

KERALA

STATE REPORT

Kerala

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KERALA

Summary of Approvals

Financial Management under NRHM (Rs. in crore)					
Years	Allocation	Release	Expenditure	% Release against Allocation	% Expenditure against Release
2005-06	117.38	113.66	59.93	96.83	52.73
2006-07	177.21	190.62	118.71	107.57	62.27
2007-08	218.57	297.61	223.06	136.16	74.95
2008-09	235.11	226.74	361.98	96.44	159.64
2009-10	235.18			0.00	
Total	983.45	828.63	763.67	84.26	92.16

S. No.	Timeline Activities	Achievement	%
1	ASHA	Selection	22949
		Training	8346
2	VHSC	18003	1320
3	24X7 PHCs	178	20
4	Mobile Medical Unit	7	50
5	Rogi Kalyan Samiti	1171	109

Budget Allocations (2005-09) (Amount in Crores)			
	Allocation	Releases	Expenditure
RCH Flexipool			
2005-06	39.03	21.44	2.07
2006-07	51.56	31.20	7.83
2007-08	38.77	41.97	48.19
2008-09	63.26	74.23	89.45
2009-10	64.50		
Total (A)	257.12	168.84	147.54
NRHM Flexipool			
2005-06		25.26	0.00
2006-07	43.37	44.60	6.53
2007-08	75.82	143.11	73.67
2008-09	55.11	63.96	188.61
2009-10	56.92		
Total (B)	231.22	276.93	268.81
National Disease Control Programme			
2005-06	12.02	13.20	11.05
2006-07	14.42	11.14	8.50
2007-08	15.74	16.47	6.25
2008-09	20.71	8.33	3.05
2009-10	17.69	1.72	0.00
Total (C)	80.59	50.85	28.85
Grand Total (A + B + C)	568.93	496.62	445.2

Record of Proceedings (2005-2009) for Mission Flexible Pool

Approval for Infrastructure Facilities (Rs. in Crore)						
S. No	Health Facilities	2005-06	2006-07	2007-08	2008-09	2009-10
1	Sub C	5.09		3.30	0.00	0.00
2	PHC			6.00	10.00	4.22
3	CHC	8.40	12.80	41.50	4.80	2.50
4	DH			9.00	0.00	21.85
5	Eqpmt			0.00	0.00	2.82
6	Transp			0.00		6.60
7	Others		9.78	23.89	48.93	16.25
	Total	13.49	22.58	83.69	63.73	54.24

Approval for Human Resource Support (Rs. in Crore)						
S. No	Personnel	2005-06	2006-07	2007-08	2008-09	2009-10
1	Doctors			0.00	0.00	13.22
2	Specialists			0.00	0.00	0.00
3	Staff Nurses			0.00	0.00	9.00
4	ANM			0.00	0.00	0.84
5	Others			0.00	0.00	14.60
	Total	0.00	0.00	0.00	0.00	37.66

Approval of other activities (2005-2009) in Rs. Lakh						
S.No	Initiative	2005-06	2006-07	2007-08	2008-09	2009-10
		Released	Approved	Approved	Approved	Approved
ASHAs						
1	ASHA		23.82	56.5		1666.41
2	ASHA Drug Kits				500	
3	Performance related incentives to ASHA					450.24
	TOTAL		23.82	56.5	500	2116.65
Untied Funds, Annual Maintenance Grants and RKS funds related matters						
5	Rogi Kalyan Samiti				1214	390
6	RKS District / General Hospitals					105
7	RKS CHC/24X7 PHC					384
8	RKS PHC				1384	702

9	Untied Fund				1474.3		
10	Untied Funds for Sub centre	509	509.4			556.8	
11	Untied Funds for PHC		227.75			175.5	
12	Untied Funds for CHC/24x7 PHC			876.3		192	
13	Untied fund for Ward Health & Sanitation Committee			1600.9	1600.9	1817.1	
14	Annual Maintenance Grant				993.8		
15	Annual Maintenance Grant - CHC					384	
16	Annual Maintenance Grant - PHC		455.5			351	
17	Annual Maintenance Grant- SC			976.8		346	
	TOTAL	509	1192.65	4838	5283	5403.4	

Infrastructure related matters

18	Mobile Medical Units		154.75	512.33		660	
19	Emergency & Referral Services				1147.67		
	TOTAL		154.75	512.33	1147.67	660	

Status of Infrastructure 2005-2010

	As per RHS 2008	New Construction	Upgradation / Renovation
Number of Sub Centre	5094	1	0
Number of PHC	909	3	2
Number of CHC	107	88	58
Number of DH	14 As per State Data Sheet, NRHM	9	12

Status of NRHM as on 15.05.2009

1	ASHA	Selection	22949
		Training	8346
2		VHSC	18003
3		Joint A/C @ Sub Centre and VHSC	18003
4		24X7 Facility	337
5		FRU	65
6	Contractual Manpower	Doctors & Specialist	876
		AYUSH Doctors	91
		Staff Nurse	1495
		Paramedics	136
		ANM	0
7		JSY Beneficiaries (in Lakhs)	3.55

National Disease Control Programme

NLEP

The state has already achieved the goal of elimination of leprosy. The state is advised to carry out indepth situational analysis in districts/blocks reporting large number of new cases and take suitable actions

IDSP

It is a Phase I state. All districts are reporting weekly Surveillance data and Outbreak Reports in time.

NBCP

UCs for GIA released to State Blindness Control Society not being received timely. SOE for Cash Grant are also not being received timely. Performance of School Eye Screening Programme needs to be improved.

NVBDCP

Though malaria is not a major problem in the state, the state needs to keep a vigil on the malaria cases being reported. The State need to facilitate the diagnostic facilities for dengue and Chikungunya . for case management and strengthening of health facilities need to be taken on priority basis for diagnosis and case management.

RNTCP

Total Case Detection and cure rate need to be improved. This appears to be due to gaps in key HR (STO, DTO and other levels), weak supply chain management and supervision.

