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# NBFP@LEBANON



BULLETIN OF THE NATIONAL BIOSAFETY FRAMEWORK PROJECT - LEBANON.

### EDITORIAL

It is so rewarding to reach the goal set for our project and at the same time it is always sad to come at an end. We have been trying to keep the link with whoever have contributed directly and indirectly in bringing added values to our project activities and here we are again insisting on your implication in the finalization of the NBF draft which must be submitted in Late July, 2005. During a first round table discussion at the Chamber of Commerce, Industry and Agriculture in Beirut; it was so challenging to see how various perspectives can decrease the possibility of missing key issues. Through this newsletter issue, we would like to invite you all to participate in the finalization of our draft national biosafety framework. We are all concerned and It is always challenging to develop present policies and laws having long-term visions as we must always keep in mind that we live the moment but we will exist forever through the next generations. We will need your diverse comments and perspectives and we will be in touch with all of you soon.

E. J. Sattout

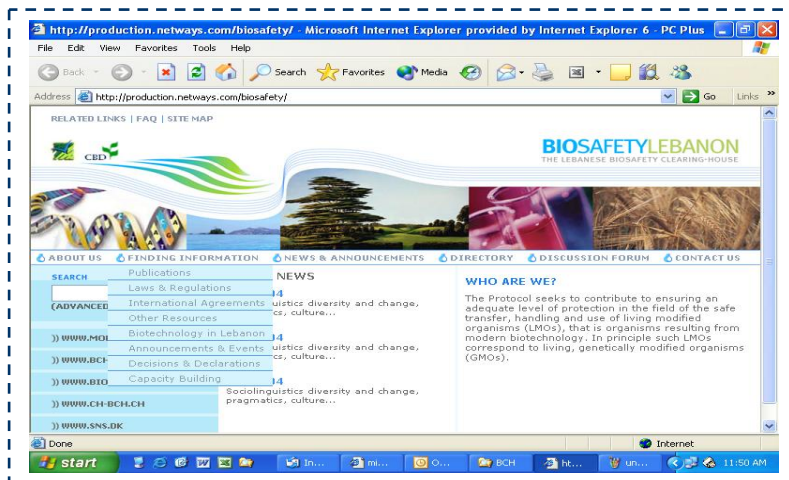


### THE BIOSAFETY CLEARING HOUSE FOR LEBANON

#### NATIONAL PLATFORM FOR INFORMATION SHARING

The Biosafety Clearing-House (BCH) is an information exchange mechanism established by the Cartagena Protocol on Biosafety to assist Parties to implement its provisions and to facilitate sharing of information on, and experience with, living modified organisms (LMOs). The BCH is essential for the successful implementation of the protocol. It assists Parties and other stakeholders in different ways in its implementation. For example, it provides a "one-stop shop" where users can readily access or contribute relevant biosafety-related information. This would assist Governments to make informed decisions regarding the importation or release of LMOs. Thus, the information in the BCH is owned and updated by the users themselves, this ensuring its timeliness and accuracy.

At this last phase of the NBF project, IBSAR and Netways in collaboration with UNEP-GEF, the Ministry of Environment (MOE) and the United Nations Development Programme (UNDP) are working on the development of the BCH for Lebanon. The Lebanese Biosafety Clearing House, will be established according to Article 20, paragraph 1, of the Cartagena Protocol on Biosafety, as part of the Clearing-House Mechanism of the Convention on Biological Diversity accessible online at: <http://bch.biodiv.org/about/default.shtml>. Through its BCH, Lebanon will ensure the transparency and promote the information sharing process, which are both vital to a dynamic and effective global biosafety system. The BCH will be hosted at the Ministry of Environment (MOE) and accessible to the public.



The purpose of the LBCH is therefore to provide a database of information and facilitate the exchange of scientific, technical, environmental and legal information on GMOs and assist the concerned authorities in the implementation of the Protocol. The LBCH is also the means through which certain information required under the Protocol is provided, including information for the Advance Informed Agreement procedure (AIA).

