

RESEARCH ARTICLE

An evaluation study of Anganwadis under ICDS in India

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Abstract: Integrated Child Development Services (ICDS) scheme has expanded tremendously over the 30 years of its operation to cover almost all the development blocks in the country. It offers a wide range of health, nutrition and education related services to children, women and adolescent girls. The study wishes to find out the impact and efficacy of the ICDS scheme. The study was conducted from April 2019 to December 2019. The study was conducted on purposive random sampling basis covering 19 States/UTs. 510 AWCs were selected and total 15300 children were covered. One of the important findings of the study is that the children in the Normal grade are found to be 77.4% of the total sample size which means that in spite of a lot of bottlenecks, the malnutrition has been reduced among the children of 0 to 5 years of age. As envisages from the field study, people are well aware of the ICDS scheme and are sending their children to AWCs. However, the children from remote areas are not able to avail these facilities. The opening of public nursery school in urban and rural areas poses a great threat to the enrollment of children in AWCs nowadays unless the infrastructural and other facilities of AWCs are upgraded. The working conditions and remuneration of AWC workers needs to be looked at sympathetically. The findings of the study are expected to help policymakers and programme implementing bodies to take appropriate corrective measures to make the ICDS more effective and thereby bringing down the malnutrition in children to zero level.

Keywords: Integrated Child Development services, Anganwadi Centre, Anganwadi worker, child, mother, health, nutrition, India

1 Introduction

Children are the future of the country and therefore, their growth and development have to be looked after by all the sections of community. However, it is noticed that many of the children face problem of under-nutrition or malnutrition. Globally, the malnutrition contributes to nearly 30 lakh (35%) deaths of children below five years of age which can only be prevented when policy, programme and budgetary actions are directed towards children during prenatal and their first few years of life. Any intervention at later stage of their lives might not be very effective. Moreover, there is now evidence that rapid weight gain after first two years of age increases the risk of chronic diseases later. The National Family Health Survey (NFHS) IV report revealed that 40.4% of children below the age of three years are underweight in India. In view of this, there is an urgent need to redress malnutrition in children. To accomplish this, the Integrated Child Development Services (ICDS) scheme [1], is under implementation as the most important government intervention for reducing maternal and childhood malnutrition. It has emerged as the world's largest programme of its kind. This scheme has expanded remarkably in its scope and coverage providing a well-integrated package of services through a network of community level Anganwadi Centers (AWCs) [2].

ICDS scheme was launched on October 2, 1975 and has expanded tremendously over the 30 years of its operation to cover almost all the development blocks in the country. It offers a wide range of health, nutrition and education related services to children, women and adolescent girls. ICDS is intended to target the needs of the poorest and the undernourished, as well as the age groups that represent a significant window of opportunity for nutrition investments (*i.e.* children under three years of age, pregnant and lactating mother). The services targeted at young children and mothers are immunization, regular health check-ups and supplementary feeding as well as nutrition and health education to improve the childcare and feeding practices. Preschool education is also provided to the children of age between three to six years. Realizing the impact and positive role of AWCs in solving the nutrition problems of children, the NITI Aayog felt a need to periodically update the data on child nutrition to assess the effectiveness of ICDS in delivering the intended services. Since the child nutrition data are routinely generated by the

service delivery system, a quick test/check study to ascertain the reliability of data reported by ICDS's MIS was designed [3].

The ICDS scheme today covers 8.4 crore children of age below 6 years and 1.91 crore pregnant and lactating mothers through 7,066 projects and 13.42 lakh operational AWCs. This is against a total number of 16.45 crore children in the age group 0-6 years (Census, 2011). ICDS, therefore, reaches only around half of the children in this age group. While the families with better financial position do not send their children to AWCs, there are still significant number of children from marginalized community groups and inaccessible habitations that have not been covered by ICDS. Therefore, ICDS data cannot adequately provide a full view of the nutrition status of all young children. Though ICDS-MIS does generate a large database on the weight for age of children under 6 years covered by ICDS, as recorded in the Child Growth Charts, it is confined to those participating in the programme.

2 Objectives of the study

The objectives of the study are:

- (1) To examine the enrollment and other records maintained by AWCs.
- (2) To examine the accuracy of weighing instruments provided to AWCs.
- (3) To examine health records and to take on-the-spot weight measurement of the children available in AWCs and assess their physical status as per the applicable norms and guidelines.
- (4) To assess the availability and adequacy of infrastructures at AWCs.
- (5) To analyse the performance/activity of personnel attached to AWCs.

3 Data and methodology of the study

The study design and methodology was prepared after thorough understanding of ICDS. Thereafter, the schedules were pre-tested in the urban and rural areas around Delhi [4, 5, 7, 8]. The schedules were also revised to incorporate feedbacks received from field. The study was conducted from April 2019 to December 2019. The study was conducted on purposive random sampling basis. The following 19 States/UTs were selected as per sampling framework namely Andhra Pradesh, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, Assam and Himachal Pradesh, Delhi and Puducherry, Dadar Nagar & Haveli and Daman & Diu. 19 Districts (one from each State/UT) was selected by using simple random sampling method. 30 AWCs from each District from States (10 from Urban Areas and 20 from Rural Areas) and 10 AWCs from each selected District of UT (4 from Urban and 6 from Rural areas) was selected on simple random sampling basis. However, keeping the in size of population in view, 30 AWCs were selected from Delhi (10 from Urban Areas and 20 from Rural Areas). Therefore, a total of 510 AWCs were selected. 30 Children from each AWC were selected and total 15300 children were covered under the study and shortfall, if any, was covered from other age group when requisite number of children were not found for the specified age groups. During the visit to AWCs by the study teams, the health records about children were verified. The number of missing records, correctness of weighing machines and other information on the infrastructure and personnel were collected. Further, the on-the-spot weight measurement of the children was also carried out by the study teams. Collected data were analyzed to categorize the health of children as normal (N), moderately malnourished (MM), severely malnourished (SM). A comparison was carried out for percentage of children in all three categories across data sets (AWC records) to determine if there is any difference in weight records [9–12].

4 Study findings

Sample Planning for Verification of Weight Records (Rural Area): To plan the sample of study for weight records verification, the study teams verified the Enrolment Registers (ERs) maintained by AWCs located in the rural areas of the sample States/UTs. The sample was planned as following.

