

Working Paper 318

**Integrated Child
Development Services
in India – A Sub-National
Review**

*Jonathan Gangbar
Pavithra Rajan
K Gayithri*

ISBN 978-81-7791-174-9

© 2014, Copyright Reserved

The Institute for Social and Economic Change,
Bangalore

Institute for Social and Economic Change (ISEC) is engaged in interdisciplinary research in analytical and applied areas of the social sciences, encompassing diverse aspects of development. ISEC works with central, state and local governments as well as international agencies by undertaking systematic studies of resource potential, identifying factors influencing growth and examining measures for reducing poverty. The thrust areas of research include state and local economic policies, issues relating to sociological and demographic transition, environmental issues and fiscal, administrative and political decentralization and governance. It pursues fruitful contacts with other institutions and scholars devoted to social science research through collaborative research programmes, seminars, etc.

The Working Paper Series provides an opportunity for ISEC faculty, visiting fellows and PhD scholars to discuss their ideas and research work before publication and to get feedback from their peer group. Papers selected for publication in the series present empirical analyses and generally deal with wider issues of public policy at a sectoral, regional or national level. These working papers undergo review but typically do not present final research results, and constitute works in progress.

INTEGRATED CHILD DEVELOPMENT SERVICES IN INDIA – A SUB-NATIONAL REVIEW

Jonathan Gangbar, Pavithra Rajan and K Gayithri*

Abstract

The Integrated Child Development Services is India's flagship programme aimed at addressing the holistic needs of the child. Since its inception in 1975, the programme has continued to experience a policy-implementation gap that has greatly hindered the effectiveness of the programme. Factors contributing to this gap can be attributed to poor resource allocation, poor governance and programmatic deficiencies. Furthermore, in 2001, the ICDS programme was mandated by the supreme court to be universalized. This has placed the added burden on implementing bodies to establish the programme nationwide, while trying to improve service quality. Although funding has been substantially increased in the years following universalization, the programme continues to struggle. That being said, programme effectiveness is not contingent upon increased funding; but rather the efficacy of the programme relies upon efficient allocation and utilization of adequate resources. A sub-national review of the ICDS programme has revealed that the financial provision for the ICDS programme by both Central and State authorities is disproportionate to the norms of the policy. Poorer regions with higher levels of malnutrition have received less funding as compared to the wealthier regions with better nutrition status over time. Although there have been marginal improvements in the nutritional status of ICDS beneficiaries over time, there seems to be an increasing gap in the nutrition status between wealthier and less affluent regions of the country. There is a need to further examine how well Central and State authorities are using their resources to achieve intended programme outputs and outcomes.

Introduction

India's Integrated Child Development Services (ICDS) is one of the world's largest child development programmes. It is a centrally sponsored scheme that has been the Government of India's (GOI) flagship programme since 1975 for addressing the holistic needs of the child. The ICDS programme offers a comprehensive range of services that aim to improve the nutritional and health status of children 0-6 years, as well as pregnant and lactating women. More recently, the programme was extended to cover adolescent girls. As well, ICDS lays the framework for the overall physical and mental development of children 0-6 years through non-formal preschool education (for children 3-6 years) and through the provision of nutritional and health education to their mothers.

Since inception, ICDS and its efficacy have been greatly hindered by an apparent policy-implementation gap, which continues to remain a challenge today, and has affected the overall performance of the programme at the all-India level. Factors that perpetuate this policy-implementation gap and the effective performance of ICDS, as highlighted in the current research on ICDS, are attributable to: (1) Poor Resource Allocation (2) Poor Governance and (3) Programmatic Deficiencies (please refer Appendix 1 for further information regarding ICDS's programmatic deficiencies). Compounding the aforementioned challenges is the fact that in 2001 the Supreme Court of India issued an interim order stating that the ICDS programme was to be universalized and that implementation of

* Jonathan Gangbar and Pavithra Rajan are Research Associates and K Gayithri is Associate Professor, Centre for Economic Studies and Policy, Institute for Social and Economic Change, Bangalore, India.

The authors would like to express their deep gratitude to the Canadian International Development Agency and the Shastri-Indo Canadian Institute for their funding support and the Institute for Social and Economic Change, India for providing the necessary support for completion of this study.

this order was to come into effect by 2004 (Mohmand, 2012). The universalization of ICDS has created a new challenge for implementing bodies of the programme as there is a need to not only expand the programme, but to ensure expansion with quality. As highlighted in the fairly recent research on ICDS, the universalization of ICDS and the effectiveness of its implementation hinges on the quality with which the programme is universalized (Drèze, 2006). There has been a fair amount of research produced that highlight the programmatic deficiencies of the ICDS programme (i.e. over-emphasis on Supplementary Nutrition Programme, neglect of children 0-3 years, regressive programme coverage and over-burdened/under-trained human capital at the field level) that are overtly affecting its quality implementation; however there are opportunities for further research that investigate how to remedy these deficiencies and improve service quality throughout the universalization process.

The ICDS programme has been widely investigated and studied; however there are several gaps that exist amongst the available research. First, it is important to recognize that the research produced or commissioned by affiliates of the ICDS programme such as National Institute of Public Cooperation and Child Development (NIPCCD) or The World Bank are not independent in nature. These organizations represent their own and/or another organization's interests and hence are likely to produce research that often adheres to an external agenda. This can influence what is studied regarding ICDS and how it is reported. Second, most of the ICDS research that has been undertaken in recent years has taken place at the micro-level and is either project specific and/or focused on a particular geographic region in the country (state, district, block and/or village). Third, although there has been some research produced in recent years that focuses on the efficacy of ICDS from a national and sub-national perspective, there has been extensive focus on issues as they relate to poor governance and programmatic deficiencies. There is a need to explore issues affecting ICDS as they relate to resources: adequacy, allocation and utilization.

First, this paper presents an overview of the relevant sections of the ICDS policy, followed by a snapshot of ICDS's performance at the national level with emphasis on its performance since the programme has been universalized. From there, this paper analyzes the funding patterns of the ICDS programme over time and compares resource adequacy, allocation and utilization at the sub-national level.

Integrated Child Development Services - Policy Overview

As mentioned earlier, the ICDS scheme, a centrally sponsored initiative, has been designed to address the holistic developmental needs of the child. The comprehensive set of services delivered via ICDS, targets children 0-6 years, pregnant and lactating women and adolescent girls. Outlined below are important elements of the ICDS policy that are discussed in greater detail in further sections.