Demographic, Socio-economic and Health profile

HEALTH INDICATORS OF KERALA

The Total Fertility Rate of the State is 1.7. The Infant Mortality Rate is 13 and Maternal Mortality Ratio is 95 (SRS 2004 - 06) which are lower than the National average. The Sex Ratio in the State is 1058 (as compared to 933 for the country). Comparative figures of major health and demographic indicators are as follows:

Table I: Demographic, Socio-economic and Health profile of Kerala State as compared to India figures

S. No.	Item	Kerala	India
1	Total population (Census 2001) (in million)	31.84	1028.61
2	Decadal Growth (Census 2001) (%)	9.43	21.54
3	Crude Birth Rate (SRS 2007)	14.7	23.1
4	Crude Death Rate (SRS 2007)	6.8	7.4
5	Total Fertility Rate (SRS 2007)	1.7	2.7
6	Infant Mortality Rate (SRS 2007)	13	55
7	Maternal Mortality Ratio (SRS 2004 - 2006)	95	254
8	Sex Ratio (Census 2001)	1058	933
9	Population below Poverty line (%)	12.72	26.10
10	Schedule Caste population (in million)	3.12	166.64
11	Schedule Tribe population (in million)	0.36	84.33
12	Female Literacy Rate (Census 2001) (%)	87.8	53.7

Table II: Health Infrastructure of Kerala

Particulars	Required	In position	shortfall
Sub-centre	4761	5094	-
Primary Health Centre	791	909	-
Community Health Centre	197	107	90
Multipurpose worker (Female)/ANM at Sub Centres & PHCs	6003	5320	683
Health Worker (Male) MPW(M) at Sub Centres	5094	2654	2440
Health Assistant (Female)/LHV at PHCs	909	740	169
Health Assistant (Male) at PHCs	909	794	115
Doctor at PHCs	909	1732	-
Obstetricians & Gynaecologists at CHCs	107	28	79
Physicians at CHCs	107	31	76
Paediatricians at CHCs	107	38	69
Total specialists at CHCs	428	115	313
Radiographers	107	15	92
Pharmacist	1016	1017	-
Laboratory Technicians	1016	347	669
Nurse/Midwife	1658	3383	-

(Source: RHS Bulletin, March 2008, M/O Health & F.W., GOI)

The other Health Institution in the State are detailed as under:

Health Institution	Number
Medical College	18
District Hospitals	14
Referral Hospitals	
City Family Welfare Centre	
Rural Dispensaries	
Ayurvedic Hospitals	124
Ayurvedic Dispensaries	740
Unani Hospitals	-
Unani Dispensaries	1
Homeopathic Hospitals	33
Homeopathic Dispensary	580

Note on Progress of NRHM in Kerala (June 2009)

Kerala has implemented the activities of National Rural Health Mission efficiently and effectively for attaining the goals and objectives of National Population Policy and Millennium Development Goals. The performance of JSY, community mobilization by ASHAs, referral transport, institutional deliveries, OPDs and bed occupancy has been significantly improved. In order to provide accessible, affordable and equitable health services to all NRHM is working in a task mode to achieve goals and effectively dealing with the challenges. There is marked improvement in infrastructure and human resources.

Brief information on progress vis-a-vis issues have been highlighted which are as follows:

Institutional Framework of NRHM

Meeting of State Health Mission held once and of District Health Mission held 17 times. The Meeting of State Health Mission needs to be streamlined and the progress at districts with regard to District Health Mission meetings is good. Merger of societies is completed in 14 districts. 18003 VHSCs have been constituted & 18003 Joint Accounts at sub centre level being operationalised. Rogi Kalyan Samiti is operational at 11 DH, 245CHCs & 839 PHCs. All districts have started developing their own IDHAP.

Infrastructure Improvements

A total of 99 PHC have been strengthened with three Staff Nurses each for 24x7 works. And, 93 CHC are functioning on 24X7 basis & facility survey completed in 115 (including others health institution also). A total of 38 SDH, 18 CHC and others health institution below district level and 9 District Hospitals are functioning as FRUs. 7 districts have functional Mobile Medical Unit (MMU)

Human Resources

A total of 22949 ASHAs have been selected & 8346 are trained upto 1st Module. And, 8450 ASHAs have been provided with drug kits. A total of 5042 Sub-centres are functional with an ANM and none of the SCs have 2nd ANM. 91 Contractual AYUSH Doctors have been appointed. As far as manpower augmentation is concerned, 1495 SN, 856 Doctors have been appointed on contractual basis to meet the demand of the health services.

Services

Institutional deliveries improved from 5.43 lakhs (2006-07) to 5.38 lakhs (2007-08). During the year 2008-09 there has been 4.99 lakhs Institutional deliveries in the state. JSY beneficiaries increased from 0.59 (2006-07) to 1.48 lakhs (2007-08). During the year 08-09 the numbers of JSY beneficiaries was 1.36 lakh. Female sterilizations have increased from 0.53 lakh (06-07) to 1.23 lakh (2007-08) and male sterilisation has increased from 461 (2006-07) to 1572 (2007-08). During year 2008-09, 125396 female & 4663 male sterilization have been reported. No districts are implementing IMNCI & 4 people trained so far. 128164 VHND held since the launch of NRHM. First Phase of Community Monitoring has been operationalised in the state.

General

Overall improvement in health system since NRHM

Achievements Made

- Increased utilization of IPD & OPD services.
- A state-wide community based Pain and Palliative Care program for terminal illness in the community
- Initiation of comprehensive health insurance scheme in collaboration with Department of Labor is appreciated.
- Ward Health and Sanitation Committees have been operationalized.
- Untied, annual maintenance grants and RKS funds being regularly used to upgrade facilities and services. PRIs are part of RKS and are involved in running the Sub Centres.
- SPMU and DPMU functional.

Areas for Further Improvement

- There is a need to focus on Non-Communicable Diseases.
- State wide emergency ambulance services needed to be established.
- A disaggregated analysis of data from health surveys can be used to identify disadvantaged groups (e.g. females, SC, ST, etc) for focused action.
- Equipment bought should be audited for their utilization and the value addition to services.
- As per NFHS-III the percentage of fully immunized children has been decreased. The State need to accelerate the activities to improve the situation.

Infrastructure

- Marked improvement in infrastructure and human resources.
- Established Engineering Wing under NRHM for planning and monitoring of civil work.

Human Resources

- Various categories of human resources have been added on contract under NRHM.
- The Compulsory Rural Service for doctors is a major step forward.
- The state need to increase the field level functionaries in underserved areas. The State need to strengthen the 2nd ANM at Sub centres to improve the health services.
- Maximising the utilization of AYUSH facility owing to its strong presence (the State has more AYUSH facilities than Modern medicine).

Service Delivery

- Equipment bought should be audited for their utilization. A State wide emergency ambulance system needs to be established.
- Community monitoring activities needs to be strengthened.
- PHCs, CHCs, Taluka Hospitals providing services for family planning. Only few CHCs providing 24X7 delivery services. Public awareness of JSY and immunization is satisfactory.

