# Health Research Financing and its Outcomes in XI Plan

# **Funds Utilization**

The funds received from Department of Health Research and expenditure incurred during XI Plan is tabulated below:

PLAN+NER										
	(Rs.								Rs. in Crore)	
	BE			RE			AE			% of Utilization
YEAR	Plan	NER	Total	Plan	NER	Total	Plan	NER	Total	
2007-08	144.15	32.50	176.65	144.15	32.50	176.65	144.15	32.50	176.65	100%
2008-09	246.00	40.00	286.00	350.18	40.00	390.18	350.18	40.00	390.18	100%
2009-10	368.00	42.00	410.00	359.50	40.00	399.50	359.50	40.00	399.50	100%
2010-11	360.00	50.00	410.00	465.00	50.00	515.00	465.00	38.30	503.30	97.73%
2011-12	440.00	60.00	500.00	498.00	45.00	543.00	498.00	45.00	543.00	100%
Total	1558.15	224.50	1782.65	1816.83	207.50	2024.33	1816.83	195.80	2012.63	99.42%
Rs 11 70 Crore Unutilized fund for 2010-11 refunded to MOHEW New Delhi										

Rs.11.70 Crore Unutilized	fund for 2010-11 refund	ded to MOHFW, New Delhi
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NON-PLAN (Rs. in Crore)							
	BE RE AE % of Utilization						
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YEAR	NON-Plan	NON-Plan	NON-Plan				
2007-08	90.00	90.00	90.00	100%			
2008-09	110.00	174.00	174.00	100%			
2009-10	184.00	184.00	184.00	100%			
2010-11	159.85	159.85	159.85	100%			
2011-12	170.85	181.85	181.85	100%			
Total	714.70	789.70	789.70	100%			
BE- Budget Estimate, RE- Revised Estimate, AE- Actual Expenditure, NER-North Eastern Region							

This reveals that the Council has fully utilised the funds (about 100%) received from the Ministry of Health & Family Welfare. The head wise expenditure is tabulated below:-

	PLAN (Rs. in Crores)						
Head	Actual Exp.	Actual Exp.	Actual Exp.	Actual Exp.	Actual Exp.	Total	
	2007-2008	2008-09	2009-2010	2010-2011	2011-2012		
Establishment	26.81	57.62	87.19	85.79	91.07	348.48	
Admn. Expenses	0.99	1.36	35.48	53.32	60.24	151.39	
Contractual Services & Supplies	41.32	75.06	42.51	49.74	46.52	255.15	
Other Expenditure	3.82	3.44	22.10	27.32	33.49	90.17	
Equipment	13.92	73.09	30.31	40.72	27.34	185.38	
Capital	19.02	55.63	47.65	69.35	59.22	250.87	
Extra-Mural Research	38.27	83.98	94.26	138.76	180.12	535.39*	
Total	144.15	350.18	359.50	465.00	498.00	1816.83	

\*Additional budget of Rs 13.92 Crores under the head family welfare was also spent on extramural activities of the RCH Division during 2007-08 (Rs 535.39 + 13.92 = 549.32 crores)

	NER							
		(Rs	. in Crores)					
Head	Actual Exp.	Actual Exp.	Actual Exp.	Actual Exp.	Actual Exp.	Total		
	2007-2008	2008-09	2009-2010	2010-2011	2011-2012			
Establishment	0.85	2.74	4.02	3.68	4.80	16.09		
Admn. Expenses	0.07	0.25	1.84	1.97	4.15	8.28		
Contractual Services & Supplies	2.11	3.20	1.94	3.29	5.85	16.39		
Other Expenditure	0.07	0.15	0.16	0.21	0.20	0.80		
Equipment	12.58	11.95	21.18	16.93	7.28	69.92		
Capital	11.00	13.00	1.83	1.71	9.54	37.07		
Extra-Mural Research	5.82	8.71	9.03	10.51	13.18	47.25		
Total	32.50	40.00	40.00	38.30	45.00	195.80		
Grand Total (Plan + NER)	176.65	390.18	399.50	503.30	543.00	2012.63		

### **Outcomes**

The projected outcomes of basic and applied research was generation of new knowledge and better understanding of the biology of disease process, insight into mechanisms of action or determinants and antecedents of risky behaviour.

