Working Paper 278

District Level NRHM Funds Flow and Expenditure: Sub National Evidence from the State of Karnataka

K Gayithri

ISBN 978-81-7791-134-3

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.

DISTRICT LEVEL NRHM FUNDS FLOW AND EXPENDITURE: SUB NATIONAL EVIDENCE FROM THE STATE OF KARNATAKA

K Gayithri [1]

Abstract

The issue of small and declining health sector financing by the central and state governments in India is addressed by the launching of National Rural Health Mission in 2005-06. Bottom up planning starting with village as unit used as the main strategy of NRHM to meet the region specific health needs would serve well to promote health sector development. The provision of effective and quality health services with a special focus on the backward districts with weak human development is also slated to be an important objective of NRHM. Analyzing the district level NRHM funds flow and expenditure in Karnataka the present paper argues that the district wise allocations are wrought with poor expenditure planning. Program implementation plans and allocations significantly vary from one another. Such deviations in the earmarking of planned funds defy the very purpose of stringent bottom up planning involving colossal manpower and financial resources to track the grass root felt needs. In addition such aberrations do not help the government in the achievement of professed outcomes. This is a serious lapse in NRHM implementation and can seriously distort the effectiveness of public spending and to be taken care of in future. Utilisation of the allocated resources is poor and there is absolute mismatch between the planned estimates for important components of NRHM like RCH, NRHM additionalities, Disease control program and Immunisation and actual expenditure.

Enhancing the government health sector financing in a big way to reach 2-3 percent mark of GDP by 2012 has been an important objective of National Rural Health Mission (NRHM) launched by the Government of India in 2005-06. Both the Central and state governments share the responsibility of enhancing the government spending. As we get closer to 2012, it is necessary to review the success of the NRHM in enhancing the health sector funding by the government, more importantly to know how effectively these funds have got transmitted to the grass root level to be translated to healthcare services. Regarding the aggregate funding of the health sector at the national level to reach 2-3 percent level, it has been observed that while the health sector outlay as a percent of GDP has been increasing ever since the launch of NRHM, it is unlikely that the goal of 2-3 percent of GDP would be reached by 2012. (Berman et al, 2010) At the grassroots level important issues in translating outlays into outcomes relate to whether funding reflects the local needs as identified in the Program Implementation Plan (PIP); whether adequate and timely funding is provided to the health facilities in the districts; whether the backwardness focus that NRHM professes to achieve is attained or not. This gains special importance in the context of NRHM policy pronouncements to provide accessible, affordable, accountable, effective and quality healthcare services, especially to the rural population and vulnerable groups throughout the state with special focus on the backward districts with weak human development and health indicators especially among the poor and marginalized groups like women and the vulnerable sections of the society. (NRHM, Mission document, 2005) The main strategy of the NRHM adopted for the purpose is the decentralized planning in the form of health plans prepared starting with village as a

[1] Faculty of Economics, Institute for Social and Economic Change, Nagarabhavi, Bangalore 560072 can be reached at **gayithri@isec.ac.in**

unit. There are also pertinent questions that need to be answered. These include, what has been the experience with the Program Implementation Plans (PIP) for which enormous amount of time has been spent by functionaries at all the administrative levels? Have the PIP allocations reflected the local priorities? How much of such allocation has actually been released? Further and most importantly what proportion of the fund released has got translated into actual expenditure? Translation of outlays into effective outcomes largely depends on how effectively some of these issues are addressed.

The present paper addresses these issues in the context of Karnataka[2], a low focus state in the ambit of the NRHM, taking the district as a unit of study. Health sector expenditure in Karnataka is briefly analyzed in section 1 to provide the backdrop. The issues relating to wide variation observed among the PIP, releases and expenditure that do not augur well for the sector's development are presented in section 2. This section also provides an analysis of program composition of expenditure in terms of Reproductive and Child Health (RCH) and NRHM additionalities as compared to Disease control and immunisation and their behaviour. The district wise allocations that are based on poor planning with the better off districts getting higher per capita benefits even while the backward districts are assigned a larger share in the total allocation are discussed in section 3. District level PIP, fund releases and expenditure are analyzed in section 4 followed by concluding observations are presented in the last section.

Health sector expenditure in Karnataka:

Health expenditure in Karnataka as a percentage of total state budget, social services expenditure and Gross State Domestic Product (GSDP) as can be observed from charts 1-3 was small and declining until the launch of NRHM, after which there is an increase in the respective shares. Owing to the revenue shortfall experienced by the general economic recession the Budget Estimate for 2009-10 had an absolute decline. Despite the recent increase, there is need to step it up further given the stagnant health indicators and high inter district disparities in the health sector development. Two important issues raised in the context of enhancing health sector funding support to 2-3 percent GDP relate to a) apprehension that the state governments may not be stepping up the expenditure as envisioned in the NRHM mission (Berman et.al, 2010) b) there would be state fund fungibility (Duggal, 2009) in the sense state governments would substitute their health sector funding with that of Central funding.

The growth in health sector expenditure since the launch of NRHM reveals that (Table 1) these two above mentioned concerns are not relevant in the case of Karnataka, because there has been more than 10 percent annual increase in the expenditure. The year 2009-10 was the only exception with an annual growth of less than 10 percent. Health sector expenditure as percent of GSDP has increased from 0.62 percent in 2005-06 to 0.86 percent in 2010-11 which has dropped to 0.79 percent in 2011-12 (BE) There are certain areas of concern however, that there has been even an absolute decline in health sector expenditure caused by fiscal stress in the state, which is a rarity given the incremental budgeting practices adopted in the country.

[2] This paper is based on a larger study on "District level Funds Flow and Expenditure Analysis under NRHM for the State of Karnataka" sponsored by NHSRC, Ministry of Health, New Delhi

