	1.6
Jammu & Kashmir	3.7	2.4	2.7	1.8	3.2	1.8
Jharkhand	2.7	1.7	2.0	1.3	2.3	1.7
Karnataka	2.7	1.8	2.0	1.3	2.3	0.9
Kerala	3.8	2.3	2.8	1.7	3.2	2.3
Madhya Pradesh	1.8	0.7	1.4	0.5	1.6	0.4
Maharashtra	2.5	1.5	1.9	1.1	2.1	1.6
Orissa	1.8	1.1	1.4	0.8	1.6	1.1
Punjab	1.5	0.6	1.1	0.4	1.2	0.7
Rajasthan	2.7	0.9	2.0	0.7	2.3	0.3
Tamil Nadu	2.1	1.4	1.6	1.0	1.8	0.8
Uttar Pradesh	2.1	0.5	1.5	0.3	1.7	0.4
Uttarakhand	0.8	0.2	0.6	0.2	0.7	0.2
West Bengal	2.2	1.4	1.6	1.1	1.9	1.4
All India	**2.5**	**1.0**	**1.8**	**0.7**	**2.1**	**0.8**

Source: Estimated using data provided by Ministry of Women and Child Development, 2008-09.

To conclude, diversion (59.7%) of SN funds from its intended use is a matter of serious concern in a programme that aims at improving nutritional status of the malnourished. It is not possible for us to comment on how and where this diverted money was used by the States. Some may have used it for meeting deficit in other components of the programme. However, collateral evidence collected during field surveys and also the case studies presented in Chapter 11 tends to suggest that in some States, a large part of the diverted fund was in fact siphoned off. The MWCD need to take up the matter with the States to identify the factors responsible for the mismatch between the expenditure shown to have been incurred for SN and that which can be justified on the basis of grassroots reality on rates of effective coverage of beneficiaries, attendance and the number of days (out of 300 days in a year) SN was delivered.

Chapter 11

Case Studies – Some Lessons

INTRODUCTION

ICDS is a central government scheme launched in 1975 for the welfare of the children (aged 7 months to 6 years), lactating mothers and pregnant women. A package of six services is provided under the scheme, which consists of: (1) Supplementary Nutrition and Growth Monitoring, (2) Immunisation, (3) Health Check-ups, (4) Health Referral Services, (5) Nutrition and Health Education (NHE) for women in the age group of 15-45 years, and (6) Pre School Education (PSE) for children in the age group 3-6 years. The scheme has also been extended to provide services to Adolescent Girls in the age group of 11-18 years for reducing nutritional gaps; for skill development, literacy, recreation; and providing a supportive environment for their self development.

In order to evaluate the progress of this scheme, a variety of cases of the functioning of the ICDS programme for some of the states were studied.

In all, 15 cases of functioning of the ICDS programme were analysed spread over eight states; Assam, Kerala, Uttar Pradesh, West Bengal, Bihar, Jharkhand, Uttar Pradesh and Chandigarh. Apart from highlighting the successful stories of functioning of the AWC, these cases also analysed the reasons for non-functioning of AWC. Except for Assam, the case studies/cases were choosen from the selected AWC in the sample districts. Prior to considering those particular AWC to be in included in case studies analyses, First Information Report (FIR) was received from the field team about functioning of these AWC. Based on these reports, some AWC were identified as good and some were identified as bad and some of the AWC were selected for a detailed investigation to find out the key factors responsible for good and unsatisfactory functioning.

Instruments of observation: The various instruments used to prepare the First Information Report (FIR) included the following:

(1) Rechecking the registers,
(2) In-depth interview with AWW and AWH,
(3) Personal discussions with women in the village
(4) Focus group discussions and
(5) Personal observations regarding cleanliness of individuals and surrounding area of AWC

Out of the 15 case studies analysed, 9 AWCs were found to be functioning well and 6 weren't. Section I presents the summary of success stories of the functioning of the AWC and Section II presents the summary of reasons for the failure of some of the AWC.

11.1 SECTION I: CASE STUDIES OF SUCCESSFUL AWC'S

Several criteria were used to find out and classify the AWC's into success or failure. The reasons for success of AWC may be explained by good network between AWW, supervisor and CDPO. A good network with goodwill is one of the major reasons for good functioning of AWC found in Chandigarh. Basic infrastructure, such as proper rooms with basic amenities like light, fan, toilet facility, drinking water and proper kitchen are indispensable that all AWC must have. No AWC functions well without such basic inputs. Imparting training to AWW for performing her duties towards all services under the ICDS programme is a must for good functioning of AWC. Community participation is essential as the programme addresses to children aged below 6 years, pregnant women and lactating mothers in the village. In some of the urban colonies/slums, community participation seems to be rare. Incentives given to AWW for her performance are also a significant reason for good performance of AWC. Location of the AWC also contributes significantly to the performance of the AWC in many cases.

Now we will show case studies of AWC's that have functioned well in this section and of those that haven't functioned well in the next section.

11.2 DADU MAJARA AWC, CHANDIGARH

11.2.1 ABSTRACT

Distribution of food is one of the most critical objectives of ICDS programme. In Chandigarh, the SN has been centralised since 2007. All the AWC are getting food from a common kitchen known as "Sri Shakti Kitchen" on regular basis. Sri Shakti Kitchen is an NGO which has been providing food to all AWC in Chandigarh. Hence, the CDPO, Supervisor and AWW all are well in touch with each other for ensuring the supply of food to all AWC. There are about 370 AWC in Chandigarh. The menu/recipe has been fixed by the department of Women and Child Development in Chandigarh and it is strictly monitored by the CDPO. Maintenance of records and updating the registers are the major work of AWW. Supervisor helps and trains AWW for maintaining registers and organizing immunisation camps regularly.

Coordination with ANM, medical officer, CDPO and ICDS Supervisor is very good in the Dadu Majara AWC. The dispensary is available at a distance of 50 meters from the AWC, where doctor and ANM are available most of the time.

Good infrastructure including pucca building with boundary wall, toilet, electricity and electric fan, kitchen as well as enough space for both indoor and outdoor activities is also an essential condition for good functioning of this AWC.

The 'Dadu Majara' AWC was specially identified as very good due to dedicated AWW and her performance in providing pre-school activities. Out of the 200 surveyed beneficiaries, about 50 per cent were registered in the AWC. Most of FGD participants expressed their views that if the food is not given in AWC they will avail other benefits especially pre-school activities and immunisation at AWC. Regular immunisation and home visits made by AWW have been appreciated by all the beneficiaries.

11.2.2 PROFILE OF AWC

The 'Dadu Majara' AWC has been functioning since 1979, and has been identified as a very good AWC in Chandigarh due to a strong network among all concerned, as well as adequate infrastructure. It has its own *pucca* building with two rooms and one big veranda, the campus having its own boundary wall. There is enough space for outdoor games as well. The AWC is well equipped with basic amenities like kitchen, tap drinking water and flush toilet. It has three electric fans in good working condition. It is situated within a community of backward caste people west of the centre of the urban colony. The distance from the AWC to the nearest primary school and health centre is less than half a Km. However, the distance to ICDS project office is about 8 Km.

11.2.3 COVERAGE

At present 99 beneficiaries are enrolled with the centre, out of 200 as per survey register. Out of 99 beneficiaries, 52 are in the age group 7 months-3 years, of which 24 are girls. In all, 31 children enrolled, all in the 3-6 age group; of which 10 are girls. Only two adolescent girls are enrolled with the centre and getting SN and other health related benefits. Nine pregnant women and five lactating mothers are also getting all the expected benefits from the AWC.

11.2.4 FOOD SUPPLY MECHANISM

The supply of 'Supplementary Nutrition' to the children aged 7months-6 years, pregnant and lactating mother is the first main objective of the ICDS programme. The supply of food to AWC has been centralised since October 6, 2007. It is interesting to note that the mechanism of supply of food is unique in Chandigarh. A Non-Profit Organisation (NPO) was selected by Home Ministry to supply cooked food to all 370 AWC currently functioning in Chandigarh. An agreement was signed between NPO and the Department of Women and Child Development, Government of Chandigarh, while assigning the responsibility. The NPO has a big kitchen, covering an area of about 350 sq. ft. A total of 68 workers are employed in the kitchen of which 28 are males. It has 1,500 Tiffin carriers or 'Jugs' with the capacity of about 20 Kg each. The kitchen has 23 big steel utensils for cooking food. The cooked food is transported to all AWC in small motor vehicles. The menu is strictly monitored by the CDPO. According to the CDPO, the cooked food is sent for analysis quarterly to assess the amount of proteins and calories contained. The CDPO also visits the 'Big Kitchen' every month for checking and supervision. The cooked food distributed to all the AWC is also monitored regularly. All the beneficiaries are getting the food as per the menu decided by the government from Monday to Saturday. Apart from cooked food, the NPO is also providing 60 grams of micronutrients per child per day basis once in a week for children below one year who are registered with AWC.

11.2.5 CHILDREN'S GROWTH MONITORING AND HEALTH FACILITIES

A total of 83 children are enrolled in the 7months- 6 year age group, of which 20 belong to Grade I and two children belong to Grade II. Out of 20 malnourished children, 15 belong to the 3-6 age group. There is no child registered in Grades III and IV. A health check up camp is arranged once every three months. Regular health check up is done by a medical officer. All registered children and women are immunised. Children in the age group 7 month- 3 years were immunised with BCG, measles, three doses of DPT, Polio and Vitamin A. Children of age group 3-6 years were given DT Booster, Polio and Vitamin A. All pregnant women got TT shots. Last year, from Dadu Majara AWC, a total of 80 children, 21 pregnant women and five lactating

mothers were referred for advanced medical help. The AWW advises mothers to feed frequently for improvement of their health. AWC has sufficient stock of medicines and never lets medicine to expire; and hence everybody collects medicine from AWC.

Weight monitoring is done once in a month for children below three years whereas there are weight check ups for 3-6 year old children once in a quarter. The weight of adolescent girls is checked as and when they are available in the AWC. All registered beneficiaries attend the health check up camps, except a very few wage labourers whose timings do not match as they can't afford to ignore one day's wage for attending.

11.2.6 PRE- SCHOOL EDUCATION

'Pre school education (PSE)' for the children aged 3-6 years is one of the services provided under the ICDS. In order to assess the extent of learning in AWC through PSE, we listed some of the activities in the questionnaires, such as: (1) Free conversations; (2)story telling; (3) Songs/poem recitation; (4) Counting; (5) Drawing/painting, (6)Outdoor games; (7) Puzzle solving; (8) Matching colours and (9) Clay modeling. Except clay modeling all the listed activities are conducted in the AWC by well trained AWWs. Some of the children attending PSE recited poems before us with confidence.

Only two adolescent girls were registered over the past year. They get SN and some health education and referral services in the AWC.

11.2.7 FOCUS GROUP DISCUSSION (FGD)

In order to assess the extent of satisfaction among the beneficiaries in all six services under the ICDS, a Focus Group Discussion of 10 beneficiaries was organised in Dadu Majara AWC. Among the participants, six were the mothers of the beneficiary children, three lactating mothers and one pregnant woman. Age of the participants ranged from 23 years to 35 years. Except one illiterate lactating mother, the level of education of other participants was in the range between 8th to 12th standard. The discussion opened up with activities of AWC. All the participants agreed upon our statement that the AWC operated regularly from Monday to Saturday. The AWW also visited each and every beneficiary household periodically. She also visited beneficiary households as and when they needed special help from AWW. AWC had separate registers for different activities and also updated them regularly. There were sufficient playkits and pre-schooling kits for children available at AWC. Almost all the participants said the AWW is very good and popular. All the participants appreciated her work and conduct. There was no involvement of panchayats or other well off people in the AWC's activities. Often, mothers in the village helped.

All participants reported that they get cooked food on all working days. However, most of the participants expressed the views that they prefer to have dry food rather than cooked food, as some of the participants reported that at times the preparation of the food is not acceptable due to the addition of more water than required in the *dal*(result: watery *dal*) and *khichri* not being up to the mark. Therefore, they prefer to take dry food so that they could cook according to their choice. But they are not aware about their entitlement of rations from the AWC. They are also very happy with the child's growth monitoring chart and referral services provided by AWW. All the participants said that AWW informed them about their child's growth status regularly.

Nutrition and health education (NHE) is organised once in two months in the AWC, all the participants agreed. Institutional delivery, best practice of breast feeding, eating adequate amount of green leafy vegetables and hygienic way of cooking etc were discussed in these meetings. All the participants were very happy with pre-school activities of the children. According to them the children were learning to count, recite poems, write alphabets, etc. All the registered children who passed out from the AWC enrolled in the nearest secondary school, where primary classes are attached. Some of the participants said that even if the AWC don't provide meals, they would still continue to avail pre-school activities and other benefits from the centre. The participants were very happy with the learning that their child attained through PSE and said that they couldn't have taught them so well at home.

Immunisation is also very regular in the AWC. The parents are very serious and understand the importance of immunizing their children. All the participants were satisfied with the immunisation and referral services and the joint activities of the ANM, medical officer and AWW.

11.2.8 KEY POSITIVE POINTS

- Community participation and awareness among mothers in the village is because the AWW operates by visiting each household regularly. This has ensured regular immunisation, growth and health monitoring of children.
- Coordination between the ANM, medical officer, CDPO, ICDS supervisor and the AWW is very good and regular. This ensures that the required medicines and play school infrastructure are always up to the mark. As an example to be followed in other AWC the CDPO monitors nutrition in food by sending it for analysis of its nutritional value quarterly. The AWC is also supervised regularly.
- The AWC has been trained for maintaining registers by the supervisor and for organizing immunisation camp regularly.
- Having a dispensary only at a distance of 50 meters from the AWC is conducive to regular health and growth monitoring. The doctor and ANM are available most of the time.
- Good infrastructure is also maintained in all aspects of the AWC

11.2.9 KEY AREAS FOR IMPROVEMENT

- SNP may be centralised at the block level or project wise to ensure regular food supply.
- Quality of food may be improved by changing the current menu as well as by increasing the per capita beneficiary rate in accordance with food prices.
- The beneficiaries should be given a choice of procuring cooked/dry food as per their choice, as they complain of the food not being cooked well.

11.3 PALLIPURAM AWC, KERALA

11.3.1 ABSTRACT

The Pallipuram AWC no.97 is good AWC due to dedicated AWW and community participation. First of all, the Panchayat had given the land for construction of the AWC building in the village. The village club has also donated some of the chairs for small kids. More over mothers of beneficiaries as well as adolescent girls helps AWW in cooking and distribution of food. Home visits by AWW play a significant role for community participation in functioning of the AWC. Moreover, the level of literacy as well as awareness about the services among the villagers makes AWW more active towards her duties. The food items are being purchased by AWW and supervisor jointly from reputed shops identified by the CDPO/DPO.

AWW visited households regularly and hence developed a good rapport with the villagers. Regular food distribution, immunisation and pre-school activities are the major reasons for identifying a good AWC. The AWW (Ms. Retnemma K.V) was awarded by the state government for her dedicated work in 2004. The AWW is very happy with such recognitions and she continues to perform better. She has an exemplary rapport with the beneficiaries. Almost all the beneficiaries are satisfied with the activities and services received through AWC.
Maintaining Registers is also one of the major activities of good AWC. She updates all the registers regularly and provided all the relevant information without major problem.

Currently 60 beneficiaries are enrolled in the centre, out of 84 as per survey carried out on 8.9.09. Out of 60, 50 children are among 7 month- 6 years age group, of which 27are girls. 5 adolescent girls are enrolled in the centre and are getting SN and other health related benefits. Out of 8 pregnant women, only 3 are enrolled. 2 lactating mothers are also getting all the expected benefits from the AWC.

11.3.2 PROFILE OF AWC AND VILLAGE

The village has a population of about 1,200 people, as per 2001 census. There are about 399 households, of which 75 per cent are Hindu, 10 per cent are Muslim and 15 per cent are Christians. About less than 5 per cent are landless. About 90 per cent are literate among both male and female. Almost all children aged 6-14 years are enrolled in school. The approach road to the village is semi-*pucca.* However, the village road is very narrow; difficult to enter by car. The distance to the nearest bus stop is about 1.5 Km. A government hospital and dispensary is located at a distance of 8 Km. The primary health centre is located at a distance of about 4 Km. The distance to the nearest primary school is about less than 1 Km. The village has a sub-centre, ration shop and a post office at a distance of half a Km. There are two self help groups in the village. Dug well is the major source of drinking water. The village is identified as drought prone area.

This AWC has been functioning since 1980. The AWC is located in a central place in the village. The AWC has own pucca building with two rooms and one big Veranda. The kitchen room is relatively small, but well furnished with slabs where all utensils are kept neatly. The toilet is attached with the bigger room. The room is well furnished with colorful kids' chairs and many charts for children education. There is an electric fan but no electricity, but there is electricity for

street lighting as well as homes. The building of AWC has been given by the village panchayat. The AWWs, Ms. Retnemma K.V. and Ms. Salik J, have been working since 1980.

11.3.3 Coverage of AWC

Currently, 60 beneficiaries are enrolled in the centre out of 84, as per a survey done on September 8, 2009. Of them, 50 children are in the 7 months- 6 years group, and 27 are girls. Five adolescent girls are enrolled with the centre and getting SN and other health related benefits. Out of eight pregnant women, only three are enrolled and two lactating mothers are also getting all the expected benefits.

11.3.4 Food Supply Mechanism

Cooked food has been given to all the beneficiaries in this AWC. The AWW purchases the food items from reputed state government undertaking store. The food is cooked in the kitchen of AWC. The beneficiary's mothers also help some times in cooking. On the day of our visit 'upma' and 'Moongdal with rice' were cooked. The CDPO also visits once in six months for ensuring adequate supply of food.

11.3.5 Children's Growth Monitoring and Health Facilities

A total of 50 children are enrolled in the 7 month- 6 years group. There is no malnutrition among children registered in the AWC. All registered children and women are immunised. Children of the 7 month- 3 years age bracked were immunised against BCG, measles, three doses of DPT, Polio and Vitamin A. Also, they were given DT Booster, Polio and Vitamin A. All the pregnant women registered with the AWC were given TT shots.

Weight monitoring is done every month for all beneficiaries, including adolescent girls. Health check up is done by ANM once in a month. Medical officer also visit once in six months to the AWC. The AWC also receives medical kits once in a year. About 22 registers are maintained by the AWW. All were duly updated. She maintained all the registers herself.

11.3.6 Pre- School Education

'Pre school education' for children aged 3-6 years is one of the objectives of ICDS. Except clay modeling, all other PSE activities are conducted in the AWC. The AWWs are well trained to conduct all these activities. Almost all the children were able to recite poems with action in front of us with confidence. The registered adolescent girls also sang group songs at the time of our visit, which provides evidence of their confidencein in the AWC. All registered adolescent girls are school drop-outs. They get SN and some health education and referral services in the AWC.

11.3.7 Focus Group Discussion (FGD)

In order to assess the extent of satisfaction among the beneficiaries in all six services under the ICDS, a Focus Group Discussion was organised in front of AWC campus under the coconut trees. A total of 9 beneficiaries had joined the team for the discussion. Out of 9 participants, 3 are lactating mothers and 6 were mothers of the beneficiaries. Their level of education ranged from HS to BA. The ages of the participants ranged from 26 to 35 years. The main occupation of the head of the households of the participants were plumbers, mason, private drivers and three of them were government employee. (At the time of discussion three adolescent girls also joined the team).

All the participants agreed upon our statement that the AWC operated regularly from Monday to Saturday. The AWW also visited each and every beneficiary household periodically. She also visited beneficiary households as and when they needed special help from AWW. All the participants agreed that the AWW has good rapport with the villagers. Her conduct is exemplary. AWC has separate registers for different activities and AWW updates them regularly. The AWC has sufficient play kits and pre-schooling kits for children.

All the participants said that they get cooked food on all working days. The quality of food is acceptable to all of them. Most of them also know about their entitlement of rations from the AWW and they get their share accordingly. They were very happy with the children's growth monitoring chart and referral services activities undertaken by the AWW. All the participants said that AWW updated them about their children's growth status regularly.

Immunisation is very regular at the AWC. All the participants are very satisfied with the immunisation and referral services and the joint activities of the ANM, medical officer and AWW. Nutrition and health education is organised once in two months in AWC, all the participants agreed. Institutional delivery, best practice of breast feeding, eating adequate amount of green leafy vegetable and hygienic way of cooking etc was discussed in these meetings.

All the participants were very happy with pre-school activities of the children. They said the children were learning to count, recite poems, and write alphabets. All the registered children who passed out from the AWC were enrolled in the primary school. So, pre-school education was very successfully provided in the AWC. All the participants said that this programme is very useful for overall development of children and women.

11.3.8 KEY POSITIVE POINTS

- Incentives and Recognition (Awards by the state government) given to the AWW has bolstered her confidence and has motivated her to keep up the good job. This should be implemented in other AWC's as well.
- Home visits by the AWW have increased community awareness and participation. The AWW should be made to realise the importance of home visits in each AWC by the supervisor.
- The village club and the panchayat are actively involved as well. The panchayat had allocated land for the AWC's pucca house; making its infrastructure sound.
- Regular food distribution with the help of the supervisor and the CDPO. The AWW purchases the food items from reputed store, which is a state government undertaking. After receiving the funds, the AWW and supervisor select food items from the store. CDPO also visits once in six months for ensuring supply of food.
- Good health and growth monitoring is also possible due to the dispensary being close to the AWC. It is vital to have at least one dispensary in the vicinity of the AWC.
- A high literacy rate in the village has made villagers realise the importance of the AWC and help in its functioning.
- The AWW is well trained by her supervisors in maintaining registers for health and nutrition. She maintains 22 registers and updates them regularly helping her keep a tab on children attending the AWC.

ICDS Centres take on some Colour in Tambaram, Tamil Nadu: The once poorly-ventilated, drab, ICDS centres in the southern suburbs of Chennai are gradually getting a makeover, thanks to the Sarva Shiksha Abhiyan (SSA). For instance, the centre on Chitlapakkam Main Road near Tambaram, for children between one and five years of age looks bright and colourful, just right for kids.

About 50 of these centres in the southern suburbs have been equipped with self-learning material and play equipment as part of the Early Children Care Education programme of the SSA. There are over 225 ICDS centres in the St. Thomas Mount Block (that covers most rural pockets) and the Alandur Block (covering Alandur and Pallavaram Municipalities) of the Social Welfare Department.

And for some years, the SSA gave Rs. 3,000 each to as many ICDS centres as possible for purchase of items such as ceiling fan, plastic mats, pillows and water filters. Following the introduction of the Activity-Based Learning method (ABL) in primary sections in 2007, the SSA began distributing self-learning material and play equipment worth Rs. 3,000.

The centres received learning material including puzzles, games, and building blocks, apart from tricycles. SSA officials told The Hindu that the idea was to prepare children at a young age to assimilate the ABL concepts easily, once they joined the primary sections in government schools. Parents of most children in these centres could not afford to buy such material, they added.
(**Source:** THE HINDU, 28 Feb 2008)

11.4 KULATHOOR AWC, THIRUVANANTHAPURAM, KERALA

11.4.1 ABSTRACT

Location and environment play an important role in the functioning of this AWC. The Kulathoor AWC no. 205 is located in front of a very good primary school (good in the sense of having a very good pucca building with boundary wall and having enough space for outdoor activities, which attracts public.). The middle school and high school is also located nearby AWC. The pucca building of AWC with two big rooms was donated by the corporate sector. All necessary infrastructures such as electricity, electric fans, good kitchen store room, attached toilet and tap drinking water are available in the AWC. There is sufficient space for both indoor and outdoor activities of the children. Providing cooked food regularly, immunisation and updating all relevant information of AWC are important criteria for considering a AWC as good, which was found in this AWC no. 205.

Due to the convenient location of the AWC, visiting the AWC no. 205 is easy for everyone. Regular visits to the AWC made by supervisor and CDPO helps in making the AWW more active towards her duty. The AWW Ms. Sashikala V.N and AWH Ms. Deepa N both have been working since last 10 years in this AWC. The supervisor and AWW together purchase food items from a listed state government undertaking store that ensures regular food supply.