An Analysis of Financial Monitoring Report for the FY 2008-09

A. RCH Flexible Pool

Component wise expenditure & Utilization under RCH against the approved PIP

Kerala					Rs. in lakhs
	Activities	SPIP	Expenditure	% of Utilization against PIP	
A.1	Maternal Health	2192.80	2246.21	102.44%	
A.2	Child Health	1055.25	341.47	32.36%	
A.3	Family Planning Services	522.00	420.36	80.53%	
A.4	Adolescent Reproductive and Sexual Health/Arsh	89.31	64.42	72.13%	
A.5	Urban RCH	655.00	516.88	78.91%	
A.6	Tribal RCH	151.81	26.51	17.46%	
A.7	Vulnerable Groups	52.30	1.26	2.41%	
A.8	Innovations/PPP/ NGO	108.47	126.83	116.93%	
A.9	Infrastructure & Human Resources	2114.25	3556.74	168.23%	
A.10	Institutional Strengthening	267.50	438.37	163.88%	
A.11	Training	108.68	123.23	113.39%	
A.12	BCC / IEC	302.37	346.19	114.49%	
A.14	Programme Management	675.91	736.63	108.98%	
	Total	8295.65	8945.10	107.83%	

Based on table above and records available in FMG, the observations and areas of concern are as under:-

General Observations:

1. 102.44%, expenditure under MH, is a significant achievement.
2. 80.53%, expenditure under Family Planning Services, is also a good achievement of the state.
3. Rs.89.45 crore, i.e.107% of the PIP approved 82.95 crore, has been utilized by the state under RCH-II as compared to average national level expenditure of 71%
4. There is 178% increase in the expenditure as compared to 2007-08.
5. Since the launch of RCH-II, Rs.150.55 crore i.e. 89% amount has been utilized by the state against the release of Rs.168.83 crore during the period 2005-06 to 2008-09.

Areas of concern:

1. Expenditure on Child Health component is low.
2. Expenditure under Vulnerable Groups component is also very low.
3. The expenditure on Infrastructure & Human Resources has crossed the limit of approved PIP, by over 68%. It should be looked into.
4. The expenditure on Institutional Strengthening has crossed the approved PIP, limit by over 64%. Which may be looked into.

A. Mission Flexible Pool

Component wise expenditure & Utilization under NRHM against the approved PIP

Kerala		Rs.in lakhs		
	Activities	SPIP	Expenditure	% of Utilization against PIP
B1	ASHA	500.00	2211.80	442.36%
B2	Untied Funds	3075.20	2150.35	69.93%
B3	Hospital Strengthening	4855.00	6203.74	127.78%
B4	Annual Maintenance Grants	993.80	729.81	73.44%
B5	New Constructions/ Renovation and Setting up	1147.67	0.00	0.00%
B6	Corpus Grants to HMS/RKS	1214.00	920.43	75.82%
B7	District Action Plans (Including Block, Village)	0.00	11.49	Error
B9	Mainstreaming of AYUSH	0.00	12.26	Error
B10	IEC-BCC NRHM	0.00	9.75	Error
B11	Mobile Medical Units (Including recurring expenditures)	0.00	500.00	Error
B14	Additional Contractual Staff (Selection, Training, Remuneration)	0.00	19.56	Error
B16	Training	1170.00	125.05	10.69%
B17	Incentives Schemes	0.00	1.02	Error
B18	Planning, Implementation and Monitoring	0.00	0.72	Error
B19	Procurements	200.00	1068.62	534.31%
B22	New Initiatives/ Strategic Interventions (As per State health policy)	1005.88	658.46	65.46%
B24	Research, Studies, Analysis	50.00	24.67	49.34%
B25	State level health resources center(SHSRC)	100.00	6.98	6.98%
B26	Support Services	0.00	50.48	Error
B27	NRHM Management Costs/ Contingencies	0.00	109.85	Error
B.28	Other Expenditures (Power Backup, Convergence etc)	0.00	4046.15	Error
	Total	14311.55	18861.19	131.79%

Based on table above and records available in FMG, the observations and areas of concern are as under:-

General Observations:

1. State incurred more than 100% expenditure on Hospital Strengthening, activity, which is a good achievement.
2. Out of Rs.143.11 Crores approved by NPCC and released Rs.63.96 Crores, state has utilised Rs.188.61 Crores i.e.131.79% of approved PIP, which is a good achievement.
3. There is 178% increase in the expenditure as compared to 2007-08.
4. Since the launch of the programme, Rs.276.94 crores were released to the state, the utilization is Rs.256.95 Crores (93%) and Rs. 19.99 Crores (7%) remains unutilized.

Areas of Concern:

1. The expenditure of Rs.22.11 crore incurred by the state under ASHA under NRHM is four times of the approved PIP of Rs.5 crore, which shows excess utilization against the approved PIP amount.
2. Procurement expenditure of Rs 10.68 crore incurred by the state against the PIP approval of Rs.2 crore is excess utilization of sanction funds.
3. There is nil expenditure reported under the head New Constructions/ Renovation and Setting up.
4. The expenditure under certain activities such as Distt. Action Plans, Mainstreaming of AYUSH, IEC/BCC, MMU, Additional Contractual Staff, Incentive schemes, Planning & Monitoring, Support Services, NRHM Management cost and other Expenditure incurred without any provision. It should be looked into.

BRIEFING NOTE ON RCH II: KERALA

A. Background/ current status

1. RCH II Goals

Kerala's MMR at 95 (SRS 04-06) has improved from 110 in SRS 01-03; it is only state which has achieved national target for 2012 (less than 100). The IMR (SRS 2007) at 13 has **increased** from 11 (SRS 2003); however this is still the best in the country. TFR at 1.7 (SRS 2007) is better than the national target for 2012 of 2.1 (refer Annex 1).

2. RCH II Outcomes

Kerala's progress during the four year period between DLHS 2 (2002-04) to DLHS 3 (2007-08) is mixed (refer Annex 1):

- Mothers having full ANCs remained static (from 69.5% to 69.8%).
- Institutional deliveries increased from 97.6% to 99.4%.
- Full immunisation in children 12-23 months marginally increased from 78.5% to 79.5%.
- Children with diarrhoea receiving ORS has decreased from 53.2% to 45.1%.
- Unmet need for family planning increased from 15.1 to 16.8%. Further, use of modern contraceptives has marginally declined from 54.7% to 53.1%.