The LBCH will serve as the channel through which national authorities are informed about final decisions regarding notifications and domestic use (including placing on the market) of GMOs that may be subject to trans-boundary movement for food, Feed or Processing (FFP). Such information is crucial for effectively implementing the Protocol. You can use this national platform to get information on:

- ✦ National contacts,
- ✦ National Coordinating Committee,
- ✦ Roster of experts,
- ✦ National laws and regulations on biosafety; notifications, decisions and declarations,
- ✦ Bilateral, regional and international agreements related to biosafety,
- ✦ Summaries of risk assessments and environmental reviews,
- ✦ Latest announcements and events,
- ✦ Publications,
- ✦ Development of National Biosafety Framework Project (NBFP),
- ✦ Cartagena Protocol on Biosafety (Arabic, English & French Versions).

We will keep you informed on the website launching through our project list-server ✦



## RISK ASSESSMENT & RISK MANAGEMENT?

INTRODUCED DURING A SERIES OF NATIONAL WORKSHOPS

Keen to ensure public participation and to attain a wide spectrum of national stakeholders, a series of workshop on the assessment and management of risk that might arise from GMOs was organized in 5 regions in Lebanon. The first workshop, held at the American University of Beirut, gathered representatives from government institutions as well as participants from academic and research institutions and agri-businesses. The participants were welcomed by Dr. S. N. Talhouk, IBSAR Director. Two opening speeches were given by Dr. Hatjian - Director General of Environment - and Dr. B. Rongevaer - UNDP Deputy Resident Representative.



Ms. D. Klaimi (MOE), Dr. Rongevaer (UNDP) and Dr. Hatjian (MOE).

The first session, given by Dr. E. J. Sattout, presented the Cartagena Protocol, its objective and provisions as well as an introduction to risk assessment and risk management articles, the mechanism for AIA and an update on project's activities.

## Risk Assessment in 5 steps

- Step 1:** Identification of hazard
- Step 2:** Assessment of the consequences of hazards
- Step 3:** Assessment of likelihood of hazard (s) being realised.
- Step 4:** Assessment of likelihood of hazard being manifested
- Step 5:** Determining risks

During the following presentations, Dr. R. Talhouk presented the risk assessment steps and introduced risk management procedures for GM crops. Eng. Klaimi presented the latest research studies on risks assessment and management. Afternoon session was devoted to the presentation of existing national systems for field trials of new seed varieties in private agri-businesses companies. Dr. Baalbaki (IBSAR-AUB) replaced Eng. Uthman (UNIFERT) and introduced the field trials process at UNIFERT company. This session was presented again by Eng. Uthman at the second similar workshop held at the University of Balamand, koura. Two other workshops on RARM were held at the Lebanese Agricultural Research centre, Tel Amara, Bekka and the Congregation of South Farmers, Tyr. The afternoon session during LARI workshop presented the effects of GM crops on wild relatives' species and biodiversity (By Dr. R. Assi) and field trials executed by LARI on cereals crops (By Dr. F. Maalouf).



Participants at the Balamand University.

At the fourth workshop, field trials on new introduced seed varieties was presented by Eng. Demiane representing Debbane company. The main objective of the afternoon sessions was to draw a picture of the existing infrastructure and to shed light on the time needed for the introduction of new seed varieties to the local market.

**Table 1.** Matrix used for the assessment of likelihood of hazard.

	Likelihood of hazard			
Consequences of hazard	High	Medium	Low	Negligible
Severe	High	High	Medium	Effectively Zero
Medium	High	Medium	Medium/Low	Effectively Zero
Low	Medium/Low	Low	Low	Effectively Zero
Negligible	Effectively Zero	Effectively Zero	Effectively Zero	Effectively Zero

**The key elements of effective risk management include:**

- ✦ Monitoring systems,
- ✦ Research programmes,
- ✦ Technical training,
- ✦ Improved domestic coordination amongst government agencies and services.