Chart No. 1: Health Expenditure as a Percentage of Total Expenditure

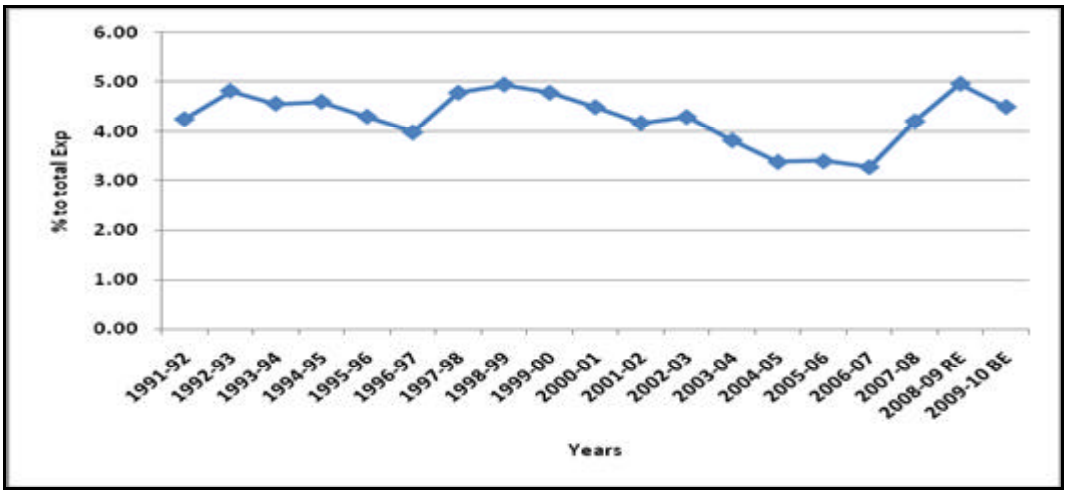


Chart No. 2: Health Expenditure in Relation to Social Services Expenditure

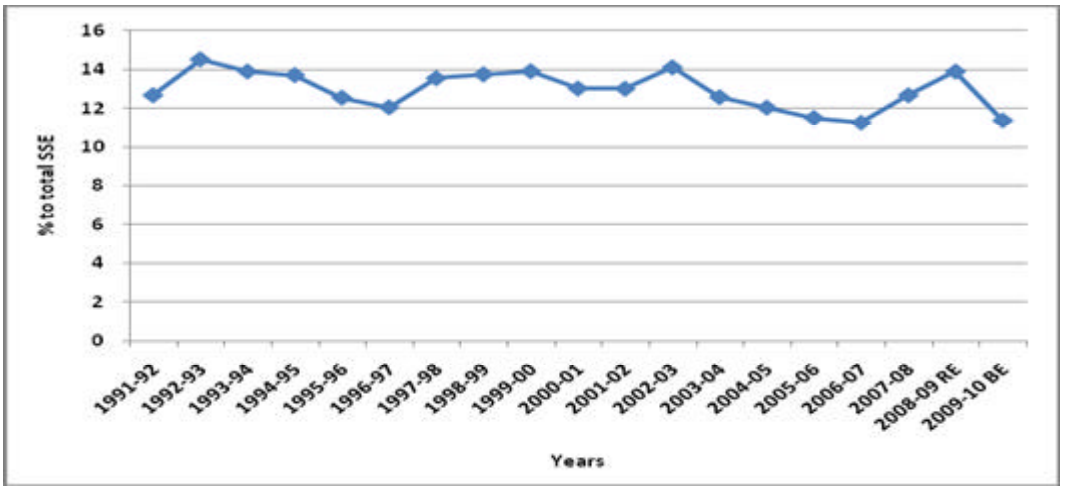


Chart No.3: Health Expenditure as a Percentage of GSDP

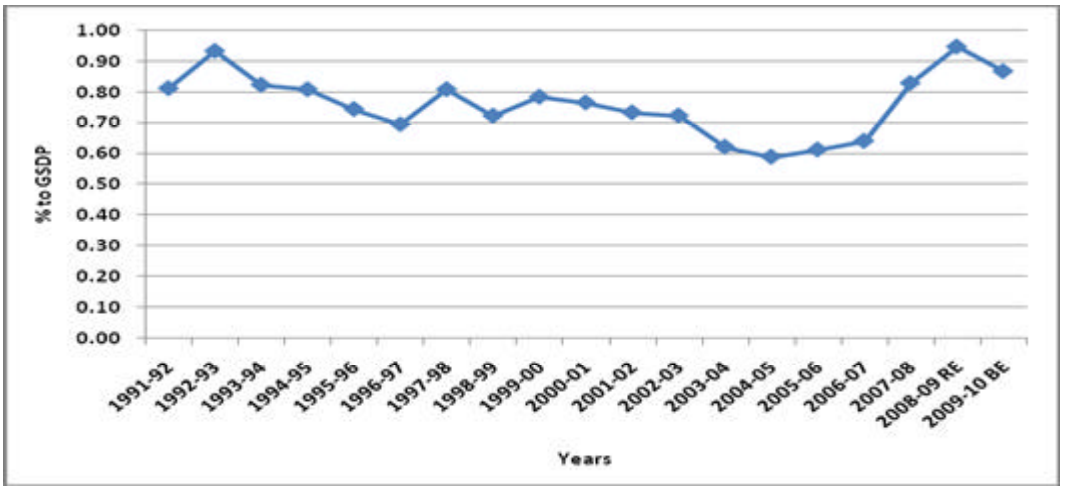


Table 1: Medical and Public Health and Family Welfare Expenditure (Rs in Crore)

Year	Revenue Exp	Capital Exp	Total Exp (RE+CE)	% Change	NRHM	Total (RE+CE+ NRHM)	% of total to Social Service Exp	% to GSDP	% Change
2005-06	1138.50	7.69	1146.19	-	15.03	1161.22	11.61	0.62	-
2006-07	1206.66	142.95	1349.61	17.75	58.49	1408.10	11.51	0.65	21.26
2007-08	1477.94	354.24	1832.18	35.76	144.41	1976.59	12.94	0.85	40.37
2008-09	1772.70	300.65	2073.35	13.16	316.66	2390.01	12.97	0.88	20.92
2009-10	1927.17	320.97	2248.14	8.43	482.57	2730.71	14.28	0.81	14.26
2010-11 RE	2396.24	428.25	2824.49	25.64	451.67	3276.16	14.22	0.86	19.97
2011-12 BE	3000.27	420.45	3420.72	21.11	-	3420.72	13.75	0.79	4.41

Source: Budget Document (various issues), Government of Karnataka. NRHM Office, Bangalore, Govt. Of Karnataka.

PIP, Release and Expenditure:

The PIP is an important bottom up planning strategy mooted by the NRHM to prioritise health intervention taking into account the grass root level felt needs of the health sector for the purpose of planned allocation. The situational analysis that serves as the basis for preparation of the PIPs is expected to guide informed prioritisation based on current levels of achievements. Logically speaking fund allocation has to be guided by such felt needs. Data relating to PIP estimates, releases and expenditure in Karnataka are analysed in table 2 (also chart 4)) detailing the flow of NRHM funds to Karnataka from 2005-06 to 20010-11. The data pertains to the requirement of fund as represented by the PIP, amount released by the state and central governments. The PIP as mentioned earlier is a welcome practice introduced by the NRHM as it is supposed to channel resources to the health sector as per the needs. During the initial years of the NRHM there was a mismatch between the estimated plan allocation, release and expenditure. The data reveals that this has been taken care of to a certain extent subsequently as the serous variations that existed between the PIP estimate; release and expenditure have got reduced in the recent years. Yet another positive aspect pertains to the fact that there has been an increase in the allocation and expenditure under the NRHM which is welcome given the fact that government funding of the health sector in Karnataka has had a small share in the total expenditure which was also at times found shrinking.

Table No. 2: NRHM Fund flow pattern, Karnataka (in crores)

Year	Fund allocation as PIP	Fund released as state share	Fund released from GOI	Total Fund received	Exp.	Fund received as a % to PIP	Exp as a % to PIP	Exp as a % to Received
2005-06	121.10	0.00	51.31	51.31	15.03	42.37	12.41	29.29
2006-07	157.21	0.00	165.60	165.60	58.49	105.34	37.21	35.32
2007-08	234.17	0.00	158.83	158.83	144.41	67.83	61.67	90.92
2008-09	439.74	72.74	313.42	386.15	316.66	87.81	72.01	82.00
2009-10	601.52	122.10	311.99	434.09	482.57	72.17	80.23	111.17
2010-11 (up to Nov 2010)	674.17	85.30	331.29	416.59	308.56	61.79	45.77	74.07
Growth rate	**33.13**	**-**	**36.46**	**41.77**	**65.47**	-	-	-

Source: NRHM Document, Bangalore, Government of Karnataka.

Chart No.4: NRHM Fund flow pattern, Karnataka

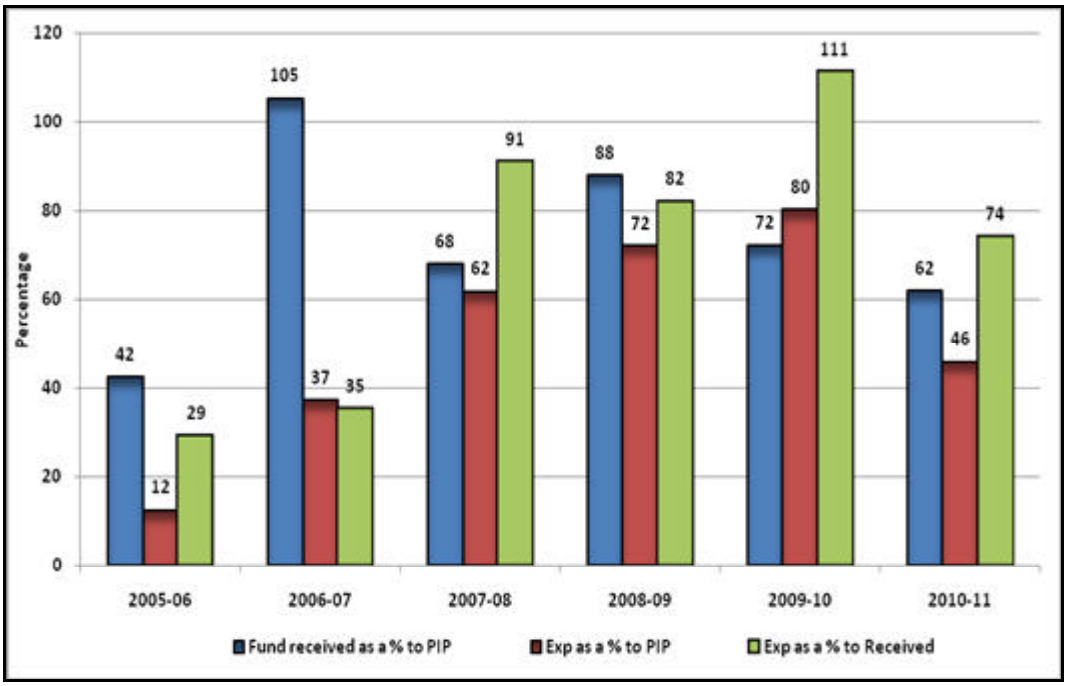


Table No 3: NRHM Fund distribution by its Components (in crores)

