

2009 Meeting

Geneva, 7-11 December 2009

Item 6 of the agenda

Consideration of, with a view to enhancing international cooperation, assistance and exchange in biological sciences and technology for peaceful purposes, promoting capacity building in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases

**CONSIDERATION OF, WITH A VIEW TO ENHANCING
INTERNATIONAL COOPERATION, ASSISTANCE AND EXCHANGE IN
BIOLOGICAL SCIENCES AND TECHNOLOGY FOR PEACEFUL
PURPOSES, PROMOTING CAPACITY BUILDING IN THE FIELDS OF
DISEASE SURVEILLANCE, DETECTION, DIAGNOSIS, AND
CONTAINMENT OF INFECTIOUS DISEASES: NEEDS, CHALLENGES
AND HURDLES**

Submitted by Pakistan

1. Pakistan, as a State Party, is committed to the Biological Weapons Convention (BWC) regime, which is an integral part of the global security architecture. The BWC regime exhibits a consensus amongst the nations for complete disarmament of biological weapons. This is one side of the BWC bargain. At the same time, the Convention obliges States Parties to enhance cooperation and provide assistance for the fullest possible exchange of equipment, materials, and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes. The implementation of disarmament obligations should not hamper the economic or technological development of States Parties relating to such peaceful uses. There is a lack of focus on cooperation and assistance under article X within the BWC framework. Pakistan, therefore, supports initiatives aimed at implementation of the Convention, particularly article X.

2. The exchange of equipment, materials, and technological information has gained more significance in the wake of the threats posed by infectious diseases. Disease patterns are rapidly changing across the globe. The threat of infectious diseases has increased due to emergence and re-emergence of microorganisms, augmented by increased international travel and trade, and uncontrolled industrial waste.

3. The developing States Parties to the Convention do not have sufficient human, technical and financial resources for disease surveillance, detection, diagnosis, and containment of infectious diseases. They do not have matching capability and equitable access to resources in order to ensure protection and promotion of public health.

4. Communicable diseases including public health events associated with illicit use of biological events would respect no geographical boundaries. The international community, therefore, must strive for well coordinated and organized efforts to combat them. International cooperation, assistance and exchange is of pivotal importance for successful implementation of the Convention.

5. Like many other developing countries, Pakistan, being in the phase of epidemic transition, faces double disease burden from communicable as well as non-communicable ailments. The problem is further compounded by drug resistance, re-emergence of adversaries such as malaria, typhoid, tuberculosis and emergence of new infections such as Hemorrhagic Fevers, pandemic Influenza etc.

6. Effective disease prevention and control is based on sound and evidence based planning for which an efficient surveillance system is inevitable. In Pakistan disease specific surveillance arrangements are in place for AFP/Polio, Malaria, Tuberculosis, Hepatitis, Influenza etc. Besides; Disease Early Warning System (DEWS) surveillance has been operational with primary objective of early detection of an outbreak for an efficient and appropriate response. The National Institute of Health (NIH) is running projects for laboratory based surveillance of Bacterial Meningitis and Seasonal & Pandemic Influenza in collaboration with the World Health Organization (WHO) and the US Centres for Disease Control (CDC).

7. Pakistan has already completed assessment of the existing surveillance arrangements in collaboration with other stakeholders. Accordingly, a National Action Plan has been developed for the implementation of an Integrated Disease Surveillance System. This would also help Pakistan towards effective implementation of its obligations under BWC and WHO's revised International Health Regulations (IHR). Important initiatives for improved disease surveillance along with specific needs for international assistance are outlined below:

(i) Strategic framework for establishment of a national Public Health Laboratories Network has been developed and the construction of bio-containment laboratory at NIH is currently underway to enhance the diagnostic and research capacity of the Institute. There are urgent and mandatory requirements of diagnostics such as primers, control strains and other latest rapid detection systems for early detection of concerned biological and select agents including H1N1. In addition, international assistance is also required in terms of equipment for diagnostics and biosafety, kits & reagents and other relevant consumables for the laboratories.

(ii) Project for Integrated Disease Surveillance & Response and Establishment of Public Health Laboratories Network has been prepared to enhance the capacity of the health department for early detection of public health events of national and international concern. On the detection side, specific assistance is required to

upgrade the capacity (equipment, kits and reagents) of laboratories at district, provincial and federal levels, networking amongst these laboratories, preparation of guidelines and development of human resource. To meet the requirements relating to response, designated Disease Surveillance & Response units are to be established and strengthened at district, provincial and federal levels. International support may encompass an efficient communication system and logistic support for field investigation teams. Additionally, international assistance and cooperation is essential to develop and maintain strategic stockpiles of vaccines and drugs with appropriate storage arrangements at all levels.

- (iii) Draft legal framework for disease surveillance covering the public and private sectors is being finalized in consultation with various stakeholders. Assistance for advocacy and capacity building particularly in private sector health facilities is required.
- (iv) In order to address the Zoonotic ailments, an effective collaboration mechanism has been built with Ministry of Agriculture & Livestock for timely detection and response to the alerts / outbreaks particularly Avian Influenza. Assistance is needed to carry out detailed situation analysis of the current Zoonotic disease surveillance arrangements followed by development and implementation of an appropriate nationwide Zoonotic disease surveillance system along with its linkage with human health sector.
- (v) In order to boost the capacity of the health departments, Field Epidemiology and Laboratory Training Program (FELTP) was launched in 2006 through collaboration between NIH, Ministry of Health and CDC. The program aims at provision of trained manpower in the field of public health for the Federal Health Ministry and the provincial departments of health to support integrated disease surveillance initiatives. Recently, the training facility has also been extended to participants from neighboring Afghanistan. To further enhance the scope of field training, assistance is required for establishment of designated disease surveillance & response units in all the provinces.

8. Considering the fact that vaccination remains the most cost effective way to prevent infectious diseases, national capacity for research and development in vaccinology is to be enhanced significantly. The current vaccine production facilities at NIH need strengthening both in terms of technology & equipment for basic manufacturing along with development of human resources. Pakistan is facing difficulties in having an access to the stated technology and equipment which is hampering our efforts of equitable healthcare delivery. International cooperation and assistance is required for this purpose. In addition, collaborative projects, with international partners, for domestic production of combo vaccines for childhood use, hepatitis B, Rabies, Typhoid and Anti-snake venom are to be launched to meet the national needs.

9. While considering internationalization of health issues, national capacity in the above stated areas needs to be upgraded through long-term and sustainable collaborative efforts.

10. International efforts remain hampered and inconclusive primarily due to non-implementation of article X. Pakistan has the potential to acquire the requisite technical expertise and the resolve to contribute towards national as well as global disease prevention and control initiatives.