Pre-school activities are well recognised by the mothers of beneficiaries' children. Most mothers use the AWC as crèche which have all the facilities for small children including safety.

Currently 25 beneficiaries out of 96 are enrolled in the centre, as per survey dated 30.5.09. Two Pregnant women, 7 lactating mother and 11 Adolescent girls are also registered in AWC. On the day of our visit, 19 children were attending the AWC.

There are 5 AWC functioning in the village. The AWW wants to demonstrate that this AWC is much better than others and this competitiveness has rubbed off on the community.

11.4.2 Profile of AWC and Village

The village has a population of about 37,391 as per the 2001 census. There are about 5,431 households, of which 70 per cent are Hindu, 20 per cent are Muslim and 10 per cent are Christians. About 10-20 per cent are landless. More than 70 per cent are literate among both males and females. Almost all children aged 6-14 years are enrolled in school. 5 AWC are functioning in the village currently.

The connecting roads to the village are *pucca*. However, the village road is very narrow; the car does not go inside the village where the AWC and the primary school are located. The distance to the nearest bus stop is about less than 1 Km. But the government hospital and dispensary are located at a distance of 7 Km. The primary health centre is located near the village. The primary school is located in front of the AWC, with a good boundary wall. The building of the AWC has been given by the corporate sector. The primary school has a very good play ground as well as very good pucca attractive school building. The middle and high schools are also located at a distance of less than half a Km from the AWC. This AWC has been functioning since 1980. It has its own *pucca* building with two big rooms (7x7 sq.metres) and one big veranda. It has a well furnished kitchen with slabs where all utensils are kept neatly. There is also a sizable store room with a big box for keeping food stock nicely. A toilet is attached to the main room where the children sit and sleep. The main room is furnished by a number of charts, board and daily menu list. There are colorful chairs for children. There are two electric fans in good working condition. All the rooms have tube lights. The village also has electricity both for the street and the households. The pipe water supply is the major source of drinking water in the AWC.

11.4.3 Coverage

Currently, 25 beneficiaries are enrolled in the centre, out of 96 as per survey dated May 30, 2009. About five children of the total covered attend this AWC almost regularly. Two pregnant women, 7 lactating mothers and 11 Adolescent girls are also registered in AWC. On the day of our visit, 19 children were attending the AWC.

11.4.4 Food Supply Mechanism

Cooked food is being given to all the beneficiaries in this AWC. The AWW purchases the food items from a reputed state government undertaking store. After receiving the funds the AWW and supervisor select the food items from the store. The food is cooked in the kitchen of the AWC.

On the day of our visit ‘upma’ and ‘moongdal with rice’ were cooked. The CDPO also visits once in six months for ensuring supply of food.

Discipline and cleanliness in the AWC: We reached this AWC around 10.30 AM, when the food was almost ready. We saw the children going in queue to wash their hands before eating. After eating food, they also went to the place where a bucket of water is kept for washing hands. The AWC floor is also very clean.

11.4.5 Children's Growth Monitoring and Health Facilities

About 22 registers are maintained by the AWW. All are updated. She maintains all the registers on her own. However, the baby weighing machine had been out of order for the last four months. Even though the AWW complained about this during May 2009, they haven't received assistance so far. The other weighing machine is in good condition.

All registered children and women are immunised. Children of the age group 7 months – 3 years were immunised for BCG, measles, three doses of DPT, Polio and Vitamin A. Children (3-6 years) were given DT Booster, Polio and Vitamin A. All the pregnant women in the AWC were given TT shots.

Weight monitoring is done every month for all beneficiaries, including adolescent girls. Health check up is done by ANM once in a month. Medical officers also visit the AWC once in six months. The AWC also receives medical kits once in a year.

11.4.6 Pre- School Education

Except clay modeling, all PSE activities are conducted in the AWC. AWW is well trained to conduct all these activities. Some of the beneficiary children attending PSE were able to recite poems with actions in front of us with confidence.

11.4.7 Focus Group Discussion (FGD)

In order to assess the extent of satisfaction among the beneficiaries in all six services under the ICDS, a Focus Group Discussion was organised in the village. In all, 9 beneficiaries joined the team for discussion. Of them, one was a pregnant woman, 3 lactating mothers and 5 were mothers of child beneficiaries. Their level of education ranged from 5th standard to BA. The age of the participants ranged from 25 to 42 years of age. The main occupations of the head of the household of the participants were mason workers and auto drivers.

All the participants agreed upon our statement that the AWC operated regularly from Monday to Saturday. The AWW also visits each and every beneficiary household periodically. She also visits beneficiary households as and when they need special help from AWW. All the participants said that the AWW has a good rapport with the villagers. However, majority of the participants complained about inadequate play kits in the AWC.

AWW has separate registers for different activities and also updates them regularly. All the participants appreciated her work and behavior. All the participants said they get cooked food on all working days. The quantity and quality of food is also acceptable to all of them. However, they don't know about their entitlement of food. They are not very happy with the child growth monitoring chart and referral services undertaken by the AWW.

Immunisation is very regular in the AWC but still all the participants were not very satisfied with the immunisation and referral services; and joint activities of the ANM, medical officer and AWW. One of the major reasons may be that in Thiruvananthapuram the pregnant women don't depend on AWC for IFA tablets or TT vaccine or general health check up.

All the participants are very happy with pre-school activities of the children. They said their children are learning counting, poem recitation and writing alphabets. All the registered children who passed out from the AWC are enrolled in the primary school. Pre-school education is very successful activity of AWC. We saw the performance of the children in the AWC. All the participants said that this programme is very useful for overall development of children and women.

But, the nutrition and health education were organised very rarely. The supervisor does not attend such meetings. Institutional delivery, best practice of breast feeding, eating adequate amount of green leafy vegetable and hygienic way of cooking etc were discussed in the meetings whenever they were organised.

11.4.8 KEY POSITIVE POINTS

- The location of the AWC in close proximity to the school has made its awareness very high in the community.
- Infrastructure is excellent, with all bases covered from electricity and toilets to children's playground. This has been due to cooperative support for the AWC.
- Home visits by the AWW has ensured that women in the community contribute a lot to the smooth functioning of the AWC and mothers even use the AWC as a crèche for their children.

11.4.9 KEY AREAS FOR IMPROVEMENT

Though the AWC is functioning well, here are some points that could be improved.

- Growth, health and nutrition education, referral services not up to par. This is partly because in Thiruvananthapuram pregnant women don't depend on AWC for IFA tablets or TT vaccine or general health check up. The adolescent girls are not informed about the organization of NHE meetings. Thus the communication should be done through proper channels.
- Inadequate play kits for children
- Poor coordination between the ANM, medical officer and the AWW

11.5 LISUBARI VILLAGE AWC, ASSAM

11.5.1 ABSTRACT

Location of AWC and self motivation of AWW are the two major factors which may be highlighted for good functioning of this AWC. The Lisubari colony AWC is located at a distance of 10 Km from the Jorhat town.

The AWC is located in the same campus of primary and middle school. The AWC has its own building with attached toilet and store. The AWC has a huge campus with boundary wall that it is sharing with primary and middle school for outdoor activities. Supervisor is also residing in the nearby area, only half Km from the AWC. AWW's own son aged 5 years is also attending pre-school activities in the AWC. Therefore, the AWW is more active for both pre-school activities and providing regular food.

Moreover, the community specially, the mothers and Adolescent girls help AWW in cooking and other activities at AWC. AWW gets help from the community as she is also a member of Mahila Mandal in the village. The Village management Committee (VMC) has been formed to monitor the activities of AWC. For SN, the AWC gets cheque in the name of VMC and the AWW is the secretary of VMC. The secretary and president, purchase the food items for 15 days at a time from the shops recommended by the supervisor or CDPO. Food has been given regularly as reported by the beneficiaries in the village, in spite of not having a permanent kitchen.

Currently 37 (24% of eligible children) and 63 (70% of illegible) children aged 6 months to 3 years and 3-6 years respectively are enrolled in the AWC. 80 Adolescent girls and 7 pregnant women and 15 lactating mother are also registered in AWC.
The AWC received medicine kits twice in 2009. One from the ICDS authorities and the other one from IMNN (Integrated Management for New Natal).

11.5.2 Profile of AWC & Village

The village has a population of about 2026 people, as per 2009 survey done by AWW. There are about 400 households. Of which, about 80 per cent are Hindu. Majority of them are agricultural landless urban non-firm workers. Above 60 per cent are literate among both male and female. Almost all children aged 6-14 years are enrolled in school. The approach road to the village is semi-pucca. The village is located at a distance of about 10 Km from Jorhat town. The village is electrified and almost all households have its connection. The village has primary and middle school in the central place where the AWC is located. The AWC is located in the same campus of the primary and middle school. The schools have a huge campus with boundary wall. The AWC is also sharing the school play ground for outdoor activities.

This AWC has been functioning since 1999. The AWC has own pucca building with one big room and one small Verandah constructed in 2005. (The big room size is about 7 by 5 meters). The size of the store room is about 7 by 3 meters. The toilet is attached with the store room. The AWC does not have proper kitchen. However, it has a temporary arrangement for cooking food. Tube well is the major source of water but most of the children carry their drinking water bottle from home. The AWC has all the relevant pictures and charts for pre-school activities. The level of education of the AWW is up to tenth standard and the AWH is just literate.

11.5.3 Coverage of the AWC

According to the survey register dated April 2009, 242 are eligible beneficiaries among the children aged 6 month- 6 years. Out of 242, 152 are in the age group of 6 months to 3 years and 90 children are in the age group of 3-6 years. There are 99 Adolescent girls, 8 pregnant women and 20 lactating mothers in the survey area.

Currently 37 (24 per cent of illegible children) and 63 (70 per cent of illegible) children aged 6 months to 3 years and 3-6 years respectively are enrolled in the AWC. 80 Adolescent girls, 7 pregnant women and 15 lactating mother are registered in AWC. On the day of our visit on 5.12.09, 19 children were attending the AWC. However, as per attendance register there were 22, and 18 children attended the AWC in the age group 3-6 years on 3.12.09 and 4.12.09 respectively. This indicates on an average 20 children attend the AWC regularly. Most of the mothers of registered children below 3 years come at the time of distribution of food. Adolescent girls, pregnant women and lactating mother also take food in the AWC. A total of 16 registers are maintained by the AWW. All are updated. She maintains all the registers on her own.

11.5.4 Food Supply Mechanism

Spot feeding has been given to all the beneficiaries in this AWC. The AWC receive cheques from the CDPO in the name of Village Management Committee (VMC), who have an account in the bank. The committee consists of 14 members. The AWW is the secretary of the committee. The village school head master or ward member may be the president of the committee. The committee purchases the food items from a nearest store and takes bill from shops which need to be produced for next installment. However, there is a long process of issuing the cheques that have an effect on the continuation of supplementary nutrition in the AWC. Khichdi, Suji and Payas are recommended for cooking according to the convenience and choice of AWW in a week. On the day of our visit 'Khichdi' was cooked and distributed.

Immunisation: All registered children and women are immunised. 7 months - 3 years old children were immunised for BCG, measles, three doses of DPT, Polio and Vitamin A. 3-6 years children were given DT Booster, Polio and Vitamin A. TT was given to all registered pregnant women in the AWC. The AWC received medicine kits twice in 2009; one from the ICDS authorities and the other medicine kit from IMNN (Integrated Management for New Natal).

11.5.5 Pre- School Education

Most of the PSE activities are conducted in the AWC. AWWs are well trained to conduct all these activities. Some of the beneficiary children were able to recite poems with action in front of us with confidence on our visit.

Pre-school activities look very good. The AWW; a Bengali lady Ms. Uma Ghosh looks very active and well trained for teaching small children. Her 5 year old son also comes regularly with her mother to AWC.

11.5.6 Key positive points

- Located in the primary and middle school campus, thus it has enough space for play activities for pre school students.
- The supervisor resides close by and ensures good supervision of the AWC by the AWW.
- The AWW has an added incentive to make the AWC function in order: Her son also attends the pre-school activities in the AWC. It would be a good idea to choose and train an AWW from one of the mothers in the village for this reason.
- The structure with which the AWC is run is excellent. There is a village management committee (VMC) dedicated to the running of the AWC headed by the AWW. The AWW receives checks in the name of the VMC regularly. This is the biggest factor that ensures its smooth running. Also, the AWW is a member of the Mahila Mandal in the village and uses this recognition to her advantage in running the AWC.
- Health services are aided by another programme, the IMNN (Integrated Management for New Natal). Since we have seen that the budget for services in AWC in general is low, it is a good idea to combine such services with any other programmes running in the area.
- Thus, what has worked to the advantage of this AWC and can easily be emulated in other AWC's is the fact that the AWW is well respected and has some clout due to her additional posts. Add to this good infrastructure, a location within the school campus of the village and the incentive of the AWW's own son in the AWC and we have a winning combination.

11.5.7 KEY AREAS FOR IMPROVEMENT

Though this AWC functions very well, we will still highlight some areas where improvements can be made.

- No permanent kitchen, however, food is regularly provided.
- What we see here is that through the AWW, community contribution and the advantage of a good location, even with a basic level of infrastructure, the AWC functions extremely well.

11.6 BEDADEEPA AWC, JHARKHAND

1.6.1 ABSTRACT

Bedadeepa AWC is one of the good performing AWC. Considering the performance of other AWC in India, this seems to be working well. The AWC is located at the AWH's house only; therefore she is always available at the work place. The performance of the AWW and AWH has been reported to be satisfactory by the villagers and they are happy with the facilities so provided.

11.6.2 PROFILE OF AWC

The AWC is running at central place at AWW's home. There is the facility of piped water and electricity at the AWC but no toilet facility is there. The population of AWC area consists of 99 per cent from ST background and 1 per cent from SC background.

The official working hours of AWC are 0830 to 1300 but it opens at 1000 hours. On the day of visit it was observed that there were 22 children present at the AWC.

11.6.3 COVERAGE

The total number of beneficiaries surveyed in the area was 255, out of which 127 were registered with the AWC. It was found that out of the 82 beneficiaries in the age group of 7 months – 3 years, 54 were registered, and out of the 87 beneficiaries in the age group 3-6 years, only 32 were registered. It was observed that all pregnant and lactating mothers surveyed were registered with the AWC, whereas a very low proportion of the adolescent girls (10 out of 55) were registered with the AWC.

11.6.4 FOOD SUPPLY MECHANISM

Khichdi is cooked and served to children daily. AWC gets Rs. 6000/- for the distribution of food among beneficiaries but not in time. There is usually a 2- 3 months delay in getting the money and it causes difficulties in the distribution of THR and spot feeding. According to the norms of ICDS every beneficiary is entitled to get 2 Kgs. of rice and 950 Gms. of dal as THR every month but since the rates of rice and dal are higher in the market than that considered in the norms of ICDS, each beneficiary i.e. AG, PW and LM gets only 1.25 Kgs. of rice and 500 Gms. of dal and each child aged 7month- 6years gets 750 Gms. of rice and 250 Gms. of dal only. THR is distributed every third Friday of the month.

11.6.5 CHILDREN'S GROWTH MONITORING AND HEALTH FACILITIES

Immunisation is also carried out by ANM and ASHA workers on the Friday when THR is distributed. Medicine viz. Paracetamole, ORS, mirinodazol, Potrimoxazol and condoms and contraceptive pills are also provided to the beneficiaries by the ANM on the same day. IFA tablets are provided to the LMs and PWs by ANM and to AGs by the CDPO office. One meeting for women is also arranged by Mahila Mandal after the distribution of THR.

Since all the children are from ST and SC background, they are not treated properly at the AWC and it affects their activities like PSE, their hygiene, their way to communicate etc.

When children cross the age of 6 years they are enrolled in the government school. There are only 2 malnourished children in the AWC area. When asked, the AWW was able to explain the growth chart clearly. Weighing machine is available at the AWC and children are weighed once every month as reported by AWW.

11.6.6 PRE SCHOOL EDUCATION

There is lack of toys and posters/ paintings used as teaching aids. There are 32 dishes and 20 glasses for serving food to children. There is no almirah available for accommodating things like utensils, registers etc. There are enough utensils for cooking food at the AWC.

The AWC pays Rs. 200/- p.m. as rent. AWW got only Rs. 1000/- for rent during 2008, and after that AWW has got no money from higher level officials to pay the rent. Community provides full cooperation to the AWC and expects the AWC to have its own building so that the difficulties in operation of AWC in summer and rainy season can be avoided.

11.6.7 FOCUS GROUP DISCUSSION

A lot of females gathered for group discussion. Most of them were either housewives or laborers and were in the age group of between 20-30 years. They were either illiterate or their qualification ranged from 2nd class to B.A**.** Most of them agreed that the AWC opens regularly. All the children go to school (PSE) daily and get food daily. Quality and quantity of food provided is acceptable to all the beneficiaries. THR is distributed every month and 750 Gms. of rice and 250 Gms. of dal are provided to each beneficiary while the AWW reported that each beneficiary gets 1250 Gms of rice and 500 Gms of dal every month. It was reported by the women during group discussions that the child younger in age gets less amount of THR while the older one gets more quantity of THR. When asked about the quantity they get, the women could not tell how much they are getting.

They reported that they are taught to practice healthy and hygienic habits like keeping their children clean and neat, washing fruits and vegetables before using it etc. and they are also told about immunisations. Immunisation is carried out every month on the day of distribution of THR along with distribution of medicines like IFA, ORS etc. When asked to quote some benefits of AWC, the women told that the children got aware of education, learned counting ,reading/ writing words/ alphabets and got medicine and immunisation at AWC. AWW is not biased towards anybody in the AWC area and behaves in a good manner. If someone falls ill, she refers the patient to the PHC and also provides the facility of blood tests and weighing the beneficiaries. AWH visits beneficiaries' homes every month and discusses with them health related issues. She also behaves nicely to the people. Overall they are satisfied with the behavior of AWW and AWH and the services provided to them through AWC.

11.6.8 KEY POSITIVE POINTS

- This AWC works pretty well considering the standards of AWC across India. Good education, food distribution, health and immunisation services are carried out regularly.

11.6.9 KEY POINTS FOR IMPROVEMENT

- The amount of food that the children should receive is not distributed because the AWW receives money to buy food according to outdated prices. One thing to learn from this is that the amount of money given to AWC needs to be revised keeping food prices in mind.
- Also there seems to be some undercurrent of discrimination in the working of the AWW against SC/ST kids. This needs to be looked into in detail and investigated further.
- There needs to be a house dedicated to the AWC. Currently it works out of the AWW's house which doesn't have adequate infrastructure. Making an AWC work out of the AWW's house is a bad idea unless the AWW's house is properly geared up with the entire required infrastructure.

11.7 KHANDA SARKARA F.P. SCHOOL AWC, NORTH 24 PARGANAS, WEST BENGAL

11.7.1 ABSTRACT

To capture best practices of the ICDS programme, the study team was looking for some good functioning AWC and discussed with CDPOs and DPOs. Fortunately, the DPO of North 24 Parganas suggested the name of Amdanga project. Accordingly CDPO of this project, Mr. Tapan Biswas gave the name of 15 AWC which according to him were functioning well. Out of 15 centres Khanda Sarkara F.P School AWC was selected for case study and it was not in selected sample centres. Team visited this AWC without prior information for case study.

11.7.2 PROFILE OF AWC AND VILLAGE

Out of total 648 populations, about 70 per cent Muslims and 30 per cent Hindus reside in this village. Agriculture is the main profession here. Some of them are salary earners. Literacy rates are very low among women. 80 per cent children among the age group of 6 years to 14 years go to the school. The village is located beside NH 34. It is approx 12 Km away from District Head quarter. Electricity facility is there in the village. Sub centre is 5 Km away from this village. Tube well is the main source of drinking water. There are two free primary schools in this village. High school is 5 Km away.

The AWC is running in a primary school room (size 16 ft X 12 ft). One third portion of the room is used for stocking food materials and fuels. AWW is using the kitchen room of the school for preparing food (kichdri). The AWW, Mrs. Firoza Bibi (HS) is working in this centre since last 9 years where as the AWH, Mrs. Mallika Mondal (VIII) is working since past 2 years. This centre provides the services like SNP, NHE, Referral services and Home visit etc. Immunisation is done at the Panchayat office where ANM comes on the 1st Thursday of each month. Altogether 81 children are there in the AWC area and all of them are registered at the centre of which 49 children are in the age group of 3-6 years. At the time of visit, 25 children aged 3-5 years were

found sitting in the room. 14 children aged 5-6 years have taken admission into Primary School but they take food daily from the centre.

At 10 am when we reached the AWC, AWH had started the distribution of food as the room had to be vacated before 10:30 am for the school to start at 11:00 am. The children collected the food in their own cans (Tiffin boxes). At the time of food distribution it was found that mothers/grandmothers had come to collect the food for their children. All the beneficiaries take the food to their homes as the AWW has to vacate the school premises within 10:30 am. During our visit to the AWC, a PW came to register her name to the AWW. But AWW told that woman that at first she will have to go to the Panchyat office, where ANM visits 1st Thursday of every month. ANM will give her a card, after looking at the card she will register her name. In the mean time a grandmother of a child came to the AWC for getting some advice for her grandson.

11.7.3 FOCUS GROUP DISCUSSION

Food supply is regular, but the quality of pulses is not so good. Quantity of vegetables remains less in kichuri sometime. Half of an egg is given to the child every day except Saturday. Not all the mothers are aware about entitlement of the food. Distribution of quality food attracts children to the AWC regularly.

Mothers are satisfied with the services provided by both AWW and ANM. AWW teaches the children well. They can write letters, recite poem, tell stories and also have developed some good habits such as washing hands before taking foods and after using toilets etc.

In FGD the mothers said that they know that there is a meeting at AWC on every 16th of the month. But due to lack of time they could not attend them regularly. If they have some problems then they discuss it with AWW at the time when they come to AWC for leaving their children or taking food. One mother who was present at the time of FGD told that she has never heard of such meetings.

About 80 per cent children are taking immunisation from Panchayat office. During group discussion it was found out that four families in the Muslim community do not allow their children to go for immunisation. One mother said during group discussion that though she knew immunisation of the child is good for health but my family does not allow. One of them belongs to a conservative family. She said that her child remains ill even after getting the vaccine (*Tika na dile valo thake, kintu tika deoer sange sange asustha hoye jai*). AWW or AWH use to inform them about next date of immunisation. The AWW takes the weight of their children at every month. She always asked for their children's over all progress. It has been observed that all of them love the work and behavior of the AWW and AWH.

No such major role of the Panchayat has been found out. Panchayat only helped to get one room for the centre in primary school. AWW seems self motivated. Villagers also are aware about the work culture of the centre. According to the villagers, the regular distribution of food and self motivation are the major two reasons for which the centre is running well as compared to nearby other centres. They also told that a self-owned building is needed for running this centre more smoothly and effectively.

11.7.4 KEY POSITIVE POINTS

- The AWC is running very smoothly and regularly. Services such as immunisation are administered to almost 80 per cent of the village children and good quality food is regularly supplied.

11.7.5 KEY AREAS OF IMPROVEMENT

- Class strength in the AWC is high owing mainly to its location in the primary school and the good quality of food that is given to children. We have found that the next best option after having a separate AWC house with good infrastructure is having the AWC in a school because the existing infrastructure can be used for the AWC's purposes including its kitchen and playground. However, in some cases the principle or the teachers of the school object to it. In such cases the AWW has a hard time carrying out all the required activities. The supervisor and the CDPO office should ensure that school staff and the AWW work together.
- Not much can be improved here, except for some villagers' demands for a separate building for the AWC. However, having the primary school work as the AWC, with no hassles from its administration has worked equally well for this AWC.

11.8 RASULPUR UTTAR BAZAR AWC, BURDWAN, WEST BENGAL

11.8.1 ABSTRACT

At the time of reaching a model centre we have heard that there are some centres under memari-I ICDS project which are running smoothly and they can be taken as model centres for visit. But it was very difficult to make a visit to this centre officially as getting permission from OPO/CDPO through SW office, is a time taking factor. So we made a visit without prior information just to know, the factors that make the AWC run smoothly. We chose the AWC at Rasulpur Uttar Bazar as it was closer to the Rasulpur Rail Station. After hearing about this AWC we decided to make **an** unorganised visit to this centre, and we visited here on 10.11.09 at 11:30Am.