**DRAFT NBF FOR LEBANON**

**DISCUSSED WITH PRIVATE SECTOR**

On April 20, 2005 representatives from the private sector were invited to discuss the first draft of the National Biosafety Framework (NBF). The discussion group meeting was organized with the Chamber of Commerce, Industry and Agriculture of Beirut and Mount Lebanon (CCIAB). Prior to interactive discussion, Dr. Elsa J. Sattout –National Project Coordinator, IBSAR-AUB - presented the Cartagena protocol objectives, its provisions and the imports/exports procedures as well as a brief history of the Development of National Biosafety Framework project. Mr. Walid Nasser- Law expert, IBSAR-AUB – moderated the discussions which focused on the selection of the National Competent Authority. Opinions were diverted towards two choices the Ministry of Environment and the Ministry of Agriculture. Most of the attendants favoured the Ministry of Agriculture having the technical and human resources and being the one responsible for the control, monitoring and inspection on agricultural products. The composition of the National Coordinating Committee was discussed. The argument of the private sector representatives was that there is no balance between the various parties represented on the NCC and especially the private sector. All opinions were seriously noted. The meeting was closed with a consensus to meet in the next weeks and discuss further points in the NBF. It was agreed that the draft NBF will be sent to all attendants for review before the 2nd group discussion meeting



**EU LISTS LEGAL GM PRODUCTS**

Following the recent illegal import of Bt10 genetically altered corn to France and Spain from the US, the European Commission has published a list of 26 biotechnology products which have been approved for use across the 25 Member States.

The products listed include 12 varieties of corn, six varieties of oilseed rape, five of cotton and one of soybean, one biomass product and one yeast cream. It is hoped this list will clear up confusion following recent events.

'This register is an important tool to clarify the legal status of GMOs [genetically modified organisms] allowed for sale in the EU before the current legislation entered into force in April 2004,' explains Markos Kyprianou, EU Commissioner for Health and Consumer Protection. 'The register makes it clear which products can legally be sold in the EU, although in reality many of these products may not currently be on the EU market.'

The 26 products were either approved under former EU

legislation or did not require approval at the time they were put on the market.

Since they were not subject to the strict new legislation put in place in April 2004, which requires a thorough authorisation procedure and a scientific safety assessment by the European Food Safety Authority (EFSA), they were examined by the Commission and the Joint Research Centre before being added to a specific section of the Community register of GM food and feed complete with all the necessary information.

Once officially listed on the EU biotech register, companies selling the approved product can do so for a term of between three and nine years, after which a new authorisation application has to be submitted to the European Commission

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**PHYTOSANITARY MEASURES**

**INSPECTION POINTS AND MONITORING AT MOAG**

The application of phytosanitary measures falls under the stewardship of the Department of Import, Export and Plant Quarantine and the Department of Plant Protection at the Ministry of Agriculture. Monitoring and inspection measures are executed in 9 Plant quarantine centres distributed on the Lebanese border, these follows the Department of Import, Export and Plant Quarantine. In the case of export, phytosanitary certificate is given by the department; while in the case of import clearance is given for imported commodities.

The main tasks undertaken by the agriculture import/export and plant quarantine department are:

- Ensure that phytosanitary rules, regulations and import/export standards are applied,
- Recommend on issues related to phytosanitary rules and regulation,
- Validate certificate of origin,
- Coordinate regularly with the centres,
- Carry on routine visits to centres on monthly basis and in emergency cases.

The tasks of quarantine centres involve:

- Monitor and control the plant health status of the imported and exported agricultural commodities,
- Collect samples from specific commodities for laboratory analysis,
- Keep records on all imported and exported agricultural commodities,
- Issue phytosanitary certificate for exported agricultural commodities.

Steps for control:

1. Submit request,
2. Verify the documentation,
3. Visual inspection of the commodity,
4. Sampling and laboratory analysis (when needed).

The prevention applied on the introduction and spread of harmful organisms, such as:

- *Bactocera zonata* in some imported fruits from specific countries,
- Sharka on stone fruits,
- *Ralostonia solanacerum* on potato,
- Nematode on roots of fruit trees,
- Tristeza on citrus.