# Major Activities/Programmes of ICMR during XI Plan

- Contribution of ICMR to establish Department of Health Research (DHR)
- Setting up of 3 new Institutes (NIREH, NCDIR and BMHRC)
- Starting a School of Public Health at NIE, Chennai
- Nine new field stations
- 12 Centre for Advanced Research/ Centre of Excellence
- Establishment of network of viral diagnostic laboratories (13 labs)
- Asia's first BSL-4 lab at NIV, Pune
- Conceiving & launching of new Flagship programs like Vector Borne Disease Science Forum, Tribal Health Research Forum
- Translational Research and Special support to medical colleges.
- Strengthening of collaborative efforts with State Health Departments.
- ICMR continued to provide support to extramural research in terms of adhoc projects in non-ICMR institutes, medical colleges, creation of Task Forces, Centre for Advanced Research (CAR), etc.
- Funding for extramural research increased from Rs 52 crores in 2007-2008 to Rs 180 crores in 2011-2012.
- Funding for research in north-east region also increased from Rs 5.82 crores to Rs 13.18 crores in the corresponding year.
- Human Resource Development was also given special impetus.

# Major Scientific Achievements of DHR/ICMR during the XI Five year Plan

# **Technology Development**

- Development of indigenous H1N1 reagents & facilitation of development of indigenous H1N1 vaccines.
- Partnering with International Vaccine Institute for the development and evaluation of cholera vaccine, now being introduced in public health program in Odisha.
- Demonstrated that home based care is useful in reducing the infant mortality.
- Indigenous production of monoclonal antibodies PfHRPII and pLDH for improved diagnosis of malaria.
- A real time RT-PCR assay for early diagnosis of dengue fever.
- New rapid molecular methods for detection of rifampicin, isoniazid and ethambutol resistance in Tuberculosis.
- A new DNA fingerprinting method for diagnosis of TB and other mycobacterial infections.
- Immuno-chromatographic dipstick kit for the rapid diagnosis of cholera.
- Monoclonal antibody based indigenous diagnostic assay for diagnosis of *Chlamydia* infection.
- Rapid IgM ELISA and Latex Agglutination test for Leptospirosis.
- Technology for the production of mosquito larvicide, *Bacillus thuringiensis* var. *israelensis* transferred to industry.
- Specificity and sensitivity of Bivalent rapid diagnostic malaria kits tested.
- ELISA kit for identification of paragonimiasis (lung fluke) after characterization of Paragonimus species in NE India.

## **Clinical Trials for National Health Programmes**

- Developed and proved the concept of common regimen for treatment of leprosy, now adopted as Uniform Multi-drug Therapy Regimen (UMDT) by WHO.
- Showed that Co-administration of albendazole with DEC is operationally feasible, safe for community use and has an edge over DEC alone for the Lymphatic Filariasis (LF) elimination programme. Accepted and implemented by the National Programme.
- Demonstrated better efficacy of reduced osmolarity ORS in young children and adults in dehydrating diarrohea as compared to that of standard ORS.

# **Epidemiological/Operational Research**

- Daily zinc supplementation 1RDA (5mg) dose had no beneficial effect in preventing severe disease (diarrhea, ARI) in low birth infants.
- Registry of People with Diabetes in young established to monitor prevalence of diabetes.
- Developed a Mental Health Needs Scale' of the people living with HIV-AIDS (PLHAs), now being used by National AIDS Control Organization (NACO).
- Flagship Programs launched include Tribal Health Research Forum, Vector Borne Disease Science Forum, Special Support to Medical Colleges & Translational Research
- Three new Institutes, 9 Field Stations and network of 13 virology laboratories established.
- Human Resource Development for Health Research and Grant-in-Aid Schemes strengthened.