Table 1 reveals that out of the total 19,534 children enrolled in 530 selected AWCs, 10,080 (51.6%) children were chosen for the verification of their weight records. The percentages of sample chosen in Himachal Pradesh and Kerala were 133.9% and 120% respectively as numbers of the enrolled children were inadequate to meet the sample size. Hence non-AWCs children were also covered in the study. Moreover, since the sample size was kept constant at 30 children

per AWC, the sample proportion varied across States, as the number of children registered in AWCs varied. Accordingly, the sample proportion for Uttar Pradesh was the smallest (29.1%), with a range from 29.1% to 133.9%, and average proportion of 51.6% for all the States.

Table 1 Children Enrolled in AWC (Rural Area) & sampling for their weight verification

| Sl.No. | State/UTs | Enrolment of Children | | | Sample size of children planned for weight verification from ERs | % of sample size w.r.t to the total enrolled children |
|-------------------------|----------------------|-----------------------|--------------|----------------|--|---|
| | | M | F | Total Children | | |
| i | ii | iii | iv | v | vi | vii = ((vi)/(v)*100) |
| 1 | Andhra Pradesh | 913 | 890 | 1,803 | 600 | 33.3 |
| 2 | Assam | 416 | 372 | 788 | 600 | 76.1 |
| 3 | Bihar | 742 | 871 | 1,613 | 600 | 37.2 |
| 4 | Dadra & Nagar Haveli | 176 | 145 | 321 | 180 | 56.1 |
| 5 | Daman & Diu | 249 | 209 | 458 | 180 | 39.3 |
| 6 | Delhi | 704 | 714 | 1,418 | 600 | 42.3 |
| 7 | Gujarat | 540 | 524 | 1,064 | 540 | 50.8 |
| 8 | Himachal Pradesh | 221 | 227 | 448 | 600 | 133.9* |
| 9 | Karnataka | 547 | 516 | 1,063 | 600 | 56.4 |
| 10 | Kerala | 271 | 229 | 500 | 600 | 120.0* |
| 11 | Madhya Pradesh | 672 | 659 | 1,331 | 600 | 45.1 |
| 12 | Maharashtra | 593 | 562 | 1,155 | 600 | 51.9 |
| 13 | Odisha | 465 | 394 | 859 | 600 | 69.8 |
| 14 | Puducherry | 105 | 105 | 210 | 180 | 85.7 |
| 15 | Punjab | 608 | 511 | 1,119 | 600 | 53.6 |
| 16 | Rajasthan | 630 | 577 | 1,207 | 600 | 49.7 |
| 17 | Tamil Nadu | 491 | 432 | 923 | 600 | 65.0 |
| 18 | Uttar Pradesh | 1,065 | 996 | 2,061 | 600 | 29.1 |
| 19 | West Bengal | 621 | 572 | 1,193 | 600 | 50.3 |
| States/UTs above | | 10,029 | 9,505 | 19,534 | 10,080 | 51.6 |

Note: Children enrolled in AWCs were less than the sample size so non-AWC children were also covered.

Verification of Weight Records (Rural Area): The study had a sample of 10,080 children from the age group of 06 months to 05 years enrolled in AWCs located in the rural areas of the selected States/ UTs for verification of their weight recorded in the Health Record Register (HRRs). However, it was found that AWCs maintained health records only for 7,703 (76.4%) children. The verification revealed that the information for 2377 (23.6%) of the children were misclassified/missing for which AWCs workers and supervisors had no satisfactory answers. The Team verified the Monthly Progress Reports and ERs of the selected AWCs in addition to checking the accuracy of weighing machines available in AWCs.

It is evident from [Table 2](#) that out of the 10,080 children selected for verification of their weight records, 600 were chosen from each State/UT except from Dadra & Nagar Haveli (DNH), Daman & Diu and Gujarat. The children Health Reports have been categorized by AWCs into three grades such as Normal (N), Moderately Malnourished (MM) and Severally Malnourished (SM). Study found that 73.1%, 21.1% and 5.9% of the children were categorized as N, MM and MS respectively. With the exception of Delhi and Daman & Diu, all other States showed $\geq 50\%$ of children with N nutrition level. However, in the case of Punjab and Uttar Pradesh, all the information maintained were found to be either misclassified or not maintained.

Sample Planning for Verification of Weight Records (Urban Area): The children enrolment status in AWCs and sample planning for their weight verification from ERs and health records maintained by AWCs (Urban area) of the selected States/UTs are given below:

It may be seen from [Table 3](#) that the selected AWCs enrolled 11,946 children in their ERs, out of them 50.13% were males and the remaining 49.87% were females. Out of them, 5220 children (43.7%) were selected as sample for verification of their weight records from HRRs. In the State of Kerala 300 children were chosen against the enrolled 287 children in selected AWCs by covering the non-AWC children, as a result the percentage of sample size for Kerala was 104.5%. As size of the sample chosen for each State was kept at 300, the percentages of sample in Andhra Pradesh and Uttar Pradesh were low at 21.1% and 25.2% respectively due to the comparatively higher enrolment in the selected AWCs. In other States, the chosen sample size varied from 33.5% to 78.4% of the enrollment.

Verification of Weight Records (Urban area) of children: The results of the weight verification of the sample children from the records maintained by the selected AWCs of the Urban Areas are tabulated below:

It may be seen [Table 4](#) that out of the sample of 5,220 children of the selected AWCs of the Urban areas, weight records for only 3,805 (72.9%) children were maintained and information about the remaining 27.1% were misclassified as the weight records were either not maintained

Table 2 Weight record verification of children enrolled in December, 2013 (Rural Area)

