

**Final Technical Report on the Proposal –PGTF- INT/10/k01,
Award number 60453-project number 76090.**

“Strengthening the Infrastructure and Synergy for Animal Health Sectors, with Special Reference to Globalization and International Trade in Yemen, Egypt, Algeria, Palestinian Authority and Jordan”.



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I. Title of the Project “Strengthening the Infrastructure and Synergy for Animal Health Sectors, with Special Reference to Globalization and International Trade in Yemen, Egypt, Algeria, Palestinian Authority and Jordan”.

II. Implementing Institution: Jordan University of Science and Technology, Faculty of Veterinary Medicine, Irbid-Jordan, 7-9 June, 2011, Prof. Nabil Hailat, DVM, Ph.D, Professor of Pathology and Animal Health.

I. Introduction, Justification and Situation Analysis:

Animal health issues are no longer confined within any single country’s borders. The global movement of animals and food products are occurring at an unprecedented rate, largely facilitated by the conventions spelled out in the World Trade Organization (WTO) and affected by international economic crisis. For effective, fruitful and sustainable participation in the international trade, the signed countries including the Arabic countries need to meet their obligations required in the articles and provisions of the WTO and other related international and regional economic agreements. There has been a real lack of appreciation among those involved in animal health for how these trade changes are affecting production, transportation, communication and sale of various animal products. Furthermore, there is little contribution of the animal health curricula at scientific institutions in the Arabic countries to the capacity building and knowledge dissemination related to these issues. These same globalization issues are also impacting public health. Many of the public health issues being faced are of zoonotic (animal) origin. Highly Pathogenic Avian Influenza (HPAI), Bovine Spongiform Encephalopathy (BSE), Anthrax, and Foot and Mouth Disease (FMD) are examples of the type of cross-cutting

trade and public health issues in which expertise in animal health is required in order to facilitate and protect trade, agricultural economy and the public health. Recently, political will and demand for laws and policies were addressed in the different Arab Summits for international trade of live animals and international financial crisis.

Unfortunately most animal health specialists, especially in the developing world, are still unaware or not fully aware of the implications and consequences inherent in the international agreements and regulations involving animal health. This is mainly due to lack of new, practical and appropriate on-job training and weak institutional capacity in communication, skills, and lack of understanding the direct and cumulative impact of such international agreements on agriculture, economics and public health. In addition, in many instances there is a lack of knowledge in the national policy and legislations affecting trade and animal and public health, as some countries have moved with high pace towards integration with international economic liberalization system, have modified some of their laws and by-laws. The Sanitary and Phytosanitary Measures Agreement (SPS), part of the WTO, sets out parameters for assessing animal health expertise across borders. Greater appreciation of these measures, including the codified concepts of harmonization, regionalization, transparency, equivalency, and risk analysis, would confer great advantage and help developing countries participate more productively in global trade, as well as in the protection of the public health.

In addition to the low level of awareness regarding international regulatory issues are the lack of sufficient, practical and effective coordination among animal health sectors; governments, academia, Non-Governmental Organizations (NGOs) and the private sector. Veterinarians and animal health specialists employed by the regulatory sectors of animal health are often not in regular conversations with their counter parts who are engaged in research, teaching and diagnostics at the universities or with those who have their own animal clinics or engaged with veterinary or and agriculture syndicates.

The Hashemite Kingdom of Jordan has the most advanced system of veterinary education in the region. The veterinary school at JUST consists of a highly trained faculty, with rigorous curriculum and excellent success with its graduates. Consequently, this school is well suited for this initiative to partner with countries in the region.

Also, Jordan was one of the first countries in this region to join the WTO. Algeria, Yemen, and two of Jordan's neighbors, Syria and Iraq are at the “doorstep” of the WTO, awaiting membership. Membership in the WTO will provide for facilitation of trade and any trade barriers will have to be solved through scientific input with accuracy and transparency from animal health specialists.

II. **Goal:**

Our goal was to develop capacity and enhance awareness of animal Health specialists and relevant policy makers regarding international trade, international financing and globalization in the Middle East and North African (MENA) region.

