



Memorandum of Understanding for **Collaborative Biorisk Management Initiative (CBMI)**

Between

**Khyber Medical University, Peshawar
The University of Agriculture, Peshawar
Dairy Science Park, Peshawar and
Higher Education Commission, Islamabad**





Memorandum of Understanding

Between Khyber Medical University, Peshawar, The University of Agriculture, Peshawar, Dairy Science Park, Peshawar, and Higher Education Commission, Islamabad for

Collaborative Biorisk Management Initiative (CBMI)

Preamble

This memorandum of understanding ("the MoU") is made between: i) Khyber Medical University, Hayatabad, Peshawar (hereinafter called as "KMU"); ii) The University of Agriculture, Peshawar (hereinafter called as "UAP"); Dairy Science Park, 23-A, Industrial Estate, Hayatabad, Peshawar (hereinafter called as "DSP"), and Higher Education Commission, Islamabad (hereinafter called as "HEC").

Sixty percent of the pathogens that cause diseases in humans are of animal origins, as per OIE (Organization for Animal Health, France). The One Health Concept is founded on an awareness of the major opportunities that exist to protect public health through policy aimed at preventing and controlling pathogens within the animal populations at the interface between animals, humans, and the environment. OIE joined hands with the World Health Organization (WHO) and Food and Agricultural Organization (FAO) of the United Nations through a formal alliance and publication of a joint concept note (April 2010), identifying reciprocal responsibilities and their objectives in this field.

Biorisk Management has been initiated at Khyber Pakhtunkhwa by Dairy Science Park as a collaborative arrangement with the Sandia National Laboratories, USA, who intends to establish a center of excellence in the region. A four-member delegation of DSP visited the Netherlands in March 2015 for launching the initiative through attending the 3rd International One Health Congress in Amsterdam, which focused on multidisciplinary collaboration involving human, veterinary, and eco-health disciplines, other life sciences, social sciences, and informatics. The One Health approach is needed to ensure an improved and sustainable human and animal health and is the key to improve monitoring, analysis, and prevention of novel global threats posed by re-emerging (infectious) diseases and food safety hazards. A nine-member delegation of DSP and a four-member delegation of Sandia National Laboratories, USA met in Dubai to hold the Pakistan Biorisk Management Curriculum Workshop, to be followed by another meeting in Bangkok during the current month.

The University of Agriculture, Peshawar reshaped their postgraduate research to accommodate public health concerns like drug residues in livestock and poultry products, presence of aflatoxins in the milk, meat, and eggs, pathogenic contaminations of the livestock products, and release of farm waste to the environment. Collaboration was initiated between the Khyber Medical University, Peshawar and DSP under an MoU to develop quality control standards and introduce these into local livestock production, processing, marketing, and services network, for protecting public health. HEC sponsored the three international conferences of DSP and facilitated review of the existing curricula related to Biorisk Management in place at various Universities of the country.



Purpose

KMU, UAP, DSP, and HEC would cooperate through "Collaborative Biorisk Management Initiative (CBMI)" for evaluating the biorisk factors associated with commercial farming, transportation, slaughtering, processing, and marketing of livestock and poultry products and human health and veterinary clinical practices. This would be targeted at achieving the two sustainable goals of DSP for self-employment of youth and hygienic food production for the people of Khyber Pakhtunkhwa and FATA.

The objectives

- To develop a Biorisk Management Curriculum for incorporation of the concepts into syllabi of Pakistani Universities and launching new undergraduate and graduate degree programs
- To help safeguard the health of students, biomedical professionals (including laboratory staff and public and animal health workers), and the community
- To develop standards and legislative guidelines for farming and processing units and service providers as they relate to dangerous and/or infectious pathogens
- To improve animal health through Biorisk Management, diagnostic methods, and surveillance designed to improve the health of the animal population
- To create a leading institution to provide assistance to other similar institutions on the implementation of Biorisk Management Curriculum, and to strengthen interdisciplinary linkages in Biorisk Management
- To incorporate international obligations on Biorisk Management into the local health regulations and implementation modules

Strategy

- Consultative meeting of experts from various disciplines of biological sciences to develop curriculum on Biorisk Management
- Design, develop, and implement Biorisk Management Curriculum as a separate discipline and its incorporation into the existing curricula of life sciences as it relates to courses where infectious agent handling occurs
- Training stakeholders to implement the newly developed curriculum and to reach out to other universities to design, develop, and implement similar curriculum to establish Biorisk Management Curriculum and practices throughout the region



- Training of senior level and middle level scientists, farmers, industry representatives, students, and policy makers in Biorisk Management so that they can contribute to training and outreach
- Research on the biohazards in the region as they relate to livestock and poultry production, value addition, and marketing
- Consultation among stakeholders on the issues related to zoonotic diseases, food safety, trans-boundary diseases, and losses to the farmers' income
- Capacity development of the partner institutions of Dairy Science Park in research and outreach programs in the region
- Evaluation of the small and medium-sized livestock and poultry farms for public health safety and devising modules for minimizing the relevant threats

Time/Duration

1. The MoU shall come into effect from the date of signing and shall remain for three years, and the period will extend further unless terminated by the parties by mutual consensus.
2. In the event of this MoU being so terminated, all the parties shall take such steps as necessary to bring the work to an end in a cost-effective, timely, and orderly manner in the larger public interest.

Signed by

Dr Zia Ul Haq
Director-Office of Research, KMU

Mr Nasir Shah
Quality Assurance HEC/FATA

Prof Dr M Subhan Qureshi
Dean FAHVS/Chief Patron-DSP

Endorsed by:

Prof Dr Mohammad Hafizullah
Vice Chancellor KMU

Prof Dr Zahoor Ahmad Swati
Vice Chancellor UAP

Prof. Dr. Mukhtar Ahmed
Chairman of HEC

Date

22/11/2016