11.8.2 PROFILE OF AWC & VILLAGE

It is a Rail station side area. 76 per cent of total population is from general caste and the rest are schedule caste. 1-2 per cent is from schedule tribe. Most of the people are salary earner and petty business holder. 90 per cent children of 6-14 years age group are in school.

Most of the houses are pucca and have an electricity connection. There are both Primary and High school in the village. One Kinder garden school is also their. Tube well is the major sources of drinking water.

The house of AWC is pucca and there are separate rooms for kitchen and storing food materials. Tube well is in the premises. There is a SSK besides the AWC. There are two toilets and two bathrooms in the AWC. One was built when the AWC was built and the other one was made by Burdwan Jela Parisad under the scheme of sanitary Mart (Nirmal Gram Yojona).

Total population of this AWC area is 1969, out of this number 829 is male and rest are female (867). The AWC is running in this building since 1994. AWW Mrs. Sima Das is working from April 2000 whereas AWH Mrs. Santana Rej Beswas has joining here in 2004.

This AWC provides all the services like SNP, PSE, NHE, Home visit, immunisation and referred services. There is no implementation of KSY in this AWC.

11.8.3 COVERAGE

Mrs. Sima is very much self motivated and self confident about her centre. She is a young graduate. She told the teams that in her area literacy rate is high and people especially mothers are very much aware. 40 per cent of the population belongs to East Bengal. These mothers are aware of SNP and PSE programmes and her main problem is that it is very difficult for her to collect vegetables and eggs by the money allotted by CDPO, as presently these have become very costly.

She told us that there is a committee founded by panchayat pradhan for the betterment of the AWC and it consisted of the following members.

1) Panchayat member-1
2) School teacher-1
3) Older knowledgeable person-2
4) Beneficiary father-1
5) Beneficiary mother-2
6) AWW
7) AWH

Among them the older persons are very active to look after the problems in the AWC.

The quality and quality of food materials are very good. Beneficiary of PSE are able to recite rhymes, can do counting etc. They are organizing NHE Programme with the mothers of 0-3 years as per CDPO's order. On the 4th Tuesday of every month they arrange such meetings. The topic varied from time to time. AWW made regular home visits and has taken this work as her moral duties. Mrs. Santana told us that mothers are very helpful. AWW reported that PSE is the main key of the AWC. If there is no SNP then also the AWC will run very smoothly.

11.8.4 FOCUS GROUP DISCUSSIONS

After a FGD with beneficiary mothers it seems to us that they are satisfied with the services provided by this centre. One of the committee members, Mrs. Suparna Roy told us that the food is regular and PSE activity of this centre has forced the mothers to send their child to the AWC. Mothers are very serious about the centre.

11.8.5 KEY POSITIVE POINTS

- The AWC is functioning well with good performance in all aspects i.e. health and immunisation services, pre school education etc due to mainly the village committee that has been set up for this purpose. We have seen that such a committee consisting of about 10 members makes it easier for the AWW to run the centre.

- The AWW is very motivated especially as there is an incentive that she might be promoted to the supervisor rank. The previous AWW was promoted. This is a good step and should be used in more AWC's where the AWW isn't as motivated
- The AWW says that it is easier to work in this area as the mothers are service conscious. It is a plus point for her in running the AWC smoothly. Supervisor comes here after 2-3 months but CDPO has visited this AWC before 5 years.

11.8.6 KEY ARES OF IMPROVEMENT

- The main difficulty arises here in the quality and quantity of food, both of which are low because money allotted for these services isn't up to date with new prices. This is quite a common difficulty and regular review and revision of rates should be made a structural part of ICDS.
- She has complained that she has not got sufficient charts and posters for the children.

11.9 BARMASIA PASI TOLA AWC, DEOGARH URBAN BLOCK, JHARKHAND

11.9.1 ABSTRACT

It is one of the selected urban projects in Jharkhand in our study. There are 125 AWC under this project out of which only 3 were reported as good functioning AWC by the project CDPO. Out of three we randomly choose 'Barmasia Pasi Tola' AWC for our case study which is in operation since May 2005 and is located at a central place of the ward. We reached the centre at 10:10 AM and found that both AWW and AWH were busy with their duties. The environment was calm and appropriate for teaching and learning.

11.9.2 PROFILE OF AWC AND VILLAGE

The centre is 5-6 Kms away from ICDS project office and 1 Km away from district headquarter. Total population of the AWC area is 1030. Out of total population, 60 per cent are from SC communities and rest 40 per cent are from backward communities. The approach roads are in good condition and the transportation facility is also good. The living standard of the ward inhabitants is average. Most of the people either engaged in daily wage based work or small business or working as made servant. Primary health centre and primary school is also available within no distance.

The centre is running in a rented building having a separate place for cooking. But there is no space available for outdoor activities. No toilet facility is there at the centre. Drinking water has been stored in the covered vessel. Some toys are there which had been supplied once in the beginning. The centre pay Rs. 500 as rent of the building and the rent is paid by the project office.

11.9.3 COVERAGE

As per survey register, there are 90 and 115 children in the age group of 7 months-3 years and 3-6 years respectively in the centre area, of which 39 children aged 7month-6years and 50 children aged 3-6 years are registered at AWC. AWW reported that all the registered children are from

BPL families irrespective of caste and other things. About 40 pregnant and lactating women are registered; only 4 are left who don't take any interest to join. She also told that though these numbers are fixed in all the AWC under this project, she has to provide SNP to all if they want.

11.9.4 Food Supply Mechanism

AWW gets Rs. 6480/- for SNP through bank account. Both AWW and AWH are the authorities to withdraw the money from the bank and there is no interference of any other members in the budget and expenditure. According to them it is very difficult to manage to provide SNP to all the beneficiaries as the price of rice and dal has increased two folds. She gives less quantity to the THR beneficiaries and manages to provide regular SNP to the PSE beneficiaries. THR is distributed every month on third Thursday. The amount fixed for the distribution is 80 gms of rice and 65 gms of dal and this quantity is based on base prices which are considered to be Rs. 12 for one kg of rice and Rs. 30 for one kg of dal. Now the prices have increased to Rs. 18-20 for one kg of rice and Rs. 60 for one kg of dal. So the AWW doesn't have enough money to distribute the quantity according to the norms. At present 1.25 kg of rice and 500 gms of dal are being distributed among the beneficiaries as THR. The AWW has informed the CDPO in this regard. About this manipulation, she has already informed both the ICDS officials (Supervisors and CDPO) as well as beneficiary mothers. Khichdi was being prepared at the AWC and was served among the children while we stayed there. The quality was good and quantity was enough. Overall the beneficiaries were enjoying while eating it.

11.9.5 Children's Growth Monitoring and Health Facilities

No immunisation is provided at AWC. There is no ANM appointed in the village. The ANM got transferred six months ago and since then the post is vacant. AWW told us that whenever the immunisation camp is arranged at the PHC, she informs each beneficiary's family and the people of the AWC area get benefited of the immunisation at PHC. Some persons avail immunisation facilities at private hospitals and doctors. The AWW updates the immunisation status in the register after children or women get immunised at private hospitals. Both AWW and AWH also spread awareness about the usefulness of the immunisation among the persons living in the AWC area during their home visits. Women also get TT immunisation s at PHC or private hospitals. Weighing machines are available at the AWC and the children get weighed regularly on monthly basis or quarterly basis according to the needs and norms.

11.9.6 Pre- School Education

Walls of the AWC have been painted with paintings and other educating information which are used to teach children. Looking at the walls seems like it is a suitable place for the education of the children. Growth charts of all the beneficiary children are prepared and are up-to-date. AWW interpreted the growth chart. It is evident that there is no coordination committee and the AWC is not taken care by Panchayat or the municipality council.

There is no contribution from the community in the functioning of the AWC but in absence of AWW and/ or AWH, AGs do day-to-day work on behalf of the AWW/ AWH at the AWC and the AWC does remain open. AWW and AWH are involved only in Pulse Polio Camp; they are not involved in any other Govt scheme other than Pulse Polio Camp. So their primary focus is on AWC activities only. Most of the children have slate and pencil.

NHE is provided with the help of Mahila Mandal once in every month at the time of distribution of THR because most of the women are present at AWC on the day of distribution of the THR.

11.9.7 Focus Group Discussion

The age of the beneficiary mothers who participated in the focus group discussion ranged from 19 years to 30 years. Many of them were illiterate. The highest level of education possessed among them was matriculate. Most of them were engaged in unorganised work such as non-farm labor, while many of them were housewives. According to beneficiary mothers and other women in the AWC area, children are excited about going to AWC and they attend AWC daily. Attitude of AWW and AWH towards beneficiaries is good and they motivate the children to come to AWC as well as their mothers to send their children to AWC for PSE and food. Generally khichidi is provided as food at AWC and the beneficiaries get enough food to satisfy their needs of food. According to the mothers of beneficiaries the children learn reading and writing at AWC through PSE and if someone is absent then AWW or AWH go to the child's home to bring him/ her to the AWC. After leaving AWC, the AWW encourages the beneficiary mother to get their children enrolled at schools and so they enroll their children at schools. All the children (100%) get enrolled at schools after leaving this AWC at the age of 5-6 years. THR is distributed once in a month. According to the beneficiaries they are given 1.25 kg rice and 250 gms of dal but according to the AWC record they get 1.5 kg rice and 500 gms of dal. AWW tells that the number of beneficiaries availing food facility at AWC is more than that of the registered beneficiaries so THR provided is less than the actual amount entitled. Villagers also told that all the children who reach AWC- whether registered or not at the AWC- get food. Total 125 AWC are there in Deogarh Block. 105 AWCs fall under Sadar Hospital, Deogarh Urban Block. ANMs don't make any visit in these 105 AWC, so many poor people do not get benefits of immunisation and their children and women remain unimmunised. Rest 20 AWC come under Jasidih notified region and ANMs visit these 20 AWC only. AWWs and AWHs are recruited by ward councilors.

All the persons participating in the FGD seemed satisfied. According to the persons participating in FGD the amount of the food distributed should be increased and one ANM should be appointed so that the immunisation can happen at AWC itself. Everyone in the community is happy with AWW and AWH's contribution and attitude.

When asked about the effect of not getting SNP, both the AWW as well as beneficiary mothers told that the number of the children attending AWC will decrease. Since the children are from poor families, they won't be coming if the food is not provided to them. So continuation of supply of the food at AWC is very essential.

11.9.8 Key Positive Points

If all the AWC are run in the way Pasi Tola is being run, the ICDS will become a successful project of the Government. AWW and AWH are socially active and skillful and have a sense of serving the community through AWC work.

- The coordination between AWW and AWH is very good and is one of the factors contributing to the success of this AWC. Since there is no coordination committee the chances of any commission or embezzlement of the ICDS budget is not possible.
- Ward members have no control on the money allocated for the food. This can be concluded that the AWC can work well even if it is controlled by the grass-root worker and not by any committee.

- Supervisor visits the AWC 2-3 times in a month and since the AWC abuts into the road, CDPO and other officers also visit this AWC sometimes. These visits encourage AWW and AWH to work better than they are doing each time. So the regular visits of the officials- especially of honest officials- are necessary for the betterment of ICDS and the services delivered.
- Every information given by the AWW and AWH was found to be true when confirmed with the inhabitants of the ward. Everyone praised their contribution towards PSE, immunisation and other services.
- There is no ANM appointed in the village. This has been unsupportive in general for health and immunisation services but the AWW has compensated by sending out notices to people about the appropriate time to go to the government or private hospital instead. The AWW also updates her registers in tandem with the hospital visits.

11.9.9 KEY AREAS OF IMPROVEMENT

- No coordination committee, thus the AWC is weak infrastructurally. Too much is left to the AWW and the AWH to handle.
- NHE is provided with the help of Mahila Mandal once in every month at the time of distribution of THR. Some women said that weaving is taught at AWC and some women said that it would be better if stitching could be taught at AWC. Some women also expect distribution of cloths for their children from AWC.
- Withdrawal of money for SNP is delayed some times because of the joint account in the names of AWW and AWH. In case of emergency, it would be better if supervisor's name is included in the withdrawal authority of the SNP money. In some of the AWC, some problems are there between AWW and AWH for which withdrawal of money for SNP sometimes gets delayed. In such cases, the signing authority of the third party will help for withdrawing money from the bank.
- There is the problem of unrevised prices according to market prices again. Due to this, a lower quantity of food than is recommended is distributed. The AWW has informed her supervisors and the CDPO office but nothing has happened as such. An action needs to be taken centrally and included in the scheme as a point for regular revision.
- There is a lack of utensils to serve food at AWC as the number of beneficiaries has increased and the new utensils have not been given to the AWC.

11.10 BAL VIKAS PARIYOJANA AWC, BIHAR

11.10.1 ABSTRACT

All the inhabitants of the ward are Harijans. AWW's husband is CPI(M) leader and took initiative to set up the ward. According to the AWH, the AWC gets sum of Rs. 10, 975 every month in time. Around 35- 36 children come to AWC daily and today there were 22 children present at the time of this observation. All the children are served khichdi daily. THR is distributed twice a month, once for 15 days and second time for 10 days. There is no facility of immunisation at the AWC. Immunisation is done at government hospital and AWW helps people in the process but since last month ANM comes to AWC and immunisation is done at AWC since the ANM has started coming to AWC. AWW could not show all the registers and told that some registers are at CDPO office.

Community helps in running of the AWC fully. The AWC is located at a central place and running at a community place. The facility of electricity and toilet is available but there is no facility of water at the AWC. Source of water is well. No Mahila Mandal meeting has been arranged since last four months at the AWC. Self Help Group was started here but it is not working at present. People are illiterate and their living standard is low. AWW reported that AWC has helped them raise their living standard. None demands any bribe from the AWC. AWC and CDPO office works as per AWW's husband's wish.

11.10.2 COVERAGE

The AWC started working from 20.12.1983.Reeta Devi has been working as the AWW in this area along with Kulwanti Devi as the AWH. Number of beneficiaries surveyed in the area in the age group 7month- 3years and 3-6 years were 125 and 150 respectively out of which 40 in both the age groups were registered. 16 PW, 22 LM and 80 AG were surveyed out of which 8, 8 and 3 respectively were registered.

11.10.3 FOCUS GROUP DISCUSSION

The participants in the FGD were women whose age ranged from 14 to 40 years. Most of them were illiterate. Half of them were casual labourers while the others were not engaged in any occupation.

After talking with these females it was clear that children go to AWC for PSE daily as the AWC is running from a community house and the AWW's home is also within the premises of the AWC. So the AWW is present on all the days. The inhabitants are fully dependent on the AWW, which in turn helps them since they are her supporters. Thus, the AWW's home visits are very frequent.

Khichdi is served to children at AWC so the children get tempted and attend AWC daily. The quality and quantity are satisfactory, according to the women.

The villagers said that they get THR once a month and they get 1 Kg of rice and 250 gm of dal. Some of the villagers told that they get 1 Kg rice and 500 gm dal.

It was evident from the discussion that immunisation is done at the government hospital only. However, IFA tablets are not distributed at the AWC and nor are meetings held there. No health

check-up is provided either. Overall, the coordination between AWW's family and the villagers is very good.

11.10.4 Key Positive Points

- The AWC is functioning only as a result of regular food supply at the AWC.
- The central location of the AWC ensures good community participation as well.

11.10.5 Key Areas of Improvement

- The AWW's house is used as the AWC. Thus the AWW is present all the time. Using the AWW's house as the AWC is recommended only if the AWC's house has adequate infrastructure.
- Basic infrastructure problems like lack of drinking water and immunisation facilities have been compensated for due to good community participation and the awareness spread by the AWW. But this is hardly enough, as apart from daily PSE the AWC hasn't shown any results.
- Having a government hospital as a backup instead of carrying health and immunisation activities should be looked into. Ideally the AWC should be close to a government hospital and the ANM and the AWW should be trained to ensure that in case these services not being carried out, or for more serious illnesses, the patient should be referred to a government hospital.

SECTION II: CASE STUDIES OF AWC'S THAT ARE NOT FUNCTIONING WELL

While conducting the case studies, our field staff also informed us about some of the AWC are not functioning as expected. Out of 9 case studies, five were of bad AWC as they weren't performing satisfactorily owing to leakages in supplementary nutritional or corruption involved in each level. But these AWC are still nurturing on paper as efficiently as possible. Lack of community participation, high illiteracy rate, lack of awareness as well as lack of training to AWW, lack of motivation is equally responsible for non- functioning of AWC.

Similar to our previous section, we would now highlight case studies of AWC that haven't functioned well. Please see the ***key points and learning's section towards the end of each case study*** for an understanding of the factors responsible for the AWC's condition.

11.11 SAKAR TOLI AWC, GAZHIPUR

11.11.1 ABSTRACT

The 'Sakar Toli' AWC has been functioning since 1996 in the house of AWW with limited coverage. In 2007, the AWC has shifted to a primary school in the village. The majority of the villagers don't know about the AWC as they are illiterate. During the past 12 years, the AWW has given food twice in May 2009 in the Sarpanch house for women and children. The villagers thought the Sarpanch had given food due to some other reasons. The registers updated by the AWW's niece who puts 'p' for present for all children. Most of the children's names are fabricated and do not live in the village. This is admitted by AWWs at the meeting. One child 'Munny Yadav' died few months back but her name still appears in the registers. The supervisor (Ms.Tara Singh) collects cash from the AWW periodically for not opening AWC regularly. She never does her duty properly and the CDPO never visits.

AWW Mrs. Geeta Yadav belongs to a very rich influential family in the village; hence she does not bother about her duty.

11.11.2 PROFILE OF AWC & VILLAGE

According to the 2001 census, the village has a population of about 3,800. There are about 700 households as reported by the Sarpanch of the village. All are Hindus. About 40 per cent and 45 per cent are recognised as members of scheduled castes and backwards respectively. According to the Sarpanch, about 5 per cent are landless, about 30-40 per cent among male are literates as against 10-20 per cent among women. However, about 70 per cent of the children in the age group 6-14 years are in school.

The approach road to the village is pucca. The village has electricity and some of the households also have a connection. The village has a sub-centre at a distance of 1 Km, whereas PHC is located at a distance of about 2 Km. The private practitioner is also available in the village. The village has primary and middle schools, located in the centre of the village. The village has post office as well as ration shop. Hand pump is the major source of drinking water in the village.

The 'Sakor Toli' AWC has been functioning in the village since 1996. The AWW, Ms. Geet Yadav, and a helper, Ms. Sitara Yadav, have been working for the past 13 years in this AWC. The AWC was functioning in AWW house for the past 11 years. Since 2007 it has been operating out of a primary school building.

The 'Sakar Toli' AWC was identified as one of the worst AWC in Ghazipur district of Uttar Pradesh. This AWC functioned between 1996 and 2001 in the house of the AWW. Two years back the AWC has shifted to a school building. The present AWC is located in the middle of the village, where primary and middle schools are located. Actually, there is no board or sign that says the AWC is functioning. Since October 1, 2009 the AWC has not opened. When we met the AWW, she showed us some register with fake names; with children who do not exist. She has admitted her mistake saying that most of the names of children are fake, and she has given in writing that 'that is true'. Only about 25 children instead of 144 as reported in the register, all aged 7 months-6 years, are actually living in the village. She has maintained a survey register as well as a beneficiaries register separately for the 7 months-3 years and 3-6 years age groups. She also has a separate register for pregnant and lactating mothers. These are updated by her nephew who puts a 'p' (for 'present') against all most all the names that appear in the children beneficiaries register. One of the worst aspects is that one child aged below three years died for some reason but her name was retained in the daily register to imply she is still present in the AWC. The AWW does not know that 'Munny' is no longer in the world.

11.11.3 Coverage

This AWC was randomly selected by considering the distance from the CDPO and this is the main criterion. After selection of this AWC, a list of child beneficiaries aged 7 months-6 years and list of beneficiaries of adolescent girls as well as pregnant women and Lactating mothers have been taken from the beneficiary registers, which have been maintained by the AWW. According to the registers, there are 144 children beneficiaries in the AWC. During verification for sample selection, our field staff reported that only 8 beneficiaries were found. Moreover a three-year-old registered child died due to some illness, but her name still appears in the registers. The AWW does not know that the child is no longer in the world. Similarly 9 pregnant and 7 lactating mothers who were registered with AWC were found during verification not to be actually PM and LM.

Our instruments of observation were: (1) rechecking the registers, (2) in-depth interview with AWW and AWH, (3) personal discussion with women in the village (4) group discussion and (5) personal observation

11.11.4 Food Supply Mechanism

Over the past 12 years, the AWW gave food twice. 'Khichdi' was cooked in the Sarpanch's house in the village. The villagers thought that they got food from the Sarpanch. The AWW said that the Sarpanch also did not take any further interest and asked her to stop cooking activities as they can't manage fuel for cooking, no utensils etc. Moreover, the Sarpanch can't spare his place for cooking where he keeps buffalos. Apart from this, she reported that she has distributed some food 'micro nutrient' to children aged less than 1 and pregnant women. She has also distributed some rice and dal to the registered adolescent girls.

Stove has not been ignited in AWC for the past 5 years: Banthra gram panchayat at Sarojini Nagar has no proper kitchen for the past 5 years, but a few bricks act as a stove. A villager reported that one AWC opened in this area in 2004 but it never functioned. The Gram Pradhan had been utilising this centre for storing dry grass. However as the news of an official visit was out, the area was cleaned. At the time of visit it was observed that the AWC was operating in very bad conditions not at all conducive for children's good health. In the AWC of Chakwali, Behata, Khatola pregnant women and children are provided nutritious food, but again only on paper. There are 265 anganwadi centres in Sarojini Nagar, and among them 24 are old and 9 are new. But most of them are operated at AWWs home.

Villagers' accusation: According to the villagers, there is a provision of providing porridge, peanuts, edible oil to children up to 6 years of age, pregnant and lactating mothers at the centre but these food items are sold by the officials in the market.

Panjiri that is supplied as a supplementary food item to the centre is being sold in the market at exorbitant rates ranging from Rs (150-200) for the purpose of feeding the animals.
(**Source:** Dainik Jagaran, Lucknow, 31 October, 2009)

11.11.5 Focus Group Discussion

When we went inside the village, a group of women came on their own when they saw us. A FGD was organised with them. It was surprising that the majority of them are not aware of a AWC functioning in the village. They never visited it at all. They get their child immunised from the sub-centre on payment.

11.11.6 Key Areas of Improvement

- This AWC exists only on paper. It is marred with corruption to an extent unimaginable to the people who planned the ICDS scheme.
- The AWW's house and later the primary school was used as AWC and no villager even knew about this.
- The AWW has not performed her duties at all for the past 12 years and just uses the money and medicines she receives for herself.

In Mahilabad, more than 30 per cent of AWC exist only on paper. An AWC located at Tilsuva was found closed on the day of the visit. Two women were found talking instead of doing any productive work at the door of the AWC. On being asked, they informed us that from the past one week nobody had come to work. The condition of AWC was very pitiable. They told us that usually workers did not come and most of the workers had opened up the centres at their homes, which usually remain closed. Most of the time children are given half-cooked porridge.

Similarly, AWC Bakinagar, Rahimabad, Musibatganj, Baldevkhada, Tulatmau, and Kewalhar have also performed abysmally. The various functions of AWC like weighing children and doing health check up of children and pregnant women are not being performed. The weighing machines that are available are also not working. Moreover, the immunisation programme does not function. Sources revealed that out of the total of Rs 2,750 which is received under the "Hot cook scheme" at Rs 750 go into the pockets of the officials. The provision of cooking fuel is also not there. Thus it is not possible to cook food every day. According to the village Pradhan, villagers are not getting any benefit from the AWC; these are only a mode of lining the pockets of high officials of these centres.

*(**Source:** Dainik Jagaran, Lucknow, 29 October, 2009)*

- Food distribution, health services and child education are all non-existent. Registers are maintained with fake names and no one attends the AWC. No one even knows of its existence. According to a AWW, she does not know when the supervisor (Ms. Tara Singh) comes. The supervisor never asked about any register. One of the most unfair acts is that the supervisor is blackmailing the AWW. She comes and demands from the AWW a major portion of the money that the AWW received from the office for SNP. The supervisor argues that 'you don't open AWC regularly and don't give food. The supervisor also said that, if you don't give me money I will make the AWC close soon'. Once she took Rs 8,000 from the AWW (as stated by AWH) in a personal meeting. The CDPO never visits. This is a serious issue and needs to be addressed urgently.