Infrastructure: ICDS delivers services specifically focused on health, nutrition, and education, which are delivered by Anganwadi Workers (AWWs) at Anganwadi Centres (AWCs) at the village level. AWCs are established based on the number of beneficiaries in the area. The norms surrounding AWCs dictate that one AWC is meant to cover between 400-800 beneficiaries. However, in difficult-to-reach areas in the country such as the North East, the norms change to one AWC for 300-800 beneficiaries.

Funding Patterns: The funding patterns under the ICDS scheme follows a top-down model that bifurcates the programme into two components: ICDS General (G), which is meant to cover the operational costs of the programme and ICDS Supplementary Nutrition (SN), which is provided for the Supplementary Nutrition component of ICDS. The norms that dictate how funding is provided for these two components differ, and have also evolved over time. Since 2009, 90% of funding for ICDS (G) is to come from the Central government and the remaining 10% is to be covered by each respective state government. Prior to 2009, the Central government was responsible for providing 100% of the funding for ICDS (G). For ICDS (SN), the norms have evolved from no central assistance (prior to 2005/06) to a 50:50 Central-State contribution (from 2005/06-2008/09). This norm is still applicable across all states with the exception of the North Eastern states, where the norm from 2009/10 onwards was changed to 90:10 Central-State contribution for Supplementary Nutrition.

Nutritional Component: The ICDS (SN) component is the largest element of the ICDS programme. Supplementary feeding is provided to all eligible beneficiaries for 300 days per year. The purpose of this component is to bridge the protein-energy gap and average dietary intake of children and pregnant and lactating women. The norms for ICDS (SN) expenditure per beneficiary per day fall under 3 categories: (1) children aged 6-72 months (2) severely malnourished children 6-72 months and (3) pregnant and lactating women. From 2008 onwards, these norms have been revised. The daily expenditure for category 1 has increased from INR 2 to INR 4; category 2 from INR 2.7 to INR 6 and category 3 from INR 2.3 to INR 5. For children 0-6 months, exclusive breastfeeding is emphasized; whereas for children 6 months to 3 years, a Take Home Ration (THR) in the form of wheat or rice is given. Lastly, for children 3-6 years, hot cooked meals are provided at the AWCs.

Policy Goals and Measurement: The primary goal of the ICDS policy is to improve health and nutrition of children aged 0-6 years, pregnant and lactating mothers and adolescent girls. Key output indicators of the scheme relate to anthropometric measurements and infant mortality rate.

The aforementioned elements of the ICDS policy outline the normative framework for implementing this programme. It is necessary to examine how these norms are translating into practice.

ICDS at the All-India Level - Post Universalization

ICDS and its efficacy have long been hindered by a policy-implementation gap, which is evident from the state of the key indicators pertaining to child and maternal health and nutrition in India. Although it cannot be said that there is a direct link between these indicators and ICDS per se, it is fair to infer that a programme, with the resources, coverage and extensive history of ICDS should have been in a position to help improve such indicators. However, it is projected that India will miss its targets in relation to child health and nutrition, as per the MDG India Country Report published in 2011. This is substantiated by the Ministry of Women and Child Development, which highlights that between 2006 and 2010, in India, the percentage of children that were underweight and severely underweight was reported at 43% and 16% respectively. The same can be said for the child health indicators, such as

Infant Mortality Rate (IMR) and Child Mortality Rate (CMR), which were reported at 48 per 1000 and 63 per 1000 respectively, versus their targets of 30 per 1000 (IMR) and 31 per 1000 (CMR).

The Supreme Court of India's mandate to universalize the ICDS programme and its further order in 2002 to monitor the progress of its implementation and impose penalties on those states that were failing to universalize the programme, placed a significant amount of pressure on the Government of India to begin establishing the required 1.4 million Anganwadi Centres (AWCs) that were necessary to achieve universalization (Mohmand, 2012). In order to deal with the massive resource requirements that universalization would entail, while also dealing with the consistent issue of persistent underfunding for ICDS, it was recommended that the GOI, as well as the International community substantially increase their financial support of ICDS (Gragnoloti et al, 2006). In fact, between the fiscal years 2007/08 and 2013/14, the Government of India has increased their support by approximately 66.39% (Kapur, 2013). As well, in 2012, The World Bank approved its ICDS System Strengthening and Nutrition Program¹ in India, which would contribute USD \$106 million to be used towards the improvement of nutrition in India under the ICDS programme (The World Bank Group, 2012).

However, increasing the expenditure on ICDS will not translate into an increase in the programme's effectiveness. Firstly, it is likely that expenditure on ICDS would need to increase as the programme expanded, as a result of the universalization process. What needs to be examined is whether the increase in the resources provided is adequate, considering the new needs of the programme and the norms laid in the ICDS policy. More importantly, effective implementation of the ICDS programme depends upon how efficiently available funds and resources are utilized (Nayak et al, 2006). The efficient utilization of resources once again highlights the importance of universalization with quality; however seeing as the ICDS programme is being expanded based upon a design that is largely considered inefficient, it seems that universalization with quality is likely to be neglected at the expense of simply achieving the mandated targets for universalizing the programme. This is evidenced in the budget brief released for FY 2013-14, whereby it was noted that the number of AWCs fell short of the sanctioned targets for the previous fiscal year. Furthermore, most of the existing AWCs across India lack basic infrastructure like clean drinking water facilities, hygienic toilet facilities and separate kitchen (Kapur, 2013).

Based on the aforementioned statement, it can be inferred that with regard to the actual delivery of ICDS services, there is greater emphasis (at present) on ensuring the physical establishment of the mandated Anganwadi Centres versus understanding how the resources that are required to run the programmes that take place in the Anganwadi Centres can be most efficiently used to achieve intended outputs and outcomes. Granted, it is necessary for the GOI to meet its mandated targets and ensure that AWCs are available for beneficiaries across the country, but by simply focusing on expansion targets, the inefficiencies that add to the financial burden and ineffectiveness of the ICDS

¹ This programme falls under The World Bank's broader strategy – Scaling Up Nutrition: A Framework For Action, which outlines priorities for addressing the persistent issues related to under-nutrition and to facilitate Millennium Development Goals achievement. The ICDS System Strengthening and Nutrition Improvement Program will seek to improve nutritional outcomes of children in India and will do so by focusing on four key areas: (1) Institutional and Systems Strengthening (2) Community Mobilization and Behaviour Change (3) Convergent Nutrition Action and (4) Project Management and Monitoring and Evaluation. On September 6, 2012, a USD \$106 million credit was issued to support the GOI in improving nutritional outcomes for children under 6 (The World Bank Group, 2012).