Component	2005-06						2006-07						2007-08						2008-09						2009-10					
	Allocation as per PIP	Percent distribution	Release	Percent distribution	Expenditure	Percent distribution	Allocation as per PIP	Percent distribution	Release	Percent distribution	Expenditure	Percent distribution	Allocation as per PIP	Percent distribution	Release	Percent distribution	Expenditure	Percent distribution	Allocation as per PIP	Percent distribution	Release (GOI + State share)	Percent distribution	Expenditure	Percent distribution	Allocation as per PIP	Percent distribution	Release (GOI + State share)	Percent distribution	Expenditure	Percent distribution
RCH II	64	**53**	29	**56**	14	**91**	79	**50**	76	**46**	41	**70**	71	**30**	65	**41**	73	**50**	210	**48**	133	**34**	114	**37**	186	**31**	130	**30**	124	**26**
NRHM	49	**40**	19	**37**	0	**0**	72	**46**	73	**44**	4	**7**	125	**54**	66	**42**	42	**29**	185	**42**	211	**55**	155	**50**	359	**60**	262	**60**	314	**65**
RI	8	**7**	4	**7**	1	**9**	7	**4**	6	**3**	4	**7**	9	**4**	1	**1**	5	**3**	10	**2**	7	**2**	5	**2**	7	**1**	3	**1**	6	**1**
PPP	0	**0**		**0**		**0**		**0**	10	**6**	9	**15**	0	**0**	7	**4**	7	**5**	0	**0**	10	**3**	10	**3**	15	**2**	10	**2**	10	**2**
DCP	0	**0**		**0**		**0**		**0**		**0**		**0**	29	**13**	19	**12**	19	**13**	34	**8**	25	**7**	27	**9**	34	**6**	29	**7**	29	**6**
Total	**121**	**100**	**51**	**100**	**15**	**100**	**157**	**100**	**166**	**100**	**58**	**100**	**234**	**100**	**159**	**100**	**144**	**100**	**440**	**100**	**386**	**100**	**312**	**100**	**602**	**100**	**434**	**100**	**483**	**100**
Growth Rate	**-**	**-**	**-**	**-**	**-**	**-**	**30**	**-**	**223**	**-**	**289**	**-**	**49**	**-**	**-4**	**-**	**147**	**-**	**88**	**-**	**143**	**-**	**116**	**-**	**37**	**-**	**12**	**-**	**54**	**-**

Notwithstanding these positive aspects the deviations observed in the NRHM component wise distribution of funds from the PIP allocation to release and further to expenditure are not welcome. The component wise details of the absolute numbers and the percentage distribution during the study period presented in table 3 accounts for these variations. The RCH II and NRHM constitute a very big share of the total. The percentage distribution of resources under PIP, release and expenditure categories for RCH II as in 2005-06 was of the order of 53:56:91 and that of NRHM were 40:37:0 respectively, indicating a serious deviation from planned needs of the state. Variations of this kind are observed through the years presented in the table, although of lesser magnitude. During 2008-09 distribution of resources for RCH II under PIP, release and expenditure was 48:34:37 and that of NRHM were 42:55:50 respectively. Such deviations in the earmarking of planned funds defy the very purpose of stringent bottom up planning involving colossal manpower and financial resources to track the felt needs at the grass root level. In addition such aberrations do not help the government in the achievement of professed outcomes. This is a serious lapse in the implementation of NRHM and can seriously distort the effectiveness of public spending and should be taken care of in future.

District wise distribution of NRHM funds

The NRHM seeks to provide accessible, affordable, accountable, effective and quality healthcare services, especially to the rural population and vulnerable groups throughout the state with special focus on the backward districts with weak human development and health indicators especially among the poor and marginalized groups like women and the vulnerable sections of the society. Given this broad focus, an attempt has been made in the present paper o study the district wise distribution of funding support to all the districts in Karnataka. It is well known that Karnataka is a combination of well developed and backward districts that can be compared with any developed country or Sub Saharan Africa in terms of human development indicators.

District level impoverishment and NRHM expenditure:

To analyze funding support under the NRHM as against the development of the health sector, the districts in Karnataka districts have been grouped under the following categories such as a) Below median income with higher than state level poverty, b) Above median income with lesser than state level poverty, c) Above median income with higher than state level poverty, d) Above median income with lesser than state level poverty. This will help in understanding the flow of funds vis-a-vis levels of impoverishment. Eight districts (Gulbarga, Raichur, Haveri, Gadag, Chitradurga, Bijapur, Bidar and Bagalkot) under the 'below median income with higher than state level poverty' category are the most needy districts and thus need greater funding support. On the contrary the districts under the 'above median income with lesser than state level poverty' category relatively need lesser support as per the NRHM objective of rendering special focus to the backward districts. While advocating larger resource support we understand that larger funding may not be the sole remedy to address the issue of under development, it needs to be coupled with allocative efficiency and effective spending in effectively resolving the problem of backwardness. Thus while enhanced funding is a 'necessary' condition to achieve the objective of bridging the regional inequalities, it is not a 'sufficient' condition.

Graph 5 clearly reflects that while in terms of distribution of funds as revealed by percentage share of the districts is more or less reflecting the objectives, the per capita funding support to the better off districts seem to be more. For instance, Gulbarga district ranks 26th in Human Development Index, among all the 27 districts ranked in the Karnataka Human Development Report, 2005. The high-powered committee for redressal of the regional imbalances headed by D.M. Nanjundappa identified 9 out of 10 taluks in the district as most backward. While all the 10 taluks in the district rank less than 155 out of the total 175 taluks ranked by the district, five of them took the positions from 170 to 174! It is also among one of the five districts in the state which receive funds under the Backward Regions Grant Fund (BRGF). It is justifiably getting the largest share of 4.83 percent in the state total; its per capita fund is Rs 58.08 as opposed to Bangalore Urban which has a share of 2.44 percent but getting Rss 84.67 per capita fund support. (Table no 4) Given their backwardness the districts falling in the 'D Group' are the neediest districts for health intervention and the broad policy guidelines do address the need to allocate more resources to such regions. Unfortunately, some districts falling in this category get lesser per capita expenditure than the better off districts, despite getting a bigger share in total. This is a serious cause for concern because it amounts to poor health expenditure planning and needs to be addressed as a top priority. Persistent funding fallacies of this kind will accentuate regional inequalities rather than reduce. There are many other such instances in the distribution of fund among the districts indicating a clear anomaly in the effort to eradicate the inter district disparities.

Health Development Index and health care expenditure: An attempt has been made below to map the NRHM per capita expenditure and the Health index rank and value among the districts in Karnataka to examine whether the health needs of districts are reflected in the expenditure. The mismatch between need as indicated by the Health index value and the rank and per capita expenditure indicate a clear disconnect between policy and planning. (Graph 6) The health expenditure of Rs 49 in Udupi district ranking in first place in terms of Health Index is higher than that of districts such as Chamarajnagar, Bijapur or Kolar which experience poor health index ranking. Bangalore Urban and Shimoga districts account for the highest per capita expenditure at Rs 84.7 and Rs 78.4 among all the Karnataka districts with 5 and 4 ranking in terms of health index. While this may be inadvertent fallout, as the focus at the time of allocation is to merely allocate a larger share based on their backwardness, but to make the intervention more effective, the government has to take into account the need of the area which gets best reflected by the size of the population, age composition, disease profile, overall level of health development etc. The above analysis clearly points at the need not to merely enhance funding but also improve expenditure planning by the authorities concerned to achieve the targeted outcomes in a cost effective manner.

Table No. 4: Per Capita Health Expenditure of Funds (2008-09) and Health Index (Rank and Value, 2001)

	Above median income	Per capita Health exp of funds 2008-09	Health Index rank and value (2001)	% share in total State exp (2008-09)	Below median income	Per capita Health exp of funds 2008-09	Health Index rank and value (2001)	% share in total State exp (2008-09)
Lesser than the state level poverty	A Group				C Group			
	Bangalore urban	84.67	5(0.705)	2.44	Belgaum	35.11	2(0.712)	4.05
	Bangalore R	24.00	6(0.692)	1.23	Chamarajnagar	41.00	15(0.642)	1.18
	chikmagalur	62.90	19(0.637)	2.01	Hassan	61.40	10(0.670)	2.95
	DK	49.00	3(0.707)	1.88	Kolar	47.05	13(0.653)	3.16
	Kodagu	71.20	18(0.638)	1.14	Mandya	55.88	21(0.632)	2.86
	Koppal	64.17	16(0.642)	2.46	Tumkur	53.95	9(0.672)	3.80
	Mysore	64.61	11(0.663)	3.72				
	Shimoga	78.36	4(0.707)	2.76				
	Udupi	49.00	1(0.713)	1.57				
Higher than the state level poverty	B Group				D Group			
	Bellary	48.67	7(0.685)	2.34	Bagalkot	62.08	27(0.597)	2.58
	Davangere	44.50	8(0.680)	1.99	Bidar	56.00	17(0.638)	2.33
	Dharwad	54.38	26(0.615)	1.39	Bijapur	48.38	24(0.627)	2.48
	Uttar Kannada	57.60	22(0.632)	1.84	Chitradurga	54.29	12(0.660)	2.43
					Gadag	62.29	23(0.628)	1.40
					Gulbarga	58.08	20(0.632)	4.83
					Haveri	58.33	25(0.620)	2.24
					Raichur	49.67	14(0.648)	2.38

Graph No 5: Percent share in total state expenditure (NRHM) and Health Index rank