Overall, this AWC revealed the extent to which the ICDS scheme can fail if integrity is not maintained using strict controls. One thing we can take away from this is that awareness among villagers of the ICDS scheme is very important. One of the reasons that the AWW and the supervisor have been able to get away with corruption is that the villagers had no clue that the AWC even existed. It is very important that villagers are made aware of the programme from time to time by district authorities and the CDPO office. Also, checks and tabs have to be kept on the AWW and the supervisor from higher authorities and field visits have to be made at least 3-4 times a year to keep the AWW accountable for the funds received in the name of the AWC.

11.11.7 SIDE NOTES

One of the pre-primary school programmes called 'Readyness' started in the AWC areas on October 1, 2009. All children aged 3-6 years are attending the school. According to Shiksha Mitra, the District Institute of Educational and Training (DIET) started this programme. Mid-day meal is also given to the children aged 3-6 years. It is not clear to us whether this 'Readyness' programme is started in place of AWC or it is a separate one. However, the AWC has not received Rs 2,500 for hard food in October 2009. She has received only micro-nutrients for below one year children and pregnant women, lying in the AWW's house.

11.12 KHANPUR BHARTI AWC, GHAZIPUR

11.12.1 ABSTRACT

The 'Khanpur Bharati' AWC has been functioning since 1989. The AWC was started in the village primary school for the first few years and then moved to a rented house for Rs 200. The CDPO refused to pay rent after one year and the AWC again moved to some other primary school located at the far end of the village.

The AWW gets Rs 2,750 for hard food in two installment and micro nutrients separately for below one year children and pregnant women per month. When the AWW received first installment of Rs 1,500, out of which Rs 1,000 has to be paid to the supervisor and CDPO then and there. For micro nutrients she has to pay Rs 450 per month in a similar way. Because of such corruptions in CDPO office the AWC have not met major objectives of ICDS in Ghazipur districts.

Lack of own AWC building was the second most reasons after leakage in food distribution

11.12.2 PROFILE OF AWC AND VILLAGE

According to the village Pradhan, the village has a population of 10,000 divided into 2,000 households. About 80 per cent are Hindu and 20 per cent are Muslim. About 50 per cent belongs to backward castes and 20 per cent to scheduled castes. About 10-20 per cent are landless. The level of education seems to be moderate, as about 60-70 per cent are literates among men as against 30-40 per cent among women. More than 70 per cent of children age 6-14 years, are enrolled in the schools.

This AWC has been functioning in the village since 1989. From 1989 to 2007, the AWC was functioning in a village primary school. The school head master, Mr Badri Narayan Pandy, allowed her to start an AWC in the school. The next headmistress, Ms Subhanti Devi, a local lady, asked her to shift the AWC from her school. Beginning 2007 for one year, she had to argue with the headmistress for functioning of the AWC in that primary school. Later on CDPO asked her to shift AWC to a rented house in 2008. However, they refuse to pay Rs 200 as rent after one year. According to her, she paid rent from her own pocket for one year. It was not before October 2009 that she got some space in another primary school where the 'Readyness' programme under the DIET is functioning since April 2009. A lady teacher called Shiksha Mitra was appointed in April 2009 for undertaking this job.

Infrastructure in the Village: The approach road to the village is pucca. The village has electricity, post office as well as a ration shop. One a middle level school and one primary school are located in the heart of the village. The nearest bus stop is at a distance of 0 Km. Piped water is the main source of drinking water. However, some of the households also have hand pump connection.

11.12.3 COVERAGE

Functioning of AWC: There are 6 AWCs functioning in the village. The 'Khanpur Bharti' AWC has been functioning since 1989. The AWW (Ms Chandrakala Singh) and AWH (Ms Renu Devi) have been working since then. This AWC was randomly selected by considering the distance from the CDPO office, which is the main criterion. After selection of this AWC, our field staff went to Khanpur Bharti AWC and met the AWW. Our field staff asked for registers, to list the name of the beneficiaries for sample selection. The AWW gave the registers contains fake names. After selection of beneficiaries, our staff went to the selected beneficiary's house, where they found that their name did not match. When our field staff asked the AWW why these children are not in the village, she said that some of the children's names appeared in the registers by their nicknames (according to our field staff, she was telling lie). In next visit to the AWC, the AWW said that her all registers got burnt in April 2009. Since then she has not maintained aproper register. Our field staff reported that they find it very difficult to follow the method we asked them for selection of beneficiaries for further interview.

Our instruments of observation was; (1) rechecking the registers, (2) in-depth interview with AWW and AWH, (3) personal discussion with women in the village (4) group discussion and (5) personal observation

No survey was done in this AWC area. The AWW has not maintained any register correctly. According to AWW, all the AWC's registers were got burnt in April 2009. However, the last survey was done in October 2009, when our field work started. As on October 10, 2009 there are 1,200 people in 115 households within this AWC's jurisdiction. There are 128 children in the 7

months-6 years age group, of whom 48 belong to the 7 months-3 years and 80 children belong to 3-6 years groups. Only 19 children belong to the 7-12 months group in the AWC areas.

According to the AWW, she was in charge of another AWC in the village, which is located at the extreme end of the village. She was in charge of that AWC since September 1, 2008 till September 30, 2009. She has been rendering her services with great measurable conditions. She said that no training was given for maintaining of registers. Her supervisor never checks the registers. Even 20 years later, the AWC does not have its own building. It has been shifting from one place to another.

11.12.4 Food Supply Mechanism

There were no utensils for cooking and nor was fuel provided. The AWW gets Rs 2,750 for hard food, and micro nutrients separately for below one year children and pregnant women per month. She gets Rs 2,750 per month in two installments. The first installment is Rs 1,500 of which Rs 1,000 has to be given to the supervisor and CDPO immediately. She gets to keep the second installment of Rs 1,250. Apart from that, for micro nutrients she has got to pay Rs 450 per month to the supervisor and CDPO then and there. These rates are fixed for all other AWC functioning in village. She also asked us to visit and verify with other AWC in confidence. There are 6 AWC functioning in the village in a similar condition. The AWW was overwhelmed with grief.

Malnourishment in Anganwadi Centres: On one hand the children studying in the primary schools have colorful books while on the other hand we see that children studying in AWC don't even have books to read or slates to write on. In around 2,200 centres of the capital only 2-3 dozen weighing machines are available. Utensils are not available for cooking and the food is being cooked in utensils bought on rent. Children are not even provided with nutritious food. This year the centre has increased the rate of providing nutritional food from Rs. 2 to Rs 4. But such a small amount is not sufficient for providing food to the children. The meal provided with this amount is not even sufficient for meeting children's hunger and hence the question of fulfilling the requirements of calcium and proteins does not arise. At some places classes are held under the tree. Now the question that arises is that how to improve the conditions of children in such an atmosphere?
*(**Source:** Dainik Jagaran, Lucknow, October 27, 2009)*

11.12.5 Key Areas of Improvement

- This is a case where corruption on the part of CDPO and the Supervisor has caused a shortage of food and micronutrients for children. Checks need to be put into place at the CDPO and the Supervisor level to ensure that cash reaches the AWW and is put to good use.

How to stop thieves of toddlers' rations? This is a shameful story revealing the corruption of the officials in Patna. Now the question that needs to be addressed is how to stop all this? Although the investigation is going on, but the theft of ration is still taking place.

The chief of social welfare department, Vijay Kumar Verma, says that many steps have been taken against this, and the situation is improving. 14 CDPO's and 125 workers have been fired. They are trying to find out some new solutions to this problem.

In reality these centres are in dismal condition. For example, investigation going on in the centre at Siwan has made the social welfare department alert, but this has not made any impact on ration looters. After the investigation at the Siwan centre, Chief Minister Nitish Kumar has ordered for investigation at other centres also. This shows the how daring the ration looters is! In some centres at Vaishali, workers give an amount of Rs (1,500-2,000) as "vasuli" to their seniors**.** The written complaint of vasuli has been made.

In the state there are 80,000 AWC. Every month each centre gets Rs 10,975. The government has increased the amount allotted to these centres. This was done for the improvement of these centres but it has just given more incentive to the ration looters**.** Vigilance bureau has 20 cases, related to bribery in hiring of AWH.

*(**Source:** Dainik Jagaran, Bihar, February 1, 20)*

- The location of the AWC isn't permanent and there have been problems with rent payment. A permanent facility or at least a facility where rent is duly paid is extremely important to a well functioning AWC. It is located in a primary school where the headmaster isn't happy about the AWC being run in the school premises. The staff at school needs to be trained to help the AWC function.

11.13 RASOOLPUR KANDHAWA AWC, GHAZIPUR

11.13.1 ABSTRACT

The AWC of Rosoolpur Kandhwa started in 1996 when Mr. Radheshyam Yadav was Sarpanch of the village. His daughter-in-law, a graduate lady appointed as AWW in the centre. Most of the activity of the AWC is done by the Sarpanch. The AWC was functioning in the Sarpanch's house but was taking Rs 300 per month on account of rent. There was no proper room was taken for rent. No pre-school activities, no immunisation, no food has been given to beneficiaries. The AWW has not maintaining any registers. Some of the very close neighbors of the Sarpanch sent their children when they saw other children coming to the centre. Nobody dares to ask why the centre does not open. The supervisor comes sometimes to the Sarpanch's house. The Sarpanch said that they received medicine kits, which was distributed. He also said that they receive Rs 2,500 per month on account of food and Rs 300 for rent on regular basis. Even though Mr Radheshyam Yadav is not currently the Sarpanch, he is a very wealthy and powerful person of the village. Hence, the AWC is functional on paper only.

11.13.2 PROFILE OF AWC AND VILLAGE

According to the 2001 census, the village has a population of about 4,000 from 750 households as reported by the Sarpanch of the village. About 85 per cent are Hindus; other 15 per cent are Muslims. About 75 per cent are from the backward castes and 20 per cent are recognised as scheduled caste. According to the Sarpanch, about 30-40 per cent is landless. The level of education seems to be very low. Only about 40-50 per cent among men is literates. Only about 10 to 20 per cent among women are literates among women in the village. However, about 70 per cent among children age 6-14 years are in school in the village.

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The village is located in a very remote area, even though the approach road to the village is pucca. The distance to the nearest bus stop is 6 Km. The government hospital/clinic/dispensary private nursing home is available at a distance of 8 Km from the village. Primary health centre is available at a distance of 10 Km, whereas sub-centre and maternity & child health/welfare centre is available at a distance of 5 Km from the village. The private practitioner is also available in the village.

The village has primary school post office as well as a ration shop within the village. The hand pump is the major source of drinking water. There is no electricity in the village.

The 'Rasoolpur Kandhawa' AWC has been functioning in the village since 1996. The AWC has been functioning in a rented house paying Rs 300 per month. The AWW, Ms Ashalata Yadav, and AWH, Ms Monni Devi, have been working in this AWC since 1996.

11.13.3 COVERAGE

This AWC was randomly selected by considering distance from CDPO office is the main criteria. After selection of this AWC, our field staff went there for listing the beneficiaries for selection. Our field staff found that there are 141 children registered with AWC aged 3-6 years. During the verification exercise they found only 8 children as beneficiaries. Many of children names are repeated. Many of them are not living in the village.

Due to such information from our field staff, we decided to revisit this AWC.

Our instruments of observation was; (1) rechecking the registers, (2) in-depth interview with AWW and AWH, (3) personal discussion with women in the village (4) group discussion and (5) personal observation

We went to the village for further verification on October 7, 2009, without prior intimation to the AWC. We found that the AWC was closed. When we asked for AWW, first indication was that she is inside her house. But within a few second someone told us that 'she has gone to Ghazipur'. We met AWH and asked for registers and asked her why the AWC was not opened today. In the mean time AWW's father-in law Mr. Radheshyam Yadav, who is actual worker of AWC came to attend us. He also refused to show us any registers. He told us that she (AWW), his daughter - in law Ms. Asha Lata Yadav knows about registers. The AWC has been functioning in a rented house. He also showed us the rented house where the children come and sit. There is no proper room on rent as reported in the questionnaire. Only a veranda of his neighbor's house is being used for seating children. We did not see any play kits, except one chart of Alphabets of ABCD. However, the father in law said that they get medicine kit once a year. They never organised any health camp or immunisation camp in the village.

Health is improving in a rented building: Out of 174 AWC only 30 are running in their own building, rest is either running in school buildings, panchayat bhawan or at AWWs home. Due to deficiency of funds food was not cooked in the months of July to September. For many months the kitchen was running from the funds of villagers, they have not been compensated for this.

This is the reality of every centre of Gosaiganj. At the Gomikheda centre, villagers have stopped coming. Mohammad Pur Ggadi centre is also running in panchayat bhavan. The building of the centre is under construction. Sources reveal that due to deficiency of funds kitchens have not been yet started.
(**Source:** Dainik Jagaran, Lucknow, 27 October, 2009)

It is found that the AWC was not opened the day we visited, because of a mild rain in the morning. The AWC started in 1996 when the AWW's father - in law was sarpanch of the village. His daughter-in law, a graduate lady appointed as AWW in the AWC. For the last 12 years the AWC has been functioning in the village on paper only.

No community participation, proper environment and outdoor playground were found in the AWC areas. The front area of AWC is occupied by lot of buffalos. The small children were

roaming around the buffalos. We asked a few women, who were standing with their child, regarding the functioning of AWC. Some of them did not respond. One of the women said that she sent her child if some other child is seen coming to the AWC.

Nobody dares to raise their voice, because Mr. Radheshyam Yadav the father-in law of AWW was sarpanch. He is still a powerful and wealthy person in the village. According to Mr. Radhashyam Yadav, the supervisor comes sometime and goes back. CDPO or other senior officials never visit the AWC at all.

11.13.4 KEY AREAS OF IMPROVEMENT

- The AWC exists only on paper. No controls maintained. The supervisor knows about this but no corrective action has been taken. CDPO or other senior officials have never visited.
- This AWC is dysfunctional due to corruption of the AWW and the callousness of the supervisor and other senior officials. The AWW takes money on account of rent, food etc but has never used it for the ICDS scheme.
- Money for rent is taken even though the AWC is the Sarpanch's house and no room is designated for it.
- The AWW is the daughter of the Sarpanch and no villager dares complain about the functioning of the AWC.
- Controls need to be brought into place to curb this kind of rampant corruption. Senior officials need to step in with regular checks.

Where tribal kill hunger with flowers: Most children belonging to the 400 tribal families in the foothills of the Vindhyas in Uttar Pradesh's Banda district have a prominent rib cage or a heavily protruding belly — both signs of severe malnutrition.

Children don't go to the nearby school — because it never opens. This means that the mid-day meal is out of the question. The tribal settlements have an AWC that's always shut, and the nearest community health centre is 18 Km away.

The tribals bring the flowers home, dry them in the sun and store them. They then eat them whole or mixed with rice or wheat gruel — if such a luxury is available. Dr SK Ranjan, a homeopath from Bundelkhand Gana Parishad, said most tribal children below 10 suffer from scurvy and anemia. "In extreme cases, when mothers don't have something substantial to give their children or when children refuse to eat the same food, the mothers rub tobacco in the children's gums to make them sleep," Ranjan said.

Government schemes such as the mid-day meals, Sarv Shiksha Abhiyan, Integrated Child Development Scheme, old-age pension and Janani Suraksha Yojna (for pregnant women) are unheard of in this part of Uttar Pradesh.

*(**Source:** Hindustan Times, April 18, 2010)*

11.14 AROOKUTTY' MATHANAM AWC, KERALA

11.14.1 ABSTRACT

The Arookutty village, Mathanam AWC No. 103 is another dyfunctioning AWC. In spite of having about 90 per cent literacy rate in the village, the AWC has not functioned due to lack of space and infrastructure. This AWC was setup in 2001, in a rented house to an extreme side of the village. The AWC has been shifted to the middle of the village in 2007. The village committee has been selected a new AWW as the earlier one was not distributing food at all, according to the information provided by the some influential person in the village. The current AWW is not trained at all. Moreover, the AWC does not have a proper room. The AWC food items were lying in the rented room. No space for cooking as well as no space for sitting the children.

11.14.2 PROFILE OF AWC AND VILLAGE

According to 2001 census, the village has about 1600 population. There are about 386 households as reported by the Sarpanch of the village, of which 180 HHs are Muslim and 6 HHs are Christians and 200 households are Hindu. About 50 per cent are recognised as scheduled caste and scheduled tribes. According to the Panchayat member, about 5 per cent are landless, about 90 per cent both among men and women are literates in the village; 100 per cent enrolment among the children age 6-14 years in the village.

The approach road to the village is pucca. The village has electricity and some of the households also have its connection. The village has a sub-centre at a distance of 2 Km, whereas PHC is located at a distance of about 5 Km. The private health practitioner, post office, government clinic/dispensary and hospital and ration shop all are located within half Km. distance from the heart of the village. Many other shops are also located at the approach road to the village. The village has primary and middle schools, located in the centre of the village. There is a limited pipe drinking water in the village. Most of the people carry water from well at a distance of 30 to 75 meters.

The surrounding of the village is dirty with foul smell of dry and rotten fish. More over there are few ponds with full of dirty water covering with lot of water plant.

The 'Atrookuty' Mathanam AWC no. 103 has been nurturing in the village since 2001, in a rented house. The rent is Rs. 200 per month. This AWC has been shifted to middle of the village in 2007. The AWW Ms. Sheela Uthamen has been appointed only 7 months back. However, the AWH Ms. Usha B has been working last two years.

According to a knowledgeable person of the village (in a personal discussion with the study team) said that earlier AWW was corrupted that is why the AWC has been shifted to the middle of the village. The current AWW Ms. Sheela is new).

The AWC has been functioning in a smaller than a bath room size rented house. It is surprised to see the size of the room. Moreover, some portion of this room occupied by an Almeria and a table belong to SSA. SSA is also taking next squire size slightly bigger bath room or a store room running on rent. The size of the Varanda of SSA which has been sharing with AWC is about one meter of breadth and 5 meter of length. However, SSA has a few small colorful plastic chairs and a wooden made toy (horse). The AWC has only a small bench for the kids.

11.14.3 COVERAGE

This AWC was randomly selected by considering distance from CDPO office was the main criteria. After selection of this AWC, list of child beneficiaries, age 7th month to 6 years and list of beneficiaries of adolescent girls as well as Pregnant women and Lactating mother need to be collected from the AWC's registers, for sample selection for further interview.

The field team visited this AWC on 7th October 2009. They found that the AWC was closed. AWH said the registers are kept in AWW house. Moreover, they found that the AWC does not have any infrastructure, play kits or weighing machine. According to our field staff, this AWW is also non-comparative while talking over the phone.

Due to such information received from our field staff, we revisited this AWC on 24th October at 11.30 AM.

The Arookutty village, Mathanam AWC no. 103 was closed when we reached the village around 11.30 AM on 24th October 2009. AWH attended to us and said that there is a religious ceremony in the village. The AWW is attending that ceremony. The AWH as usual said that the registers are with AWW's house. When we phone AWW, she said that she will be coming after the function in the village temple. We asked AWW over the phone to come at around 3.30 PM with her all registers. We will come again at around 3.30 P.M to AWC. We also asked AWH to inform AWW to come with all the registers to AWC.

We reached the AWC at 3.45 PM. We found that the AWC was closed and AWW and AWH did not come to AWC. Then we phoned CDPO, he said that since there was a religious ceremony in the village, I can't ask AWW to come to AWC. He asked supervisor to visits the AWC, when we left the village in the morning. Then I told CDPO, "that we came to the village at around 11.30 AM and we saw there was a function in the village temple. That is why we came in the evening and we asked AWW and AWH to come to the AWC at 3.30 PM. In spite of that also the AWW did not come to the AWC. That is why we are going the AWW house to meet her."

Within a few second CDPO phoned us and told that he is also coming to the AWC and within half an hour CDPO reached the AWC. He came with his office clerk, because he did not know the location of the AWC. The supervisor had come to the AWC for the first time in the morning when we left the village. We have seen her signature only once for 24.10.09.

This AWC does not have place for children to sit, to cook, to eat and to play. Moreover the AWC was closed for last two month. About two months back she distributed some food to beneficiary, according to some mothers of child beneficiaries (asked in a separate meeting in the village). About two quintals of hard food was lying in the room. The food was stalling and lot of cockroaches and other insects were roaming over the hard food. We called the CDPO to show him. Then he said that the supervisor has not been supervising properly. We also told him about the size of the room. He said that there is some problem of getting rooms in the village. He said that sometimes in June 2009, he wrote to the village panchayat for providing two rooms for AWC, but no response came.

Anganwadi centre is operating in its own way: On the day of visit the centre was closed. Arun Kumar Paswan informed that the centre has not opened for the last 15-20 days. The workers also do not come for work. Raman Kumar informed that porridge has also not been cooked from many months. They have not even distributed the material which has come for the distribution for flood relief. Some people present there have reported that the centre has not been opening regularly for the last six months. The condition of the centre no 15 and 36 is also similar. We can say that the AWC is running on papers only. If some centres are running, then the children are not present and if children are present then nutritious food is not available. Looking at this only we can imagine the condition of these centres.
*(**Source:** Dainik Jagaran ,Bihar, 13 September 2009)*

11.14.4 KEY AREAS OF IMPROVEMENT

- Lack of infrastructure plays a big part in the failure of this AWC. The room is extremely small and the AWC isn't open most of the time. No pre-school education kits have been provided.
- Negligence of duty of part of the AWW and the supervisor has further contributed to this failure.
- The CDPO office has to take responsibility of this situation and impress upon the AWW and the supervisor the importance of regularly opening the AWC and has to help with upgrading the infrastructure.
- Though the village community is literate (90%), no one seems to have cared about the AWC or held the AWW accountable for its condition. Nothing much can be done about this situation apart from holding information sessions about the AWC. The AWW should also make home visits in the village to spread awareness about the AWC.
- We see here that inadequate infrastructure has curbed the village community's enthusiasm about the AWC's functioning. We've seen in previous case studies that the only way a lack of proper infrastructure can be overcome is due to hard work and dedication from the community as well as from the AWW. Unfortunately, in this case, both seem to be missing.

11.15 AWC, JORHAT DISTRICT, ASSAM

We describe here a non-functioning AWC due to mainly lack of basic infrastructure and lack of community participation.

11.15.1 ABSTRACT

Remote and inconvenient location, lack of supervision and community participation and leakage in SN are the major factors that can be highlighted for bad functioning/ non- functioning of this AWC. This AWC is located about 15 Km from the block office and about 30 Km away from the district head quarter. The Village Management Committee (VMC) was formed to monitor the functioning of AWC in the village. The VMC consists of 14 members; AWW is the secretary of the VMC. The AWC gets cheques in the name of VMC. The AWW has to take cash from the Bank and manage the account. The VMC is also held partly responsible for non-distributing of food. Time lag for receiving cheque/cash for buying food items affects regular distribution of food.

Home visit by AWW is an important factor for creating awareness about AWC. The AWW has not visited any household in the last 7 years as the majority of the villagers are unawre of the services under AWC. The AWW takes larger share as she has to pay Rs 100 to CDPO in the time of taking the cheque as well as she has to update all paper work for next installment.

No pre-school activities in the AWC. On the day of our third visit only 4 children attended and the AWW was not present – only the AWH was in the AWC. The AWW has been getting grant for SN for 100 beneficiaries.

11.15.2 Profile of AWC and Village

The village has a population of about 1,200. There are about 200 households and all are Hindus. Almost all are cultivators, irrespective of the size of land they owned. Only about 5 per cent are agricultural landless labourers.

Above 70 per cent are literate among males and 50 per cent of the females are literates. Almost all children aged 6-14 years are enrolled in school.

The approach road to the village is *katcha* and not all weather. This approach road is 5 Km away from the national highway. During the rainy season the road becomes muddy and not motorable. On the right side of the road there is a river (Jhanji). A portion of the road is very close to the river and it becomes dangerous during rainy seasons because of floods. Often taxis refuse to go to the village.