programme, such as the disproportionate amount of funding for the Supplementary Nutrition Programme (SNP), and poorly trained and over-burdened human capital can only worsen in the long-term. There is a substantial need to start allocating funds towards initiatives that address the issue of malnutrition as opposed to continuing to over-budget for interventions related to food provision and infrastructure development (Mohmand, 2012). In effect, universalization versus quality universalization can potentially detract from the effectiveness of the ICDS programme and its objectives². Given the diversity of the country and the regional disparities that exist within India, it is more effective to look at ICDS from a sub-national perspective. This is because the performance of poor performing regions tend to bring down the national performance of the ICDS programme. There are region specific factors that are responsible for why certain regions are performing better or worse, and hence it is necessary to undertake an evaluation of ICDS at the sub-national level and review the financial patterns that have developed over time. As well, there are also opportunities to conduct research that appraises the technical efficiency³ of ICDS, although it may be better to examine this at the individual state level.

Regional Breakdown

The classification of Indian States was done region wise taking into consideration the socio-economic differences that exist between states. The regions consist of the South, the Northeast, the Poor North, the Rich North and the Other North (Das Gupta et al, 2005).

The South: Andhra Pradesh, Karnataka, Kerala and Tamil Nadu

The Northeast: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura

The "Poor" North: Bihar, *Jharkhand, Uttar Pradesh, *Uttarakhand, Orissa, Madhya Pradesh and Rajasthan

The "Rich" North: Punjab, Haryana, Gujarat and Maharashtra

The "Other" North: Himachal Pradesh, Jammu & Kashmir and West Bengal

* Jharkhand & Uttarakhand– in the study by Das Gupta et al 2005, Jharkhand and Uttarakhand were not included in the analysis; however they are included in this study and are considered a part of the Poor North because of their relation to Bihar and Uttar Pradesh respectively, which both belong to the Poor North category.

² Objectives of the ICDS programme: (1) improve nutritional and health status of children 0-6 years (2) lay the foundation for proper psychological, physical and social development of the child (3) reduce the incidence of mortality, morbidity, malnutrition and school dropout (4) achieve effective co-ordination of policy and implementation amongst the various departments to promote child development (5) enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education (Ministry of Women and Child Development, Government of India: <http://wcd.nic.in/icds/icds.aspx>).

³ "Technical efficiency refers to the physical relation between resources (capital and labour) and [a particular] outcome. A technically efficient position is achieved when the maximum possible improvement in outcome is obtained from a set of resource inputs. An intervention is technically inefficient if the same (or greater) outcome could be produced with less of one type of input" (Page 1136, Palmer and Torgerson, 1999).

Resource Allocation and Funding⁴

The funding allocation for ICDS as presented in the Comptroller Auditor General's (CAG) Report (2013) on Performance Audit of ICDS Scheme is broken out into two categories, ICDS (G) – [ICDS General] and ICDS (SN) – [ICDS Supplementary Nutrition]. ICDS (G) is meant to cover operational costs and ICDS (SN) is for funding the Supplementary Nutrition component of ICDS. Between the time periods 2006/07 and 2010/11, the norms regarding how financial assistance is provided by the Central Government to the States has changed for both of the categories respectively.

ICDS (G):

With respect to ICDS (G), between 2006/07 and 2010/11 the Central Government has gone from providing 100% financial assistance to providing 90% and requiring the States to supplement the additional 10% of costs. It is quite noticeable that there has been a substantial incremental increase in per capita funds released and per capita expenditure over time with a growth rate of 25.58% and 36.99% respectively (please refer to Table 1).

The region that stands out is the North Poor. In per capita terms, the North Poor region is receiving the least amount of funds in both 2006/07 and 2010/11. As well, the North Poor appears to have had a lesser increase in per capita expenditure between 2006/07 and 2010/11 as compared to the other regions. This is concerning because the North Poor had the largest number of beneficiaries in the ICDS programme in 2006/07 and has experienced one of the largest increases in the number of its beneficiaries between 2006/07 and 2010/11 (please refer to Table 2), and therefore it is likely that the North Poor contributes a substantially high percentage of malnourished children in India. This will be discussed more in depth in the following sections.

ICDS (SN):

With regard to ICDS (SN), it was observed that there has been inconsistency between ICDS norms pertaining to financial allocation and the actual contribution by the Central Government. This has been quite evident across most regions in the country. First, as per the ICDS policy with regard to the Supplementary Nutrition Programme, in 2006/07, all the regions in the country were to receive 50% of the total expenditure on ICDS (SN) from the Central Government⁵. This policy was changed in 2010/11 to account for a 90:10 provision to the North Eastern region, while the other regions remained at 50:50.

It was found that the funding for the regions of North Rich and North Other was not on par with the norms set for ICDS in 2006/07 where the Central Government was responsible for contributing 50% of funds. It is worth noting that despite the Central Government being responsible for contributing 50% of expenditure, or 50% of financial norms (funds to be disbursed per beneficiary), the regions on average are not allocating the amounts as per the per capita norms stated in the policy (please refer to Table 3.1 and Table 3.2 for an overview of ICDS's financial norms and how much each region is

⁴ Data from the Comptroller Auditor General's (CAG) Report (2013) on Performance Audit of ICDS Scheme was used in order to conduct the secondary data analysis for this report.

⁵ As per the CAG Report, in 2006/07, States were to receive 50% of the financial norms (based on per capita expenditure) or 50% of expenditure incurred by the States. The amount contributed by the Central Government would be based on the lesser of the two.

spending on average per beneficiary). However, there has been an incremental increase in the per capita contribution by the Central and the State Governments and consequently the Total Expenditure over time (please refer to Table 1). On an average, there has been a 51.30% increase in per capita expenditure from 2006/07 to 2010/11 (please refer to Table 1). Nonetheless, the North Rich and South have experienced a decline in contributions from the Central Government over time. These changes will be addressed in the following sections of the paper.