| Sl.No. | State/UTs | No. of Children (rural) under Health Report Maintained by AWCs | | | | | | | | | | No. of CW | |
|--------|----------------------|--|-------------|-------|--------------|----------------|---------------|-----|----------------|------------|-------|-----------------|--|
| | | No. of CPWVRH | No. of CWRM | N | % of CFN | MM | % of CFM | SM | % of CFS | % of CWWRM | WRM | WRNM | |
| i | ii | iii | iv | v | vi | vii | viii | ix | x | xi | xii | xiii | |
| | | | | | (v)/(iv)*100 | (vii)/(iv)*100 | (ix)/(iv)*100 | | (iv)/(iii)*100 | | | (xii)/(iii)*100 | |
| 1 | AP | 600 | 339 | 202 | 59.6 | 89 | 26.3 | 48 | 14.2 | 56.5 | 261 | 43.5 | |
| 2 | Assam | 600 | 507 | 374 | 73.8 | 125 | 24.7 | 8 | 1.6 | 84.5 | 93 | 15.5 | |
| 3 | Bihar | 600 | 600 | 347 | 57.8 | 173 | 28.8 | 80 | 13.3 | 100.0 | 0 | 0.0 | |
| 4 | Dadra & Nagar Haveli | 180 | 180 | 161 | 89.4 | 18 | 10.0 | 1 | 0.6 | 100.0 | 0 | 0.0 | |
| 5 | Daman & Diu | 180 | 175 | 74 | 42.3 | 89 | 50.9 | 12 | 6.9 | 97.2 | 5 | 2.8 | |
| 6 | Delhi | 600 | 508 | 253 | 49.8 | 133 | 26.2 | 122 | 24.0 | 84.7 | 92 | 15.3 | |
| 7 | Gujarat | 540 | 539 | 324 | 60.1 | 189 | 35.1 | 26 | 4.8 | 99.8 | 1 | 0.2 | |
| 8 | HP | 600 | 582 | 502 | 86.3 | 63 | 10.8 | 17 | 2.9 | 97.0 | 18 | 3.0 | |
| 9 | Karnataka | 600 | 506 | 380 | 75.1 | 108 | 21.3 | 18 | 3.6 | 84.3 | 94 | 15.7 | |
| 10 | Kerala | 600 | 600 | 488 | 81.3 | 95 | 15.8 | 17 | 2.8 | 100.0 | 0 | 0.0 | |
| 11 | Madhya Pr. | 600 | 600 | 416 | 69.3 | 136 | 22.7 | 48 | 8.0 | 100.0 | 0 | 0.0 | |
| 12 | Maharashtra | 600 | 599 | 553 | 92.3 | 41 | 6.8 | 5 | 0.8 | 99.8 | 1 | 0.2 | |
| 13 | Odisha | 600 | 511 | 404 | 79.1 | 89 | 17.4 | 18 | 3.5 | 85.2 | 89 | 14.8 | |
| 14 | Puducherry | 180 | 180 | 153 | 85.0 | 26 | 14.4 | 1 | 0.6 | 100.0 | 0 | 0.0 | |
| 15 | Punjab | 600 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0.0 | 600 | 100.0 | |
| 16 | Rajasthan | 600 | 166 | 85 | 51.2 | 56 | 33.7 | 25 | 15.1 | 27.7 | 434 | 72.3 | |
| 17 | Tamil Nadu | 600 | 600 | 469 | 78.2 | 128 | 21.3 | 3 | 0.5 | 100.0 | 0 | 0.0 | |
| 18 | Uttar Prad. | 600 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0.0 | 600 | 100.0 | |
| 19 | West Bengal | 600 | 511 | 443 | 86.7 | 64 | 12.5 | 0.8 | 85.2 | 89 | 14.8 | 2.6 | |
| | States/UTs above | 10,080 | 7,703 | 5,628 | 73.1 | 1622 | 21.1 | 453 | 5.9 | 76.4 | 2,377 | 23.6 | |

Note: CPWVRH: children planned for weight verification recorded in HRRs; CW: children for whom; CWRM: children for whom weight records were maintained; CFN: Children found N; CFM: Children found MM; CFS: children found SM; CWWRM: children for whom weight records were maintained; WRM: Weight records not maintained; WRNM: Weight records not maintained in %

Table 3 Sampling for weight verification (Urban Area) of children

| Sl.No. | State/UTs | Enrolment of Children | | | No. of children planned for weight verification from ERs as sample | % of sample size w.r.t to total registered children |
|-------------------------|----------------------|-----------------------|--------------|----------------|--|---|
| | | M | F | Total Children | | |
| i | ii | iii | iv | v | vi | vii = ((vi)/(v))*100 |
| 1 | Andhra Pradesh | 701 | 719 | 1420 | 300 | 21.1 |
| 2 | Assam | 378 | 377 | 755 | 300 | 39.7 |
| 3 | Bihar | 374 | 434 | 808 | 300 | 37.1 |
| 4 | Dadra & Nagar Haveli | 108 | 135 | 243 | 120 | 49.4 |
| 5 | Daman & Diu | 85 | 112 | 197 | 120 | 60.9 |
| 6 | Delhi | 367 | 377 | 744 | 300 | 40.3 |
| 7 | Gujarat | 390 | 378 | 768 | 360 | 46.9 |
| 8 | Himachal Pradesh | 265 | 276 | 541 | 300 | 55.5 |
| 9 | Karnataka | 302 | 345 | 647 | 300 | 46.4 |
| 10 | Kerala | 155 | 132 | 287 | 300 | 104.5* |
| 11 | Madhya Pradesh | 452 | 443 | 895 | 300 | 33.5 |
| 12 | Maharashtra | 431 | 389 | 820 | 300 | 36.6 |
| 13 | Odisha | 263 | 282 | 545 | 300 | 55.0 |
| 14 | Puducherry | 75 | 78 | 153 | 120 | 78.4 |
| 15 | Punjab | 282 | 249 | 531 | 300 | 56.5 |
| 16 | Rajasthan | 274 | 259 | 533 | 300 | 56.3 |
| 17 | Tamil Nadu | 249 | 232 | 481 | 300 | 62.4 |
| 18 | Uttar Pradesh | 632 | 557 | 1189 | 300 | 25.2 |
| 19 | West Bengal | 205 | 184 | 389 | 300 | 77.1 |
| States/UTs above | | 5,988 | 5,958 | 11,946 | 5,220 | 43.7 |

Note: * Children enrolled in AWCs were less than the sample size required, so non-AWC children were also covered

or not properly maintained. Weight of the children was found to be recorded as N, MM and SM in the cases of 77.6%, 17% and 5.4% of the children respectively. However, in the case of Punjab and Uttar Pradesh, all the information maintained were found to be either misclassified or not maintained.

Sample Planning for weight Record Verification (Rural+Urban Areas): The enrolment status and planning for sample for weight records verification of children for both of rural and urban, of the selected States is indicated as following:

It may be seen from Table 5, the total children enrolled in ERs of the sample AWCs during December, 2013 were 31,480 and out of them 62.05% were from rural areas and 37.95% from urban areas. In order to conduct the weight verification, 10,080 children (51.6%) from rural and 5,220 (43.7%) children from urban areas were planned to be covered for verification of their weight records. Thus, a total of 15300 (48.6%) children (Rural+Urban) were planned to be covered in the study.

