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Review Statement to be laid on the table of the Rajya Sabha along with the Annual Report and Annual Accounts together with Audit Report thereon for the year 2023-24 in respect of Indian Council of Medical Research, New Delhi

The Indian Council of Medical Research (ICMR) is an autonomous body under Department of Health Research, Ministry of Health and Family Welfare, Government of India. It is the apex and premier medical research organization in the country which spearheads planning, formulation, coordination, implementation and promotion of biomedical research. It is one of the oldest medical research bodies in the world. In 1911, Government of India made a historic decision to establish Indian Research Fund Association (IRFA) with the specific objectives of sponsoring and coordinating medical research in the country. After Independence, in 1949, the IRFA was re-designated as the Indian Council of Medical Research (ICMR) with considerable expansion in its functions and activities. The ICMR achieved significant milestones in 2023-24, driving advancements in public health, clinical care, and innovation through groundbreaking research, strategic collaborations, and evidence-based policy support. The following are the key achievements of ICMR during 2023-24:

1. ICMR utilised 99.71% of its ₹2,350.12 crore allocation to strategically fund both intramural research (conducted by its institutes) and extramural initiatives (driven through funding external projects and institutions).
2. In a landmark year, 31 Indian patents, 6 design patents, 9 copyrights, 4 trademarks, and 4 foreign patents were filed, while securing 24 Indian patents and 4 foreign patents previously filed.
3. A total of 35 technologies were successfully validated, with 3 key innovations transferred—one addressing bleeding disorders and two focused on pandemic preparedness. Furthermore, 3 strategic licensing and commercialization agreements were finalized.
4. A total of ₹698.94 crore was utilized in intramural grants to advance high-impact initiatives across ICMR institutes. Notable new initiatives included 36 multisite projects in communicable diseases, 34 in non-communicable diseases, and 7 multicentric projects in reproductive, child health, and nutrition, highlighting strategic focus on addressing India's critical health challenges.
5. A total of ₹896.18 crore was allocated in extramural grants to drive impactful biomedical research across four key categories: Discovery, Development, Delivery, and Description. A significant portion of the funding was dedicated to Discovery (38%) and Development (35%), underscoring ICMR's commitment to innovation and the application of foundational research. In total, 725 new grants were initiated across the Small, Intermediate, and Centre for Advanced Research programs, emphasizing dedication to fostering research and innovation.
6. A total of 3300+ Research publications were published from the intramural and extramural research programmes. Intramural research, mostly funded in previous years culminated in over 1,500 publications highlighting ICMR's significant contributions to

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scientific advancement and evidence-based solutions for improving public health outcomes. Meanwhile, extramural projects resulted in 1,809 publications, advancing scientific knowledge and driving solutions to improve public health outcomes.

7. In addition, ICMR provided targeted support for research addressing National Health Research Priorities, emphasizing the Government of India's commitment to tackling critical public health challenges through evidence-based approaches. This year, 16 projects were funded in Primary Health Care, Acute Emergency Care, Oral Health, Neonatal Mortality (NMR), Stillbirth, Anemia, Cancer, Ambulatory Care for Non-Communicable Diseases, Mental Health, Tuberculosis (TB), and Antimicrobial Resistance (AMR). These projects span 177 sites across the country, ensuring comprehensive regional and demographic representation to address diverse healthcare needs effectively.

8. A significant milestone was achieved with the launch of the ICMR Faculty of Medical Research (AcSIR-ICMR-FMR) in collaboration with the Academy of Scientific and Innovative Research (AcSIR). This transformative initiative is aimed at revolutionizing biomedical research in India by fostering transdisciplinary studies and awarding PhD degrees, thereby significantly strengthening the nation's research capacity.

9. To further strengthen its research ecosystem, ICMR undertook a mission-mode recruitment drive to fill existing vacancies, significantly expanding its workforce.

10. Significant strides in healthcare innovation were made, with ICMR spearheading MedTech Mitra Platform, a collaborative initiative with Central Drug Standard Control Organization (CDSCO) and under the guidance of National Institution for Transforming India (NITI) Aayog. This platform provides comprehensive support, including regulatory facilitation, pre-clinical and clinical evaluations, Health Technology Assessment (HTA), and the uptake of new products.

11. Key highlights include the development of a rapid, cost-effective diagnostic kit for Haemophilia A and von Willebrand Disease (vWD) and development of India's first rapid Mpox test kit, delivering results within an hour at a low cost of ₹350–400. These advancements have significantly improved ability to respond swiftly to outbreaks.

12. ICMR's innovations extended to molecular diagnostics, with the development of tools for detecting clarithromycin-resistant *Helicobacter pylori*, co-infections like visceral leishmaniasis, and CRISPR-Cas13-based diagnostics for tuberculosis and malaria.