3. Expenditure

Audited expenditure has increased from Rs. 2.07 crores in 05-06 to Rs. 13.84 crores in 06-07 and Rs. 45.19 crores in 07-08; reported expenditure in 08-09 was Rs. 89.45 crores i.e. 107.8% of allocation (Rs. 82.95 crores). JSY accounted for 14.3% of the reported expenditure in 08-09.

B. Key achievements

1. Maternal Health, including JSY

- Number of JSY beneficiaries in the state increased from 0.56 lakhs in 06-07 to 1.62 lakh in 07-08. A total of 1.36 lakh beneficiaries have availed of the services in 08-09. State has accredited 401 private institutions under the scheme.
- State has operationalised 65 FRUs (against the target of 111) and 178 PHCs as 24x7 (against the target of 497).
- To make the timely payment of JSY, fund has been given at the hospitals and MO in charge has power to give cheque to beneficiaries.
- Ward Health and Nutrition Days (WHNDs) are organised in coordination with Social Welfare Department and Local Self Government Institutions. 66% of the planned WHNDs were held in 08-09 (126791 out of 192108)
- State is conducting maternal deaths audit at institution level.

2. Child Health

- Considering low level of breastfeeding practices, state has initiated community based activities to increase breastfeeding.
- 14 Sick Newborn Care Units are functional in the state.
- Highly effective School health programme.

3. Other initiatives

- State is implementing Sickle Cell Anaemia project
- State is appointing doctors under Compulsory Rural Services and contract appointment under NRHM.
- State is providing on call duty allowance to all the doctors.

- Active involvement of Local Self Government Institutions in supporting facilities with local funding and monitoring of services.

C. Key issues

1. Maternal Health, including JSY

- State is yet to initiate anaesthesia and SBA training.
- State is organizing RCH camps since RCH-I; however these have not been evaluated. State should focus on WHNDs rather focusing on RCH camps.

2. Child Health

- During the recent review, state has acknowledged that there is shortage of NICU equipments.
- Infant mortality rate of the state has increased between SRS 2003 and SRS 2007 (from 11 to 13).
- There is decline in use of ORS during diarrhoea between DLHS 2 and DLHS 3 (from 53.2% to 45.1%)
- During the appraisal of State plan for 09-10, it was observed that state doesn't have specific strategies for malnutrition, anaemia and supplementation.

ANNEX 1

A. Progress on Key Indicators

1. RCH II Goals

INDICATOR	KERALA		INDIA	
	Trend (year & source)		Current status	RCHII/NRHM (2012) goal
Maternal Mortality Ratio (MMR)	110 (SRS 01-03)	95 (SRS 04-06)	254 (SRS 04-06)	<100
Infant Mortality Rate (IMR)	11 (SRS 2003)	13 (SRS 2007)	55 (SRS 2007)	<30
Total Fertility Rate (TFR)	1.8 (SRS 2003)	1.7 (SRS 2007)	2.7 (SRS 2007)	2.1

2. RCH II Outcomes

S. No.	RCH OUTCOME INDICATOR	KERALA		INDIA*	
		DLHS-2 (2002-04)	DLHS-3 (2007-08)	DLHS-2 (2002-04)	DLHS-3 (2007-08)
1.	Mothers who received 3 or more antenatal care checkups (%)	96.5	99.6	50.4	51.0
2.	Mothers who had full antenatal check-up (%)	69.5	69.8	16.5	19.1
3.	Institutional deliveries (%)	97.6	99.4	40.9	47.0
4.	Children 12-23 months age fully immunised (%)	78.5	79.5	45.9	54.1
5.	Children age 6-35 months exclusively breastfed for at least 6 months (%)	22.0	22.3	22.7	24.9
6.	Children with diarrhoea in the last 2 weeks who received ORS (%)	53.2	45.1	30.3	33.7
7.	Use of any modern contraceptive method (%)	54.7	53.1	45.2	47.3
8.	Total unmet need for family planning - both spacing methods and terminal methods (%)	15.1	16.8	21.4	21.5

* - Provisional results for DLHS-3

B. Trends in Financial Expenditure

	(Rs. crores)			
	FY 2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Release	21.44	31.20	41.96	74.23
Audited Expenditure	2.07	13.84	45.19	89.45*

* - Audited expenditure for 2008-09 is not yet available; reported expenditure is provided.

- Allocation for 2008-09: Rs. 82.95 crores.

C. Progress on Key Strategies

1. Demand side interventions

S. No.	Indicators	Achievement (no. of beneficiaries)			
		2005-06	2006-07	2007-08	2008-09
1	Janani Suraksha Yojana	NA	56,072	1,62,050	1,36,000
2	Total Sterilisation	1,33,000	1,27,701	1,26,096	na
3	IUD Insertions	73,642	68,772	65,371	na

(Source: M&E Division reports, and JSY reports from the states)

2. *Technical interventions*

S. No.	Indicators	Achievement upto March 2009	
		Number	%
1.	No. of First Referral Units (FRUs) operationalised	65	58.6 (against the target of 111 FRUs)
2.	No. of PHCs operationalised to provide 24-hour services	178	35.8 (against the target of 497 PHCs)
3.	No. of private institutions accredited under JSY	401	NA
4.	No. of districts implementing Integrated Management of Neonatal & Childhood Illness (IMNCI)	0	0
5.	No. of people trained in IMNCI	4	NA
6.	No. of Village Health & Nutrition Days (VHNDs) held	1,28,164	NA

(Source: NRHM MIS report, April 2009)

Immunization

Kerala

Evaluated Immunization Coverage

Survey Indicator	NFHS 1 (1992-93)	NFHS 2 (1998- 99)	NFHS 3 (2005- 06)	CES (2005)	CES (2006)	DLHS 2 (2002- 04)	DLHS3 (2007- 08)
FI	54.4	79.7	75.3	82.1	87.9	78.5	79.5
BCG	86.1	96.2	96.3	98.7	99.4	98.1	99.1
Measles	60.5	84.6	82.1	94.5	90.8	87.9	87.9
DPT 3	73.7	88.0	84.0	91.5	91.9	89.4	87.1

Progress

- As per the various evaluated surveys the state has been having good immunization coverage with Full Immunization at 79.5% as per DLHS 3 Survey.
- The state has a constituted AEFI committees at the State and in all the districts. The AEFI sensitization workshop was also conducted in 2008.
- All the districts have implemented RIMS and most of them are uploading them regularly.
- The immunization training has been imparted to 45.0% (4814/10506) health workers.