Weight Record Verification (Rural + Urban Areas): The results of weight verification of the sample children from the records maintained by the selected AWCs of both the Rural and Urban Areas are tabulated below (Table 6):

The study covered 510 AWCs as sample and the total numbers of children enrolled in these AWCs is 31,480. Out of them, study selected 15,300 (48.6%) children as sample for verification of their weight records. It was found that AWCs were maintaining appropriate records only for 11,508 (75.2%) children and thus, records for the remaining 3,792 (24.8%) children were either missing or not maintained properly. The health status of 11,508 (76.4%) children was categorized as Normal, 2,269 (19.7%) children as MM grade and the remaining 657 (5.7%) as SM. However, in the case of Punjab and Uttar Pradesh, all the information maintained were found to be either misclassified or not maintained.

Infrastructural Facilities Available In AWCs [13–16]: Besides verifying the health records and taking on the spot weight measurement of the children in the selected AWCs, the study teams also examined the availability of infrastructures and support provided to AWCs, periodical visits by Doctors to AWCs, availability of medicines, mothers counseling and intervention for malnutrition, etc. The following were found (Table 7):

Out of the total 510 AWCs visited by the study teams, 301 (59%) of them had adequate space, whereas 98.63% of them had provision for Supplementary Nutrition. Similarly, 440 (86.3%) of the AWCs visited had safe drinking water facilities. Space for sitting of the children in the AWCs is a very big problem for the children as well as for the workers. 41% AWCs are not having adequate space for sitting inside the centres. Moreover, 70 AWCs (13.7%) have no drinking water facilities. The workers are fetching water from outside of the centers for drinking purpose. Very often, safe drinking water is not available at AWCs and as a result the children are at risk of contracting water borne diseases like typhoid and diarrhea, etc.

Table 4 Weight record verification of children enrolled in December, 2013 (Rural Area)

| Sl.No. | State/UTs | No. of Children (rural) under Health Report Maintained by AWCs | | | | | | | | | | No. of CW | |
|--------|---------------------------------|--|-------------|-------|--------------|----------------|----------|---------------|----------------|-----------------|-------|-----------|--|
| | | No. of CPWVRH | No. of CWRM | N | % of CFN | MM | % of CFM | SM | % of CFS | % of CWWRM | WRM | WRNM | |
| i. | ii | iii | iv | v | vi | vii | viii | ix | x | xi | xii | xiii | |
| | | | | | (v)/(iv)*100 | (vii)/(iv)*100 | | (ix)/(iv)*100 | (iv)/(iii)*100 | (xii)/(iii)*100 | | | |
| 1. | Andhra Pradesh | 300 | 171 | 120 | 70.2 | 37 | 21.6 | 14 | 8.2 | 57.0 | 129 | 43.0 | |
| 2. | Assam | 300 | 148 | 124 | 83.8 | 19 | 12.8 | 5 | 3.4 | 49.3 | 152 | 50.7 | |
| 3. | Bihar | 300 | 300 | 171 | 57.0 | 77 | 25.7 | 52 | 17.3 | 100.0 | 0 | 0.0 | |
| 4. | <i>Dadra & Nagar Haveli</i> | 120 | 120 | 118 | 98.3 | 2 | 1.7 | 0 | 0.0 | 100.0 | 0 | 0.0 | |
| 5. | Daman & Diu | 120 | 119 | 65 | 54.6 | 47 | 39.5 | 7 | 5.9 | 99.2 | 1 | 0.8 | |
| 6. | Delhi | 300 | 204 | 118 | 57.8 | 61 | 29.9 | 25 | 12.3 | 68.0 | 96 | 32.0 | |
| 7. | Gujarat | 360 | 360 | 284 | 78.9 | 60 | 16.7 | 16 | 4.4 | 100.0 | 0 | 0.0 | |
| 8. | Himachal Pradesh | 300 | 279 | 253 | 90.7 | 16 | 5.7 | 10 | 3.6 | 93.0 | 21 | 7.0 | |
| 9. | Karnataka | 300 | 254 | 172 | 67.7 | 65 | 25.6 | 17 | 6.7 | 84.7 | 46 | 15.3 | |
| 10. | Kerala | 300 | 300 | 247 | 82.3 | 48 | 16.0 | 5 | 1.7 | 100.0 | 0 | 0.0 | |
| 11. | Madhya Pradesh | 300 | 300 | 200 | 66.7 | 70 | 23.3 | 30 | 10.0 | 100.0 | 0 | 0.0 | |
| 12. | Maharashtra | 300 | 298 | 258 | 86.6 | 33 | 11.1 | 7 | 2.3 | 99.3 | 2 | 0.7 | |
| 13. | Odisha | 300 | 265 | 215 | 81.1 | 39 | 14.7 | 11 | 4.2 | 88.3 | 35 | 11.7 | |
| 14. | Puducherry | 120 | 120 | 109 | 90.8 | 11 | 9.2 | 0 | 0.0 | 100.0 | 0 | 0.0 | |
| 15. | Punjab | 300 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0.0 | 300 | 100.0 | |
| 16. | Rajasthan | 300 | 25 | 16 | 64.0 | 6 | 24.0 | 3 | 12.0 | 8.3 | 275 | 91.7 | |
| 17. | Tamil Nadu | 300 | 300 | 264 | 88.0 | 36 | 12.0 | 0 | 0.0 | 100.0 | 0 | 0.0 | |
| 18. | Uttar Pradesh | 300 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0.0 | 300 | 100.0 | |
| 19. | West Bengal | 300 | 242 | 220 | 90.9 | 20 | 8.3 | 2 | 0.8 | 80.7 | 58 | 19.3 | |
| | States/UTs above | 5,220 | 3,805 | 2,954 | 77.6 | 647 | 17.0 | 204 | 5.4 | 72.9 | 1,415 | 27.1 | |

Note: CPWVRH: children planned for weight verification recorded in HRRs; CW: children for whom; CWRM: children for whom weight records were maintained; CFN: Children found N; CFM: Children found MM; CFS: children found SM; CWWRM: children for whom weight records were maintained; WRM: Weight records not maintained; WRNM: Weight records not maintained in %

