



THE EVALUATION OF ICDS IN MAHARASHTRA

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ABSTRACT

Despite impressive economic growth, India remains home to one-third of the world's undernourished children. Hence, in this context this paper aims to examine the issue of under nutrition in the districts of Maharashtra in the recent period. Malnutrition and under nutrition are critical issues in Maharashtra. In spite of being a high growth state in the country, it has occasionally remained in the news due to deaths caused by under nutrition in the recent past. India's primary policy response to tackle the problem of under nutrition was in form of Integrated Child Development Scheme (ICDS) The ICDS has expanded tremendously in last few years of operation to cover almost all development blocks in India and it offers a wide range of nutrition, health and educational services to children, women and adolescent girls. Basically, in this paper an attempt is made to evaluate Integrated Child Development Scheme (ICDS) which is a 'Centrally Sponsored Scheme' to tackle the problem of undernourished among the most vulnerable groups of population in Maharashtra. This evaluation is undertaken in the context of the poverty levels at the district level in Maharashtra.

INTRODUCTION

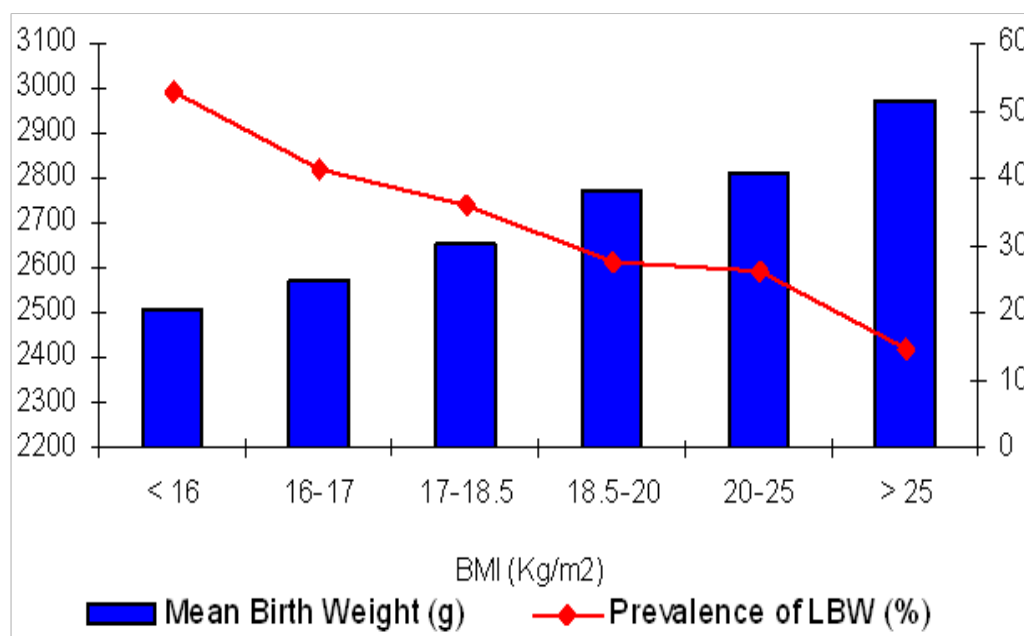
Under nutrition is a serious health problem in the developing and underdeveloped countries. The problem of under nutrition and malnutrition results in higher maternal mortality, retardation of growth, diminished physical and mental capacity, increased morbidity from infectious diseases, prenatal mortality, premature delivery, low birth weight, and (in children) impaired cognitive performance, psychomotor development, and reduced educational attainment and excess mortality. Several studies in the past have indicated that the children who are born with low birth weight (from short, undernourished mothers) are ten times more likely to die in their first year than children with normal weights. Chronic energy deficiency and under nutrition leads to several health problems like micro-nutrient deficiencies, anemia due to iron and folate deficiency, vitamin A deficiency, Iodine deficiency disorders. These children, who are stunted and wasted, enter school late and are more likely to drop out.

At the micro level under nutrition and malnutrition reinforce poverty, lower mental competence, lowers personal achievements, and also earnings, and at the macro level it depresses economic growth by at least 5 percentage of Gross Domestic Product (Svedberg, 2000). Following figure clearly explains the relationship between maternal BMI and low birth weight among children highlighting the importance of nourishment in expecting mothers measured in terms of their BMI.