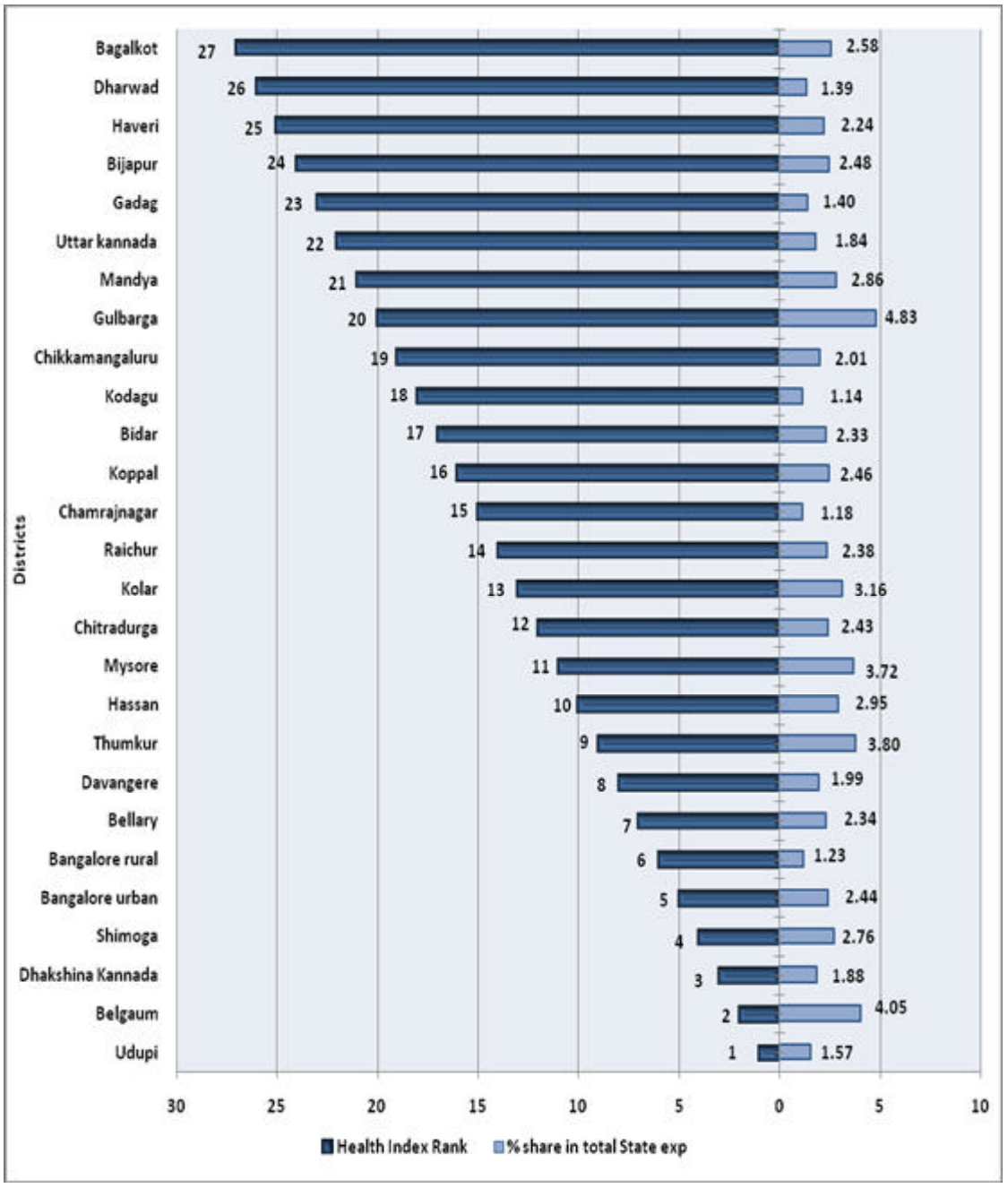
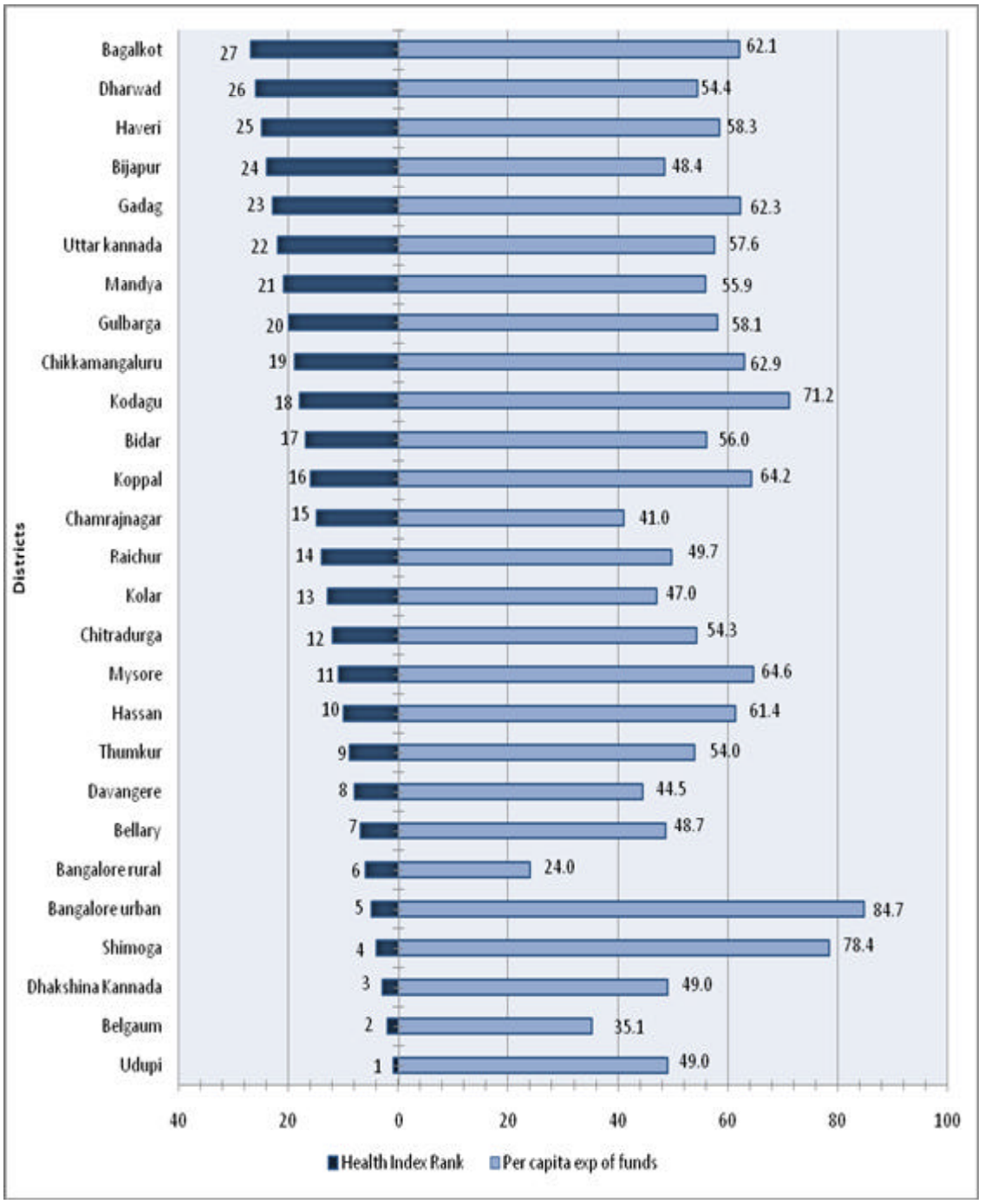


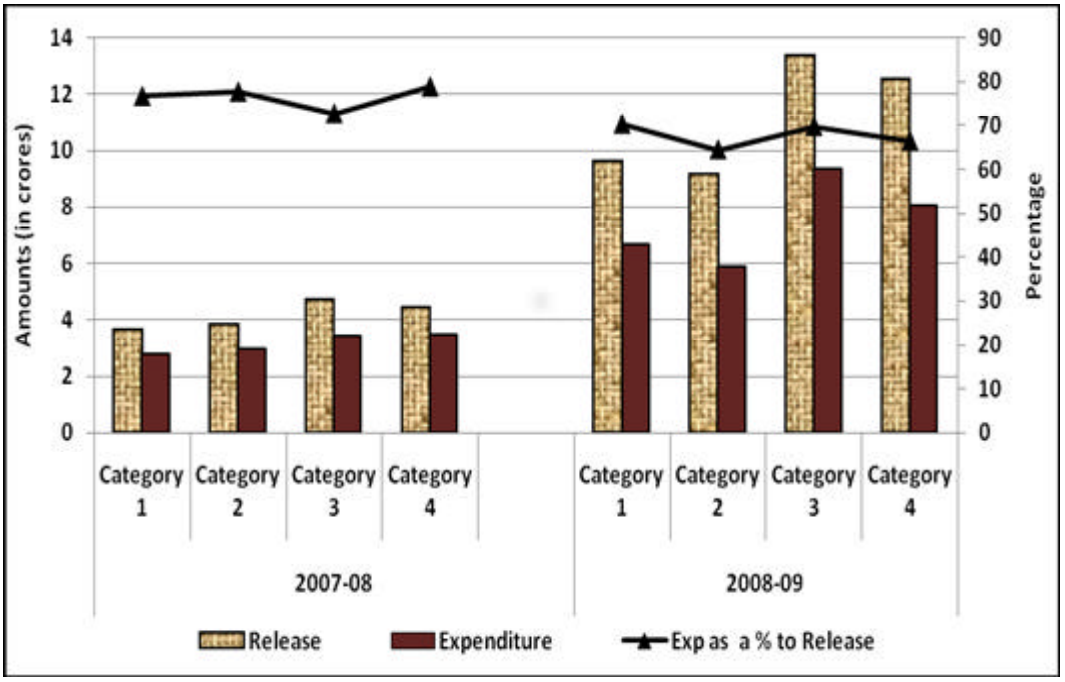
Chart 6: Per capita expenditure and Health Index rank



