

“Data Verification of Routine MIS of Department of Women and Child Development in Madhya Pradesh”

**A dissertation submitted in partial fulfilment of the requirements
For the award of**

Post-Graduate Diploma in Health and Hospital Management

By

**Dr.Sutirtha Mazumder (PT)
PG/10/111**



**International Institute of Health Management Research
New Delhi -110075
April, 2012**

“Data Verification of Routine MIS of Department of Women and Child Development in Madhya Pradesh”

**A dissertation submitted in partial fulfilment of the requirements
For the award of**

Post-Graduate Diploma in Health and Hospital Management

By

**Dr.Sutirtha Mazumder (PT)
PG/10/111**



**International Institute of Health Management Research
New Delhi -110075
April, 2012**

Certificate of Approval

The following dissertation titled “**Data verification of Routine MIS of Department of Women and Child Development in Madhya Pradesh**” is hereby approved as a certified study in management carried out and presented in a manner satisfactory to warrant its acceptance as a prerequisite for the award of **Post- Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation

Name Signature

RAJIB DASGUPTA 

NITISH DOGRA 

Certificate from Dissertation Advisory Committee

This is to certify that Dr. Sutirtha Mazumder (PT), a participant of the Post- Graduate Diploma in Hospital and Health Management, has worked under our guidance and supervision. He is submitting this dissertation titled "Data Verification of Routine MIS of Women and Child Development in MP" in partial fulfillment of the requirements of the award of the Post- Graduate Diploma in Hospital and Health Management.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.


Dr. S.K. Patel

Assistant Professor

IHMR

New Delhi

Date-


Director

Astron Healthcare Consultancy

Gurgaon

Date- 14-5-2012



Astron Hospital and Healthcare Consultants Pvt. Ltd.

Certificate of Internship


Date: 11th April 2012

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. Sutirtha Mazumder** has successfully completed his internship in ASTRON Hospital and Healthcare Consultants Pvt. Ltd. from December 17, 2011 to April 10, 2012. During this period, he has worked on the project on “**Data Verification of Routine MIS of ICDS Project in MP**”, funded by DFID.

During his tenure with the organization, Mr Sutirtha was found to be hardworking, sincere, self disciplined and conscientious worker.

We wish him all the success for his future assignments.


Dr. Neeru Bhatia
Executive Director

Regd. Office : 6117/3 Sector - D-6, Vasant Kunj, New Delhi - 110070, India Ph. : +91-11-42148131/32 Fax : +91-11-42148132
E-mail: Contact@astronhealthcare.com Website : www.astronhealthcare.com

Corp. Office : L.G.F., Surya Kiran Complex, Old Mehrauli : Road (Opp. SBI Main Branch) Gurgaon, Haryana - 122 001
Tel.: +91-124-4267551 / 52 Fax : +91-124-4546200 Extn. No. : 214

ACKNOWLEDGEMENT

I owe my deep sense of gratitude to Dr.Yash Paul Bhatia, Managing Director, Astron Hospital and Healthcare Consultants, for having permitted me to carry out this project work and giving me the opportunity to learn various aspects of the study.

My special thanks to Dr. Neeru Bhatia, Executive Director, Astron Healthcare Consultancy, for his valuable guidance and support. I also want to thank Mrs Mousumi Kundu, Senior Public Health Consultant, Astron Healthcare Consultancy for their involvement and encouragement. They left no stone unturned in updating me about the subject. It is needless to mention Astron Team for their kind assistance throughout the study.

I am also grateful to Madhya Pradesh Technical and Assistance Support Team(MPTAST) AND Women and Child Development Department, M.P for constant support during the period of data collection.

I wish to express my deep sense of gratitude to my Professor, Dr. S.k. Patel. for his indispensable and unstained cooperation throughout the study. I am grateful in receiving his exemplary supervision.

My sincere thanks to Dr. L.P. Singh, Director, Dr. Rajesh Bhalla, Dean and Dr. Dharmesh Lal, Associate Dean, International Institute of Health Management Research, New Delhi, who always have been a source of motivation and inspiration.

Finally, yet importantly, I would like to express my heartfelt thanks to my beloved parents for their blessings, my friends /classmates for their help and wishes for the successful completion of this project.

Thank You.

Dr.Sutirtha Mazumder (PT)

IIHMR

PGDHHM (PG/10/111)

Table of Contents	Page Number
Acknowledgement	5
PART - 1 INTERNSHIP REPORT	8-14
Organization Profile – Astron	9-13
Learning’s and Experiences during Dissertation	14
PART- 2 DISSERTATION REPORT	15
Acronyms	16-17
Executive Summary	18-24
Chapter 1: Introduction	25-30
Chapter 2: Research Methodology	31-38
Chapter 3: Key Findings at the User level - Strengths and Weakness in Data	39-62
3.1. At the level of Anganwadi Worker	39-51
3.2. At the level of Supervisor	51-54
3.3. At the level of Child Development Project Officer	55-59
3.4. At the level of District Programme Officer	60-62
Chapter 4: Key Findings at the beneficiary level- Matching of AWC data with field responses	63-77
4.1. Adolescents	65-66
4.2. Pregnant Women	66-68
4.3. Lactating Mothers	68-69
4.4. Mothers of Children 0-3 years	70-73
4.5. Mothers of Children 3-6 years	74-77

Chapter 5: Moving ahead from Village to State -Data matching between groups	78-91
5.1. AWW MPR – Supervisor MPR	80-91
Chapter 6: Tackling Road Blocks, Paving Future Path – Issues and recommendations	92-108
Annexure	109-114
Annexure 1: Impressions of Research Team	109-114
References	115-116

PART-1

INTERNSHIP REPORT

Organization Profile –ASTRON

Astron is a professionally managed consultancy organization specializing in hospital and healthcare, promoted by Dr. Yash Paul Bhatia who has been at the forefront of hospital and healthcare facility management since 1981, along with a team of Healthcare and allied professionals. The combined strength of these professionals, 'Team Astron', forms the core strength of the organization. Individually, the team members have excelled in their respective fields of expertise and specialties.

Astron Hospital and Healthcare consultants are well endowed with technical expertise and experience to comprehensively assimilate projects in Hospital and Healthcare activities from conceptualization, execution, operational management to turn key project management. Their capabilities in contemporary and visionary planning of new hospitals is equally matched in adapting existing commercial buildings (hotels and commercial complexes) into healthcare delivery facilities. Functionality remains their watchword to ensure a healing environment for the seekers and ergonomic comfort for providers within the facility.

An unmatched distinction of the 'Team Astron' is its combined experience in setting up and managing large number of hospitals. Astron Hospital and Healthcare Consultants are uniquely poised to deliver advisory services in operational management for existing healthcare facilities and offer services to take on this role. The 'Team Astron' ascribes to concept of corporate governance for taking on the challenge of astute healthcare facility management.

VISION

To facilitate quality healthcare delivery system globally.

MISSION

Astron commits to developing, executing and optimizing quality healthcare delivery infrastructure and operating systems. It envisions a global reach for its conceptualizations enthrone local perspectives. It plans to do so through consultancy, turnkey project and

systems management services, research and creating a resource pool for healthcare organizations to access operational requirements.

Core Areas of Operations:

1. Division of Public Health
2. Division of Healthcare Human Resources
3. Division of Corporate Governance and System Optimization
4. Division of Facility Planning and Design
5. Division of Quality and Accreditation
6. Division of Equipment Management

IN-HOUSE INFRASTRUCTURE CAPABILITY

Astron has the following in house infrastructural strengths:

1. Corporate office and presence across the country:

Astron Hospital & Healthcare Consultants has presence across the country with corporate office located in Gurgaon. The office is equipped with all facilities of high end communication and software capabilities including AUTOCAD and wifi enabled web based system at all terminals. Team .Astron has its presence pan India with offices in Bangalore, Kolkata and Ahmadabad and representation in Punjab, Chandigarh, Rajasthan, Madhya Pradesh, Uttar Pradesh, Gujarat, Karnataka, Maharashtra, Bihar and Jharkhand.

Astron has strength of 42 full time qualified consultants and staff. The team includes Hospital Planning and management experts, public health research experts and professional with expertise in accreditation. The team also has technical expertise from specification from AYUSH in addition to architect and biomedical engineers.

2. Facilitating Quality Initiatives in Health Care Services

NRBPT Registration: Registration of Astron Hospital & Healthcare Consultants with National Registration Board for Personnel and Training (NRBPT) of Quality Council of India (QCI) has evolved its procedures to deliver high quality of consultancy services. The systems and processes are audited by an expert team from QCI at regular intervals to ensure that highest quality of services is provided uniformly by the ASTRON team.

Quality and Accreditation projects for State Governments: ASTRON has been entrusted with the responsibility of improving health care systems in many state governments including Gujarat, Andhra Pradesh and also for Government of India. Recently ASTRON has been commissioned for facilitating quality improvement in all the health care organizations of New Delhi Municipal Corporation.

JCI Collaboration: Astron has been designated as a collaborating and resource organization by Joint Commission International (JCI), the biggest international health care accreditation body of the world. Astron is privileged and honoured to be the exclusive organization having these privileges in Indian subcontinent.

3.Geographical Experience: Haryana, Punjab, Chandigarh, Rajasthan, Himachal Pradesh, Uttar Pradesh, National Capital Region, Maharashtra, Manipur, Karnataka, Madhya Pradesh, Gujarat and Andhra Pradesh

LIST OF CLIENTS:

Team Astron has successfully completed projects with the following organisation

Government Sector:

- Govt. of Uttar Pradesh
- Govt. of Punjab
- Govt of Haryana
- Govt. of Delhi
- Govt. of Himachal Pradesh
- Govt of Gujarat
- Govt. of Madhya Pradesh(Madhya Pradesh Technical Assistance Support Team)
- National AIDS Control Organization
- Delhi State AIDS Control Society

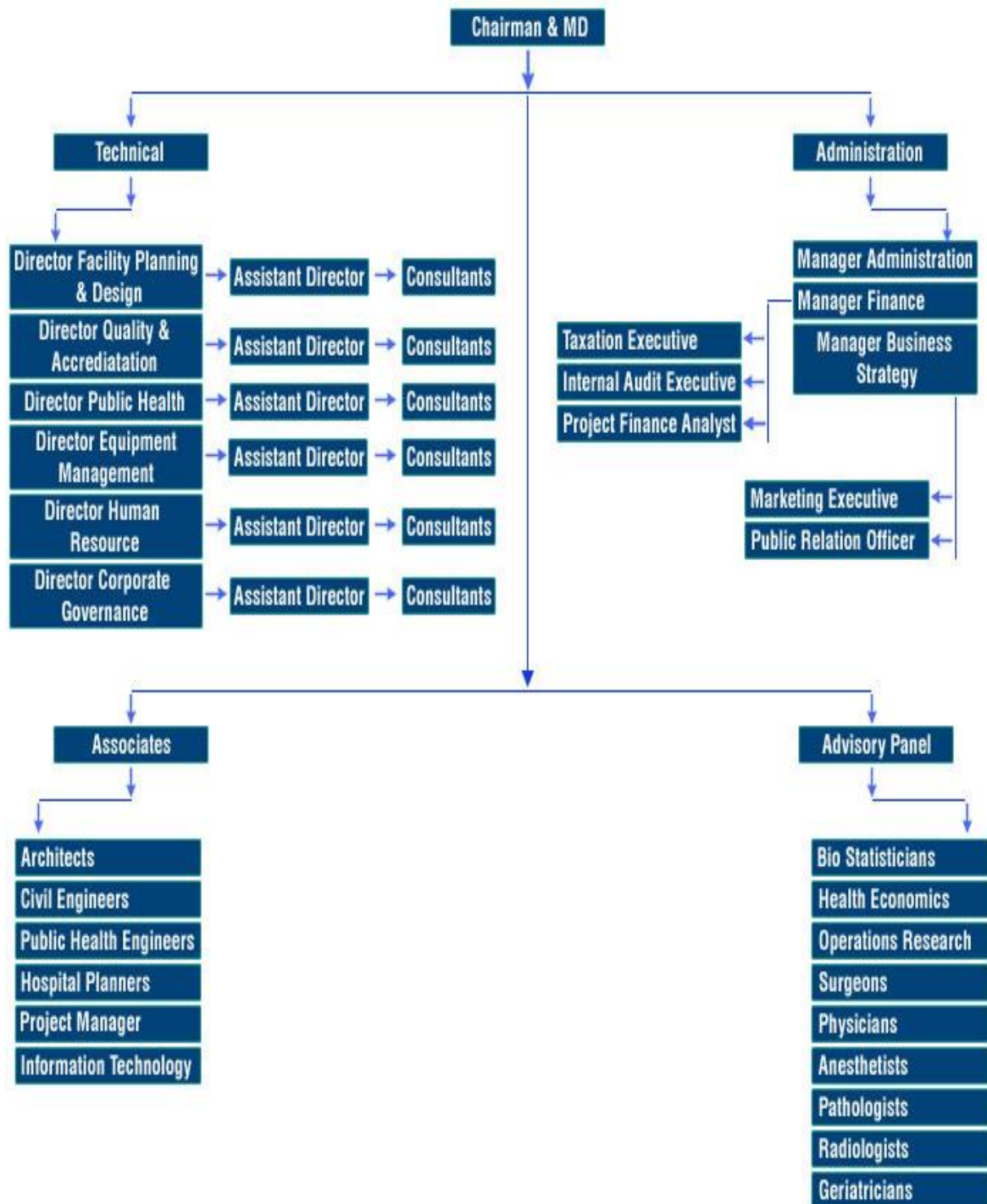
International Agencies:

- Clinton Foundation HIV/AIDS Initiative
- India HIV/AIDS Alliance
- PLAN India

Private Sector:

- Jaypee Group, NOIDA
- Sterling Addlife India Ltd, Gujarat

ORGANISATIONAL HEIRARCHY



Learning and Experience during dissertation:

I worked in Astron Consultancy as a management Trainee for a period of 4 months starting from December 17, 2011. In this time period I worked on this ICDS project which was concerned with data verification at Anganwadi level. During the period of my dissertation I was designated as Team leader and covered the whole Sagar Division for the data collection activity. I coordinated and managed 8 researchers of my team who were responsible for data collection on field. I used to supervise their work along with that collected data from supervisors and CDPO at block level.

Two months of field work, gave me deep insight about the whole functioning of the ICDS program and I learnt a lot. I was able to figure out loopholes in the system which proved as a good learning. Anganwadi worker of different districts: rural, tribal and urban blocks, all of them had different kinds of challenges some were similar in nature some were diverse. So, in all in was a great opportunity to learn and to sharpen both technical and managerial skills which we inculcated during two year post graduate program.

PART- 2

***DISSERTATION
REPORT***

ACRONYM

AWC	Anganwadi Centre
AWW	Anganwadi Worker
ANC	Ante – Natal Check up
ACDPO	Assistant Child Development Project Officer
APS	Avdesh Pratap Singh
CDPO	Child Development Project Officer
DPO	District Programme Officer
DWCD	Department of Women and Child Development
DLHS	District Level Household and Facility Survey
HH	House-Hold
HOD	Head of Department
IYCF	Infant and Young Child Feeding
IMNCI	Integrated Management of Neonatal Childhood Illnesses
ICDS	Integrated Child Development Services Scheme
IDI	In depth Interview
IFA	Iron and Folic Acid
IMR	Infant Mortality Rate
MIS	Management Information System
LLY	Ladli Laxmi Yojna
MPR	Monthly Progress Report
MSW	Master of Social Work
MUAC	Mid Upper Arm Circumference
MMR	Maternal Mortality Rate
PSE	Pre School Education
SPO	State Programme Officer

SNP	Supplementary Nutrition Program
TT	Tetanus Toxoid
TAST	Technical Assistance Support Team
TNA	Training Need Assessment
WHO	World Health Organization

Executive Summary

Maternal and Child Health Programs constitute a significant foundation in determining the healthcare status of all the countries in the world, as they influence the most important health indicators such as IMR, MMR, nutrition status, morbidity indicators etc. Eventually, they have a collective impact on the economic and social development of the country. However maternal and child health remains a matter of concern for almost all the developing countries with health indicators remaining far below average levels.

To combat this challenge, Integrated Child Development Scheme (ICDS) was launched in India in October 1975 aimed at holistic development of children. The Department of Women and Child Development in Madhya Pradesh is primarily responsible for the delivery of health and nutrition services at the village level through 78929 AWCs in the state.

In view of the geographical spread, prevailing socio-cultural milieu, vast population & coverage of beneficiaries as well as massive scale of ICDS functionaries in the state, monitoring and supervision activities pose a challenge at all levels in the state. The issues related to quality & integrity of data and its analysis in taking evidence based informed decisions to make required modifications/corrections in the ongoing programs to achieve set goals require a focused attention to improve program performance. Therefore, the Department decided to establish a system of independent feedback on data quality through verification of data on sample basis which will be used as a check on the performance of the internal management information systems and improve quality of routine data generated by the Department.

Consequently, Astron Hospital and Health Care Consultants were entrusted the task by DWCD and MPTAST to conduct a study on Data Verification of Routine MIS of Department of Women and Child Development in MP with the objective of verification of routine MIS data in 125 sampled Projects spread over 50 districts. The study also aimed at identifying bottlenecks and gaps in collection, compilation, processing and reporting as well as quality of data at all levels. The study results were aimed to guide/suggest improvement in quality of data generated through internal MIS of WCD and to suggest way (s) of establishing system of data verification/validation at Sector, block, district and state level for the DWCD.

Subsequently the agency developed a scientific and robust methodology to collect data from all levels of reporting units and verify the information/data with reports at different levels of reporting units to identify gaps in data collection, compilation, processing and reporting for verification and addressing the issues of quality and appropriateness of data.

The research team reached 20074 beneficiaries, 1000 AWWs, 250 Supervisor's, 124 CDPOs, 8 DPOs and SPO spread across 1000 AWCs, 125 Blocks and 50 Districts across whole of MP. The data captured and communicated at various levels was captured and re captured from the representative samples by scientifically planned sampling technique. The data so captured was analyzed and is being presented to suggest the level of inconsistencies, with possible reasons, suggestions and recommendations to overcome the challenges of this complex exercise.

The review of 1000 AWWs revealed a general lack of training on basic topics related to ICDS. Short supply of proper printed registers resulting in to data capturing on loose bound blank registers was found resulting in to major data loss. Non-availability and non-functional weighing machines emerged as a major cause for inconsistencies in weight recording. The interpretation of MUAC is erratic so almost all children are being taken up for MUAC thus losing focus on malnourished children requiring special attention. In spite of claims of regular home visits and regular and timely updating of registers, the data inconsistencies remain high thus belying these claims.

250 Supervisors interviewed during study revealed low levels of training on the key components of the ICDS program, on type of supervision and monitoring to be done during field visits and reporting and documentation. Through field visits majority of supervisors corroborate the claims of AWWs about near total weight recording but same is not evidenced in cross records and shows lots of inconsistencies. Generally the MPR is submitted to the supervisors during sector meeting, however there are incidents of habitual delays, however almost all the supervisors review the AWW's MPR and put it online within a week. Supervisory visits by CDPOs are made three times a month in majority of sectors, but most of the supervisors receive feedback from their respective CDPOs in the next monthly meeting only. This delay and gap in communication between the team members is a major constraint in generation of quality data

About 6% of the 124 CDPOs, who constitute an important managerial link, were under qualified (12th pass) for the task assigned, hence leading to compromised quality of supervision and program management. The awareness level on important indicators and their validation process is very low thus having a major impact on the validation of the data. The lack of clarity of role among the CDPO about the scope of work is another important issue needed to be addressed to.

Majority of the CDPOs in all sectors receive monthly reports from the supervisors on the scheduled time, though the quality of data reported is compromised due to the short time allocated for preparing and submission of reports giving them less time for reviewing and analyzing the same. Most of the CDPOs generally follow MPR validation guidelines as checks and conduct home visits, while some others cross check data entered with the actual AWW MPR data sheet randomly. Feedback of the data generated and analyzed by the CDPOs is provided on regular basis to the respective supervisors by the CDPOs in rural and tribal areas, however the urban CDPOs default in the same due to their other official pre occupations, and commitments.