The village is electrified and almost all households have a connection. There is a primary school at a central place where the AWC is located. The AWC is in the same campus as the primary school, village temple and a youth club. The school has a small play ground without boundary wall. The AWC is also sharing the school play ground for outdoor activities.

This AWC has been functioning since 2001. The AWC has own pucca building with one big room and a small veranda. (The size of the big room is about 6 by 5 sq. metres). The size of the store room is about 2 x 5 metre. The toilet is not attached but close by. The AWC has a proper kitchen but remains locked all the time. The tube well is the major source of water but the AWC's own tube well is lying in the store room. AWC can take water either from the school's or temple's tube wells.

Both AWW and AWH are in position. The level of education of the AWW is up to the 10th standard and the AWH is just up to middle school.

11.15.3 Coverage

According to the survey register of October 2008, 96 children aged 6 months-6 years are eligible beneficiaries, of which 40 are in the 3-6 years bracket. As per the survey, 59 adolescent girls are also eligible of which only 15 are registered in the AWC. Some pregnant women registered but did not get any benefits from AWC as reported by a pregnant woman who gave birth to a male child on previous day of our visit. In all, 11 registers are maintained by the AWW. All are updated. She maintained all the registers on her own.

11.15.4 Food Supply Mechanism

Spot-feeding food such as "kidchiri", "payasam" and "suji" has been recommended by the CDPO as reported by AWW, which is not given at all. However, the AWW said that she gives

biscuits and others eatable such as "katcha channa", bananas, etc. She receives cheques from the CDPO in the name of the VMC, which has an account in the bank. The committee consists of 14 members with the AWW as the secretary. The village school head master or ward member may be a president of the committee. The committee purchases the food items from a nearest store against bills from shops which need to be produced for the next installment. The AWW said that they purchase the food item for 15 days at a time. However, there is a long process of issuing the cheque for which the AWW reported paying of Rs 100 to the CDPO in the time of taking the cheque.

Toffees in the name of nutritious food:

In Mohanlalganj, the AWC of Hulaskheda is located at the Panchayat Bhavan. Suresh, a villager informed that only 8-10 children come to the centre and villagers are not informed about the opening and closing timings.

The AWH, Shiv Dulari, herself reported that the utensils are lying at the AWWs house and hence the food cannot be cooked regularly

The AWC of Atrauli is held in a classroom of a school and a villager reported that when children come to study, they usually find it closed.

Phullar informed that neither proper health checkup of children are done nor they are provided with proper food. In the Mohanlalganj, out of 217 AWC only 33 are running in their proper buildings, while the rest are running at homes of AWW or AWH.

In Nigoha, the hot food scheme has stopped functioning due to lack of funds. The condition of Rampura AWC is also the same. The centre does not open on regular basis. The AWH, Sarvesh Kumari, distributes toffees instead of proper nutritional food to the limited number of children who come to the centre. Villagers are not even aware of the facilities provided to them by the AWC. Community participation is also lacking as parents do not sent their children to the centres.

*(**Source:** Dainik Jagaran, Lucknow, 1 November 2009)*

Scam in ICDS Project Unearthed

Dibrugarh, Assam: Two organisations have brought charges of rampant corruption in the Integrated Child Development Scheme (ICDS) amounting to more than Rs 37 lakh in Panitola ICDS project of the district. While the officer-in-charge of the ICDS project in Panitola development block has drawn the money for 2007-2008 through two cheques (Nos. 107895 and 017896) from UCO Bank, Dibrugarh after collecting the cheque from the district social welfare department, All India Youth Federation and All Assam Mottock Yuba Chatra Sanmilan unearthed through Right to Information (RTI) Act that the money has not been utilised till date. Suspecting misuse of the allotted money, the two organisations have demanded that the district administration institute an enquiry into the anomaly immediately. They have also demanded exemplary punishment on the erring officials.

*(**Source:** The Assam Tribune, 12 May 2008)*

11.15.5 Focus Group Discussion

Some of the villagers reported about non-functioning of this AWC in Jorhat district. Jorhat district is not a sample district for ICDS evaluation. However, the regional programme director, Mr Anil Phukan, allowed us to visit some of the AWC in the Jorhat district, Block: Kolia Pani, Bonai No-pamua AWC.

11.15.6 Key Positive Points

- There are a lot of positive things about this AWC that could have made it function very well. It is located in a primary school providing easy access to children. There is a village management committee comprising of 14 members with the AWW heading it that is also involved in the AWC's management.

11.15.7 Key Areas of Improvement

- However, since most of the VMC members are related to each other, there is some corruption and a callous attitude prevails. It is important for the supervisor or the CDPO to ensure that any committee that has the responsibility of running the AWC isn't filled with relatives.
- Despite having a VMC of 14 to look into the functioning of the AWC, it hasn't functioned properly. This could point to a need for external supervision in favor of internal supervision of the AWC. External committees should also look into 3-4 villages at a time and should have no links to the villagers.

11.16 DESHBANDHU CLUB AWC, WEST BENGAL

11.16.1 Abstract

It was decided that two case studies from West Bengal will be done; one from urban project and the other one from rural project from one of the three selected districts in the state. Only one urban project got selected in West Bengal and that was in North 24 Parganas. The name of the project is 'Baranagar' urban ICDS project.

The attendance of the AWC in this district was observed to be very low. One reason behind this is the irregularity of food supply in this area. Food is the main attraction for villagers for sending their children to the AWC. On the health front, there has been no immunisation camp for the last two years, camp near the centre and there has been a serious dearth of healthcare facilities. Community participation is also very low and villagers are unaware of their entitlements.

11.16.2 Profile of AWC and Village

According to the 2001 census this area has about 1,333 Hindus, of whom 688 are male and 645 female. About 40 per cent of the people are Bengalis and the rest non-Bengalis, mostly mostly Biharis. Most of the non-Bengali families are staying in rented houses. They are mostly non-farm labourers. The literacy rate of women in this area is very poor.

There are private clinics at Baranagar State General Hospital located at a distance of about 6 Km. The area has both primary and high school, both Bengali and Hindi medium. The market and ration shop are very close by. Piped water is the main source of drinking water.

The programme is conducted in a club called 'Deshbandhu'. The centre has both toilet and electric facility. There is also a separate space for cooking and storing the food material. The AWW gives a rent of Rs 375 per month. The AWW, Mrs Anjana Dutta, has been working since 1988 while the AWH, Mrs Tumpa Manna Maity, is working here since July 2008. The centre is providing all six types of services including the ones like SNP, PSE and NHE as reported by AWW. The timing of this AWC is 10:30 am to 2:30 pm.

11.16.3 COVERAGE

Out of 90 children in the age group 7 months- 6 years, only 40 have been registered. At the time of our visit only 4 children were present at the AWC. Average attendance is 7-10. Parents don't take any interest to send their child if food is not supplied. Due to irregular food supply there has been a sharp drop in an attendance. From September 1, 2009 the food supply stopped. The AWW said ***"Khaber na thakle bachhara aaste chai na aar maara pathate-o chai na***". (If food is not provided then children don't want to come to the AWC and mothers also not take any interest to send their children). Most of the mothers said that the quality of food supplied at the centre is very low. Vegetables are not given in the "khichdi"; only rice mixed with pulses. They also don't know about their entitlement to food. Most of the fathers/husband of the beneficiaries are either non-farm wage labourers or are engaged in petty business.

11.16.4 CHILDREN'S GROWTH MONITORING AND HEALTH FACILITIES

Previously there was a regular camp in a club called 'Mitra Alilah Sangha' where the children and pregnant woman received immunisation. But for the past 2 years there has been no immunisation camp near the centre. Now they have to go to the Baranagar State General Hospital for immunisation which is 3-4 Km away from this AWC. Some mothers don't go there as they have to wait for a long time. One club use to organise immunisation camps in this area but not everyone is able to afford the payment charged for the vaccination. There is only one weighing scale to take the weight of the children. ANM has not made any visit since the past one year as there is only one ANM in the whole project.

The mothers are not aware of these meetings. Most of them reported that they have not even heard of such meetings as they do not have time to attend in spite of the AWW's instruction. The AWW also reported that most of the mothers do not attend as they work away from the past and are not interested. The mothers in turn say that the AWW's visits to their homes are infrequent. The people of the community of this area are not very interested about the centre. Only some women who work as maid servants are interested to send their children to the centre even if food is not available.

11.16.5 PRE-SCHOOL EDUCATION

Pre-school education (PSE) exists only on paper. Not a single mother can be found who is satisfied. Some are even not aware about PSE. As most of the children belong to Hindi-speaking families, it is difficult to teach them in their own language as there is no Hindi chart or poster provided to the AWC. As a result, the non-Bengali children loose interest in PSE. The AWW admitted that she does not know Hindi. Non-Bengali mothers said ***"school me didi Bangla shekati hai, lekin hamare bachho ke lia Hindi shikha jaruri hai"*** (The medium of teaching in the centre is Bengali and for our children it is necessary to learn Hindi which they can learn in Hindi medium schools only).

Kolkata Pratichi Trust report highlights the ICDS flaws: A report released by Pratichi Trust (Nobel laureate Amartya Sen is closely associated it) has pointed out major flaws in the state government's Integrated Child Development Services (ICDS) meant for nutrition and education to children below six years of age. The report said there was a lack of popular participation that impeded its implementation. "Only 3 per cent of the mothers were aware of any such specific committee or centres. There are neither mothers' committees nor any public committees to supervise these centres. Thus public participation in the ICDS is almost non-existent," the report said.

It added that though parents showed keenness to take part in the delivery of services, there has been no systematic attempt to involve them.

The report has also highlighted irregularity and inadequacy of supply to the ICDS centres. The data on supply of rice and other ingredients collected from 10 of the 14 centres in the sample showed all of them but one faced inadequate supply of rice. "The deficits ranged from 7 to 75 per cent," the report said. In some centres, it added, the supply is so low that the supplementary nutrition programme has virtually stopped.

The study also said the role of Essential Commodities Supply Corporation (ECSC), a government undertaking looking after the supply, was not satisfactory.

Instances of corruption on the supply side have also been highlighted in the report, which cites cases where workers raised their voices and the supply to the centre has been cut off for several months.

The reports also highlighted the excessive workload on AWWs. "In addition to regular activities concerning SNP and pre-primary schooling, they are also needed to maintain a number of registers, carry out home visits, conduct meetings, helping in health-related Programmes and so on," the report said. The Anganwadi workers are provided a paltry sum of Rs 1,400 as remuneration. Recently, the state government made slight improvement in their pay structure.

The report also touched upon the lack of training of workers. "Often, workers and helpers have complained they found themselves helpless on many occasions as they did not have sufficient training to handle situations which involved health, nutrition and education, administrative affairs like keeping accounts and public communication," it said.

The researchers at the Pratichi Trust pointed out the scope of improvement of the ICDS services by improving coordination between departments of health and social welfare, improving supervision and even distribution of staff for the betterment of the three-decade old Programme.

11.16.6 KEY AREAS OF IMPROVEMENT

- Community participation is very low. Mothers only send their kids if food distribution is happening. Food distribution should be highlighted to make children attend and then proper infrastructure should be provided for other services as well. All of this is non-existent in this AWC.
- No coordination between the ANM, supervisor, AWW. This should be ensured with regular meetings between them. A VMC could be useful in such a situation.
- The quality of food is extremely low; vaccination and health care facilities are non-existent due to high costs of vaccines, etc. Lack of funds seems to be a major problem in this AWC.
- A language barrier exists in pre-school education. The AWW should be chosen and trained to communicate and teach in the local language.

11.17 CONCLUSION

The key ingredients for the success of certain AWC emerged from the case studies have been summarised below.

- The location of AWC is a major factor behind the good functioning of the AWC. The AWC should be centrally located and easily accessible.
- Basic amenities must be made available at the centres.
- Food is a major attraction of the people in the community. Hence the food supply mechanism should be smooth in all the AWC s. Further, for the supply mechanism to be smooth, allocation of funds plays a very important role. Funds for food items should be regularly revised, keeping in mind the food inflation.
- Proper coordination should be maintained between the ANM, supervisor, AWW, CDPO and AWC. This should be ensured with regular meetings between them or a village management committee.
- A self-motivated worker can prove to be an asset to the AWC. In addition, the incentive of promotion of the AWW to the supervisors rank plays a very important role in their proper functioning.
- Having a dispensary with proper and available infrastructure at a distance of 50-100 metres from the AWC (in the vicinity of the AWC) to regular health and growth monitoring found one of the main reasons of getting success of the AWC.
- The AWWs should get refresher training on a regular basis to handle registers independently rather than depending on their Supervisors.
- People are generally not aware of their entitlements. So picking people like mothers from the community itself increases the community's awareness to a large extent and hence increases the efficiency of the scheme. Regular visits by the AWWs generate awareness among people and have led to the success of Programmes in the good performing AWC. This awareness also generates community participation which is a vital ingredient for the success of the AWC. Regular feedbacks should be taken from the villagers as well.
- A positive correlation has been observed between literacy rates and the success of AWC. This shows that emphasis on pre and high level education is very important. For this, the various education schemes of the government should be implemented simultaneously and effectively.
- The budget for services in AWC in general is seen to be low, thus it is a good idea to combine such services with any other programmes running in the area. (e. g. Lisubari Village AWC, Assam)

These features have been seen to have a sizable impact on the functioning of the AWC. The AWC which are not performing well are seen to be lagging behind in these spheres. Thus measures should be taken to incorporate these in order to bring them on a high performing trajectory.

Appendix Text – E.1: Typologies of AWC in India

Based on the feedback from field teams and information received through case studies, it is possible to classify the AWC into an eight functional categories.

TYPE I: GENERAL

The large majority of the AWC are making efforts to deliver some ICDS services, particularly SNP & PSE components. The modus operandi involves receiving food materials/money for all those registered, but serve only to those who are present in AWC. Roughly less than one-fifth of those registered actually attend AWC. The beneficiaries who attend AWC for food & PSE belong to poor families.

In this model of AWC, there is some leakage in the supply chain, and records/accounts are fudged to compensate for various expenses (fuel, other expendables) for which provisions are either inadequate or not made at all.

TYPE II: AWC IN AREAS WITH POOR HEALTH SERVICES

In some rural areas, access to primary health care system is difficult. The target groups avail immunisation and some health services through AWC. Even though SNP is not the primary attraction in these areas, some of the beneficiaries were found to receive SN as well. In many areas where the primary health care services are inadequate, this model is working reasonably well. However, leakages in supply chain and/or fudging of records are prevalent in this model as well.

TYPE III: TRIBAL AREAS

The SNP is the primary attraction in the tribal areas because of widespread poverty and shortage of food. AWC function in these areas even without adequate infrastructure. Alongside SNP, these AWC provide some other services, like PSE and immunisation. However, here too, deviation between recorded information and actual was noted.

TYPE IV: URBAN AREAS

In urban periphery and slum areas of large cities, AWC are functioning because of demand for their services by daily wage earning women and maid servants. They find AWC useful as their children get food/PSE and are in safe custody of AWW, while they do their job. These AWC are also found to be supervised / monitored well. However, discrepancy between recorded information and what is observed is common in these AWC as well.

TYPE V: AREAS WITH LOW DEMAND FOR ICDS SERVICES

In some states, like Kerala, H.P. and Punjab, the demand for services being provided through AWC is very low, partly because of less poverty and partly due to easy access to alternate service providers. This trend is noted in many better off districts/blocks/villages as well. However, AWC were being utilised by a small number of beneficiaries. These have adequate infrastructure, but their capacities are under-utilised.

TYPE VI: AWC WITH NGO PARTICIPATION

In some states, AWC run better with active NGO participation. For instance, in some districts of Uttar Pradesh where an international NGO actively participated in the day-to-day activities of AWC — from creating awareness among target groups to delivery of nutrition/health services — the performance is very good. This happens in a state where the general performance of ICDS is very poor.

TYPE VII: NON-FUNCTIONAL AWC

In some areas, corruption is rampant. Though their records show that AWC are functioning and delivering the services, on inquiry it is found that there is gross mismatch between recorded data and reality. Case studies and FGDs conducted by the study team reveal that in most of the AWC, occasionally (once or less than once a month) some beneficiaries received cooked meal and/or THR in AWW's house or in school or in Pradhan's house. The beneficiaries think that the feast is being offered by the Pradhan or the AWW and not as one being offered under ICDS. The beneficiaries are totally unaware about this Programme. These AWC do not render other services. The money/materials released by the government for AWC are shared by ICDS functionaries and in many cases by the Panchayat Pradhan as well. This model is prevalent in some parts of few states.

TYPE – VIII: SUCCESSFUL AWC

All the 7 models of AWC have weaknesses of different types and have not fully contributed to the realisation of ICDS goals. Since they constitute the majority, it may be concluded that the quality of public spending in ICDS has been poor. However, this general weakness in ICDS notwithstanding, the field survey has found a number of well functioning AWC in many states, and more specifically in Tamil Nadu and Karnataka. These AWC are better equipped in terms of infrastructure, quality of human resources and supply of various equipments and kits. The quality of service delivery assessed in terms of regularity of services, adequacy of quantity and quality of SN and other services and satisfaction level of the beneficiaries distinguishes them from the rest. There is a good demand for their services as the average attendance was much higher. There is less pilferage and leakage in these AWC. A diagnostic analysis of these better functioning AWC will be undertaken to bring out the factors contributing to their success. This will be presented in the main report.

Appendix Text 2.1: A Brief Review

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
1.	NCAER study	2001	India		NCAER	**Infrastructure** • 40 per cent of AWC with pucca structures • 50 per cent AWC had adequate cooking space, indoor and outdoor space • Toilet facilities at AWC were dismal (nearly 17%) • Most AWC were located close to beneficiary households • 75 per cent AWC reported having weighing scales **Educational qualifications of AWWs** • 50 per cent AWWs were matriculate and above • 30 per cent were educated up to middle school • 15 per cent educated up to primary level • 34.6 per cent AWHs illiterate **Training** • In service training was quite low(less than 30 per cent) • 84 per cent of AWWs received some kind of training 45.6 per cent of the AWH s received any training **Coverage of SN** • 65 per cent of the eligible children were registered in AWC and of the registered 64 per cent availed of SNP • 67.3 per cent of AWC providing food supplements for more than 21 days during the last month of survey **Acceptability of SN** • About 63 per cent of AWWs reported poor quality of nutrition effecting the functioning of AWC • 42 per cent of the households perceived that the nutrition supplied by the AWC was very good • In states like Haryana, Gujarat, Maharashtra, Bihar, Andhra Pradesh did households perceive the quality of the food to be poor **Interruption in distribution of SN** • 67 per cent of anganwari perceived that there was irregular supply of nutrition in their respective AWC

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						PSE • 60 per cent of the eligible children were enrolled for PSE. Inadequate in-service training of AWWs in some of the states and inadequate availability of PSE materials were some reasons for low enrolment. • 68.5 per cent of the AWC provided PSE for more than 21 days • 93.3 per cent of the households reported provision of PSE **Immunisation** • Most children were immunised about 2.7 times in the last 3 months prior to the survey compared to 2.5 times for women • More than 80 per cent of the children were immunised against the major 6 diseases in the country (polio,diphtheria,pertusis,tetanus,measles,TB) • 76.5 per cent of the households received full immunisation **Health Check Ups** • 74.8 per cent of the households reported regular health chech ups **Community Participation** • 53 per cent AWC reported community support • 33 per cent of AWC reported support from panchayat and village leaders • 57.3 per cent reported support from women's group and mothers of children • 40 per cent reported support from family members of AW functionaries • 35 per cent reported support from other members of the community **Growth Monitoring** • 62.1 per cent of the households reported growth monitoring of the children at the AWC **Coordination in ICDS** • more than 80 per cent of the AWWs received support from ICDS supervisors • ANMs provided support to 65 per cent of the AWWs in the delivery of health services

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						• Interaction with CDPOs and LHV was weak **Vacant posts** • 97 per cent OF THE AWWs were in position • 91 per cent of the AWHs were in position
2.	Improving Child Nutrition Outcomes in India – World Bank Policy Research Working Paper	2005	India	World Bank	World Bank-Development Research group (Monica Das Gupta, Michael Lokshin, Michele Gragnolati, Oleksiy Ivaschenko)	• Using NFHS data from 1992 and 1998, ICDS's placement was found to be clearly regressive across states. • The states with the greatest need for the programme – the poor Northern states with high levels of child malnutrition and nearly half of India's population - have the lowest programme coverage and the lowest budgetary allocations from the central government • Levels of child nutrition fell only slowly during the 1990s, despite significant economic growth and substantial public spending on ICDS • Programme placement within a state is good : poorer and larger villages have a higher probability of having an ICDS centre • Little evidence of impact on child nutrition status in villages with ICDS centres.
3.	Resource allocation in the Union Budget2005-06 – Is it sufficient to fulfill the rights of India's children	2005-06	India	Centre for Child Rights	Centre for Child Rights	• To implement the Supreme Court orders on universalisation of ICDS while maintaining quality, according to National Advisory Council headed by Ms. Sonia Gandhi, the allocation should have increased six fold. But it has increased only twofold from Rs1490.40 crore to Rs 3142.25 crore (Observation from the Annual Financial Statement 05-06) • Worrisome to know that abysmally low public health expenditure - .9 per cent of GDP (below the average of low income countries and even sub-Saharan Africa) given that 58 per cent of children are not vaccinated fully and 14 per cent not at all.
4.	NIPCCD Study	2006	India	NIPCCD	NIPCCD	**Infrastructure** • Only 31 per cent of households had toilet facilities • 41 per cent of AWC had toilet facilities.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						• 97 per cent of AWC in urban areas, 93 per cent in rural areas and 74 per cent in tribal areas connected by roads • PHCs and subcentres were available in 29 per cent and 43 per cent of AWC areas. • 75.4 per cent of AWC located in pucca buildings • Weighing scales available in 90.71 per cent of AWC and learning kits in 55.9 per cent of AWC **Educational qualifications of AWWs** • 43.2 per cent of AWWs matriculates • 23.3 per cent passed higher secondary • 10 per cent graduates **Training** • 98.3 per cent of AWWs were trained • 95.2 per cent supervisors were trained • 81.6 per cent CDPOs were trained **Coverage of SN** • For children of ages between 6 months and 3 years 57 per cent were registered and 78.25 per cent availed the SN service. • For children between 3 to 6 years 63 per cent were registered and 75 per cent used the SN service. • 47.5 per cent of pregnant women were registered and 87.3 per cent used the SN service. • 52.8 per cent of nursing mothers were registered and 88.6 per cent used the SN service **Acceptability of SN** • 79 per cent of AWWs reported that food was acceptable to children and mothers • Interruption in distribution of SN • 54 per cent of AWWs reported disruption in the distribution of SN, 44.5 per cent of AWWs said disruption was due to food items not being supplied, 3.3 per cent said it was due to weather conditions and 9.8 per cent due to transportation problems. **PSE** • 37 per cent children registered for PSE

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						• 75 per cent of registered children attended AWC **Immunisation** • 66 per cent children immunised • 23.3 per cent of health functionaries reported that indifferent attitude of parents towards immunisation was a reason for inadequate immunisation , 17.6 per cent thought that disbelief attached to immunisation was a cause and 10.8 per cent said that there was stiff resistance to immunisation from certain communities • BCG vaccination for children between 6 months and 3 years was 82.4 per cent followed by polio and measles (both 70.5%) and Bolster DPT dose (17.8%) **Health Check Ups** • Age group 0-3 years – 56.1 per cent children received health check ups • 3-6 years – 46.7 per cent • 59.6 per cent between 6 months-3 years given IFA tablets **Community Participation** • 32 per cent women supported AWC (cooking, fuel, health checkups, immunisation , fetching drinking water) • 69.7 per cent of community leaders contributed to AWC (solving personal problems of AWWs and protecting them. **Growth Monitoring** • AWWs weighed 63 per cent of new born children • 82 per cent children below 3years weighed once a month • 83.3 per cent AWWs weighed children in the age group 3-5 years **Coordination in ICDS** • 20 per cent of rural areas did not have coordination committee at the project level • 28 per cent of tribal areas did not have coordination committee at the project level • 12.5 per cent of urban areas did not have coordination committee at the project level

