

REPORT NO.

127



PARLIAMENT OF INDIA  
RAJYA SABHA

DEPARTMENT-RELATED PARLIAMENTARY STANDING  
COMMITTEE ON HEALTH AND FAMILY WELFARE

**ONE HUNDRED AND TWENTY-SEVENTH REPORT**

On

DEMANDS FOR GRANTS 2021-22 (DEMAND NO. 45 )

OF THE

DEPARTMENT OF HEALTH RESEARCH

(Ministry of Health and Family Welfare)

*(Presented to the Rajya Sabha on 8<sup>th</sup> March, 2021)*  
*(Laid on the Table of Lok Sabha on 8<sup>th</sup> March, 2021)*



Rajya Sabha Secretariat, New Delhi  
March, 2021/ Phalguna, 1942 (SAKA)

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सत्यमेव जयते

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March, 2021/ Phalguna, 1942 (SAKA)**

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**COMPOSITION OF THE COMMITTEE**  
**(2020-21)**

1. **Prof. Ram Gopal Yadav** - **Chairman**

**RAJYA SABHA**

2. Shri A.K. Antony
3. Ms. Indu Bala Goswami
4. Dr. L. Hanumanthaiah
5. Shri Suresh Prabhu
6. Dr. Santanu Sen
7. Shri Bashistha Narain Singh
8. Shri K. Somaprasad
9. Dr. Subramanian Swamy
10. Shrimati Sampatiya Uikey

**LOK SABHA**

11. Ms. Bhavana Gawali (Patil)
12. Ms. Ramya Haridas
13. Dr. Chandra Sen Jadon
14. Shrimati Maloth Kavitha
15. Dr. Amol Ramsing Kolhe
16. Dr. Sanghamitra Maurya
17. Shri Arjunlal Meena
18. Shrimati Pratima Mondal
19. Dr. Pritam Gopinath Munde
20. Dr. Mahendrabhai Kalubhai Munjpara
21. Shri K. Navaskani
22. Dr. Bharati Pravin Pawar
23. Adv. Adoor Prakash
24. Shri Haji Fazlur Rehman
25. Dr. Rajdeep Roy
26. Dr. Subhas Sarkar
27. Dr. DNV Senthilkumar. S
28. Shri Anurag Sharma
29. Dr. Mahesh Sharma
30. Dr. Sujay Radhakrishna Vikhepatil
31. Dr. Krishna Pal Singh Yadav

**SECRETARIAT**

Dr. P.P.K. Ramacharyulu	Secretary
Shri J. Sundriyal	Joint Secretary
Shri V.S.P.Singh	Director
Shri Bhupendra Bhaskar	Additional Director
Smt. Harshita Shankar	Under Secretary
Shri Rajesh Kumar Sharma	Assistant Committee Officer
Ms. Monika Garbyal	Assistant Committee Officer

## PREFACE

I, the Chairman of the Department-related Parliamentary Standing Committee on Health and Family Welfare, having been authorized by the Committee to present the Report on its behalf, hereby present this 127<sup>th</sup> Report of the Committee on the Demands for Grants for the year 2021-22 (Demand No. 45) of the Department of Health Research, Ministry of Health and Family Welfare.

2. The Committee, in its meeting, held on 17<sup>th</sup> February, 2021 heard the Secretary (Health Research) and other Officers on Demands for Grants (2021-22) of the Department of Health Research.

3. The Committee while making its observations/recommendations has mainly relied upon the following documents:—

- (i) Detailed Demands for Grants (2021-22) of the Department of Health Research;
- (ii) Annual Report of the Department for the year 2020-21;
- (iii) Detailed Explanatory Note on Demands for Grants (2021-22) of the Department of Health Research;
- (iv) Output-outcome monitoring framework for CS & CSS scheme with outlays less than 500 crore during 2021-22;
- (v) Projection of outlays for the schemes to be undertaken by the Department during the Financial Year 2021-22;
- (vi) Written replies furnished by the Department to the Questionnaires sent to them by the Secretariat; and
- (vii) Presentation made by the Secretary (Health Research) and other concerned officers.

4. The Committee, in its meeting held on 2<sup>nd</sup> March, 2021, considered and adopted the Draft Report and adopted the same.

5. For facility of reference and convenience, observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

**NEW DELHI**  
**2<sup>nd</sup> March 2021**  
**Phalguna 5, 1942 (Saka)**

*Prof. Ram Gopal Yadav*  
*Chairman,*  
*Department-related Parliamentary Standing Committee on*  
*Health and Family Welfare*

## ACRONYMS

AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy
AMR	Antimicrobial Resistance
BIRAC	Biotechnology Industry Research Assistance Council
BMHRC	Bhopal Memorial Hospital & Research Centre
CHC	Community Health Center
CSIR	Council of Scientific and Industrial Research
CSS	Centrally Sponsored Scheme
CTRI	Clinical Trial Registry of India
CCEA	Cabinet Committee on Economic Affairs
DCGI	Drugs Controller General of India
DBT	Direct Beneficiary Module
DHR	Department of Health Research
DIAMOnDS	DHR-ICMR Advanced Molecular Oncology Diagnostic Services
ENDS	Electronic Nicotine Delivery Systems
EMR	Emergency Medical Relief
GIA	Grants in Aid Scheme
GHI	Global Health Index
HTAIn	Health Technology Assessment in India
HRD	Human Resource Development
HTA	Health Technology Assessment
ICMR	Indian Council of Medical Research
IDSP	Integrated Disease Surveillance Programme
INDIAB	India DIABetes
MBO	Management by Objectives
MBA	Management by Activities
MDM	Mid-Day Meal
MDR-TB	Multi-Drug Resistant Tuberculosis
MoA	Memorandum of Agreement
MERA	Malaria Elimination Research Alliance
Mission DELHI	Delhi Emergency Life Heart-Attack Initiative
MRHRUs	Model Rural Health Research Units
MRUs	Multidisciplinary Research Units
NIF	National Investment Fund
NCDs	Non-Communicable Diseases
NCDC	National Control for Disease Control
NCT of Delhi	National Capital Territory of Delhi
NER	North Eastern Region
NICPR	National Institute of Cancer Prevention and Research in Noida
NICED	National Institute of Cholera and Enteric Disease
NITM	National Institute of Traditional Medicine, Belagavi
NIV	National Institute of Virology, Pune
NLEM	National List of Essential Medicines

NCRP	National Cancer Registry Programme
NVBDCP	National Vector Borne Disease Control Program
PMSSY	Pradhan Mantri Swasthya Suraksha Yojana
PHCs	Primary Health Centres
PIH	Pregnancy Induced Hypertension
RCVRDL	Resource Centre for Virus Research; Diagnostic Laboratories
RCH	Reproductive and Child Health
RMRC	Regional Medical Research Centre
RMRIMS	Rajendra Memorial Research Institute for Medical Sciences
RESEARCH	Regional Enabler for South East Asia Research Collaboration for Health
SDG	Sustainable Development Goals
SNCM	Standing National Committee on Medicines and other Health Care Products
STW	Standard Treatment Workflow
SFC	Standing Finance Committee
VCRC	Vector Control Research Center
VRDL	Viral Research and Diagnostic Laboratories
UCs	Utilization Certificates
UTs	Union Territories
WHO	World Health Organisation



## CHAPTER I

### INTRODUCTION

1.1 The history of the Department of Health Research could be traced back to the year 1911 when the Indian Research Fund Association (IRFA) was founded with the sole purpose of sponsoring and coordinating medical research in the country. Post-independence IRFA was rechristened as Indian Council of Medical Research (ICMR) with an expanded mandate to formulate, co-ordinate and promote biomedical research in the country. The Department of Health Research in its current form was carved out of as a separate Department under the Ministry of Health & Family Welfare on the 17<sup>th</sup> September 2007 through an amendment to the Government of India (Allocation of Business) Rules, 1961. The Minister for Science & Technology and Earth Sciences formally launched the Department of Health Research on 5<sup>th</sup> October 2007 in a function presided over by the Minister for Health & Family Welfare. The Department however started functioning from November 2008.

1.2 The Department of Health Research (DHR) aims at giving a fillip to research and innovations in the field of diagnosis, treatment methods and vaccines as also to develop these innovations into products/technologies and ultimately take them to the people.

1.3 As per the Annual Report 2020-21 of the Department of Health Research, the Department has been entrusted with the following functions:-

- (i) Promotion and co-ordination of basic, applied and clinical research including clinical trials and operational research in areas related to medical, health, biomedical and medical profession and education through the development of infrastructure, manpower and skills in cutting edge areas and management of related information thereto.
- (ii) Promote and guide on research governance issues, including ethical issues in medical and health research.
- (iii) Inter-sectoral coordination and promotion of public-private partnership in medical, biomedical and health research related areas.
- (iv) Advanced training in research areas concerning medicine and health, including grant of fellowships for such training in India and abroad.
- (v) International co-cooperation in medical and health research, including work related to international conferences in related areas in India and abroad.
- (vi) Technical support for dealing with epidemics and natural calamities.
- (vii) Investigation of outbreaks due to new and exotic agents and development of tools for prevention.
- (viii) Matters relating to scientific societies and associations, charitable and religious endowments in medicine and health research areas.

- (ix) Coordination between organizations and institutes under the Central and State Governments in areas related to the subjects entrusted to the Department and for the promotion of special studies in medicine and health.
- (x) Administering and monitoring of Indian Council of Medical Research (ICMR).

1.4 To achieve the given mandate, DHR is running the following central sector schemes:-

**(i) Establishment of Network of Research Laboratories for Managing Epidemics and Natural Calamities**

Viral Research and Diagnostic Laboratories (VRDLs) were established for the early identification and diagnosis of viral infections of public health importance. They also play a significant role in surveillance, diagnosis and detection of outbreaks of emerging/re-emerging viral infections.

**(ii) Establishment of Multidisciplinary Research Units (MRUs) in Govt. Medical Colleges/ Research Institutions**

Realizing DHR's function of "Promotion, Coordination and Development of Basic, Applied and Clinical Research", the Government of India approved the scheme for 'Establishment of Multi -Disciplinary Research Units (MRUs) in the Government Medical Colleges/Research Institutions'. The aim of the scheme is to develop/strengthen the health research infrastructure in the country.

**(iii) Establishment of Model Rural Health Research Units (MRHRUs) in the States.**

This scheme is a revolutionary initiative for the transfer of technology for early diagnosis and management of various diseases for the benefit of rural population. The Scheme aims to create infrastructure for the transfer of technology to the rural areas for improving the quality of health services of the rural population.

**(iv) Human Resource Development (HRD)for Health Research**

The Human Resource Development Scheme intends to create a pool of talented health research personnel in the country by upgrading the skills of faculty of Medical Colleges/Institutes, mid-career Scientists, medical students, etc. It aims to impart specialised training in priority areas of health research in leading national and international institutions, encourage and support the trainees to develop and take up research projects for addressing critical national and local health problems.

**(v) Grants in Aid scheme (GIA) for inter-sectoral convergence and promotion and guidance on research governance issues.**

Grants-in-aid Scheme for Inter-Sectoral Convergence & Coordination for Promotion and Guidance on Health Research aims to strengthen research effort in which the partnership of different government agencies, NGOs and Industry is required. Under this Scheme, support in the form of grants-in-aid for carrying out research studies to identify the

existing knowledge gap and to translate the existing health leads into deliverable products is provided.

1.5 Besides the above, additional responsibilities have also been entrusted to the Department over the years which inter-alia includes the following:-

**(i) Development of Tools/support for the prevention of epidemics and outbreaks.**

It aims to incorporate advanced and world-class technologies to boost the country's both predictive and curative response to future pandemics/epidemics.

**(ii) Health Technology Assessment in India (HTAIn)**

Health Technology Assessment in India (HTAIn) is an institutional structure entrusted with the responsibility to analyse evidences related to cost-effectiveness, clinical-effectiveness and equity issues regarding the deployment of health programs by means of HTA in India. It aims for efficient use of existing health resources and provides people affordable, accessible and quality healthcare. The main objective of the HTAIn is maximizing health, reducing Out of Pocket Expenditure (OOP) and minimizing and minimizing inequality in healthcare services.

**(iii) National List of Essential Medicines (NLEM)**

The National List of Essential Medicines (NLEM) is deliberated upon and revised from time to time. Medicines in NLEM are categorised according to the therapeutic class and listed with doses forms and references to the levels of healthcare, namely, Primary (P), Secondary (S) and Tertiary (T).

**(iv) The India-TB Research Consortium (ITRC)**

The vision of ITRC is to accelerate the development of new tools in areas of diagnostics, treatment, vaccines and implementation of research by harnessing interdisciplinary expertise. It also aims to strengthen scientific capabilities by fostering in-country collaborations and global partnerships.

**(v) Response to the outbreak of Covid-19**

Covid-19 pandemic is a National Health Emergency of unprecedented nature and of historic scale, which has rendered human life at risk. In the early stages of Pandemic, the National Institute of Virology, Pune was the only testing centre for Sars Cov-2. A strategy was adopted to enhance the testing centres and sample collection centres. The existing Viral Research and Diagnostics established labs were trained to undertake RT PCR COVID testing. Secondly, strategy was adopted to address the constraints for procuring COVID 19 diagnostic material. Empowered group-3 set up by the Government of India, cutting across ministries, was tasked with the objective of increasing procurement and ensuring regular supplies. Indian missions and embassies abroad helped identify global suppliers in a highly competitive seller's market. Thirdly, the strategy was

to partner with domestic industry to work towards self-sufficiency in testing. A task force at DHR was set up principally to ease out these challenges and handhold the industry to accelerate production of VTM, RNA extraction kits and RT PCR kits. The scale-up of testing laboratories started with a network of 106 DHR funded Viral Research and Diagnostic Laboratories, (VRDLs), which already had the capacity to conduct testing for viruses similar to SARS-CoV-2. Subsequently, the testing was initiated in partnership with laboratories in DST, DBT, ICAR, CSIR, DRDO, MHRD, medical colleges and private laboratories. Private laboratories that had approval from the National Accreditation Board for Testing and Calibration Laboratories (NABL) were accepted. ICMR established 24 Mentor Institutes for approving testing centres and assuring quality control for testing. States provided infrastructure and manpower for enhancing testing centres. India's expertise in virology has resulted in the speedy development of required diagnostics (RT-PCR and COVID Kawach ELISA) and ensuring an adequate supply of testing reagents through handholding domestic players thus realizing our mission of Atma-nirbhar Bharat. Also, ICMR isolated the COVID-19 virus, which made India the fifth nation in the world to do so and paved the way for vaccine development in record time. India today is conducting the biggest vaccinating drive and is exporting the vaccines to several countries in the world. The way India has come out of this pandemic situation is a testament to the capabilities of India's researchers, healthcare systems, medical staff, administrators and the public at large.

**1.6 The Committee observes that the Covid-19 pandemic has created the need for transformation of the allocation of budgetary resources for research and innovation in the health sector. The Department of Health Research being the nodal department for medical research needs to reorient its focus in strengthening research capabilities and infrastructure and reinvigorating interest in medical research amongst the youth. Availability of up-to-date, sophisticated, state of the art research infrastructure will provide impetus to research and innovation. These insights help in formulating group or population-specific policies. Technologically backed, swift and accurate testing & diagnostic services will effectively counter existing and emerging viral diseases. Incorporating niche technologies like ML and AI in understanding human behaviour and tendencies can generate qualitative insights into issues like how human behaviour impacts the transmission of diseases. The Covid-19 pandemic has made us realize that there is an urgent need for improving infrastructure for enhancing bio-security in the country by strengthening testing and research facilities. Department of Health Research needs to ramp up its resources and strategic research priorities.**

1.7 The Committee is astonished to find that DHR, which is engaged in, the crucial task of surveillance, diagnosis and detection of emerging/ re-emerging viral infections, such as, Dengue, Chikungunya, Influenza, Rotavirus, Nipah Virus, SARS Cov, Avian Influenza, Ebola, etc and even the recent COVID-19 pandemic, does not have the adequate administrative staff to man the Department. As per the information available in its Annual Report DHR has a total of 42 sanctioned posts, out of which, 24 are vacant as shown in the table given below:

**TABLE-1**

<b>Total Sanctioned Strength</b>	<b>Incumbency Position</b>	<b>Vacancy Position</b>
42	24 (includes 6 incumbents who are working over and above the sanctioned posts)	24

1.8 On being enquired as to whether the vacant posts have been filled up, the Department submitted that they are continuously taking up the matter with the Department of Personnel & Training and also Department of Health & Family Welfare, the concerned cadre management authorities, for filling up of these posts. The Committee also enquired about the status of the proposal for the creation of 74 additional posts in the Department and it was informed that the matter was taken up with the Department of Expenditure for the creation of additional posts. 21 posts had been approved and the matter for the creation of remaining was under process.

1.9 In reply to a query on structural changes required in the Department post Covid-19 pandemic for discharging its responsibilities effectively, Department of Health Research that in the wake the Pandemic Covid-19, structural changes are required to deal with future pandemic situations, based on the experience gained during the current covid-19 pandemic. These changes include developing more professionalism in the Department by having more scientific staff; building the capacity of experts through skill up-gradation, including that of scientific manpower, provide incentives through rewards etc. There is a need for closer integration with programmes of the Department of Health & Family Welfare (DoH&FW) & other Scientific Departments to facilitate better cooperation and coordination at the Research–Policy–Public Health system interface.