The NFHS fact sheets reveal some startling facts about under nutrition in India. Dis-aggregation of underweight statistics (NFHS-2) by socio-economic and demographic groups reveals that weight-for-age underweight prevalence is higher in rural areas (50percent) than in urban areas (38 percent); higher among girls (48.9 percent) than among boys (45.5 percent); higher among Scheduled Castes (53.2 percent) and Scheduled Tribes (56.2 percent) than among other Castes (44.1 percent).

The analysis of the problem reveals that under nutrition is dependent on various factors like the family structure; access to education and economic resources for women; hierarchy and decision-making within the household, how health care is sought and provided for the children in the family; birth order of the child, sex of the child; changes in young women's diet and workload after marriage; and how families select daughters-in-law; gender discrimination in various communities, fasting patterns and differences in fasting between men and women; explanations for the thinness of young women, whether the community identifies this as a problem, and, if so, how it can be overcome.

Figure 1: Birth weights in relation to maternal BMI



Source: Tenth Five Year Plan 2002

Problem of under nutrition in Maharashtra:

Malnutrition and under nutrition are critical issues in Maharashtra. In spite of being a high growth state in the country, it has always remained in the news due to deaths caused by under nutrition in the recent past. Prevalence of under nutrition and deaths caused due to under nutrition in Jawahar, Makhada, Gadchiroli and slums of Mumbai have recently been in the news and created a national sensation. The problem of under nutrition is evident among women and children in the state.

The prevalence of anemia in Maharashtra has changed little since National Family Health Survey-2. As per the last National Family Health Survey, about half (48 percentage) of women in Maharashtra are anemic, including 33 percent with mild anemia, 14 percent with moderate anemia, and 2 percent with severe anemia. As per the report, 58 percent of

pregnant women and 54 percent of women who are breastfeeding are anemic, compared with 47 percent of women who are neither pregnant nor breastfeeding. The likelihood of anemia is lower among the more educated and among women in the higher wealth quintiles; nonetheless, at least two in five women are anemic in all population groups. While the prevalence of anemia among children age 6-35 months has declined marginally by 4 percentage points in the seven years since National Family Health Survey-2, the prevalence of anemia among ever-married women has remained virtually unchanged over the same period (National Family Health Survey- 3).

India is home for almost half of the under-nourished and mal-nourished children in the world. Consequently, there is continuous debate on the effectiveness of ICDS and Supplementary Nutrition Programmes in India. There is also large inter-State variation in patterns and trends in underweight in India. In six States, at least one in two children are still underweight, namely Maharashtra, Orissa, Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan. The four latter states account for more than 43 percent of all underweight children in India (NFHS-2). The situation of under-nutrition among children in a progressive state like Maharashtra is a sad reality. This paper makes an attempt to examine the effectiveness of ICDS in the most progressive state of India i.e. Maharashtra.

Table 1: State-wise Nutritional Status of Women and Men in India

Sr. no	State	Women whose BMI is below normal	Men whose BMI is below normal	Women who are under-weight	Men who are under-weight
1	Andhra Pradesh	33.5	30.8	15.6	13.6
2	Kerala	18.0	21.5	28.1	17.8
3	Maharashtra	36.2	33.5	14.5	17.9
	India	35.6	34.8	12.6	9.3

Source: Planning Commission, Government of India

Table 2: Nutritional Status in Maharashtra (NFHS 2005-06)

Category	Height for Age		Weight for Height			Weight for Age			Total No of Children
	-3D	-2D	-3D	-2D	+2D	-3D	-2D	+2D	
Total	19.1	46.3	5.2	16.5	2.8	11.9	37	0.9	2465
Urban	16.4	42.3	4.6	14.1	4.9	9.1	30.7	1.5	1039

Source: NFHS-3 (2005-06), State data obtained from IIPS, Mumbai

Notes: 1. All figures as % of children under 5 years of age classified as malnourished based on the three anthropometric indices of nutritional status.

2. Indices expressed in standard deviation units (SD) from the median of the 2006 WHO International Reference Population.

As indicated in the above table Maharashtra's performance is not satisfactory in comparison to Kerala (and even Andhra which otherwise lags behind Maharashtra). In

fact Maharashtra's figures are closer to the national average indicating its backwardness in nutritional indicators. As per the NFHS 3 survey the nutritional status in Maharashtra is as below.