Lack of appropriate supervisory mechanisms forces the reporting unit to act as evaluators of the self -reports, hence, compromising on a critical review, monitoring and quality of data generated. Supervisory visits by DPOs are significantly low with many CDPOs highlighting only 1-3 visits in their project areas with one visit in urban and 2-3 visits in tribal / rural areas. Some of the CDPOs report no feed -back on the MPR from the DPO. Inadequate understanding of importance of MPR due to low literacy of AWWs and data entry of the MPR being done by multiple, unskilled and non-authenticated sources are the major constraints in the current MPR system. Also inadequate availability of the required infrastructure for data compilation and entry and repetitive indicators resulting in confusion among AWWs add to the problem. Two important suggestions given by the CDPOs for improving the current MPR system relate to strengthening the capacity of AWWs and supervisors and putting in place proper system of data entry. Additional focus needs to be made on trainings in tribal projects.

Data verification of AWC data vis-a-vis Adolescents (3116) studied revealed major inconsistencies in documentation of weight and age of the adolescent girls and supplementary nutrition received by the girls. The inconsistencies were also observed in

the names of the persons who received THR from the AWW including name of respondent and fathers' name. The level of inconsistencies was more in rural projects followed by urban and tribal projects.

Matching between AWC data and direct Interactions with Pregnant women (4014), randomly selected for the study from rural, urban and tribal areas show a high degree of inconsistencies at the level of AWCs in significant indicators like date of registration at AWC, status of TT, distribution of IFA and date of ANC checkup, weight of women, date of conception of pregnancy, expected date of delivery and even date of delivery. Minor inconsistencies also surface on the status of SNP, services received at the Mangal Divas, last time weight recorded at AWC, number of deliveries, number of months of pregnancy, first weight recorded and date of first time weight recorded, name, husband's name, caste, number of days SNP received, number of children and number of deliveries and present month of pregnancy, inferring the inadequate understanding among the providers.

Mothers of child 0-3 years (4657) and AWC data analysis highlight major inconsistencies in vital indicators like recording weight of the child in the Growth Monitoring Chart, grading the child for malnutrition, date of health checkup, status of immunization of the children, Vitamin A Dose, assessment of malnutrition by monitoring the weight of the child, time when the child was weighed and graded for malnutrition. THR reflecting person and name who received THR, weight record, breakfast, lunch and third food provided in case of malnourished child also show high level of inconsistencies between. In addition, a review of the non ICDS indicators also show inconsistencies on registration for LLY and number of NSC received till date. The levels of inconsistencies were relatively high in the rural projects as compared to urban and tribal areas.

Direct Interactions with Mothers of child 3-6 years (4202) show major inconsistencies in data vis-à-vis AWC data in terms of vital indicators viz. weight of the child in the growth chart, grade of malnutrition, date of health checkup, status of immunization of the children, Vitamin A administration, time when the child was weighed and graded for malnutrition and parameters on THR reflecting person and name who received THR and registration for LLY and no of NSC received till date. Other inconsistencies observed were on date of birth and type of disability, gender, caste and father/ mothers name.

Indicators that are specific for this particular age group like date of admission and leaving the pre-school also surface as inconsistencies.

To track the quality and integrity of data at managerial level data matching between AWW MPR – Supervisor MPR & Supervisor MPR- CDPO MPR was scheduled The research team was able to access only 102 projects (AWW- Supervisor matching) and 99 projects (Supervisor- CDPO matching), distributed pro-rata in rural urban and tribal as per pattern in rest of the project . While comparing the indicators of all categories of population as reported by the AWW and supervisor high level of inconsistencies were observed as compared to that in the matching between Supervisor – CDPO where the discrepancies were lesser but yet very high, being highest in adolescent girls (98%).

Inconsistency in case of still births and live births is remarkably high in the AWW to supervisor matching as well as Supervisor –CDPO matching. In case of death of child of ages < 1year to 6 years, the inconsistency varies from (50% - 63%). Among the targets for SNP, inconsistencies in AWW – Supervisor MPR are much higher as compared to those in supervisor- CDPO MPR, with adolescents showing highest inconsistency in both. On the other hand, higher inconsistencies have been observed in AWW – Supervisor MPR as compared to supervisor CDPO MPR, adolescents showing highest inconsistency in both. A reverse order was seen regarding actual beneficiaries for SNP, where higher inconsistencies were observed in AWW – Supervisor MPR as compared to supervisor CDPO MPR, adolescents showing highest inconsistency in both again. In AWW to supervisor matching, the number of AWCs provided pre –school education also shows high inconsistency, which also reflects in registration in PSE and children present for PSE. The same indicators in supervisor to CDPO matching also show inconsistencies ranging from 77 – 81%. While comparing MPR of AWW and Supervisors, inconsistencies were also has been observed in immunization of pregnant women, in both the matchings.

A cause of major concern and attention of the service providers is that higher the degree of malnourishment, an increasing trend of inconsistency is observed in the age group 3-6, grade-I (72%), grade –II (75%), grade III (92%). Percentage of inconsistencies is very high in all the components in Supervisor-CDPO matching, i.e. Total pregnant women registered, total pregnant women registered on or before 16th week of pregnancy, total

pregnant women whose weight was taken, total pregnant women whose weight was less than the expected during pregnancy, total no. of below weight pregnant women who received supplementary Nutrition, total lactating women who received SNP till 16th week, no. of normal weighed lactating women, number of lactating women whose weight was less during pregnancy, total pregnant women who received IFA tablets, total pregnant women who receive IFA tablets till 12 week, number of children who had been given complementary feeding, number of children for whom Annaprasan has been done, total number of children who have been receiving complementary nutrition 4 times a day with inconsistencies ranging from 60 – 80%. The inconsistencies in case of AWW to Supervisor matching were much higher ranging from 79 – 98%.

Both AWW- supervisor MPR with that of supervisor-CDPO MPR show inconsistencies ranging from 70% - 90%, high in AWW –supervisor MPR. All the inconsistencies emerging at all level starting from AWWs to CDPO / DPO appear consistently and show a reducing trend in the ascending order i.e. inconsistencies reduce as they move upwards from AWW to DPO mainly due to the improved education levels, experience and empowered capacity of the service providers as we ascend on the hierarchical line.

Matching of Data at Block District and State Level was also done to ensure overall representation of the State, eight designated Divisions were selected and an proportionate representation of urban, rural and tribal projects. Data generated at the district level reveals varying degrees of inconsistencies in some of the significant indicators i.e. reporting of live births, reporting of deaths 0-1 years, death of children 1-5 years, Number of children weighed, classifying nutritional status, status of overall development of children (PSE), sanctioned and reporting of the AWC units, population size and SNP beneficiaries.

Data validation checks were applied for finding out the levels of Quality Assurance which revealed non-compliance to validation checks in 14 out of 15 indicators validated across all projects. Reverse data documentation was observed in some of the indicators.

Based upon above findings, recommendations to improve the present MIS system have been suggested comprising of techniques like Bar code technology, scanner system, tablet technology, voice recognition through PC and microphone, voice recording system via computer through cluster approach, IVR system as a tool for data verification.

Recommendations were also given to strengthen the validation by capacity building, designing of new MPR format, checklist for supportive supervision, validation checks to be an integral part of all field visits, existing MIS to provide software which has an inbuilt system of automatic validation checks. The issues based upon above study have been classified and short, mid and long-term recommendations have been made to address them.

As the success of programme implementation depends on several synergistic activities of several partners i.e.; service providers and beneficiaries, a mutually supportive, innovative, practical and time bound action plan will go a long way to achieve long term improvement of Mother and Child services in the Districts of Madhya Pradesh.

Chapter 1:

Introduction:-

Maternal and Child Health Programs constitute the significant foundation in determining the healthcare status of all the countries in the world, as they influence the most important health indicators such as IMR, MMR, nutrition status, morbidity indicators etc. Eventually, they have a collective impact on the economic and social development of the country. Maternal and Child Health is of prime importance as it has proved that good health and nutrition of the mother contributes to infant survival and ensures positive health of the child.

The health indicators in India reflect a concerning trend being far below average with IMR being 50 per 1000 live births, MMR 212 per 1, 00,000 live births - SRS 2010. This data varies grossly from state to state with IMR being highest in Madhya Pradesh (62 per 1000 live birth) and MMR at 269 per 1, 00,000 live births (SRS 2011). NFHS-III data shows that only 40.3% children are fully vaccinated in the state and 60% under the age of 5 years are suffering from under-nutrition indicating less opportunity for the children in terms of overall health and development in their life.

To combat this challenge, the Integrated Child Development Scheme (ICDS) was launched in India in October 1975 with a prime responsibility of the delivery of health and nutrition services at the village level through AWCs in the state and provision of structured services under the program to support Supplementary Nutrition, Immunization, Growth Monitoring, Health check-up and Referral services, Pre-school non-formal education, Health and Nutrition education. The beneficiaries of the program are children below 6 years of age, pregnant women, lactating mothers, adolescent girls and women of age group (15 to 45 years).

However, in view of the geographical spread, prevailing socio-cultural milieu, vast population and coverage of beneficiaries as well as the massive scale of ICDS functionaries in the state, monitoring and supervision activities pose a major challenge at all levels in the state especially at the grass root level. In the Department of Women and Child Development, the existing system of recording and reporting of information has made substantial progress, such as use of computerized MIS. This has helped in timely and regular reporting of data at various levels. However issues related to quality and integrity of data and its analysis in taking evidence based informed decisions to make the

required modifications/corrections in the ongoing programs to achieve set goals require a focused attention.

Rationale of the study:-

The paucity of high quality and objective data generated from routine MIS impacts the overall program management. It has been observed that on some parameters data is not correctly reported by ICDS workers mainly Anganwadi Workers while there has been under-reporting/over reporting of data on other parameters. This creates a data gap and compromises the quality of data being reported from field level. The main purpose or need of this study is to assess the skill level of AWWs, because the grass root level workers are the main pillar of any programme or scheme.

Consequently, Astron Hospital and Health Care Consultants were entrusted the task by DWCD and MPTAST to conduct a study on Data Verification of Routine MIS of Department of Women and Child Development in MP with the following objectives:

LITERATURE REVIEW

1. NIPCCD Report 2006: The study was conducted in 35 states and highlighted that 49% AWCs had inadequate space and 50% had no storage space for registers and other resources. Secondly, they also linked that low education level of AWW affects quality of data. Majority of the AWWs (43.2%) were upto 10th, 23% were 12th pass and 10% were graduate. Other finding of the study was that 60% of newborn and mothers are weighed at centre though it's better for 3-5 years old (83.3%) and only 68.9% pregnant mothers received IFA tablets.
2. Vrinda Dutta, 2001 did a study on factors affecting job performance of AWW and found that infrastructure of training centers has not been improved from 20 years. 74% AWW mentioned that such trainings are useful but others felt theoretical trainings doesn't provide them with enough confidence.
3. Adarsh Sharma *et al* (2005) - The study was conducted in 2 districts of Uttar Pradesh to see impact of ICDS training on service delivery. It revealed that AWWs who received Job training were equipped in better way with 5 skills -Story telling, Narrating children's story, organizing creative activities, number and word game required for organizing PSE sessions with their counterparts who did not attend the training.
4. Centre for Budget study conducted a study in 2009 on ICDS and Child survival issues in M.P. which highlighted

that some major findings. Monthly Progress report of Month May 2008 available on website of WCD shows that population of children under 6 years is 86.96 lakhs but as per as census 2001, population is 1.078 crore. It means 2.1 million children are out of focus. So gap between targeted population and actual coverage.

Secondly, only 37% AWW (out of 65 sample size) were having their own building, other 63% lack their own edifice and are running centers in rented structures, Panchayat Bhawans or at residence of AWW or helper.

Thirdly, it was striking to find that only 24% of the AWWs are imparting PSE to the 3-6 years old.

Fourthly, functional salter machine and adult weighing machine were present only in 72% and 66% of the AWC respectively.

5. A study conducted in 5 states including M.P. by Swami Vivekanand Youth Movement, Mysore (2009) along with collaboration with MOH&FW and WHO revealed AWWs faces a lot of challenge due to too much of documentation work, poor infrastructure at AWC, irregular supply of resources, salary disbursements were irregular, periodic non-ICDS responsibilities decreases their morale and enthusiasm. Secondly, it was seen that AWC are taken more as feeding centers and components of pre-school education is often lacking.

6. World Bank Report 2002 highlighted that majorly in all the states AWWs do not maintain complete and correct household survey of the corresponding village. There are gross disparities in the actual services being provided and data recorded and reported. Various indicators are over/under reported and do not depict the true scenario of the state.

Other finding disclose that growth monitoring though regular for attending beneficiaries remains weak in the absence of supervisors monitoring.

7. IIHMR, Jaipur (2000) conducted a study for world bank in 20 districts of Rajasthan, and the results were that only 24% pregnant women reported receiving IFA tablets and 29% reported receiving TT injections, 42% respondents mothers of children(6 months to 6 years) received Supplementary nutrition. But the data were indicating over-reporting of data and showed that all services are provided to majority of registered beneficiaries.

Second finding, highlights that 51% of mothers of children in age group of 3-6 years were aware of AWC in their area.

Thirdly, 30-40% of registered children in pre-school were found to be attending. Immunization survey registers were only present in 72% of AWCs which questions how do those centers, without registers are reporting on immunization status.

8. Anita Joshi et al (2001) did a study regarding Anganwadi workers Knowledge, Attitude and practices on Nutrition and found that about 95% urban AWWs weighed pregnant women correctly while only 65% and 60% rural and tribal AWWs respectively could weigh pregnant women correctly.
9. Chander Shekhar et al (2008) did a study in Madhya Pradesh and revealed that children of secondary and higher educated mothers are 1.9 times more likely than non-literate mothers to utilize services at AWC (like immunization) and keep a note on progress of their child. They keep track of child's growth and development and ensure attendance of child at AWC.

General Objective:-

- To undertake data verification of routine MIS in 125 sampled projects spread over 50 districts at AWWs level.

Specific Objectives:-

- To assess the AWWs skill level by means of data reporting and services provided to the beneficiaries.
- To identify bottlenecks and gaps in collection, compilation, processing and reporting as well as quality of data at all levels especially at AWWs level.
- To guide/suggest improvement in quality of data generated through internal MIS of WCD.

The agency developed a scientific and robust methodology to collect data from all levels of reporting units and verify the information/data with reports at different levels of reporting units to identify gaps in data collection, compilation, processing and reporting for verification and addressing the issues of quality and appropriateness of data.

Keeping in view the demography of the state, the study was conducted in a representative sample of projects and 125 projects were selected using proportionate sampling techniques which were in line with the existing ICDS proportionate distribution (Urban- 17%, Rural- 60%, Tribal- 23%). Accordingly care was taken to select the required number of projects from each strata of urban, rural and tribal categories i.e. U – 22, R- 75, T- 28= 125.

Chapter 2:

Research Methodology:-

The methodology adopted in the present study was to assess the skill level of AWWs through the data being reported by the Monthly Progress Report (MPR) at different levels. The MPR is comprised of both health and non – health indicators against which services are provided under the ICDS scheme. Ideally speaking MPR indicators are a reflection of service registers maintained by AWWs, in which records of a series of health and non – health services provided to the beneficiaries are recorded.

The process of data verification was initiated from the household information collected on a sample of pregnant and lactating mothers, children 0-6 yrs and adolescent girls selected by using simple random sampling technique and from there the verification methods were used at different levels e.g. Level 1 – AWW, Level 2 – Supervisor, Level 3 – CDPO, Level 4 – DPO.

1. Data Verification at the level of Between Group Comparison:

Matching technique of MPRs between 2 related reporting groups was undertaken to identify the accuracy of MPR reporting system.

- Level 1: AWW- Household level
- Level 2: Supervisor- AWW level
- Level 3: CDPO- Supervisor level
- Level 4: DPO-CDPO level

Level 1: AWW

The first level deals with information collected at the AWW/ AWC level where the beneficiaries include pregnant women, lactating mothers, children 0 – 6 years and adolescent girls. For interview purposes, the children under 6 years and adolescent girls were also taken as part of the interview with the mothers. Out of the four selected AWCs from a sector, one AWC was selected randomly to verify the records of the households from the AWW registers for the parameters indicated in the MPR obtained from the concerned Supervisor. *The basis of selection of AWCs was done taking into account the distance from the block headquarters i.e. <5kms, 5-10kms,>10kms to ensure an adequate representation of the entire block.* The scores of the indicators as received from the HH were compared with that recorded in AWW registers. From each selected AWC, the process of data verification was targeted at 19 beneficiaries to be covered in a group of 11 households, keeping in view that each HH may not have each category of targeted beneficiary i.e. HH with lactating mothers will have a child 3yrs but may not have adolescent or pregnant women. In cases where the required sample was not available in a particular village, the sample of that category was compensated for in the next village/ project depending upon the availability of beneficiary category. This issue was faced especially among the sample of lactating mothers and pregnant women who had migrated to their parents place for delivery. The matching performa used for verification of the data is as follows:

Service Indicators	Household 1	Household 2	Household N	Verification of each household data with the survey register and service register	Right/Wrong	Inconsistency recorded (Between the household information and Register)
---------------------------	--------------------	--------------------	--------------------	--	--------------------	--

Level 2: Supervisor

The MPR of all AWCs communicated to the Supervisor was taken as a base of finding out the reliability of data. It is believed that each indicator score of the Supervisor’s MPR would be equal to the total score of AWW MPR under the Supervisor’s jurisdiction.

Inconsistency in the score would be an indicator of wrong reporting of any nature. It can also be taken as an indicator of either under reporting or over reporting on respective indicators which may be intentional or otherwise. At this level, the MPR of AWW and Supervisor for the month of May were taken for matching at every project. Alternatively the MPR of block and non block Supervisors were taken to ensure that the sample is not biased. Where such MPRs were not provided by the concerned, a written declaration / justification were obtained.

The format of compilation of data is as follows

Service Indicators	MPR of AWW falling under Supervisor MPR 1, MPR 2, MPR (N)	Total of AWW MPR	Supervisor MPR of selected month (May 2011)	Inconsistency (Indicator of wrong reporting)
---------------------------	--	-------------------------	--	---

Level 3: Child Development Project Officer

The identification of level 3- CDPO inconsistencies in the reporting system also entailed the same methodology as mentioned in 2nd level. CDPOs prepare the MPR for DPOs by compiling the data received from the Supervisors' MPR. At the CDPO level, there may be some information /data, which are available only at that level especially matters mostly administrative in nature in addition to the health and non – health indicators of MPR. However the inconsistencies in totality (ICDS and Non ICDS indicators) can be obtained by comparing the data from the Supervisor MPR with the total of CDPO scores. At this level, the MPR of the CDPO and Supervisors for the month of May was taken for matching at every project. Where MPRs were not provided by the concerned, a written declaration / justification were obtained.

The format of compilation of data is as follows:

Service Indicators	MPR of Supervisor falling under CDPO MPR 1, MPR 2, MPR (N)	Total of Supervisor MPR	CDPO MPR of Selected month(May 2011)	Inconsistency (Indicator of wrong reporting)
---------------------------	---	--------------------------------	---	---

Level 4: District Program Officer: As in the above levels of reporting, I had proposed to conduct a hierarchical matching of MPRs but on ground it was found that the DPOs do not compile the reports submitted by the CDPOs at the end of the month. The monthly reports received from the CDPOs are forwarded as such by the DPOs to the state for compilation. Consequently, at the DPO level no matching of the CDPO-DPO MPRs was done.

Data Verification at the Service provider level:

In order to gather an in-depth understanding of the issues, assess gaps in the process and implementation related to MCH data, interview schedules were developed for each category of ICDS personnel i.e. AWW, Supervisor, CDPO and DPO.

Steps for the selection of sampling units

Step I

There are 453 ICDS projects in the state of Madhya Pradesh across 50 districts. The distributions of these projects are: - Rural - 274, Urban – 78 and Tribal – 101. *Out of these, 125 ICDS projects were selected using a proportionate sampling technique keeping in view the prevailing ICDS proportionate distribution (U-17%, R-60%, T-23%).* Accordingly care was taken to select the required number of projects from each strata of urban, rural and tribal areas i.e. *U- 23, R- 74, T-28 = 125.*

Step II

From each of the selected projects, one CDPO and two Supervisors were selected randomly with the help of a simple random sampling technique maintaining a near equal representation of block and non block categories.