District level PIP, Fund releases and expenditure:

The NRHM identifies the district as the core unit of planning, budgeting and implementation. PIP is a pioneering initiative seeking to link the funding requirements to local needs. The district health plan represents an amalgamation of field responses through (NRHM, Mission document, 2005) village health plans, state and national priorities for health, water supply sanitation and nutrition. The extent, to which the health care financing is reflecting these needs and the fulfillment of the current felt requirements, needs to be verified at the grass root level for future policy refinements.

Graph 7: NRHM fund release, expenditure and utilisation rate (Averages of each category)



District level data relating to release and expenditure, expenditure as a percentage of utilization, per capita availability and expenditure and growth rates in release and expenditure are presented in table 5. The data is presented for the four categories of districts discussed above. Growth in NRHM funding during the reference period is generally observed to be higher in releases than in the expenditure, more so among the category of districts that belong to the category of most backward districts. The data reveals many disappointing aspects of expenditure planning and implementation. Between 2007-08 and 2008-09, there has been largely an increase in releases and expenditure across all the districts, but utilization as revealed by expenditure as a percentage of release accounts for the wide gap that exists between planning and execution of schemes. For instance, Raichur a very backward district has a rate of growth of 260.89 percent in 2008-09 over that of 2007-08, for releases as opposed to 89.67 percent growth in actual expenditure. Similarly, release to Gulbarga has experienced a rate of growth of 206.95 percent, but the rate of growth of expenditure was 140.06 percent during the above reference period. This indicates that the intention to bridge the disparity is not being translated into reality. Making good the shortfall of one year in the next is neither good planning

nor good execution of the schemes. The enhanced allocations are better absorbed by the better off districts compared to the weaker districts as the average percent utilization of funds in the case of category A districts has declined from 77.51 percent in 2007-08 to 73.81 percent in 2008-09 that of category D districts has experienced even sharper a decline from 78.89 percent to 66.47 percent. These get reflected very well from graph 7. The grassroots level reality is far removed from the planned reduction of regional imbalance professed by the NRHM. The glaring variation proves that the local felt needs are not attracting adequate funds and the allocated funds are underutilized.

While this is evidence with reference to the aggregate expenditure, a disaggregated analysis by the important components of NRHM is even more revealing. These details are presented in tables 6 and 7 and Graphs 8 & 9.

The data clearly reveals a larger and increased focus on RCH and NRHM additionalities even while disease control program and immunization get small and declining share. However, among the latter two categories there is not much of difference between releases and expenditure. In addition the category D districts have larger releases and expenditure under RCH and NRHM while Disease control program and Immunisation received much smaller releases. Variations in allocations over time to reflect the local needs and priorities are certainly a welcome development in the context of expenditure planning and management, in this particular context we do not have any evidence to say that these backward districts have a reduced need for 'disease control program' and immunization**.** In fact**,** Immunisation performance has suffered in the state as per the NFHS- 3 survey. These findings corroborate the observations made by Duggal (2009,16) that with in NRHM the largest increases have been for Ayush and RCH/FW whereas the disease control programs which include key diseases of poverty like TB, Malaria and the diarrheal diseases have suffered with a marginal growth of only 1.6 times. Expenditure has barely crossed 50 percent of PIP that too with regard to items like immunization. While providing for the entire planned estimate (there is also a need to check for over estimation) may be not feasible given the hard budget constraints, there is a dire need to provide adequate allocation for the basic health needs. The PIP could further be refined to list the priorities in the order of merit so that the funding helps enhance the allocative efficiency of health sector expenditure at the grass root level.

Table 5: District wise NRHM Fund releases and expenditure (in crores)

Districts		2007-08					2008-09					Growth Rate		Difference
		Release	Exp	Exp as a % to Release	Per capita		Release	Exp	Exp as a % to Release	Per capita				
					Availability	Exp				Availability	Exp	Release	Exp	
AMI with lesser than state level poverty **(Category 1)**	Bangalore Urban	3.68	3.53	95.92	**40.89**	**39.22**	10.36	7.62	73.55	**115.11**	**84.67**	181.52	115.86	65.66
	Bangalore Rural	4.29	3.82	89.04	**26.81**	**23.88**	6.46	3.84	59.44	**40.38**	**24.00**	50.58	0.52	50.06
	Chikmagalur	3.05	2.66	87.21	**30.50**	**26.60**	8.50	6.29	74.00	**85.00**	**62.90**	178.69	136.47	42.22
	Dakshina Kannada	3.84	2.14	55.73	**32.00**	**17.83**	8.06	5.88	72.95	**67.17**	**49.00**	109.90	174.77	-64.87
	Kodagu	1.87	1.03	55.08	**37.40**	**20.60**	5.03	3.56	70.78	**100.60**	**71.20**	168.98	245.63	-76.65
	Koppal	3.83	2.83	73.89	**31.92**	**23.58**	12.50	7.70	61.60	**104.17**	**64.17**	226.37	172.08	54.29
	Mysore	4.98	3.27	65.66	**27.67**	**18.17**	14.10	11.63	82.48	**78.33**	**64.61**	183.13	255.66	-72.52
	Shimoga	4.27	3.41	79.86	**38.82**	**31.00**	8.77	8.62	98.29	**79.73**	**78.36**	105.39	152.79	-47.40
	Udupi	2.63	2.32	88.21	**26.30**	**23.20**	12.34	4.90	39.71	**123.40**	**49.00**	369.20	111.21	257.99
AMI with Higher than state level poverty **(Category 2)**	Bellary	4.09	3.17	77.51	**27.27**	**21.13**	9.89	7.30	73.81	**65.93**	**48.67**	141.81	130.28	11.53
	Davanagere	4.93	4.38	88.84	**37.92**	**33.69**	10.51	6.23	59.28	**75.07**	**44.50**	113.18	42.24	70.95
	Dharwad	3.13	2.50	79.87	**39.13**	**31.25**	7.22	4.35	60.25	**90.25**	**54.38**	130.67	74.00	56.67
	Uttar kannada	3.05	1.97	64.59	**30.50**	**19.70**	8.93	5.76	64.50	**89.30**	**57.60**	192.79	192.39	0.40
BMI with lesser than state level poverty **(Category 3)**	Belgaum	5.64	4.53	80.32	**15.67**	**12.58**	19.67	12.64	64.26	**54.64**	**35.11**	248.76	179.03	69.73
	Chamarajanagar	2.96	2.23	75.34	**32.89**	**24.78**	8.30	3.69	44.46	**92.22**	**41.00**	180.41	65.47	114.93
	Hassan	3.91	2.85	72.89	**26.07**	**19.00**	11.85	9.21	77.72	**79.00**	**61.40**	203.07	223.16	-20.09
	Kolar	5.37	3.42	63.69	**25.57**	**16.29**	11.95	9.88	82.68	**56.90**	**47.05**	122.53	188.89	-66.36
	Mandya	4.70	2.65	56.38	**29.38**	**16.56**	11.27	8.94	79.33	**70.44**	**55.88**	139.79	237.36	-97.57
	Tumkur	5.63	4.94	87.74	**25.59**	**22.45**	16.85	11.87	70.45	**76.59**	**53.95**	199.29	140.28	59.01
BMI with Higher than state level poverty **(Category 4)**	Bagalkot	4.54	3.70	81.50	**34.92**	**28.46**	10.98	8.07	73.50	**84.46**	**62.08**	141.85	118.11	23.74
	Bidar	3.83	3.37	87.99	**29.46**	**25.92**	10.80	7.28	67.41	**83.08**	**56.00**	181.98	116.02	65.96
	Bijapur	4.23	2.08	49.17	**28.20**	**13.87**	12.44	7.74	62.22	**77.75**	**48.38**	194.09	272.12	-78.03
	Chitradurga	4.31	3.25	75.41	**30.79**	**23.21**	9.84	7.60	77.24	**70.29**	**54.29**	128.31	133.85	-5.54
	Gadag	2.35	2.10	89.36	**33.57**	**30.00**	6.66	4.36	65.47	**95.14**	**62.29**	183.40	107.62	75.79
	Gulbarga	7.05	6.29	89.22	**28.20**	**25.16**	21.64	15.10	69.78	**83.23**	**58.08**	206.95	140.06	66.89
	Haveri	3.93	3.20	81.42	**32.75**	**26.67**	9.26	7.00	75.59	**77.17**	**58.33**	135.62	118.75	16.87
	Raichur	5.10	3.93	77.06	**36.43**	**28.07**	18.39	7.45	40.51	**122.60**	**49.67**	260.59	89.57	171.02
Grand Total		**180.39**	**144.4**	**76.88**	**47.60**	**38.10**	**433.26**	**312.44**	**67.82**	**113.12**	**81.58**	**140.18**	**116.37**	**23.81**

Note: Along with districts share grand total includes HQ Exp, State Health Institute, Director Ayurvedic, Drugs Logistic Society, Exp incurred at DH for FW compensation, etc.