Table 1: Per Capita Funds Released and Expenditure (INR in crores): ICDS (G) & ICDS (SN)

Region	2006/07						2010/11						Growth Rate (%)					
	ICDS (G)			ICDS (SN)			ICDS (G)			ICDS (SN)			ICDS (G)			ICDS (SN)		
	FR	EXP	RI	FR	EXP	RI	FR	EXP	RI	FR	EXP	RI	FR	EXP	RI	FR	EXP	RI
South	575.94	548.99	0.00	237.97	501.47	263.50	716.57	768.77	52.20	452.51	1336.76	884.25	19.63	28.59	100.00	47.41	62.49	70.20
North Poor	266.77	277.07	10.30	247.08	458.38	211.29	282.17	346.25	64.08	537.53	1019.90	482.38	5.46	19.98	83.93	54.03	55.06	56.20
North Rich	371.32	381.16	9.84	154.22	393.94	239.72	442.72	495.90	53.18	220.88	703.70	482.83	16.13	23.14	81.49	30.18	44.02	50.35
North Other	515.12	585.73	70.61	129.39	436.52	307.14	966.65	1100.57	133.92	532.05	966.18	434.13	46.71	46.78	47.28	75.68	54.82	29.25
North East	1147.44	681.86	0.00	305.19	672.78	367.59	1457.22	1216.24	0.00	1067.96	1031.32	0.00	21.26	43.94	-	71.42	34.77	-
Total	2876.59	2474.81	90.75	1073.86	2463.09	1389.23	3865.33	3927.72	303.38	2810.93	5057.87	2246.94	25.58	36.99	70.09	61.80	51.30	38.17

* FR - Funds Released by GOI

* EXP - Expenditure (GOI + Region)

* RI - Regional Investment

Table 2: Number of Beneficiaries

# Beneficiaries	2006/07	2010/11
South	10,748,208.57	13,271,619.97
North Poor	35,300,758.48	53,988,273.48
North Rich	12,130,457.84	18,992,932.88
North Other	4,945,659.74	7,459,792.35
North East	2,918,505.90	4,233,881.92
Total	66,043,590.53	97,946,500.60

* Calculated based on data from CAG report

Table 3.1: Per Capita (in INR) Financial Norms

Category	2006/07 Rates	2010/11 Rates
Children (6-72 Months)	2.00	4.00
Severely Malnourished Children (6-72 Months)	2.70	6.00
Pregnant Women and Nursing Mothers	2.30	5.00
Average Per Capita Expenditure	2.33	5.00

* For the purposes of this report, the average per capita expenditure has been used.

Source: Ministry of Women and Child Development, Government of India, 2008

Table 3.2: Per Capita Expenditure (in INR) Per Day 2006/07 & 2010/11

Region	2006/07	201/11
South	1.87	4.47
North Poor	1.58	3.10
North Rich	1.39	2.56
North Other	1.66	3.17
North East	2.22	3.66

Source: CAG Report, 2013

Physical Infrastructure and Human Capital

The Anganwadi Centre (AWC) is where the actual implementation of the ICDS programme takes place. It has been seen that the number of sanctioned AWCs have always been higher than the number of operational ones, despite decrease in the shortfall over time (please refer to Table 4). As per the Budget Brief by Kapur (2013), although there has been a nearly 30% increase in the number of operational AWCs across the country, the number of AWCs that are opened continue to be less than what is sanctioned. This could imply that the number of functional AWCs are less than those actually required for effective implementation of the programme. This raises an additional concern as to whether the current norms as they relate to AWCs and programme placement are sufficient. For example, the norms of ICDS mandate one AWC per population of 400-800, while as compared to a neighbouring country like Thailand, it is one per 100 (Mohmand, 2012). As well, given that there is generally one AWW per AWC, it can be inferred that the human capital required to implement ICDS is also lacking. Although the number of sanctioned posts for AWWs has been raised from 10.6 lakh in 2007-08 to 13.7 lakh in 2011-12, there are 9% vacancies in these posts at an all-India level, as of 2012 (Kapur, 2013).

Ultimately, the infrastructural component of ICDS (physical infrastructure and human capital) is not sufficient to meet the demands of the programme. Although the gap between sanctioned and operational AWCs, as well as staff vacancies appear to be decreasing over time, the targets are not yet met. Furthermore, it can be seen from Table 4 that the less prosperous regions in the country, namely, North Poor, North Other and North East are experiencing the greatest percentage shortage in terms of physical infrastructure. This validates the claim made by Das Gupta et al (2005) that programme placement is regressive across the country. More importantly, given the issues as they relate to coverage and over-burdened human capital, it is perhaps necessary to re-evaluate the norms dictating programme placement. As it stands, the resources allocated for boosting the infrastructural component of ICDS appear to be inadequate, but this is quite possibly because the norms do not seem to be adequately addressing the needs.

Table 4: Anganwadi Centres (AWCs)

Region	2006/07			2010/11		
	Sanctioned	Operational	% Shortfall	Sanctioned	Operational	% Shortfall
South	207584	186578	10.12%	242238	234315	3.27%
North Poor	432883	351926	18.70%	565931	526015	7.05%
North Rich	166407	144008	13.46%	213067	203824	4.34%
North Other	135883	80537	40.73%	164672	155553	5.54%
North East	64595	46623	27.82%	100344	92006	8.31%
Total	1007352	809672	19.62%	1286252	1211713	5.80%

Source: CAG Report, 2013

ICDS and Nutrition Status

ICDS has often been touted as a controversial Government scheme because it has not been directly linked with improving malnutrition rates across the country (Das Gupta et al, 2005). The programme is continuing to struggle post universalization and based on the data presented in the CAG Report that was released in January 2013, ICDS has failed to meet its own halfway performance targets. This was also reported by Maiorano (2013). However, there has been improvement in the levels of SNP beneficiaries that are receiving the benefits of this ICDS component. Across all regions with the exception of the North East, there has been a substantial increase in the growth rate from 2006/07 to 2010/11 (please refer to Table 5).