**1.10 The Committee is of the opinion that a crucial body like DHR cannot be made to suffer due to a shortage of administrative staff when the country is confronting the annual epidemic of Dengue, Chikungunya, Japanese Encephalitis etc. added by the outbreak of new viruses. Optimum utilization of the allocated budget and actual efficiency of the Department can only be realized when it functions at its full capacity. The work and responsibility of the Department have increased tremendously due to Covid-19 and a significant number of other strains reported worldwide. The Committee agrees with the Department that to deal with future pandemic situations there is a need to bring more professionalism in the Department and such objectives can be achieved by having more scientific staff; enhanced capacity of experts through skill integration, provision of incentives through rewards, etc.**

**1.11 The Committee, therefore, recommends that the Department should assiduously and forcefully take up the matter with the Department of Health & Family Welfare, Department of Personnel & Training and Department of Expenditure to fill up the vacant posts and also to approve the creations of additional posts required. The Committee expects the concerned Department to accede to the genuine requests of the Department in this regard in a time-bound manner. The Committee also believes that the Department needs to work in close coordination with the Department of Health & Family Welfare (DoH&FW), Department of Biotechnology (DPT), CSIR-Centre for Cellular & Molecular Biology (CCMB) and other similar organisations involved in health research so as to**

**establish a sync between Research-Policy-Public Health system interface. The Committee acknowledges the DHR's concerted efforts in translating modern health technologies and innovations into the public health system through in-depth research and investigation.**

## CHAPTER-II

### BUDGETARY ALLOCATIONS TO THE DHR AND ITS MACRO ANALYSIS

2.1 The DHR informed the Committee that for the year 2021-22, the Department had projected a requirement of Rs. 3312.33 crores against which it has been allocated an outlay of Rs. 2663.00 crores leaving a shortfall of Rs. 649.33 crores as shown in the table given below:-

TABLE-2

(Rs in Crores)

COMPONENT	BE-2021-22			
	Projection by DHR	Allocation	Shortfall	Allocation as a percentage of Projection
DHR Secretariat Expenditure	45.00	45.00	-	100.00
DHR Schemes	310.00	260.00	50.00	83.87
ICMR	2957.33	2358.00	599.33	79.73
<b>TOTAL</b>	<b>3312.33</b>	<b>2663.00</b>	<b>649.33</b>	<b>80.40</b>

Allocation for DHR is 3.74% of that of the Department of Health & Family Welfare in FY21-22 as compared to 3.23% in FY 20-21 (increased to 5.15% due to additional allocation for COVID-19)

2.2 The attention of the Committee has also been drawn to the trend of allocation vis-a-vis projected demand of DHR for the last three years as indicated below:-

TABLE-3

(Rs in crore)

Year	Projected Demand	BE Allocation	Allocation as % of Projection
2018-19	3143.00	1800.00	57.27%
2019-20	2653.79	1900.00	71.60%
2020-21	2871.72	2100.00	73.13%
2021-22	3312.33	2663.00	80.40%

2.3 The Committee notes that the projected demand of the Department and the actual allocation indicates a shortfall of Rs. 649.33 crores even though there a marginal increase of Rs. 563.00 crores when compared to the budgetary allocation of 2020-21. The Committee is concerned that the shortfall will impact important Central Sector Schemes of DHR such as Infrastructure for promotion of Health Research (MRUs & MRHRUs) and Human Resource and Capacity Development and will adversely affect the operations of ICMR. Given the present circumstances, when the entire focus is on the pandemic Covid-19

entailing diversion of resources towards tackling the said pandemic, the Committee observes that the fund allocated to the Department of Health Research are inadequate to cater for its mandate in R&D. The Committee fails to understand that if a globally debilitating pandemic cannot spur health research spending, what would prompt the policy-makers to allocate adequate fund to the DHR.

2.4 The Committee notes that even though the budgetary allocation for DHR is witnessing a consistent increase, but the increase, in allocation in the year 2021-22 has not been significant. While it is noteworthy that the allocation as a percentage of projection has gradually increased over the years, the overall DHR expenditure is still only 3.74% of the Department of Health & Family Welfare in FY 21-22. If taken as the percentage of the GDP (Real) (as per first AE for FY-21) the public expenditure for health research is a meagre 0.02%.

2.5 The Secretary, DHR in his deposition before the Committee submitted that ideally, the overall public expenditure on health research should be at least 5% of the budget of the Department of Health & Family Welfare. The current allocation of 3.74% is thus short by 1.26%. The Committee, therefore, recommends that the Government should make all-out efforts to allocate 5 per cent of the budget of the Department of Health & Family Welfare to DHR at the R.E. stage.

2.6 The utilisation/ expenditure against the BE&RE allocation for FY-2020-21 and FY 2021-22 of DHR is as given below:-

**Table-4**

(Rs in crore)

S.No.	Particulars	BE 2020-2021	RE 2020-2021	Actual Expenditure up to 10.02.2021	Remarks	BE 2021-22
1.	DHR Secretariat Expenditure	42.30	38.30	22.27	Expenditure in progress	45.00
2.	DHR Schemes	262.29	226.29	134.08	Expenditure in progress	260.00
3.	ICMR-normal grant	1795.71	1697.71	1594.46	Out of the grant of Rs. 1594.46 crores released to the ICMR, expenditure incurred by the ICMR is Rs 1305.06 crores on 31.01.2021.	2358.00
4.	Allocation for Covid-19 Emergency Response	NA	2100.00	1245.00	Out of the release of Rs.1245 crores to the ICMR, expenditure incurred by ICMR is Rs 1067.82 crores on 31.01.2021	NA
5.	<b>Total</b>	<b>2100.00</b>	<b>4062.30</b>	<b>2995.81</b>		<b>2663.00</b>



2.7 The Committee notes with concern that there is under-utilisation of funds with respect to the DHR schemes, DHR Secretariat Expenditure and allocation for Covid-19 emergency response.

2.8 The Committee further notes that out of the total Rs. 4062.30 crores allocated to the Department at the RE stage of 2020-21, the Department has been able to utilise only around 74% of the funds till February 10, 2021. The Committee is disturbed to note that the Department failed to fully utilise one time grant of Rs. 2100 crores for emergency response. The actual utilization till 31.01.2021 from this one time grant is only Rs. 1067.82 crores. Similarly, out of the total Rs. 1594.46 crores allocated to the ICMR, only Rs. 1305.06 crores have been spent till 31.01.2021.

2.9 While this Committee appreciates that the scarce budgeting could be saved mainly due to indigenous production of testing kits and reduction in their prices, its feels that under-utilisation of the allocated funds would give the Department of Economic affairs the basis to curtail the budgetary allocations to the DHR.

2.10 The Committee desired to know the reasons for low expenditure in DHR Schemes, COVID-19 emergency package and by ICMR with respect to the funds allocated under RE 2020-21. The Department replied that it is due to fewer requirements for procurement of testing kits, equipment/machines, reagents for Covid-19 and a drastic reduction in their prices over some time. The Department also informed that if any additional need arises in 2021-22, the requirement will be projected at the RE stage. The Committee, therefore, recommends that the Department should effectively ramp up the utilisation of funds allocated at both the BE and RE stage in each quarter to ensure optimum utilisation of resources. The Committee is also not convinced by the reasons given by the Department for the under-utilisation of funds especially for low utilisation in DHR Schemes where funds to the tune of Rs. 92.21 crores are yet to be spent in less than a month.

2.11 As per the information provided by the DHR, the allocations made in 2020-21 and utilisation of the allocated amount as of 12 February 2021 with respect to various schemes of the Department is as under:-

**TABLE-5**

(Rs in crores)

Sl. No.	Scheme/Programme	BE 2020-21	RE 2020-21	Cumulative expr. upto <u>12.02.2021</u>	% of expr with respect to BE	% of expr in respect of RE
1.	Establishment of Network of Viral Diagnostic & Research Laboratories for Managing Epidemics.	83.00	83.00	55.88	67.33%	67.33%
	Development of Tools to prevent outbreaks of epidemics	7.29	12.26	6.78	93.00%	55.30%

2.	Establishment of Multidisciplinary Research Units (MRUs) in Govt. Medical Colleges.	60.00	58.00	39.43	65.72%	67.98%
3.	Establishment of Model Rural Health Research Units (MRHRUs) in the States	20.00	16.00	6.05	30.25%	37.81%
4.	Human Resource Development for Health Research	34.00	18.00	7.37	21.68%	40.94%
5.	Grant-in-aid Scheme for inter-sectoral convergence and Coordination for Promotion & Guidance on Health Research	27.00	19.00	8.26	30.59%	43.47%
6.	Research Governance	25.00	15.00	5.86	23.44%	39.07%
7.	International Cooperation	6.00	5.03	4.73	78.83%	94.04%
<i>Total of DHR Schemes (A)</i>		<i>262.29</i>	<i>226.29</i>	<i>134.36</i>	<i>51.08%</i>	<i>59.21%</i>
8.	Indian Council of Medical Research (ICMR)(B)	1795.71	1697.71	1594.46	88.79%	93.92%
9.	Secretariat Expenditure (C)	42.00	38.30	22.27	53.02%	58.15%
<i>Total (A+B+C)= D</i>		<i>2100.00</i>	<i>1962.30</i>	<i>1751.09</i>	<i>83.39%</i>	<i>89.24%</i>
10.	COVID-19 Emergency Response and Health System Preparedness Package (ICMR) (D)	-	2100.00	1245.00	-	59.28%
<b>Total (A+B+C+D)</b>		<b>2100.00</b>	<b>4062.30</b>	<b>2996.09</b>	<b>142.67%</b>	<b>73.75%</b>

**2.12** The Committee observes that the Department as on 12.2.2021 has been able to spend only 73.75% i.e. Rs. 2996.09 crores out of the total allocated 4062.30 crores at the RE 2021-22. The Committee also notes gross underutilisation (only 67.33% of the RE) of the funds in some of the pivotal schemes like the establishment of Network of Viral Diagnostic & Research Laboratories for Managing Epidemics; Development of Tools to prevent outbreaks of epidemics (55.30% of RE); establishment of MRHRUs (37.81% of RE); establishment of Multidisciplinary Research Units (MRUs) in Govt. Medical Colleges (only 67.98% of RE). All this apparently reflects the poor absorption capacity of the agencies implementing schemes and programmes.

**2.13** The Committee is of the view that though the year 2020 witnessed the Indian Council of Medical Research (ICMR) oversee the management of the Covid-19 response in the country, but the RE 2020-21 of ICMR was surprisingly decreased. The Committee notes that though the BE 2021-22 for ICMR is almost 31% more than the BE 2020-21, yet the allocation is inadequate considering the volume of ICMR's responsibilities. It is worth reminding here that the DRSC on Health & Family Welfare has consistently recommended higher allocation to DHR considering the rise in pandemics, epidemics and other similar viral diseases which have the potential to

threaten large swathes of the human population. However, the absorption capacity of the implementing agencies should be commensurate with the projected financial requirement of the Department. The Committee, therefore, has repeatedly stressed and once again reiterate the need to strengthen the absorption capacity of the implementing agencies of the schemes and programmes for intended utilization of the allocated funds.

2.14 As per the data furnished by the Department, the scheme-wise projected demand, fund allocation and actual utilization are as follows:

**TABLE- 6**

(Rs. in Crores)

Year	Schemes/ Projects	Projected Demand	Fund Allocation at BE Stage	Reasons for revision at the RE stage	Actual Utilization	Reasons for underutilization of earmarked funds
2019-20	Setting up a nationwide network of laboratories for managing epidemics and national calamities	130.00	80.00	RE reduced to Rs 73.00 crore by the Ministry of Finance (MoF)	69.37	Due to the reduction in the budget at the RE stage and less utilization of provision under the NER component.
	Development of tools/support to prevent outbreaks of epidemics	5.00	7.35	RE reduced to Rs 6.00 crore by the Ministry of Finance (MoF)	6.00	-
	Development of Infrastructure for Promotion of Health Research	118.00	73.00	RE increased to Rs. 74 crore	72.50	The RE figures were revised considering the expenditure trend and the proposals received from MRUs/MRHRUs
	Human Resource and Capacity Development	101.00	87.00	RE reduced to Rs 77.00 crore by MoF	71.81	Due to less number of receipt proposals for fellowship, especially from the NE Region.
2020-21	Setting up a nationwide network of laboratories for managing epidemics and national calamities	90.00	83.00	No change in RE	55.60	Expenditure is up to 10.2.2021. Further expenditure is still in progress.
	Development of tools/support to prevent outbreaks of epidemics	8.00	7.29	RE increased to Rs 12.26 crore by MoF	6.78	Expenditure is up to 10.2.2021. Further expenditure is still in progress.

Development of Infrastructure for Promotion of Health Research	92.00	80.00	RE reduced to Rs 74.00 crore by MoF	45.48	Expenditure is up to 10.2.2021. Further expenditure is still in progress and the funds are expected to be fully utilised up to 31.3.2021.
Human Resource and Capacity Development	115.50	92.00	RE reduced to Rs 57.03 crore by MoF	26.22	Expenditure is up to 10.2.2021. Further expenditure is still in progress.

2.15 The Committee notes that the Department failed to establish a targeted number of laboratories for managing epidemics and national calamities mainly due to less utilisation of provision of under the North-Eastern (NE) region component. Similarly, for the Development of Human Resources and Capacity, the fund allocated in BE 2020-21 was slashed at the RE stage, and the Department failed to fully utilise the revised allocation as well. The reason being the receipt of less number of proposals for fellowship/training, particularly from the NE Region.

**2.16 The Committee understands that the NE region lags when it comes to the implementation of schemes. This underlines the lack of an effective monitoring mechanism to identify regions that are not performing expectedly. The Committee, therefore, recommends the DHR to improve the monitoring mechanism for timely execution of schemes/programmes undertaken. The Committee suggests that the Department must assess or find reasons for a staggered implementation of schemes in the North-Eastern (NE) region; identify the problem areas and find solutions thereof. If the implementation of schemes does not gain momentum, the Department may restructure/ revamp the schemes and also popularize amongst the local masses for its successful implementation. The Committee believes that funds allocated for the N.E region should be utilised judiciously. The optimum and time-bound utilisation of funds would also strengthen DHR's claim of higher budgetary allocation from the Ministry of Finance (MoF).**

2.17 To a specific query as to how the outbreak of pandemic Covid-19 has transformed the budgeting process, the Department of Health Research responded that the COVID-19 pandemic has no doubt created the need for transformation in the allocation of budgetary resources for research and innovation in the health sector, as follows:

1. Need for additional resources and infrastructure for enhancing bio-security in the country by strengthening, upgrading and creating more research and testing facilities for existing and emerging viral diseases. Institutionalize the concept of one health so that country is prepared to deal with future pandemics
2. Greater focus on the development of indigenous technologies, devices and vaccines to achieve the goal of Atmanirbhar Bharat. This need was greatly felt during the pandemic, especially during lockdown & suspended international movement.

3. Deployment of advanced technologies, including Artificial Intelligence (AI) to provide insights into complex questions of how individual behaviours impact transmission and identifying which policies are effective for specific groups.
4. Accelerating technology uptake
5. More effective use of communication tools, social media, mass media for preventive measures.
6. Institutionalize Health Technology Assessment in the country so that cost-effective programmes technologies are introduced in public programmes.
7. Enhancing regional and international cooperation for research on outbreak investigations, biomedical and health research.

**2.18 The Committee notes that the pandemic Covid-19 has underlined new dimensions in budgetary allocations. Given the emerging and unpredictable health hazards, there is a dire need for additional resources and resilient infrastructure for enhancing bio-security in the country. The Committee, therefore, recommends that the Department must formulate sector-specific strategies for different regions to strengthen bio-security in the country. The Committee recommends higher budgetary allocations to the Department for enhancing its research infrastructure aimed towards strengthening, upgrading and developing more research and testing facilities to counter existing and emerging viral diseases. The Committee further believes that global logistic chains, indigenous technologies, vaccines and researches must be promoted considering the global nature of emerging health emergencies. The Committee would therefore recommend that budgetary allocation to the Department of Health Research should be enhanced substantially.**

## CHAPTER – III

### INDIAN COUNCIL OF MEDICAL RESEARCH (ICMR), NEW DELHI

3.1 The Indian Council of Medical Research (ICMR), New Delhi is an apex body to formulate, conduct, coordinate and promote biomedical research in the country. It is one of the oldest medical research bodies in the world. The ICMR aims to address the growing demands of the scientific advances in biomedical research on the one hand, and to the need of finding practical solutions to the emerging and existing health problems of the country, on the other. The ICMR's mandate inter-alia is to conduct, coordinate and implement medical research for the benefit of society and to further translate medical innovations into products/processes and introduce these products/processes into the public health system.

3.2 The Indian Council of Medical Research (ICMR) is an integral part of the Department of Health Research (DHR). The ICMR carries out research work through a countrywide network of 31 institutes/centres, out of which 17 deal with communicable diseases, 6 with non-communicable diseases, 2 with diseases related to Reproductive and Child Health (RCH), 3 with nutritional deficiencies and 3 with disease related to Basic Medical Sciences including Haemoglobinopathies and Traditional Medicine.