Table 6: Component -wise Fund position by districts 2007-08 (in crores)

Sl. No.	Districts	RCH			NRHM Add			Immunisation			DCP		
		Release	Exp	Exp as a % to release	Release	Exp	Exp as a % to release	Release	Exp	Exp as a % to release	Release	Exp	Exp as a % to release
AMI with lesser than state level poverty **(Category 1)**	Bangalore Urban	1.79	1.46	81.56	1.13	1.32	116.81	0.44	0.44	100.00	0.32	0.31	96.88
	Bangalore Rural	1.04	1.22	117.31	2.53	1.91	75.49	0.28	0.2	71.43	0.49	0.49	100.00
	Chikmagalur	1.14	1.01	88.60	1.56	1.28	82.05	0.14	0.15	107.14	0.22	0.2	90.91
	Dakshina Kannada	1.28	0.8	62.50	1.87	0.7	37.43	0.29	0.29	100.00	0.39	0.35	89.74
	Kodagu	0.38	0.32	84.21	0.92	0.16	17.39	0.08	0.08	100.00	0.49	0.47	95.92
	Koppal	1.96	1.46	74.49	1.13	0.65	57.52	0.27	0.27	100.00	0.47	0.45	95.74
	Mysore	1.77	1.62	91.53	2.32	0.72	31.03	0.27	0.31	114.81	0.62	0.61	98.39
	Shimoga	1.35	1.18	87.41	1.48	0.82	55.41	0.31	0.3	96.77	1.13	1.11	98.23
	Udupi	0.74	0.85	114.86	1.05	0.66	62.86	0.13	0.13	100.00	0.72	0.68	94.44
AMI with Higher than state level poverty **(Category 2)**	Bellary	1.8	1.73	96.11	1.22	0.34	27.87	0.31	0.3	96.77	0.76	0.79	103.95
	Davanagere	1.84	1.49	80.98	1.63	1.4	85.89	0.42	0.42	100.00	1.03	1.07	103.88
	Dharwad	1.55	1.42	91.61	1	0.47	47.00	0.16	0.16	100.00	0.43	0.43	100.00
	Uttara kannada	0.85	0.72	84.71	1.51	0.66	43.71	0.13	0.03	23.08	0.56	0.57	101.79
BMI with lesser than state level poverty **(Category 3)**	Belgaum	1.63	1.63	100.00	2.86	1.8	62.94	0.45	0.44	97.78	0.7	0.67	95.71
	Chamarajanagar	1.5	0.87	58.00	0.96	0.94	97.92	0.25	0.2	80.00	0.25	0.22	88.00
	Hassan	1.18	1.72	145.76	1.89	0.33	17.46	0.2	0.24	120.00	0.63	0.56	88.89
	Kolar	1.32	1.63	123.48	3.64	1.18	32.42	0.65	0.7	107.69	0.42	0.39	92.86
	Mandya	1.77	1.76	99.44	2.26	0.19	8.41	0.25	0.28	112.00	0.43	0.43	100.00
	Tumkur	2.42	2.13	88.02	2.43	2.03	83.54	0.31	0.31	100.00	0.48	0.48	100.00
BMI with Higher than state level poverty **(Category 4)**	Bagalakote	2.77	2.15	77.62	1.19	1.01	84.87	0.36	0.36	100.00	0.23	0.17	73.91
	Bidar	1.62	1.43	88.27	1.43	1.13	79.02	0.3	0.3	100.00	0.49	0.51	104.08
	Bijapur	1.73	0.84	48.55	1.46	0.79	54.11	0.5	0.04	8.00	0.55	0.4	72.73
	Chitradurga	1.79	1.63	91.06	1.75	0.8	45.71	0.34	0.35	102.94	0.43	0.47	109.30
	Gadag	0.79	0.76	96.20	0.86	0.64	74.42	0.25	0.25	100.00	0.45	0.46	102.22
	Gulbarga	2.77	2.51	90.61	2.9	2.65	91.38	0.62	0.37	59.68	0.76	0.77	101.32
	Haveri	1.57	1.37	87.26	1.62	1.19	73.46	0.31	0.27	87.10	0.43	0.37	86.05
	Raichur	2.51	1.65	65.74	1.25	1.11	88.80	0.7	0.67	95.71	0.64	0.5	78.13
Grand Total		**85.84**	**72.51**	**84.47**	**63.27**	**41.86**	**66.16**	**12.00**	**11.29**	**94.08**	**19.28**	**18.74**	**97.20**

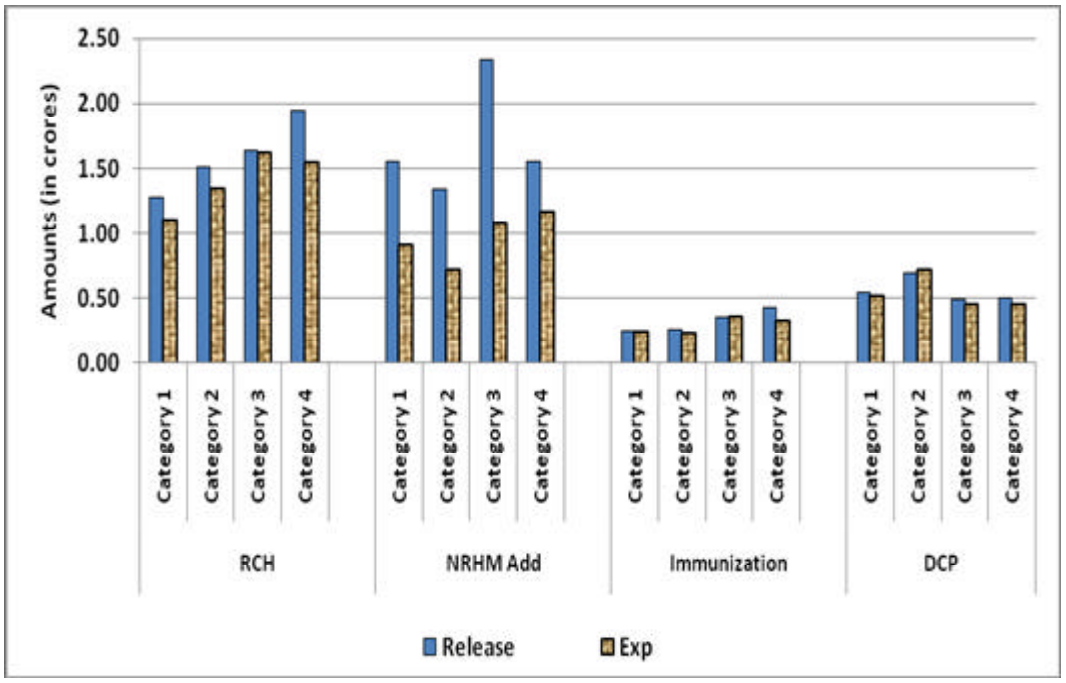
Note: Along with districts share grand total includes HQ Exp, State Health Institute, Director Ayurvedic, Drugs Logistic Society, Exp incurred at DH for FW compensation, etc.