III. **Objectives:** Our objectives were to:

1. Enhance understanding of global trade issues, recent financial economic crisis, as they impact animal and public health and farmers.
 - a. Recent economic crisis and globalization’s impacts on international traffic of animals and animal products.
 - b. World Trade Organization and the SPS Measure Agreement – what it means for animal health.
 - c. Multilateral agencies and integration with veterinary medicine – OIE, FAO, WHO.
2. Promote effective and sustainable integration and coordination mechanisms among all sectors in animal health.
 - a. Review functions and responsibilities of government, academics, and private sector
 - b. Create integrated template for animal health
 - c. Address public health issues that intersect with animal health
 - d. Form national and regional bodies from all sectors in animal health on globalization and relevant international agreements.

IV. Plan:

Our plan was to organize a consultation meeting/workshop that will bring together all key players in animal health. Ideally, we would have 5-8 individuals from each of the three main branches – government, academics, and private sector from the participating countries (total of 20-25 people). In addition, there should be 2-5 individuals from the public health and 3-4 people from the agriculture and health committees in the lower house.

V. Implementation of the Project:

To implement the proposal, we contacted our counterparts in Algeria, Egypt, Yemen, The Palestinian Authorities and our colleagues in Jordan. We contacted scientists from both academia and governmental people in the ministries of Agriculture through our counterpart officers in each country, by emails, telephones and faxes. We sent to them the main themes of the consultation meeting-training workshop and we asked them to prepare their talks accordingly and the nominations of the participants should be according to specialization. We also complied with the recommendation of the expert committee where we invited Dr. Doumi from Algeria but we received no response from him. We also included the private sector in Jordan where the chairman of the Jordan Veterinary Syndicate was invited and presented his views in during the activities of the workshop.

We asked the Royal Jordanian airline to make the proper reservations for the participants and we made also the accommodation reservations for all the participants. We provided the participants with transportation from the airport to the hotel and to the university and viceversa. Food, soft drinks, juices and water, and teaching materials were burned on CDs with some photos taken during the activities of the workshop were also provided to the participants.

Over the course of three days which we conducted from 7-9, of June 2011, we reviewed the current issues related to globalization, changes in international trade, regulations associated with that trade, and how to maximize economic health, minimize threats, and remain within the international regulatory framework. Transfer of knowledge and information in regards to WTO and its agreement and impacts on HPAI, BSE, Anthrax and FMD was conducted. That was through presentation of lectures, seminars and round table discussions. In addition, we reviewed the international regulations on animal movements and trade, regional documents and regulations, and country reports pertaining to such issues. Previous experience on animal trade and discussing the obstacles of international trade were presented. List A disease was presented although, listing mechanism has been canceled. Furthermore, the subject of international trade as stated in the curricula was discussed and it was found that very little information is in the curricula regarding this subject. Reports and papers on international trades, some of them electronic were exchanged among the participants. Exchange of addresses and emails and raising the issue of writing up joint proposals on such issues was discussed also. Some of the issues related to WTO were discussed are: Harmonization, Regionalization, Equivalency, Transparency, Risk Analysis, Food safety – role of the veterinary profession and Zoonotic diseases.

The training-consultation workshop conducted on three days with five sessions. Fifteen papers were presented. Chairman and Co-chairman were assigned for each session considering the participating countries and the themes addressed in that session (see the workshop program Attached Number 1). The first page contained the logos of the participating institutions. Each country was asked to present the current issues and the challenges facing animal health with reference to international trade and globalization.

The workshop started on Tuesday June 7th, 2011 with an opening ceremony. The opening ceremony started with the speech of Prof. Nabil Hailat, the organizer at JUST where he welcomed the delegations and the participants and presented the main objectives and the strategy behind funding this proposal and the expected outcomes. This was followed by the paper of the Director of the Consultation Center at Jordan University

of Science and Technology, where he presented all the support for implementation of the project on the behalf of the university. It was followed by the speech of the chairman of the Jordan Veterinary Syndicate- private sector and then by the Dean of the Faculty of Veterinary Medicine at the University. Both appraised the workshop and emphasized the importance of organizing such a workshop.

