## **Chapter 9**

## **Observations, Conclusions and Recommendations**

The study has thrown light on the experiences and difficulties of the ICMR institutes in conducting and exporting R&D services.

Some specific observations, conclusions and recommendations arising from this study are made here.

- 1. ICMR is a premier medical research & development agency in India and most of the ICMR laboratories do have international exposure of varying degrees. The inclination and orientation towards international marketing and exports of R&D services, nevertheless, is lacking in most of the laboratories. In the course of the discussions that were held with the laboratories, most were, however, found enthusiastic about the opportunity to export their R&D services. Some of the laboratories do have interactions with international clients and are keen to approach the international marketing of R&D services in a more systematic manner.
- 2. The level of international exposure in some of the individual laboratories needs to be increased substantially. This can be done by encouraging these laboratories to increase their participation in international conferences and workshops and to interact with international delegations visiting India. Corporate thrust and direct support in this direction may be considered by ICMR along with an agenda of international marketing of its knowledge base and R&D services.
- 3. Their contribution in the capacity building of the country through collaborations with academic institutions and universities, contract

research & collaborative research studies with Indian industry are not many in number.

- 4. With a view to give a competitive edge to ICMR laboratories required for export of R&D services, it is recommended that ICMR management should encourage adoption of 'corporate-culture' in its laboratories with due streamlining.
- 5. It is recommended that to give thrust to the corporate strategy, ICMR may evolve a structure or framework in which the activities related to exports of R&D services will be coordinated at two levels; i.e. at the corporate level as well as laboratory level. As an integral part of this strategy and structure, appropriate systems comprising of both formal and informal procedures, including institutional objectives, compensation systems, management information systems, and capital allocation systems, etc. are recommended to be worked out.
- With establishment of an appropriate setup, it is recommended that a specific budget for export of R&D services should be specifically allocated for all laboratories.
- 7. Appropriate 'Orientation Workshops' aimed at inculcating ethos of international marketing of ICMR knowledgebase and R&D services need to be developed and organized. Moreover, an orientation programs for young scientists as well as middle managers may be started for tapping the global health market.
- 8. There is no database or an organised system available in the country for interfacing or dealing with activities of foreign medical R&D services in India. Therefore suitable database, research and analysis facility and a pro-active action from Indian side need to be set up.

- 9. The future areas in which skill development is required include Neuroscience, Oncology, Paediatrics, Women's health, Diabetes, Phage therapy, Tuberculosis, Alzheimer disease, Epilepsy, Transplantation, Hepatitis, HIV, Cardiology, Ophthalmology, Non-Hodgekin's Lymphoma, Psychiatry, Infectious diseases, Metabolic diseases (Osteoporosis) and Respiratory diseases (Asthma, Bronciotis).
- 10. For wider diffusion of skill spill over capabilities and more collaborative arrangements with domestic institutions / industry, special incentives or mechanisms need to be evolved.