Table 5: Number of Eligible Beneficiaries (in Lakh) for Supplementary Nutrition

Region	2006/07			2010/11			Growth Rate (%)		
	Eligible	Actual	Shortfall	Eligible	Actual	Shortfall	Eligible	Actual	Shortfall
South	211.12	113.68	97.44	223.19	140.30	82.89	5.41	18.97	-162.37
North Poor	679.35	387.37	291.98	772.42	504.08	268.34	12.05	23.15	-740.47
North Rich	180.13	104.77	75.36	200.39	139.11	61.28	10.11	24.69	-146.43
North Other	101.47	44.82	56.65	115.45	70.87	44.58	12.11	36.76	-46.71
North East	60.07	26.33	33.74	81.52	49.94	31.58	26.31	47.28	12.90
Total	1232.14	676.97	555.17	1392.17	904.30	488.67	11.55	25.14	-1482.53

* Data for West Bengal (2010/11) was not available in the CAG report

* Data for West Bengal was therefore used based on the earliest available year (2008/2009)

With regard to changes in the nutrition status of ICDS beneficiaries over time, recent changes in Growth Monitoring Standards adopted by the GOI have altered how nutrition levels are reported. ICDS has adopted the WHO Child Growth Standards⁶. Therefore, for this paper, nutrition status will be examined over a 3 year time period between 2006/07 and 2008/09. During this time, all of the regions in India experienced a marginal increase in the percentage of children with normal nutrition status, with the exception of the North East, which experienced a marginal drop in 2007/08 (please refer to Table 6). However, the North Rich region experienced the most significant change in its percentage of children with normal nutrition status. For moderately malnourished children, again there was a marginal decrease across all regions over time, except for the North East region that experienced an increase in

the year 2007/08 (please refer to Table 7). The analysis of severely malnourished children indicates a fluctuating trend over-time, with some regions, such as the South and the North East experiencing sharp increases in 2007/08 before falling back down again. Certain regions, namely, the North Rich and North Other have demonstrated a decreasing trend over time (please refer to Table 8). However, there appears to be some inconsistency in the levels of severe malnutrition.

Table 6: Normal Nutrition Status (%) – Pre-WHO Child Growth Standards⁶

	2006/07	2007/08	2008/09
South	52.79	53.43	54.68
North Poor	47.15	48.16	50.14
North Rich	49.65	53.92	56.24
North Other	48.91	51.02	52.70
North East	69.11	67.61	69.85

Table 7: Moderate Malnutrition (%) – Pre-WHO Child Growth Standards

	2006/07	2007/08	2008/09
South	47.07	46.16	45.21
North Poor	51.99	51.15	49.01
North Rich	49.97	45.80	43.51
North Other	50.45	48.52	47.18
North East	30.05	31.36	29.77

Table 8: Severe Malnutrition (%) – Pre-WHO Child Growth Standards

	2006/07	2007/08	2008/09
South	0.14	0.40	0.11
North Poor	0.86	0.69	0.85
North Rich	0.38	0.28	0.25
North Other	0.65	0.46	0.12
North East	0.83	1.02	0.38

Discussion

Regional Highlights

Taking into consideration the funding patterns and the levels of nutrition status across the regions, there is a concern that the regions with the highest prevalence of malnutrition appear to have the least funding. This was also noted in previous research (Das Gupta et al, 2005 and Gragnolati et al, 2006). In addition, this problem seems to persist over time. The North Poor region is poorly funded, but has the highest number of beneficiaries; however the North East region has the least number of

⁶ The WHO Child Growth Standards, adopted by the Ministry of Women and Child Development on August 15, 2008, provides an international standard for assessing the physical growth, nutritional status and motor development of children 0-6 years of age. Significant implications of adopting these standards include both an increase in the proportion of children with normal nutrition status, as well as children suffering from severe malnutrition (Ministry of Women and Child Development, Government of India. <http://wcd.nic.in/icds/icds.aspx>). These implications can be verified in Appendix 2 (please refer to Appendix 2 for Tables depicting nutrition status in India following the adoption of the WHO Child Growth Standards).

beneficiaries, but is well funded. Although there is allowance in the policy for more funding for the North East (due to terrain and high tribal population), the aforementioned point still sheds light on the issues regarding funding patterns and expenditure for the ICDS program. However, higher fund allocation does not imply efficient implementation of ICDS. Further research needs to be done to explore the technical efficiency of the ICDS program.

Of particular concern is the North Poor region because with over 40% of the population of the country and its large increase in the number of beneficiaries between 2006/07 and 2010/11, the North Poor certainly contributes a substantially high percentage of malnourished children in India (Das Gupta et al, 2005). In addition, as compared to the other regions in the country, this region has the least number of children with normal nutrition status and the highest number of moderately and severely malnourished children. The issue at hand, as mentioned previously, is that the per capita expenditure in this region is not proportionate to the levels of malnourishment. Regional issues that have been found to persist across the states in the North Poor region include low political prioritization, ineffective financial allocation and gaps in staffing, training and supervision of Anganwadi workers, thus inhibiting the ability of ICDS from assisting in improving health and nutrition (Nayak et al, 2006).

For the North East region, although the number of beneficiaries is the least, the per capita expenditure was the highest in 2006/07 and was the second highest in 2010/11. Also, as compared to other regions, the North East region was characterized by the highest levels of children with normal nutrition status and the lowest levels of moderately malnourished children in 2006/07. This makes sense considering the fact that despite being a poorer region of the country, it is well developed as far as its social indicators are concerned. As well, as pointed out by Gagnoloti et al (2006), there are two reasons for high levels of ICDS contribution. First, the North East region has a large tribal population. This is beneficial because the ICDS policy accounts for the special needs of Tribal groups. Instead of the norm of one Anganwadi Centre per one-thousand people, there is a provision of one Anganwadi Centre per seven-hundred people in the tribal areas. Second, although the North East maintains lower levels of malnutrition than all other regions, it maintains higher levels of enrolment in the program. However, in the current study, it was found that there was an increase in the percentage shortfall of the number of beneficiaries that received SNP versus the number of beneficiaries that were eligible between 2006/07 and 2010/11.

As for the South and the North Rich regions, there seemed to be an incremental increase over time as far as the funding patterns are concerned. These regions have experienced improvement in the levels of nutrition over time. As highlighted by Das Gupta, et al (2005), the coverage of ICDS was found to be regressive, in that funding was highest in regions where levels of malnutrition were the lowest. Based on the current study, this seems to hold true, especially in the South and the North Rich, which are wealthier and are often considered to be progressive regions in the country that are often characterized by their better infrastructure and governance for delivering the ICDS programme.

Implications

ICDS continues to struggle with a persistent gap between the ICDS policy and its implementation. In their study of the efficacy of ICDS, Das Gupta et al (2005), also identified the prevalence of this policy-implementation gap. The mismatch between funds allocated by the Central Government to some of the regions, particularly in regards to the Supplementary Nutrition Programme and the financial norms that dictate the funding that should be provided, can most certainly be considered a contributing factor to this problem. More importantly, the substantial increase in funding/expenditure towards the Supplementary Nutrition Programme, especially when compared with the provision for ICDS (G), indicates that the food bias still dominates the ICDS landscape. This is of concern for the simple reason that nutrition status has appeared to have only marginally increased in recent years, and with specific regard to severe malnutrition, the change over time has often been inconsistent. However, since 2009, ICDS has adopted the WHO Child Growth Standards for growth monitoring, which are recognized as an international standard for comparison across countries. Adopting these new standards has implications behind how nutritional status is viewed and thus will alter levels of particular nutrition indicators. This standardization in the measurement of nutrition compounds the existing problem by making it difficult to monitor the trends over time and evaluate the effectiveness of ICDS. This subject is beyond the scope of this paper, but has potential to impact how ICDS is funded and implemented and thus would be useful to examine in future research.