Evaluating Progress of ICDS with Special Focus on Maharashtra:

ICDS is implemented through Anganwadi centers. The Anganwadis which are functioning in Maharashtra are 82,864. There are 451 projects under this centrally sponsored scheme in Maharashtra. Out of which 297 are in rural areas and 66 in urban areas 88 in urban slum areas. According to 2001 census, total population of children 0-6 years of age 1,31,87,087 in Maharashtra out of which 82,00,000 children are covered by ICDS in Maharashtra.

Looking at the recent past history of ICDS reveals that the World Bank assisted ICDS-III Project (Credit IN N042) ended on March 31, 2006 after 6.5 years of implementation. The project was made effective in October 1999, originally for a period of five years, in five States of Kerala, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh with an outlay of Rs. 1600.66 crore and committed IDA assistance of 225 million SDR (equivalent to US\$ 300 million). In addition, the project aimed at strengthening the ICDS programme in all States/UTs, by improving the quality of training of ICDS functionaries. Under the project, 318 new blocks and about 44,000 AWCs were operationalized in these States except Tamil Nadu (where all blocks covered were the existing blocks). Another 685 old blocks in the five States were also included for strengthening through several quality improvement interventions.

For allocation of funds the identification of high-burden States/districts with low girls' enrolment in primary is a requirement. The identification of High burden States/Districts is based on the findings of a study titled "Mapping and Profile of Target Districts" carried out by the World Bank. Eight States viz., Uttar Pradesh, Madhya Pradesh, Maharashtra, Rajasthan, Bihar, Chhattisgarh Jharkhand and Andhra Pradesh have been selected for intensive support under the project. While the first seven States have been selected due to highest concentration of child malnutrition, Andhra Pradesh has been selected in view of State's best practice experiences in the activities of Mother's Committees/Self Help Groups and community participation in development activities, which can serve as a model for other States to follow. About 160 districts from these States have been identified for intensive support under the Project. As seen in the table below, 20 districts were selected from Maharashtra for implementing this programme (as compared to Bihar where 19 districts were chosen).

Apparently, ICDS is now the world's largest programme providing an integrated approach by converging basic services through community based workers and helpers. In November 2001, the Supreme Court ordered the government to universalize ICDS. Further detailed orders were passed in 2004, which spelt out that ICDS should never be restricted to BPL families, and prohibited contractors from supplying nutrition to Anganwadis; instead it directed that funds should be spent by village communities, self-help groups and Mahila Mandals for "buying grains and preparation of meals." The entitlements of children under six were further strengthened by the landmark Order of December 13, 2006, which ordered

the government to ensure “universalization with quality” within a time frame. The Order clearly states that all ICDS services (Supplementary nutrition, growth monitoring, nutrition and health education, immunization, referral and pre-school education) must be extended to every child under the age of six, all pregnant women and lactating mothers and all adolescent girls.

Table 3: State-wise Identification of Districts and Allocation under ICDS

STATES	No. of selected Districts	No. of AWCs under selected districts (as reported by States)	Total State allocation for five years (tentative) [Crores]
Andhra Pradesh	13	46230	391.00
2. Bihar	19	42793	379.00
3. Chhattisgarh	9	20086	183.00
4. Jharkhand	6	9118	92.00
5. Madhya Pradesh	30	41618	340.00
6. Maharashtra	20	48454	366.00
7. Rajasthan	20	30913	251.00
8. Uttar Pradesh	41	81649	625.00
TOTAL	158	320,861	2628.00

Source: Planning Commission, Government of India

At the state level the allocation under the programme has been increased substantially in recent years. The allocation to the state of Maharashtra is given in the following table.

Table 4: State wise funds released under ICDS Scheme (General) in India

State	2005-06		2006-07		2007-08		2008-09	
	Amount Released	Expend. by State	Amount Released	Expend. by State	Amount Released	Expend. by State	Amount Released	Expend. by State
Maharashtra	16808.92	17007.61	20433.15	9448.22	25105.71	NA	14684.06	19692
Utilization (%)		101.18		46.23				134.10

Note : Reported up to 30/9/2008; Source : www.Indiastat.com

The following table indicates the second installment of grant-in-aid given by GOI to the major states for 2009-10. It is a centrally sponsored scheme implemented through the State Governments with 100 per cent financial assistance from the Central Government for all inputs other than supplementary food, which the States provide from their own resources. Since 2005-06, grant-in-aid pattern has been modified and the Government of India now provides central assistance to States for supplementary nutrition to the extent of 50% of the cost norms or 50% of the actual expenditure incurred by States, whichever is less.