Issues

- As per DLHS 3 the State continues to have **high dropout from BCG to DPT 3** especially in districts of Pallakad, Mallapuram, Khozikhode, which is critical for further improvement in full immunization coverage.
- The State needs to expedite immunization trainings of the health workers since only 45.0 % of training has been completed. This becomes more important as many more trainings have been planned for Medical Officers and other Immunization staff which could put pressure on the training infrastructure.
- The **fund utilization under Immunization** is low for the year 2008-09. Even in previous years the expenditure has been **less than 15 % of the approved PIP**.
- There is need to improve coverage of **Hepatitis B** vaccine in the state under routine immunization.

Comments

- The State needs to further improve service delivery and other infrastructure as Rubella vaccine is going to be introduced shortly in form of MR vaccine for children of 16-24 months.

Brief on National TB Control Programme in the state of Kerala

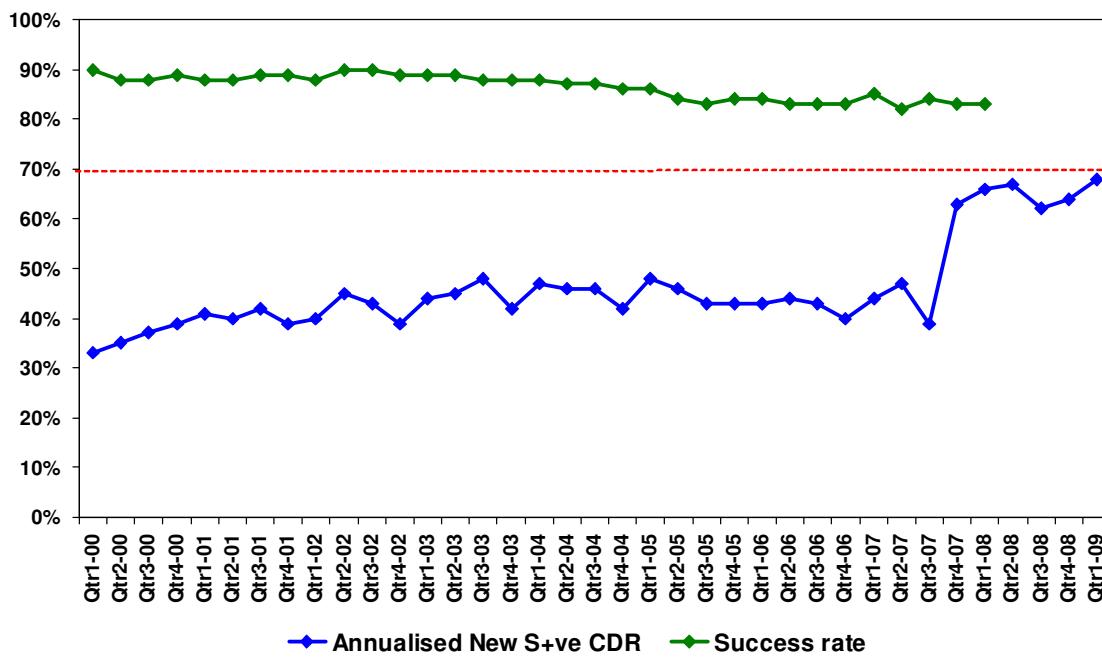
1. Infrastructure

Total Population	-	346 lakh
No. of Districts/reporting Units	-	14
No. of Tuberculosis Units (TUs)	-	167
No. of Designated Microscopy Centres (DMCs)	-	476

2. State level performance (Based on quarterly reports for 1st quarter of 2009)

- Performance is gradually improving. 265 TB suspects/lakh pop were examined in 1st quarter 09 which is good but TCD rate of 77/lakh and NSPCD rate of 34/lakh (68%) are still low.
- Sputum conversion rate of 83% and cure rate of 81% in new smear positive patients are lower than expected.
- Cure rate of 64% in retreatment sputum positive patients is very low due to high default rate of 16%.

Annualized New Smear-Positive Case Detection Rate and Treatment Success Rate in DOTS Areas, Kerala, 2000-2009*



• Population projected from 2001 census

• Estimated no. of NSP cases - 75/100,000 population per year (based on recent ARTI report)

3. District-wise Performance (Based on quarterly reports for 1st quarter 2009)

- Case finding is particularly very low in Malappuram district.

- Sputum conversion rate is very low (<85%) in 8 districts and cure rate is also very low (<80%) in 3 districts (Kasargod, Palakkad and Thrisur)

District	Suspects examined per lakh population	Annualized total case detection rate (against >144 lakh)	Annualised new sputum positive case detection rate (against >53/lakh)	Sputum conversion rate in new smear positive cases (against >90%)	Cure rate in new smear positive cases (against >85%)
Alappuzha	274	88	36 73%	90%	83%
Ernakulam	229	80	35 71%	80%	83%
Idukki	389	61	30 59%	78%	90%
Kannur	200	67	29 58%	84%	81%
Kasaragod	160	69	32 63%	78%	79%
Kollam	188	80	40 80%	91%	84%
Kottayam	298	82	39 77%	85%	80%
Kozhikode	223	89	33 67%	77%	80%
Malappuram	180	65	25 51%	82%	81%
Palakkad	164	84	39 78%	82%	76%
Pathanamthitta	187	70	38 75%	85%	86%
Thiruvananthapuram	299	84	38 76%	79%	81%
Thrissur	206	72	32 63%	88%	77%
Wayanad	205	73	30 61%	79%	82%
Total	225	77	34 68%	83%	81%

4. Funds status as on 31st March 2009 (Rs. in lakh)

C/F	Released	Other Income	Expenditure	Balance
72.15	362.00	3.43	376.40	61.18

5. Issues

- **Human Resource** – Post of 3 DTOs, 10 MO-TCs and 1 STS & STLS each are vacant. Posts of these key personnel need to be filled on priority.
- **Supervision and Monitoring** – Supervision and Monitoring activities are sub-optimal at all levels (State, district and Sub-district levels). Track on patients placed on DOTS are not maintained resulting in low cure rate and high default rate.
- **Performance**
 - Overall performance is marginally better than corresponding quarter last year.
 - Inspite of good referral of TB suspects, TCD rate of 77/lakh, NSP case detection rate of 34/lakh (68%) are still low. NSP case detection rate is particularly very low in Malappuram district.
 - Sputum conversion rate of 83% and cure rate of 81 remain low as in corresponding quarter last year. Cure rate of 64% in retreatment sputum positive patients is very low due to high default rate of 16%.
- **Recording and Reporting** – EPI Centre Windows version is not being used in all districts.
- **TB-HIV Collaboration**

- Post of TB-HIV coordinator is vacant.
- ART MOs are not trained in RNTCP - 5 days Modular training.
- **DOTS Plus** – Civil works of second DOTS Plus site in the Respiratory Medicine Dept of Medical college Kozhikode has not yet began. NRHM has sanctioned Rs. 15 lakh for civil works. Tender process is in the final stage by PWD. At present DOTS Plus patients are admitted in the ward of Beach Hospital Kozhikode and are under the clinical managerial of Respiratory Medicine Dept of Medical College Kozhikode. There is need for speedy completion of the civil works.