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						Vacant posts • 15 per cent of positions of CDPOs, 48 per cent of ACDPOs and 18 per cent of supervisors were vacant
5.	Quick Review of Working of ICDS in Rajasthan	2005	State: Rajasthan Sample districts: Alwar, Ajmer, Nagaur, Sikar and Jaisalmer	Department of Women and Child Development. Ministry of Human Resource Development	Society for Economic Development and Environmental Management (New Delhi)	**Weaknesses in the structure of implementation:** **1. CDPOs** • 44 CDPOs supervising 18,666 staff members,(ratio: 1:424) • Each CDPO supervising 161 AWC • per cent posts are vacant. **2. Supervisors** • One supervisor to (average) 28 AWC. • Nearly 28 per cent posts are vacant. • Major activity being record keeping **3. AWW** • All AWWs in position. • Inability to ensure community based participative healthcare planning with ANM. Main reasons for this being; (1) Community Needs Assessment Approach (CNAA) not operational and (2) Ad-hoc system of coordination with the ANM. **4. Sahyogini** • Is appointed one at each GP, to ensure that women take medicines and come for health check ups regularly. Adolescent girls were also taken care of. **Performance on key indicators** **1. Supplementary nutrition Programme** • Nearly 92 per cent women are getting benefit from AWC and supply has improved. • Storage problem remains and villagers complain that food being served is stale. **2. Pre-schooling** • In majority of the AWC children were present at the time of survey. Community initiative is seen as one of the main reasons for success of most of AWC in these districts. **3. Awareness creation** • Being < 50 per cent for villagers and about 60 per cent for AWWs

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						• Women do not go to the AWC at their own **4. Immunisation** • 38 per cent of AWC have records of this for children • From ANM records: • 100 per cent coverage even for Polio is not achieved • 93.8 per cent children have measles vaccination • Only 14 per cent and 6 per cent of AWC have records for health checkups and referral services resp. • Correlation between literacy and awareness was 0.195379 for women and 0.191349 for AWWs.
6.	Review of ICDS Programme in Bihar	2006	Bihar: Sewanan, Karauna, Ammain Nairu A, Nairu B	N.C. Saxena	N.C. Saxena	• Bihar lagged behind other states in terms of number of covered blocks, enrolment for feeding, actual feeding. • ICDS is operational in only 44 per cent of the blocks in Bihar. • Improper SNP arrangement. • No utensils for cooking or feeding. • Many centres run in tiny kuchha huts. • Children's attendance and weight not recorded properly. • CDPOs do not inspect the AWC regularly. • Excessive centralization.
7.	ICDS in Delhi – A Reality Check	2006	New Delhi		Neenv	• Infrastructure – 96 per cent of buildings on rent, Inadequate space (58%), low allocation of rent (Rs 500 allotted pm), irregular payment of rent, inadequate facilities for drinking water (only 57 per cent with access to clean drinking water), toilets (57 % with one) scarcity of equipment like weighing machine, teaching aids was found in 82 per cent of AWC • Supplementary nutrition – 100 per cent of centres had SN provided. 74 per cent had regular SN. • Coverage of immunisation very good. 85 per cent of immunisation s done by ANMs in PHCs and dispensaries. • Heath and Nutrition – Only 17 per cent of AWC with records on malnutrition. Only 25 per cent of children below six years and 9 per

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						cent of pregnant women weighed • Supervision – 66 per cent AWC had CDPO visits in the last six months. No maintenance of children's growth and malnutrition charts. • Community participation – 40 per cent AWC received support from beneficiaries. Only 10 per cent from Pradhans and 6 per cent from MLAs
8.	Report on Gram Sabha for Social Audit of ICDS Praogramme	2007	Orissa: Ratnakhand, Phalsamal, Dumerjharan, Dandapani, Banipali, Bianrpali, Babja, Bagdungri, Belpali, Badipali, Taljuri, Tabalnaji	Adhar, AT/PO-Loisingha, Dist-Bolangir (Orissa)	Adhar, AT/PO-Loisingha, Dist- Bolangir (Orissa	• AWC not conveniently located. • Most unaware of ICDS guidelines and services. • Stock registers not maintained by 12 AWC • Corruption: officials asked for Rs 2000 for appointment of AWW in Taljuri. • No monitoring by supervisor. • SNP being used to pay daily workers the wages for AWWs personal work. • No proper identification of beneficiaries. • Irregular distribution of THR. • Health checkups and distribution of medicines irregular. • No immunisation , irregular availability of ANs. • Weighing machines used to weigh mahua instead of children. • PSE working properly only in one village. • Absent children marked present.
9.	Rapid Assessment of ICDS Project in Bihar	2007	Bihar	UNICEF	Directorate Department of Social Welfare Government of Bihar & UNICEF Bihar	**Infrastructure** • 63.8 per cent AWC have a building. • 64 per cent of these structures were kutcha. • Only 20 per cent of these buildings were owned by ICDS. • In majority of the centres without building, SNP was cooked in open air (41%) • 27.9 per cent of AWC with building had drinking water, 10.7 per cent had toilets, 6.5 per cent had electricity, and 16.4 per cent had storage space. • 43 per cent of the total AWTCs provided training. • Only 32 per cent of projects had their own offices at the block level.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						Resources • Only 9.3 per cent of AWWs received honorarium on time. **Training** • Refresher training was completed by 88.6 per cent supervisors. • Job training was completed by 91.4 per cent supervisors. • The scenario was overall satisfactory. **Equipments Available at AWC:** • Weighing Machines: 84.4 per cent • Growth Charts:41.3 per cent • Toys: 69.4 per cent • Pregnancy Kits:3.2 per cent • Medical Kita:4.9 per cent • Cooking Pot: 71.7 per cent • Plates:62.8 per cent • Table: 6.2 per cent • Chair:10.9 per cent **Beneficiary Services:** • 57.5 per cent - 64.6 per cent immunised in various groups. • 85.9 per cent of pregnant women were never weighed. • Home visits by AWWs were around 60 per cent on an average.
10.	Evaluation Report on ICDS (Jammu & Kashmir)	2009	Jammu & Kashmir: Anantnag, Kupwara, Doda, Rajouri	Government of India	Population Research Centre, Department of Economics, University of Kashmir, Srinagar	• 28 per cent of AWC in pucca buildings, 45 per cent in semi pucca and 28 per cent in katcha. • Inadequate space for indoor and outdoor activities. • Most children come to the AWC for SNPs only. • Most children immunised. 89 per cent -BCG 91 per cent - DPT and Polio 74 per cent - Measles doses. • Less than 35 per cent women received health education. • Regular weighing of children not done. • PSE imparted only when nutrition was available at the centre • Improper teaching and learning aid. • Poor system of maintenance of records.
11.	Moribund ICDS - A study on the	2009	Madhya		Vikas Samvad,	• Universalisation – 60 per cent children, 73 per cent eligible women

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
	ICDS and Child Survival issues in Madhya Pradesh		Pradesh		Sanket – Centre for Budget Studies & Right to Food Campaign, Madhya Pradesh, Support Group	• Exclusion from ICDS based on caste prevalent. • Only 37 per cent AWC with own buildings • Availability of basic facilities low – utensils (58%), safe drinking water (56%), toilet facilities (76%), playing kit/PSE kit (60%), medical kit (89%) • Low quality of SN – Nutritious food in 44 per cent of AWC, cooked meals in 28 per cent of AWC • Growth monitoring comparatively good – 72 per cent of studied AWC with salter weighing machines, 66 per cent with adult weighing machines • Immunisation very poor – only 22 per cent of children below 12 months of age vaccinated, only 25 per cent of children from 6-35 months vaccinated. • Health budget declined from 5.1 per cent of total expenditure in 2000-01to 3.9 per cent in 2008-09.
12.	The Pratichi Child Report – A Study on the Delivery of ICDS in West Bengal	2009	West Bengal		Pratichi Research Team	• Universalisation – According to Dep. Of Women and Child Development and Social Welfare there is only 50 per cent coverage of eligible children • Own buildings were used in only 35 per cent of studied centres – rest operated in verandas of primary schools, or Sishu Siksha Kendras, temples, mosques, atchalas (unwalled construction where village meetings are held, or simply under trees. • In most centres, only SN and PSE were provided. Even these were fragmented in their delivery – According to mothers there was low quality of food in 50 per cent, 28 per cent had no PSE, 46 per cent had no weighing of children and 70 per cent of AWC had no medicine distribution. • Lack of Supervision – Only 29 per cent of AWC were visited by the CDPOs in the year prior to the survey. • Inadequacy of staff – Due to inadequacy of staff, AWWs and AWHs were overburdened with other government programmes such as sanitation campaign, facilitation of

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						self- help groups, collection of village level data, and various public health related programmes. • In spite of bad quality of services, children from poorer sections attended regularly mainly for food. Now there is an increase in expectations regarding ICDS after the success of the Mid-Day Meal programme which has proper implementation. • High willingness of mother' participation not substantiated due to a lack of mother/public/AWC specific committees.
13.	ICDS in Uttar Pradesh An Abandoned Vehicle	2009	State: Uttar Pradesh Sample districts: Raebareli, Sitapur, Hardoi, Kanpur, Allahabad, Shahjahanpur, Fetehpur, Barabanki and Lucknow.	Supported by CARE-Uttar Pradesh	Arundhati Dhuru (Advisor from Uttar Pradesh to the commissioners appointed by Supreme Court in the matter of Right to Food.)	• Out of 43 AWC visited only 6 open regularly, 24 for about 5 days a month and 13 do not open at all. • Most of AWC are called Panjiri or Daliya. **SNP:** • 40 per cent children are out of coverage. • Poor quality of food and irregular supply. • GoI norms recommends hot cooked meals for PS children. • Result: in 43 AWC hot cooked meal served as follows; in 4 AWC for > 15 days, in 8 for ~10 days, in 7<10 days, in 24 no hot meal was served. • The increased budget (from Rs 2/child/day to Rs 4) was not received By AWC in Uttar Pradesh, this affected the quantity and quality of food supplied. • For the meals the AWW has to initially pay from her own pocket or some savings and later settle accounts with the dept. supply of funds is mostly not smooth and many times AWW is not able to get her reimbursements in time. • No budgetary provision for utensils or cooking medium. **Infrastructure** • None of the 43 AWC in Uttar Pradesh had its own building. • Only 7 had toilet facilities and 14 had safe drinking water facilities.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						Pre-school Education • Out of 43 only two were addressing the component of PS education **Growth monitoring** • No weighing for <3 years in all 43 AWC. • Only 9 had a weighing machine for 3-6 years children. • None of the AWC had a fully equipped medical kit. **Limited access to services by SC/ST**, in areas where AWC was located in a predominantly upper class area.
14.	Human Development In India Challenges For A Society In Transition.	2009	Madhya Pradesh Project site:tribal district Dhar of Madhya Pradesh (Study was limited to 613 AWC in the four ICDS blocks viz, Tirla, Nalchha, Sardarpur and Gandhwani of Dhar district.)	World Food Programme and UNESCO	Sonalde B Desai, Amaresh Dubey, Brij Lal Joshi, Mitali Sen, Abusaleh Shariff, and Reeve Vanneman	**Impact of ICDS** • Greater school retention of children exposed tops education. • Several studies reported: lack of transport facilities, village level politics, ineffective coordination of ICDS staff, lack of supervision, poor interpersonal communication are the main the main difficulties that hamper the growth of ICDS. **Experience gathered through field visits and workshops conducted by WFP and UNESCO** • Inadequate use of outdoor space for conducting Early Childhood Care and Development (ECCD) activities. • Growth monitoring and promotional activities need to be strengthened by improving the skills of the AWWs. (The national evaluation of ICDS by NIPCCD shows that 36.3 per cent AWWs are not able to monitor growth of children.) • Referral and health check ups was the weakest link of ICDS. • There are several constraints and backlogs in the training of ICDS functionaries. • Lack of field staff at the primary health centres. • NHE only organised in 40-50 per cent of AWC • Women usually go for farm work during AWC work hours. **Results after conducting workshop**: • AWC earlier dull became attractive after receiving the learning materials.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						• After the skill and management orientation workshops, the supervisors and AWWS were motivated to work. • The education of parents helped in increasing regular attendance of children • The action plans prepared were executed also • Decentralisation of power was found to be the key for success. • The communication skills of AWWs were strengthened after participation in the WPF project " Empowerment of tribal adolescent girls"
15.	Social Exclusion in ICDS – A research study	Undated	14 villages in four states – Andhra Pradesh, Chhattisgarh, Jharkhand and Uttar Pradesh	Staff and Partners of CARE	Harsh Mander & M.Kumaran	• Large number of children from impoverished households with no access to ICDS services (SN for infants, children etc) • Denial of these services not random but based on caste, gender, disability and constraints placed by extreme poverty resulting in distress migration and reliance on uncertain exploitative daily wage work. • 'Neutral' factors for explaining denial from ICDS services such as geographical distance, or ceiling on numbers who can be enrolled actually disguise real factors that are more closely akin to social exclusion.
16.	Study on the distribution of Supplementary Nutrition under the ICDS Scheme	Undated	Uttar Pradesh: Gorakhpur, Jaunpur, Mirzapur,	The state project director, State Project Management Unit, UP	Academy of Management Studies, Lucknow, UP	• 23 per cent reported regular SNP. • 63 per cent satisfied with the taste of SNP (Panjeeri) • 70 per cent prefer biscuits to Panjeeri. • 88 per cent want SNP to continue. • 37 per cent knew the nutritive value of SNP. • Only 28 per cent AWWs stored the SNP bags in AWC. • 14 per cent stored in open, 54 per cent at their residence • Only 5 per cent have participated in discussions on nutrition and education. • 45 per cent women against growth and weight monitoring.
17.	Nutritional Interventions	1989	All India	Bulletin of	BN Tandon	**In 1985, as compared to 1976** • SNP food coverage among preschool

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
	through Primary health care: impact of the ICDS projects in India.			WHO		children, pregnant women and lactating mothers in the non ICDS population had increased to 23.6 per cent, 16 per cent and 12.9 per cent resp. • Increase in the overall coverage of the 3 target groups. • Drop in severe malnutrition from 19.1 per cent to 8.4 per cent. • The ICDS nutrition intervention Programmes achieved better coverage of the target population because the nutrient supplements were given as part of a package of primary health care, PSE, nutrition and health education. • The integrated nutrition interventions led to a significant decline in malnutrition among preschool children in the ICDS population compared with the non-ICDS groups that received nutrition, health care and education services through separate Programmes.
18.	Child Malnutrition	2004	All India	Economic and Political Weekly	Shanti Ghosh	• ICDS has to be converted into a true health, nutrition and development Programme, and not limited to a food dole Programme. • 30 per cent of newborns have weight below 2.5 kgs, among whom mortality is higher. • 47 per cent children under 4 are malnourished (NFHS-2; 1998-99), and 18 per cent are severely malnourished. • The main reasons are poor living conditions and lack of awareness of the young child s food requirements. • Only 39.7 per cent of infants were exclusively breastfed for the first 6 months. • No concept of feeding the child modified family food. • A nutrition mission is proposed where with more attention to 200-250 districts where the level of malnutrition is high.
19.	Food Dole or Health, Nutrition and Development	2006	National	Economic and Political Weekly	Shanti Ghosh	• Almost a third of babies born in India are under weight, they weigh less than 2.5 kg at birth, mainly due to young age and poor nutrition of

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
	Programme?					mother • According to National Family Health Survey (1998-99), 14% of girls aged 15-19 years were married and 61 per cent of all women were married before 18 years. • According to NFHS-2 only one third of Indian children are offered semi solid food between 6-9 months of age. This sets the beginning of malnutrition. • This is not because of lack of food in the households but because of lack of knowledge • Malnourishment is responsible for 60 per cent of 10.9 million deaths among children <5 years.(WHO and UNICEF) • To prevent malnutrition focus should be on the age group 6months to 2 years, this age group is not being addressed in the way ICDS is functioning. • HNS is an important objective of ICDS but its performance on this front is dismal, • It has become a food dole Programme, which is irregular and of poor quality. • To improve matters, AWW should be allowed to do the job assigned to her with full support from the community • People should be made aware of their entitlements • Emphasis should be on the total functioning of ICDS and not just the money sanctioned for supplements, as ICDS is meant to be much more than a food supplementary Programme.
20.	Hidden Hunger: The Problem and Possible Interventions	2006	All India	Economic and Political Weekly	Tara Gopaldas	• All members of low income and middle income families are likely to be deficient in vitamins and minerals because of their diet consisting mainly of cereals and legumes. • A recent RCH survey revealed that the coverage of children in age group of one to 5 years was less than 10 per cent in most of the states. • There is no specific national Programme to combat hidden hunger

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						among children in the school going age group. • NIDCP was introduced to deal with iron deficiency. • 50 per cent of Indian households were using iodised salt. **Further micro nutrient interventions in the context of universalisation of ICDS:** • Fortification and multi-micronutrient supplementation • Domiciliary counselling • Safe atomic irradiation technologies and biotechnology • Public- private partnerships to meet micronutrient requirements. • Mid day meal Programmes **Other Lessons:** • Impetus should be given to double fortified salt Programme. • Encouragement should be given to "instant vitamin/ minerals that the vulnerable groups need • Major ministries should have 'micronutrient and health cell' • Environment safety measures should be taken • Information- education- communication for doctors in crucial.
21.	Universalisation with Quality: ICDS in a Rights Perspective	2006	All India	Economic and Political Weekly	Jean Dreze	**The rights perspective:** • It is the main foundation of the demand for "universal" child development services. All children are entitled to certain "opportunities and facilities" that do not have to b justified on case-by- case basis. • This perspective points to the need for strong monitoring and redressal mechanisms, so that people are able to claim their entitlements. • This perspective highlights the possibility of putting in place legal safeguards for children's rights. **Universalisation with Quality** • Every settlement should have a functional anganwadi. • ICDS should be extended to all children under the age of 6 and all eligible women.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						• The scope and quality of these services should be radically enhanced. **Other findings** • In Bihar, 85 per cent of the supervisor posts are vacant and 18 per cent of the ICDS "projects" do not have a single supervisor. • In Jhankhand, even the post of CDPO is vacant in about half the projects. • The interrupted supply of SNP in these states had brought the ICDS to a standstill when children had stopped attending for several months. • Tamil Nadu is an exception where in the ICDS is working in a very satisfactory manner. • Community participation in ICDS is low everywhere.
22.	ICDS and Persistent Undernutrition Strategies to Enhance the Impact	2006	All India	Economic and Political Weekly	Michele Gragnolati, Caryn Bredenkamp, Monika Das Gupta, Yi-Young Lee, Meera Shekhar.	**Three mismatches in the prioritization of the services** • Too much emphasis on food security and not other interventions that increase nutrition at lower cost. • Service delivery not focused on children under three. Also, wealthier children participate more than poor ones. • The poorest states have lower level of funding and coverage than other states. **Political Commitment** • High level of political commitment essential for the Programme. • In India, there is lack of awareness of the cost effective interventions. **Findings** • Poor quality of services. • Design does not reflect local needs. • Weak articulation with health system. • Leakage to non priority groups. • AWW burdened with several tasks. • Poor quality of equipment of growth monitoring. • Irregular food availability. • Inadequate articulation of reproductive and child health (RCH) Programme.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
23.	Infant Survival: A Political Challenge	2006	All India	Economic and Political Weekly	Shantha Sinha	• AWW is neither professionally trained nor paid even the minimum wage according to her services. • ICDS should free the girl child of responsibilities of younger siblings and encourage her to join school and continue to study. • There are no legal instruments for the provision of necessary infrastructure and for professional support
24.	Rethinking ICDS: A Rights Based Perspective	2006	National level Based on the experience of MV Foundation in 8 mandals of Ranga Reddy district, Andhra Pradesh	Economic and Political Weekly	Dipa Sinha	**All India situation** • 65 per cent women have access to antenatal care • Less than 50 per cent deliveries take place with skilled attendance • 50 per cent women are anaemic. • Median age of marriage: 16.7 years. • IMR: 67.6/1000 • 45.5 per cent children under the age of 5 are chronically undernourished. **Impact of ICDS** • IMR declined from 94/1000 live births in 1981 to 73 in 1994. • Severe malnourishment decreased from 15.3 per cent in 1976-78 to 8.7 per cent in 1988-90 **(Chandrasekhar and Ghosh 2005)** • In 2001, the SC issued an order directing the govt. to ensure that ICDS is immediately expanded to cover every hamlet in the country. • The present UPA govt. has committed itself to universalising the ICDS scheme to "provide a functional anganwadi in every settlement and ensure full coverage of all children." • NAC has shown keen interest in ICDS, and made detailed recommendations to improve the coverage and quality of the Programme. **Shortcomings** • Huge gap b/w what is planned and what is implemented. • Limited reach: only 6 lakh AWC as compared to estimated 17lakh required. • SN provided to 3.4 crore children as opposed to 16 crore in the age group

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						0-6 years. **(Dreeze and Sen 2004)** • Improvement of ICDS or primary health services is not on the election agenda of any political party. • Lack of accountability through public action. **Strengthening ICDS** • Through community participation • AWWs should carry out their responsibilities well. • Comprehensive planning and decentralization. • Expanding the coverage. • Separating the functions and specialising. • AWC should give equal importance to all its functions.
25.	ICDS with a Difference	2006	Tamil Nadu	Goverentment of India	Economic and Political Weekly	• ICDS works under political pressure. • Programme popular among masses. • Coverage more effective than targeted schemes. • Near universalisation in case of ICDS in the state. • TN- sandwich case- pressure from above through political will; pressure from below through public expectations.
26.	Implementation of ICDS in Bihar and Jharkhand	2006	Bihar and Jharkhand	Economic and Political Weekly	Nandini Nayak, Naresh C Saxena	• As per 2001 census population of children <6 years of age was ~16 crore, i.e., 15 per cent of India's total population. Majority of these live in conditions which include poor sanitation, disease, infection and inadequate access to primary health care. • Currently ICDS services are being provided to ~4.2 crore beneficiaries, including 3.4 crore children < 6 years of age, through ~6.4 lakh AWC. • In a PIL on the right to food (CWP 196/2001), Supreme Court has issued interim orders that reinforce the mandate and importance of ICDS and that the scheme should be implemented in full. These orders have significantly enhanced the potential of ICDS.

S.No.	Title of The Study	Year	Jurisdiction	Sponsor	Agency/ Author	Main Findings
						Bihar and Jharkhand • Children in the age group 0-6 form 19.6 per cent of Bihar's population, while for Jharkhand the figures are 17.8 per cent, both higher than the national average of 15.4 per cent • In Bihar out of 394 ICDS project sanctioned only 183 are operational while for Jharkhand all of 204 sanctioned are operational. • SN was provided for 181 days on an average in Bihar out of the requisite 300 days (as per the orders of Supreme Court) • No SN is provided to adolescent girls in both the states. • In both Bihar and Jharkhand the entire ICDS staff get their salary only twice in a year. This is a highly demotivating factor. • Funds released to Bihar under ICDS stood at Rs 1,755 lakh in 2003-04 and Rs 7,408 lakh in 2004-05. The release of funds from the state budget stood at Rs 2,713 lakh and Rs 8,753 lakh in 2003-04 and 2004-05 respectively, of the funds released by the state government in 2003-04, Rs 160 lakh remain unutilised. However during the field visit to Vaishali district it was found that there is usually no arrangement for SNP in AWC, despite sufficient funds having been made available. • In many AWC there is complete absence of utensils. • Many centres are run in tiny kutch huts where hardly 20 children can sit. • Bihar suffers from an excessive centralisation procedure for financial matters. • The implementation of ICDS in Jharkhand is better than Bihar. • Medical kits have not been supplied to any AWC of Jharkhand and drinking water is only available to only 35 per cent of AWC of the state. • Also no enhanced ration is being provided to the malnourished beneficiaries in the AWC of Jharkhand.