3.3 A statement of the projected demand of ICMR; BE, RE and actual allocation for the last five years is shown below:-

TABLE-7

(Rs in Crores)

Financial Year	Projected Demand	Actual Allocation		Grant Released to ICMR	Actual Expenditure by ICMR
		BE	RE		
2016-17	1460.10	894.00	1094.00	1077.40	1062.97
2017-18	2308.00	1150.00	1413.60	1413.60	1390.46
2018-19	2487.00	1416.00	1447.85	1447.85	1436.62
2019-20	2100.00	1474.65	1552.22	1594.22	1521.17
2020-21	2300.00	1795.71	3797.71#	2839.46	2372.88
2021-22	2957.33	2358.00	-	-	-

# Include Rs 2100 crores for ICMR on COVID-19 Pandemic from COVID-19 Emergency Response and Health System Preparedness Package out of which Rs 1245.00 crores has been released to ICMR till 05.02.2021

3.4 The Committee appreciates the ICMR's track record with respect to the utilisation of funds. Barring the year 2020-21, the ICMR has a near-perfect track-record of utilising the budgeted funds. The Committee, however, is surprised to note that the grant that ICMR receives is less than the actual allocation that the DHR gets in the name of ICMR. It is quite intriguing to the Committee that while on the one hand the Ministry of Finance

does not allocate the fund as per the projected demand and even the allocated fund is not released in totality to the ICMR. The Committee opines that the role of ICMR is very crucial considering the current and future health challenges; inadequacy of funds to ICMR can undermine the desired outcomes in the health sector. The Committee, therefore, recommends that sufficient funds must be released to ICMR including additional funds, at the RE stage.

3.5 The DHR has shared the following status of existing strength and vacancies in the ICMR:-

**TABLE-8**

Sl.No.	Total Number of Posts	Existing Strength	No. of posts for which recruitment is in Progress	Vacancies
1.	876	600	221	55

3.6 The Committee notes with concern that the ICMR is understaffed and is therefore working at reduced capacity. Out of the total 876 posts, currently, only 600 posts are filled up. The Committee has been informed that the recruitment for the 221 posts is currently in progress and the process would be finalised soon. The Committee is unhappy with the casual way the urgency of filling vacant posts in the ICMR is being handled. The Committee notes that for most of the 221 posts for which the recruitment is in progress, the recruitment process began in the months of November, December 2020 and till now the recruitment is still incomplete.

3.7 The Committee recommends that the ICMR must formulate proper Recruitment Rules/guidelines to complete the recruitment process within a definite time frame. The schedule (date-wise) for the complete recruitment process should be notified well in time to help both the probable applicants and the recruitment conducting authorities.

3.8 The budgetary allocation for the ICMR for the FY 2021-22 and BE and RE for FY 2020-21 are as under:-

**TABLE -9**

(Rs. In crores)

	Actual 2019-20	BE 2020-21	RE 2020-21	Projected Demand for FY-22	BE 2021-22
<b>Revenue Allocation</b>	1479.17	1795.71	1697.71 (plus 2100 crores for Covid-19)	2957.33	2358.00

3.9 The Department has submitted that against the projected demand of Rs. 2957.33 crores for the year 2021-22 an allocation of Rs. 2358.00 crores have been made to the ICMR which is a shortfall of Rs. 599.33 crores. On being enquired about the initiatives that are likely to suffer

because of this shortfall, the Department informed that the shortfall includes Rs.88 crores under Grant-in-aid Salaries of ICMR. The Department further added that the requirements, including the requirements under PM-ASBY, would be re-assessed on approval of the scheme by the Cabinet and additional requirements, if any, would be projected at the RE stage or in the Supplementary, as the case may be. According to the Department the RE 2020-21 allocation of Rs.4062.30 crores, which includes an allocation of Rs.2100 crores for Covid-19 Emergency Response, would be sufficient to meet the current financial year's requirements both for the ICMR as well as DHR schemes.

**3.10 The Committee observes with concern a significant shortfall against the project demand to ICMR. The Committee understands the key role played by the ICMR and its associated organisations in fighting the Covid-19 pandemic. It is needless to mention; health research activities need to be promoted and encouraged to tackle future health care challenges/diseases. The Committee, therefore, recommends that the Department of Expenditure should provide the additional funds to the tune of Rs. 599.33 crores for FY-22 at the RE stage for ICMR.**

**3.11 The Committee expects the ICMR to formulate a long term vision document, comprising of its long term goals and objectives, technological interventions required to undertake action plans for improving the efficiency of the country's health systems and how it intends to provide quality, easily accessible and affordable healthcare to every citizen. The vision document should spell out the roadmap for the ICMR with which the schemes would be conceived, improvised, implemented and evaluated to overcome the health challenges encountered by mankind in general and India in particular.**

**3.12** On being asked about the specific areas proposed to be funded under the head of ICMR, the Department mentioned the outbreak investigation & preparedness, Elimenable Diseases (Leprosy, Malaria, TB, Lymphatic Filariasis, Kala-azar); Anti-microbial Resistance; Vaccine-preventable Diseases; Malnutrition; Anaemia; Tribal Health; Non-Communicable Diseases like Cancer, Stroke, Hypertension, Diabetes, Cardiovascular Diseases; Reproductive health including infertility and contraception; International Health as specific areas identified for the purpose.

**3.13** Replying to a query about the major achievements of ICMR during the year 2020-21, the Department has furnished the following information:-

#### **Achievements of ICMR in various domains in the year 2020-21**

**3.14** ICMR has been at the forefront of the fight against Covid-19. The major achievements in this area are listed below:

- **SARS-CoV2 virus isolation:** India is 5th in the world to isolate the SARS-CoV2 virus. It aided in COVID-19 testing development (ELISA) and is the starting point of fully indigenous vaccine development. Also, ICMR is 1st in the country to sequence the complete genome. ICMR has also isolated and cultured the UK variant of SARS-CoV2.
- **24X7 operational pan-India Lab network:** Due to the novelty of the virus, there was no capacity in the country to diagnose the virus. From one lab in the country in mid-January to 2360 operational laboratories today. During the lockdown period itself, 414



laboratories made functional. Today, we have a testing capacity of approx. 17 lakh tests/day.

- **First Make-in India Covid Kawach ELISA kit:** ICMR developed a rapid, highly sensitive human IgG ELISA kit for COVID-19 to help in detecting the presence of anti-SARS CoV 2 antibodies in the Indian population. Three National Sero-Surveillance, using this ELISA kit, have been completed. It helped in guiding the future policies of COVID-19 control.
- **Promoting Make-in-India efforts:** ICMR is validating COVID-19 diagnostics through a fast track mechanism. Till 21st January 2021, out of 331 RT-PCR kits evaluated by ICMR validation centres, 152 were found to be Satisfactory; of this 63 antigen-based rapid test kits validated, 18 were found satisfactory; 25 out of the 192 Rapid Antibody Test Kits evaluated were found satisfactory; 260 RNA extraction kits were validated and 162 were found satisfactory; 224 VTM kits were validated and 190 were found to be satisfactory and out of 91 ELISA/CLIA based kits validated 17 were found to be satisfactory. ICMR is also handholding domestic players to expedite the production of diagnostic supplies through all possible support. The Capacity has been developed for the production of 10 million RT PCR test and 5 million RNA extraction kits. The capacity of VTM (Virus Transport Material) production is up-scaled from 5L VTM tubes/yr to 5L VTM tubes/day. Synthetic swabs, used for sample collection, were not manufactured in India earlier and now the current in-country production capacity is approx. 1 Lakhs swabs/day. Efforts are on to ramp up the production capacities of all supplies.
- **Vaccine Development:** ICMR has led to the development of both EUA vaccines: Covaxin and Covishield. ICMR partnered with Bharat Biotech India Limited for Covaxin since its inception. It transferred the SARS-CoV2 cultured strain and provided technical expertise during its pre-clinical development, animal studies and human clinical trials. Also, ICMR partnered with Serum Institute of India (SII) and Oxford University to fast-track clinical trials of the live attenuated recombinant vaccine, Covishield.
- **Exploring the treatment options:** ICMR participated in the WHO Global solidarity trial to test repurposed drugs including hydroxychloroquine, Lopinavir/ritonavir, Remdesivir, Interferon-gamma. None of the treatment options yielded significant results but contributed important information to global knowledge. ICMR also evaluated Plasma therapy under PLACID trial and demonstrated that the therapy does not reduce the progression to critical disease or death.
- **Vaccine Communications:** Recently, ICMR organized an International symposium on novel ideas in the science and ethics of vaccines against the COVID-19 pandemic. Vaccine experts from across the globe participated in this symposium where the discussion was held regarding the ethics of human vaccine challenge, scaling up of vaccine production and India's role in it, and prioritization of recipients of the vaccine once available. Also, a vaccine web portal has been launched consisting of all the information regarding the Indian efforts towards vaccine development against various diseases including the most recent COVID-19.
- **National Clinical Trial Registry for COVID-19:** This registry collects systematic data

on clinical signs & symptoms, laboratory investigations, management protocols, the clinical course of COVID-19 disease, disease spectrum and outcomes of patients. The data will serve as an invaluable tool for formulating appropriate patient management strategies, predicting disease severity, patient outcomes etc.

### **Non-Communicable Diseases & Nutrition**

- Mobile Stroke Care Unit in North East: ICMR has initiated to provide stroke treatment through state of the art Mobile Stroke Unit in Tezpur and Dibrugarh area of Assam. This would lead to saving the lives of stroke patients through the intervention of clot buster medicine after CT / specialist decision through a digital platform.
- Released the National Non-Communicable Disease Monitoring Survey (NNMS) Report. The purpose of the survey was to collect reliable baseline data on key indicators (risk factors, select NCDs and health systems response) related to the National NCD monitoring framework and NCD Action Plan.
- Released the Framework for Telemedicine use in Management of Cancer, Diabetes, Cardiovascular Disease and Stroke in India
- Released The National Cancer Registry Programme Report 2020: The report estimates that in 2020 cancer cases in the country will be at 13.9 lakhs and likely to increase to 15.7 lakhs by 2025, based on current trends.
- Released Nutrient Requirements for Indians & What India Eats: The Nutrient Requirements for Indians, the revised Recommended Dietary Allowances (RDAs), for the first time includes the Estimated Average Requirements (EAR) and also the Tolerable Upper Limits (TUL) of nutrients alongside RDAs. “What India Eats” reports the dietary patterns across the country for the first time the data has been analysed and projected based on food groups. This report gives details of ‘Regional Dietary Pattern of Indian Population’ and energy and protein sources from different food groups in graphical form.
- Mapping of nutrition and health status – A national-level participatory real-time data generation programme has been launched.

### **International Health Research Collaborations**

- **Newton Bhabha Researcher Link workshops:** ICMR has partnered with British Council, the UK for the Researcher Link Workshops under the Newton Bhabha Fund programme. Grants are designed to provide financial support to bring together UK/Indian cohorts of early career researchers to take part in workshops to meet the overarching objectives. For the year 2020-21, the second joint call of the programme has been advertised in the areas of Cardiovascular pharmacotherapy in Covid-19 infections, Bio-banking, Public health preparedness and response to emerging diseases outbreak/ pandemic, Capacity building of maternity care providers to improve prenatal outcome.
- **India Africa Health Sciences Platform (IAHSP):** To strengthen South-South collaboration in advancing health sciences research and to enhance local capacity and ownership, ICMR in collaboration with AU-STRC announced the 'Call for

Applications for African Health Practitioners/Researchers under ICMR/AU-STRC Capacity Building Scheme (Training Courses in India 2019) under India Africa Health Sciences Platform (IAHSP). The call was for 7 training courses at 3 ICMR Institutes-NICPR, Noida; NIN, Hyderabad; NIE, Chennai. A total of 95 African Health Practitioners/Researchers from 26 African countries were trained during 2019. The second call for 8 courses announced in February 2020 is under process. Also, the Call for proposals 2020 for joint research projects in the area of HIV/AIDS; Cancer; Tuberculosis; COVID-19 under the ICMR-AUSTRC Research Grant Scheme is being finalized in consultation with AU-STRC.

### **Other Achievements**

- Unveiled the History Timeline of ICMR showcasing the 108 years of journey in service of the nation. The timeline was unveiled physically at ICMR Headquarters and online on a dedicated web page.
- Launched an online course on Prescribing Skills for Indian Medical Graduates (pursuing or completed internship). The course is meant for improving prescription practices among Indian Medical Graduates
- Released First comprehensive estimates of district-level trends of child mortality and child growth failure in India under India State-Level Disease Burden Initiative.
- Under Human Resource Development (HRD), currently, there are 525 Junior Research Fellowship(JRF), 76 Post-doctoral Research Fellowship (PDF), 10 Nurturing Clinical Scientists Fellowship (NCS), 55 MD/Ph.D. Fellowships, 400 ICMR-MD/MDS/MCh/MS Thesis financial support is ongoing.
- Under the extramural research programme, ICMR has approved 815 Adhoc fellowships and 773 ad-hoc projects and are currently funding 1166 fellowships and 1040 ad-hoc projects in various areas of health research during the year.

**3.15 The Committee places on record its deep sense of appreciation for the path-breaking work done by the ICMR especially with respect to tackling Covid-19 by way of up-gradation and leveraging of testing capabilities, researches on the corona virus and the development of a vaccine in collaboration with Bharat Biotech. The Committee believes that in critical times when the entire world had been struggling with Covid-19, the ICMR rose to the occasion, took swift measures and made commendable efforts for enhancement of its testing and research capabilities which not helped the country overcome the pandemic situation but also saved resources through production of essential kits.**

3.16 Replying to a query regarding the profit-sharing mechanism between ICMR and Bharat Biotech regarding the development of Covaxin, the ICMR stated that the collaboration between ICMR and Bharat Biotech is on a cost-sharing basis and ICMR is an equal partner in this collaboration. Also, as per the terms of the MoU, Bharat Biotech would provide the vaccines to the Government of India at a reduced price. The Committee was further informed that the Bharat Biotech would be giving 5% royalty of the total net sale to the ICMR.

**3.17 The Committee is pleased to know that the ICMR is an equal partner in its MoU with Bharat Biotech. The Committee strongly recommends that the 5% royalty from Bharat Biotech be given to the ICMR exclusively for research and development.**

3.18 As per the data provided by the ICMR, the number of research papers published, patents filed and patents granted during the last two years i.e. 2019-20 and 2020-21 is as under:-

**TABLE-10**

<b>Particulars</b>	<b>Achievements 2019-20</b>	<b>Achievements 2020-21</b>
Publications	760	779 (till December 2020)
Patents Filed	25	16 (till December 2020)
Tech Developed	28	34 ((till December 2020)
Outbreaks Investigated	174	42 (till January 2021)

**3.19 The Committee appreciates ICMR for publishing 779 research papers /research documents, filing 16 patents and 34 tech developments in FY 2020-21 (till December 2020). The ICMR had similar achievements in FY 2019-20 too. The Committee hopes that these researches once scientifically validated and approved would be translated into technology and benefit the common man.**

3.20 On the issue of research projects on traditional medicine in association with the Ministry of AYUSH, the Department of Health Research shared the following details regarding research projects on Traditional Medicine undertaken by ICMR- ICMR-National Institute of Traditional Medicine (NITM), Belagavi (Karnataka) in collaboration with the Ministry of AYUSH:

1. Project entitled "Evaluation of Ayush-GMH in the subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD) - A Double-blind Randomized control clinical study" has been sanctioned by the Central Council for Research in Ayurvedic Sciences (CCRAS) and the release of the grant is awaited. ICMR task force under Phase I completed 5 projects on Nonalcoholic Fatty Liver Disease in 2016. In Phase II, one project was started in 2017 which is completed and the second one started in 2018 is still ongoing.
2. A project entitled "Randomized Controlled Clinical study of the Ayurveda formulation-PJ17 for the management of Dengue fever" sanctioned by CCRAS has been completed and a report of ICMR-NITM has been communicated to the PI. The final report of the project yet to be submitted by the PI to CCRAS. As the study design was double-blinded, the results or outcome of the study will be known once the analysis of all the data and unblinding is done by CCRAS.

3.21 The Committee notes the details of major research projects on the traditional medicine undertaken by ICMR such as (i) evaluation of the safety and efficacy of an Ayurveda formulation PJ7 in the management of the Dengue fever and (ii) non-alcoholic fatty liver disease (NAFLD) – A double-blind randomized control clinical study, funded by Ministry of AYUSH.