Step III

From the catchment areas of each of the selected Supervisors, four Anganwadi Centres were selected using a simple random sampling technique with varying distance from the block head quarters so as to have a representation of the entire block.

Step IV

From the catchment areas of each of the selected Anganwadi Centres, eleven households were selected using simple random sampling technique to ensure the coverage of 19 targeted beneficiaries.

The details of the selected sampling units are given in the following table.

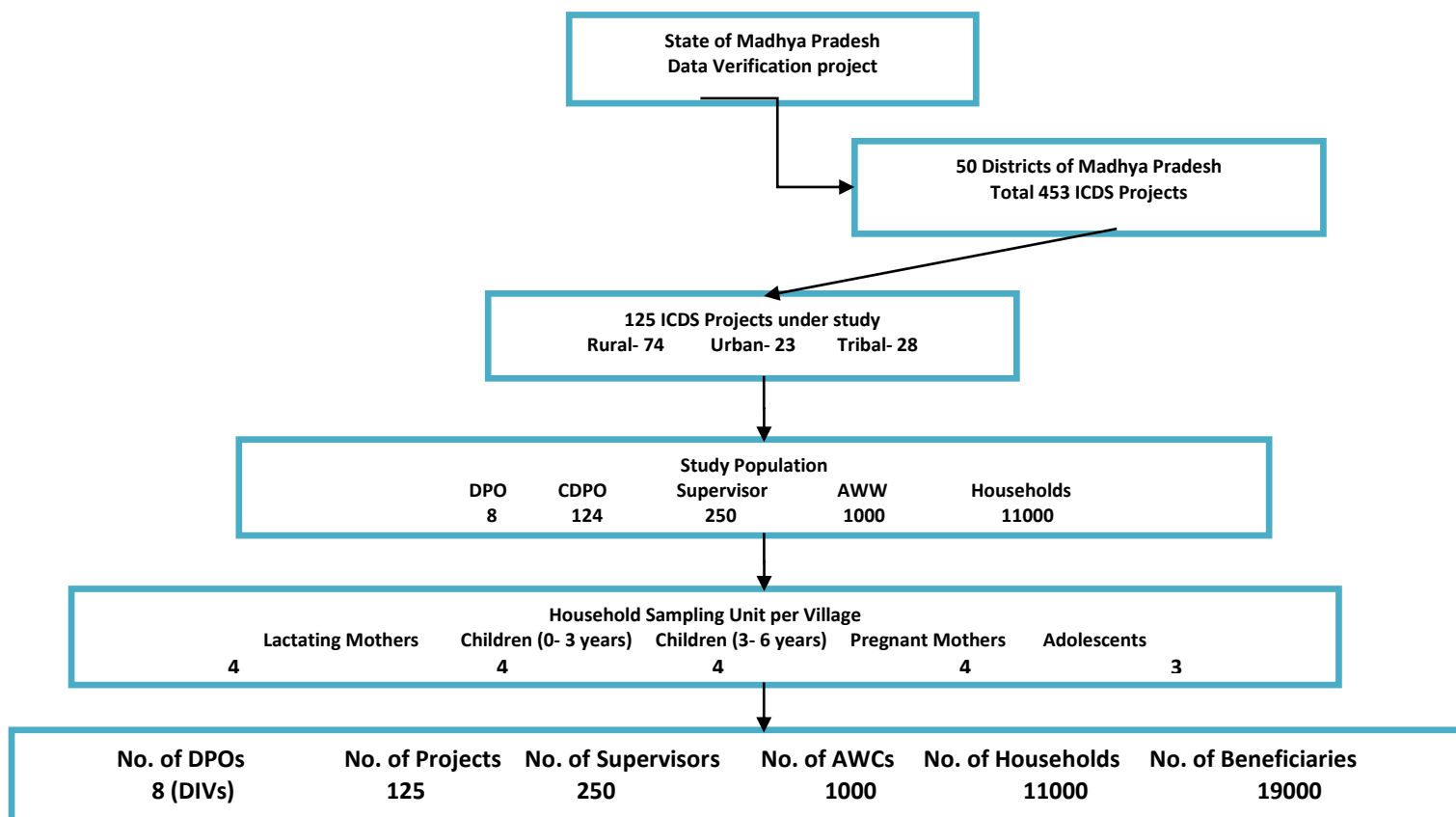
BENEFICIARIES PER AWC IN HOUSEHOLDS

(Sample size calculated keeping in view the probability of availability of the sample size in the households in the village)

Sample of House hold and beneficiaries/ village

Sample Type	Category	Number/ Type Beneficiaries	No of HHs	Total Beneficiaries
Lactating HH	mothers	Lactating mother+0-3yrs child/3-6yrs Child2	4	8
Pregnant HH	women	Pregnant Women+0-3 yrs child/3-6 yrs Child 2	4	8
Adolescent girl HH		Adolescent 1	3	3
Total			11	19

SAMPLING FLOW CHART



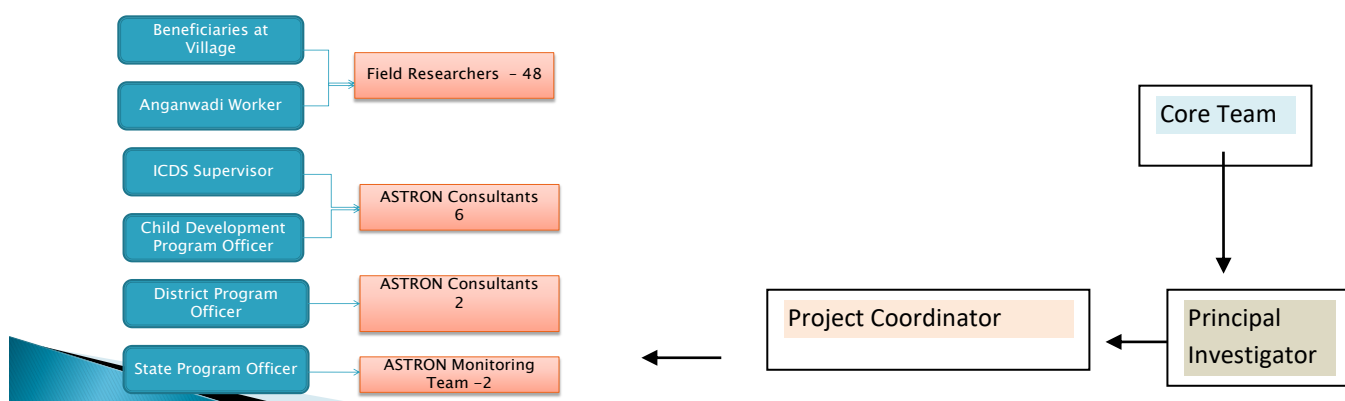
Type of tools and data collected:-

In this study we used quantitative tools, mainly two kinds of tools we used those are Interview schedules and matching formats for AWWs, Supervisors, CDPOs and DPOs. In matching formats we have two kinds; those are AWW- Supervisor and Supervisor-CDPO. Through this kind of tools we check the inconsistencies of quantitative data between beneficiaries and service providers.

Team Structure:

A well structured team of 65 experts in the field of public health, statistics, mother and child health, ICDS programs was put in place under the supervision of Astron consultants for ensuring the quality of data.

Research Team



A two days training programme of the research team was conducted at the Department of Social Work, APS University, Rewa on 3rd- 4th January 2012. About 60 participants holding Ph.D. degree and qualified MSWs having expertise in conducting public health studies were trained on a structured and approved agenda to be followed in the field.

Expert inputs were provided by a multidisciplinary team comprising of the Vice Chancellor APS University, HOD and Coordinator, Department of Social work. Administrative, programmatic issues and practical problems generally faced in the field were highlighted by Joint Director ICDS and Dean, Rewa Medical College. Expert inputs on the objectives of the study were provided by Dr Rahul Bhawsar, MP TAST.

Day one was dedicated to orientation of the research team with the research tools and investigator guide lines through group work, role plays and question answer sessions, moderated by our Team and MP TAST.

Day two comprised of field visit of all teams to AWCs to conduct an onsite field exercise followed by responding to feedback and queries of the participants, clarifying team formation, TORs, Movement Plan and Methodology to be adopted in field and sharing contacts. The teams departed to begin field work after the training.

A three tier monitoring of the field investigators was done to ensure cross checks and supportive supervision of the data in the field i.e. MPTAST officials- Principal investigator- Project coordinator- Field Supervisor- Self checks by research team.

Ethical compliance was maintained by a written informed consent taken from the respondents. In case of illiterate respondents, thumb impression was taken after explaining the objectives of the study. Confidentiality at all levels of respondents was maintained.

Chapter 3:

Key findings at the User level-Strengths and weaknesses

Chapter 3.1: At the level of Anganwadi Worker:-

According to the objective to assess the skill level of AWWs is the base of our study findings. We tried to find out that, does this grass root level health workers skill is affecting the ICDS system by means of data reporting and service delivery to the beneficiaries. So In-depth interviews were conducted with 1000 AWWs across 125 projects identified for the study taking adequate representation of urban, rural and tribal projects. Informal and formal discussions were conducted with the grass root work force to assess their capacity, systems and processes followed for data collection, compilation and reporting. Gaps highlighted and suggestions given by the AWWs have been documented in this chapter.

The majority of the AWWs fall in the age group of 31 to 40 years, across the three different types of projects. Almost an equal percentage of AWWs fall in the age groups below 30 years and above 40 years respectively. Only 1/4th AWWs belong to more than 40 yrs age group across all sectors, high in urban and tribal sectors.

The majority (73%) of the AWWs are 12th standard pass, with maximum dominance in the urban areas (92.4%), followed by 73% in rural areas and lowest in the tribal areas. In the tribal area 24% of the AWW are 10th pass, followed by 14% in the rural areas as education facility above 10th standard is generally not available in such areas. 9% of AWWs are only 8th pass with a comparatively higher (12%) percentage in tribal areas, followed by 10% in the rural areas. Education levels of 3% AWWs are only up-to primary level, with a very small percentage (1%) still being illiterate but functioning as full-fledged AWWs. Though the percentage of illiterate AWWs is very small, but such minimally empowered resource responsible for service provisioning can adversely impact the data collected, generated and reported, hence impacting the overall program performance.

In spite of the fact that the ICDS Department has a battery of sufficiently qualified AWWs who can be appropriately utilized for bringing about significant improvements in the program, still emergence of a high percentage of inconsistencies in almost all the indicators is a direct evidence of inadequate in-depth understanding of the processes to be adopted for operationalization of their defined scope of work as mandated by the Department.

Status of Training of AWWs

Review of the status of the training of AWWs reveals that orientation trainings on the components of ICDS program (> 31 days) have been conducted only for 25%

“Orientation trainings on the components of ICDS programme (> 31 days) have been conducted only for 25% of the total strength of the AWWs interviewed.”

of the total strength of the AWWs interviewed. Though sufficient importance has been accorded to cover most of the components related to the scope of work of the AWWs but *important issues like immunization and specialized trainings on IMNCI and IYCF appear to have not been significantly touched upon. Also refresher trainings have not been given adequate importance to strengthen the capacity of the AWWs.*

Additionally different training programmes ranging from 7 to 30 days have been conducted for a varied percentage of AWWs. The seven days training schedule has generally covered about 19% of respondents on scope of work, field visits, more than 25% on documentation and reporting and about 34% on refresher training. The 8 to 15 days has been able to cover 17% respondents on scope work, more than 18% on documentation and reporting and 25% on refresher trainings. More than 15-30 days trainings have covered 32% respondents on scope of work, 30% on field visit reporting and documentation and 30% on refresher training. However a few AWWs informed that training on IMNCI, IYCF has not been done formally. Information on such significant topics has been only a part of the routine induction trainings.

The gaps highlighted need to be addressed as per the evidence based TNA.

Table 1: Status of Record keeping by AWWs

S N o	NAM E OF THE REGI STER S	URBAN (N=184)				RURAL (N=592)				TRIBAL(N=224)				TOTAL (N=1000)			
		AV AI LA BL E	PR IN TE D	Sel f- M ad e Re gis ter	LO OS SH EE T	AV AIL AB LE	PR IN TE D	Sel f- Ma de Re gis ter	LO OS SH EE T	AVAI LAB LE	PR IN TE D	Self - Mad e Regi ster	LO OS SH EE T	AVAI LAB LE *	PR IN TE D	Sel f- Ma de Re gis ter	LO OS SH EE T
1.	Panji kraman	164	13 0	22	12	511	37 0	10 4	37	195	16 8	15	12	870	66 8	14 1	61
	k -1 (Regist er-1, Bhag- A, B and C)	89. 10 %	70. 70 %	11. 90 %	6.5 0%	86.3 0%	62. 50 %	17. 50 %	6.3 0%	87.10 %	75. 00 %	6.70 %	5.4 0%	87.00 %	66. 80 %	14. 10 %	6.1 0%
2.	Upasth iti	176	13 4	30	12	561	37 4	16 0	27	211	16 6	28	17	948	67 4	21 8	56
	Panji (Purak Poshan Aahar)	95. 70 %	72. 80 %	16. 40 %	6.5 0%	94.8 0%	63. 20 %	27. 00 %	4.6 0%	94.20 %	74. 10 %	12.5 0%	7.6 0%	94.80 %	67. 40 %	21. 80 %	5.6 0%
3.	Tulnat amak	93	72	13	8	288	16 0	11 0	18	148	90	51	7	529	32 2	17 4	33
	Panji	50. 50 %	39. 10 %	7.1 0%	4.3 0%	48.6 0%	27. 00 %	18. 60 %	3.0 0%	66.10 %	40. 20 %	22.8 0%	3.1 0%	52.90 %	32. 20 %	17. 40 %	3.3 0%
4.	Upasth	167	14	8	17	551	41	10	27	201	16	23	10	919	72	13	54

	iti Panji (shala purva shiksha)	90.80%	77.20%	4.40%	9.20%	93.10%	70.80%	17.70%	4.60%	89.70%	75.00%	10.20%	4.50%	91.90%	72.90%	13.60%	5.40%
5.	Purak poshan aahar ka register (6 months to 3 years)	17190	1155	3710	1930	55200	3120	202	350	20900	1470	460	160	93200	5770	285	700
		92.90%	62.50%	20.10%	10.30%	93.20%	53.20%	34.10%	5.90%	93.30%	65.60%	20.60%	7.10%	93.20%	57.70%	28.50%	7.00%
6.	Panji kraman k – 3 (0-6 years childre n immun ization and stock details	17040	1480	80	170	51200	4200	580	280	19900	170	80	140	88100	7480	740	590
		92.40%	78.80%	4.40%	9.20%	86.50%	72.00%	9.80%	4.70%	88.80%	79.00%	3.50%	6.30%	88.10%	74.80%	7.40%	5.90%
7.	Registe r on Laadi Laksh mi	17510	1560	110	120	54800	4630	550	300	20300	1850	80	100	92600	800	740	520
		95.10%	82.60%	6.00%	6.50%	92.60%	78.20%	9.30%	5.10%	90.60%	82.60%	3.50%	4.50%	92.60%	80.00%	7.40%	5.20%

	Yojana																
8.	Growt h Chart/ Registe r	170 40 %	16 3 60 %	0 0 0%	7 3.8 0%	513 86.7 0%	48 82. 10 %	10 1.7 0%	17 2.9 0%	196 87.50 %	18 83. 50 %	0 0 %	9 4.0 0%	879 87.90 %	83 83. 60 %	10 1.0 0%	33 3.3 0%
9.	Angan wadi Kendra mein godbha rai ka aayoj n (manga l diwas)	165 70 %	95 60 %	52 28. 30 %	18 9.8 0%	534 90.2 0%	29 50. 00 %	21 35. 50 %	28 4.7 0%	201 89.70 %	11 51. 30 %	67 29.9 0%	19 8.5 0%	900 90%	50 50. 60 %	32 32. 90 %	65 6.5 0%
1 0.	THR register	172 50 %	10 70 %	48 26. 10 %	16 8.7 0%	549 92.7 0%	27 45. 60 %	24 41. 00 %	36 6.1 0%	206 92.00 %	11 50. 00 %	76 34.0 0%	18 8.0 0%	927 92.70 %	49 49. 00 %	36 36. 70 %	70 7.0 0%
1 1.	Vivah Panji	99 80 %	42 80 %	48 0.2 61 %	9 4.9 0%	295 49.8 0%	10 18. 40 %	16 28. 20 %	19 3.2 0%	141 62.90 %	53 23. 70 %	72 32.1 0%	16 7.1 0%	535 53.50 %	20 20. 40 %	28 28. 70 %	44 4.4 0%
1 2.	Garbha wati Panji	158 90 %	11 80 %	32 17. 40 %	16 8.7 0%	512 86.5 0%	31 53. 20 %	16 28. 40 %	29 4.9 0%	201 89.70 %	12 55. 80 %	63 28.1 0%	13 5.8 0%	871 87.10 %	55 55. 00 %	26 26. 30 %	58 5.8 0%
1	Janma	161	88	54	19	521	29	19	34	194	11	62	16	876	49	31	69

3.	Panji						2	5			6				6	1	
		87.50%	44.80%	32.40%	10.30%	88.00%	49.30%	33.00%	5.70%	86.60%	51.80%	27.70%	7.10%	87.60%	49.60%	31.10%	6.90%
1 4.	Mirtu Panji	155	78	58	19	485	27	18	30	189	10	61	19	829	46	29	68
		84.20%	42.40%	31.50%	10.30%	81.90%	46.50%	30.30%	5.10%	84.40%	48.70%	27.20%	8.50%	82.90%	46.20%	29.90%	6.80%

* The number of registers not available is the difference between the total AWCs visited and the number of AWCs reporting availability of the specific registers.

Out of the 1000 AWWs interviewed, about 90% reported availability of registers in their centers. 10% report non availability of registers with them during the visit of the research team at their center mainly due to the lack of adequate infrastructure, fear of theft, difficulty in carrying the registers every day to the AWC etc (projected in the chapter on Impression of Research team”). Out of this percentage, 60% were printed bound registers, while the remaining 30% were self made and loose sheets and dairies. (Refer table on status of education and record keeping of AWWs)

Also a major cause of concern is relatively significant level of inadequately literate AWWs in the rural areas (10-14%) having a correspondingly high percentage of self-made registers (30%) which can obviously result into a wrong data entry. (Refer table on status of education and record keeping of AWWs)

“90% AWWs report having registers, but availability of printed, bound registers with required indicators as approved by the Department is relatively low (60%)”

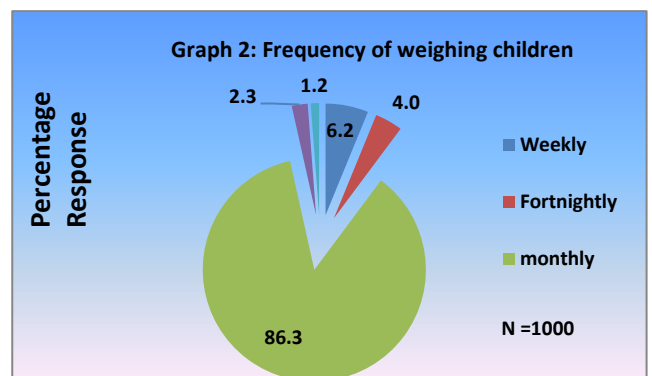
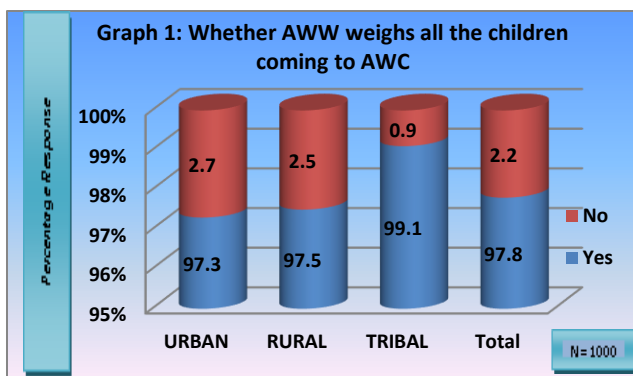
All these issues can result into a significant degree of adverse impact on the services provided, resulting in errors and data loss, hence impacting data quality.