Table 7: Component -wise Fund Position by Districts 2009-10 (in crores)

Sl. No.	Districts	RCH			NRHM Add			Immunisation			DCP		
		Release	Exp	Exp as a % to release	Release	Exp	Exp as a % to release	Release	Exp	Exp as a % to release	Release	Exp	Exp as a % to release
AMI with lesser than state level poverty **(Category 1)**	Bangalore Urban	5.02	3.58	71.31	3.47	2.96	85.37	0.88	0.70	79.44	1.46	1.46	99.90
	Bangalore Rural	2.14	2.57	120.26	2.54	2.58	101.28	0.24	0.20	81.44	0.39	0.51	129.49
	Chikmagalur	2.89	2.82	97.43	4.41	3.71	84.09	0.42	0.35	84.71	0.69	0.68	97.70
	Dakshina Kannada	2.27	2.73	120.43	3.83	4.76	124.25	0.47	0.50	107.26	0.74	0.72	97.77
	Kodagu	1.85	1.60	86.81	2.15	1.90	88.48	0.27	0.24	92.35	0.28	0.28	100.00
	Koppal	3.03	4.43	146.07	2.25	5.30	235.80	0.45	0.38	83.51	0.66	0.70	105.14
	Mysore	6.19	5.80	93.64	4.93	5.88	119.25	0.62	0.55	88.75	1.21	1.24	102.84
	Shimoga	4.02	3.84	95.60	5.14	4.05	78.82	0.50	0.47	93.02	0.66	0.94	143.05
	Udupi	2.91	3.00	103.25	2.91	4.55	156.40	0.29	0.21	74.15	0.54	0.53	98.38
AMI with Higher than state level poverty **(Category 2)**	Bellary	5.51	6.48	117.68	4.41	5.13	116.54	0.68	0.57	84.00	0.92	0.94	102.21
	Davanagere	4.31	5.22	121.26	4.64	5.01	107.89	0.62	0.52	83.94	0.82	0.80	97.52
	Dharwad	2.79	3.42	122.53	3.11	3.21	103.45	0.81	0.64	79.18	0.72	0.73	100.98
	Uttara kannada	2.08	3.68	176.84	3.94	4.52	114.84	0.39	0.33	85.25	0.60	0.59	98.47
BMI with lesser than state level poverty **(Category 3)**	Belgaum	7.98	0.00	0.00	8.25	11.70	141.91	1.16	1.11	95.76	0.87	0.99	113.71
	Chamarajanagar	3.06	3.32	108.26	2.86	3.34	116.80	0.33	0.27	83.79	0.54	0.58	107.96
	Hassan	3.47	4.50	129.85	5.26	4.35	82.79	0.45	0.48	107.02	0.68	0.70	104.28
	Kolar	4.14	5.33	128.69	4.43	4.62	104.22	0.50	0.82	163.71	0.89	0.94	105.68
	Mandya	3.41	5.05	148.31	5.30	3.95	74.59	0.41	0.37	90.21	1.22	1.26	103.08
	Tumkur	5.46	5.63	103.12	6.53	7.47	114.34	0.56	0.52	91.81	1.39	1.36	97.74
BMI with Higher than state level poverty **(Category 4)**	Bagalakote	6.48	6.76	104.32	3.88	5.00	129.02	0.48	0.39	80.28	0.65	0.69	106.43
	Bidar	4.02	4.40	109.48	7.55	5.93	78.59	0.47	0.43	91.36	0.51	0.57	110.99
	Bijapur	4.08	5.38	132.04	3.47	4.27	122.94	0.82	0.86	104.92	0.54	0.58	108.19
	Chitradurga	3.60	4.43	123.06	4.08	4.50	110.17	0.57	0.42	73.75	0.84	0.83	98.54
	Gadag	3.01	3.16	104.96	2.74	2.83	103.50	0.41	0.33	81.50	0.27	0.31	113.75
	Gulbarga	10.16	8.72	85.83	6.82	7.46	109.43	0.66	0.73	111.48	0.98	0.99	101.56
	Haveri	3.38	4.73	140.04	4.24	4.51	106.50	0.52	0.46	89.30	0.65	0.66	101.11
	Raichur	4.80	4.50	93.70	4.29	4.67	108.63	0.47	0.47	100.39	0.87	0.89	102.71
Grand Total		**133.71**	**150.72**	**112.73**	**316.61**	**293.54**	**92.72**	**16.17**	**14.56**	**90.02**	**24.88**	**24.33**	**97.77**

Note: Along with districts share grand total includes HQ Exp, State Health Institute, Director Ayurvedic, Drugs Logistic Society, Exp incurred at DH for FW compensation, etc.

Graph: 8 Component -wise fund flow pattern 2007-08



Graph: 9 Component -wise fund flow pattern 2009-10

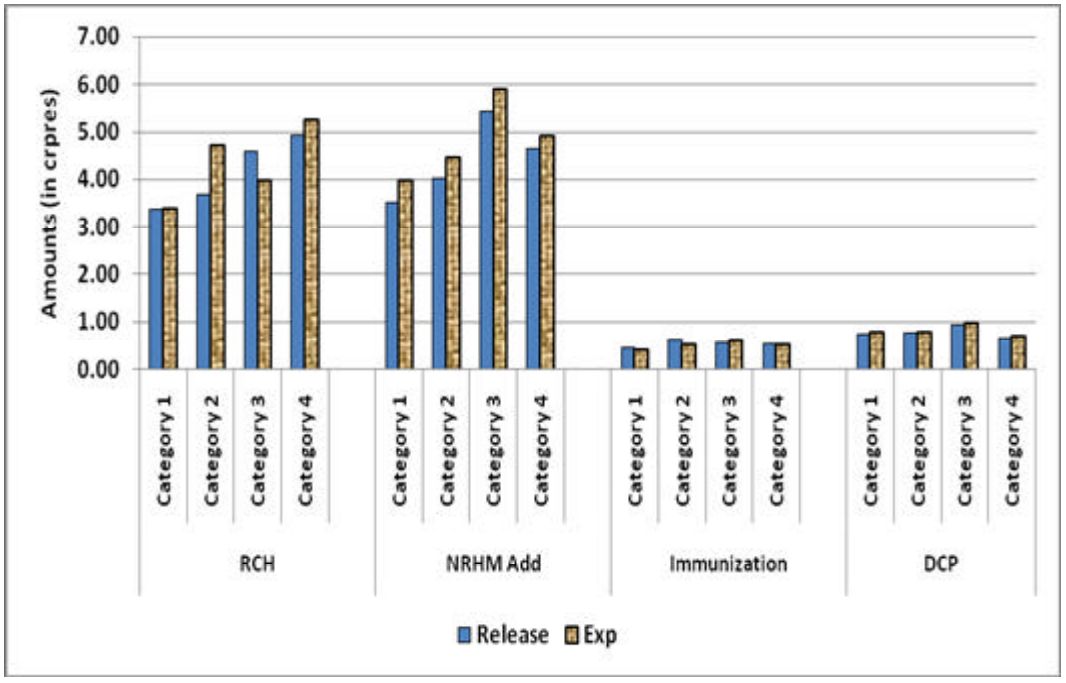


Table No. 8: Component-wise Growth rate in fund flow (between 2007-08 & 2009-10)

Sl. No.	Districts	RCH		NRHM Add		Immunisation		DCP	
		Release	Exp	Release	Exp	Release	Exp	Release	Exp
AMI with lesser than state level poverty	Bangalore Urban	180.42	145.17	206.87	124.28	99.23	58.26	356.57	370.80
	Bangalore Rural	105.67	110.85	0.58	34.93	-13.42	-1.28	-20.01	3.57
	Chikmagalur	153.85	179.16	182.85	189.89	196.70	134.59	214.30	237.77
	Dakshina Kannada	77.00	241.06	104.95	580.29	61.90	73.64	88.80	105.69
	Kodagu	385.84	400.84	133.31	1086.98	231.55	206.17	-43.47	-39.98
	Koppal	54.61	203.19	98.73	714.63	66.87	39.35	41.43	55.30
	Mysore	249.97	258.05	112.38	716.08	130.68	78.30	94.78	103.61
	Shimoga	197.56	225.47	247.07	393.75	61.91	55.62	-41.58	-14.92
	Udupi	293.02	253.28	177.36	590.13	119.74	62.94	-25.45	-22.34
AMI with Higher than state level poverty	Bellary	206.06	274.75	261.09	1409.91	120.76	91.62	21.29	19.27
	Davanagere	134.08	250.53	184.95	257.95	48.54	24.69	-20.83	-25.68
	Dharwad	80.11	140.89	210.64	583.76	406.34	300.92	68.14	69.79
	Uttara kannada	144.73	410.93	160.94	585.61	198.79	1003.71	7.07	3.59
BMI with lesser than state level poverty	Belgaum	389.68	-100.00	188.30	550.06	157.59	152.28	23.90	47.19
	Chamarajanagar	104.20	281.16	197.53	254.92	30.93	37.12	116.15	165.17
	Hassan	193.74	161.66	178.16	1218.90	123.98	99.75	7.24	25.81
	Kolar	213.72	226.95	21.70	291.26	-23.21	16.73	111.49	140.70
	Mandya	92.44	187.03	134.45	1980.19	63.63	31.80	183.34	192.08
	Tumkur	125.65	164.38	168.74	267.83	81.65	66.77	188.94	182.41
BMI with Higher than state level poverty	Bagalakote	133.94	214.41	225.70	395.10	34.49	7.97	181.12	304.79
	Bidar	148.31	207.98	427.76	424.86	55.15	41.75	4.51	11.44
	Bijapur	135.62	540.75	137.78	440.24	64.05	2051.63	-2.65	44.82
	Chitradurga	101.15	171.83	133.31	462.29	68.17	20.48	95.98	76.69
	Gadag	280.70	315.37	218.41	342.85	63.70	33.42	-39.04	-32.17
	Gulbarga	266.76	247.38	135.22	181.69	6.17	98.35	28.56	28.87
	Haveri	115.37	245.62	161.64	279.33	67.43	71.67	52.13	78.77
	Raichur	91.24	172.59	243.57	320.30	-32.62	-29.32	35.86	78.61
Grand Total		**55.76**	**107.87**	**400.40**	**601.25**	**34.77**	**28.95**	**29.06**	**29.81**

Source: NRHM Annual Audited Financial Statements & Reports, Government of Karnataka. (2007-08 & 2009-10)

By way of summary, this paper reveals that, government financing of the health sector in Karnataka gives cause for concern because the sector has a very small share in GSDP and the state's revenue expenditure which also declined until the launch of the NRHM. There were also instances of absolute decline in the expenditure which is a rarity given the incremental budgeting practices that the Indian governments practice. Regarding NRHM funding to the state, wide variation has been observed among the PIP, releases and expenditure which does not augur well for the development of the sector. Such deviations in the earmarking of planned funds defy the very purpose of stringent bottom up planning involving colossal manpower and financial resources to track the grass root felt needs. In addition such aberrations do not help the government in the achievement of professed outcomes. This is a serious lapse in NRHM implementation and can seriously distort the effectiveness of public spending and to be taken care of in future.