**3.22 The Committee is of the opinion that every system of medicine has its own speciality and thus there is no harm in exploring the avenues of supplementing the modern system of medicine with the Indian system of medicine. Of late there is a growing perception supported by some practical evidence that systems of traditional medicines like Ayurveda and Homoeopathy work better than the modern medicine system when it comes to diagnosis and treatment of some serious and life-style based diseases. The Committee, therefore, appreciates the collaboration of ICMR with the Ministry of AYUSH for scientific validation of Ayurvedic formulations for dengue fever and also engagement in a clinical study for the treatment of NAFLD. The Committee recommends that ICMR must regularly follow up with the Ministry of AYUSH for the immediate release of grants to carry out “Double-blind Randomized control clinical study” for the "Evaluation of Ayush-GMH in the subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD)”. The Committee also recommends that as and when the final report is released by CCRAS regarding “Randomized Controlled Clinical study of the Ayurveda formulation- PJ17 for the management of Dengue fever”; and if the said Ayurvedic formulation is found effective in tackling Dengue fever, the ICMR must take necessary steps for speedy intervention of this drug in the public health system. The final report should also be placed in the public domain. The Committee also recommends DHR to make efforts to take more and more projects for the validation of traditional medicines so that their efficacy could be scientifically proved and people don’t hesitate to accept them.**

3.23 The Committee has been given to understand that multiple measures have been taken in the recent past to improve the financial and physical performance of ICMR like decreasing the turnaround time for project screening and review for extramural funding, prompt recruitment drive, creation of new infrastructure for initiating research in newer areas, initiating flagship programmes in mission mode to bring them to a logical end for utilization in public health. The effect of all these was visible during the ICMR’s contribution to tackling COVID-19. Additionally, the following measures can be taken to further improve the performance are:

- Creation of a career development path for mid-level scientists.
- Conducting research in mission mode with project designs that are scientifically strong and could be brought to a logical end and utilized to better the public health of the nation.

**3.24 The Committee appreciates the steps taken by the ICMR to improve its physical and financial performance. The Committee is of the view that ICMR being the apex medical research body in the country should have the best infrastructure and other resources to carry out its mandate effectively. The ICMR should have the best team of renowned scientists/experts working towards research priorities that coincide with the national health priorities. The objective of promoting the health and well-being of the country’s population can only be ensured by goal-oriented research studies seeking standardised and scientific methodologies for reducing the disease burden of the country. The Committee underlines adequate provisioning for ICMR resources to strengthen its physical and financial performance. The Committee recommends that more measures i.e. creation of career development path for mid-level scientists and conducting research in mission mode must also be initiated at the earliest.**

**3.25 The Committee recommends that the ICMR should carry out comparative studies of mechanisms/ processes that similar organisations of other countries have put in place to spur professional, social, personal and thus holistic development of their workforce particularly scientists.**

**3.26 The Committee also recommends ICMR to conduct regular training and workshops of its scientists and researchers to keep them abreast with the latest developments and findings in medical research. The Committee believes that most of the times there is the protracted threat of research being limited to thesis and journals. Thus, such workshops will help researchers and scientists gain valuable insights into how research can be done keeping in view the ultimate goal i.e. betterment of public health.**

3.27 Replying to a query on challenges encountered in research with respect to infrastructure and other resources, the ICMR flagged the cumbersome procedures for collaboration with international institutions/agencies/private parties and the delay in coordination between scientific agencies as major constraints.

3.28 Besides, the NITI Aayog has identified the following major issues of concerns/difficulties faced by the Scientific Departments:

1. The financial rules preventing re-appropriation of funds which hampers effective utilization of allocated budget provision resulting in non-utilization and surrender of funds
2. In spite of the approval of any projects by SFC/EFC including the manpower component, the Department of Expenditure is insisting on a separate proposal for manpower for its approval.
3. Even after technical peer-review of projects which includes the budget for equipment etc., quotations are required to be submitted to the IFD as price-support documents before sanctioning projects
4. The audit process does not take into account the uncertainties and complexities inherent in scientific projects.
5. Restriction of at least 20% of total procurement from Medium & Small Enterprises (MSEs). It may be made an optional condition for the scientific departments. Procurement of materials will have to be determined purely based on the quality and technical specifications, suiting the special needs of the Scientific Departments
6. Any new scheme in respect of the budget requires the approval of the Cabinet
7. Investment by Scientific Departments in the spin-off companies of its scientists as equity will lead science departments losing their exemption under Section 10 (21).
8. No provision of funds for insurance of trials/compensation in case of trial-related injuries. This makes conducting trials difficult.
9. The grants, donations and funds from foreign agencies for research requires FCRA clearance

**3.29 The Committee fully agrees that there are administrative, infrastructural, financial hurdles identified by ICMR & NITI Aayog and recommends the Department to make all-out efforts to overcome these hurdles at the earliest.**

**3.30 The Committee also recommends that the DHR must immediately take up the issue of financial rules that prevent re-appropriation of funds with the Ministry of Finance (MoF) along with the need for doing away with filing a separate proposal with the Department of Expenditure for manpower requirement. In addition to this, the Committee also recommends that the Department may propose the Ministry of MSMEs to exempt the scientific Departments like ICMR from compulsorily procuring at least 20% of their total procurement from Medium & Small Enterprises (MSEs). The Committee also urges with Ministry of Finance (MoF) and other concerned bodies like IRDA to consider providing insurance coverage to scientific/ research trials as such measures/initiative would significantly reduce the research time. The Committee suggests the Department of Health Research to share these issues with the concerned Departments and regularly follow-up with them for final resolution.**

3.31 Replying to a query regarding steps taken by the ICMR-NCDIR to persuade State Governments to make cancer "a Notifiable Disease" for broad base research on the treatment of cancer, the Department submitted as under:-

- a. During interaction with cancer registries in each of the states, they are encouraged to interact with respective state health authorities to make cancer notifiable in respective states.
- b. Close interaction with state health authorities is kept and steps to implement cancer modifiability are conveyed.
- c. To make cancer notifiable at the National level, a document conveying the rationale, scope and advantages has been prepared which is being finalised for further submission to the Ministry of Health & Family welfare.
- d. Efforts have been successful in making cancer notifiable in various states in the country through administrative orders/ Gazette Notifications.
- e. The states where this effort has been successful are listed as follows:
  1. **Tripura** on 24<sup>th</sup> September 2008
  2. **West Bengal** on 20<sup>th</sup> December, 2010
  3. **Punjab** on 18<sup>th</sup> October, 2011
  4. **Assam** on 9<sup>th</sup> December, 2013
  5. **Mizoram** on 27<sup>th</sup> January, 2014
  6. **Haryana** on 29<sup>th</sup> October, 2014 - Gazette Notification
  7. **Manipur** on 22<sup>nd</sup> February, 2017
  8. **Karnataka** on 25<sup>th</sup> July, 2015 – Gazette Notification
  9. **Arunachal Pradesh** on 29<sup>th</sup> July, 2015
  10. **Gujarat** on 20<sup>th</sup> May, 2016
  11. **Rajasthan** on 5<sup>th</sup> July 2019

**3.32 The Committee is pained to note that the efforts to make cancer a “Notifiable Disease” are being made since 1982 without much success as only 11 States have been taken**

on board so far. The Committee, however, appreciates ICMR's persistent and concerted efforts in making Cancer a "Notifiable Disease". The Committee notes that according to the estimates of the National Cancer Registry Programme Report 2020, released by the ICMR and NCDI Bengaluru, based on current trends cancer cases in India are likely to increase to 15.7 lakhs by 2025, which could drive policy decisions. This will also help in better cancer screening, early detection, referral, treatment and palliative care services throughout the country. Considering the scourge that the disease can become if not reigned in soon, the Committee recommends that the ICMR must continue its concerted efforts to make Cancer a "Notifiable Disease". The Committee would like the Department to take up the matter at the highest decision making levels of the States.

**3.33** Cancer is fast emerging as a major to the life and well being of the people as its treatments is too costly to be afforded by even middle-class family. The Committee, therefore, recommends that ICMR must undertake research on therapeutic or curative drugs in a mission mode to reduce their cost and make them affordable.

3.34 In response to a query regarding measures taken by the Department to carry out an in-depth investigation in the field of biomedical research and health research to consolidate health infrastructure under 'One Health System/Policy/ in the country, the Committee was informed that- The Indian Council of Medical Research (ICMR) plans to establish country's first-of-its-kind Centre of One Health in the campus of Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur. The Centre will focus on research in all domains of One Health that can impact human health i.e., animal sector, wildlife, environment, climate change. The preparedness to tackle the threat of emerging and re-emerging infections would be enhanced. Satellite Centre at Nagpur would have a BSL 4 laboratory. Similar Zonal institutes of the National Institute of Virology (NIV) in Northeast, North and South Zones are also planned under the PM-Atamnirbhar Swasth Bharat Yojana (PM-ASBY). Majority of the emerging and re-emerging infections are viral in their origin. ICMR/DHR has established a network of 118 Virus Research & Diagnostic Labs (VRDLs) which are well trained in biosafety and biosecurity protocols. VRDLs in different levels – regional and state-level decentralizing capacities to timely detect various viral infections including those which spill over from the animal side to the human side.

**3.35** The Committee is pleased to note that the ICMR is planning to establish the country's first-of-its-kind Centre of One Health on the campus of Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur to view human health not in isolation but in conjunction with biotic and abiotic elements like plant life, animal life, the physical environment is a step forward in the right direction. The Committee believes that the concept of One Health must be effectively implemented for reducing the incidence of emerging zoonotic threats like COVID-19. The Committee recommends that the Department must promote One Health research for developing a sustainable disease control system that uses real-time health analytics and highly advanced data management tools for accurate results. Further, such a model must be scaled up across the country.

**3.36** The Committee further recommends ICMR to establish meaningful research collaborations across the world. Moreover, medical, veterinary, paramedical sectors and



**bioscience researchers must be integrated to form a task force to address the emergent issues. The Committee recommends that the ICMR should collaborate with health, veterinary, agriculture and life science research institutions and universities to broad base its R&D.**

3.37 Replying to a query of the Committee regarding the assessment of DHR regarding the financial requirement for using AI-based tools for screening TB in semi-urban and rural areas across the country, the Department informed that- ICMR in collaboration with the Institute of Plasma Research (IPR), under the Department of Atomic Energy, is developing an Artificial Intelligence (AI) tool for screening and detection of TB which could be used in peripheral areas (semi-urban and rural areas) as a triage test for screening of TB cases. The development of this tool includes primarily a setup (supercomputers, storage) for development of the algorithm (expertise) and the tool and data generation (health care data, repository and analysis tools, storage) for training and testing of the tool and finally the deployment of the tool under the national programme which would also require constant maintenance of the tool.

3.38 The cost for the development of the AI tool cannot be estimated at this stage. However, the setup developed by the IPR is being used for the development of the tool and ICMR is collaborating in the development, data generation and validation of the tool. The cost of data generation and validation would be required initially which could be about Rs.1-2 cr annually. Subsequently, the deployment and maintenance under the programme would depend upon the area of deployment and use.

**3.39 The Committee appreciates ICMR's vision of incorporating modern technologies like AI for the detection and diagnosis of serious contagious diseases like TB. The Committee notes that the ICMR's role in this collaboration is primarily data generation and validation of the tool. The Committee, however, recommends that the ICMR must use high quality annotated training data sets to train this AI tool. The ICMR must generate exhaustive and large datasets to train this model for various exigencies involved during the testing and screening of patients for TB. The Committee would like to further recommend that the Department must carry out studies concerning the readiness of health centres, the skillset of healthcare personnel and the suitability of overall infrastructure areas to ascertain the effectiveness of such a model.**

#### **Study on Under-nutrition, fluorosis, IDD, Vitamin-A Deficiency**

3.40 To a query regarding the current status of studies addressing problems of under-nutrition, fluorosis, IDD, Vitamin -A deficiency, the DHR submitted as under:-

**Under-nutrition:** ICMR Task Force study: total 40 districts (14 from NIN). Nutrition status data were collected from 14 districts in 4 States and based on the baseline, formative research findings district-specific multi-component health and nutrition education intervention strategies were developed and implemented in 3 phases in 7 Districts of Gujarat, 5 districts of Jharkhand, one district each in Andhra Pradesh and Telangana. Education materials such as posters, flip charts, table calendars, banners, which were developed and finalized after pre-testing were used for imparting education to adolescent girls, pregnant women, lactating mothers. The mode of

education was person to person, focus group meetings. The project staff contact with each of the beneficiary in the target areas was about 7 to 9 for counselling. There was a significant improvement in all nutrition indicators; IYCF practices improved, and a number of children with stunting, wasting and under nutrition decreased.

**Fluorosis:** ICMR Task Force study: total 7 districts (1 from NIN) “Prevalence of fluorosis in the community of selected districts of India and development of an appropriate intervention model for prevention and control of fluorosis” was conducted in Prakasam district, Andhra Pradesh. A sampling of villages was done by the Central Co-ordinating Unit at ICMR Hqs, New Delhi. Based on the water fluoride levels in the villages, 30 villages were categorized into 3 categories; 10 villages were in category I (<1.5 ppm fluoride in drinking water), 10 were in category II (1.5-3.0 ppm fluoride in drinking water); 10 were in category III (>3.0 ppm fluoride in drinking water). Dietary data showed high levels of fluorosis. Diet survey and anthropometry proforma’s were sent to ICMR, New Delhi and the results are awaited.

**Intellectual and Developmental Disabilities (IDD):** ICMR Task Force Study (The study is coordinated by the Centre for promotion of Nutrition Research & Training with special focus on North-east tribal & Inaccessible Population (CNRT), Division of Nutrition, ICMR, New Delhi, with six participating centers): total 10 districts (1 from NIN) “Assessment of iodine status among pregnant women in selected districts of India”, was initiated in April 2017 in ten districts, that is, one district from each of the ten states of India, namely, Meghalaya, Assam, Tripura, Uttar Pradesh, Madhya Pradesh and Maharashtra, Telangana, Odisha, New Delhi & Rajasthan among 18-40y old pregnant women, to assess iodine status during pregnancy and up to 12 months postpartum. Samples were collected for thyroid profile, TSH and micronutrient status (anaemia, iron, zinc, vitamin A and vitamin B-12 status). Diet intake data and consumption of iodized salt were also collected apart from demographic, health, urine and household salt samples were also collected for relevant biomarker estimations. A follow-up of about 80% was achieved. The data and samples have been shared with CNRT, ICMR, New Delhi and analysis is in progress.

**Vitamin-A Deficiency:** ICMR task force study – total 7 districts (1 from NIN): To assess the prevalence of sub-clinical and clinical vitamin A deficiency (Serum Retinol) in children aged 1-5 years and pregnant women, and to estimate dietary intake of vitamin A. From NIN, 30,750 children (1-5 y old) and 826 pregnant women were examined from 162 villages. Blood sample and dietary intake data were collected in a subsample. Data entry and analysis of serum samples for serum vitamin A is in progress at ICMR Headquarters.

**3.41 While appreciating the initiatives of ICMR to combat malnutrition, the problem of fluorosis, IDD and menace of Vitamin-A deficiency, the Committee is of the considered view that given the mandate of ICMR with regard to medical and health research, a lot more needs to be done. The Committee recommends that the DHR must complete the studies on the prevalence of fluorosis, Vitamin A deficiency and IDD and finalise the report as soon as possible. The Committee would like to be updated on the findings of the studies and the actions taken by DHR thereon. The Committee also recommends the Department to promote such studies in other regions of the country and incorporate findings of such studies in the National Health Policy.**

## **India's Performance in the Global Hunger Index 2019 and the consequent actions taken by the DHR.**

3.42 The Committee was informed that a 'White Paper' on the Global Hunger Index (GHI) has been prepared. However, final deliberations could not be done due to the COVID-19 pandemic. The way forward suggested by the Expert Committee is as follows:

- Global Hunger Index could be abandoned or renamed to suitably reflect the information provided by the indicators for an appropriate connection with the lay media and stakeholders. Indian Media, lay population, stakeholders and policymakers should not equate this index with hunger or semi-starvation and not be misled for inappropriate policy actions. Future research may be carried out to delineate a robust hunger index, especially in the context of an emerging epidemic of over nutrition related cardio metabolic risk factors.
- The committee observed that the indicators used in GHI were not specifically measuring Hunger. The methodology was found to be flawed and the data used were of sub-optimal accuracy. The Index intended to assess the status for the entire population was found to give excessive weightage to under-five children. The committee also observed that the calculation of GHI as an index in percentage is often interpreted as percentage hunger by a layman, media and even the general population.
- Measurement of Hunger is a very complex, methodological issue and a challenge for statisticians and subject experts. In view of this, the committee recommended that the Ministry of Statistics and Programme Implementation should join hands with the Ministry for Women and Child Development and other ministries to develop robust and acceptable country-specific methodology to measure hunger on priority and avoid using proxy indicators for hunger. 'Zero' hunger being one of the very important goals of SDGs, therefore the committee observed that this initiative is not only essential but also required to put a full stop to the use of indirect, ill-conceived and half-baked measures of hunger like GHI.

**3.43 The Committee endorses the Expert Committee's view that the latest data for India was not used in computing various indicators of GHI and also appreciates the Expert Committee for trying to remove the lacunae in measuring hunger by involving other concerned Ministries. The Committee believes that there should be objective assessment and proper measuring of hunger to generate the actual and real data on hunger. The Committee, therefore, recommends that the research concerning a specific Hunger Index that is more suitable to India's dynamics and demography must be undertaken.**



## CHAPTER-IV

### SCHEMES/PROJECTS OF DEPARTMENT OF HEALTH RESEARCH (DHR)

#### A. Establishment of Viral Diagnostic & Research Laboratories (VRDL) to manage epidemics and national calamities

4.1 Viral Research & Diagnostic Laboratories (VRDLs) played a significant role in the surveillance, diagnosis and detection of outbreaks. The Scheme is in the mid-phase for setting up new VRDLs and creating high-quality systems for the existing network which has a significant role in the identification of emerging/ re-emerging viral pathogens at an early stage and preventing the spreading of epidemics. The network of VRDLs is now working in a synchronized way by augmenting the quality parameters for consistent, reliable and high-quality diagnosis; initiated event-based surveillance for fast detection of outbreaks; strengthened coordination of VRDLs with the State Public Health System, Integrated Disease Surveillance Program (IDSP) and National Vector Borne Disease Control Program (NVBDCP).