Assessment of capacity of AWWs on the validation indicators revealed that about 80% of the AWWs interviewed were aware about the indicators related to breast feeding, 50% on complete ANC check up,

complete immunization of children, Pre- school education, Annaprashan, Adolescent education and booster doses to be given to children. A significantly lower awareness (20-30%) was observed on validation indicators related to institutional deliveries, breast feeding immediately after birth, registration of live births and deaths, number of days SNP given and methodology adopted for recording MUAC.

The majority (98%) of the AWWs across all locations claimed that they weigh all the children coming to their centre. However an on spot verification by the research team observed that only 87% of AWWs had a growth register/chart and 52% had



‘Tulnatmak register, a document which

compares the monthly weight of the children. This illustrates the inadequacy of resource availability to match the documentation requirements, hence creating an imbalance between demand and supply and mismatch between knowledge and practice.

Though a majority (86%) of the AWWs report weighing the children on monthly basis, which is appreciable

but on verification of data between household and AWC data, a 30%- 40 % inconsistency in recording the weight has been observed. This indicates that even if the AWW weighs most of her beneficiaries, either the process of measuring the weight is wrong or the documentation of the same in the register is incorrect ultimately resulting into data aberrations. Also the weight plotted on the growth monitoring chart, significance of weight recording and follow up of the same is not adequately communicated to the mother/ parents wherein adequate priority is not accorded to this vital activity. (Though no data on this specific was collected but the field observations of the research team indicate inadequate communication between the AWWs and mothers). All these issues have a direct implication on the prognosis of the indicators.

86% of the AWWs report weighing more than 30 children who, come to their centre during the month, which is a very positive sign. However, a negligible percentage of Anganwadi workers report having not weighed as many children during last month but this small percentage converts into huge numbers when we plot this against 79000 AWCs.

“A 40% inconsistency in grading the children for malnutrition has been observed”

Although the CDPO, Supervisor and AWW agree on the fact that children are weighed monthly in the AWCs but there is lack of coordination between the Supervisor and AWW who differ in the percentage of children being weighed during the month (56% Supervisors report more than 30 children being weighed in AWCs while 86% AWWs report weighing the same number during the month - details in the main report pg 59, 91 and 40).

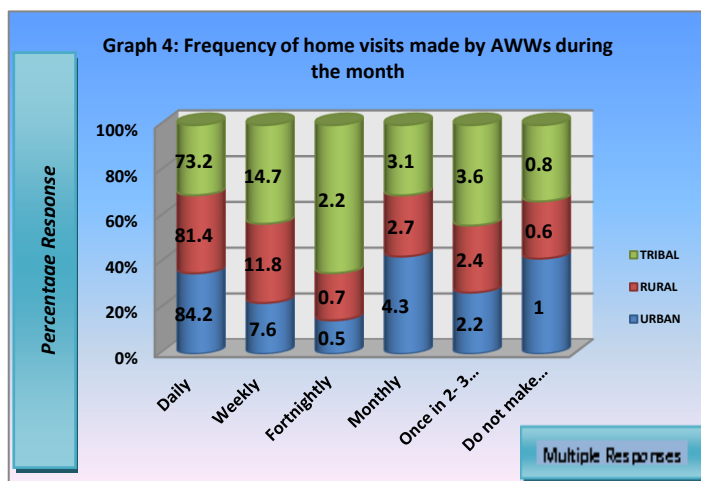
97% of AWWs are aware of MUAC; with an insignificant inter sectorial difference.

“98% AWWs report conducting MUAC for all categories of children, inferring inadequate awareness about focusing on specialized group who need more attention for growth monitoring”

Though a near total AWWs are aware about MUAC but in-depth knowledge about the same is significantly low as 40% inconsistency in grading the children for malnutrition has been detected while verifying the house hold information with the data registers of AWC by research team.

Out of the AWWs who are aware about MUAC , 98% report conducting MUAC for all category of children across all locations, which infers the inadequate awareness among the AWWs about focusing on the specialized group of children (malnourished children) who need more attention for growth monitoring.

Though a near total AWWs are aware about the process of recording MUAC (97%), ***still a small percentage lack appropriate knowledge on the same so record MUAC with thread, hand or by observing the child.*** Also another <1% do not record MUAC at all inferring the lack of knowledge about their scope of work and significance of MUAC among children. Non availability of MUAC tape was not observed by the research team at any location during the study period.



Home visit is one of the vital components of ICDS program, where in each AWW is required to visit 5 households/ day. A majority of the AWWs (82%) report going for home visits daily. This is, relatively lower in tribal and rural areas due to the large inter AWC distance, long distance from the block headquarters,

scattered villages, hard to reach areas and preoccupation in non ICDS activities. A high percentage (85%) of AWWs frequent urban areas as the compliance is better in urban areas due to less distance required to be covered because of limited geographic spread and less inter AWC distance so is less time consuming. Influenced by all these factors, 11% AWWs make weekly visits, high in rural and tribal areas. A low percent (2-3%) also make monthly and bi monthly visits. Even though a high percentage of AWWs claim to conduct the required number of home visits per day still a high number of inconsistencies observed between responses received from the households vis-a-vis data in the registers,

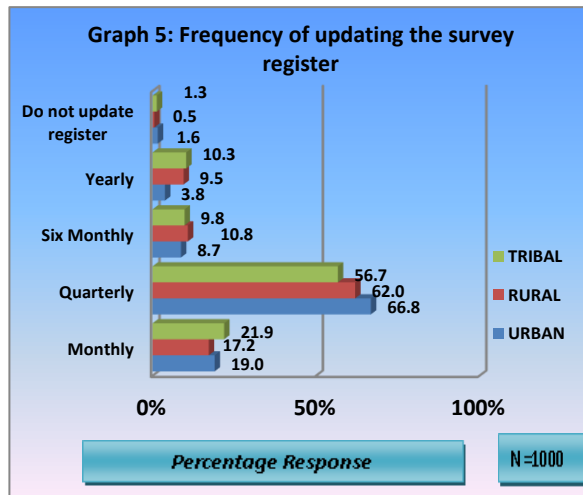
do not validate the claims made by them.

“Even though a high percentage of AWWs claim to conduct the required number of home visits per day still a high number of inconsistencies observed between responses received from the households vis-a-vis data in the registers, do not validate the claims made by them”

Pre occupation of the beneficiaries (57%), high in urban areas (due to relatively high working population) and non -availability of transport (38%) across all locations are the two major

constraints faced by the AWWs in conducting field/home visits. Other factors being hard to reach areas (23%), high in rural and tribal areas and AWWs do not get time with busy schedule (14%), adversely impacting the field visits.

Though most (95%) of the AWWs informed that they prepare only monthly progress report, but a small percentage also said that apart from MPR, others reports like LLY and family planning reports are also prepared. ***Even if the MPR is prepared by almost all the AWWs the quality of data compiled and entered to generate the MPR is generally poor which is evident from the inconsistencies appearing between the AWW MPR and Supervisor MPR. (Refer chapter on- Status of inconsistencies in data)***



A significant finding revealed by the AWWs having a direct impact on data upkeep, is the status of up-dating of survey register. The majority (62%) of the AWWs informed that the survey register is updated on quarterly basis, high (67%) in urban areas, followed by 62% in rural and 57% in tribal areas. However some AWWs update the survey register on monthly basis

especially deaths and Births apart from maintaining the specific register on ‘Death and Birth’. A small percentage (9%) update the survey register only once a year, high in tribal areas, followed by rural (9.5%) and 4% in urban areas. *Such infrequent, inadequate annual updating leads to data loss and improper compilation of information at the program level. A very low but significantly relevant percentage of AWWs who do not up -date the registers are also a major cause of concern which can result in data errors. Though the AWWs report a regular and timely updating of survey registers but gross inconsistencies in the name, identity, gender, age etc of the beneficiaries negates the opinion of the AWWs (Refer chapter on- Status of inconsistencies in data)*

Most (95%) of the AWWs prepare the MPR themselves, with a uniform trend across all locations. About 4% seek support from others e.g. family members, friends, other AWWs for report preparation which creates an added opportunity for data aberrations, human errors and data loss.

“About 4% AWWs seek support from family members, friends and other AWWs for report preparation”

The MPR preparation is done adopting various methodologies depending upon resource availability, convenience and workload i.e. about

50% AWWs directly enter data in registers high in urban and rural locations, *data entered first in loose sheets and subsequently in registers (27%), high in rural and tribal locations, followed by data first entered in registers and later complied electronically. Adopting unconventional methods leads to high chances of aberrations in data and data loss, hence compromising on quality of data generated. This is in line with the physical verification by the research team wherein data is entered in loose sheets (Refer table on record keeping of AWWs)*

Almost all AWWs interviewed informed that they submitted the MPR to the Supervisor on the scheduled time, i.e. in the 3rd -4th week during the month with the tribal AWCs submitting MPR in the 3rd week i.e. 21st of every month. The rural and urban AWWs said that they submitted the report in the 4th week.

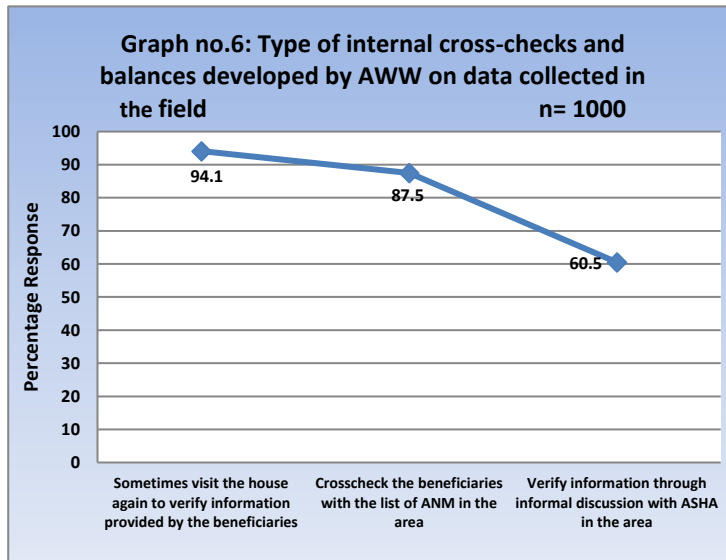
This contradicts the issue raised by 64% of the Supervisors who reported 25% defaulters in timely submission of report (Source: IDI Supervisor).

A number of issues, which seem to impact the quality of data generated out of the report, have been projected by the user (AWW) of the MPR document. A majority of the AWWs feel that they have to refer to too many registers for preparing the report (86%), reporting format is too lengthy (68%), preparing the MPR is very time consuming (63%), and a significant percentage also do not understand the indicators (32%). Pressure of additional duties especially in tribal areas and inadequate understanding due to low capacity of AWWs act as compounding factors to the same.

Almost all AWWs (98%) have a uniform consensus on the submission of the MPR in the sector meetings across all locations, however an insignificant percentage also go to the Supervisor's office to submit the MPR and occasionally the Supervisor comes to the AWC to collect the MPR and jointly prepares the report. The same is in line with that reported by the Supervisor.

A majority of the AWWs (97%) report that feedback on the MPR submitted by the AWWs is provided by the Supervisor across all locations inferring the level of ownership of the manager in the program. In line with the monitoring exercise almost all AWWs (98%) report, verification of MPR by the Supervisor. A small percentage (2%) across all locations report entry of MPR without verification. However this verification as reported is regular a majority of the times (71%) high in urban and tribal areas due to the monitoring pressure of the hierarchical posts and additional focus of Government and external agencies in the underserved districts for improvement of the indicators. The rural Supervisors (30%) falter in verifying the reports due to the large distances to be covered across the scattered villages coupled with pressure of timely submission of the MPR. Generally a direct verification process is reported to be adopted by the Supervisors for verification of reports submitted by the AWW as a majority of the Supervisors cross check the services provided by the AWW from the beneficiaries on their visit to the AWC (93%), in the houses visited by the AWWs (81%) and also verify from their colleagues about the field visits made (78%).

But this information seems to lose ground based on the fact that if the Supervisor would be reviewing, verifying and applying cross checks through various methodologies to ensure the quality of data entered in the MPR, the high number of inconsistencies as emerging on verification of data by the research team would not have been present.



As a part of the internal control system, the AWWs report making random visits to the previously visited houses to verify the information provided by the beneficiaries (94%), utilize existing resources through cross checking the beneficiaries with the list of ANM in the area (88%) and

by informal discussion with ASHA (60%) for ensuring the quality of data. With the focus of activities concerted in the tribal and urban areas, a high percentage of AWWs apply verification checks, hence improved results in these locations.

As reported by the AWW, immediate corrective actions are taken in case the cross verification yields negative results to ensure that data quality is not compromised. Modification of report (75%), informing Supervisor about the aberrations in the collected data (14%) is done. A small percentage (5%) of AWWs does not do anything to ascertain modifications in the data collected, hence contributing to errors in data.

Cross verification and internal controls as reported by AWWs are being applied to ensure data quality in the MPR. However this does not appear to work efficiently. This is either due to lack of implementation by the AWW, improper guidance by the mentors on the usage of such controls or due to lack of adequate monitoring and supportive supervision by the senior staff resulting in failure of quality assurance mechanisms, hence emerging as inconsistencies in data as observed by the research team.

About 67.8% AWWs interviewed were satisfied with the existing MPR system with a uniform consensus in urban and tribal areas while a minor (5%) difference in the thought process was reported in the rural AWWs.

More than half (59%) of AWWs who are satisfied with the MPR feel the current MPR is less time consuming. Another 20% feel it to be more organized than the earlier MPR and feel that it has become a complete document now which provides all information, high in urban followed by tribal and rural areas. A relatively low percentage (21%) did not respond which appears to be due to the low utilization and understanding about the same. Irrespective of the literacy, understanding level and status of training, about 32.2% AWWs have voiced their opinion about their non-satisfaction with the existing MPR system, though no major inter project preferences have been highlighted. The main reasons in order of priority being inadequate understanding of some of the indicators need to refer to a number of registers and too many repetitions about the same indicator in MPR.

Chapter 3.2:

At the level of Supervisor:-

In-depth interviews were conducted with 250 Supervisors across 250 sectors operational in 125 projects identified for the study taking adequate representation of urban, rural and tribal projects. To avoid bias in the sample both block and non-block sectors were taken up for the study. Informal and formal discussions were conducted with the Supervisory managers to assess their capacity, systems and processes followed for data compilation, entry, processing and reporting. Gaps highlighted and suggestions given by the Supervisors have been documented in this chapter.

The Supervisors support the AWW about the reported compliance of a near total weighing of all children coming to the centers. However a high percentage of inconsistencies recorded in the AWW registers point toward disparities in recording the weight of children.

A similar exercise of conducting verification of services provided by AWWs and data recorded in registers by the research team was attempted as a part of the project, which highlighted a significant percentage of inconsistencies in almost all indicators, approved by the Department under the program. Sustained, regular and claimed field visits, if had been made by the Supervisors would have been able to detect such discrepancies; hence the inconsistent numbers would have been less during the study.

Various issues raised by the Supervisors pertaining to their field visits relate to monitoring AWCs, reporting facts by AWW.

Vital issues having a significant impact on the quality of data highlight deficiencies at the level of AWWs where columns are left blank in their registers (42%) or wrong data entries done (38%) mostly due to inadequate understanding of indicators (36%). Other issues mainly relate to administrative problems like In-appropriately located AWCs (45%) lack of availability of computers with the Supervisors adversely impacting data entry (47%) and inadequate supplies of SNP (35%)

Data collection from AWWs, as reported by the Supervisors is generally done through MPR Performa. 92% Supervisors informed that data is submitted on the standardized MPR format, due to the implementation of web enabled data collection system wherein Government is committing itself to make MIS effective. About 3% Supervisors get data in self made registers, 3.6% in diaries and 2% are provided with data in loose sheets. These 9% AWWs can be responsible for data loss and also contribute towards errors in data compilation.

Majority of Supervisors (82%) receive MPR from AWWs on scheduled time every month mainly due to the defined timelines which the AWWs are required to follow for the timely online entry of MPR by the Supervisors. ***14% Supervisors informed that they do not receive reports on time*** due to the urgency of submission of MPR on the scheduled time and preoccupation in-non ICDS tasks, resulting in a compromised quality of MPR.

Of the 14% Supervisors who do-not receive reports on time, alternatively such reports are received through various methodologies, like AWWs send reports through a third person (Husband, Family member, friend)26%. About 9% wait for the next sector meeting to collect report. ***Data errors will occur in such situations where the reports are not received in time and are sent through a third party”***

A significant degree of disparity in the versions quoted by AWWs and Supervisors exist on these issues wherein the AWWs report timely submission of report while the Supervisors show their concern on the same with 25% AWWs defaulting on the submission of report. (Source: default in submission of report of AWW- IDI AWWs).

Primarily, Supervisors report giving feedback to AWWs regarding MPR during sector meetings (86%) as it is convenient for them to discuss the MPR on a specific day with all AWWs. About 39% provide feedback during field visits also. However more urban Supervisors (45%) adopt a practical and hands on approach by giving feedback in the field along with reviewing MPR in the meetings as compared to rural and tribal areas.

Ensuring implementation of feedback given by them to AWWs is done by half of the managers in all sectors using a multifaceted approach. About 58% of Supervisors check the action taken during field visits, 42% by checking registers and MPR of the subsequent month. More Supervisors in tribal sectors check MPR of the subsequent month (46%) while those in urban sectors do so more during field visits (60%.)

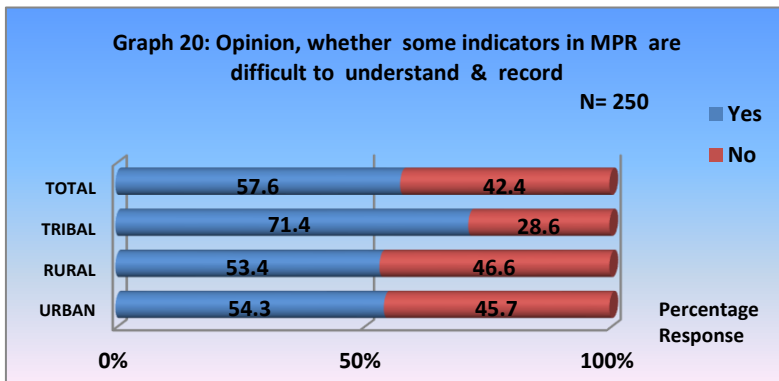
Inadequacy of a proper feedback on MPR provided to AWWs by Supervisors has resulted into inconsistencies in data observed at various levels by the research team (Refer: Interaction with beneficiaries verified with AWC data and matching of AWW MPR with Supervisor MPR)

Out of the 250 Supervisors interviewed, a majority (68%) informed that about 10% of the AWWs report incorrect information in MPR while 22% Supervisors expressed that 25% AWWs submit incorrect information. Another 6% Supervisors opined that 50% AWWs report wrong information. In rural and tribal areas, Supervisors report a high percentage of incorrect data reported by AWWs as compared to urban areas, majorly due to low understanding, improper skills and analyzing capabilities.

The Supervisors admit the incorrect reporting of MPR by AWWs and reviewing the reports themselves, still emergence of inconsistencies in data indicate more effort is required on the part of Supervisors in rectifying the anomalies observed in the reports submitted by AWWs. Lack of understanding and analysis of indicators, pressure of timely submission of MPR and overload due to additional duties are other compounding factors.

More than 50% Supervisors interviewed reported receiving feedback from their respective CDPOs in the next monthly meetings. This delay and gap in communication between the team members is a major constraint in generation of quality data.

Out of 250 Supervisors interviewed, 58% agree that some of the indicators are complex



for the understanding of AWWs, keeping in view the low understanding of indicators, background and exposure of AWWs to training on MPR and feedback from AWWs on MPR, resulting in wrong entries and subsequent data errors.

Categorization of population as per age and target (58%), Transition of malnourished children from one grade to another(39%), Caste wise detail of PSE and SNP (34%), in the descending order have been voiced as complex indicators.

Also some of the indicators related to ANC follow up and referral of complicated cases , immunization, growth monitoring, SNP, pre- school education need close monitoring as suggested by the Supervisors.