Table 5 Sampling of children (Rural+Urban) for their weight verification

| Sl.No | State/UTs | Enrolment of Children | | | Planned weight verification from HRRs as sample | | | | |
|-------------------------|----------------------|-----------------------|--------------|--------------|---|-------------|--------------|-------------|--------------------|
| | | Rural | Urban | Total | No. of Rural | % of Rural | No. of urban | % of urban | % of Rural + Urban |
| 1 | Andhra Pradesh | 1803 | 1420 | 3223 | 600 | 33.3 | 300 | 21.1 | 27.9 |
| 2 | Assam | 788 | 755 | 1543 | 600 | 76.1 | 300 | 39.7 | 58.3 |
| 3 | Bihar | 1613 | 808 | 2421 | 600 | 37.2 | 300 | 37.1 | 37.2 |
| 4 | Dadra & Nagar Haveli | 321 | 243 | 564 | 180 | 56.1 | 120 | 49.4 | 53.2 |
| 5 | Daman & Diu | 458 | 197 | 655 | 180 | 39.3 | 120 | 60.9 | 45.8 |
| 6 | Delhi | 1418 | 744 | 2162 | 600 | 42.3 | 300 | 40.3 | 41.6 |
| 7 | Gujarat | 1064 | 768 | 1832 | 540 | 50.8 | 360 | 46.9 | 49.1 |
| 8 | Himachal Pradesh | 448 | 541 | 989 | 600 | 133.9 | 300 | 55.5 | 91.0 |
| 9 | Karnataka | 1063 | 647 | 1710 | 600 | 56.4 | 300 | 46.4 | 52.6 |
| 10 | Kerala | 500 | 287 | 787 | 600 | 120.0 | 300 | 104.5 | 114.4 |
| 11 | Madhya Pradesh | 1331 | 895 | 2226 | 600 | 45.1 | 300 | 33.5 | 40.4 |
| 12 | Maharashtra | 1155 | 820 | 1975 | 600 | 51.9 | 300 | 36.6 | 45.6 |
| 13 | Odisha | 859 | 545 | 1404 | 600 | 69.8 | 300 | 55.0 | 64.1 |
| 14 | Puducherry | 210 | 153 | 363 | 180 | 85.7 | 120 | 78.4 | 82.6 |
| 15 | Punjab | 1119 | 531 | 1650 | 600 | 53.6 | 300 | 56.5 | 54.5 |
| 16 | Rajasthan | 1207 | 533 | 1740 | 600 | 49.7 | 300 | 56.3 | 51.7 |
| 17 | Tamil Nadu | 923 | 481 | 1404 | 600 | 65.0 | 300 | 62.4 | 64.1 |
| 18 | Uttar Pradesh | 2061 | 1189 | 3250 | 600 | 29.1 | 300 | 25.2 | 27.7 |
| 19 | West Bengal | 1193 | 389 | 1582 | 600 | 50.3 | 300 | 77.1 | 56.9 |
| States/UTs above | | 19534 | 11946 | 31480 | 10080 | 51.6 | 5220 | 43.7 | 48.6 |

It may be seen from Table 8 that 29% of AWCs visited by the study teams, had visit by Doctors and 77.5% of had medicines available for children. It is a matter of concern that 71% of the AWCs are not visited by the Doctors. Further, 99% of AWCs provided Mothers Counselling whereas 68.6% of them had provision for intervention to contain malnutrition. Thus, in case of 31.4% of AWCs, no supplementary food are given for speedy recovery of the malnourished children. However, 99% of AWCs workers and supervisors have given necessary counselling to the mothers in protecting the children against malnutrition and different chronic diseases. The study team have also collected data/information on other important aspects like maintenance of records, hygiene and sanitary condition in centers and ownership of the AWC accommodation, etc. The results are given in the following table (Table 9):

Table 9 reveals that 75.7% of AWCs maintained proper records and 48.2% of AWCs has good hygiene conditions at centers. It is also seen that 24.3% of AWCs have not maintained the required records and registers properly. However, 75.7% of the AWCs were maintaining around 30 registers of different types as per the guidelines provided by the Ministry of WCD. Moreover, as AWCs are working for healthy growth of children, their hygiene conditions should be good. However, the study team found that 51.8% of the AWCs had bad hygiene condition. It was also found that 60% of the AWCs in the 19 States/UTs have been functioning from the rented and inadequate accommodation [6].

5 Suggestions

Based on the verification of the children's health records maintained by AWCs, actual weight measurement by the study teams, and position of infrastructure available in AWCs, the following suggestions are made for improving the services being provided by AWCs:

(1) Adequate space should be provided to accommodate all the children and the accommodation provided should be located in a hygiene friendly areas of the locality. The accommodation should located at convenient place and protected with fence and boundary wall.

(2) AWCs should be equipped with appropriate facilities like sanitation facilities, safe drinking water, toilettes, adequate medicines, electricity/power supply, toys,

(3) AWCs should be provided with adequate number of workers.

(4) The enhancement of workers/helpers' monthly honorarium needs urgent consideration. It is also necessary that the AWC workers should not be deployed in other works.

(5) Doctors should visit AWCs regularly.

(6) AWCs should maintain complete health records of all the children enrolled with them. The health graph of the children should be prepared neatly and updated regularly. The growth monitoring charts and Mother Child Protection Card must be prepared and given to the mothers. At present, AWCs are required to maintain around 30 registers which is considered too many. Hence, review should be carried out to reduce/minimize their number.

Table 6 Weight records verification of children (Rural and Urban)