Appendix Text 3.1: List of Questionnaires and its' Contents Canvassed for the Study

Schedule 1	**:**	**Anganwadi Centre (AWC) Questionnaire**
SECTION I	**:**	**Profile of AWC**
SECTION II	**:**	**Coverage and Demographic Profile of Beneficiary**
SECTION III	**:**	**Reported Births and Deaths of Children (As Per AWC Register)**
SECTION IV	**:**	**Functioning of AWC**
SECTION V	**:**	**Maintenance and Updating the Registers**
SECTION VI	**:**	**Nutrition and Health Education (NHE)**
SECTION VII	**:**	**Home Visits**
SECTION VIII	**:**	**Weighing Scales and Other Inventories at the AWC**
SECTION IX	**:**	**Delivery of Services**
Section 9.1	:	Supplementary Nutrition
Section 9.2	:	Supply and Use of Medicine
Section 9.3	:	Immunisation
Section 9.4	:	Health Check-Up
Section 9.5	:	Pre School Education (PSE)
Section 9.6	:	Kishori Shakti Yojana (KSY)
Section 9.7	:	Women aged 15-45 Years
SECTION X	**:**	**Coordination with Supervisors/CDPO's and Other Officials**
SECTION XI	**:**	**Community Participation**
SECTION XII	**:**	**Profile of AWW and AWH**
SECTION XIII	**:**	**AWW's Perception of the ICDS Programme**
SECTION XIV	**:**	**Observation of the Investigator regarding Records/ Cleanliness/Skills of AWW**

Schedule 2 (A)	**:**	**Household Questionnaire (Beneficiary - Children Aged 7 Months-6 Years)**
SECTION I	**:**	**Access to AWC**
SECTION II	**:**	**Service Delivery**
Section 2.1	:	Supplementary Nutrition
Section 2.2	:	Status of Immunisation
Section 2.3	:	Weight and Growth
Section 2.4	:	Health Care

Section 2.5	:	Pre-School Education (PSE)
Section 2.6	:	Practices of Breastfeeding
SECTION III	**:**	**Nutrition and Health Education**
SECTION IV	**:**	**About AWC/AWW**
SECTION V	**:**	**Socio-Economic Profile of Households**

Schedule 2 (B)	**:**	**Household Questionnaire (Beneficiary - Pregnant Women)**
SECTION I	**:**	**Access to AWC**
SECTION II	**:**	**Service Delivery**
Section 2.1	:	Supplementary Nutrition
Section 2.2	:	Pre-natal Care and Health Check-ups
SECTION III	**:**	**Nutrition and Health Education**
SECTION IV	**:**	**About AWC/AWW**
SECTION V	**:**	**Socio-Economic Profile of Households**

Schedule 2 (C)	**:**	**Household Questionnaire (Beneficiary - Lactating Mother)**
SECTION I	**:**	**Access to AWC**
SECTION II	**:**	**Service Delivery**
Section 2.1	:	Supplementary Nutrition
Section 2.2	:	Pre and Post Natal Care
Section 2.3	:	Immunisation of the Child
Section 2.4	:	Weight and Growth of the Child
Section 2.5	:	Health Care of the Child
Section 2.6	:	Practices of Breastfeeding
SECTION III	**:**	**Nutrition and Health Education**
SECTION IV	**:**	**About AWC/AWW**
SECTION V	**:**	**Socio-Economic Profile of Households**

Schedule 2 (D)	**:**	**Household Questionnaire (Beneficiary - Adolescent Girl)**
SECTION I	**:**	**Access to AWC**
SECTION II	**:**	**Service Delivery**
Section 2.1	:	Supplementary Nutrition
Section 2.2	:	Health
SECTION III	**:**	**Non Formal Education (NFE) and Nutrition and Health Education (NHE)**
SECTION IV	**:**	**About AWC/AWW**

SECTION V	**:**	**Socio-Economic Profile of Households**
Schedule 3	**:**	**Household Questionnaire (Non-Beneficiary - Children Aged 7 Months-6 Years)**
SECTION I	**:**	**About the Child**
SECTION II	**:**	**Child Care**
Section 2.1	:	Food
Section 2.2	:	Status of Immunisation
Section 2.3	:	Weight and Growth
Section 2.4	:	Health Care
Section 2.5	:	Pre-School Education (PSE)
Section 2.6	:	Practices of Breastfeeding
SECTION III	**:**	**About AWC**
SECTION IV	**:**	**Socio-Economic Profile of Households**
Schedule 4	**:**	**Village Questionnaire**
Section	**:**	**Demographic Profile of Village**
Schedule 5	**:**	**Community Leader Questionnaire**
Section	**:**	**Opinion of a Community Leader or Knowledgeable Person about the functioning of AWC**
Schedule 6	**:**	**CDPO Questionnaire**
SECTION I	**:**	**Profile of CDPO**
SECTION II	**:**	**Resources**
SECTION III	**:**	**Coverage**
Section 3.1	:	Coverage and Demographic Profile of Beneficiaries
Section 3.2	:	Registered
Section 3.3	:	Attendance
SECTION IV	**:**	**Births and Deaths**
Section 4.1	:	Reported Births and Deaths of Children in Your Project Area
Section 4.2	:	Reported pregnancies, deliveries and deaths of women in your project area
SECTION V	**:**	**Service Delivery**
Section 5.1	:	Supplementary Nutrition (SN)
Section 5.2	:	Health and Immunisation

SECTION VI	**:**	**Administration**
SECTION VII	**:**	**Coordination with Other Departments**
SECTION VIII	**:**	**Expenses of the Project**
SECTION IX	**:**	**CDPO's Perception of the ICDS**

Schedule 7	**:**	**Health Functionaries Questionnaire**
SECTION I	**:**	**Respondent - MO**
SECTION II	**:**	**Respondent - ANM**

Schedule 8	**:**	**DPO Questionnaire**
SECTION I	**:**	**Job Profile of DPO**
SECTION II	**:**	**Human Resources in the District**
SECTION III	**:**	**Status of Children and Coverage of Eligible Beneficiary**
Section 3.1	:	Status of Children and Mothers during Last 5 years (in thousands)
Section 3.2	:	Eligible Beneficiaries
Section 3.3	:	Registered Beneficiaries in AWC
SECTION IV	**:**	**Service Delivery**
Section 4.1	:	Supplementary Nutrition (SN)
Section 4.2	:	Project wise Annual requirement and Actual allocation for SNP (in Rs. Lakhs) during last three years?
Section 4.3	:	Project-wise Annual Requirement and Actual Allocation of Food during Last One Year
SECTION V	**:**	**Health and Immunisation**
SECTION VI	**:**	**Expenditure for ICDS during last Five Financial years (Rs. In Lakhs)**
SECTION VII	**:**	**Coordination with Other Departments**
SECTION VIII	**:**	**DPO's Perception of the ICDS**

Schedule 9	**:**	**Questionnaire for Project Director/State Nodal Officer**
SECTION I	**:**	**Profile of the State**
SECTION II	**:**	**Project Implementation Procedure**
SECTION III	**:**	**Budget Provision and Expenditure**
SECTION IV	**:**	**Human Resources**
Section 4.1	:	Staff Involved in ICDS in the state (other than HQ)
Section 4.2	:	Staff Involved in ICDS at State HQ
SECTION V	**:**	**Status of Children and Coverage of Eligible Beneficiary (in Lakhs)**
Section 5.1	:	Eligible Beneficiaries

Section 5.2 : Registered Beneficiaries in AWC

SECTION VI : Monitoring of ICDS Activities

SECTION VII : Coordination with Other Departments

SECTION VIII : Perception of State Nodal Officer on the Following Aspects

Appendix Text 4.1: Estimation Procedure

Define the following notations:

i = subscript for ith FSU (district)

j = subscript for jth SSU (project) in ith district

k = subscript for kth TSU (AWC) in an SSU, k=1 to 5

l = subscript for lth sample individual (beneficiary/non-beneficiary) under a particular AWC within a project

d = number of sample districts (FSUs) in a state

U = total size of a state (rural/urban population of state)

u_i = total size of a specific sample district

N_i = total number of projects (SSUs) in the ith FSU

n_i = number of SSUs selected in the ith FSU

M_{ij} = total number of AWC (TSUs) in the jth SSU and ith FSU

m_{ij} = number of TSUs selected in the jth SSU

P_{ijk} = number of persons (beneficiary/non-beneficiary) in (ijk)th TSU after listing

p_{ijk} = number of persons (beneficiary/non-beneficiary) selected in the (ijk)th TSU

x , y = observed value of characteristics x, y under estimation

$\hat{X}, \hat{Y}$ = estimate of population total X, Y for the characteristics x, y

y_{ijkl} = observed value of the characteristic y for the lth person in the kth TSU (AWC) of jth SSU (project) within ith district

An unbiased estimator of the population total Y for a particular state on the line of estimation procedure is given by

$$\hat{Y} = \sum_i \sum_j \sum_k \sum_l W'_{ijkl} y_{ijkl} \qquad (1)$$

where $W'_{ijkl} = W'_1 \times W'_2 \times W'_3 \times W'_4$

$$W'_1 = \frac{U}{d \times u_i},$$

$$W'_2 = \frac{N_i}{n_i}$$

$$W'_3 = \frac{M_{ij}}{m_{ij}}$$

and $W'_4 = \frac{P_{ijk}}{p_{ijk}}$

so equation (1) may be written as

$$\hat{Y} = \frac{1}{d}\sum_{i=1}^{d}\frac{U}{u_i}\frac{N_i}{n_i}\sum_{j=1}^{n_i}\frac{M_{ij}}{m_{ij}}\sum_{k=1}^{m_{ij}}\hat{Y}_{ijk}$$

where, $\hat{Y}_{ijk} = \frac{P_{ijk}}{p_{ijk}}\sum_{l=1}^{p_{ijk}} y_{ijkl}$ (2)

In fact,

$$\hat{Y} = \frac{U}{d}\sum_{i=1}^{d}\frac{\hat{Y}_i}{u_i} \quad (3)$$

where, $\hat{Y}_i = \frac{N_i}{n_i}\sum_{j=1}^{n_i}\hat{Y}_{ij}$,

and $\hat{Y}_{ij} = \frac{M_{ij}}{m_{ij}}\sum_{K=1}^{m_{ij}}\hat{Y}_{ijk}$

Thus, the weight attached to (ijkl)th individual is

$$W_{ijkl} = \frac{U}{d\times u_i}\frac{N_i}{n_i}\frac{M_{ij}}{m_{ij}}\frac{P_{ijk}}{p_{ijk}}$$

It may be noted that the four components of this weight are appearing due to four stages of selection.

OVERALL ESTIMATE FOR AGGREGATES

The estimates have been developed for a specific state. The national level estimates will be obtained by aggregating the state level estimates over all the states.

ESTIMATES OF ERRORS

The estimated variances of the above estimates will be as follows:

FOR TOTALS

An estimator of variance $\hat{Y}_s$ for a specific state (s) with the assumption that FSUs are randomly selected is approximately given by

Let $Z_i = \frac{\hat{Y}_i}{a_i}$,

where $a_i = \frac{u_i}{U}$

so from (3), we get $\hat{Y}_s = \frac{1}{d}\sum_{i=1}^{d} Z_i$, s is subscript for a state

Ignoring the contributions due to second, third and fourth stage of selection towards the sampling variance, an estimator of variance for $\hat{Y}_s$ is approximately given by

$$\hat{V}\left(\hat{Y}_s\right)=\frac{1}{d(d-1)}\sum_{i=1}^{d}(Z_i-\bar{Z})^2$$

where $\bar{Z}=\frac{1}{d}\sum_{i=1}^{d}Z_i$

$$Z_i=\frac{\hat{Y}_i}{a_i}$$

and $a_i=\frac{u_i}{U}$

$$\hat{Y}_i=\frac{N_i}{n_i}\sum_{j=1}^{n_i}Y_{ij}$$

$$\text{Estimate of (\% SE)} = \frac{\sqrt{\hat{V}(\hat{Y}_s)}}{\hat{Y}_s}\times 100$$

For aggregate, summing over all states,

$$\hat{Y}=\sum_s \hat{Y}_s$$

$$\hat{V}(\hat{Y})=\sum_s V(\hat{Y}_s)$$

$$\text{Estimate of (\% SE)} = \frac{\sqrt{\hat{V}(\hat{Y})}}{\hat{Y}}\times 100$$

Estimates of Ratios

Let $\hat{X}$ and $\hat{Y}$ be the estimates of the aggregates X and Y for two characteristics x and y at the state level. Then the combined ratio estimate $\hat{R}$ of the ratio $R=\frac{Y}{X}$ will be obtained as $\hat{R}=\frac{\hat{Y}}{\hat{X}}$. Again the overall estimates for national level will be obtained by aggregating the state estimates.

For ratios $\hat{R}$:

$$M\hat{S}E(\hat{R})=\frac{1}{\hat{X}^2}\left[\sum\frac{1}{d(d-1)}\sum_{i=1}^{d}\left\{\left(Z_i-\hat{R}Z_i^*\right)^2-d\left(\bar{Z}-\hat{R}\bar{Z}^*\right)^2\right\}\right]$$

where $\hat{R}$ is the combined ratio estimate for the ratio $R=\frac{Y}{X}$

$$Z_i=\frac{\hat{Y}_i}{a_i};\qquad Z^*{}_i=\frac{\hat{X}_i}{a_i};$$

and $\bar{Z}=\frac{1}{n}\sum_{i=1}^{n}\hat{Z}_i;\qquad \bar{Z}^*=\frac{1}{n}\sum_{i=1}^{n}\hat{Z}_i^*$

Estimates of RSE

$$R\hat{S}E\left(\hat{Y}\right)=\frac{\sqrt{V\hat{a}r\left(\hat{Y}\right)}}{\hat{Y}}\times 100$$

$$R\hat{S}E\left(\hat{R}\right)=\frac{\sqrt{M\hat{S}E\left(\hat{R}\right)}}{\hat{R}}\times 100$$

Appendix Text 5.1: Definition and Measurement in Details

- This regression is based on 20 observations and 4 variables, namely PMNC, PHNST, PPH and EICDS including one dummy variable i.e. DV. The 20 observations include data for 19 states and total aggregate for all India. The data for the following 19 states was used: Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal.

- PMNC implies proportion of total malnourished children in the age group 7-60 months (in case of both beneficiary children and non-beneficiary children) those who are in Grades II,III & IV.

  The proportion of malnourished children was calculated as follows: all the AWC maintain Growth Monitoring Charts which are provided by the UNICEF. We use growth chart for each child to determine the child's nutritional status. Ideally, every child under five years of age should be weighed once a month and all children under the age of three should be weighed every month.

  In the growth chart on the x-axis we have the age of the child starting from 7 months till 60 months and on the y-axis we have the weight of the child in Kg. The growth chart gives concave graphs for children in Grades I, II, III and IV and as well as for normal children. For each of the grades we determined the weight for different age brackets of infants/children (starting from 1 month till 60 months). When the child is weighed, the weight is written below the data box at the bottom of the column corresponding to the month in which the child is weighed. Likewise we conducted this exercise for all ages and for all grades and generated the numbers of each points highlighted in the chart. Then, the survey data of weight of the child in Kg and age in month was used and applied to these norms of weight for age for different grades to get actual data on children in various grades of malnourishment.

- PHNST refers to Proportion of HHs not seeking treatment when ill (it includes those beneficiary and non-beneficiary HHs who either gave Home Treatment, Followed rituals, Consulted Faith Healer or gave No Treatment when their child was ill)

- PPH refers to Proportion of poor HHs (both beneficiary and non-beneficiary) reporting expenditure below Rs 3000 per month

- EICDS means Effectiveness of the ICDS Scheme (Based on Beneficiary Response). It is represented by the summation of three variables by giving them equal weights i.e. it is a summation of Performance Indicator (PI), Proportion of Effective Coverage (EffCov) and Behavioural Index.

  EICDS = (PI/3 + EffCov/300 + BehInd/3)*100

  (a) **PI:** Performance indicator is an index to judge the performance of the ICDS Programme based on various indicators which are as follows:

  1. Average of days received food,

2. Proportion of Children (12-23 months) fully immunised,
3. Proportion of children able to write alphabets/words (those beneficiary children attending PSE and in the age group 3 yrs to 6 yrs),
4. Proportion of women reporting attended NHE meetings,
5. Proportion of mothers reported to have sought help reporting seeking help from AWW when their child got sick,
6. Proportion of mother reporting received deworming tablets from AWC,
7. Average attendance (number of children aged 3-6 years) based on 3 sudden visits by the field team.

A standard technique of index analysis used by UNDP in its' first report on "Human Development Report, 1990" has been applied to construct the Performance Index as follows:

Calculate: M = 1 – [(Maximum - Actual)/Range]

Index value = Summation of M of all indicators
Number of Indicators

(b) **EffCov:** Percentage Effective Coverage (EffCov) = [{Estimated number of children receiving SN from AWC (in lakhs)*(Proportion of children receiving SN) *(Proportion of Days for which SN delivered)}/ {Estimated Population 6 months - 6 years in lakhs}]*100

(c) **BehInd:** it refers to Behavioral Index which is a composite index consisting of several indexes. The various indexes which is part of BehInd are as follows:

1. **NHE Child Index:** This index has been calculated using the following indicators-
Proportion of Mothers following advice given during NHE meetings
   - Regarding taking care and monitoring of child's growth
   - Timely immunisation of child
   - About breastfeeding the child
   - About colostrums feeding
   - About treatment of diarrhea/minor illness
   - About preparation of nutritious food/feeding practices
   - Provide medicine/consult AWW during illness
   - Importance of education of the child
   - Cleanliness and hygiene

   The NHE Child index was calculated using the methodology given by UNDP.

2. **NHE Mother Index:** This index has been calculated using the following indicators-
Proportion of Women following advice given during NHE meetings
   - About immunisation during pregnancy
   - About institutional delivery
   - Advice regarding precautions in case of home delivery
   - About feeding practices during pregnancy and lactating period
   - About correct posture during pregnancy
   - About correct posture during breast feeding

- About self care & health (cleanliness & hygiene)
- About disease/illness
- About nipple hygiene
- About family planning

The NHE Mother index was calculated using the methodology given by UNDP.

3. **PSE Learning Education Index:** This index has been calculated using the following indicators-
   Beneficiary child who is in the age group of 3-6 years and is attending PSE, is that child (in Proportions) able to
   - Read Simple words
   - Count numbers
   - Write alphabets/words

   PSE Learning Education index was calculated using the above methodology.

4. **PSE Learning Behaviour Index:** This index has been calculated using the following indicators-
   Beneficiary Child, who is in the age group 3-6 years and is attending PSE, does the child (in Proportions)
   - Wash hands after using toilet
   - Respect elders

   PSE Learning Behaviour index was calculated using the above methodology.

5. **Weight at Birth Index:** Weight at Birth index was calculated from proportion of child weighed at birth and using the methodology given by UNDP.

6. **Colostrum Feeding Index:** This index was calculated using the data for Initiation of Breastfeeding by the mothers in Proportion within one hour of birth and using the same methodology as above.

7. **No Diarrhoea Index:** This index was calculated from Proportion of children who had no diarrhea and using the above methodology.

8. **Deworming Tablet-AWC Index:** This index was calculated from the proportion of mothers reporting having received deworming tablets from AWC and using the same methodology.

9. **Use of Iodised Salt Index:** This index was calculated from the proportion of households who use iodised salt, using the same methodology as above.

10. **Use of Boiled Water Index:** To calculate this index data on the proportion of HHs giving boiled water to their child during illness was used as per the above methodology.

11. **Awareness to Prevent Anemia Index:** This index was calculated based on the proportion of HHs aware of measures to control anemia (i.e. the HHs who are

consuming green leafy vegetables, IFA tablets, sugarcane juice, carrot/tomato/drum stick etc) and using the same methodology.

Based on these above mentioned Indices, 'BehInd' has been calculated using the methodology given by UNDP.

- **DV:** It is a Dummy Variable derived from Deviations from the regression line. The negative deviations for the states of Haryana, Punjab, Tamil Nadu and West Bengal were maximum. So we used DV of 1 for these states and for rest of the states used 0 as the DV.

Appendix Text 6.1: Comments of Ministy of Women and Child Development on the final draft report of ICDS submitted by NCAER

I. General Comments

- The draft Report has attempted to throw some insights about the functioning of the programme at the field level. While trying to provide information on the questions outlined in the Terms of Reference, the Report has used some innovative methods of analyses that open up needs for further research in ICDS to assess the true outcome/impacts of ICDS based on a scientific study design.
- Many of the findings emerging from the study reiterate several critical points about the functioning of ICDS Programme that the MWCD itself has been raising since long. Some of the study findings also endorse the MWCD's own assessment of performance of various States with respect to various indicators.
- However, the Ministry feels that though there have been several significant findings and innovative analysis carried out in the study, their programmatic relevance and use for making corrective actions, could have been enhanced by closer engagement of the Research Agency with the MWCD.
- In a large scale survey like the present one, it is a normal practice to develop draft tabulation and analysis plan prior to the data analysis, in accordance with the study objectives/requirements of the client. While the same must have been done by the Research Agency, it was not shared/discussed with the MWCD before finalizing the draft Report.
- The presentation style of the findings that has been followed in the Report inhibits one, especially the programme implementers, to quickly understand the key results emerging from the study with respect to programme inputs/processes/outputs/outcomes. One has to make special effort to understand even some basic analyses contained in the Report and interpretation of the results.
- It is not clear whether all conclusions/recommendations made in the Report are based on the data collected from the field or based on mere review of literatures.
- Use of composite indices in respect of several indicators analysed in the Report, though appear to be useful in comparing status and performance of ICDS across states/UTs, their use for understanding the situation within a state or to identify managerial actions by the programme authorities for improvement, is limited.

II. Some of the key points highlighted by the study and MWCD's comments thereon are as follows:

A. Infrastructure

Finding of the study: Though one does not find one-to-one correspondence in the two sets of Ranks, there is high degree of association between **FI** (*Infrastructure Index)* and **PI** (*ICDS overall performance index)*. For the 20 large States the simple correlation coefficient between the two indices is **0.70**, which is statistically significant. In other words, a large part of the poor

performance and insignificant impact of ICDS on nutritional status could be explained by the inadequacy of infrastructure of AWCs.

MWCD's comment: the infrastructure gaps in ICDS found in this study as well as the criticality of infrastructure in determining the impact of the programme are well known. Though there is no provision for construction of AWC buildings (except North-Eastern States) in ICDS, the Ministry has been emphasizing this issue since long and pursuing with the States to mobilize funds from several sources/other schemes for building AWCs on priority. Ministry of Minority Affairs, under its MSD Programme, is also providing funds for construction of AWC Buildings in 90 identified minority concentration districts, as a gap filling measure.

NCAER: Study team found out only about the availability; not the providers of the building etc.

B. Behaviour Change

Finding of the study: In general, the practice of breast feeding within an hour of birth is found to be more widespread among ICDS beneficiaries;

MWCD's comment: Considering that the infant feeding practices are one of the most difficult behaviours to change in the community, this finding of the study is very important indicator of focus of the programme on ground. It is important to recognise that the MWCD has been emphasizing on this critical behaviour in ICDS through nutrition and health education, training of AWWs and IECs. The widespread practice of this behaviour which is very critical to neonatal survival reinforces the importance of the ICDS programme for reaching interventions to household level rapidly.

NCAER: This is not comment.

C. PSE Component

Finding of the Study: ICDS has also positively influenced formal school enrolment and reduction in early discontinuation among beneficiaries;

MWCD's comment: While most of the earlier reviews and general perceptions about the effectiveness of the non-formal pre-school education component of ICDS programme have not been encouraging, this study finding is very important to recognize the ICDS's role in early childhood education. Despite the infrastructural limitations, the programme has been able to influence school readiness and retention through its pre-school education component. This finding reiterates MWCD's prioritization of PSE component and calls for further attention to addressing gaps in it in diverse contexts especially the urban areas.

NCAER: This is not comment.

D. Impact of ICDS/Issue of Convergence

Finding of the Study: To circumvent this problem an attempt is made to explain inter-State variations in Child Mortality Rates and proportion of malnourished children in multivariate analyses. The results tend to suggest that, *ceteris paribus,* the **effectiveness of delivery system of ICDS contributes to reduction in CMR and child malnutrition.** The results also point to the importance of **convergence of interrelated services,** such as, benefits of anti-poverty programs (MGNREGA) and other initiatives for improving access to public services (NRHM,

Bharat Nirman and RD schemes) in realizing the potential of ICDS. The emphasis then should be placed on **effectiveness of implementation and meaningful convergence** of services. Survey data reveal that coordination among providers of complementary services, such as, health facilities, safe drinking water, sanitation etc. and facilitators, like PRIs, Coordination Committees and other grassroots level institutions **was ineffective in most States.** This observation is not new and has been made in many concurrent evaluation studies of similar development interventions.