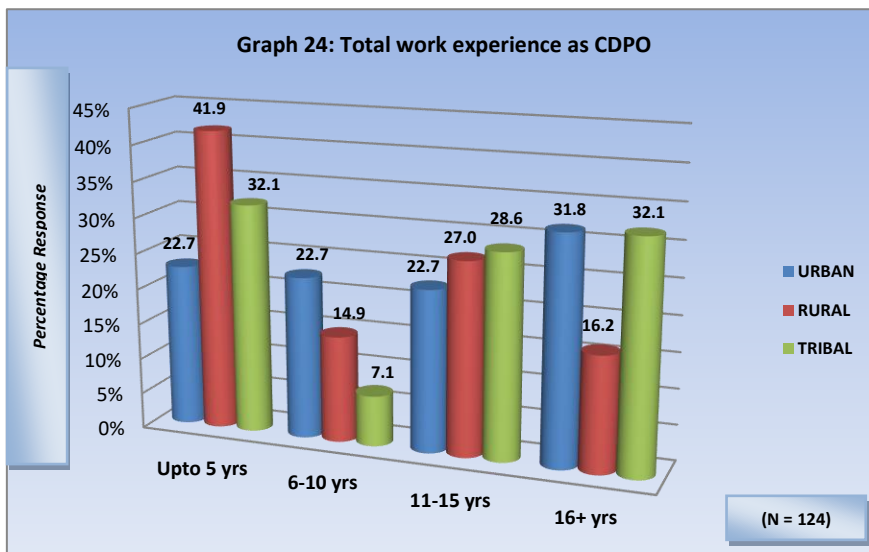
Chapter 3.3:

At the level of Child Development Project Officer:-

In-depth interviews were conducted with 124 CDPOs in charge of the blocks in 124 projects identified for the study taking adequate representation of urban, rural and tribal projects. Formal discussions were conducted with the block managers to assess the systems and processes followed for data handling in the field, sector and block. Constraints felt by the CDPOs in service provisioning and suggestions given by them have been documented in this chapter.

The majority of CDPOs (42%) belong to age group of 51+ years, 38% among 41-50 years, while 20% fall under 40 years of age. CDPOs in 51plus age group are in a higher percentage in tribal projects as compared to those in urban projects where this category is more in 41-50 years.

Across Madhya Pradesh, 79% of CDPOs are qualified up to post graduation, while 14% are graduates, almost uniformly spread across all locations. A small percentage (4.5%)



CDPOs in urban areas have achieved further qualifications after post-graduation.

However, an important issue of concern is the 6% who are only 12th class pass. This category is mainly found in tribal and

rural areas and appears to be the result of upgraded Supervisors. However it can result into a compromised quality of supervision and program management.

It is important to note that a significant number of CDPOs among the respondents interviewed are experienced only up to 5 years which accounts for almost 1/3rd of CDPOs - high in rural (42%) followed by tribal (32%) with a low percentage in urban (22%) areas, the remaining 2/3rds CDPOs have varied experiences from 6 to 16 years. In the

tribal and urban areas 32% of CDPOs are having 16 + years of experience. Keeping in view the type of responsibilities associated with this post the uniformity in the level of experience is relatively low.

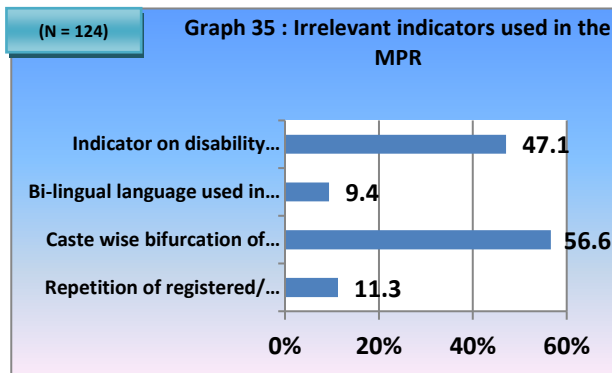
The CDPOs reported that a majority (86%) of children coming to the centers are weighed in the AWCs relatively low (81%) in rural areas as compared to urban (91%) and tribal (96%) areas. This is due to the focused efforts of MP Government and other funding agencies to support tribal and underserved districts to improve the healthcare indicators and create an improved awareness about community health in urban areas. Though a varied response was reported by CDPOs about the frequency of weighing the children by AWWs, but a majority (86%) feel that children are weighed at monthly intervals, high in tribal (93%) followed by rural (85%) and urban sectors (77%). With the urban AWCs being closely knit, so are benefitted with the short distances to be travelled, the children are weighed at weekly (14%) and fortnightly (5%) intervals also. Rural areas fall short of weighing all children due to AWCs opening later than the scheduled time and sometimes not opening at all without giving a prior intimation to the community and also non - availability of functional weighing machines in the centers.

An important point to note here is the difference of opinion of all reporting lines on the similar indicator i.e. category and percentage of children for which MUAC is recorded and process of recording MUAC e.g. AWW and Supervisor report recording MUAC for all category of children, while the CDPOs feel MUAC is done for malnourished children and children upto 5 years and all children who come to the center . This infers lack of awareness and coordination among the implementers themselves, i.e. AWWs, Supervisors and CDPOs, hence constitution of a weakly coordinated team of implementers, Supervisory staff and mentors.

As in the case of verification of weight, the CDPOs inform that verification of MUAC is also done through field visits, which as in the case is highly compromised reflecting as a high percentage of inconsistencies in grading of malnutrition. (Source: Matching between HH and AWC data - children up to 6 years)

About 87% CDPOs in all sectors feel that monthly report from the Supervisors are uploaded on time, though the quality of data reported is compromised due to the short time allocated for preparing and submission of reports.

Rural CDPOs rely more on desk review verification due to the issue of long distances as compared to urban and tribal CDPOs who combine field and desk review for ensuring the integrity of data reported in the MPR. Also ground visits by CDPOs in rural sectors are relatively low due to the CDPO office being generally located in urban locales which is quite far from the AWCs, so preference for cross checks mainly remain adhering to desk review of the actual AWW MPR data sheet on sample basis.



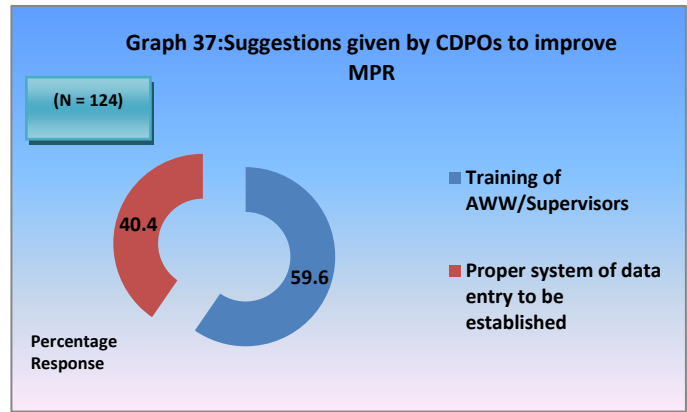
About 43% CDPOs strongly feel the presence of irrelevant indicators in MPR which do not contribute to the program outcomes, the indicators being caste wise bifurcation of beneficiaries in SNP and PSE (56.6%), clubbing of caste indicator

with indicator on disability (47%). Also repetition of registered/ surveyed/ benefitted beneficiaries (11%) and bi-lingual language used in the MPR (9%) does not appear to be user friendly, so poses a problem at the AWW level.

A positive response about the MPR, was received from 87% CDPOs with uniform consensus across all

locations. The significant modalities being MPR improves performance of AWCs (39%) followed by assisting in future strategic planning (26%). About 15% feel that MPR helps in monitoring trends of performance and allocation of need based resources. However, **13% still feel that MPR does not contribute significantly in improving the functioning of AWCs due to inadequate understanding of AWWs on MPR, Supervisors non-conversant with computer technology (37%), and inadequate training of Supervisors and AWWs (25%) on the MPR. Though the percentage is low but is still significant keeping in view that the MPR is now filled in electronic format.**

Fear of punitive action among the AWWs and migration of mothers to their native villages (45%) followed by lack of awareness among the AWWs on reporting the cause of death other than casualty due to maternal causes(10%) remain the significant reasons of non-reporting of maternal deaths, as reported by the CDPOs.



Inadequate understanding of the indicators of MPR (31%) by AWWs due to inadequate training, data entry of MPR being done by multiple, unskilled and non-authenticated sources(31%) are the major constraints in the current MPR system as felt by the CDPOs. Also inadequate availability of the required infrastructure for data compilation and entry (23%) and repetitive indicators (14%) resulting in confusion among AWWs adding to the problem. Collectively all these issues contribute to data errors and data loss, hence impacting the quality of data in current MPR

Two important suggestions given by the CDPOs for improving the current MPR system relate to strengthening the capacity of AWWs and Supervisors (60%) and putting in place proper system of data entry (40%).

Strengthening ICDS system (Case Study)

Saheli Samuh – Capacity Building through Cluster Approach

In block Sailana, Joint Director, ICDS Ujjain identified a key challenge in the process of documentation and reporting at the level of Anganwadi workers. The reason behind this is the low skill and education of AWWs. As adequate training have not been imparted to the AWWs, these workers in general, face prime difficulty in documenting, recording and reporting of indicators so the AWWs have serious difficulties while filling the MPR. Consequently there are major problems with the validity and reliability of the reports received by the Supervisors.

*To counteract this problem, Joint Director in the year 2010, developed a plan under which he formulated a **group named- Saheli Samuh**, comprising of 5 Anganwadi workers in each group. It is ensured that every group has an educated and skilled Anganwadi worker who is given responsibility to help the weak AWWs of their sector in preparation of MPR. The group meets before the submission of report to compile data and mutually help each other in preparation of report. This practice assists in empowering and building capacities of all AWWs and sets in a spirit of team work and supportive attitude, so chances of errors are significantly reduced. After the execution of this practice, CDPOs and Supervisors have expressed that the quality of reporting has improved and the inadequately skilled AWWs are now picking up improved awareness about the indicators and MPR, hence becoming confident and positive about the same. Due to this positive impact, the administration plans to stick to this “Cluster Approach”, which motivates and encourages AWWs to get trained by their own peers. The same practice can be replicated in areas where a mix of such percentage is high, resulting in improved reporting at source.*

Chapter 3.4:

At the level of District Programme Officer:-

The District Program Officer (DPO) is the authorized official at the district to oversee, implement, monitor and provide technical and administrative support to the ICDS program. Discussion was held with 8 DPOs positioned at Rural, Tribal and Urban Districts (Ratlam, Jhabua, Chattarpur, Rewa, Singrouli, Dewas, Bhind, Seoni) for an overall insight of the state to gather information on programmatic linkages, prevailing gaps and suggestions related to MIS through a divisional representation of the state.

Opinion of the DPO on the Current MPR system:

Though the current MPR system has been well received at the district level, the following technical, manual and process related issues still remain to be addressed:

- Inadequate understanding of indicators and required skills of the first level user of the service, the Anganwadi Worker, who are responsible for capturing and documenting basic raw field data. This inadequately assimilated data at source replicates multifold into the emergence of incorrect data at subsequent levels of reporting hierarchy.
- The MPR format is too lengthy with replication of similar indicators having inadequate relevance, subsequently capturing certain indicators with low actionable points e.g category wise, caste wise beneficiaries.
- Technical issues like automated updating of data following online feeding, non availability of alarm system in the software to detect data disparity, lack of options available for comparative analysis of data and offline data entry.
- Infrastructural deficiencies compounding the problems being non availability of computers and qualified data entry operators at the block level.

Significant suggestions of the DPO for improvement highlight actions related to the following:

- Building capacities of front runners (AWW) and users of the service who have a pivotal role in ICDS programs,
- Strengthening block level infrastructure for an efficient collation, compilation, analysis, generation and outcome of data by making adequate provision of structures to house high-tech computers supported by sustained availability of qualified operators and statistical experts.
- Technical issues hampering the efficiency of operations and outcome of data by reviewing the software for inclusion of required options (Atal Bal Yojana, stock details of Take Home Ration) and filtering indicators of low relevance (category wise/ caste wise beneficiaries)
- MPR review for the emergence of a comprehensive format containing indicators with high reporting relevance, need based frequency of indicator reporting, scheduling a practical and doable time of report submission for ensuring outcome of quality data.

SMS Service Software- (Case Study)

“Streamlining data through Mobile Technology”

In Chattarpur district of the state, the managerial staff was struggling with a number of challenges like difficult terrain, inaccessibility, migration, presence of vulnerable groups and poor health indicators resulting in a major impact on ICDS reporting system. SMS reporting software system introduced by the DPO is one such positive development as an effort to improve reporting.

The system aims to gather quick information and the software captures updated data on important key indicators like operationalization of AWCs, status of SNP, grading malnourishment, ANC and immunization etc. To operationalize, the DPO initiates the message from his office on the indicator requiring response from the field provider. Within a few hours, he gets a SMS back displaying data from grass-root workers which gets compiled with the help of software. The question is responded in codes of 1 and 2 implying YES for 1 and NO for 2. Consequently the information is readily made available within real-time.

The process has made the collection and compilation system faster and quick decisions can be taken on issues immediately without loosing out on time. Hence, the system assists the Supervisory staff to monitor the functioning of AWCs and AWWs more effectively. After implementation of this system, the process of collection of data from the village level and inaccessible tribal areas has accelerated. To and fro linkages within the team have strengthened along with improved communication. To make the system robust, the AWWs are given regular training on its operations.

In recent time this system is helping the ICDS officials of Chattarpur district in an effective way by enhancing the district reporting system and providing quality services to the ICDS beneficiaries.

Chapter 4:

Key Findings at the beneficiary level- Matching of AWC data with field responses:-

The Department of Women and Child Development in Madhya Pradesh with its prime responsibility towards improvement of health and nutrition of the mother and child provides services through a vast network of service delivery units at the door step of beneficiaries by catering structured services under the program: *Supplementary nutrition, Immunization, Growth Monitoring, Health check-up and Referral services, Pre-school non-formal education and Nutrition and health education*. The beneficiaries of these services are primarily adolescent girls, pregnant women, lactating mothers and children below 6 years of age.

In an effort to assess the quality of services being provisioned to its beneficiaries and strategically plan evidence based methodologies for program improvement, direct interaction was held with a statistically *significant representative sample of 20074 beneficiaries comprising of 3116 adolescent girls, 4014 pregnant women, 4085 lactating mothers, 4657 children of 0-3 years age and 4202 children of 3-6 years age*, across urban, rural and tribal projects. The information received through direct interaction with the beneficiaries was cross checked with related registers carrying required information i.e. Panji kramank – 1 (Register -1 , Bhaag – A, B and C, Upasthiti Panji (Purak Poshan Aahar), Tulnatamak Panji, Upasthiti Panji (shala purva shiksha), Purak poshan aahar ka register (6 months to 3 years/3 years to 6 years, Panji kramanak – 3 (0 – 6 years children immunization and stock details), Laadli Lakshmi Yojana, Growth Chart and Register, Anganwadi Kendra mein godbharai ka aayojan (Mangal Diwas), THR Register, Garbhawati Panji (Pregnant Women Register), Janma Panji (Birth Register) and Mrityu Panji (Death Register).

A wide variety of inconsistencies were reported at various levels ranging from name, identity, gender, age, caste, type of disability, record of date of birth vis a vis age at the time of survey, status of health checkup, record of weight and degree of malnutrition, immunization, status of SNP and THR, preschool education, registration for LLY and receipt of NSC. In addition a wide disparity has been reported in the parity, status of ANC registration, immunization and distribution of IFA, months of pregnancy, antenatal checkup including weight, services provided under Mangal Divas and Annaprashan among the pregnant and lactating mothers. Significant indicators like weight show a wide disparity between the weights recorded entered in registers and that plotted on growth

monitoring chart. Inconsistencies in nature and intensity appear to be more among the pregnant women as compared to lactating mothers and among the children 3-6 years as compared to children 0-3 years.

The possible reasons for the inconsistencies observed are; inadequate and sustained availability of appropriate documentation tools resulting in impulsive and adhoc compilation of information in varied, alternative, unconventional forms like loose sheets and dairies, hence resulting in delayed, incomplete and incorrect documentation. Improper clarity of action among the AWWs compounded with lack of regular monitoring and supportive supervision by Supervisory staff leaves *a major gap between knowledge and practice among the AWWs*. Hence the disparity Inadequate understanding among the providers especially AWWs about the significance of the services provided under ICDS result into a gross inadequacy of follow up by the AWWs on the issues which are of prime importance for this impressionable group (i.e. the mothers and children for which these service components have been designed by the Department).

Also lack of understanding of indicators and in adequate communication skills among AWWs results in inability of creating a hype, urgency and significance among the women about the need of availing such services. In spite of the fact that the hierarchical chain (AWW, Supervisor, CDPO, DPO) claim to possess good knowledge about their scope of work, report conducting Supervisory visits in their project area, review data collected by immediate reporting units, still major inconsistencies exist in almost all indicators defined under the program, hence inferring the significant gap between the actual service provisioning vis-a- vis documentation of the same. Also inadequate convergence of ICDS with the health Department, inadequate coordination within the working team and inadequate support to providers for delivery of services under the program contribute to such inconsistencies.

At the level of demand, the low literacy levels, family and financial pressures, cultural issues, migration, inadequate awareness about the felt need of self follow up for their own wellbeing creates a level of inhibition among the beneficiaries for availing such services. On a comparative note, the tribal projects enjoying a focused attention of Government authorities, external funding agencies and constant vigil and support of district administration at the local level, keeps the senior team motivated for providing the required support to the field level, hence perform relatively better in some of the indicators like capacity of the AWWs, monthly updating of registers, ,number of AWWs

weighing children in AWCs, more educated and experienced CDPOs, better knowledge of validation indicators among the CDPOs, innovative efforts being initiated and low percentage of inconsistencies observed in most of the indicators.

Chapter 4.1:

Adolescents:-

Table 2: Verification of indicators in terms of correct/incorrect with the registers maintained by AWWs

ADOLESCENTS		Location			
		URBAN (N=550)	RURAL (N=1761)	TRIBAL (N=805)	TOTAL (N=3116)
WEIGHT RECORDED	CORRECT	314 57.1%	1018 57.8%	595 73.9%	1927 61.8%
	INCORRECT	236 42.9%	743 42.2%	210 26.1%	1189 38.2%
SUPPLEMENTARY NUTRITION WAS RECEIVED BY ADOLESCENT	CORRECT	457 83.1%	1427 81.0%	729 90.6%	2613 83.9%
	INCORRECT	93 16.9%	334 19.0%	76 9.4%	503 16.1%
WHO RECEIVED TAKE HOME RATION FROM AWW	CORRECT	461 83.8%	1470 83.5%	745 92.5%	2676 85.9%
	INCORRECT	89 16.2%	291 16.5%	60 7.5%	440 14.1%

NAME RECEIVED THR	WHO	CORRECT	445	1440	719	2604
			80.9%	81.8%	89.3%	83.6%
		INCORRECT	105	321	86	512
			19.1%	18.2%	10.7%	16.4

In-depth interviews were conducted with 3116 adolescents on the services provided by the Department and responses were matched with corresponding AWC data entered in registers. Inconsistencies so observed by the research team have been tabulated below.

Major inconsistencies were highlighted in documentation of weight in 38% adolescents, Inconsistencies in whether supplementary nutrition was received by the girl (16%), person and name of the person who received THR from AWW (14%).

Other inconsistencies have been observed in the name; age of respondent and fathers' name (7-8%) and caste (12%), for details refer to the final report.