4.2 118 VRDLs have been established to date out of the set target of establishing 125 VRDLs up to 2020-21. Measures taken to persuade the State Governments to submit proposals for the establishment of more VRDLs include constant follow-up with the State Health Authorities, frequent communication with different Govt. Institutions/Medical Colleges etc. Four Regional advocacy workshops have been organized wherein State Health Authorities from different states were made aware of the Scheme to enable them to submit more proposals for the establishment of VRDLs. More Advocacy Workshops are being planned to cover all the remaining States.

4.3 A statement of financial and physical performance of VRDLs is as given below:-

TABLE-11

(Rs. in Crores)

<b>I. Financial Performance</b>	
BE 2020-21	83.00
RE 2020-21	83.00
Actual Expenditure (up to 19.02.2021)	57.08
<b>II. Physical Performance:</b>	
Total Scheme Target	125 VRDLs (Viral Research & Diagnostic Laboratories)
Total Scheme Target Achieved till date	118 VRDLs
Target for 2020-21 was	17 VRDLs
Achievement during 2020-21 (Up to January, 2021)	10 VRDLs (3 more expected to be established in FY – 21)
Shortfall	7 VRDLs
Target for 2021-22	8 VRDLs
Proposed Scope for the 15 <sup>th</sup> Finance Commission (FY-22 to FY-26)	42 new VRDLs

4.4 The DHR informed the Committee that the main reasons for shortfall in achieving the set physical target for establishing Viral Research & Diagnostic Laboratories (VRDLs) include time taken by State Government to submit proposals and MoUs, long time taken by the

concerned Institutes/medical colleges in identifying the requisite space, etc. The Department further informed that the progress for submission of proposals for the establishment of new VRDLs was affected due to diversion and deployment of resources at the medical colleges/VRDLs and State Governments to deal with testing for the Covid-19 pandemic.

**4.5 The Committee acknowledges that outbreak of pandemic Covid-19 has put extra burden on the available resources. The Committee however, appreciates the efforts of DHR for strengthening the network of Viral Research & Diagnostic Laboratories for managing epidemics and national calamities. The Committee notes that the Department managed to set up 118 VRDLs against the target of setting up 125 VRDLs in 2020-21. Also, 3 more VRDLs are expected to be established by 31.03.2021.**

**4.6 The Committee understands that the financial year 2020-21 was unique as Covid-19 pandemic made it difficult to accomplish the set targets. The Committee, however, feels that DHR should take up the matter with the State Governments to expedite their proposals for establishing VRDLs. The Committee hopes that DHR, put every possible effort in achieving its set target of establishing VRDLs.**

4.7 Financial statement regarding allocation and expenditure of funds for the setting up of nation-wide network of laboratories for managing epidemics and national calamities for FY-20, FY-21 and FY-22 is as under:-

**TABLE-12**

(Rs in Crores)

	<b>Actual 2019-20</b>	<b>BE 2020- 21</b>	<b>RE 2020- 21</b>	<b>Actual Expenditure (up to 19.02.2021)</b>	<b>Projected Demand for 2021-22</b>	<b>BE 2021- 22</b>
<b>Revenue Allocation</b>	69.37	83.00	83.00	57.08	90.00	82.00

**4.8 The Committee observes that as against the projected demand of Rs. 90.00 crores, the scheme has been allocated only Rs. 82.00 crores for the year 2021-22. It is however a matter of concern that for 2020-21, the actual expenditure as on 19.02.2021 is Rs. 57.08 crores only as against the allocation of Rs. 83.00 crores at both BE & RE stages. The Committee was informed that though in 2021-22, the Department is aiming to establish 8 new VRDLs but the provision of Rs. 82.00 crore (BE 2021-22) will suffice the requirement of setting up these new VRDLs and to strengthen the existing network of VRDLs. The Committee recommends that the DHR may project its demand for the scheme considering the length and breadth of the country, size of population, vulnerable sections of the society and frequency of incidence of epidemics and calamities for efficient management and control of the health emergencies. and effective control for optimum utilisation of funds allocated.**

4.9 The Committee wanted to know the key concerned areas of the working of VRDLs, especially in view of the experience gained in the aftermath of outbreak of pandemic Covid-19 and steps that can be taken to equip the network of laboratories in the country with latest tool and technology to tackle/contain future pandemics/ epidemics of the scale of Covid-19. The DHR submitted that the VRDLs have been very successful in undertaking testing of around 10 lakhs tests till 2019 and in the year 2019 the total test conducted are about 3 lakhs. About 143 outbreak detection in 2019 and 1168 since inception. Most importantly, timely diagnosis of Common virus JE, Chikungunya, Dengue, Influenza viruses, Hepatitis A virus (HAV), Hepatitis B virus (HBV), hepatitis C virus (HCV), Hepatitis D or delta virus (HDV) Herpes Simplex Virus (HSV), Cyto Megalo Virus (CMV), Varicella Zoster Virus. (VZV) Measles, Rubella, Mumps, Rota Virus, Adeno Virus, Entero Virus etc. are being done so that prognosis is followed up for effective health interventions. VRDLs have also succeeded in reducing turn-around time for diagnosis of unknown viruses/exotic viruses to 48-72 hours. Through this network, VRDLs could expeditiously detect two subsequent Nipah virus outbreaks in Kerala in 2018 and 2019. Zika virus circulation in India was first detected by the VRDL at Ahmedabad and the subsequent large outbreaks in Rajasthan and Bhopal were also detected early by the VRDLs at Jaipur and Bhopal. This network regularly captures crucial data to determine the composition of yearly influenza vaccines in India and also monitor the trends of emergence of resistance to H1N1 or swine flu. Over the years the network has been extensively trained to handle high risk pathogens like Ebola, Yellow Fever, MERS-CoV and emerging/re-emerging Influenza viruses. The VRDL network provided a basic platform for increasing the testing laboratory capacity from 115 labs in March 2020 to more than 2300 labs today (Feb 10, 2021). Further, VRDLs served as mentor Institutes to hand-hold, train, establish infrastructure at various local private and government medical colleges.

4.10 These labs also served as validation centres for COVID-19 diagnostic commodities under the “*Atmanirbhar Bharat*” initiative of the Hon’ble Prime Minister of India. VRDLs also helped in establishing molecular testing labs for COVID-19 in underserved and difficult terrains like Leh, NER states, A&N and Lakshwadeep Islands. This network though very young in age, has proved its immense value to the public health system of India.

4.11 The state-of-art infrastructure and world class expertise has enabled the country to confidently fight against various emerging/ re-emerging infectious diseases which pose hazard to mankind. India’s farsightedness in terms of creating “*Atmanirbharta*” or self-reliance for diagnosing viral infections makes the country stand-out in the global arena. In order to strengthen our nation for future epidemics/ pandemics various surveillance programmes like event based surveillance, systematic surveillance will be initiated. Laboratory quality systems will be strengthened by inclusion of inter laboratory quality control and external quality assurance programme. Capacity building of health care professionals will be undertaken at a mass scale. In addition to this various multi-centric research studies will be initiated to find answers on disease spectrum, natural history of infection, epidemiological trends, piloting and testing of newer vaccines /interventions.

**4.12 The Committee recommends that to enhance its performance in disease surveillance and monitoring the Department must focus on the following priority areas:-**

- **Network of laboratories should be equipped with the latest tool and technology and**

**increase of testing capabilities;**

- **Expeditious detection of viruses so as to initiate timely and effective health interventions;**
- **Training in handling high risk pathogens;**
- **Testing labs in under-served and difficult terrains;**
- **Strengthening of laboratory quality systems through quality control quality assurance;**
- **Capacity building of health care facilities etc.**

#### **Measures for Contingent Plan for Managing Epidemic and National Calamities**

4.13 The Department has shared following measures to strengthen the contingent plan for managing epidemic and National calamities:

- The testing labs already established for Covid-19 would be supported by capacity building, improving testing quality and training of human resources, etc.
- The network of VRDLs will be expanded by establishment of 42 new VRDLs in the next five years (2021-22 to 2025-26) in addition to supporting the existing 118 VRDLs for staff, consumables, contingency, training and annual maintenance of equipment. In addition, good performing laboratories should be upgraded with high end equipment so that research component may be augmented.

4.14 The action plan in the proposal for continuation of the scheme related managing epidemic and National calamities inter alia provide for the following:

- a) To supply diagnostic kits and reagents (wherever feasible).
- b) To strengthen VRDLs as well as labs in other Medical Colleges / Institutions for diagnosing viral/non-viral agents.
- c) To establish surveillance for high-risk pathogens for early detection, response and research in a prioritized way in different parts of the country.
- d) To strengthen laboratory quality systems in various laboratory networks across the country including the VRDLs.
- e) To create a trained workforce for handling infectious disease pathogens of public health importance.
- f) To conduct multi-centric research programs for Public Health Importance.
- g) To sustain and support the National resource centers for laboratory diagnosis and data capture: – ICMR-National Institute of Virology (NIV), Pune and ICMR-National Institute of Epidemiology (NIE), Chennai



- h) To support capacity building through National and International trainings, National and International Conferences, symposia and workshops, etc.
- i) In addition, the following activities/initiatives form part of the proposals under the PM Atamnirbhar Swasth Bharat Package (DHR-ICMR component) for the next five years:

S.No.	ICMR-Component/ Activities	Total Allocation (2020-21 to 2025-26) Rs. In crores
<b>1. Resources for COVID-19 Emergency Response</b>		
	i. Procurement of testing kits, reagents, lab, equipment, transportation etc.	708.18
<b>2. Bio-security preparedness</b>		
	i. Upgradation of 5 VRDLs into BSL-III (85 cr) ii. Setting up of 4 Mobile BSL-III Laboratories (100 cr) iii. Strengthening of already functional 80 VRDLs (160 cr)	345.00
<b>3. Strengthening Pandemic Research and Multi - Sector National Institutions and Platforms for one Health</b>		
	i. Regional Research Platform South East Asia Region Countries (200 cr) ii. Centre for one Health at Nagpur/Disease Control Centre at Pune/Zonal NIVs at Dibrugarh; New Chandigarh (Punjab) and Bengaluru (383 cr) iii. Support for Research institutes/Capacity Building (349 cr)	932.00
<b>4. Community Engagement /Implementation Management</b>		
	Activities relating communication strategy and awareness and Setting up of Programme Management Unit (PMU)/Technical Support Unit (TSU)	10.00
<b>Total</b>		<b>1995.18</b>

**4.15** The Committee is of the view that a full proof surveillance system of DHR can help in timely identification of viruses and timely health intervention for the same. Further, the Committee believes that the DHR along with Department of Health and Family welfare should formulate a concrete contingent plan to control infections before turning into pandemics/ epidemics. The level of preparedness must be resilient enough to contain the outbreak of epidemics and calamities so that precious human lives could be saved. The Committee, therefore, recommends establishing a robust and highly advance surveillance system for high-risk pathogens for early detection, response and research on an immediate call. In addition to this, the DHR should also create a trained workforce for handling infectious disease pathogens of public health importance. To further strengthen the contingent plan for managing epidemic and National calamities, VRDLs must be trained in Good Clinical Laboratory Practices (GCLP).

**4.16 Keeping in view the pandemic Covid-19 and the response time of the concerned Departments/ agencies, the Committee underlines the need for establishment of more sophisticated labs in different parts of the country. The Committee has been given to understand as of now only one such lab is functioning at Pune, and 2 more labs are proposed to be established. The Committee recommended that in order to cater to the testing needs of the different zones of the country, at least one lab of BSL-IV category in each zone should be established.**

**B. Development of Infrastructure for Promotion of Health Research**

4.17 The Development of Infrastructure for Promotion of Health Research comprises of two schemes:

- I. Multi-Disciplinary Research Units (MRUs) in Government Medical Colleges/Research Institutions.
- II. Establishment of Model Rural Health Research Units (MRHRUs) in States.

**I. Establishment of Multi-Disciplinary Research Units (MRUs) in Government Medical Colleges/Research Institutions**

4.18 As per the Annual Report of the Department, to promote and encourage quality medical research in the country and provide assistance to medical colleges to set up appropriate research facilities, the Department of Health Research rolled out the MRU scheme in the year 2013-14 during 12th five year plan and extended it to the 14th Finance Commission Period i.e. 2017-18 to 2019-20 with total estimated cost of Rs. 394.86 crores. The Government has further extended the scheme for 2020-21. The scheme aims to provide infrastructural support, in terms of civil works, equipment and recurring expenditure, to carry out research focused on non-communicable diseases, to various State Govt. Medical Colleges across the country.

4.19 The physical and financial performance of the scheme is as follows:-

**TABLE-13**

<b>I. Financial Performance</b>	<i>(Rs in crores)</i>
BE 2020-21	60.00
RE 2020-21	58.00
Actual Expenditure (upto 10.02.2021)	39.43
<b>II. Physical Performance:</b>	
Total Scheme Target	90 MRUs
Total Scheme Target Achieved till date	80 MRUs
Target for 2020-21 was	10 MRUs
Achievement during 2020-21 (Upto January, 2021)	NIL (10 more expected to be established in FY – 21)
Shortfall	10
Target for 2021-22	6
Proposed Scope for the 15 <sup>th</sup> Finance Commission (FY-22 to FY-26)	30

4.20 The Committee was informed that the reason for establishments of no MRUs in 2020-21 was the involvement of State Governments/ medical colleges and MRUs in managing Covid-19 pandemic. However, the Department expected that the targets will be achieved in the remaining period of 2020-21 when the Committee desired to know details about the infrastructure projects planned to be undertaken during the year 2021-22 along with estimated expenditure and date of completion of the projects, the Department submitted that it aims to provide grant in aid of Rs. 48.96 crores to the existing MRUs. Besides, it is also proposed to establish 06 new MRUs at the cost of Rs.10.38 crores.

**4.21 The Committee takes serious note of the fact that not a single MRU has been established this financial year. The Committee also notes with concern that out of the total approved 80 MRUs for establishment, research work has commenced only in 47 MRUs. The Committee, therefore, recommends that DHR should speed up the processes to attain the target of establishing 10 MRUs in the current financial year. The Committee also recommends that the Government should expedite approvals for MRUs that are at various stages of consideration. In addition to this, the Committee also recommends that research work in remaining 33 established MRUs must commence at the earliest.**

**C. Establishment of Model Rural Health Research Units (MRHRUs) in States**

4.22 Transfer of research findings/ technologies at the rural level has been found to be major lacuna for providing quality medical services to the rural population. To bridge the gap, Department of Health Research has rolled out a Scheme for ‘Establishment of Model Rural Health Research Units (MRHRUs) in the State’s under the initiative of Infrastructure Development for Health Research in the country.

4.23 The physical and financial performance of the scheme is as follows:-

**TABLE-14**

<b>I. Financial Performance</b>	<i>(Rs in crores)</i>
BE 2020-21	20.00
RE 2020-21	16.00
Actual Expenditure (upto 10.02.2021)	6.05
<b>II. Physical Performance:</b>	
Total Scheme Target:	25 MRHRUs
Total Scheme Target Achieved till date	25 MRHRUs
Target for 2020-21 was	Target is fully met
Achievement during 2020-21 (Upto January, 2021)	Target is fully met
Target for 2021-22	2
Proposed Scope for the 15 <sup>th</sup> Finance Commission (FY-22 to FY-26)	8

**4.24 The Committee expresses its satisfaction over achievement of physical targets set with regard to establishment of MRHRUs. However, the Committee is surprised to note that the set targets have been achieved despite the fact that only Rs. 6.05 crores has been utilised upto 10.2.2021 out of the allocations of Rs. 16.00 crores. Interestingly, the**

**Department has not only achieved its physical target of the scheme i.e. setting up 25 MRHRUs, but has also planned to set up 4 more MRHRUs in the current financial year i.e. 2020-21.**

4.25 The Committee desired to know details about the infrastructure projects planned to be undertaken during the year 2021-22 along with estimated expenditure and date of completion of the projects. The Department submitted that it aims to provide grant in aid of Rs.52.78 crores to the existing MRHRUs. Besides, it is also proposed to establish 02 new MRHRUs at the cost of Rs.4.84 crores. Regarding completion of the projects, the Department maintained that medical research is a continuous activity and goes on as per the national and local health priorities.