The amount of funding provided for the Supplementary Nutrition Programme and the concern with the over-emphasis on the programme is not a new area of contention, but it is worth highlighting once more that this focus on SNP will continue to pose challenges for the ICDS programme. The continued over-emphasis on SNP gives weight to the idea that malnutrition is still largely viewed as an issue related to hunger and food distribution (Mohmand, 2012). This is problematic because it impacts how the programme is run on a daily basis and the perception of what ICDS is. At present, Anganwadi Workers spend the majority of their time focusing on the Supplementary Nutrition Programme, which invariably detracts from the other programmes being offered at the AWC (Gagnoloti et al, 2006). The emphasis on Supplementary Nutrition is quite high across all regions, and funding for the programme continues to rise. It is important to remember that ICDS was designed to address the holistic needs of the child, and that nutrition services are not exclusive to Supplementary Nutrition (Drèze, 2011).

Unfortunately, despite the fact that Supplementary Nutrition programmes have been found to be limited in their effectiveness across large-scale interventions (Das Gupta et al, 2005), significant resources, both financial and non-financial continue to be put towards the programme. The incrementalist approach employed by the GOI in funding the ICDS programme is not necessarily the most effective way to plan for the universalization of ICDS. Granted the programme will naturally require a substantial increase in the financial resources allocated towards it, but what needs to be kept in mind across all regions is that the effective implementation of ICDS depends upon the efficient utilization of available funds and other resources (Nayak et al, 2006), and efficient utilization of resources is partially contingent upon prioritizing high impact-low cost ICDS services (Gagnoloti et al, 2006).

Policy Recommendations – Ensuring Adequacy and Efficiency of Resources

The focus of the ICDS policy is broad-based. There are regional disparities throughout the country that require further attention and greater assistance from a resource perspective (financial and infrastructural). The above analysis has shown that the poorer regions in the country have lesser funding and higher levels of malnutrition. On a broader level, the policy needs to assume a greater element of “localization”, as also recommended by Das Gupta et al (2005), in attempting to universalize the programme across the country and ensure effective implementation. More specifically, funding needs to be contingent upon regional need. As was accounted for with the North Eastern region, it is perhaps necessary to employ a similar method of funding provision (i.e. region specific norms) for lesser performing regions like the North Poor. This does not imply that an increase in funds is warranted, as there are issues beyond financial allocation affecting these regions, but it needs to be examined as to whether what is being provided is adequate and/or whether the Central-State contribution ratio is adequate.

Secondly, although there has been a considerable increase in the level of resources allocated towards the ICDS programme in recent years, it remains to be seen that the resources provided are adequate for meeting the needs of ICDS beneficiaries and for the achievement of mandated universalization targets. Looking at the physical infrastructure and human capital components of ICDS, it is seen that there are gaps in operational AWCs and filled vacancies for AWWs. To go one step further, currently AWWs, as has been well established, are over-burdened, undertrained and over-worked (Gragnolati et al, 2006; Das Gupta et al, 2005). However, this is not the case across the entire country, as certain states, namely Tamil Nadu have addressed infrastructural weaknesses of the programme effectively. For example, the state of Tamil Nadu, has adopted the “two worker model”, wherein each AWC is managed by two AWWs and an Anganwadi Helper (AWH). This is an example of a localized intervention that has proven effective. Such a programmatic adjustment could be relevant across all regions.

Lastly, the over-emphasis on the Supplementary Nutrition Programme has created a disconnect between what the ICDS policy actually is intended to do and what it actually does. Furthermore, it continues to be the component that requires the greatest amount of funding. As per the CAG audit in 2012-13, despite having norms that dictate greater allocations for this component, the expenditure was only 76% of these norms, indicative of a massive deficit of 24%. Lesser than allocated expenditure has led to lesser per capita expenditure, which as per the CAG report has implied that beneficiaries may be “receiving lesser nutrition”. On further analysis, it was found that there were specific reasons for this shortfall in allocated expenditure: (1) an inadequate assessment of fund requirements, which resulted in lesser fund provision in the budget, (2) funds are often released at year end after the expenses have been incurred, (3) delays in fund disbursements from the ICDS centres, (4) delays in food procurement and (5) the inability to identify the target population. These identified shortfalls have hindered the progress of ICDS and should be taken into consideration at the policy level and changes should be made accordingly.

Conclusion

There seems to be a gap in the funding patterns for the Integrated Child Development Services in India. Looking more closely at the sub national context, it can be inferred that regions with a higher prevalence of child malnutrition do not seem to be receiving a proportionate level of financial support (from both Central and State Governments) as the regions with a lower prevalence. While it has been established that funding is not contingent upon reducing the burden of malnutrition, it is indicative, to some extent, of the urgency with which this persistent problem is being addressed. The regional comparison showed that as far as nutrition indicators are concerned, the poorer regions in the country are not improving as much as the richer regions. The gap between the poorer and richer states seems to have increased over the years. Moreover, the nutrition levels across ICDS beneficiaries appear to have marginally improved over time. Accounting for the recent change in the Growth Monitoring Standards, it is apparent that there is inconsistency in the reported levels of severe malnutrition. This issue could be addressed in future research.

Taking into consideration the Government of India's incremental approach to financial provision for ICDS, its continued over-emphasis on the Supplementary Nutrition component and an inconsistent improvement in the levels of severe malnutrition across the regions in the country, it is necessary to undertake further study of the ICDS scheme, with continued focus on resource adequacy and allocation. It is therefore necessary to understand and explore whether the scheme is technically efficient, and how well the Government is using its resources to achieve its intended outputs and outcomes as they relate to ICDS, as well as, child and maternal health and nutrition.