Chapter 4.2:

Pregnant Women:-

Table 3: Verification of indicators in terms of correct/incorrect with the registers maintained by AWWs

Pregnant Women	Location				
	URBAN (N=712)	RURA L (N=248 9)	TRIBAL (N=813)	TOTAL (N=4014)	
STATUS OF TT	CORREC	459	1183	350	1992

	T	64.5%	47.5%	43.1%	49.6%
	INCORRE	253	1306	463	2022
	CT	35.5%	52.5%	56.9%	50.4%
DISTRIBUTION OF IFA TABLETS	CORREC	458	1278	518	2254
	T	64.3%	51.3%	63.7%	56.2%
	INCORRE	254	1211	295	1760
	CT	35.7%	48.7%	36.3%	43.8%
DATE- ANC CHECK UP	CORREC	426	1281	543	2250
	T	59.8%	51.5%	66.8%	56.1%
	INCORRE	286	1208	270	1764
	CT	40.2%	48.5%	33.2%	43.9%
WEIGHT OF WOMAN	CORREC	410	1238	526	2174
	T	57.6%	49.7%	64.7%	54.2%
	INCORRE	302	1251	287	1840
	CT	42.4%	50.3%	35.3%	45.8%
NO OF DAYS DURING THE MONTH SUPPLEMENTRY NUTRITION WAS RECEIVED	CORREC	639	2231	705	3575
	T	89.7%	89.6%	86.7%	89.1%
	INCORRE	73	258	108	439
	CT	10.3%	10.4%	13.3%	10.9%
SERVICES PROVIDED DURING MANGAL DIWAS	CORREC	517	1548	519	2584
	T	72.6%	62.2%	63.8%	64.4%
	INCORRE	195	941	294	1430
	CT	27.4%	37.8%	36.2%	35.6%

In-depth interviews were conducted with 4014 pregnant women on the services provided by the Department and responses were matched with corresponding AWC data entered in

registers. Major inconsistencies in vital indicators which have a direct impact on the MMR and IMR at the state and national level were observed.

Significant indicators like status of administration of TT (50%), distribution of IFA and date of ANC checkup (44%), weight of women (46%), services received at Mangal Divas (36%), status of SNP (11%), reflect as inconsistencies.

Minor inconsistencies also surface on the Other inconsistencies were observed in date of registration 50%, date of conception of pregnancy (43%), Date of delivery (41%) , expected date of delivery (37%) , last time weight recorded at AWC (33%), number of months of pregnancy (25%), first weight recorded and date of first time weight recorded (35%), name, husband's name, caste, no of days SNP received (up to 10%), number of children and number of deliveries (18%), present month of pregnancy (20%). show inconsistencies at the level of AWCs. for details refer final report.

Chapter 4.3:

Lactating Mothers:-

Table 4: Verification of indicators in terms of correct/incorrect with the registers maintained by AWWs

			Location			
			URBAN (N=690)	RURAL (N=2558)	TRIBAL (N=837)	Total (N=4085)
NO. OF CHILDREN	CORRECT	581 84.2%	2039 79.7%	768 91.8%	3388 82.9%	
	INCORRECT	109 15.8%	519 20.3%	69 8.2%	697 17.1%	

SUPPL. NUTRITION RECEIVED BY MOTHER	CORRECT	633 91.7%	2210 86.4%	770 92.0%	3613 88.4%
	INCORRECT	57 8.3%	348 13.6%	67 8.0%	472 11.6%
SERVICE PROVIDED TO BENEFICIARY DURING ANNAPRASHAN	CORRECT	571 82.8%	1874 73.3%	723 86.4%	3168 77.6%
	INCORRECT	119 17.2%	684 26.7%	114 13.6%	917 22.4%

In-depth interviews were conducted with 4085 lactating mothers on the services provided by the Department and responses were matched with corresponding AWC data entered in registers. Inconsistencies so observed by the research team are listed as follows.

As all indicators defined by the Department for service provisioning of lactating mothers are interrelated and involve the process indicators of the child, inconsistency in one impacts the output in the other, and finally impact the services provided to all beneficiaries under the purview of the program.

Inconsistencies reported in key indicators relate to number of children 17%, SNP received by mother 12% and services provided to beneficiaries during Annaprasan 23%. Inconsistencies are high in rural as compared to urban and tribal.

Other indicators like age and weight of children which constitute to be the two most significant parameters related to monitoring and prognostic assessment of normal and malnourished child, also show major levels of inconsistencies (>30%) as compared to other parameters like, month when child was born (15%), number of deliveries (14%), name of women, husband's name, caste (10%) which though inconsistent but fall in a relatively lower percentage.. Also significant indicator on the age of mother shows a inconsistency of 36%. For detail refer to final report

Chapter 4.4:

Mothers of children 0-3 years:-

Table 5: Verification of indicators in terms of correct/incorrect with the registers maintained by AWWs

Children Age Group 0-3 years		Location			
		URBA N (N=702)	RURAL (N=3031)	TRIBAL (N=924)	TOTAL (N=4657)
Month / year when weight of child was taken	CORRECT	543	2185	680	3408
		77.4%	72.1%	73.6%	73.2%
	INCORRECT	159	846	244	1249
		22.6%	27.9%	26.4%	26.8%
Month/ year when child was graded for malnutritio n	CORRECT	501	2158	753	3412
		71.4%	71.2%	81.5%	73.3%
	INCORRECT	201	873	171	1245
		28.6%	28.8%	18.5%	26.7%
Weight of child in the growth monitoring chart	CORRECT	392	1636	536	2564
		55.8%	54.0%	58.0%	55.1%
	INCORRECT	310	1395	388	2093
		44.2%	46.0%	42.0%	44.9%
Grade of the child in the growth monitoring chart	CORRECT	463,	1911	657	3031
		66.0%	63.0%	71.1%	65.1%
	INCORRECT	239	1120	267	1626
		34.0%	37.0%	28.9%	34.9%

Date of health check	CORRECT	506	1995	655	3156
		72.1%	65.8%	70.9%	67.8%
	INCORRECT	196	1036	269	1501
		27.9%	34.2%	29.1%	32.2%
OPV 0 dose at the time of birth	CORRECT	511	1994	670	3175
		72.8%	65.8%	72.5%	68.2%
	INCORRECT	191	1037	254	1482
		27.2%	34.2%	27.5%	31.8%
BC G	CORRECT	506	1991	680	3177
		72.1%	65.7%	73.6%	68.2%
	INCORRECT	196	1040	244	1480
		27.9%	34.3%	26.4%	31.8%
DPT-1	CORRECT	506	2031	685	3222
		72.1%	67.0%	74.1%	69.2%
	INCORRECT	196	1000	239	1435
		27.9%	33.0%	25.9%	30.8%
OPV-1	CORRECT	498	2016	682	3196
		70.9%	66.5%	73.8%	68.6%
	INCORRECT	204	1015	242	1461
		29.1%	33.5%	26.2%	31.4%
Hepatitis-B-1	CORRECT	504	2018	675	3197
		71.8%	66.6%	73.1%	68.6%
	INCORRECT	198	1013	249	1460
		28.2%	33.4%	26.9%	31.4%
DPT-2	CORRECT	516	2016	681	3213
		73.5%	66.5%	73.7%	69.0%
	INCORRECT	186	1015	243	1444
		26.5%	33.5%	26.3%	31.0%
OPV-2	CORRECT	511	2001	674	3186
		72.8%	66.0%	72.9%	68.4%

	INCORRECT	191	1030	250	1471
		27.2%	34.0%	27.1%	31.6%
Hepatitis-B-2	CORRECT	510	2009	669	3188
		72.6%	66.3%	72.4%	68.5%
	INCORRECT	192	1022	255	1469
		27.4%	33.7%	27.6%	31.5%
DPT-3	CORRECT	540	2306	778	3628
		77%	76.1%	84.2%	77.9%
	INCORRECT	162	724	146	1029
		23%	23.9%	15.8%	22.1%
OPV-3	CORRECT	511	1993	672	3176
		72.8%	65.8%	72.7%	68.2%
	INCORRECT	191	1038	252	1481
		27.2%	34.2%	27.3%	31.8%
Hepatitis-B-3	CORRECT	505	1997	666	3168
		71.9%	65.9%	72.1%	68.0%
	INCORRECT	197	1034	258	1489
		28.1%	34.1%	27.9%	32.0%
Measles	CORRECT	504	1976	672	3152
		71.8%	65.2%	72.7%	67.7%
	INCORRECT	198	1055	252	1505
		28.2%	34.8%	27.3%	32.3%
Who Received THR from AWW	CORRECT	611	2524	832	3967
		87.0%	83.3%	90.0%	85.2%
	INCORRECT	91	507	92	690
		13.0	16.7%	10.0%	14.8%
Third food in case malnourished child	CORRECT	534	2234	760	3528
		76.1%	73.7%	82.3%	75.8%
	INCORRECT	168	797	164	1129
		23.9%	26.3%	17.7%	24.2%

In-depth interviews were conducted with 4657 mothers of children 0-3 years on the services provided by the Department and responses were matched with corresponding AWC data entered in the registers. Inconsistencies so observed by the research team are listed as follows.

Major inconsistencies were highlighted in vital indicators which have a direct impact on the overall growth and development of the child i.e. recording weight of child in Growth Monitoring Chart (45%), grading child for malnutrition (35%), date of health checkup (33%), status of immunization of children (30 Inconsistencies in vital parameters related to nutritional status of the child i.e. time when the child was weighed and graded for malnutrition (27%) followed by parameters on THR reflecting person and name who received THR(15%)and third food provided in case of malnourished children(24%).

Administration of Vitamin A (25%), assessment of malnutrition by monitoring the weight of child (31%).breakfast, lunch also show a significant level of inconsistency between 25-30%. In addition a review of the non ICDS indicators also show inconsistencies on registration for LLY and number of NSC received till date though low but do exist (up to 20%). It is significant to note that a wide disparity was noted between the weight recorded and documented in the weight register and weight recorded on growth monitoring chart. The levels of inconsistencies were relatively high in rural projects as compared to urban and tribal areas. For details refer to Final report.

Emergence of inconsistencies among the indicators in this significant age group, which has a direct relation with neonatal and infant morbidity and mortality are critical as they infer the laxity in delivery of services by the front line workers due to inadequate awareness among AWWs, lack of infrastructural and supportive facilities to provision the required services to the beneficiaries, inadequate skills of the providers resulting in a communication gap between AWWs and beneficiaries, inadequate coordination within the team and inadequate support to the grass root providers for the optimal delivery of services under the program.

Chapter 4.5:

Mothers of children 3-6 years:-

Table 6: Verification of indicators in terms of correct/incorrect with the registers maintained by AWWs

Children Age Group 3-6 years		Location			
		URBAN (N=695)	RURAL (N=2612)	TRIBAL (N=895)	TOTAL (N=4202)
PRE SCHOOL ADMISSION DATE	CORRECT	441	1473	559	2473
		63.5	56.4	62.5	58.9
DATE OF LEAVING AWC	INCORRECT	254	1139	336	1729
		36.5	43.6	37.5	41.1
DATE OF LEAVING AWC	CORRECT	511	1883	746	3140
		73.5	72.1	83.4	74.7
MONTH /YEAR WHEN WEIGHT WAS TAKEN	INCORRECT	184	729	149	1062
		26.5	27.9	16.6	25.3
MONTH /YEAR WHEN WEIGHT WAS TAKEN	CORRECT	498	1681	633	2812
		71.7	64.4	70.7	66.9
Month /year when child was graded for malnutrition	INCORRECT	197	931	262	1390
		28.3	35.6	29.3	33.1
Month /year when child was graded for malnutrition	CORRECT	489	1804	698	2991
		70.4	69.1	78.0	71.2
WEIGHT OF CHILD IN	INCORRECT	206	808	197	1211
		29.6	30.9	22.0	28.8
WEIGHT OF CHILD IN	CORRECT	369	1279	534	2182
		53.1	49.0	59.7	51.9

GROWTH MONITORING CHART	INCORRECT	326	1333	361	2020
		46.9	51.0	40.3	48.1
GRADE OF THE CHILD IN GROWTH MONITORING CHART	CORRECT	412	1497	644	2553
		59.3	57.3	72.0	60.8
	INCORRECT	283	1115	251	1649
		40.7	42.7	28.0	39.2
DATE OF HEALTH CHECKUP	CORRECT	484	1646	636	2766
		69.6	63.0	71.1	65.8
	INCORRECT	211	966	259	1436
		30.4	37.0	28.9	34.2
VITAMIN-A 6-A	CORRECT	524	1568	646	2738
		75.4	60.0	72.2	65.2
	INCORRECT	171	1044	249	1464
		24.6	40.0	27.8	34.8
6-B	CORRECT	546	1630	654	2830
		78.6	62.4	73.1	67.3
	INCORRECT	149	982	241	1372
		21.4	37.6	26.9	32.7
6-C	CORRECT	547	1658	658	2863
		78.7	63.5	73.5	68.1
	INCORRECT	148	954	237	1339
		21.3	36.5	26.5	31.9
6-D	CORRECT	548	1668	667	2883
		78.8	63.9	74.5	68.6
	INCORRECT	147	944	228	1319
		21.2	36.1	25.5	31.4
6-E	CORRECT	548	1675	679	2902
		78.8	64.1	75.9	69.1

	INCORRECT	147	937	216	1300
		21.2	35.9	24.1	30.9
6-F	CORRECT	542	1682	693	2917
		78.0	64.4	77.4	69.4
	INCORRECT	153	930	202	1285
		22.0	35.6	22.6	30.6
6-G	CORRECT	540	1698	704	2942
		77.7	65.0	78.7	70.0
	INCORRECT	155	914	191	1260
		22.3	35.0	21.3	30.0
6-H	CORRECT	539	1701	706	2946
		77.6	65.1	78.9	70.1
	INCORRECT	156	911	189	1256
		22.4	34.9	21.1	29.9
6-I	CORRECT	530	1707	706	2943
		76.3	65.4	78.9	70.0
	INCORRECT	165	905	189	1259
		23.7	34.6	21.1	30.0
BREAKFAST	CORRECT	587	2054	736	3377
		84.5	78.6	82.2	80.4
	INCORRECT	108	558	159	825
		15.5	21.4	17.8	19.6
LUNCH	CORRECT	584	2082	748	3414
		84.0	79.7	83.6	81.2
	INCORRECT	111	530	147	788
		16.0	20.3	16.4	18.8
THIRD FOOD FOR MALNOURISHED CHILDREN	CORRECT	514	1741	693	2948
		74.0	66.7	77.4	70.2
	INCORRECT	181	871	202	1254
		26.0	33.3	22.6	29.8

In-depth interviews were conducted with 4202 mothers of children 3-6 years on the services provided by the Department and responses were matched with corresponding AWC data entered in the registers. Inconsistencies so observed by the research team are listed as follows.

Major inconsistencies were highlighted in some of the vital indicators i.e. weight of the child in growth monitoring chart (48%), grade of malnutrition (39%), date of health checkup (34%), status of immunization of children Vitamin A (30%), time when the child was weighed and graded for malnutrition (28 -33%), provision of breakfast and lunch 19% and third food to malnourished children (30%). Indicators that are specific for this particular age group like date of admission (41%) and leaving the pre-school (25%) also surface as inconsistencies.

Indicators relating to Take Home ration also reflects a clear gap between demand and supply as distribution of nutrition, a vital parameter to assess the growth of the child especially in this age group also appears as a significant gap of 43%, monitoring weight record (37%) followed by parameters on THR reflecting person and name who received THR (20-25%), registration for LLY, number of NSC received till date (23%). Other inconsistencies being immunization of children (40%), date of birth and type of disability (25%), gender, caste, father/ mothers name (10%). For detail refer final report.

These gaps though similar in nature with those emerging in 0-3 years age group, but reflect a relatively higher percentage inferring both a casual approach of service provisioning and uptake of services along with a lack of coordination, communication gap and follow up by the AWWs and parents. Inconsistent supervision and monitoring by the managerial staff and verification of data with the actual uptake of services by the beneficiaries results in sustained persistence of these inconsistencies.

Though inconsistencies appear in all categories of projects but the intensity of the same appears to be more in rural projects as compared to urban and tribal.

Chapter 5:

Moving ahead from village to Service Provider-Data matching:-

Reporting system explores different ways of collecting and presenting data for different purposes. MPR of AWW provides an insight on key indicators, which are being directly recorded on ground from the beneficiaries. The idea behind matching of MPR of AWW with that of Supervisor and CDPO was to find out the indicators having highest inconsistency, probable reasons for the same and to get an idea of data loss at various levels, thus assessing the implications on the overall program monitoring and evaluation. As per the agreed sample size, scores of the compiled data of AWW MPR of all AWCs coming under the jurisdiction of one Supervisor was matched with MPR of the same Supervisor. The matching of AWW and Supervisor MPR was done for the same month. Similarly scores of the compiled data of the Supervisor MPR of all sectors under the jurisdiction of the CDPO was matched with the MPR of the same CDPO. This matching was also done for the same month (May 2011. Where ever data for May was not available, the data for April was taken).

A total of 125 ICDS projects were undertaken for the matching process, however in cases of transfer and non -availability of staff and records, the research team was able to access only 102 projects (AWW- Supervisor matching) and 99 projects (Supervisor- CDPO matching). **Accordingly 19 urban, 61 rural and 22 tribal projects were taken up for AWW- Supervisor matching, and 19 Urban, 58 rural and 22 tribal projects for Supervisor- CDPO matching.** Written declaration for non-availability of required documents was taken from most of the concerned officials where ever the MPR could not be provided.

Indicator wise scores of one category of reporting unit were compiled and matched with the corresponding indicator wise scores of the next category of reporting unit to cull out the inconsistencies in scores, which were further graded as percentages keeping the lower unit as the denominator.

The matching process involved a comparative analysis of the following key indicators:

- Population size of the operational area under each category of targeted beneficiary
- Death and birth registration
- Distribution of Supplementary nutrition / SNP caste wise

- Nutritional status i.e. weight recording and growth monitoring
- Home visit by AWWs and Joint visits of AWCs
- Status of immunization of mother and child
- ANC check- up and referral

Chapter 5.1:

AWW MPR - Supervisor MPR:-

Table 7: Category wise total population size

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
1-3 YR – BOYS	Correct	9	22	8	39
		47.4%	36.1%	36.4%	38.2%
	Incorrect	10	39	14	63
		52.6%	63.9%	63.6%	61.8%
1-3 YR –GIRLS	Correct	11	24	8	43
		57.9%	39.3%	36.4%	42.2%
	Incorrect	8	37	14	59
		42.1%	60.7%	63.6%	57.8%
TOTAL LACTATING MOTHERS	Correct	12	22	8	42
		63.2%	36.1%	36.4%	41.2%
	Incorrect	7	39	14	60
		36.8%	63.9%	63.6%	58.8%
TOTAL PREGNANT WOMEN	Correct	9	17	6	32
		47.4%	27.9%	27.3%	31.4%
	Incorrect	10	44	16	70
		52.6%	72.1%	72.7%	68.6%
TOTAL ADOLESCENT GIRLS	Correct	3	7	3	13
		15.8%	11.5%	13.6%	12.7%
	Incorrect	16	54	19	89
		84.2%	88.5%	86.4%	87.3%

Table 8: Number of Child death registered

Survey register is the base of AWC and is the basic register of AWW. While comparing the scores of all categories of population pregnant women, lactating mothers, adolescent girls and children 1-3 years) inconsistencies ranging from 58% - 87% were observed on matching AWW MPR with that of Supervisor MPRs. The inconsistency was highest in the Adolescent Girls 87%

Registration of death among the children reflect a significant percentage of inconsistency > 70% though no gender difference was observed on the same.