Currently, Maharashtra is among the top three to receive this grant for ICDS as seen in

the table below. This grant-in-aid is towards the non-recurring and recurring expenditure for the ICDS programme. This does not include funds for Kishori shakti yojana (KSY) scheme. It would be really interesting to study why Maharashtra has been treated on par with Bihar for allocation of funds for this programme. This brings out the fact that the most urbanized and the most advanced state in the country has failed to assure food security at the house hold level to poor. Food security is defined as the access to the food needed for a healthy life. This is despite the fact that it has been given substantial grant to deal with the problem of under nutrition. So one has to really question the administrative efficiency of this programme and also the efficiency of the monitoring mechanism in the state is needs to be looked at.

Table 5: Grant-in aid (2009-10) for ICDS
(Lakhs)

State	Grant-in aid
Haryana	2149.88
Maharashtra	5139.62
Andhra Pradesh	4597.12
Bihar	5995.2
Gujarat	2360.58
Uttar Pradesh	3195.61
Tamil Nadu	3431.51
Kerala	2005.43
West Bengal	10552.88
Total	60346.88

Source: Planning Commission, GOI

District- wise Analysis of Malnutrition

It is difficult to obtain district- wise data to conduct district- wise analysis of nutritional standards in Maharashtra. According to Bawadekar and Ladusingh (2008) the level of malnourishment is very high in certain social groups and also in some districts in Maharashtra. Also, the latest NSSO large sample survey (2004-05 data) on nutrition (61st round, report no: 513) shows that per capita calorie intake for the poorer masses is one of the lowest in Maharashtra in the country both in rural and urban areas

For instance the prevalence of malnourishment was found to be 14% in Scheduled caste and 37% high in Scheduled tribes as compared with other backward class category. They have given ranking to the districts based on the severity of malnutrition. The worst performing districts are the ones which have large proportion of SC/ST population. The districts like Nandurbar, Nashik, Amravati, Gadchiroli and Thane are largely inhabited by adivasis who form almost 10% of the total population in the state.

**Table 6: District Ranking in terms of Severity of Malnutrition
from Residual analysis**

District	Ranking	District	Ranking
Nandurbar	1	Ratnagiri	28
Chandrapur	2	Parbhani	29
Nasik	3	Beed	30
Gondiya	4	Satara	31
Gadchiroli	5	Raigarh	32
		Osmanabad	33
Bawadekar and Ladusingh, 2008			

In fact the most disturbing fact about ICDS in Maharashtra is across various districts of Maharashtra there are glaring disparities in implementation of ICDS further aggravating the problem. The allocation of grants to different districts in the state indicates that there is inter-district variation in allocation of these grants. This is obvious as the norms for allocation of funds are % of children suffering from different grades of mal-nutrition and low girls' enrolment in primary level.

The table indicates the top five districts and the bottom five districts for allocation of funds. Districts like Thane, Nandurbar have higher % of tribal population and hence higher allocation is justified. Nashik actually performs better than many other districts on the growth terms however as it has high levels of rural and urban poverty, higher allocations are justified. Ironically, it is difficult to understand lower allocations to poor districts like Hingoli, Parbhani and Wardha. Ratnagiri and Sindhudurg in Konkan division receive lower allocations which may be attributed to their better performance on the poverty front (Chaudhuri and Gupta, 2009).

From the above analysis, one can conclude that those with highest level of under nutrition, due to either poverty, socio-economic backwardness or with high % of ST population seem to have benefitted the least. This may be due the fact that it is a demand driven programme, so along with the districts' initiative it is the effectiveness of planning and delivery mechanism which are important criteria of allocation of funds.

Secondly, the important prerequisite for ICDS is submission of State Project Implementation Plan (SPIP). The allocation requires submission of State PIP and district annual plans. Slow progress of developing district plans and the State PIP is a major constraint in getting the funds. As per the Maharashtra govt source, majority of the efforts have been focused on developing plans for Mumbai district – due to its vastness and unique issues (urban; semi-urban).