References

- Das Gupta, M, M Lokshin, M Gragnolati and O Ivaschenko (2005). Improving Child Nutrition Outcomes in India - Can the Integrated Child Development Services Program Be More Effective? *The World Bank Policy Research Working Paper 3647*.
- Drèze J (2006). Universalisation with Quality: ICDS in a Rights Perspective. *Economic and Political Weekly*, 41 (34): 3706-15.
- Gragnolati M, C Bredenkamp, M Das Gupta, Y-K Lee and M Sheka (2006). ICDS and Persistent Undernutrition: Strategies to Enhance the Impact. *Economic and Political Weekly*, 41 (12): 1193-201.
- Kapur, A (2013). Budget Briefs: ICDS GOI, 2013-2014. *Centre for Policy Research*, 1-8.
- Maiorano, D (2013). Let the Country Grow. *Economic and Political Weekly*, 68 (22).
- Ministry of Women and Child Development, Government of India. <http://wcd.nic.in/icds/icds.aspx>
- Mohmand S K (2012). *Policies Without Politics: Analysing Nutrition Governance in India*. Institute of Development Studies.
- Nayak, N, and N C Saxena (2006). Implementation of ICDS in Bihar and Jharkhand. *Economic and Political Weekly*, 34 (41): 3680-84.
- The World Bank Group (2012). *Project Signing: Government of India and World Bank Sign \$106 Million Agreement for Improving Nutrition Among Children in India*. <http://www.worldbank.org/en/news/press-release/2012/11/05/project-signing-government-of->

Appendix 1: Programmatic Deficiencies

Programmatic Deficiencies impacting the performance of ICDS that have been identified in the existing research are inclusive of, but not limited to:

- An over-emphasis on the Supplementary Nutrition Programme
- Gaps in Programme Targeting
 - Children 0-3 years
 - Programme Coverage
- Inadequate human resources

Supplementary Nutrition Programme:

The issues as they relate to the Supplementary Nutrition Programme (SNP) are rooted in the perception of the SNP component, the resources it requires in terms of finances and human capital and its effectiveness at reaching its target demographic. The SNP has come to dominate the ICDS landscape, and despite nutrition services extending beyond SNP, they are often restricted to it (Drèze, 2006). This is apparent based on the funding pattern for SNP, as it comprises the majority of spending towards the ICDS programme. As well, Anganwadi workers spend the majority of their time working on activities related to SNP (Gagnolati et al, 2006). The aforementioned considered, the SNP is run inefficiently and frequently encounters issues relating to supply availability and leakages in food procurement. More importantly, the food supply is poorly targeted and leakages of SNP food often occur and are consumed by non-targeted and/or non-needy beneficiaries (Das Gupta et al, 2005).

Programme Targeting:

Children 0-3 years:

The ICDS programme has neglected to focus on children under 3 years of age (Gagnolati et al, 2006; Drèze, 2006; Das Gupta et al, 2005). This is partially attributable to the fact that the services provided by the ICDS programme and activities that take place at the Anganwadi Centre (AWC) tend to attract children 4-6 years of age. For example, the Pre-school Education component requires Anganwadi Workers (AWWs) to devote much of their time to the children that receive these services (4-6 years), which detracts attention from the needs of children 0-3 years (Gagnolati et al, 2006).

Programme Coverage:

Historically, poor states with higher levels of under-nutrition have received the least funding and were not adequately covered by the programme (Gagnolati et al, 2006). Regressive program placement has neglected situations where the need is the greatest (Das Gupta et al, 2005), which could have influenced how the programme is governed and implemented.

Anganwadi Workers (AWWs):

Anganwadi Workers are often over-worked, under-trained, improperly supervised and inadequately supported (Gragnotati et al, 2006; Das Gupta et al, 2005). Their duties require that they have knowledge and an understanding of nutrition, pre-school education and child and maternal health and nutrition and require the tools, time and support to carry out their work both efficiently and effectively.

Appendix 2: Nutrition Status Following the Adoption of the WHO Child Growth Standards

Normal Nutrition Status (%)

	2009/10	2010/11
South	55.56	58.86
North Poor	40.34	53.54
North Rich	58.30	68.08
North Other	52.15	64.74
North East	69.59	72.19

Moderate Malnutrition (%)

	2009/10	2010/11
South	44.34	40.43
North Poor	37.16	41.49
North Rich	41.45	29.53
North Other	47.37	33.61
North East	29.99	27.46

Severe Malnutrition (%)

	2009/10	2010/11
South	0.10	0.71
North Poor	22.50	4.96
North Rich	0.25	2.38
North Other	0.48	3.63
North East	0.42	0.35