**4.26 The Committee understands that MRHRUs act has an interface between patient and health researchers that help in providing latest and sophisticated technology for diagnosis and management of diseases in rural areas. The Committee, therefore, recommends that DHR, while considering to set up more number of MRHRUs in the rural areas should make realistic assessment of financial requirement for the purpose and accordingly, approach the Ministry of Finance for allocation of required funds.**

4.27 Financial statement regarding allocation and expenditure of funds for Development of Infrastructure for Promotion of Health Research for FY-20, FY-21 and FY-22 is as under:-

**TABLE-15**

(Rs in Crores)

	<b>Actual 2019-20</b>	<b>BE 2020-21</b>	<b>RE 2020-21</b>	<b>Projected Demand for 2021-22</b>	<b>BE 2021-22</b>
<b>Revenue Allocation</b>	72.50	80.00	74.00	105.00	80.00

4.28 The Committee observes that as against the projected demand of Rs. 105.00 crores the scheme was allocated only Rs. 80.00 crores for the 2021-22. The Committee, notes with concern that for 2020-21, out of the RE allocation of Rs. 74 crores the actual expenditure incurred is Rs. 52.59 crores only as on 19.02.2021. Apprising the Committee about the outcomes of the funds so utilised during 2020-21, the Department replied that as of now, 686 research projects in MRUs and 204 research projects in MRHRUs are under way.

**4.29 The Committee recommends that, to foster quality research work at the level of Medical Colleges and rural facilities, the Department should adequately incentivise the health researchers to bolster their enthusiasm. Simultaneously, measures need to be taken to modernize existing network of MRUs and MRHRUs so that these facilities available therein can be used as potential sites for high quality clinical trials required to counter pandemics like Covid-19 also need to be taken.**

#### **D. Development of Tools/ Support to Prevent Outbreaks of Epidemics**

4.30 As per information furnished by the Department, viral diagnosis today is a major health problem and repeated outbreaks of new viral agents have become common phenomena. Accordingly, a separate budget line was created in 2015-16 with a small budget provision to meet additional requirements for supply of diagnostic kits, transport of samples, hiring of additional manpower, etc. during such outbreaks. The inadequacy of specialized laboratories equipped with latest equipment in the country, especially at secondary and tertiary level has severely affected the response time in identification of the viruses and quick mobilization in the event of outbreaks/ response to infectious disease out-breaks/epidemics, viz, the H1N1 viruses that gripped the nation in 2010 and during the Swine flu outbreaks in the past.

**TABLE-16**

<b>I. Financial Performance</b>	<b>(Rs in crores)</b>
BE 2020-21	7.29
RE 2020-21	12.26
Actual Expenditure (upto19.02.2021)	6.78
Expected achievement up to 31.3.2021	12.26
BE 2021-22	15.00
Projected Demand for 2021-22	15.00

4.31 The Department informed the Committee that there are no pre-planned targets under this scheme. Funds are released against specific proposals received from the State Governments/medical colleges/research institutes, etc for supply of diagnostic kits, training of staff, collection of samples, procurement of reagents for testing of samples, research activities, etc on case-to-case basis. The allocation in RE (2020-21) has been increased to Rs.12.26 crores to meet the additional requirements due to Covid-19 pandemic. Funds to the tune of Rs 34.38 lakhs were released to IGMC, Shimla for the research project undertaken on Dynamics of Transmission of Hepatitis Viruses in Shimla city and its Surrounding Areas. Rs 49.83 lakhs were released to NIV Field Unit, Mumbai for Measles Elimination and Rubella Control Programme; Rs 90.18 lakhs were released for COVID -19 to NIV, Pune; Rs 148.17 lakhs were released to four VRDLs to provide manpower support to fight against Covid-19. Funds to the tune of Rs 3.02 crores were released to undertake Inter-laboratory quality control for SARS-CoV-2. In order to continue the quality control activity of scrub typhus and its surveillance funds to the tune of Rs 53.50 lakhs were released. Also, proposals to the tune of Rs. 4.5 crores (approx.) relating to continuation of Inter-laboratory quality control for SARS-CoV-2and systemic surveillance of influenza are in pipeline.

**4.32 The Committee expresses its anguish over poor financial performance to the tune of Rs. 6.78 crores against RE allocation of Rs. 12.26 crores in the 2020-21. The Committee has been given to understand that the budget of the Scheme has been increased from Rs. 7.29 crores to Rs.12.26 crores in order to resume influenza surveillance, which could not be undertaken due to pandemic during the first half of the financial year. The Committee however, apprehends that the poor utilisation of funds would have seriously hampered the surveillance of Influenza. The Committee, therefore, recommends that DHR must improve the absorption capacities of its institutions to spend the entire funds allocated to it in a given**

financial cycle. The Committee also notes that the projected demand of the DHR was met in the BE allocation of 2021-22. The Committee hopes that the scheme is implemented effectively and funds allocated are utilised fully.

**D. Human Resource and Capacity Development**

4.33 The budgetary provision under Human and Resource and Capacity Development is meant for (i) fellowships for training in health research under the scheme of Human Resource Development of Health Research; (ii) Grant in aid Scheme for inter-sectoral convergence for health research & governance issues including Health technology Assessment and (iii) International Co-operation in Medical & Health Research including work related to International Conferences. The status of allocations under the scheme is as follows.

4.34 Financial statement regarding allocation and expenditure of funds for Development of Tools/ Support to Prevent Outbreaks of Epidemics for FY-20, FY-21 and FY-22 is as under:-

**TABLE-17**

(Rs in Crores)

	<b>Actual 2019-20</b>	<b>BE 2020-21</b>	<b>RE 2020-21</b>	<b>Expenditure for 2020-21 (Upto 19.2.2021)</b>	<b>Projected Demand for 2021-22</b>	<b>BE 2021-22</b>
<b>Revenue Allocation</b>	71.81	92.00	57.03	26.22	100.00	83.00

4.35 The Committee notes that the BE 2020-21 of Rs. 92.00 crores for the scheme was sharply reduced at the RE stage to Rs. 57.03 crores. The DHR clarified that the main reason for it was the limited scope for expenditure due to the Covid-19 situation. The actual expenditure as of 19.02.2021 is mere Rs. 26.22 crores. However, the DHR expects that the allocation in RE 2020-21 would be fully utilized. The Committee recommends to make all out efforts to ensure the allocation made to the tune of Rs. 83.00 crore is optimally utilised for the intended purpose.

**(i) Human Resource Development for Health Research**

4.36 The Human Resource Development Scheme of the Department of Health Research is intended to create a pool of talented health research personnel in the country by upgrading the skills of faculty of Medical Colleges/ Institutes, mid-career Scientists, medical students, etc., y specialised training in priority areas of health research in leading national and international institutions, encourage and support the trainees to develop take-up research projects for addressing critical national and local health problems and financial assistance to Institutions for up-gradation of infrastructure to enable such institutions to provide training with state of the art technologies.

**TABLE-18**

<b>I. Financial Performance</b>	<b>(Rs in crores)</b>
BE 2020-21	34.00
RE 2020-21	18.00
Actual Expenditure (upto 10.02.2021)	7.37
BE 2021-22	27.00
<b>II. Physical Performance:</b>	
Total Scheme Target:	
Total Achievements to date	531 fellowships including start-up projects
Target for 2020-21	65 Fellowships, 30 startup projects and support to 12 institutes
Achievement during 2020-21 (Upto January 2021)	72 fellowships, support to 2 Institutes and 30 startup projects
Target for 2021-22	80-100 fellowships
Proposed Scope for the 15 <sup>th</sup> Finance Commission (FY-22 to FY-26)	Award of 655 Fellowships for training in India & abroad. Support to 25 Research Institutes & 10 Scientific bodies/associations. 50 Startup projects on priority areas of health research by the trainees/fellows.
Reasons for the shortfall:	The allocation made in 2020-21 could not be fully utilized as of date, since due to the COVID-19 pandemic, the funding of ongoing projects has been delayed as the projects could not be accomplished by the fellows. Besides, new projects could not be funded so far and the evaluation of the new proposals received would be undertaken after easing out of Covid-19 pandemic.

**4.37** The Committee notes that allocation made in 2020-21 could not be fully utilized due to COVID-19 pandemic. The funding of ongoing projects got delayed as the projects could not be accomplished. Besides, new projects could not be funded for their evaluation would be undertaken after easing out of Covid-19 pandemic. The Committee expects the Department would strive hard and put in extra efforts in the upcoming year 2021-22 to achieve the targets set for 2020-21 as well.

**4.38** The Committee was informed that the physical achievements under the scheme of Human Resource Development for health research depend on the availability of budget vis-à-vis the number of quality applications received under the scheme.

**4.39** The Committee recommends that the DHR must encourage more and more fellow researchers to undertake research projects so that positive interventions in the form of new

**products and tools can be brought into the public health system for combating the challenges of emerging and re-emerging viruses. The Committee also recommends that the HRD scheme of DHR must accomplish the objective of the creation of a pool of talented health research personnel in the country.**

**(ii) Health Technology Assessment**

4.40 The Government of India is committed to extending health care services to its 1.37 billion populations as part of India’s Universal Health Coverage (UHC) agenda. The main purpose of the HTAIn is to engage in explicit and evidence-based priority setting of health resources towards providing universal health coverage for all individuals. HTA will help to bridge the evidence to policy gap and ensure alignment of academic and policy gap and policy interests towards the common goal of improving decision-making for health resource allocation to improve the health of the Indian population.

**Objectives and Significance of HTAIn:**

- Maximising health, reducing out of pocket expenditure (OOP) and reducing inequity.
- To support the process of decision-making in health care at the Central and State policy level by providing reliable information based on scientific evidence.
- Develop systems and mechanisms to assess new and existing health technologies by a transparent and inclusive process.
- To appraise health interventions and technologies based on available data on resource use, cost, clinical effectiveness, and safety.
- To collect To collect and analyse evidence in a systematic and reproducible way and ensure its accessibility and usefulness to inform health policy.
- Disseminate research findings and resulting policy decisions to educate and empower the public to make better informed decisions for health.

4.41 The physical and financial performance of the scheme is as follows:-

**TABLE-19**

<b>I. Financial Performance</b>	<b>(Rs in crores)</b>
BE 2020-21	25.00
RE 2020-21	15.00
Actual Expenditure (upto 10.02.2021)	5.86
RE 2021-22	23.00
<b>II. Physical Performance:</b>	
Total Scheme Target:	
Achievements to date	No. of evidence-based policies issued on Health Technology Assessment (HTA)-13 No. of new topics for Health Technology Assessment -18
Target for 2020-21	No. of evidence-based policies issued on Health Technology Assessment (HTA)-6 No. of new topics for Health Technology



	Assessment. -14
Achievement during 2020-21 (Upto January 2021)	No. of evidence-based policies issued on Health Technology Assessment (HTA)-7 studies have been completed approved by the Board and policies will be issued  No. of new topics for Health Technology Assessment. -15
Target for 2021-2	30 New HTA Studies, 4 new DIAMONDS Centres
Proposed Scope for the 15 <sup>th</sup> Finance Commission (FY-22 to FY-26)	i) HTA studies:125 ii) New Resource Centres for HTA: 12 iii) New DIAMONDS Centres: 15 Issue of Policy Briefs/Guidelines on Evidence-Based Studies on HTA 30
Reasons for the shortfall:	The allocation in RE 2020-21 is expected to be fully utilized.

**4.42 The Committee notes that under Health Technology Assessment in India (HTAI) scheme/activities to analyze evidence related cost-effectiveness and clinical effectiveness for the deployment of health technologies covering medicines, devices and health programmes, are undertaken, which in turn ensures effective and optimal utilization of health budget and easy access to quality healthcare at the minimum cost. Its main objective is to reduce out of pocket expenditure and address inequality. The Committee, therefore, recommends optimal utilization of allocated funds to minimize the cost for quality healthcare, especially in rural, urban slums and tribal areas.**

4.43 Actual allocation and data regarding utilization trends during the last five years for Human Resource and Capacity Development are as follows:-

**TABLE-20**

*(Rs in crores)*

Financial Year	Actual Allocation		Expenditure
	BE	RE	
2016-17	28.25	28.25	31.66
2017-18	46.00	63.00	58.53
2018-19	72.00	28.01	23.77
2019-20	87.00	77.00	71.81
2020-21 (Upto 19.2.2021)	92.00	57.03	26.22

**4.44 The Committee understands that due to problems posed by Covid-19, the funds could not be utilised fully. The Committee, however, is of the view that despite certain restriction due to the Covid-19 pandemic, academic research work could have progressed.**

**The Committee recommends to the Department to ensure proper supervision and monitoring of the work being done under these schemes during the year so that the time lost is compensated and the allocated funds are not left idle. The Committee would like to emphasise that unless there is adequate budgetary allocation followed by optimal utilization of allocated fund, the DHR would find it very difficult to constitute a pool of talented, knowledgeable and trained medical researchers. At the same time, the Committee further underlines the importance of capacity building by providing financial assistance and other social security measures to health researchers to build a dedicated pool of researchers.**

## **RECOMMENDATIONS/OBSERVATIONS OF THE COMMITTEE-AT A GLANCE**

### **RESPONSE TO COVID-19**

The Committee observes that the Covid-19 pandemic has created the need for transformation of the allocation of budgetary resources for research and innovation in the health sector. The Department of Health Research being the nodal department for medical research needs to reorient its focus in strengthening research capabilities and infrastructure and reinvigorating interest in medical research amongst the youth. Availability of up-to-date, sophisticated, state of the art research infrastructure will provide impetus to research and innovation. These insights help in formulating group or population-specific policies. Technologically backed, swift and accurate testing & diagnostic services will effectively counter existing and emerging viral diseases. Incorporating niche technologies like ML and AI in understanding human behaviour and tendencies can generate qualitative insights into issues like how human behaviour impacts the transmission of diseases. The Covid-19 pandemic has made us realize that there is an urgent need for improving infrastructure for enhancing bio-security in the country by strengthening testing and research facilities. Department of Health Research needs to ramp up its resources and strategic research priorities.

(Para 1.6)

The Committee is of the opinion that a crucial body like DHR cannot be made to suffer due to a shortage of administrative staff when the country is confronting the annual epidemic of Dengue, Chikungunya, Japanese Encephalitis etc. added by the outbreak of new viruses. Optimum utilization of the allocated budget and actual efficiency of the Department can only be realized when it functions at its full capacity. The work and responsibility of the Department have increased tremendously due to Covid-19 and a significant number of other strains reported worldwide. The Committee agrees with the Department that to deal with future pandemic situations there is a need to bring more professionalism in the Department and such objectives can be achieved by having more scientific staff; enhanced capacity of experts through skill integration, provision of incentives through rewards, etc.

(Para 1.10)

### **FILLING UP OF VACANT POSTS IN DHR**

The Committee, therefore, recommends that the Department should assiduously and forcefully take up the matter with the Department of Health & Family Welfare, Department of Personnel & Training and Department of Expenditure to fill up the vacant posts and also to approve the creations of additional posts required. The Committee expects the concerned Department to accede to the genuine requests of the Department in this regard in a time-bound manner. The Committee also believes that the Department needs to work in close coordination with the Department of Health & Family Welfare (DoH&FW), Department of Biotechnology (DPT), CSIR-Centre for Cellular & Molecular Biology (CCMB) and other similar organisations involved in health research so as to establish a sync between Research-Policy-Public Health system interface. The Committee acknowledges the DHR's concerted efforts in translating modern health technologies and innovations into the public health system through in-depth research and investigation.

(Para 1.11)

## **BUDGETARY ALLOCATION TO THE DHR**

The Committee notes that the projected demand of the Department and the actual allocation indicates a shortfall of Rs. 649.33 crores even though there a marginal increase of Rs. 563.00 crores when compared to the budgetary allocation of 2020-21. The Committee is concerned that the shortfall will impact important Central Sector Schemes of DHR such as Infrastructure for promotion of Health Research (MRUs & MRHRUs) and Human Resource and Capacity Development and will adversely affect the operations of ICMR. Given the present circumstances, when the entire focus is on the pandemic Covid-19 entailing diversion of resources towards tackling the said pandemic, the Committee observes that the fund allocated to the Department of Health Research are inadequate to cater for its mandate in R&D. The Committee fails to understand that if a globally debilitating pandemic cannot spur health research spending, what would prompt the policy-makers to allocate adequate fund to the DHR.

(Para 2.3)

The Committee notes that even though the budgetary allocation for DHR is witnessing a consistent increase, but the increase, in allocation in the year 2021-22 has not been significant. While it is noteworthy that the allocation as a percentage of projection has gradually increased over the years, the overall DHR expenditure is still only 3.74% of the Department of Health & Family Welfare in FY 21-22. If taken as the percentage of the GDP (Real) (as per first AE for FY-21) the public expenditure for health research is a meagre 0.02%.

(Para 2.4)

The Secretary, DHR in his deposition before the Committee submitted that ideally, the overall public expenditure on health research should be at least 5% of the budget of the Department of Health & Family Welfare. The current allocation of 3.74% is thus short by 1.26%. The Committee, therefore, recommends that the Government should make all-out efforts to allocate 5 per cent of the budget of the Department of Health & Family Welfare to DHR at the R.E. stage.

(Para 2.5)

## **UNDER UTILISATION OF FUNDS BY DHR**

The Committee notes with concern that there is under-utilisation of funds with respect to the DHR schemes, DHR Secretariat Expenditure and allocation for Covid-19 emergency response.

(Para 2.7)

The Committee further notes that out of the total Rs. 4062.30 crores allocated to the Department at the RE stage of 2020-21, the Department has been able to utilise only around 74% of the funds till February 10, 2021. The Committee is disturbed to note that

the Department failed to fully utilise one time grant of Rs. 2100 crores for emergency response. The actual utilization till 31.01.2021 from this one time grant is only Rs. 1067.82 crores. Similarly, out of the total Rs. 1594.46 crores allocated to the ICMR, only Rs. 1305.06 crores have been spent till 31.01.2021.