All these issues get reflected in the allocation of funds. Apparently, need is not the only criterion for allocation. However, for assuring food security for the poor need has to be emphasized in allocation of funds. The State seems to have ignored this issue. This argument is also validated by the evaluation of Supplementary Nutritional Programme in

Maharashtra. Though there are certain positive signs, the achievements are more prominent in urban areas as compared to the rural and adivasi areas.

Table 7 : Districwise Allocation of Funds

Sr. No	Districts with lowest allocations	Funds Allocated to the District as per cent of total funds allocated for the State (%)	Sr. No	Districts with Highest Allocations	Funds Allocated to the District as per cent of Total Funds Allocated for the State (%)
1	Sindhudurg	0.71	1	Thane	8.93
2	Parbhani	0.93	2	Nashik	6.41
3	Ratnagiri	0.94	3	Jalgaon	5.35
4	Wardha	0.97	4	Latur	5.00
5	Hingoli	1.10	5	Nandurbar	4.86

Source: DES, Government of Maharashtra

The above table indicates very clearly that ICDS has a strong urban bias. The per cent increase in AWCs, the number of projects, number of beneficiaries has been the highest in the urban areas. But the adivasis, except in case of number of project, lag behind the urban and rural areas. This is an indication of growth of ICDS being more in well-served area and the those with highest levels of under nutrition have lower coverage by ICDS activities as seen in the above table. The success rate of ICDS is higher in urban areas may be because of better delivery mechanism and better awareness in among the targeted group. Hence, one can say that the problem of persistent under-nutrition can be due to the mismatches between the programme's design and actual implementation that prevent it from reaching its potential (Gragnotati et. al.).

**Table 8: Progress of Supplementary Nutritional Programme (SNP)
(Percent Change from 2001 to 2009) (in %)**

Project type	Project number (% increase)	Functional AWC	Number of AWCs providing SN > 21 days	no of beneficiaries of SNP						Pregnant women and lactating mothers	
				Children (6 months to 3 years)		3-6 years of age group		Total			
				Registered	Beneficiaries	Registered	Beneficiaries	Registered	Beneficiaries	Registered	Beneficiaries
Adivasis	32.00	64.41	75.30	13.72	12.23	16.31	15.42	15.06	13.87	24.24	24.00
Rural	16.47	30.65	46.64	56.19	47.51	23.06	16.60	36.81	29.43	59.35	51.93
Urban	238.46	366.17	372.57	449.37	467.11	316.69	307.67	371.42	370.24	240.48	240.84
Total	36.25	54.21	70.63	63.85	58.30	35.31	31.61	47.52	43.04	63.13	59.26

Source: Computed from the data obtained from ICDS, Belapur, Government of Maharashtra

The above table also indicates that there seems to be emphasis on supplementary nutrition and pre- school education to children aged between three to six years, at the expense of may be the other components which are crucial for combating persistent under nutrition. In the above table the growth rate for beneficiaries in the age group of 6 months

to 3 years and 3-6 years is the highest as compared to pregnant and lactating mothers.

Though unlike other states, Maharashtra has succeeded in reaching the children below three years, efforts need to be made to increase out reach for pregnant and lactating mothers. The per cent of pregnant women and lactating mothers as beneficiaries is lower in the rural and adivasi areas as seen in the above table. Secondly, more attention also needs to be given to improving child care behaviors, and on educating parents regarding how to improve nutrition using the family budget. This could also solve the problem of under nutrition among children belonging to elite household. This would also help the government to target mainly the households belonging to low income groups. Consequently, targeting this group could be an important step to avoid future increase in the number of children with lower birth-weight and potential danger of facing severe malnutrition at later stages.

The following table indicates the progress of the state in achieving the physical targets of reduction in IMR and CMR. The incidence of still births is also indicated in the table below. It is good to see that the CMR has declined by 20.88%, the live births over the period of 2001-02 to 2008-09 and the number projects have gone up by 68.28%. But the increase in still births (1.46%) and the increase in IMR (10.74%) are quite disturbing. This strengthens the earlier point made that better targeting is needed in ICDS.

Table 9: Physical Progress in IMR and CMR (nos.)