| SLNo. | State/UTs | No. of AWCs | No. of CE | No. of CRWRV | % of SZTE | Weight as recorded in AWC health records for Dec., 2013 | | | | | | | | | | No. of CWHRNM | % No. of CWHRNM | | | | | | | | | |
|------------------|------------------------------|-------------|-----------|--------------|--------------|---|-------|------------------|-------|----------|-----------------|----------|-----|--------------|-----|----------------|-----------------|------------------|----------|------------------|-----|----------------|-----|----------------|-----|------|
| | | | | | | CWHRM | | | | | MM | | | | | | | SM | | | | | | | | |
| | | | | | | R+U | N | % of R+U | R+U | % of R+U | R+U | % of R+U | R+U | % of R+U | R+U | | | | % of R+U | | | | | | | |
| iii | iv | v | vi | vii | viii | ix | x | xi | xii | xiii | xiv | xv | xvi | | | | | | | | | | | | | |
| | | | | | (v)/(iv)*100 | | | (viii)/(vii)*100 | | | (ix)/(viii)*100 | | | (x)/(xi)*100 | | (xii)/(xi)*100 | | (xiii)/(xii)*100 | | (xiv)/(xiii)*100 | | (xv)/(xiv)*100 | | (xvi)/(xv)*100 | | |
| 1 | AP | 30 | 3,223 | 900 | 27.9 | 510 | 322 | 63.1 | 126 | 24.7 | 62 | 12.2 | 62 | 24.7 | 62 | 12.2 | 62 | 24.7 | 62 | 12.2 | 62 | 12.2 | 62 | 12.2 | 62 | 12.2 |
| 2 | Assam | 30 | 1,543 | 900 | 58.3 | 655 | 498 | 76.0 | 144 | 22.0 | 13 | 2.0 | 13 | 22.0 | 13 | 2.0 | 13 | 22.0 | 13 | 2.0 | 13 | 2.0 | 13 | 2.0 | 13 | 2.0 |
| 3 | Bihar <i>Dadra</i> | 30 | 2,421 | 900 | 37.2 | 900 | 518 | 57.6 | 250 | 27.8 | 132 | 14.7 | 132 | 27.8 | 132 | 14.7 | 132 | 27.8 | 132 | 14.7 | 132 | 14.7 | 132 | 14.7 | 132 | 14.7 |
| 4 | & <i>Naggar</i> | 10 | 564 | 300 | 53.2 | 300 | 279 | 93.0 | 20 | 6.7 | 1 | 0.3 | 1 | 6.7 | 1 | 0.3 | 1 | 6.7 | 1 | 0.3 | 1 | 0.3 | 1 | 0.3 | 1 | 0.3 |
| 5 | <i>Haveli</i> Daman & Diu | 10 | 655 | 300 | 45.8 | 294 | 139 | 47.3 | 136 | 46.3 | 19 | 6.5 | 19 | 46.3 | 19 | 6.5 | 19 | 46.3 | 19 | 6.5 | 19 | 6.5 | 19 | 6.5 | 19 | 6.5 |
| 6 | Delhi | 30 | 2,162 | 900 | 41.6 | 712 | 371 | 52.1 | 194 | 27.2 | 147 | 20.6 | 147 | 27.2 | 147 | 20.6 | 147 | 27.2 | 147 | 20.6 | 147 | 20.6 | 147 | 20.6 | 147 | 20.6 |
| 7 | Gujarat | 30 | 1,832 | 900 | 49.1 | 899 | 608 | 67.6 | 249 | 27.7 | 42 | 4.7 | 42 | 27.7 | 42 | 4.7 | 42 | 27.7 | 42 | 4.7 | 42 | 4.7 | 42 | 4.7 | 42 | 4.7 |
| 8 | HP | 30 | 989 | 900 | 91.0 | 861 | 755 | 87.7 | 79 | 9.2 | 27 | 3.1 | 27 | 9.2 | 27 | 3.1 | 27 | 9.2 | 27 | 3.1 | 27 | 3.1 | 27 | 3.1 | 27 | 3.1 |
| 9 | Karnataka | 30 | 1,710 | 900 | 52.6 | 760 | 552 | 72.6 | 173 | 22.8 | 35 | 4.6 | 35 | 22.8 | 35 | 4.6 | 35 | 22.8 | 35 | 4.6 | 35 | 4.6 | 35 | 4.6 | 35 | 4.6 |
| 10 | Kerala | 30 | 787 | 900 | 114.4 | 900 | 735 | 81.7 | 143 | 15.9 | 22 | 2.4 | 22 | 15.9 | 22 | 2.4 | 22 | 15.9 | 22 | 2.4 | 22 | 2.4 | 22 | 2.4 | 22 | 2.4 |
| 11 | MP | 30 | 2,226 | 900 | 40.4 | 900 | 616 | 68.4 | 206 | 22.9 | 78 | 8.7 | 78 | 22.9 | 78 | 8.7 | 78 | 22.9 | 78 | 8.7 | 78 | 8.7 | 78 | 8.7 | 78 | 8.7 |
| 12 | Maharashtra | 30 | 1,975 | 900 | 45.6 | 897 | 811 | 90.4 | 74 | 8.2 | 12 | 1.3 | 12 | 8.2 | 12 | 1.3 | 12 | 8.2 | 12 | 1.3 | 12 | 1.3 | 12 | 1.3 | 12 | 1.3 |
| 13 | Odisha | 30 | 1,404 | 900 | 64.1 | 776 | 619 | 79.8 | 128 | 16.5 | 29 | 3.7 | 29 | 16.5 | 29 | 3.7 | 29 | 16.5 | 29 | 3.7 | 29 | 3.7 | 29 | 3.7 | 29 | 3.7 |
| 14 | Puducherry | 10 | 363 | 300 | 82.6 | 300 | 262 | 87.3 | 37 | 12.3 | 1 | 0.3 | 1 | 12.3 | 1 | 0.3 | 1 | 12.3 | 1 | 0.3 | 1 | 0.3 | 1 | 0.3 | 1 | 0.3 |
| 15 | Punjab | 30 | 1,650 | 900 | 54.5 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 16 | Rajasthan | 30 | 1,740 | 900 | 51.7 | 191 | 101 | 52.9 | 62 | 32.5 | 28 | 14.7 | 28 | 32.5 | 28 | 14.7 | 28 | 32.5 | 28 | 14.7 | 28 | 14.7 | 28 | 14.7 | 28 | 14.7 |
| 17 | Tamil Nadu | 30 | 1,404 | 900 | 64.1 | 900 | 733 | 81.4 | 164 | 18.2 | 3 | 0.3 | 3 | 18.2 | 3 | 0.3 | 3 | 18.2 | 3 | 0.3 | 3 | 0.3 | 3 | 0.3 | 3 | 0.3 |
| 18 | Uttar Pradesh | 30 | 3,250 | 900 | 27.7 | 0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 19 | West Bengal | 30 | 1,582 | 900 | 56.9 | 753 | 663 | 88.0 | 84 | 11.2 | 6 | 0.8 | 6 | 11.2 | 6 | 0.8 | 6 | 11.2 | 6 | 0.8 | 6 | 0.8 | 6 | 0.8 | 6 | 0.8 |
| States/UTs above | | 510 | 31,480 | 15,300 | 48.6 | 11,508 | 8,582 | 74.6 | 2,269 | 19.7 | 657 | 5.7 | 657 | 19.7 | 657 | 5.7 | 657 | 19.7 | 657 | 5.7 | 657 | 5.7 | 657 | 5.7 | 657 | 5.7 |