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
1-3 YR BOYS	Correct	5	16	7	28
		26.3%	26.2%	31.8%	27.5%
	Incorrect	14	45	15	74
		73.7%	73.8%	68.2%	72.5%
1-3 YR GIRLS	Correct	6	16	7	29
		31.6%	26.2%	31.8%	28.4%
	Incorrect	13	45	15	73
		68.4%	73.8%	68.2%	71.6%

Table 9: No. of beneficiaries of supplementary Nutrition – Target

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
PREGNANT WOMEN	Correct	6	15	6	27
		31.6%	24.6%	27.3%	26.5%
	Incorrect	13	46	16	75
		68.4%	75.4%	72.7%	73.5%
1-3 YR BOYS	Correct	6	15	5	26
		31.6%	24.6%	22.7%	25.5%
	Incorrect	13	46	17	76
		68.4%	75.4%	77.3%	74.5%
1-3 YR GIRLS	Correct	5	13	4	22
		26.3%	21.3%	18.2%	21.6%
	Incorrect	14	48	18	80
		73.7%	78.7%	81.8%	78.4%
ADOLESENT GIRLS	Correct	1	2	2	5
		5.3%	3.3%	9.1%	4.9%
	Incorrect	18	59	20	97
		94.7%	96.7%	90.9%	95.1%

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
PREG MOTHERS	<i>Correct</i>	6	13	6	25
		31.6%	21.3%	27.3%	24.5%
	<i>Incorrect</i>	13	48	16	77
		68.4%	78.7%	72.7%	75.5%
1-3 YR BOYS	<i>Correct</i>	5	14	3	22
		26.3%	23.0%	13.6%	21.6%
	<i>Incorrect</i>	14	47	19	80
		73.7%	77.0%	86.4%	78.4%
1-3 YR GIRLS	<i>Correct</i>	4	11	3	18

		21.1%	18.0%	13.6%	17.6%
	<i>Incorrect</i>	15	50	19	84
		78.9%	82.0%	86.4%	82.4%
ADOLESENT GIRL	<i>Correct</i>	1	2	2	5
		5.3%	3.3%	9.1%	4.9%
	<i>Incorrect</i>	18	59	20	97
		94.7%	96.7%	90.9%	95.1%

Table 10: No. of beneficiaries of supplementary Nutrition– Benefited (15 days or more)

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
PREGNANT MOTHERS	<i>Correct</i>	3	13	5	21
		15.8%	21.3%	22.7%	20.6%
	<i>Incorrect</i>	16	48	17	81
		84.2%	78.7%	77.3%	79.4%
1-3 YR BOYS	<i>Correct</i>	5	15	3	23
		26.3%	24.6%	13.6%	22.5%
	<i>Incorrect</i>	14	46	19	79
		73.7%	75.4%	86.4%	77.5%
1-3 YR GIRLS	<i>Correct</i>	5	12	3	20
		26.3%	19.7%	13.6%	19.6%
	<i>Incorrect</i>	14	49	19	82
		73.7%	80.3%	86.4%	80.4%
ADOLESENTGIRL	<i>Correct</i>	2	2	2	6
		10.5%	3.3%	9.1%	5.9%
	<i>Incorrect</i>	17	59	20	96
		89.5%	96.7%	90.0%	94.1%

Among the number of beneficiaries targeted, registered and benefited for SNP, inconsistencies of varying degree have been observed in the key beneficiaries' i.e. pregnant women, Adolescent girls, children 1-3 years, varying from 73% 95%. The inconsistencies are comparatively higher among the beneficiaries' registered (75.5- 95%) and benefited (79.4- 94%) of SNP as compared to those targeted (73.5- 95%). Also inconsistency is higher among 1-3 years and adolescent girls as compared to pregnant women and 1-3 year boys, in all categories i.e. targeted, registered and benefited.

Table 11: Age wise grading of Nutritional Status, based on weight- Less than 1 year.

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
GRADE – 3	Correct	1	2	1	4
		5.3%	3.3%	4.5%	3.9%
	Incorrect	18	59	21	98
		94.7%	96.7%	95.5%	96.1%
GRADE – 4	Correct	0	3	3	6
		.0%	4.9%	13.6%	5.9%
	Incorrect	19	58	19	96
		100.0%	95.1%	86.4%	94.1%

Weight recording and plotting the same in the growth chart is one of the core indicators of ICDS program. Inconsistency in such indicator implicates the status of validation and verification being done at various levels, hence the measure of nutritional status of the child. *A cause of major concern and attention of the service providers is that a significant percentage (94-96% of inconsistency is noted in the higher grades of malnutrition (Grade 3 and 4) especially among the vulnerable age group of children less than 1 year of age. The inconsistency is comparatively less in tribal projects as compared to Urban and Rural.*

Table 12: Pre School Education

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
No of AWC provided PSE 21 days and above	Correct	3	3	5	11
		15.8%	4.9%	22.7%	10.8%
	Incorrect	16	58	17	91
		84.2%	95.1%	77.3%	89.2%
Total number of children registered for PSE – 3-6 years BOYS	Correct	5	12	3	20
		26.3%	19.7%	13.6%	19.6%
	Incorrect	14	49	19	82
		73.7%	80.3%	86.4%	80.4%
Total number of children registered for PSE – 3-6 years GIRLS	Correct	4	11	3	18
		21.1%	18.0%	13.6%	17.6%
	Incorrect	15	50	19	84
		78.9%	82.0%	86.4%	82.4%

Similarly, pre -school education is also one of the core services provided to the children for age group 3-6 years. Inconsistencies are evident not only in the number of day(21 days)s pre-school education has been provided to the beneficiaries(89%) but also in the number of children registered(80- 82%).

Table 13: VHND

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
No. of centre organizing VHND (write yes or no)	Correct	1	3	3	7
		5.3%	4.9%	13.6%	6.9%
	Incorrect	18	58	19	95
		94.7%	95.1%	86.4%	93.1%
Number of women participated in VHND	Correct	1	2	3	6
		5.3%	3.3%	13.6%	5.9%
	Incorrect	18	59	19	96
		94.7%	96.7%	86.4%	94.1%

VHND provides a platform to strengthen convergence between ICDS and health Department. Inconsistencies at the level of 93-94% was observed in the number of centers organizing VHND and number of women participating in VHND

Table 14: Home Visit and inspection visit

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
Home visits by AWW	Correct	2	3	2	7
		10.5%	4.9%	9.1%	6.9%
	Incorrect	17	58	20	95
		89.5%	95.1%	90.9%	93.1%
Inspection visit CDPO	Correct	0	1	5	6
		.0%	1.6%	22.7%	5.9%
	Incorrect	19	60	17	96
		100.0%	98.4%	77.3%	94.1%

As per the job description of AWWs, each worker is required to visit five House -holds each day but as far as reporting of this important indicator(Home Visits by AWW) is concerned, a high percentage of inconsistencies have been observed (93%))

In any community based program, monitoring visit is important for program outcomes and number of visits required to be made by Supervisory staff are also fixed. Joint visit of ICDS staff with health Department is part of convergence and joint monitoring of the program, which helps both the Departments not only for taking corrective measures but also for future strategic planning. In spite of the significance of these joint visits, a high percentage of inconsistency has emerged in inspection visit of CDPO (94%) also.

Table 15: Status of Immunization of Pregnant women

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
TT1	Correct	5	16	6	27
		26.3%	26.2%	27.3%	26.5%
	Incorrect	14	45	16	75
		73.7%	73.8%	72.7%	73.5%
TT2	Correct	4	14	5	23
		21.1%	23.0%	22.7%	22.5%
	Incorrect	15	47	17	79
		78.9%	77.0%	77.3%	77.5%

Immunization of both mother and child is a vital parameter for the reduction of IMR and MMR, which is also the main objective of ICDS. Inconsistency in this indicator is highly alarming for the Department as inconsistency ranging from 73- 75 % has been observed in administration of TT1 and TT2 among pregnant women

Table 16: Ante – Natal Check up

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
Total pregnant women registered	Correct	3	5	3	11
		15.8%	8.2%	13.6%	10.8%
	Incorrect	16	56	19	91
		84.2%	91.8%	86.4%	89.2%
Total number of below weight pregnant who received supplementary nutrition	Correct	3	2	4	9
		15.8%	3.3%	18.2%	8.8%
	Incorrect	16	59	18	93
		84.2%	96.7%	81.8%	91.2%
Total pregnant women who received IFA tablets	Correct	1	10	4	15
		5.3%	16.4%	18.2%	14.7%
	Incorrect	18	51	18	87
		94.7%	83.6%	81.8%	85.3%

A careful monitoring and follow-up of the health of the pregnant women through regular Ante natal check-up is vital keeping in view the objectives of the ICDS Department. A high percentage of inconsistencies have been reported by the research team in the indicators – Total pregnant women registered 89%, total number of pregnant women who received IFA tablets 85% and total number of below weight pregnant women received supplementary nutrition 91%.

Table 17: Health Check-up done

INDICATOR		URBAN N=19	RURAL N=61	TRIBAL N=22	TOTAL N=102
0-3 YEARS – BOYS	Correct	2	16	6	24
		10.5%	26.2%	27.3%	23.5%
	Incorrect	17	45	16	78
		89.5%	73.8%	72.7%	76.5%
0-3 YEARS – GIRLS	Correct	3	15	7	25
		15.8%	24.6%	31.8%	24.5%
	Incorrect	16	46	15	77
		84.2%	75.4%	68.2%	75.5%
PREGNANT MOTHERS	Correct	2	13	5	20
		10.5%	21.3%	22.7%	19.6%
	Incorrect	17	48	17	82
		89.5%	78.7%	77.3%	80.4%

In-line with the Antenatal check -up, health check- up of the pregnant women and children 0-3 years also reflect major inconsistencies ranging from 75% - 80%

Chapter 6:

Tackling Road Blocks, Paving Future Path- Conclusions and Recommendations:-

Data verification studies conducted by the Research team analyzed the data collected after field study at households covering 20074 beneficiaries, 1000 AWWs, 250 Supervisors, 124 Child Development Programme Officers, 8 District Programme Officers and State Programme Officer.

Data aberrations and inconsistencies were observed at all levels with varying degrees in Urban, Rural and Tribal areas. The challenges of level of skill of AWWs, to difficulties in communication with relatively low level of supportive supervision emerged as major issues compounded by infrastructural and support mechanisms within the program though well intended but compromised at ground levels.

The following issues have emerged and have been listed with short, mid and long-term recommendations to address them.

Conclusions and Recommendations

Stage 1: Data Collection

Issues – (1) Low awareness on the Scope of work and Tools, inadequate understanding of the Indicators, process of documentation and reporting among AWWs

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Inadequate understanding about the scope of work e.g. correct process of weighing and MUAC.</p> <p>Inadequate understanding about the estimation of targets to be achieved e.g. number of beneficiaries in the area, birth rate, death rate, etc resulting in improper survey.</p> <p>Inadequate understanding of the indicators in the MPR format resulting in wrong entries.</p> <p>Inadequate knowledge about the process of documentation, gaps in reporting and documenting</p>	<ol style="list-style-type: none"> 1. Need based capacity building of AWWs through Master Trainers trained on all aspects of ICDS projects and MIS system. 2. Induction training to be short, comprehensive and a balanced mix of classroom and hands on training. 3. Direct user of MPR to be imparted with additional hands on training on MPR especially AWW and Supervisors. 4. Training to culminate into an 	<p>Mid-term</p> <ol style="list-style-type: none"> 1. Adolescent girls to be inducted as AWWs to encourage local resource. 2. Best Practices to be introduced in a systematic manner through official interventions and directives 	<p>. Long term</p> <ol style="list-style-type: none"> 1. Recruitment systems to be stringent. 2. Eligibility criteria of the AWWs to have a minimum, non - negotiable level of education. 3. Recruitment to be conducted by external panel of experts 4. Placement of Need

<p>indicators - dashing factor</p> <p>Improper knowledge about the process of data collection e.g. doing the right documentation, usage of pencil in data filling and overwriting in registers creating confusion in compilation.</p> <p>Inadequate understanding of MPR validation system resulting in capturing wrong basic raw data, hence multiplying wrong data from source up to the terminal point, impacting strategic decisions and project outcomes.</p> <p>Non uniform and unstructured training of AWWs and Supervisors resulting in lack of uniformity in knowledge across all cadres. e.g. orientation, Induction training , specialized trainings like IMNCI, IYCF, nutrition etc.</p> <p>Improper supportive supervision by the immediate reporting line.</p>	<p>assessment of knowledge uptake through evaluation.</p> <p>5. Old AWWs to be trained on newer aspects of the programme, additional support of efficient AWWs to be provided to the old AWWs for improved functioning.</p> <p>6. MPR format to be standardized including the content, font size, keeping in view the literacy of the user and convenience of data entry operators.</p> <p>7. Also MPR to feature only the minimum possible indicators so as to carry only the indicators which have a reporting and outcome significance e.g. Indicator on Immunization only to focus on the number of complete and incomplete immunizations.</p> <p>8. MPR user guidelines to be made</p>	<p>.</p>	<p>Based Manpower at each level. e.g.: grass root and managerial staff in the required proportions to ensure the availability of the right mix of staff at all levels.</p>
---	---	----------	--

	available as a part of the Training Module. 9. A Handy Booklet on "MPR User Guidelines" to be provided to all users including Supervisors.		
--	--	--	--

Issues – (2) Inadequate availability of Resources to facilitate scope of work allocated to AWWs

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Inadequate Infrastructural availability resulting in data errors and data loss at AWC level (non availability of secure place for data storage, issue of theft, insecurity of data documented on loose sheets, non availability of security compelling AWW to keep the registers at her residence resulting in delayed data entries).</p> <p>Non availability of adequate resources e.g. weighing machine especially adult weighing machines. If available, improperly functioning.</p> <p>Non availability of sustained supply of registers resulting in documenting limited indicators, Reports in self made registers and loose sheets by the inadequately literate AWWs resulting in data loss and questionable</p>	<p>Institutionalizing AWCs with adequate security, basic essential and required facilities e.g. Almirahs, equipment, documentation tools, detailed MPR guidelines (do's/don'ts).</p> <p>Standardized formats with page numbers to be provided at all levels (registers, MPR formats).</p>	<p>Sustained supply of all resources to be made available. Adequate annual maintenance of all equipment including calibration of weighing machine etc., at defined intervals by an external agency.</p>	<p>Well structured, self owned AWCs equipped with basic facilities, skilled manpower, functioning and well maintained equipment supported with basic transport and communication services to be provided.</p>

<p>data reliability.</p> <p>Inadequate availability of transport facilities especially in rural and tribal areas resulting in inadequate field visits resulting in inadequate data collection, hence data loss.</p> <p>Inadequate availability of the required manpower esp. support staff both at the grassroots and Supervisory level i.e. AWH, CDPO. Compromised quality of services and data review due to multitasking, additional duties, upgraded personnel.</p>	<p>Making sustained availability of mobility and provision of reimbursement based on actual need.</p> <p>Need for realistic evaluation of workloads and manpower availability at each AWC</p>		
---	---	--	--

Issues – (3) Inadequate Role Clarity

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Pre occupation in non ICDS work thus compromising on operations of the AWC i.e. AWC do not open at the scheduled time, and do not open regularly.</p> <p>Also additional responsibilities adversely impacting the regularity and mandated home visits resulting in improper and inadequate data collection</p>	<p>1. Ascertaining clarity of roles and ensuring implementation as per the Job Descriptions.</p> <p>2. Need based distribution of work, tailoring to work load keeping in view the need, community demand, geographical location, and manpower and support staff availability.</p>		

Stage 2: Data Compilation

Issue – AWW and Supervisor Level

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Inadequate awareness about the compilation of daily entries into MPR resulting in data handling by third party, family members, friends who are not aware about the subject leading to data errors, data loss and improper data compilation.</p> <p>Non clarity on documentation due to gross difference between some of the indicators as they appear on the</p>	<p>1. Making provisions for the sustained supply of standardized registers and formats which align with the reporting formats at various levels to have uniformity of indicators at the point of data source till the point of terminal data generation, in addition all registers provided in the file should be properly bound, page numbered.</p> <p>2. Adequate capacity building of AWW and Supervisor to be conducted jointly for clarity of roles and implementation. significant need based and evidence based issues need to be focused on during the training programme.</p> <p>Headers in the MPR to clearly reflect the</p>		

<p>AWW register and MPR document.</p> <p>Non availability of all the prescribed registers with the AWW resulting in data loss of the information captured in such registers.</p> <p>Non availability of adequate resources like properly bound registers resulting in data entry in loose sheets, hence improper compilation.</p> <p>Varied methodologies adopted for data compilation like dairies, loose sheets, resulting in data loss.</p> <p>MPR format too lengthy with irrelevant and repetitive indicators resulting in improper understanding of the format, improper data compilation, hence data loss.</p> <p>Availability of different type of formats for the same MPR within the same project resulting in confusion in indicators leading to data errors.</p>	<p>indicators documented in the AWW registers for facilitating data compilation by the low literate AWW.</p> <p>Administrative section at the block level to be active to record requirement and provision timely supply of all logistics. Special care to be taken to Ensuring surplus supply of registers with instructions to avoid vacuum periods of non availability of registers.</p> <p>Special instructions to be issued to avoid document data on loose sheets.</p>		
--	--	--	--

<p>Overwriting of data digits causing confusion resulting in errors in compilation.</p> <p>Improper timing allocated for report compilation resulting in data errors.</p> <p>Inadequate knowledge and competency among the Supervisors about the MPR especially in cases of upgraded AWWs serving as Supervisors coupled with Inadequate coordination between the AWW and Supervisors, hence impacting the data review after compilation by AWW resulting in data aberration and data loss.</p>	<p>Uniformity of documentation methodologies to be followed. Can be ensured through Training Sessions.</p> <ol style="list-style-type: none"> 1. Practical and doable timelines for compilation of data to be fixed with consensus of the reporting units for ensuring data quality 2. Timely support and feedback to be provided to the AWWs. <ol style="list-style-type: none"> 1. Existing monitoring visits being made by the Supervisors to be replaced by Need based Supportive Supervision especially to the below average performing AWCs. 2. Field visits to be regular though based on convenience with a minimum of two per month to ensure quality of supportive supervision provided by the senior staff. 		
---	--	--	--

Stage 3: Data Entry and Processing

Issue – Entry of data and irregular data updating

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Non - availability of proper block wise infrastructural facilities available for data entry resulting into an unequal distribution of workload, contributing to data aberrations.</p> <p>Data entry being done through external agencies/ daily wagers, with un-assured skills, coupled with frequent turnover of staff having no accountability towards data resulting in gross aberrations and data loss at the point of data entry.</p> <p>Bulk entries of the MPR format at a given location provided for data entry being done at insecure places resulting in data errors.</p> <p>Multiple handlers of data (password known to all data</p>	<p>1. Institutionalizing Data Entry system at appropriate levels complying with stringent eligibility criteria wherein the team needs to be adequately qualified and headed by a trained expert on both the programmatic and technical aspects of data.</p> <p>2. Sustained updating and Maintenance of data base of data entry team to ensure the replacement of qualified and trained personnel during turnover of staff.</p> <p>An efficient and doable methodology to be followed for ensuring confidentiality</p>	<p>1. Designation of self - owned, maintained, well structured, equipped and ideally located sites in every block for data entry.</p> <p>2 Adequate support system matching the server load required in place for accelerating the response time and maintenance of effective data base.</p>	<p>Strengthening of Server as per the work load, Data entry system and adequate back up.</p>

<p>entry operators) posing a threat to confidentiality of data resulting in data errors.</p> <p>A full proof system for identification of every MPR format to be established to prevent data errors.</p> <p>Slow server resulting in delay in opening of website leading to delayed data entry and data processing.</p> <p>Non availability of mechanisms in place for data back up in cases the data care taker (AWW, Supervisor) are on leave or transferred.</p>	<p>of data - password to be known only to a limited personnel for limiting access with better controls. Best practices adopted by other alternate institutions e.g. banks could be followed.</p>	<p>A full proof system for identification of every MPR format to be established to prevent data errors.</p>	
---	--	---	--

Stage 4: Data Reporting

Issue – Rationalizing reporting format

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Inadequate awareness and implementation of structured cross checking mechanisms in place to validate the data entered at the first point to the data generated in the report at the terminal point.</p> <p>Availability of different formats within the same project results in confusion and disparity at the time of reporting.</p> <p>Irregular updating of data by the AWWs due to inadequate and irregular home visits resulting in aberrations in data reporting. e.g. pregnant mothers not being updated in the list of lactating mothers even after the child has delivered, Child in Pre School Education not stuck off the list even after leaving the pre-school.</p> <p>MPR format is too lengthy; carry irrelevant and repetitive indicators which do not yield any useful outcome for taking strategic decisions for project improvement. e.g. ration details, residential status, caste</p>	<ol style="list-style-type: none"> 1. Website to be made user friendly 2. Adequate maintenance and regular updating to be ensured. 3. The existing MPR format to be made comprehensive and output based. 		

details etc.			
Website displaying the MIS is not user friendly.			