Following these papers some remarks were presented by the delegations where they thanked the organizing institution and expressed their gratitude for Jordan as a leading country and initiating these activities. They also expressed their interest in sustainability of such activities with Jordan as it gives an opportunity for mutual and multinational cooperation and changes of ideas. Part of the opening ceremony is shown in Figures 1-5 below.



Figure 1.



Figure 2.



Figure 3.



Figures 4-5.

At the beginning of the workshop, Prof .N. Hailat presented a scoping session explaining the idea behind the project and the expected outcome from this meeting. The objectives, the justification and the activities need to be conducted were introduced. Then another paper was presented by Dr. Hailat showing the development of OIE, FAO, WHO and their relations to managing and regulating animal health (see the attached two presentations).

Dr. Hailat also showed a video explaining the clinical signs, the pathogenesis and the pathological lesions associated with FMD. This video was prepared by APHIS-United State Department of Agriculture. The team from Egypt raised a major point that the clinical signs in the field in Egypt are different and it is possible because of vaccination. An infectious disease specialist also said that they vaccinated their cattle population three times per /year with little protection. This raised the notion whether there is a problem in the vaccine itself or the storage and transportation of this vaccine. Another issue also is the viral strains, may not be compatible with vaccine strain used.

During the activities of the training workshop, the issues of animal vaccination programs at the regional level were raised. The program of vaccinations in the different countries was also discussed with emphasis on Foot and Mouth Disease (FMD), Brucellosis vaccination (Rev-1 SQ and ocular) and Pest Petit Ruminants (PPR). Jovac-Jordan Bio Industries Center is a center which produce such vaccines for the region and in some times at the international level. The participants expressed their interest to visits the facilities of this center. We arranged for them in the last half of the third day a visitation program to meet with the director of Jovac and visit the different laboratories in the center and meet different technical personals there. After the visitation, the director of Jovac offered 500,000 doses of *Brucella* vaccines for Egypt without any charge. In addition an issue of *brucella millitinses* in cattle was raised by the Egyptian team also which was new for us in Jordan. This will create a new area of cooperative research with the private sector and the governments in the region. Another paper was presented on how the Avian Influenza limited the national, regional and international trade, and what measures can be taken to reduce the animal diseases effects on trades; such as zoning and compartments which are accepted internationally according to the OIE regulations.

As a result of discussion, a proposal came from the Egyptians to use regional strategies to control animal diseases affecting international trade and to harmonize the specifications and standards used for testing in order to facilitate regional and international trade. This was raised again when the paper from Jordan on harmonization of standards for food-Codus Alimentarius was presented. Similar feedback was pointed out about the paper on Sanitary and Phyto-sanitary Measures Agreement (SPS)-WTO which was presented by the Director of International Cooperation Unit at the Ministry of Agriculture Jordan. This was linked with the presentation of the Director of the Quarantine Unit in the Ministry. Feedback from Yemen, Egypt and the Palestinian Authority were presented and discussed. Part of the presentations and discussions are shown in the below (figures 6-7).



Figure 6.



Figure 7

VI. Certificates:

The Dean of Veterinary Medicine, Prof. Fekry and the organizer Prof. Nabil Hailat handed in the certificates to the participants on Thursday following the completion of the consultation workshop. The certificates were in English and were signed by the organizer and the Director of the Consultation Center for Science and Technology, Prof. Serhan Hadad. They contained the title, date and duration of the workshop with the logo of Jordan and the university. A copy of the certificate is attached with the report.

VII. Recommendations:

1. To expand and enhance the cooperation strategies among the countries in the region in relation to animal health and international trade.
2. To form a regional body where they can update the countries and the academic institutions with the international changes which occur on the regulations affecting animal health.
3. Create Pan Arab legislative forum regarding the food safety and to be harmonized with international standards.
4. To include the concepts in trade, globalization and animal health in the curricula of the veterinary faculties in the region.
5. To address the issue of international trade and animal health at the next meeting of the Arab Association for the Faculties of veterinary Medicine, this belongs to the Arab University Union.
6. To share the vaccination programs of animal diseases which are of international trade importance such as FMD, PPR and so on.
7. To write joint research and developmental proposals for improving animal health policies and trade.
8. To form personnel data base for those interested on trade and animal health.
9. To give diseases of public health concern priorities in the framework of international trade.