### What are the future requirements of the department?

- Issue a plant quarantine law,
- Implement IPPC international standard,
- Laboratory accreditation,
- Rehabilitate plant quarantine centers,
- Recruit new staff (mainly inspectors),
- Assist in linking inspection centers through a network,
- Pest list quarantine,
- Strengthen the communication with international organization.

Source: Eng. Charles Zarzour, Chief of Agriculture Import & Export Service, MoAg.



## BIOPHARMING

### LIVING PHARMACEUTICALS MANUFACTURES

In recent years, leading agrobiotech and agrochemical companies have begun developing plant-based systems for pharmaceutical and chemical production. In that light, tobacco, potato and corn plants have been genetically engineered on an experimental basis to produce a number of vaccine components and monoclonal antibodies. Several of these products have begun clinical trials. About 20 companies worldwide are developing plants for the production of pharmaceutical or industrial proteins. Companies have already conducted open field trials of plants that produce Hepatitis B vaccine, human antibodies against herpes and other diseases, and human blood proteins. One company is developing an animal drug in corn, and suggests that the corn would be grown only for feed. Field trials have taken place in the US, France, and Canada. Products being actively researched for plant-based production include blood coagulants, proteases and protease inhibitors, growth promoters, neurologically active proteins, and enzymes that modify the structure and function of other biologically important compounds, as well as monoclonal antibodies and viral surface proteins potentially useful for vaccination.

### What is Biopharming?

Biopharming is a plant-based system for pharmaceutical and chemical production.

### What are the crops used?

Corn is by far the most popular crop, accounting for over 2/3 of the biopharm plantings. Other crops engineered for biopharmaceutical production include soybeans, rice, barley, wheat, canola and tobacco. Biopharm field trials have been conducted on surface area varying between 900 and 1600 acres

SOURCES: <http://www.edmonds-institute.org>; [http://www.innovations-report.com/html/reports/life\\_sciences/report-31550.html](http://www.innovations-report.com/html/reports/life_sciences/report-31550.html), <http://www.biomedcentral.com/news/20030730/04>



#### RESOURCES

✦ The Cartagena Protocol: A record of Negotiations. Downloadable online at: <http://www.biodiv.org/doc/publications/bs-brochure-03-en.pdf>

✦ The Biosafety Clearing House of the Cartagena Protocol on Biosafety: A Guide to the BCH. Downloadable online at: <http://www.biodiv.org/doc/publications/bch-brochure-en.pdf>

✦ Conference Proceedings on the Impact Biotech Regulations has on Small Businesses and University Research. Downloadable online at: <http://pewagbiotech.org/newsroom/announcements/030705.php>

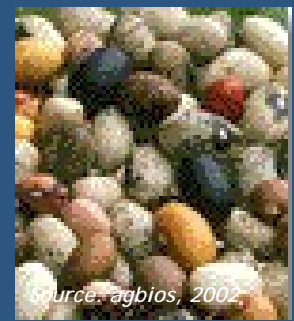
#### WHERE ARE WE NOW?

✦ Organizing discussion groups and round table meeting to review the draft of the National Biosafety Framework for Lebanon,

✦ Finalizing the draft NBF. The draft will be reviewed by international experts provided through UNEP-GEF Biosafety Unit,

✦ Working on the design and finalizing the concept of the awareness material,

To know more about our project activities, check the project fact sheets online at: <http://www.undp.org.lb/programme/environment/factsheets/index.html>



Source: agbios, 2002.

## EVENTS

### INTERNATIONAL CONSORTIUM ON AGRICULTURAL BIOTECHNOLOGY RESEARCH

The International Consortium on Agricultural Biotechnology Research (ICABR) is organizing its 9th international conference, entitled "Agricultural Biotechnology: Ten Years After." The conference will take place July 6-10, 2005 in Ravello, Italy. For more information go to:

<http://www.economia.uniroma2.it/conferenze/icabr2005/Default.asp>



### WORKSHOP

ASSESSING & MANAGING RISKS: THE CARTAGENA PROTOCOL ON BIOSAFETY & NBF

May 18, 2005

Place: Kaslik University, Kaslik.



### FOR FURTHER INFORMATION

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