Stage 4: Quality Check

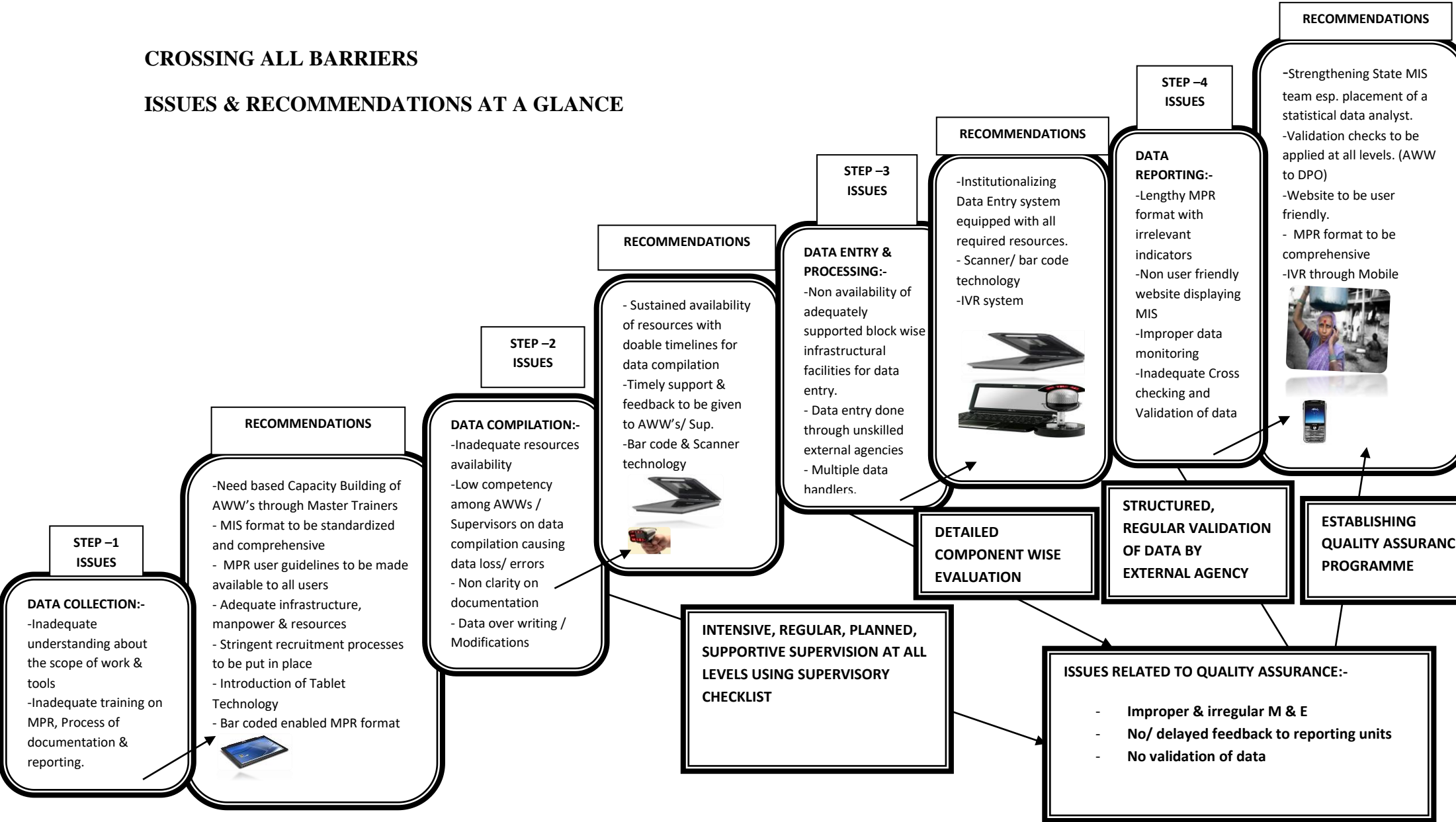
Issue – Lack of monitoring and feedback mechanism.

Contributory Factors	Recommendations		
	SHORT TERM	MID TERM	LONG TERM
<p>Improper and irregular monitoring mechanisms in place at all levels.</p> <p>No feedback / delay in feedback by the higher authorities along the hierarchical line for better project outcomes.</p> <p>No validation checks applied at various levels due to lack of awareness and implementation of validation guidelines.</p> <p>Non availability of a strong MIS team supported by a statistical analyst for data base management at the State.</p> <p>Inadequate mechanisms of AMC and Equipment calibration in place for a sustained upkeep of equipment.</p>	<p>1. Intensive, regular, structured supportive supervision to be done at all levels using Supervisory check list</p> <p>2. Early feedback of the visit to be provided and action taken to be ensured.</p> <p>3. Relevance of correct and incorrect data needs special attention at all levels.</p> <p>4. Load of data generation needs to be handled properly.</p> <p>5. Detailed Component wise evaluation under the project should be undertaken at frequent, defined intervals through internal but inter - project representatives.</p> <p>6. Frequent Validation of evaluation on small, random sample by an external agency at all levels.</p> <p>7.</p>		<p>Need to establish a Quality Assurance Plan for long term and sustainable implementation.</p>

<p>Inadequately qualified, skilled and trained manpower with improper role clarity at various levels impacting data quality.</p> <p>Lack of adequate support to facilitate day to day working resulting in de-motivation and adversely impacting project output and deliverables at various levels.</p> <p>No regular evaluation of ICDS projects done in totality.</p>	<p>Technical Advisory Group to be constituted to look into the quality assurance of the program.</p> <p>8. An urgent need for strengthening the State MIS team comprising of MIS experts and subject experts, especially a statistical data analyst having a sound back ground on statistics/demography and data base management an in-depth understanding of the sensitivity of data, conducting validation checks, regular monitoring and ensuring a sustained management of MIS at the State.</p>		
---	--	--	--

CROSSING ALL BARRIERS

ISSUES & RECOMMENDATIONS AT A GLANCE



ANNEXURE

Annexure 1:

Impressions of the Research Team:-

As the research was conducted by a team comprising of multifaceted expertise in the field of mother and child health, ICDS programs, research, program management and health administration, views of the team on ground experiences were vital for providing updated information to the client for ready reference and action.

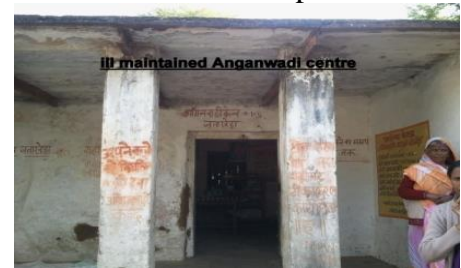
1. General Issues:

A majority of the AWWs and Supervisors are not adequately qualified to have a basic understanding about the indicators of the MPR and format as a whole so are not competent enough to fill the MPR accurately. At some locations the Supervisors are upgraded AWWs so do not appear to be adequately competent for the TORs, hence add to the problem. Though a significant percentage of the cadre of service providers are reported to be provided with induction training on the scope of work but effectiveness of the trainings among those who have been imparted such trainings are directly related to the literacy levels of these providers e.g. a majority of the AWWs are not aware about the correct process of identifying malnutrition using MUAC tape and weight of the child which directly impacts the outcome of such significant indicators. Similarly at the level of Supervisors under the Sangvida scheme, most of the contractual Supervisors have not been provided any training on the MPR especially in Biora, Jhabua, Rajpur, Chatarpur Rural, Umariya Rural, Mandasour Naveen, Ratlam (Alot). In addition the content, duration and methodology of training is also not uniform and structured across all districts as some of them in Indore division and Badod are still required to be trained on IMNCI, IYCF, breast feeding and nutrition.

Inadequate resource availability contributing adversely on the MPR at all levels is another significant issue. The matter is a major concern at the AWC level which captures the basic, raw data directly from the field and forms a vocal piece of information of the first level of project beneficiaries. Any anomaly at this level multiplies upwards in the reporting line resulting in the projection of deceptive information at the terminal point, hence impacting strategic decisions and project outcomes. A thorough review of the available registers further revealed that in certain instances where the registers were

available, they were either devoid of page numbers or were torn. Some of them had been misplaced or were observed in a shabby, non- readable state. These logistical issues result in loss of valuable data, hence poor reporting to the next level of authority. Also documentation of data in self made registers, diaries and loose sheets further adds to data loss and integrity.

Inadequacy of manpower has been observed at all levels of service providers e.g. a majority of AWCs are functioning with a single source rather than the prescribed dual combination of AWW and AWH or one AWW managing multiple centers. A similar situation was observed at the level of CDPOs wherein the placements are strongly impacted due to transfer, promotion, retirement, additional charge e.g. CDPO at Rewa is looking after four projects while that at Fanda and Barod after two projects. At certain locations the senior Supervisors are functioning as CDPOs esp in rural and tribal areas while DPO is holding additional charge of CDPO also. In such cases one Supervisor is handling 2-3 sectors simultaneously but is not competent enough to portray program efficiency. In addition, these managerial posts are also required to perform multitasking i.e. conduct non ICDS tasks like family planning camps and implement schemes like Ladli Laxmi Yojna and administrative tasks. This pressure of meeting the targets and deadlines sets in a significant degree of demotivation and leaves hardly any quality time with them to provide supportive supervision, hand holding of reporting units and review the MPR before onward submission/online posting, hence impacting data verification at all levels. Also, AWWs performing personal tasks hardly have any time to concentrate their thoughts and energies on their official duties e.g. AWW in one of the district is a school teacher.



Non availability of the required infrastructure for the basic functioning of AWCs in the urban areas e.g. Alot (Saheri, Taal) and Abdulhaganj (Mandideep saheri) where generally such centers operate in basic minimum areas available in hired premises for a limited period of time, due to a gross disparity between the amount allocated for rentals vis a vis market rates of rental accommodations. In such locations, the sustained availability of the structure is questionable and is not customized to its need. Also these locations usually lack the regular availability of documenting tools as the AWW does not keep her registers in these centers owing to the risk of theft or carry her registers with her

as a routine, resulting in delay in indicator entries in the available registers, hence predisposing to high levels of human error in MPR.

Also lack of congenial working environment in terms of hygiene in the centers (some AWCs function as cow shed in the evening and are transformed to AWCs in the morning), security at work (AWCs located near unwanted elements, poor AWC structures without a secure boundary), peer rivalry, punitive actions, lack of appreciation, verbal and kind incentivization demotivating them resulting in mental instability, cumulatively having a major toll on the performance of AWWs, thereby influencing the MPR. Similarly the managerial posts are also subjected to high political pressures, high degree of accountability from the district administration. Administrative delays like non allocation of serial numbers to AWCs and improper placement of required staff in the new AWCs results in the provision of inadequate services (SNP, PSE), hence impacting the performance in MPR.



At the level of Supervisors, a major issue which has been unanimously voiced has been the inadequate availability of transport facility especially in highly inaccessible areas i.e. rural, tribal and remote areas resulting in grossly inadequate monitoring, field visits and interaction with the beneficiaries, hence impacting the verification of data collected and documented in the MPR. The issue is compounded in select areas due to improper geographical distribution of sectors wherein overlapping of jurisdictions leads to improper accountability, compromised monitoring and target achievements (Dharad overlapping into Sector Bilpanag) hence impacting the quality of work and subsequently MPR.

Field monitoring as a means of physical data verification is highly compromised as no structured/ planned visits are made at any level i.e. Supervisor, CDPO and DPO. No cross linkages along the hierarchical line are in place for monitoring by the higher level of authority e.g. Supervisor- ACDPO- CDPO- DPO. This has been adversely impacted by various factors like non availability of required managerial staff esp. CDPO/ACDPO in position, lack of adequate coordination between the ground, Supervisory and managerial staff (AWWs, Supervisors, CDPOs, DPOs). Where ever such problems do not exist, issues to counter inaccessibility, reach and coverage act as compounding factors due to

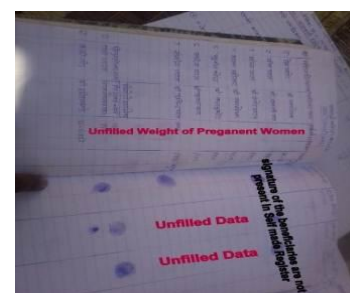
large distances especially in rural and tribal areas and in adequate transport support to the field staff and the monitoring personnel. High work load coupled with multitasking, multiplicity of role and lack of adequate clarity of role among the monitoring levels(AWWs, Supervisors, CDPOs, DPOs) lead to compromised monitoring, hence adversely impacting the quality of data fed, processed, generated and program outcomes.

2. Issues relating to reporting, documentation in MPR:

- **Data Triangulation at the level of AWWs:** Some of the indicators in the MPR feature repeatedly resulting in manual aberrations in reporting (over/ under reporting) due to lack of understanding of the significance and implication of the indicators e.g. Caste- wise, age- wise, gender- wise beneficiaries' esp. in SNP and Registration.
- **Improper Monitoring of Data:** Inadequate field visits, delayed site monitoring resulting in delay in updating of raw data in MPR e.g. status of pregnant women remains unchanged during the normal course of pregnancy or eventuality ie. Pregnant women does not become lactating even after delivery, cases of miscarriage or still birth are still reported as pregnant, hence availing benefits. Validity and reliability of data is also questionable at times as recording immunization details is generally done based on information received by AWW from ANMs.
- **Data Inconsistencies:**



Based on the observations of the research team, Major inconsistencies have been observed in almost



all the key indicators i.e. Immunization of children and pregnant women, antenatal check-up, Supplementary nutrition program, Take Home ration, weight of children and mothers, grading of malnutrition, Preschool education followed by name, age, identity of the beneficiaries also.

- **Improper and inadequate means of Data Entry:** Lack of availability of the required infrastructure for data entry at source, improper data entry mechanisms

in place i.e. entry being done through outsourced agencies employing nonqualified/ inadequately qualified manpower having low/lack of understanding about the programmatic indicators in the MPR coupled with non -availability of manpower, required equipment and inadequate mechanisms of AMC in place for a sustained upkeep of computers and lack of sustained power supply etc impacting the quality of MPR.

- **Lack of Confidentiality of data:** Data entry done at multiple focal points through various outsourced agencies compromising on maintenance of data confidentiality resulting in high chances of data manipulation (pass word at entry point is known to multiple data entry operators). The issue is compounded with lack of adequate monitoring of data entry due to cultural issues as majority of the Supervisors feel hesitant to go to data entry sites being manned by external agencies choosing odd, insecure locations which are light on pocket.
- **Non availability of tools for documentation and reporting:** At certain locations, MPR formats are not available from a significant period of time. Yet other locations have reported availability of different type of formats for the same MPR within the same project.
- **Improper Back up Plan for Data Maintenance:** No data back- up plan is in place in case the data care taker (AWW, Supervisor) are on leave or transferred (no system of hand over at Supervisor / CDPO level).

3. Issues indirectly impacting MPR:

- **Inadequate Capacity of AWWs:**

Inadequate understanding of indicators by the first level user of the service who are responsible for capturing and documenting basic, raw field data but are significantly devoid of the required skills e.g. a majority of AWWs are not trained in MUAC measuring technique resulting in incorrect identification, assessment of severity of malnourishment among children. This inadequately assimilated data at source replicates multifold into the emergence of incorrect data at subsequent levels of reporting hierarchy.
- Inadequate understanding of certain technical terms in the MPR resulting in hesitation of documenting the required information, hence leaving a gap in the required data e.g. transition of grade, SNP caste wise, non-clarity between target and registration

- **Inadequate monitoring and review of MPR:** Overburdened block and district level officials with their additional duties, pre occupation with non ICDS work, pressures of timely entry/submission of data within the stipulated timelines for review by the higher authorities do not find adequate time for review of MPR, hence adopting a casual approach towards the data generated and missing out on the fallacies, thus impacting project outcomes.

- **Tone of Providers**

“Ger ICDS kaam; meetings hume field visit aur monitoring se rokta hai... (Daily meetings, non-ICDS tasks keeps us away from regular monitoring)”.....-A managerial staff from Khargaon district expressed

“Gareeb ki biwi sabki bhauji hoti hain... (‘We’ Supervisors don’t get respect and are assigned all non-ICDS duties)” A Supervisory staff of Burhanpur district remarked

“Hum mahila baal vikas mein aa ke phas gaye, kaam bahut hai, MPR theek dang se banane ke liye time nai milta... (We are struck in this WCD department; the workload is too much, so we cannot focus on preparing the MPR properly)” A Supervisory staff of Narsingpur district expressed



“Itne saare registers bharne padte hain ki pucho mat, time hi nai milta... (There are so many registers to fill which you cannot imagine ; so we do not get time to fill them)”A grass-root worker of Damoh district remarked

“Aap MPR kya match kar rahe ho kuch bhi sahi nahi milega... (What are you matching in MPR, you will not find anything correct)”.....-A Supervisory staff from Rewa district remarked

“Hamari report jama nai hoti, magar CDPO sir apni report pehle hi DPO ko submit kar dete hain...(Even before we submit our report, our CDPO sir submits his MPR to DPO)”.....-A Supervisory staff of Burhanpur district expressed

“Sarkar printed registers tak nai deti, kahan tak aur kab tak rule hathon se chalaain ge...(Government does not provide us with printed registers, we are tired of making registers ourselves)”.....A grass-root worker of Dindori district

“Kie baar kaam itna hota hai ki hume peechle mahine ki report hi bhejni padti hai...(Due to work-pressure at times, we send MPR of previous month)”A Managerial staff of Gwalior district remarked



“Iss MPR main kya Dhundh rahe ho aapko kuch bhi nahi milega... (What you are searching in the MPR, you will find nothing)...- A managerial staff from Jabalpur district expressed

“Kehte hain Supervisor dukan pe baeth ke data entry karaye, yahan ye socially-culturally acceptable nai hai... (We are asked to sit in the shop and get the data entry done but it is not acceptable here)”.....A managerial staff of Burhanpur district expressed

“Supervisor madam 100 rupaye leti hai har mahine aur hamare MPR main sudhar kar deti hain, tho hum zyada tension nai lete... (Supervisor charges 100 rupees every month to correct our MPR so we don’t take much stress)”.....A grass-root worker of Alirajpur district remarked

“Hamari training hue nahi hai MPR bharne ke liye, mushkil lagta hai MPR bharna... (We have not been given proper training to fill MPR so we face difficulties in filling it)”A grass-root worker of Indore remarked

References

1. **WHO-Global Health Observatory-‘Maternal and Reproductive Health’**
http://www.who.int/gho/maternal_health/en/index.html
2. **WHO-Global Health Observatory- ‘Causes of child mortality for the year 2008’**
http://www.who.int/gho/child_health/mortality/mortality_causes_text/en/index.html
3. **WHO-Global Health Observatory-‘Underweight in Children’**
http://www.who.int/gho/mdg/poverty_hunger/underweight_text/en/index.html
4. **SRS Report 2011**
http://censusindia.gov.in/vital_statistics/SRS_Bulletins/SRS%20Bulletin%20-%20January%202011.pdf
5. **NFHS-3 Data (2005-2006)-Fact sheet Madhya Pradesh**
<http://www.mp.gov.in/health/survey/nfhs-3.pdf>
6. **Gwalior Administration- Census 2011**
<http://gwalior.nic.in/Stastical.html>
7. **Area-Profile: Jabalpur**
http://en.wikipedia.org/wiki/Jabalpur_District
8. **Area-Profile: Madhya Pradesh**
<http://www.fpaindia.org/FinalWeb/7/mp.htm>
9. **“Medium Term Health Sector Strategy-Madhya Pradesh”**- Department of Public Health and Family Welfare, Government of Madhya Pradesh
<http://www.mp.gov.in/health/archives/mths.pdf>
10. **DLHS Report Of Jabalpur-**
<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Jabalpur.xls>
11. **DLHS Report of Rewa-**
<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Rewa.xls>

12. DLHS Report of Gwalior -

<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Gwalior.xls>

13. DLHS Report of Ujjain-

<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Ujjain.xls>

14. DLHS Report of Shahdol-

<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Shahdol.xls>

15. DLHS Report of Sagar-

<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Sagar.xls>

16. DLHS Report of Indore-

<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Indore.xls>

17. DLHS Report of Bhopal-

<http://nrhmmis.nic.in/ui/reports/dlhsiii/MADHYA%20PRADESH/DISTRICT%20FACT%20SHEET%20%20Madhya%20Pradesh/Bhopal.xls>

18. Annual Health Survey Bulletin 2010-2011, office of Registrar General, Ministry of Home Affairs 2010-2011

http://censusindia.gov.in/vital_statistics/AHSBulletins/files/AHS%20bulletinppt.pdf

19. Janardan Warvadekar, “Maternal Health Care in Madhya Pradesh”.

20. Reena Basu, “Nutritional challenges in Madhya Pradesh”.