Fact Sheet on NVBDCP- Kerala

Background Information

The State has 14 districts with a population 31.84 million. There are 107 CHCs, 909 PHCs, 5094 Sub-centres and 1364 villages. There are 5694 Multipurpose Workers (Female)/ANM, 4266 Health Worker (Male), 740 Health Assistants (Female)/LHV, 794 Health Assistant (Male) and 336 Laboratory Technician. The state has 2 Malaria Clinics.

Malaria

Epidemiological Situation

Year	Total Slide examined	Total Malaria Cases	Total Pf Cases	Deaths
2006	1966325	2111	322	7
2007	1953317	1927	293	6
2008	1822003	1804	217	3
2009(Upto March)	438226	242	25	0

Elimination of Lymphatic Filariasis (ELF)

- Government of India during 2004 initiated massive campaign of Mass Drug Administration (MDA) with annual single dose of DEC tablets to all the population living at the risk of Filariasis excluding pregnant women, children below 2 years of age and seriously ill persons. The population coverage of MDA in Kerala was 86.10% in 2004, 90.15% in 2005, 92.19% in 2007 and 93.67% in 2008.
- Line listing of Lymphoedema and Hydrocele cases was also initiated in 2004 for morbidity management and as per updated report (2007), there are 10840 Lymphoedema and 1232 Hydrocele cases.

Japanese Encephalitis/ Acute Encephalitis Syndrome: In Kerala, 3 cases and 3 deaths of suspected/viral encephalitis were reported in the year 2006. During 2007 and 2008, only 2 JE case was reported. In 2009 no JE cases has been reported. During 2008 district Alleppey was covered under JE vaccination.

Year	Cases	Deaths
2006	3	3
2007	2	0
2008	2	0
2009 (Prov. Upto April)	0	0

Dengue

Year	Cases	Deaths
2006	981	4
2007	603	11
2008	733	3
2009 (Prov. Upto.30 th May.)	571	3

- Present situation is that during 2009 till 30th May, total 571 cases and 3 deaths (2 from Kottayam & 1 from Thiruvananthapuram) have been reported. Maximum cases were reported by Thiruvananthapuram (418) followed by Kottayam (54). In 2008 also, maximum cases were reported from Thiruvananthapuram (503) followed by Ernakulam (100) out of total 733 cases.

- The activities on source reduction to eliminate Aedes breeding by involving Panchayat, Ward, Village Health and Sanitation Committee, Mahila Sangathan and Kudumbashree etc. were initiated.

Chikungunya

- During 2006, all the 14 districts had reported 70731 suspected Chikungunya cases. The most affected district were Alappuzha, Thiruvananthapuram and Ernakulam. In 2007, a total of 24052 suspected Chikungunya fever were recorded and the most affected districts were Kottayam, Pathanamthitta, Malappuram, Ernakula and Alappuzha. In 2008, a total of 24685 suspected chikungunya fever cases have been reported. Maximum cases were reported from Kasargode, Kozhikode and Malappuram. Out of 1356 samples tested, 492 were found positive for chikungunya.
- In 2009 till 30th May, total 277 clinically suspected chikungunya fever cases have been reported. Maximum number of cases has been reported by Kozikode (264). Rest 13 cases were reported by Kasargao (6), Trichur (2), Palakkad (2), Trivananthapuram (1), Kottayam (1) and Wayanad (1) districts. Out of 58 samples tested, 42 were found positive for Chikungunya till May. Following actions have been taken by Government:
 - To facilitate the diagnostic facilities for dengue and Chikungunya, 10 Sentinel Surveillance Hospitals (SSHs) have been identified which are linked with Kerala State Institute of Virology (KSIV), Alappuzha - the Apex Referral Laboratories.
 - Besides NIV, Pune has also established one field unit at Medical College, Alappuzha which is functioning since May 2008.
 - NIV, Pune has been entrusted to provide test kits to all of the above institutes as per the technical requirement of the state.

Central Assistance

(Rs. In lakhs)

Year	Allocation			Release/Expenditure		
	Cash	Kind	Total	Cash	Kind	Total
2004-05	0.00	78.00	78.00	0.00	109.71	109.71
2005-06	0.00	158.45	158.45	211.96	70.64	282.60
2006-07	238.80	170.78	409.58	383.44	48.00	431.44
2007-08	259.44	38.48	297.92	630.94	224.32	855.26
2008-09	399.76	121.06	520.82	199.88	107.71	307.59
2009-10(B.E.)	236.00	96.33	332.33			

Issues:-

Malaria:

- Though malaria is not a major problem in the state, the state needs to keep a vigil on the malaria cases being reported in the PHCs/Hospitals and take intervention measures to avoid any focal outbreaks.

Filaria:

- Though the 11 districts of the state are at the risk of lymphatic filariasis and are covered under elimination strategy, the state has yet to provide the village wise and PHC wise data of lymphoedema and hydrocele cases line-listed for mapping for morbidity management. State also needs to provide the data on hydrocele operations conducted in different years.

- The state needs to improve the compliance of drug administration during MDA especially in urban areas by involving municipality and corporations and there sensitization adequately.

Dengue/Chikungunya:

- Since 40-50% cases were from corporation area of Thiruvananthapuram, the corporation needs to draw the action plan immediately and ensure its implementation.
- State needs to sustain the activities related with source reduction in a campaign mode especially the areas including rubber and areca plantation,

STATUS OF NATIONAL LEPROSY ERADICATION PROGRAMME IN KERALA

- **Epidemiological scenario-**
Kerala has already achieved the goal of elimination of leprosy (i.e. prevalence rate of less than 1 case /10000 population). There were 738 leprosy cases on record as on March 2009.
- **New case detection and treatment completion-**
During 2008-09, a total of 827 new leprosy cases were detected as compared to 778 new cases detected during the corresponding period of previous year. Out of 738 cases discharged during the year, 681 cases (92.28%) were released as cured after completing treatment.
- During 2008-09, NLEP action plan amounting to Rs.110.00 lakh has been approved for the State.