MWCD's comment: It is encouraging to note the findings that the ICDS programme contributes to reduction in child mortality and malnutrition in the country. As none of the earlier evaluations or studies tried to attribute or define contributions of different programmes to the critical issues of mortality and malnutrition, the ICDS programme's efforts were not credited the way this study has been able to do. Application of similar approach to identify relative contributions of national investments will need to be undertaken more widely.

The observation about need for greater convergence of complementary services at grassroots level is appropriate and MWCD considers that convergence at higher levels of management and leadership will be essential to facilitate the convergence of grassroots level.

E. Expenditure on Supplementary Food

Finding of the study: On the basis of NCAER survey information on the proportion of registered beneficiaries receiving SN and actual number of days SN was served, only 40% of the reported expenditure could be accounted for at the national level.

The divergence between reported expenditure on SNP and spending that could be justified on the basis of grassroots reality is a matter of serious concern. It may be possible that states have used a part of the reported expenditure on SNP for other components of ICDS program. However, collateral evidence gathered during field survey, discussions with functionaries and knowledgeable individuals as also the case studies conducted by NCAER tend to suggest that in many States, a large proportion of the unused funds meant for SNP was most likely siphoned off (for the FY 2008-09 amount of SNP allocation diverted is estimated at RS. 2943 Crore).

MWCD's comment: As the resources for SNP are distinctly ear-marked and provided through the consolidated fund, there are no possibilities of diversion of funds for non-SNP aspects by the states. The MWCD is therefore, of the opinion that the above findings need a closer examination of the data-collection, approach to the data analysis and basis for drawing such conclusions. The different approaches of food distribution followed for different beneficiary groups (Spot-feeding and Take Home Rations) and variations in the food models across states will need to be considered in this analysis. Similarly, the data from ICDS reporting system on food distribution (AWC Register) will need to be triangulated with the food receipt reported by the respondents during the survey in arriving at such conclusions.

The observation on 'siphoning-off" of resources seems to be based on 'anecdotal' information, which is referred to as "collateral evidence". This requires significant substantiation with the State-wise data. Subsequent summarization of possible modus-operandi of siphoning-off etc. presented in the report is based on a few case-studies developed during the field survey. Generalization of such observations is not appropriate and the findings from such case studies can only be used to design a more scientific investigation. The MWCD suggests that the analysis

and interpretation of entire SNP related component should be reworded, in consultation with MWCD.

NCAER: For this analysis both primary (current ICDS evaluation survey data) and secondary data have been used. The secondary data (expenditure on SNP and number of children aged 6 months to 6 years who received SN in 2008-09) have been collected from Ministry of Women Child Development website and these data were verified by the study team from WCD division, Planning Commission as well as from MWCD officials. Data received from MWCD in Table 10.1. Financial norms per beneficiary specified by the Ministry of MWCD have been taken (Reference to the government norms on this matter has been given in the report in Chapter 1; Section 1.9.3). From the current ICDS evaluation survey data, 'proportion of delivery registered beneficiaries who received food' and 'proportion of days SN were delivered to delivery the registered beneficiaries' captured through survey instruments were taken into account.

Three basic parameters used for estimation of the amount of money spent on SNP are:

i. Proportion of delivery register-beneficiaries who received SNP (about 64% at all-India level);
ii. Proportion of days SNP was delivered (192 days out of 300 days in a year) to delivery register –beneficiaries;
iii. Financial norms per beneficiary as specified by the Ministry of MWCD.
iv. (Reference to the government orders on this matter has been given in the report).

The MWCD should pin point if any of these estimates is out of place. On receipt of specific comments we can look into their suggestion of undertaking a scientific investigation to arrive at more precise estimates, if need be. It is expected that MWCD would come up with sound alternative estimates of these three parameters to support their claim.

It is up to the MWCD and States to explain where the amount of money, which cannot be accounted for is going; the implementing agencies did not provide us with a break-up of expenditure out of SNP-fund, though we had sought this information; NCAER, therefore, had to rely on "Collateral Evidence" for explanation. Such collateral evidences, inter alia, include conversations with functionaries, some of whom have admitted of rampant corruption in ICDS. There is enough evidence in this regard, but we deemed it inappropriate to report in a document which will be made public.

It is also misunderstood that the observation on 'siphoning off" of resources is based on case studies. This observation we have made is totally based on the both secondary as well as primary data. Again we want to reiterate that the website data on expenditure on SNP was verified by the study team from WCD division, Planning Commission. The case studies supported the findings and explained some factors through some 'collateral evidences'.

Suggestion in the Report: Per capita norms of financial allocation for SNP (Ref: Table 10.7 in chapter 10) need revision every year and must be in keeping with the rising food prices. It was noted during field survey that low per capita allocation often lead to compromises with quantity and quality of food. It is also possible that AWCs overstate attendance rates to overcome problems arising out of lower per capita norms. A rationalisation of the cost norms, not only for SNP, but also other components is warranted.

MWCD's comments: The Ministry agrees with the suggestions of revising the per capita norms of financial allocation every year keeping in view the rising food prices and will be exploring possibilities of operationalizing these suggestions.

NCAER: This is not comment.

v. Monitoring in ICDS

Suggestion in the Report: The existing monitoring system of ICDS needs to be strengthened and revamped. The responsibility of data generation at source (i.e. at AWC) should not be with the staff of DWCD, primarily because some aspects like, classification of children according to standard grades of malnourishment, growth monitoring, assessing types of medical interventions required, use of weighing machines etc. warrant involvement of trained/technical personal. The study also reveals that official statistics on nutritional status of children generated departmentally do not represent grassroots reality. Misuse of available SN-funds can be linked to unreliable/unrepresentative data. Secondly, given the primary objective of the intervention, the monitoring system should generate not only process data, but also output and outcome data with appropriate periodicity to ensure gradual movement towards program goals.

Responsibility of data (on output and outcome) generation at AWCs should be with a third party, preferably with the health functionaries (which may call for measures to strengthen grassroots level institutions providing health services); most existing M&E staff at CDPO may be transferred to the Health Department and State Nodal Office; the data should then be transmitted to the State level Nodal Office of ICDS for processing, consolidation, diagnostic analysis and onward transmission. The CDPO may concentrate on routine process monitoring of inputs and activities.

MWCD's Comments:

- The Ministry recognizes the importance of improving the existing monitoring system in ICDS and it currently undertaking a process to reform the entire programme monitoring system. However, suggestions related to assigning activities like 'classification of children according to standard grades of malnourishment, growth monitoring, assessing types of medical interventions required use of weighing machines etc.' to an agency external to ICDS, do not appear to be operationally feasible and appropriate . Growth promotion which is a more critical component of ICDS functioning requires growth monitoring by AWWs themselves. More investments to enhance their capacities may be better option than assigning the task to an external agency.
- While **outputs** need to be monitored more frequently using the programme monitoring system, **outcomes** of ICDS programme are better measured through less frequent assessments/surveys (annual/bi-annual), through an external agency. As such, <u>health functionaries cannot be taken as third party for measuring outcomes of ICDS, as three of the ICDS services are actually delivered through them.</u>

NCAER: The issue here relates to unreliable official statistics. The existing system needs to be substituted by a system that would help generated reliable grassroots level data on the number of beneficiaries receiving different services, measurement and monitoring of weights of children. The issue is flagged not to trigger an academic debate, but to drive home the point that a better M&E system should be put in place. There could be more than one way of doing this. MWCD

should have given their alternate system rather than be critical of the system suggested by NCAER. It is well known that there is no unique way of addressing such issues.

III. Specific Comments on data analysis, methodology and some of the findings in the draft Report:

The Report will require some revisions in order to make it more useful for the Programme Authorities, especially at the State level. Some of the specific issues that may be considered for improving the Report are summarized below:

(i) A Summary of findings on key indicators at the national level needs to be included in the Executive Summary section for easy reference.
(ii) Except for the issues of coverage (in respect of SNP), infrastructure and supplementary nutrition, detailed analyses on other aspects of the programme are not available in the draft Report.

NCAER: NCAER has prepared an impact evaluation report as per term of reference given by Planning Commission. It certainly has not covered all respect of ICDS, nor was it warranted for our analysis. Such observations should take into account the primary objective of the Study. This remark is not contextual.

Sampling: The Sample size of 1500 AWCs selected from all 35 States/UTs for the study was pre-determined. However, given the fact that this **sample size is grossly inadequate** to represent a total universe of about 7 lakh AWCs (that were set up before March 2005), utmost care is needed while presenting the national or state level figures. While the state averages, percentages etc. presented are reported to have been weighted in order to make them representative at the state level **(Section 5.1, pp -37),** there is no mention of using of weights for arriving at the national figures and in case there is no weighing, the national figures may not be interpreted as true representation of the facts.

NCAER: The sample size was decided by PEO, PC. Weights were used for arriving the national figures (Please see Chapter 4; Section 4.5.1).

Methods of data analysis: There is no analysis of key indicator disaggregated by various socio-economic characteristics that have proven linkages with the programme results such as age group of the children (<6, 6-12, 12-36 and 37-71 months), caste (SC/ST/others), boys/girls, rural/urban/tribal, education level of respondent mothers, etc., as relevant to the specific indicators. This type of analysis is a standard practice in any cross-sectional study. In the absence of this, it is not possible to infer about how much percentage of children below three years who are getting specific services at AWCs or whether there are any significant variations among SCs and STs with respect to various in ICDS. Most of the standard indicators related to ICDS services are children's age-sensitive, e.g. monthly weighing (of below 3 year children), full immunization (out of those who completed 12 months), exclusive breastfeeding (below 6 months), complementary feeding (above 6 months with a denominator of 9-12 months children), etc.

NCAER: The sample size was decided by PEO, PC. The Sample size was too small to analyse the disaggregated data by states. Moreover, the estimates of such break-up (suggested above) will not give the valid estimates.

Missing Denominators: Also, some basic way of presenting the analysis in tables has not been followed in the main Report. Though percentages and averages in respect of various variables have been indicated in the Tables, there is no mention of the denominator (N). In the absence of N, simple percentages may mislead the readers.

NCAER: There is no mention of denominator as all the estimates are weighted.

Use of Indices: Throughout the Report, most of the indicators have been converted into state wise index (considering the range of variation with in the given state) and several indicators have been averaged and converted into composite indices for the state then for all India level. However, there is no explanation of what the composite index means from programme perspective. While such indices are useful for comparing the situation across states, there is no use of them for understanding the situation within a state or to be identified managerial actions by the Programme Authority for improvement. While the objectives of this study did not include comparing of ICDS performance across states, the entire report is focused on such comparisons and it does not provide information on gaps in each state. Also, this approach of converting into multiple indices and composite indices may not be the appropriate way to present the research finding with such a small sample size.

NCAER: When there are too many factors impinging on a phenomenon and the number of observations is inadequate to give due importance or separate treatment to each, it is customary to construct an index to ensure that each has been given due consideration in analysis. Well, NCAER has given component-wise details of each such index and it is easy to understand whether the components considered are relevant to the purpose at hand. Once, one agrees that there is relevance of the components considered, the message is loud and clear, viz; due attention needs to be paid to each area of concern by the implementing agencies and not the index per se. The basic data (estimates from the survey data) of all the indicators used for indices are given in the respective chapters and appendix tables.

For example: **In Table 6.1 (pp-43 of Vol I),** while presenting the infrastructure situation, there is presentation of mean and standard deviation of percentages from 35 states and UTs, which is theoretically unacceptable. While the Report does not provide any interpretation of this information, the subsequent estimation of an **infrastructure index** *(FI)* pools together varied types of indicators (Total 12), some of which are related to periodic supplies, some are one-time investments and some others are about capacities/ education level of AWWs. Though this is one example for illustration, the whole Report is filled with such estimations of indices which are grossly incorrect and also make very little sense for programme managers to take action.

NCAER: The Infrastructure Index (IF) needs to be understood differently. The idea implicit in construction of FI is as follows. The AWCs need to be equipped with certain basic facilities to deliver the six services and discharge other functions, such as, growth monitoring, record keeping etc.

It must be appreciated that different AWCs are in a different position w.r.t the identified basic facilities, while all the facilities are important for quality delivery by AWCs. The only way to arrive at an average quality of infrastructure (of AWC) in a state is to integrate the differential position of AWCs through an index. Before doing this the standard method of converting each into a factor that is free from unit of measurement (sen-Anand technique) has been followed. This has subsequently used such indices to explain various phenomena. On the question of "stock-flow" concept referred to by MWCD, let us reiterate that all the identified facilities have

been taken as stock of facilities at a point of time (i.e. 2009) in a state affecting quality of delivery of services by AWCs. We have not looked at the facilities from the perspective of investment requirement of MWCD/states. Our limited concern is to examine how service delivery is affected by lack of facilities. The basic data (estimates from the survey data) of all the indicators used for indices are given in the text (Chapter -6).

In the section on **Child Mortality (CMR) and ICDS (Ref. Chapter 9, page 130-132)**, an attempt has been made to establish relationship between CMR and three 'explanatory variables', one of which is a composite indicator generated by this study, to explain child mortality:

- Index of performance of ICDS (generated by this study)
- Female literacy rate (NSSO)
- Poverty ratio (using Tendulkar Committee's estimate).

While this is an innovative approach but it does not seem to have any theoretical basis for explaining mortality and are definitely not comprehensive to explain child mortality. **Based on this analysis the study draws interpretations which do not seem to have significant programmatic implications in ICDS.**

NCAER: Yes, the variable included in the regression may not be exhaustive, but anybody can link CMR with poverty, nutrition, immunization/other health services and female literacy. We think for the report this analysis has thrown the important message for the policy makers.

Analysis of Nutritional Status of Children: *[*Ref. Chapter 8 (pp-122, Table 8.8) and Chapter 9 (Section 4, pp-135, Table 9.2)]

- There are number of findings on the nutritional status of children in the Report. But the Report has not followed the most commonly used analysis of *weight for age* data as done globally in any survey (followed in NFHS-3) based on NCHS or the WHO New Growth Standards. Instead, the study has followed the old method of grading of weight for age into grades 1 through 4, which is not the standard way of analysing the weight for age data from surveys. Estimation of percentages of children below and above 2 and 3 standard-deviations (SDs) from median/mean of the population (using Z –score) is missing in the analysis.

NCAER: It is important to remember that planning commission asked NCAER to do an impact evaluation of ICDS, in addition to other terms of reference. The commission did not ask us to derive alternate/comparable statistical estimates of "child malnutrition" in the country, for which the sample size was inadequate. That is why no attempt was made to derive comparable estimates of malnutrition available in the literature. The objective of studies and reports referred to is not "impact evaluation", but derivation of statistically valid estimates of the extent of mal-nourishment among children. With large sample size one can play with data to derive alternate statistical estimates and test hypotheses. In impact studies, we do not concentrate on testing of hypotheses, but more on the program being evaluated, constructing "treatment groups" and "counterfactuals" to get an idea as to how the programme is impacting on the beneficiaries and why. The focus is on causality and attribution.

- Also, there is no mention anywhere in the Report whether actual weights/heights of children were collected during the field survey. So it is not clear if only the growth

monitoring data from the AWC registers, which might not be reliable, has been used in the analysis.

NCAER: Yes, we have collected the actual weights of the children which are used in the analysis.

- **Ref. Table 8.8 (pp-122):** Analysis of impact of ICDS on nutritional status of children aged 7-60 months comparing between ICDS and non-ICDS population is very complex and does not appear to be of much relevance. It is strongly recommended that the Researchers undertake such analysis on the primary data collected and this will enable comparison with findings of other surveys, especially NFHS-3. Instead of doing such simple and standard analysis, the study has attempted to compute some complex indices, coefficients and dummy variables to explain the variation in nutritional status across states. The Research Agency may undertake the basic analysis first and then later attempt any further estimation.

Effectiveness of delivery mechanism **[Ref. Chapter 7, pp 99 onwards)]**: A number of questions are asked to the beneficiaries to assess the effectiveness of delivery mechanisms, most of these questions are relevant to understand the delivery as well as service utilisation. This section is in a way central to the entire study. However the analysis of data in this section is poorly done. Indicators in this section do not capture all the critical aspects maternal and child health and nutrition behaviours. E.g., there is no indicator related to complementary feeding behaviours. Also, the definition of indicators is not presented according to the international standards of measuring interventions, e.g. % of children having diarrhoea –one cannot make out from this indicator which age group of children is used and what is the reference period for diarrhoea episode. This indicator could have been formulated as: % of *children under three who had diarrhoea two weeks preceding the survey.* Also, there is no discussion on the State –wise variations in respect of indicators presented in Boxes 7.1, 7.2, 7.3, 7.4; pp-99-105. This set of data needs to be better organised to present status of each state against key indicators.

Subsequent to this presentation of national averages, the study converts all state performances into indices and then presents a composite index by combining seven indicators to arrive at the **performance index** (PI) by giving equal weights to each of them (**Section 3, pp-106-110).** This assigning of equal weights to each of the seven services does not appear appropriate programmatically. Also, some of the indicators considered for PI, are insufficient/inappropriate to judge the programme performance, e.g. receipt of de-worming tablets by mother, children's writing capacity of alphabets/words (in non-formal PSE, writing is not encouraged!) etc. then, the states have been classified into four categories along with presentation of mean, standard deviation and co-efficient of variation for the seven indices (**table 7.2, pp-107).** This mere comparison of performance of states as a composite index is not useful for programmatic purpose. Rather than complicating with conversion to indices, the performance of each state against each of the key indicators could have been discussed in details, so that the specific component could be strengthened or explained as appropriate.

NCAER: Same as III (vi). The basic data (estimates from the survey data) of all the indicators used for indices are given in the respective chapter and appendix.

Some of **the suggestions/conclusions** in the Report (**Ref. S-9, pp-xx-xxii)** appear to be sweeping, judgemental without adequate backing of the data from the study and in some places they are factually wrong. For examples:

- **Ref. Point # 5(pp-xxi)** –Suggestion to transfer M&E staff at CDPO level (there is no M&E staff at CDPO level!) to health department is factually wrong, and the suggestion to transfer responsibility of collecting output and outcome data at AWCs (no outcome data are generated by AWWs!) to health department does not consider the current pattern of distribution of health functionaries (one ANM per more than 5000 population), which makes it infeasible for generating data like the AWWs do. **(Ref. pp-xxi).**
- **Ref. Point #8 (pp-xxii)** –Emphasizing on supplementary nutrition as the most critical intervention for 'tangible improvement in nutritional status' is not based on technical appropriateness. Emphasis on behaviour change related to IYCF should have been greater than that on the SNP. Suggestions like transferring of funds for SNP directly to AWWs in their bank a/c instead of providing commodity supplies will need to consider the states' experiences in implementing these models and an approach of mixing both models and identify the efficiencies as well as possibility of ensuring quality. It is not clear, how these suggestions have been made and based on what evidence.

NCAER: Suggestions are suggestions and not mandated instructions. These are given to draw attention of MWCD to think of ways and means to remove weaknesses in program design and implementation for improving program performance. It would be more appropriate for the ministry to focus on weak areas identified in the study and look for more appropriate solutions for improving performance of ICDS. We have indicated the areas that need ministry's attention and our suggestions are based on survey data and our understanding of the various processes observed during the field survey. Since there is no unique method of removing weaknesses in the program, these can always be substituted by better ones from experts and seek their opinion on follow-up actions that could contribute to better performance of ICDS.

Overall, in all **the ICDS and non ICDS comparisons,** the variations in sample sizes are huge (size of sample from the non-ICDS category). In this situation is it statistically inappropriate to compare and draw interpretations.

Section 11 of Chapter 1 (pp-16) – Role of Donors in ICDS, is incomplete and factually incorrect.

The Report mentions about survey register, **child register** and delivery register (**Ref. Section 4.1, pp-27).** As per the guidelines, AWC maintains survey register, supplementary food and PSE register, immunization register, etc. There is nothing called **Child register.**

NCAER: in the Study, the information related to child is available has been termed as child register.

The ICDS beneficiary has been defined as those who received either 'only food' or 'both food and immunization'. The study should have defined those as the beneficiaries who have received at least 2 out of the six services during the last 3 months preceding the survey. It is possible that there are cases where children do not avail supplementary food, but come for PSE, or growth monitoring or their mothers come for nutrition and health education.

NCAER: Yes, logically many such alternatives are possible. But, let us recall the primary objectives of ICDS and money allocated /spent on various heads in the program. While we have examined the impact of PSE, NHE etc., the primary objective in the study is to analyse impact of ICDS on child malnutrition. Since a large proportion of ICDS budget is spent on SNP, it is expected that SNP is the primary focus, while other components of ICDS indirectly impact on

nutrition and child development. It is important to point that ICDS is not the sole provider of immunization and health services, even for the recipients of SNP. The study has clearly distinguished between short-to-medium term impact and relatively long-term impact of ICDS. SNP and immunization with health services are important for the former and PSE/NHE/PM&LM etc. are important from the perspective of long-term impact. Let us draw attention of MWCD to the fact that the study has considered both impacts. The regression analyses do consider long term impact by including both ICDS specific services (in addition to SNP) and general development indicators.

The **quantitative analysis on the gaps in coverage** has considered three types of gaps, as below and estimated the actual coverage:

- *Survey gap* (proportion of children not registered as % to total eligible children as per census)
- *Service gap* (proportion of children not in the delivery register as % to total number in survey register)
- *Delivery gap* (proportion of children not receiving SNP as % to total number in delivery register)

It is not clear how the survey gap has been measured given the fact that Census does not provide population data for the specific age group of 0-6 yrs (i.e. upto 5 yrs 11 months) and also the 2001 data has become old to use in 2009. No information has been given on the numbers of child population from the Census used in the analysis, in the absence of which it is not possible to conclude about the accuracy of the survey gap presented in **Table 5.1 (pp-32).**

NCAER: The study team estimated the population for the specific age group of 7 months to 6 years by states taking the single age-wise data from NSSO 2004-05 survey data and verified from other two large surveys namely, NFHS and NCAER IHDP conducted in 2004-05. It is estimated that these age groups constitute about 15% of the total population. In Census 2001, it was 15.9% of the total population. Total population for the year 2008-09 is taken from "Projection of population up to the 2026' by GOI.

In the **regular training of ICDS functionaries,** refresher training are conducted once in 2 years covering all aspects of the programme. The analysis on training of AWWs **(Ref. Sec 4.3 pp-78-79)** is factually wrong as it contains refresher training on growth monitoring and PSE having average duration of 9 and 10 days respectively. There is no provision for refresher training on any specific issue like the ones analysed in the report. In reality, such type of specific training are limited as per the needs and are undertaken as part of the 'other training' for 1-2 days duration.

In **Section 6.2 (pp-92-93),** the study has analysed **community leader's perception** about common diseases of children in the village, instead of actually assessing the situation through mother's interviews, as per the standard practice. It is not clear what role perception plays in assessing the morbidity status of the children.

Similarly, the community leader's perceptions have been assessed about the changes in IMR and CMR. This analysis does not seem to add any value to the programme performance.

NCAER: It is simply perception/opinion of the leaders on this issue.

Ref. Chapter 8 (pp-111 onwards): The analysis on the **behaviour change** among the mothers of indexed children which is the most key outcome of the ICDS programme, has been made in

the Report based on the information collected as part of nutrition and health education section questions. The behaviour change indicators are not arrived at, following the standard approach of assessing the actual practices by the mothers, but limit only to following of the advices given during NHED Sessions. This type of analysis is inappropriate and also not informative in the absence of any data on the total number of respondents for these questions.

NCAER: It is misunderstood. It is not on the advices given during NHE session. This index is based on whether the mothers follow the advices or not.

Considering the comments provided on the research design and approach of analysis as above, which indicate that several of the findings presented are inappropriate, the suggestions of this study will need to be reframed after appropriate analysis and comparison with other surveys like NFHS-3 and DLHS-3.

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