Recent Working Papers

- 257 **Scheduled Castes, Legitimacy and Local Governance: Continuing Social Exclusion in Panchayats**
Anand Inbanathan and N Sivanna
- 258 **Plant-Biodiversity Conservation in Academic Institutions: An Efficient Approach for Conserving Biodiversity Across Ecological Regions in India**
Sunil Nautiyal
- 259 **WTO and Agricultural Policy in Karnataka**
Malini L Tantri and R S Deshpande
- 260 **Tibetans in Bylakuppe: Political and Legal Status and Settlement Experiences**
Tunga Tarodi
- 261 **Trajectories of China's Integration with the World Economy through SEZs: A Study on Shenzhen SEZ**
Malni L Tantri
- 262 **Governance Reforms in Power Sector: Initiatives and Outcomes in Orissa**
Bikash Chandra Dash and S N Sangita
- 263 **Conflicting Truths and Contrasting Realities: Are Official Statistics on Agrarian Change Reliable?**
V Anil Kumar
- 264 **Food Security in Maharashtra: Regional Dimensions**
Nitin Tagade
- 265 **Total Factor Productivity Growth and Its Determinants in Karnataka Agriculture**
Elumalai Kannan
- 266 **Revisiting Home: Tibetan Refugees, Perceptions of Home (Land) and Politics of Return**
Tarodi Tunga
- 267 **Nature and Dimension of Farmers' Indebtedness in India and Karnataka**
Meenakshi Rajeev and B P Vani
- 268 **Civil Society Organisations and Elementary Education Delivery in Madhya Pradesh**
Reetika Syal
- 269 **Burden of Income Loss due to Ailment in India: Evidence from NSS Data**
Amrita Ghatak and S Madheswaran
- 270 **Progressive Lending as a Dynamic Incentive Mechanism in Microfinance Group Lending Programmes: Empirical Evidence from India**
Naveen Kumar K and Veerashekarappa
- 271 **Decentralisation and Interventions in Health Sector: A Critical Inquiry into the Experience of Local Self Governments in Kerala**
M Benson Thomas and K Rajesh
- 272 **Determinants of Migration and Remittance in India: Empirical Evidence**
Jajati Keshari Parida and S Madheswaran
- 273 **Repayment of Short Term Loans in the Formal Credit Market: The Role of Accessibility to Credit from Informal Sources**
Manojit Bhattacharjee and Meenkashi Rajeev
- 274 **Special Economic Zones in India: Are these Enclaves Efficient?**
Malini L Tantri
- 275 **An Investigation into the Pattern of Delayed Marriage in India**
Baishali Goswami
- 276 **Analysis of Trends in India's Agricultural Growth**
Elumalai Kannan and Sujata Sundaram
- 277 **Climate Change, Agriculture, Poverty and Livelihoods: A Status Report**
K N Ninan and Satyasiba Bedamatta
- 278 **District Level NRHM Funds Flow and Expenditure: Sub National Evidence from the State of Karnataka**
K Gayithri
- 279 **In-stream Water Flows: A Perspective from Downstream Environmental Requirements in Tungabhadra River Basin**
K Lenin Babu and B K Harish Kumara
- 280 **Food Insecurity in Tribal Regions of Maharashtra: Explaining Differentials between the Tribal and Non-Tribal Communities**
Nitin Tagade
- 281 **Higher Wages, Cost of Separation and Seasonal Migration in India**
Jajati Keshari Parida and S Madheswaran
- 282 **Pattern of Mortality Changes in Kerala: Are they Moving to the Advanced Stage?**
M Benson Thomas and K S James
- 283 **Civil Society and Policy Advocacy in India**
V Anil Kumar
- 284 **Infertility in India: Levels, Trends, Determinants and Consequences**
T S Syamala
- 285 **Double Burden of Malnutrition in India: An Investigation**
Angan Sengupta and T S Syamala
- 286 **Vocational Education and Child Labour in Bidar, Karnataka, India**
V Anil Kumar
- 287 **Politics and Public Policies: Politics of Human Development in Uttar Pradesh, India**
Shyam Singh and V Anil Kumar
- 288 **Understanding the Fiscal Implications of SEZs in India: An Exploration in Resource Cost Approach**
Malini L Tantri
- 289 **Does Higher Economic Growth Reduce Poverty and Increase Inequality? Evidence from Urban India**
Sabyasachi Tripathi
- 290 **Fiscal Devaluations**
Emmanuel Farhi, Gita Gopinath and Oleg Itskhoki
- 291 **Living Arrangement Preferences and Health of the Institutionalised Elderly in Odisha**
Akshaya Kumar Panigrahi and T S Syamala

- 292 **Do Large Agglomerations Lead to Economic Growth? Evidence from Urban India**
Sabyasachi Tripathi
- 293 **Representation and Executive Functions of Women Presidents and Representatives in the Grama Panchayats of Karnataka**
Anand Inbanathan
- 294 **How Effective are Social Audits under MGNREGS? Lessons from Karnataka**
D Rajasekhar, Salim Lakha and R Manjula
- 295 **Vulnerability Assessment Of The Agricultural Sector In Yadgir District, Karnataka: A Socio-Economic Survey Approach**
Sarishthi Attri and Sunil Nautiyal
- 296 **How Much Do We Know about the Chinese SEZ Policy?**
Malini L Tantri
- 297 **Emerging Trends in E-Waste Management - Status and Issues - A Case Study of Bangalore City**
Manasi S
- 298 **The Child and the City: Autonomous Migrants in Bangalore**
Supriya RoyChowdhury
- 299 **Crop Diversification and Growth of Maize in Karnataka: An Assessment**
Komol Singha and Arpita Chakravorty
- 300 **The Economic Impact of Non-communicable Disease in China and India: Estimates, Projections, and Comparisons**
David E Bloom, Elizabeth T Cafiero, Mark E McGovern, Klaus Prettnner, Anderson Stanciole, Jonathan Weiss, Samuel Bakkia and Larry Rosenberg
- 301 **India's SEZ Policy - Retrospective Analysis**
Malini L Tantri
- 302 **Rainwater Harvesting Initiative in Bangalore City: Problems and Prospects**
K S Umamani and S Manasi
- 303 **Large Agglomerations and Economic Growth in Urban India: An Application of Panel Data Model**
Sabyasachi Tripathi
- 304 **Identifying Credit Constrained Farmers: An Alternative Approach**
Manojit Bhattacharjee and Meenakshi Rajeev
- 305 **Conflict and Education in Manipur: A Comparative Analysis**
Komol Singha
- 306 **Determinants of Capital Structure of Indian Corporate Sector: Evidence of Regulatory Impact**
Kaushik Basu and Meenakshi Rajeev
- 307 **Where All the Water Has Gone? An Analysis of Unreliable Water Supply in Bangalore City**
Krishna Raj
- 308 **Urban Property Ownership Records in Karnataka: Computerized Land Registration System for Urban Properties**
S Manasi, K C Smitha, R G Nadadur, N Sivanna, P G Chengappa
- 309 **Historical Issues and Perspectives of Land Resource Management in India: A Review**
M S Umesh Babu and Sunil Nautiyal
- 310 **E-Education: An Impact Study of Sankya Programme on Computer Education**
N Sivanna and Suchetha Srinath
- 311 **Is India's Public Debt Sustainable?**
Krishanu Pradhan
- 312 **Biomedical Waste Management: Issues and Concerns - A Ward Level Study of Bangalore City**
S Manasi, K S Umamani and N Latha
- 313 **Trade and Exclusion: Review of Probable Impacts of Organised Retailing on Marginalised Communities in India**
Sobin George
- 314 **Social Disparity in Child Morbidity and Curative Care: Investigating for Determining Factors from Rural India**
Rajesh Raushan and R Mutharayappa
- 315 **Is Access to Loan Adequate for Financing Capital Expenditure? A Household Level Analysis on Some Selected States of India**
Manojit Bhattacharjee and Meenakshi Rajeev
- 316 **Role of Fertility in Changing Age Structure in India: Evidence and Implications**
C M Lakshmana
- 317 **Healthcare Utilisation Behaviour in India: Socio-economic Disparities and the Effect of Health Insurance**
Amit Kumar Sahoo

Price: ₹ 30.00

ISBN 978-81-7791-174-9



INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE

Dr V K R V Rao Road, Nagarabhavi P.O., Bangalore - 560 072, India
Phone: 0091-80-23215468, 23215519, 23215592; Fax: 0091-80-23217008
E-mail: lekha@isec.ac.in; Web: www.isec.ac.in