Issues -

1. The state has reported low level of fund utilization in 2008-09. During 2008-09, the state action plan was approved for Rs.125.57 lakhs, however the State could utilize only Rs. 31.11 lakhs.
2. Audited statement for 2007-08 has not yet submitted by the state even after repeated reminders. The audit report is required for release of funds for 2009-10.
3. New leprosy cases are being detected in the state every year which suggest active transmission of the disease in the community. The state is advised to carry out in-depth situational analysis in districts/blocks reporting large number of new cases and take suitable actions like –
 - (i) Ensuring completion of treatment in each of the new cases detected.
 - (ii) Enhance awareness of the community to improve self reporting of suspected cases to health facility and
 - (iii) Carrying out family contact survey against all multibacillary and child cases.
4. There are about 3 leprosy colonies in the state. The state should ensure provision of proper health care facilities like ulcer care, provision of supportive drugs and dressing materials to the persons affected with leprosy residing in these colonies.

State - Kerala

Integrated Disease Surveillance Project (IDSP) –Fact sheet as on 17 June 2009

The state of Kerala has an area of 38,863 sq. km. and a population of 31.84 million. There are 14 districts, 152 blocks and 1364 villages. The State has population density of 819 per sq. km. (as against the national average of 312). The decadal growth rate of the state is 9.43% (against 21.54% for the country) and the population of the state is growing at a slower rate than the national rate.

Keralal is a phase-I state under IDSP and has been inducted in the program during November 2005. Dr Anil Kumar, Additional Director of Health Services, from Directorate Health Services, Govt of Kerala has been designated as the State Surveillance Officer (IDSP).

The component wise action points are as under

1. Manpower

Surveillance Officer and RRT team at state and district Headquarter designated. Consultant Finance and Data Manager are appointed at State Surveillance Unit. The offer letter to the recommended candidates for the positions of state/district epidemiologists (15), microbiologists (3) and state entomologists (1) would be issued by state NRHM society.

2. IT & EDUSAT

Status:

- EDUSAT (SSU-1,MCH-7 & DSU Broadband-14)
- SIT equipments installed at State Headquarter(temporary room) & 7 Medical Colleges (Kochi, Kottayam, Trissur, Calicut, Thiruvananthapuram, Alappuzha & Pariyaram Medical College, Kannur).
- Data Centre equipments (Printer, Scanner, Computer, UPS) installed at all sites.
- Training site ready in 10 Districts except Trivandrum, Pathanamthitta, Malappuram & Alapuzha.
- Broadband connection installed in all the sites.

Issues:

- SIT(Medical College) – 6 DEO posts are vacant (One post filled MCH,ALP)
- **Most of the IT Posts are Vacant(16 DEO post Vacant)**
- DEO's salary too low.
- Responsibility regarding recruitment of IT Staff not clear- Whether NIC/SSO. Vacancies informed to state NIC.

3. Laboratory Strengthening

Two priority district laboratory identified by the state. One Deep freezer to be purchased. This procurement is under progress.

4. Data Reporting

Kerala State has 14 districts. All districts are reporting weekly Surveillance data and Outbreak Reports in time.

P		S		L	
Identified	Reporting	Identified	reporting	Identified	Reporting
1374	861	5475	4263	474	264

5. Training

Category	Total No. that need to be trained as per PIP	No. trained before 2008 - 09	No. trained in 2009 - 10
Master Trainers	61	77	
State level training			
Medical Officers	1049	1181	135
Multi Purpose Health Workers	6038	5168	0
District Lab Technicians	56	28	0
Peripheral Lab Technicians	105	40	0

6. Finance

Year	Release	Expenditure
2003-04	0.37	
2004-05	156.40	0.35
2005-06	65	21.44
2006-07	60	187.88
2007-08	200	76.10
2008-09	0.00	38.46
	481.77	157.54

Audit report & utilization certificate for 2007-08 has been received at CSU. Financial Monitoring Report (FMR) for quarterly ending March 2009, has been received at CSU.

NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS
STATUS NOTE ON KERALA

Magnitude:

Prevalence of blindness	2001	0.56%
Estimated blind persons		1.78 lakh

Infrastructure developed

Regional Institute of Ophthalmology	1
Upgraded Medical Colleges	5
Upgraded District Hospitals	14
District Blindness Control Societies	14
Upgraded PHC's	214

Cataract Performance

YEAR	TARGET	ACHIEVEMENT
2007-2008	900000	91890
2008-2009	100000	118053

School Eye Screening

YEAR	TEACHER TRAINED IN SCREENING FOR REFRACTIVE ERRORS	SCREENED	DETECTED WITH REFRACTIVE ERRORS	PROVIDED FREE GLASSES
2007-2008	1260	667002	35006	5675
2008-2009	0	1645684	66876	17027

GIA is released to District Blindness Control Societies/State Blindness Control Society

(Rs in lakhs)

YEAR	RELEASED	EXPENDITURE	BALANCE
2007-2008	158.00	123.45	35.45
2008-2009	217.07	308.48	-91.41

Issues

- UCs for GIA released to State Blindness Control Society are not being received timely.
- SOE for Cash Grant are also not being received timely.
- Performance Report of School Eye Screening Programme not received.

NIDDCP**Kerala**

	Activity	Amount proposed	Amount Approved	Remarks
1	Establishment of IDD Control Cell	10.00	6.00	There is no fund provision for activities i.e. training, setting up of regional lab and analysis of iodine content in food stuff, drinking water and soil under NIDDCP.
2	Establishment of IDD Monitoring Lab		3.50	
3	Health Education and Publicity	15.00	8.00	The State Government may carry out the activities as per the fund allocation of GOI.
4	IDD surveys		2.50	
5	Training, Setting up of regional Lab, Analysis of iodine content in food stuff, water, soil			
	Total	25.00	20.00	

Mapping of Record of Proceedings of the NPCC of NRHM for 2005-06 to 2009-10

The mapping charts the NRHM Mission Flexipool approvals contained in the RoP in following broad thematic chapters