The district wise allocations reflect poor planning because the better off districts get higher per capita benefits even while the backward districts get a larger share in the total allocation. This amounts

to the fact that bridging these gaps would require a much larger funding support to the backward districts than that is currently provided for. In terms of program composition too the backward districts seem to have better and increased funding support for RCH and NRHM additionalities as compared to Disease control and immunisation, in fact the latter two have received a declined share and at times declined absolute size. Unfortunately, some districts falling in this category get lesser per capita expenditure than the better off districts, despite getting a bigger share in total, is a serious issue of concern amounting to poor health expenditure planning and needs to be addressed on top priority. Funding fallacies of this kind if persisted for long may augment regional inequalities rather than reduce. There are many other such instances in the fund distribution among districts and is a clear anomaly in the inter district disparity bridging effort. To make the intervention more effective, the government has to take into account the need of the area which gets best reflected by the size of the population, age composition, disease profile, overall level of health development etc. The analysis clearly hints at the need not to merely enhance funding support but also improve expenditure planning by the authorities concerned to achieve the targeted outcomes in a cost effective manner. While providing for the entire planned estimate may be not feasible given the hard budget constraints, there is every need to provide adequate allocation for the basic health needs. The PIP could further be refined to list the priorities in the order of merit such that the funding helps enhance the allocative efficiency of health sector expenditure at the grass root level.These issues need to be addressed to get rid of the adversities in Karnataka's health sector.

References

Berman, Peter, Rajeev Ahuja, Ajay Tandon, Susan Sparkes and Pablo Gattret (2010). Government Health Financing in India: Challenges in Achieving Ambitious Goals. *HNP Discussion paper*. The World Bank.

Duggal, Ravi (2009). Sinking Flagships and Health Budgets in India. *Economic and Political Weekly*, 44 (33): 14-17.

Gayithri, K (2011). District Level Funds Flow and Expenditure Analysis under NRHM for the State of Karnataka. *ISEC Research study report prepared for National Health Systems Research Center*. New Delhi.

Government of India (2005). *National Rural Health Mission: A framework for Implementation*. New Delhi: Ministry of Health and Family Welfare.

Uchimura, Hiroko and Johannes Jutting (2007). Fiscal Decentralisation, Chinese Style: Good for Health Outcomes. *OECDE Working Paper No 264*.

Recent Working Papers

217 Fisheries and Livelihoods in Tungabhadra Basin, India: Current Status and Future Possibilities
Manasi S, Latha N and K V Raju

218 Economics of Shrimp Farming: A Comparative Study of Traditional Vs. Scientific Shrimp Farming in West Bengal
Poulomi Bhattacharya

219 Output and Input Efficiency of Manufacturing Firms in India: A Case of the Indian Pharmaceutical Sector
Mainak Mazumdar, Meenakshi Rajeev and Subhash C Ray

220 Panchayats, Hariyali Guidelines and Watershed Development: Lessons from Karnataka
N Sivanna

221 Gender Differential in Disease Burden: It's Role to Explain Gender Differential in Mortality
Biplab Dhak and Mutharayappa R

222 Sanitation Strategies in Karnataka: A Review
Veerashekharappa and Shashanka Bhide

223 A Comparative Analysis of Efficiency and productivity of the Indian Pharmaceutical Firms: A Malmquist-Meta-Frontier Approach
Mainak Mazumdar and Meenakshi Rajeev

224 Local Governance, Patronage and Accountability in Karnataka and Kerala
Anand Inbanathan

225 Downward Dividends of Groundwater Irrigation in Hard Rock Areas of Southern Peninsular India
Anantha K H

226 Trends and Patterns of Private Investment in India
Jagannath Mallick

227 Environmental Efficiency of the Indian Cement Industry: An Interstate Analysis
Sabuj Kumar Mandal and S Madheswaran

228 Determinants of Living Arrangements of Elderly in Orissa: An Analysis
Akshaya Kumar Panigrahi

229 Fiscal Empowerment of Panchayats in India: Real or Rhetoric?
M Devendra Babu

230 Energy Use Efficiency in Indian Cement Industry: Application of Data Envelopment Analysis and Directional Distance Function
Sabuj Kumar Mandaland S Madheswaran

231 Ethnicity, Caste and Community in a Disaster Prone Area of Orissa
Priya Gupta

232 Koodankulam Anti-Nuclear Movement: A Struggle for Alternative Development?
Patibandla Srikant

233 History Revisited: Narratives on Political and Constitutional Changes in Kashmir (1947-1990)
Khalid Wasim Hassan

234 Spatial Heterogeneity and Population Mobility in India
Jajati Keshari Parida and S Madheswaran

235 Measuring Energy Use Efficiency in Presence of Undesirable Output: An Application of Data Envelopment Analysis (DEA) to Indian Cement Industry
Sabuj Kumar Mandaland S Madheswaran

236 Increasing trend in Caesarean Section Delivery in India: Role of Medicalisation of Maternal Health
Sancheetha Ghosh

237 Migration of Kashmiri Pandits: Kashmiriyat Challenged?
Khalid Wasim Hassan

238 Causality Between Energy Consumption and Output Growth in Indian Cement Industry: An Application of Panel Vector Error Correction Model
Sabuj Kumar Mandaland S Madheswaran

239 Conflict Over Worship:A Study of the Sri Guru Dattatreya Swami Bababudhan Dargah in South India
Sudha Sitharaman

240 Living Arrangement Preferences of the Elderly in Orissa, India
Akshaya Kumar Panigrahi

241 Challenges and Pospects in the Measurement of Trade in Services
Krushna Mohan Pattanaik

242 Dalit Movement and Emergence of the Bahujan Samaj Party in Uttar Pradesh: Politics and Priorities
Shyam Singh

243 Globalisation, Democratic Decentralisation and Social Secutiry in India
S N Sangita and T K Jyothi

244 Health, Labour Supply and Wages: A Critical Review of Literature
Amrita Ghatak

245 Is Young Maternal Age A Risk Factor for Sexually Transmitted Diseases and Anemia in India? An Examination in Urban and Rural Areas
Kavitha N

246 Patterns and Determinants of Female Migration in India: Insights from Census
Sandhya Rani Mahapatro

247 Spillover Effects from Multinational Corporations: Evidence From West Bengal Engineering Industries
Rajdeep Singha and K Gayithri

248 Effectiveness of SEZs Over EPZs Structure: The Performance at Aggregate Level
Malini L Tantri

249 Income, Income Inequality and Mortality An empirical investigation of the relationship in India, 1971-2003
K S James and T S Syamala

250 Institutions and their Interactions: An Economic Analysis of Irrigation Institutions in the Malaprabha Dam Project Area, Karnataka, India
Durba Biswas and L Venkatachalam

251 Performance of Indian SEZs: A Disaggregated Level Analysis
Malini L Tantri

252 Banking Sector Reforms and NPA: A study of Indian Commercial Banks
Meenakshi Rajeev and H P Mahesh

253 Government Policy and Performance: A Study of Indian Engineering Industry
Rajdeep Singha and K Gayithri

254 Reproduction of Institutions through People's Practices: Evidences from a Gram Panchayat in Kerala
Rajesh K

255 Survival and Resilience of Two Village Communities in Coastal Orissa: A Comparative Study of Coping with Disasters
Priya Gupta

256 Engineering Industry, Corporate Ownership and Development: Are Indian Firms Catching up with the Global Standard?
Rajdeep Singha and K Gayithri

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
Malnil 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 Veerashekharappa

271 Decentralisation and Interventions in Health Sector: A Critical Inquiry into the Experience of Local Self Governments in Keral
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

Price: Rs. 30.00 ISBN 978-81-7791-134-3

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