(Para 2.8)

While this Committee appreciates that the scarce budgeting could be saved mainly due to indigenous production of testing kits and reduction in their prices, it feels that under-utilisation of the allocated funds would give the Department of Economic affairs the basis to curtail the budgetary allocations to the DHR.

(Para 2.9)

The Committee desired to know the reasons for low expenditure in DHR Schemes, COVID-19 emergency package and by ICMR with respect to the funds allocated under RE 2020-21. The Department replied that it is due to fewer requirements for procurement of testing kits, equipment/machines, reagents for Covid-19 and a drastic reduction in their prices over some time. The Department also informed that if any additional need arises in 2021-22, the requirement will be projected at the RE stage. The Committee, therefore, recommends that the Department should effectively ramp up the utilisation of funds allocated at both the BE and RE stage in each quarter to ensure optimum utilisation of resources. The Committee is also not convinced by the reasons given by the Department for the under-utilisation of funds especially for low utilisation in DHR Schemes where funds to the tune of Rs. 92.21 crores are yet to be spent in less than a month.

(Para 2.10)

#### REASONS FOR UNDER-UTILISATION

The Committee observes that the Department as on 12.2.2021 has been able to spend only 73.75% i.e. Rs. 2996.09 crores out of the total allocated 4062.30 crores at the RE 2021-22. The Committee also notes gross underutilisation (only 67.33% of the RE) of the funds in some of the pivotal schemes like the establishment of Network of Viral Diagnostic & Research Laboratories for Managing Epidemics; Development of Tools to prevent outbreaks of epidemics (55.30% of RE); establishment of MRHRUs (37.81% of RE); establishment of Multidisciplinary Research Units (MRUs) in Govt. Medical Colleges (only 67.98% of RE). All this apparently reflects the poor absorption capacity of the agencies implementing schemes and programmes.

(Para 2.12)

The Committee is of the view that though the year 2020 witnessed the Indian Council of Medical Research (ICMR) oversee the management of the Covid-19 response in the country, but the RE 2020-21 of ICMR was surprisingly decreased. The Committee notes that though the BE 2021-22 for ICMR is almost 31% more than the BE 2020-21, yet the allocation is inadequate considering the volume of ICMR's responsibilities. It is worth reminding here that the DRSC on Health & Family Welfare has consistently recommended higher allocation to DHR considering the rise in pandemics, epidemics and other similar viral diseases which have the potential to threaten large swathes of the human population. However, the absorption capacity of the

**implementing agencies should be commensurate with the projected financial requirement of the Department. The Committee, therefore, has repeatedly stressed and once again reiterate the need to strengthen the absorption capacity of the implementing agencies of the schemes and programmes for intended utilization of the allocated funds.**

**(Para 2.13)**

**The Committee understands that the NE region lags when it comes to the implementation of schemes. This underlines the lack of an effective monitoring mechanism to identify regions that are not performing expectedly. The Committee, therefore, recommends the DHR to improve the monitoring mechanism for timely execution of schemes/programmes undertaken. The Committee suggests that the Department must assess or find reasons for a staggered implementation of schemes in the North-Eastern (NE) region; identify the problem areas and find solutions thereof. If the implementation of schemes does not gain momentum, the Department may restructure/ revamp the schemes and also popularize amongst the local masses for its successful implementation. The Committee believes that funds allocated for the N.E region should be utilised judiciously. The optimum and time-bound utilisation of funds would also strengthen DHR's claim of higher budgetary allocation from the Ministry of Finance (MoF).**

**(Para 2.16)**

**The Committee notes that the pandemic Covid-19 has underlined new dimensions in budgetary allocations. Given the emerging and unpredictable health hazards, there is a dire need for additional resources and resilient infrastructure for enhancing bio-security in the country. The Committee, therefore, recommends that the Department must formulate sector-specific strategies for different regions to strengthen bio-security in the country. The Committee recommends higher budgetary allocations to the Department for enhancing its research infrastructure aimed towards strengthening, upgrading and developing more research and testing facilities to counter existing and emerging viral diseases. The Committee further believes that global logistic chains, indigenous technologies, vaccines and researches must be promoted considering the global nature of emerging health emergencies. The Committee would therefore recommend that budgetary allocation to the Department of Health Research should be enhanced substantially.**

**(Para 2.18)**

#### **INDIAN COUNCIL OF MEDICAL RESEARCH (ICMR)**

**The Committee appreciates the ICMR's track record with respect to the utilisation of funds. Barring the year 2020-21, the ICMR has a near-perfect track-record of utilising the budgeted funds. The Committee, however, is surprised to note that the grant that ICMR receives is less than the actual allocation that the DHR gets in the name of ICMR. It is quite intriguing to the Committee that while on the one hand the Ministry of Finance does not allocate the fund as per the projected demand and even the allocated fund is not released in totality to the ICMR. The Committee opines that the role of ICMR is very crucial considering the current and future health challenges; inadequacy of funds to ICMR can undermine the desired outcomes in the health sector. The Committee, therefore,**

recommends that sufficient funds must be released to ICMR including additional funds, at the RE stage.

(Para 3.4)

#### **WORKFORCE STRENGTH IN ICMR**

The Committee notes with concern that the ICMR is understaffed and is therefore working at reduced capacity. Out of the total 876 posts, currently, only 600 posts are filled up. The Committee has been informed that the recruitment for the 221 posts is currently in progress and the process would be finalised soon. The Committee is unhappy with the casual way the urgency of filling vacant posts in the ICMR is being handled. The Committee notes that for most of the 221 posts for which the recruitment is in progress, the recruitment process began in the months of November, December 2020 and till now the recruitment is still incomplete.

(Para 3.6)

The Committee recommends that the ICMR must formulate proper Recruitment Rules/guidelines to complete the recruitment process within a definite time frame. The schedule (date-wise) for the complete recruitment process should be notified well in time to help both the probable applicants and the recruitment conducting authorities.

(Para 3.7)

#### **BUDGETARY SHORTFALL IN ICMR**

The Committee observes with concern a significant shortfall against the project demand to ICMR. The Committee understands the key role played by the ICMR and its associated organisations in fighting the Covid-19 pandemic. It is needless to mention; health research activities need to be promoted and encouraged to tackle future health care challenges/diseases. The Committee, therefore, recommends that the Department of Expenditure should provide the additional funds to the tune of Rs. 599.33 crores for FY-22 at the RE stage for ICMR.

(Para 3.10)

#### **FUTURE ROADMAP FOR ICMR**

The Committee expects the ICMR to formulate a long term vision document, comprising of its long term goals and objectives, technological interventions required to undertake action plans for improving the efficiency of the country's health systems and how it intends to provide quality, easily accessible and affordable healthcare to every citizen. The vision document should spell out the roadmap for the ICMR with which the schemes would be conceived, improvised, implemented and evaluated to overcome the health challenges encountered by mankind in general and India in particular.

(Para 3.11)

#### **Other Achievements**

The Committee places on record its deep sense of appreciation for the path-breaking work done by the ICMR especially with respect to tackling Covid-19 by way of up-gradation and leveraging of testing capabilities, researches on the corona virus and the development of a vaccine in collaboration with Bharat Biotech. The Committee believes that in critical times when the entire world had been struggling with Covid-19, the ICMR rose to the occasion, took swift measures and made commendable efforts for enhancement of its testing and research capabilities which not helped the country overcome the pandemic situation but also saved resources through production of essential kits.

(Para 3.15)

The Committee is pleased to know that the ICMR is an equal partner in its MoU with Bharat Biotech. The Committee strongly recommends that the 5% royalty from Bharat Biotech be given to the ICMR exclusively for research and development.

(Para 3.17)

The Committee appreciates ICMR for publishing 779 research papers /research documents, filing 16 patents and 34 tech developments in FY 2020-21 (till December 2020). The ICMR had similar achievements in FY 2019-20 too. The Committee hopes that these researches once scientifically validated and approved would be translated into technology and benefit the common man.

(Para 3.19)

## **INTEGRATION OF RESEARCH WORK WITH AYUSH SYSTEMS**

The Committee is of the opinion that every system of medicine has its own speciality and thus there is no harm in exploring the avenues of supplementing the modern system of medicine with the Indian system of medicine. Of late there is a growing perception supported by some practical evidence that systems of traditional medicines like Ayurveda and Homoeopathy work better than the modern medicine system when it comes to diagnosis and treatment of some serious and life-style based diseases. The Committee, therefore, appreciates the collaboration of ICMR with the Ministry of AYUSH for scientific validation of Ayurvedic formulations for dengue fever and also engagement in a clinical study for the treatment of NAFLD. The Committee recommends that ICMR must regularly follow up with the Ministry of AYUSH for the immediate release of grants to carry out "Double-blind Randomized control clinical study" for the "Evaluation of Ayush-GMH in the subjects of mild to moderate non-alcoholic fatty liver disease (NAFLD)". The Committee also recommends that as and when the final report is released by CCRAS regarding "Randomized Controlled Clinical study of the Ayurveda formulation- PJ17 for the management of Dengue fever"; and if the said Ayurvedic formulation is found effective in tackling Dengue fever, the ICMR must take necessary steps for speedy intervention of this drug in the public health system. The final report should also be placed in the public domain. The Committee also recommends DHR to make efforts to take more and more



projects for the validation of traditional medicines so that their efficacy could be scientifically proved and people don't hesitate to accept them.

(Para 3.22)

The Committee appreciates the steps taken by the ICMR to improve its physical and financial performance. The Committee is of the view that ICMR being the apex medical research body in the country should have the best infrastructure and other resources to carry out its mandate effectively. The ICMR should have the best team of renowned scientists/experts working towards research priorities that coincide with the national health priorities. The objective of promoting the health and well-being of the country's population can only be ensured by goal-oriented research studies seeking standardised and scientific methodologies for reducing the disease burden of the country. The Committee underlines adequate provisioning for ICMR resources to strengthen its physical and financial performance. The Committee recommends that more measures i.e. creation of career development path for mid-level scientists and conducting research in mission mode must also be initiated at the earliest.

(Para 3.24)

#### **SKILLING OF MANPOWER**

The Committee recommends that the ICMR should carry out comparative studies of mechanisms/ processes that similar organisations of other countries have put in place to spur professional, social, personal and thus holistic development of their workforce particularly scientists.

(Para 3.25)

The Committee also recommends ICMR to conduct regular training and workshops of its scientists and researchers to keep them abreast with the latest developments and findings in medical research. The Committee believes that most of the times there is the protracted threat of research being limited to thesis and journals. Thus, such workshops will help researchers and scientists gain valuable insights into how research can be done keeping in view the ultimate goal i.e. betterment of public health.

(Para 3.26)

#### **CHALLENGES FACED BY ICMR**

The Committee fully agrees that there are administrative, infrastructural, financial hurdles identified by ICMR & NITI Aayog and recommends the Department to make all-out efforts to overcome these hurdles at the earliest.

(Para 3.29)

The Committee also recommends that the DHR must immediately take up the issue of financial rules that prevent re-appropriation of funds with the Ministry of Finance (MoF) along with the need for doing away with filing a separate proposal with the

Department of Expenditure for manpower requirement. In addition to this, the Committee also recommends that the Department may propose the Ministry of MSMEs to exempt the scientific Departments like ICMR from compulsorily procuring at least 20% of their total procurement from Medium & Small Enterprises (MSEs). The Committee also urges with Ministry of Finance (MoF) and other concerned bodies like IRDA to consider providing insurance coverage to scientific/ research trials as such measures/initiative would significantly reduce the research time. The Committee suggests the Department of Health Research to share these issues with the concerned Departments and regularly follow-up with them for final resolution.

(Para 3.30)

### **MAKING CANCER A “NOTIFIABLE DISEASE”**

The Committee is pained to note that the efforts to make cancer a “Notifiable Disease” are being made since 1982 without much success as only 11 States have been taken on board so far. The Committee, however, appreciates ICMR’s persistent and concerted efforts in making Cancer a “Notifiable Disease”. The Committee notes that according to the estimates of the National Cancer Registry Programme Report 2020, released by the ICMR and NCDI Bengaluru, based on current trends cancer cases in India are likely to increase to 15.7 lakhs by 2025, which could drive policy decisions. This will also help in better cancer screening, early detection, referral, treatment and palliative care services throughout the country. Considering the scourge that the disease can become if not reigned in soon, the Committee recommends that the ICMR must continue its concerted efforts to make Cancer a “Notifiable Disease”. The Committee would like the Department to take up the matter at the highest decision making levels of the States.

(Para 3.32)

Cancer is fast emerging as a major to the life and well being of the people as its treatments is too costly to be afforded by even middle-class family. The Committee, therefore, recommends that ICMR must undertake research on therapeutic or curative drugs in a mission mode to reduce their cost and make them affordable.

(Para 3.33)

### **“ONE HEALTH” AND OTHER RESEARCH AVENUES**

The Committee is pleased to note that the ICMR is planning to establish the country’s first-of-its-kind Centre of One Health on the campus of Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur to view human health not in isolation but in conjunction with biotic and abiotic elements like plant life, animal life, the physical environment is a step forward in the right direction. The Committee believes that the concept of One Health must be effectively implemented for reducing the incidence of emerging zoonotic threats like COVID-19. The Committee recommends that the Department must promote One Health research for developing a sustainable disease control system that uses real-time health analytics and highly advanced data management tools for accurate results. Further, such a model must be scaled up across the country.

(Para 3.35)

The Committee further recommends ICMR to establish meaningful research collaborations across the world. Moreover, medical, veterinary, paramedical sectors and bioscience researchers must be integrated to form a task force to address the emergent issues. The Committee recommends that the ICMR should collaborate with health, veterinary, agriculture and life science research institutions and universities to broad base its R&D.

(Para 3.36)

## **INCORPORATING AI IN RESEARCH**

The Committee appreciates ICMR's vision of incorporating modern technologies like AI for the detection and diagnosis of serious contagious diseases like TB. The Committee notes that the ICMR's role in this collaboration is primarily data generation and validation of the tool. The Committee, however, recommends that the ICMR must use high quality annotated training data sets to train this AI tool. The ICMR must generate exhaustive and large datasets to train this model for various exigencies involved during the testing and screening of patients for TB. The Committee would like to further recommend that the Department must carry out studies concerning the readiness of health centres, the skillset of healthcare personnel and the suitability of overall infrastructure areas to ascertain the effectiveness of such a model.

(Para 3.39)

## **STUDY ON UNDER-NUTRITION, FLUOROSIS, IDD, VITAMIN-A DEFICIENCY**

While appreciating the initiatives of ICMR to combat malnutrition, the problem of fluorosis, IDD and menace of Vitamin-A deficiency, the Committee is of the considered view that given the mandate of ICMR with regard to medical and health research, a lot more needs to be done. The Committee recommends that the DHR must complete the studies on the prevalence of fluorosis, Vitamin A deficiency and IDD and finalise the report as soon as possible. The Committee would like to be updated on the findings of the studies and the actions taken by DHR thereon. The Committee also recommends the Department to promote such studies in other regions of the country and incorporate findings of such studies in the National Health Policy.

(Para 3.41)

## **INDIA'S PERFORMANCE IN THE GLOBAL HUNGER INDEX 2019 AND THE CONSEQUENT ACTIONS TAKEN BY THE DHR.**

The Committee endorses the Expert Committee's view that the latest data for India was not used in computing various indicators of GHI and also appreciates the Expert Committee for trying to remove the lacunae in measuring hunger by involving other concerned Ministries. The Committee believes that there should be objective assessment and proper measuring of hunger to generate the actual and real data on hunger. The Committee, therefore, recommends that the research concerning a specific Hunger Index that is more suitable to India's dynamics and demography must be undertaken.

(Para 3.43)

### **ESTABLISHMENT OF VIRAL DIAGNOSTIC & RESEARCH LABORATORIES (VRDL) TO MANAGE EPIDEMICS AND NATIONAL CALAMITIES**

The Committee acknowledges that outbreak of pandemic Covid-19 has put extra burden on the available resources. The Committee however, appreciates the efforts of DHR for strengthening the network of Viral Research & Diagnostic Laboratories for managing epidemics and national calamities. The Committee notes that the Department managed to set up 118 VRDLs against the target of setting up 125 VRDLs in 2020-21. Also, 3 more VRDLs are expected to be established by 31.03.2021.

(Para 4.5)

The Committee understands that the financial year 2020-21 was unique as Covid-19 pandemic made it difficult to accomplish the set targets. The Committee, however, feels that DHR should take up the matter with the State Governments to expedite their proposals for establishing VRDLs. The Committee hopes that DHR put every possible effort in achieving its set target of establishing VRDLs.

(Para 4.6)

### **BUDGETARY ALLOCATION AND UTILISATION**

The Committee observes that as against the projected demand of Rs. 90.00 crores, the scheme has been allocated only Rs. 82.00 crores for the year 2021-22. It is however a matter of concern that for 2020-21, the actual expenditure as on 19.02.2021 is Rs. 57.08 crores only as against the allocation of Rs. 83.00 crores at both BE & RE stages. The Committee was informed that though in 2021-22, the Department is aiming to establish 8 new VRDLs but the provision of Rs. 82.00 crore (BE 2021-22) will suffice the requirement of setting up these new VRDLs and to strengthen the existing network of VRDLs. The Committee recommends that the DHR may project its demand for the scheme considering the length and breadth of the country, size of population, vulnerable sections of the society and frequency of incidence of epidemics and calamities for efficient management and control of the health emergencies. and effective control for optimum utilisation of funds allocated.