13. To enhance the pandemic preparedness of the country, ICMR identified the priority pathogens for various acute syndromes including undifferentiated fever, encephalitis, diarrhoea and respiratory infections. Surveillance for comprehensive testing of these syndromic illnesses is conducted at viral research and diagnostic labs (VRDLs).

14. Indigenous manufacturers have been promoted and hand-held for developing multiplex molecular diagnostic tests for various pathogens prevalent in India.

15. The validation of the Indian Diabetic Risk Score as a cost-effective screening tool for diabetes in Asian Indians underscored ICMR's commitment to addressing diverse health challenges with impactful, evidence-driven solutions.
16. ICMR-DHR has been designated as the Secretariat for the activities of the National One Health Mission, launched under aegis of the Principal Scientific Advisor to Government of India. Under the mission, an interdepartmental network of 21 Biosafety Level-3 (BSL-3) labs has been established and trained for holistically testing samples of human, animal and environmental origin.
17. Under public-private partnerships, initiatives were taken to develop Medical countermeasures for locally endemic diseases including vaccine for Kyasanur Forest Disease and monoclonal antibodies for Nipah virus disease.
18. Pilot projects for implementing surveillance at animal-human interface such as bird sanctuaries, slaughterhouses, and zoos, have been initiated for early detection of newly emerging pathogens.
19. Through extramural project funding and collaborations with ICMR-DHR Centers of Excellence at Indian Institutes of Technology (IITs), ICMR developed innovations including i-Scope, an automated microscopy tool that is revolutionizing cervical cancer diagnosis, and Artsens, an image-free ultrasound device that enables greater accessibility for vascular screening. Furthermore, AI-powered tools for tuberculosis diagnosis and reproductive outcome prediction have demonstrated ICMR's dedication to leveraging cutting-edge technology.
20. A portable Point of Care device developed for albumin, direct bilirubin, total bilirubin, and total protein detection in serum for liver and kidney disorders underscored ICMR's dedication to delivering sustainable, cost-effective, and transformative healthcare solutions tailored to India's needs.
21. ICMR has been instrumental in advancing drug and vaccine development. ICMR supported the development of a powder for oral suspension (PFOS) of 6-mercaptopurine (PREVALL), which has reduced leukemia treatment costs by 90%.
22. Comparative immunogenicity and safety study of Oral Cholera Vaccines (OCV) Euvichol-Plus with Shanchol demonstrated the non-inferiority of Euvichol-Plus to Shanchol, contributing to the licensure of Euvichol-Plus for use in India. ICMR has made remarkable contributions in treatment regimens that significantly improved disease management and patient outcomes.
23. Initiatives in tuberculosis (TB) care provided evidence for three shorter oral regimens for Multidrug-resistant TB (MDR-TB), while a clinical trial demonstrated the efficacy of adding piperine to standard TB treatment in accelerating recovery.
24. Advancements in cancer care include the introduction of isotretinoin for high-risk neuroblastoma, ensuring precise dosing and improving accessibility.

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25. ICMR continues to be at the forefront of India's response to public health emergencies and outbreaks, demonstrating resilience and innovation in safeguarding the nation's health. ICMR's preparedness for emerging threats, such as yellow fever during Operation Kaveri, showcased strategic foresight and diagnostic readiness. Furthermore, ICMR's response to outbreaks of measles and hepatitis combined advanced testing, community outreach, and capacity building efforts for local healthcare systems.

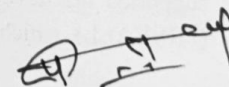
26. Surveillance and control measures for vector-borne diseases like dengue, chikungunya, and West Nile Virus were strengthened, further bolstering India's capacity to address public health challenges.

27. ICMR continued to support national health programs in various ways. For example, ICMR made significant contributions to the National Tuberculosis Elimination Program by validating diagnostic tools, deploying handheld X-ray devices, and facilitating active case finding in collaboration with state teams.

28. ICMR's contributions to the Anemia Mukt Bharat initiative, especially the recommendations on intravenous iron use during pregnancy, helped strengthen the national programme. ICMR also scaled up the Indian Hypertension Control Initiative, pioneered rapid diagnostics for sickle cell anemia, and supported universal health coverage through Ayushman Bharat.

29. In conclusion, during the year 2023-24, ICMR leveraged data-driven insights, cutting-edge technology, and strategic partnerships to tackle critical health challenges. ICMR's commitment to addressing these challenges and fostering impactful solutions aligns with both national and global health goals, positioning the organization as a leader in healthcare innovation and delivery. Through these efforts, ICMR has played a transformative role in advancing India's healthcare landscape. ICMR remains committed to work relentlessly in research, innovation, strategic funding, and policymaking, significantly improving public health and driving India toward its vision of Viksit Bharat 2047.

Authenticated



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