Note: AWCs: AWCs covered in study; CE: child, enrolled; CRWRV: children planned for weight record verification as sample; SZTE: sample size w.r.t to total enrollment; HSTS: health status w.r.t total Sample; CWHRNM: children whose health records not maintained; CWHRM: child, whose health records not maintained; CWHRM: Children for whom Health record maintained; R+U: Rural + Urban; % of R+U: % of Rural+ Urban w.r.t. Tot Children

Table 7 AWC Space, Provisions for Supplementary Nutrition and Drinking Water

| Sr.No. | States/ UTs | No. of AWC Visited | Space for AWC | | | | Supplementary Nutrition | | | | Drinking Water | | | |
|------------------------|-------------|--------------------|---------------|-------------|-------------|-------------|-------------------------|--------------|--------------|------------|----------------|-------------|-----------|-------------|
| | | | Adequate | | In Adequate | | Provided | | Not Provided | | Available | | NA | |
| | | | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) |
| 1 | AP | 30 | 28 | 93.3 | 2 | 6.7 | 30 | 100 | 0 | 0.0 | 28 | 93.3 | 2 | 6.7 |
| 2 | Assam | 30 | 23 | 76.7 | 7 | 23.3 | 30 | 100 | 0 | 0.0 | 12 | 40 | 18 | 60 |
| 3 | Bihar | 30 | 17 | 56.7 | 13 | 43.3 | 24 | 80 | 6 | 20 | 28 | 93.3 | 2 | 6.7 |
| 4 | DN& H | 10 | 8 | 80 | 2 | 20 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 |
| 5 | D& Diu | 10 | 9 | 90 | 1 | 10 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 |
| 6 | Delhi | 30 | 6 | 20 | 24 | 80 | 30 | 100 | 0 | 0.0 | 27 | 90 | 3 | 10 |
| 7 | Gujarat | 30 | 17 | 56.7 | 13 | 43.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 8 | HP | 30 | 17 | 56.7 | 13 | 43.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 9 | Karnataka | 30 | 17 | 56.7 | 13 | 43.3 | 30 | 100 | 0 | 0.0 | 29 | 96.7 | 1 | 3.3 |
| 10 | Kerala | 30 | 17 | 56.7 | 13 | 43.3 | 30 | 100 | 0 | 0.0 | 29 | 96.7 | 1 | 3.3 |
| 11 | Maharashtra | 30 | 19 | 63.3 | 11 | 36.7 | 30 | 100 | 0 | 0.0 | 28 | 93.3 | 2 | 6.7 |
| 12 | MP | 30 | 20 | 66.7 | 10 | 33.3 | 30 | 100 | 0 | 0.0 | 18 | 60 | 12 | 40 |
| 13 | Odisha | 30 | 20 | 66.7 | 10 | 33.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 14 | Puducherry | 10 | 3 | 30 | 7 | 70 | 10 | 100 | 0 | 0.0 | 9 | 90 | 1 | 10 |
| 15 | Punjab | 30 | 23 | 76.7 | 7 | 23.3 | 30 | 100 | 0 | 0.0 | 14 | 46.7 | 16 | 53.3 |
| 16 | Rajasthan | 30 | 20 | 66.7 | 10 | 33.3 | 29 | 96.67 | 1 | 3.3 | 28 | 93.3 | 2 | 6.7 |
| 17 | Tamil Nadu | 30 | 15 | 50 | 15 | 50 | 30 | 100 | 0 | 0.0 | 29 | 96.7 | 1 | 3.3 |
| 18 | UP | 30 | 1 | 3.3 | 29 | 96.7 | 30 | 100 | 0 | 0.0 | 27 | 90 | 3 | 10 |
| 19 | West Bengal | 30 | 21 | 70 | 9 | 30 | 30 | 100 | 0 | 0.0 | 24 | 80 | 6 | 20 |
| State/UTs above | | 510 | 301 | 59.0 | 209 | 41.0 | 503 | 98.63 | 7 | 1.4 | 440 | 86.3 | 70 | 13.7 |

Table 8 Availability of Facilities in AWC

| SN | State/ UTs | No. of AWC visited | Health related issues at the time of visit | | | | | | | | | | | | | | | |
|------------------------|-------------|--------------------|--|-------------|------------|-------------|--------------------------|-------------|------------|-------------|-------------------|-------------|----------|------------|--------------|-------------|------------|-------------|
| | | | Doctor Visits | | | | Availability of Medicine | | | | Mother Counseling | | | | Intervention | | | |
| | | | Yes | | No | | Yes | | No | | Yes | | No | | Yes | | No | |
| | | | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) |
| 1 | AP | 30 | 0 | 0.0 | 30 | 100 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 2 | Assam | 30 | 5 | 16.7 | 25 | 83.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 1 | 3.3 | 29 | 96.7 |
| 3 | Bihar | 30 | 2 | 6.7 | 28 | 93.3 | 8 | 26.7 | 22 | 73.3 | 30 | 100 | 0 | 0.0 | 24 | 80 | 6 | 20 |
| 4 | DN& H | 10 | 7 | 70 | 3 | 30 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 |
| 5 | D& Diu | 10 | 1 | 10 | 9 | 90 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 |
| 6 | Delhi | 30 | 3 | 10 | 27 | 90 | 29 | 96.7 | 1 | 3.3 | 30 | 100 | 0 | 0.0 | 16 | 53.3 | 14 | 46.7 |
| 7 | Gujarat | 30 | 24 | 80 | 6 | 20 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 8 | HP | 30 | 2 | 6.7 | 28 | 93.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 1 | 3.3 | 29 | 96.7 |
| 9 | Karnataka | 30 | 29 | 96.7 | 1 | 3.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 10 | Kerala | 30 | 13 | 43.3 | 17 | 56.7 | 29 | 96.7 | 1 | 3.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 11 | Maharashtra | 30 | 24 | 80 | 6 | 20 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 12 | MP | 30 | 0 | 0.0 | 30 | 100 | 24 | 80 | 6 | 20 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 13 | Odisha | 30 | 0 | 0.0 | 30 | 100 | 0 | 0.0 | 30 | 100 | 28 | 93.3 | 2 | 6.7 | 17 | 56.7 | 13 | 43.3 |
| 14 | Puducherry | 10 | 0 | 0.0 | 10 | 100 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 | 10 | 100 | 0 | 0.0 |
| 15 | Punjab | 30 | 6 | 20 | 24 | 80 | 11 | 36.7 | 19 | 63.3 | 30 | 100 | 0 | 0.0 | 24 | 80 | 6 | 20 |
| 16 | Rajasthan | 30 | 0 | 0.0 | 30 | 100 | 29 | 96.7 | 1 | 3.3 | 27 | 90 | 3 | 10 | 4 | 13.3 | 26 | 86.7 |
| 17 | Tamil Nadu | 30 | 0 | 0.0 | 30 | 100 | 8 | 26.7 | 22 | 73.3 | 30 | 100 | 0 | 0.0 | 30 | 100 | 0 | 0.0 |
| 18 | UP | 30 | 29 | 96.7 | 1 | 3.3 | 28 | 93.3 | 2 | 6.7 | 30 | 100 | 0 | 0.0 | 0 | 0.0 | 30 | 100 |
| 19 | West Bengal | 30 | 3 | 10 | 27 | 90 | 19 | 63.3 | 11 | 36.7 | 30 | 100 | 0 | 0.0 | 23 | 76.7 | 7 | 23.3 |
| State/UTs above | | 510 | 148 | 29.0 | 362 | 71.0 | 395 | 77.5 | 115 | 22.5 | 505 | 99.0 | 5 | 1.0 | 350 | 68.6 | 160 | 31.4 |