(Para 4.8)

The Committee recommends that to enhance its performance in disease surveillance and monitoring the Department must focus on the following priority areas:-

- Network of laboratories should be equipped with the latest tool and technology and increase of testing capabilities;
- Expeditious detection of viruses so as to initiate timely and effective health interventions;
- Training in handling high risk pathogens;
- Testing labs in under-served and difficult terrains;
- Strengthening of laboratory quality systems through quality control quality

- assurance;
- Capacity building of health care facilities etc.

(Para 4.12)

#### **STEPS TO IMPROVE PERFORMANCE**

The Committee is of the view that a full proof surveillance system of DHR can help in timely identification of viruses and timely health intervention for the same. Further, the Committee believes that the DHR along with Department of Health and Family welfare should formulate a concrete contingent plan to control infections before turning into pandemics/ epidemics. The level of preparedness must be resilient enough to contain the outbreak of epidemics and calamities so that precious human lives could be saved. The Committee, therefore, recommends establishing a robust and highly advance surveillance system for high-risk pathogens for early detection, response and research on an immediate call. In addition to this, the DHR should also create a trained workforce for handling infectious disease pathogens of public health importance. To further strengthen the contingent plan for managing epidemic and National calamities, VRDLs must be trained in Good Clinical Laboratory Practices (GCLP).

(Para 4.15)

Keeping in view the pandemic Covid-19 and the response time of the concerned Departments/ agencies, the Committee underlines the need for establishment of more sophisticated labs in different parts of the country. The Committee has been given to understand as of now only one such lab is functioning at Pune, and 2 more labs are proposed to be established. The Committee recommended that in order to cater to the testing needs of the different zones of the country, at least one lab of BSL-IV category in each zone should be established.

(Para 4.16)

#### **ESTABLISHMENT OF MULTI-DISCIPLINARY RESEARCH UNITS (MRUS) IN GOVERNMENT MEDICAL COLLEGES/RESEARCH INSTITUTIONS**

The Committee takes serious note of the fact that not a single MRU has been established this financial year. The Committee also notes with concern that out of the total approved 80 MRUs for establishment, research work has commenced only in 47 MRUs. The Committee, therefore, recommends that DHR should speed up the processes to attain the target of establishing 10 MRUs in the current financial year. The Committee also recommends that the Government should expedite approvals for MRUs that are at various stages of consideration. In addition to this, the Committee also recommends that research work in remaining 33 established MRUs must commence at the earliest.

(Para 4.21)

## **PHYSICAL AND FINANCIAL PERFORMANCE**

**The Committee expresses its satisfaction over achievement of physical targets set with regard to establishment of MRHRUs. However, the Committee is surprised to note that the set targets have been achieved despite the fact that only Rs. 6.05 crores has been utilised upto 10.2.2021 out of the allocations of Rs. 16.00 crores. Interestingly, the Department has not only achieved its physical target of the scheme i.e. setting up 25 MRHRUs, but has also planned to set up 4 more MRHRUs in the current financial year i.e. 2020-21.**

**(Para 4.24)**

**The Committee understands that MRHRUs act has an interface between patient and health researchers that help in providing latest and sophisticated technology for diagnosis and management of diseases in rural areas. The Committee, therefore, recommends that DHR, while considering to set up more number of MRHRUs in the rural areas should make realistic assessment of financial requirement for the purpose and accordingly, approach the Ministry of Finance for allocation of required funds.**

**(Para 4.26)**

## **BUDGETARY ALLOCATION FOR THE SCHEME**

**The Committee recommends that, to foster quality research work at the level of Medical Colleges and rural facilities, the Department should adequately incentivise the health researchers to bolster their enthusiasm. Simultaneously, measures need to be taken to modernize existing network of MRUs and MRHRUs so that these facilities available therein can be used as potential sites for high quality clinical trials required to counter pandemics like Covid-19 also need to be taken.**

**(Para 4.29)**

## **PHYSICAL AND FINANCIAL PERFORMANCE**

**The Committee expresses its anguish over poor financial performance to the tune of Rs. 6.78 crores against RE allocation of Rs. 12.26 crores in the 2020-21. The Committee has been given to understand that the budget of the Scheme has been increased from Rs. 7.29 crores to Rs.12.26 crores in order to resume influenza surveillance, which could not be undertaken due to pandemic during the first half of the financial year. The Committee however, apprehends that the poor utilisation of funds would have seriously hampered the surveillance of Influenza. The Committee, therefore, recommends that DHR must improve the absorption capacities of its institutions to spend the entire funds allocated to it in a given financial cycle. The Committee also notes that the projected demand of the DHR was met in the BE allocation of 2021-22. The Committee hopes that the scheme is implemented effectively and funds allocated are utilised fully.**

**(Para 4.32)**

## **BUDGETARY ALLOCATION AND UTILISATION**

The Committee notes that the BE 2020-21 of Rs. 92.00 crores for the scheme was sharply reduced at the RE stage to Rs. 57.03 crores. The DHR clarified that the main reason for it was the limited scope for expenditure due to the Covid-19 situation. The actual expenditure as of 19.02.2021 is mere Rs. 26.22 crores. However, the DHR expects that the allocation in RE 2020-21 would be fully utilized. The Committee recommends to make all out efforts to ensure the allocation made to the tune of Rs. 83.00 crore is optimally utilised for the intended purpose.

(Para 4.35)

## **PHYSICAL AND FINANCIAL PERFORMANCE OF THE HUMAN RESOURCE DEVELOPMENT FOR HEALTH RESEARCH SCHEME**

The Committee notes that allocation made in 2020-21 could not be fully utilized due to COVID-19 pandemic. The funding of ongoing projects got delayed as the projects could not be accomplished. Besides, new projects could not be funded for their evaluation would be undertaken after easing out of Covid-19 pandemic. The Committee expects the Department would strive hard and put in extra efforts in the upcoming year 2021-22 to achieve the targets set for 2020-21 as well.

(Para 4.37)

The Committee recommends that the DHR must encourage more and more fellow researchers to undertake research projects so that positive interventions in the form of new products and tools can be brought into the public health system for combating the challenges of emerging and re-emerging viruses. The Committee also recommends that the HRD scheme of DHR must accomplish the objective of the creation of a pool of talented health research personnel in the country.

(Para 4.39)

## **HEALTH TECHNOLOGY ASSESSMENT**

### **PHYSICAL AND FINANCIAL PERFORMANCE OF THE HEALTH TECHNOLOGY ASSESSMENT SCHEME**

The Committee notes that under Health Technology Assessment in India (HTAI) scheme/activities to analyze evidence related cost-effectiveness and clinical effectiveness for the deployment of health technologies covering medicines, devices and health programmes, are undertaken, which in turn ensures effective and optimal utilization of health budget and easy access to quality healthcare at the minimum cost. Its main objective is to reduce out of pocket expenditure and address inequality. The Committee, therefore, recommends optimal utilization of allocated funds to minimize the cost for quality healthcare, especially in rural, urban slums and tribal areas.

(Para 4.42)

## **UTILISATION TREND FOR THE SCHEME**

**The Committee understands that due to problems posed by Covid-19, the funds could not be utilised fully. The Committee, however, is of the view that despite certain restriction due to the Covid-19 pandemic, academic research work could have progressed. The Committee recommends to the Department to ensure proper supervision and monitoring of the work being done under these schemes during the year so that the time lost is compensated and the allocated funds are not left idle. The Committee would like to emphasise that unless there is adequate budgetary allocation followed by optimal utilization of allocated fund, the DHR would find it very difficult to constitute a pool of talented, knowledgeable and trained medical researchers. At the same time, the Committee further underlines the importance of capacity building by providing financial assistance and other social security measures to health researchers to build a dedicated pool of researchers.**

**(Para 4.44)**



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# MINUTES

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**VIII**  
**EIGHTH MEETING**

The Committee met at 2.28 p.m. on Wednesday, the 17<sup>th</sup> February, 2021 in Main Committee Room, Ground Floor, Parliament House Annexe, New Delhi.

1. **Prof. Ram Gopal Yadav** - **Chairman**

**RAJYA SABHA**

2. Shri A.K. Antony
3. Shri Suresh Prabhu
4. Dr. Subramanian Swamy
5. Shrimati Sampatiya Uikey

**LOK SABHA**

6. Dr. Chandra Sen Jadon
7. Dr. Amol Ramsing Kolhe
8. Dr. Sanghamitra Maurya
9. Shri Arjunlal Meena
10. Dr. Bharati Pravin Pawar
11. Dr. Rajdeep Roy
12. Dr. D.N.V. Senthilkumar S.
13. Shri Anurag Sharma
14. Dr. Mahesh Sharma
15. Dr. Krishna Pal Singh Yadav

**SECRETARIAT**

- |                           |                     |
|---------------------------|---------------------|
| 1. Shri J. Sundriyal      | Joint Secretary     |
| 2. Shri V.S.P. Singh      | Director            |
| 3. Shri Bhupendra Bhaskar | Additional Director |
| 4. Smt. Harshita Shankar  | Under Secretary     |

**LIST OF WITNESSES**

**Representatives of Department of Health Research**

1. Prof. Balram Bhargava, Secretary, DHR cum DG, ICMR
2. Dr. Dharmendra Singh Gangwar, AS&FA
3. Smt. Anu Nagar, Joint Secretary
4. Smt. Geeta Narayan, Joint Secretary
5. Dr. G.S.G. Ayyangar, Sr. DDG, ICMR

6. Shri Rajeev Roy, Sr. Financial Advisor, ICMR
7. Dr. Ranji Kant, Dead, RMPPC, ICMR
8. Dr. Nivedita Gupta, Scientist-F, ICMR

2. The Committee heard the views of Prof. Balram Bhargava, Secretary, Department of Health Research (DHR) who gave an overview of the Demands for Grants (2021-22) of the Department of Health Research. The Committee was given to understand by him that against the projected demand of Rs. 3312.33 crores, Rs. 2663.00 crores has been allocated to the DHR which means a shortfall of Rs. 649.33 crores. He further informed the Committee that the allocation of DHR is only 3.74% of the net budget of Department of Health and Family Welfare in financial year 2021-22 as compared to 3.23% in financial year 2020-21.

3. He also informed the Committee about the efforts put in by ICMR in Covid-19 pandemic management by expanding the National Testing Network and increasing access to diagnostic kits by developing affordable alternatives. He further informed the Committee about the ICMR's collaborations and the revolutionary efforts put in by its scientists towards COVID-19 vaccine development. In addition to this, he also submitted to the Committee about National Community Sero-surveys and other several clinical & research studies undertaken by ICMR with respect to Covid-19. Thereafter, he informed the Committee about DHR-ICMR Advanced Molecular Oncology Diagnostic Services (DIAMOnDS) to arrest the spread of Cancer in the country.

4. During the course of the meeting, Members raised some queries which are as follows:-

- (i) Reasons for the difference between the projected demand and the budgetary allocation to the Department of Health Research (DHR);
- (ii) High out-of-pocket expenditure on health;
- (iii) Details of the future of COVID-19 vaccination programme;
- (iv) Research on possible side effects of the Covid 19 vaccine on children;
- (v) Share of ICMR in the profits of the Bharat Biotech from the sale of the Covaxin;
- (vi) Information available with ICMR regarding WHO's investigation in Wuhan concerning emergence of Covid-19;
- (vii) Study concerning immunological response for both the vaccines viz. Covaxin and Covishield;
- (viii) Developing infrastructure for scientific research of herbal or Ayurvedic medicine;
- (ix) Reliability of Antibody Kits developed by ICMR;
- (x) Establishing of a corpus fund from the amount collected from tax on tobacco and alcohol;
- (xi) Quality control on Private Labs always;
- (xii) Need for research to ascertain rising number of sugar, diabetes, blood pressure and cancer patients;
- (xiii) Details on the processes followed to give approval to Fabiflu;
- (xiv) Need for an Obesity Control Programme;

5. The Secretary, Department of Health Research and other officials replied to some of the queries raised by the Members which are as follows:-

- i. Bharat Biotech promised to give the Covaxin vaccine to the Government of India at reduced price along with the 5% royalty (to be given to the ICMR) on the net sales.
  - ii. As far as immunological response is concerned, it is well established that in two dose vaccines if the second dose is delayed, there are chances of higher immunological response;
  - iii. The projects run by ICMR are divided into communicable diseases and non-communicable diseases. For the non-communicable diseases, the ICMR has created several registries where ICMR looks at hotspots of different cancers. Similarly, for infections, sero-surveys for Dengue, Chikungunya and tuberculosis are conducted and ICMR maps out the hot spots and give it to the Ministry of Health to take remedial actions.
  - iv. Life style modification programme is absolutely essential and the Ministry of Health has now started a national programme on non-communicable diseases, which includes measure of blood sugar, cholesterol, blood pressure and obesity. It is also going to look at mental and dental health.
  - v. There are 876 scientific posts in ICMR, out of which the current strength is 600 posts. Recruitment process to fill up another 221 number of posts at various levels starting from Scientist-B, D, E, Directors and Heads of Divisions is currently in progress;
  - vi. The ICMR currently runs 9 molecular diagnosis centers for the diagnosis of cancer and is planning to establish 29 more such centers in the future;
  - vii. 25 research units working under ICMR are located in the rural areas and the council will consider establishing the research units in the biodiversity rich regions;
  - viii. Assuming the vaccine efficacy to be at 60%, by vaccinating 18-25 crore people, the transmission chain of the virus can be broken;
  - ix. Possibility of extensive sero-surveys helping in identifying Covid-19 hotspots and thereby reducing the need for vaccination of the entire population
6. The Chairman along with most of the members appreciated the efforts made by the Department of Health Research particularly ICMR in tackling the Covid-19 pandemic. The Chairman also asked the Secretary to submit a written response to the questions asked by the Members.
7. A verbatim record of the proceedings of the meeting was kept.
8. The Committee then adjourned at 3:54 p.m. to meet again at 11.00 a.m. on 18th February, 2021.

## X

### TENTH MEETING

The Committee met at 3.00 p.m. on Tuesday, the 2<sup>nd</sup> March, 2021 in Committee Room-A, Ground Floor, Parliament House Annexe, New Delhi.

#### MEMBERS PRESENT

1. **Prof. Ram Gopal Yadav** - **Chairman**

#### RAJYA SABHA

2. Shri A.K. Antony
3. Dr. L Hanumanthaiah
4. Shri Suresh Prabhu
5. Dr. Subramanian Swamy
6. Shrimati Sampatiya Uikey

#### LOK SABHA

7. Dr. Chandra Sen Jadon
8. Dr. Sanghamitra Maurya
9. Shrimati Pratima Mondal
10. Dr. Pritam Gopinath Munde
11. Dr. Mahendrabhai Kalubhai Munjpara
12. Shri Anurag Sharma
13. Dr. Mahesh Sharma
14. Dr. Sujay Radhakrishna Vikhepatil
15. Dr. Krishna Pal Singh Yadav

#### SECRETARIAT

- |    |                        |                     |
|----|------------------------|---------------------|
| 1. | Shri J. Sundriyal      | Joint Secretary     |
| 2. | Shri V.S.P. Singh      | Director            |
| 3. | Shri Bhupendra Bhaskar | Additional Director |
| 4. | Smt. Harshita Shankar  | Under Secretary     |

2. At the outset, the Chairman welcomed the Members of the Committee and informed that the meeting has been convened to consider and adopt the (i) \*\*\* (ii) \*\*\* and (iii) draft 127<sup>th</sup> Report of the Committee on Demands for Grants (2021-22) pertaining to the Department of Health Research. He further added that the draft reports had already been circulated to the Members and they must have gone through them. He invited views/suggestions/modifications, if any, from the Members in the draft reports.

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\*\*\* *Relates to other matter*

3. \*\*\*

4. The Committee then considered the draft 127<sup>th</sup> Report on Demands for Grants (2021-22) of Department of Health Research. The Committee, after a brief deliberation adopted the Report.

5. The Committee, thereafter, decided that the Reports may be presented to the Rajya Sabha and simultaneously laid on the Table of the Lok Sabha on Monday, the 8<sup>th</sup> March, 2021. The Committee authorized its Chairman Prof. Ram Gopal Yadav, MP, Rajya Sabha and in his absence Dr. L. Hanumanthaiah, MP, Rajya Sabha and in the absence of both members, Smt. Sampatiya Uikey, MP, Rajya Sabha to present the Reports in Rajya Sabha. The Committee also authorized Dr. Dr. Mahesh Sharma MP, Lok Sabha and in his absence Dr. Krishna Pal Singh Yadav MP, Lok Sabha to lay the Reports on the Table of the Lok Sabha.

6. The Committee also authorized the Chairman to carry out any typographical/factual errors in the \*\*\* and 127<sup>th</sup> Reports, if necessary.

7. The Committee then adjourned at 3.40 p.m.

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\*\*\* *Relates to other matter*