Year	Projects.	Live births	Still births	no of deaths < 1yr	No. of deaths between 1-6 years
2001-02	268	660902	12650	19679	7867
2002-03	268	656319	11901	20612	7974
2003-04	268	677680	12364	21668	8591
2004-05	268	675580	11527	20738	7295
2005-06	268	707713	11459	21549	7451
2006-07	416	976579	14045	23797	7374
2007-08	416	967919	14192	23060	7115
2008-09	451	1039646	12835	21793	6224
Per Cent Change	68.28	57.31	1.46	10.74	-20.88

Source: Government of Maharashtra

The following table indicates the progress made in reducing the malnutrition levels among children in the state. The percentage increase in the normal children for 2001-02 to 2008-09 is highest for urban areas (309.05%) and lowest for adivasis, which again strengthens the earlier point made i.e. those who need the most get the least.

The per cent decline in Grade II and Grade III and IV for rural areas and adivasis is very

good sign. But 12.86% rise in the Grade I for all the categories is an area of concern. This may be due to phase wise process of eliminating the problem of under nutrition.

**Table 10: Projects for Combating Mal-nutrition in Maharashtra
(Percentage Change 2001 to 2009)**

Project Type	Number of projects (nos.)	Grade wise categorization of children as per their weight (%)				
		Normal children	Grade- I	Grade- II	Grade- III+IV	weights taken of children (Total)
Rural	16	94	17	-52	-44	41
Adivasi	32.00	53.28	12.86	-40.12	-42.50	14.93
Urban	238.46	309.05	192.74	143.84	26.85	228.91
Total	36.25	99.94	26.34	-35.63	-37.12	47.00

Source: ICDS, Belapur, GoM

To conclude, it is absolutely essential to combat the problem of under nutrition and malnutrition as there are devastating social, human and economic consequences of this problem. Consequently, failing to address it urgently means sacrificing the large social, economic and human benefits of tackling the problem of under-nutrition. Hence, correcting the implementation problems and involvement of the stakeholders is absolutely essential to increase the success of ICDS in Maharashtra. For the rural and tribal to reap the benefits of this affordable and cost effective nutrition intervention problems like disparities in allocation, implementation failures and political non-commitment must be tackled on a war footing.

Secondly, improving geographical access is not adequate, there may be social and cultural issues related to nutritional habits and practices of child care which the ICDS and public health programmes need to address through ASHAs and Anganwadi workers. Hence, it is very important that these ASHAS and Anganwadi workers to be not only equipped with proper training but also sufficient material to be able to perform their duties in the best possible manner. The immediate priority should be creating more awareness about ASHAS and Anganwadi workers. As per the IIPS survey (2009) on NRHM, only 13 % of women are aware about ASHA and only 22% are aware about Janani Surashka Yojana in India. The important lesson to be drawn from this is one needs to involve all the stakeholders in this task of reducing the problem of under- nutrition. Anganwadi workers will not be able to reach each and every person and therefore some efforts from community, panchayat members, local political parties, NGOs and social activist need to be involved in this mammoth task of reducing under nutrition in Maharashtra.

To sum up, India is which is emphasizing on inclusive growth cannot get headway in it unless it is able to assure required nutritional security to people. Inclusion implies not

only reduction in absolute poverty but also in income inequality across income groups and geographical regions. There are variety of elements and dimensions that are involved in determining whether growth is inclusive. The most important dimension is the improvement of the livelihood of the poor. Do you expect the livelihood to improve unless basic issues of nutrition are addressed and food security is assured to poor? The Central government has recently passed a more comprehensive Food Security Bill which is been criticized even before its implementation. As per the criticism the bill that is cleared by the cabinet is likely to hurt the poor more than it helps them. India already has 54.7 million tonnes of rice and wheat lying as stocks with the Centre and the states, 29.7 million tonnes of grain in excess of the buffer stocking norm (Economic Times, December 20, 2011). To meet the requirements of the Food Security Bill, India will annually need 60 million to 61 million tons of grains to feed people who will be eligible for assistance under the program, up from around 55 million tons it needs now for state-run welfare programs.

This will cause food subsidies to balloon to an estimated 949.73 billion rupees (\$18.05 billion) in the first year of implementing the food security program, up from around 673 billion rupees now. The government will also need an investment of 1.1 trillion rupees to boost farm output over next few years.

Hence, against this backdrop, evaluation of schemes like ICDS will provide some guidelines regarding what lessons we can draw for better implementation of Food Security Bill which will be a major step in achieving the objective of Inclusive Growth.

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