1. ASHA (including selection, training, drug kits, mentoring, specific performance incentives and anything else associated with ASHA)
2. Infrastructure related matters (including construction, strengthening, renovation, new construction etc), equipments, transport (ambulances, EMRI, associated expenses) and others)
3. Human Resource related matters (including HR salary, contractual payments, incentives, etc)
4. Programme Management related matters (including PMUs, SHS/DHS, SHSRC, IDHAP, M&E, Mobility support to SHS etc)
5. Untied funds, AMG & RKS related matters
6. Training & Capacity Building related matters (including trainings, workshops, training institutions including their upgradation or new construction, courses, etc)
7. Innovations (including Procurement of medicines, School Health, Health Mela, Insurance, Accreditations, Monthly VHND etc)

NATIONAL RURAL HEALTH MISSION							
Kerala							
	Total MFP Approvals		3564.22	14367.55	14311	19817.51	
RoP Approvals for Various Years in Rs. Lakh							
S.No	Initiative	2005-06	2006-07	2007-08	2008-09	2009-10	Remarks
		Released	Approved	Approved	Approved	Approved	
ASHAs							
1	ASHA		23.82	56.5		1666.41	
2	ASHA Drug Kits				500		
3	Performance related incentives to ASHA					450.24	
	TOTAL		23.82	56.5	500	2116.65	
Infrastructure related matters							
4	Civil Works for operationalization of FRUs					600	
5	Construction/renovation & Setting up-CHC					759.4	
6	Construction/renovation & Setting up-SC					660	
7	New / Upgradation of W&C hospitals.		753				

8	Construction of Sub Centre			330.00			
9	Upgradation of IMMCH Medical College Khozikhode Into Centre of Excellence			500.00			
10	Upgradation			97.05	1475		
11	Upgrading Blood Bank					25	
12	Upgradation of District Hospitals/General Hospitals			900.00		1100.00	
13	Upgradation of CHCs, PHCs, Dist. Hospitals to IPHS)						
14	Upgradation of W&C Hospitals			900.00			
15	Upgradation of IMCH, Kozhikode				1000	1000	
16	Upgradation of Taluk Hospitals			700.00			
17	Upgradation of CHCs	840	1280	3450.00	480.00		
18	Upgradation of PHCs			600.00	1000.00		
19	Strengthening of Distt/Gen. Hospital				900.00		
20	Strengthening of Training Institution/ Nursing School				1000	500	
21	Strenthening of JPHV Training Schools			170.00			
22	Strenthening of District and Su-divisional Hospitals(Thaluk)					1085	
23	SAT Hospitals (W&C)			100.00			
24	Mobile Medical Units		154.75	512.33		660	
25	Emergency & Referral Services				1147.67		
26	Keral Medical Supplies Corporation			10.00			
27	Kerala Emergency Medical Services Project					1094	
28	Renovation of basic Training Schools				170		

	TOTAL	840	2187.75	8269.38	7172.67	7483.4	
Human Resources related matters							
29	Medical Officers on Contract (Selection, Training, Remuneration)					449.88	
30	JHI on Contract (Selection, Training, Remuneration)					200.4	
31	Incentive to Specialist					784.72	
32	Incentive to Medical Officers					76.68	
33	Other Incentives					218.18	
	TOTAL					1729.86	
Programme Management related matters							
34	State level health resources center (SHSRC)			100	100	100	
35	SPMU Support					106.54	
36	Programme Management Costs @ State level					37	
37	Programme Management Costs @ District level					67.2	
38	Programme Management Costs @ Block Level PMU					441.6	
39	District Action Plans (Including Block, Village)	140				28	
40	Mobility Support to BMO/MO/Others					332.64	
	Total	140		100	100	1112.98	
Untied Funds, Annual Maintainence Grants and RKS fundsrelated matters							
41	Rogi Kalyan Samiti				1214	390	
42	RKS District / General Hospitals					105	
43	RKS CHC/24X7 PHC					384	
44	RKS PHC					702	
45	Untied Fund				1474.3		
46	Untied Funds for Sub centre	509	509.4			556.8	
47	Untied Funds for PHC		227.75			175.5	
48	Untied Funds for CHC/24x7 PHC			876.3		192	
49	Untied fund for Ward Health & Sanitation Committee			1600.9	1600.9	1817.1	
50	Annual Maintenance Grant				993.8		

51	Annual Maintenance Grant - CHC					384	
52	Annual Maintenance Grant -PHC		455.5			351	
53	Annual Maintenance Grant- SC			976.8		346	
	TOTAL	509	1192.65	4838	5283	5403.4	

Training & Capacity Building related matters

54							

Innovations related matters

55	Health Melas		160			140	
56	Mental Health Programme			104.00	552.16	180.00	
57	Drug Kits- Kit A, Kit B, EOC Drug Kit etc)			1000.00	200.00		
58	Panchayti Raj Initiative					10	
59	Mainstreaming of AYUSH					983.77	
60	Quality Assurance					530.13	
61	Pain and Palliative Care					150	
62	ICCONS Project (on autism)					100	
63	Child Development Service					13.63	
64	Child Development Centre as Centre for Excellence					25	
65	Institute of Non Communicable Diseases & NCD's Program					314.8	
66	Geriatric Care					170.61	
67	Research, Studies, Analysis				50	100	
68	Bio-Medical Waste Management					50	
69	Sewage Treatment Plant					25	
70	Child health procurement – ORS/Zinc/Bleaching powder					18	
71	M&E Patients Logistics Management					338	
72	Community based Care of Bed ridden, elderly, chronically ill				453.72		
73	Drug supply for CHC/FRU	680	160	1104	1255.88	3148.94	
	TOTAL	680	160	1104	1255.88	3148.94	

District wise Information on Kerala under some RCH indicators

Districts	Mother received at least one TT injection	Institutional Deliveries	Full Vaccination	Contraceptive Use
India	73.5	47	69.6	54.1
Kerala	98.5	99.4	87.9	62.3
Alappuzha	100	99.5	96	71.1
Ernakulam	96.5	100	94.1	64.2
Idukki	100	99.5	97.2	75.1
Kannur	99.5	100	89.2	50.8
Kasargod	99.4	98.7	93	44.1
Kollam	98.8	99.6	91.9	68.7
Kottayam	99.6	100	95	71.5
Kozhikode	98.5	100	79.7	56.1
Malappuram	98.3	100	71.9	53.2
Palakkad	98.6	99.3	82.1	52.2
Pathanamthitta	99.4	100	93.8	63.7
Thiruvananthapuram	98.1	98.9	97.3	69.8
Thrissur	95		93.1	61.9
Wayanad	96	95.4	82.1	66.7

source DLHS-III