Table 9 Learning Environment in AWCs

| Sl. No. | State/UTs | Records | | | | Hygiene and Sanitation Condition | | | | Accommodation | | | |
|---------|------------------------|------------|-------------|----------------|-------------|----------------------------------|-------------|------------|-------------|---------------|-----------|------------|-----------|
| | | Maintained | | Not maintained | | Good | | Bad | | Owned | | Rented | |
| | | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) | No. | (%) |
| 1 | AP | 0 | 0.0 | 30 | 100 | 18 | 60 | 12 | 40 | 16 | 53.3 | 14 | 46.7 |
| 2 | Assam | 21 | 70.0 | 9 | 30 | 30 | 100 | 0 | 0.0 | 0 | 0.0 | 30 | 100 |
| 3 | Bihar | 23 | 76.7 | 7 | 23.3 | 23 | 76.7 | 7 | 23.3 | 0 | 0.0 | 10 | 33.3 |
| 4 | D, N & H | 10 | 100 | 0 | 0.0 | 8 | 80 | 2 | 20 | 5 | 50 | 5 | 50 |
| 5 | D & Diu | 10 | 100 | 0 | 0.0 | 8 | 80 | 2 | 20 | 9 | 90 | 1 | 10 |
| 6 | Delhi | 9 | 30 | 21 | 70 | 19 | 63.3 | 11 | 36.7 | 1 | 3.3 | 29 | 96.7 |
| 7 | Gujarat | 30 | 100 | 0 | 0.0 | 15 | 50 | 15 | 50 | 21 | 70 | 9 | 30 |
| 8 | HP | 30 | 100 | 0 | 0.0 | 10 | 33.3 | 20 | 66.7 | 0 | 0.0 | 30 | 100 |
| 9 | Karnataka | 30 | 100 | 0 | 0.0 | 10 | 33.3 | 20 | 66.7 | 17 | 56.7 | 13 | 43.3 |
| 10 | Kerala | 30 | 100 | 0 | 0.0 | 10 | 33.3 | 20 | 66.7 | 17 | 56.7 | 13 | 43.3 |
| 11 | Maharashtra | 30 | 100 | 0 | 0.0 | 15 | 50 | 15 | 50 | 19 | 63.3 | 11 | 36.7 |
| 12 | MP | 30 | 100 | 0 | 0.0 | 24 | 80 | 6 | 20 | 20 | 66.7 | 10 | 33.3 |
| 13 | Odisha | 18 | 60 | 12 | 40 | 12 | 40 | 18 | 60 | 3 | 10 | 27 | 90 |
| 14 | Puducherry | 10 | 100 | 0 | 0.0 | 2 | 20 | 8 | 80 | 2 | 20 | 8 | 80 |
| 15 | Punjab | 30 | 100 | 0 | 0.0 | 14 | 46.7 | 16 | 53.3 | 27 | 90 | 3 | 10 |
| 16 | Rajasthan | 22 | 73.3 | 8 | 26.7 | 6 | 20 | 24 | 80 | 20 | 66.7 | 10 | 33.3 |
| 17 | Tamil Nadu | 30 | 100 | 0 | 0.0 | 4 | 13.3 | 26 | 86.7 | 27 | 90 | 3 | 10 |
| 18 | UP | 0 | 0.0 | 30 | 100 | 1 | 3.3 | 29 | 96.7 | 0 | 0.0 | 30 | 100 |
| 19 | West Bengal | 23 | 76.7 | 7 | 23.3 | 17 | 56.7 | 13 | 43.3 | 0 | 0.0 | 30 | 100 |
| | State/UTs above | 386 | 75.7 | 124 | 24.3 | 246 | 48.2 | 264 | 51.8 | 204 | 40 | 306 | 60 |

(7) Regular training should be provided to AWC workers and their supervisors. Further they should also get refresher training to handle registers independently.

(8) The monitoring and supervision should be done by the Block and District level Officers regularly.

(8) Food provided at AWCs should be of good qualities and nutrition as this could enhance the children enrollment and their attendance. Provision of LPG gas for cooking purpose may also be supplied to every AWC [2].

6 Conclusions

The ICDS is one of the major programmes of the Government of India launched in 1975 for the development of women and children [17–19]. The Government has been spending thousands of crore of rupees every year through the networks of AWCs for reducing malnutrition among the children from the age group of zero to five+ years. One of the important findings of the study is that the children in the Normal grade are found to be 77.4% of the total sample size which means that in spite of a lot of bottlenecks, the malnutrition has been reduced among the children of 0 to 5 years of age. As envisages from the field study, people are well aware of the ICDS Programme and are sending their children to AWCs. However, the children from remote areas are not able to avail these facilities. The opening of public nursery school in urban and rural areas poses a great threat to the enrollment of children in AWCs nowadays unless the infrastructural and other facilities of AWCs are upgraded. The working conditions and remuneration of AWC workers needs to be looked at sympathetically. The findings of the study are expected to help policymakers and programme implementing bodies to take appropriate corrective measures to make the programme more effective and thereby bringing down the malnutrition in children to zero level [20–22].

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