import approval regulations and mandatory labeling requirements for GM food. However, the European policy results in an effective import filter of GM food ingredients whereas the Japanese policy is more pragmatic and allows imports of a larger range of GM food and feed.

Thirdly, we show that the expected effects of international and domestic trade-related regulations critically depend on the type of traded GM products and their intended use: food and unprocessed products are subject to more stringent regulations than animal feed and processed products. As a consequence, international regulations are likely to have a much larger international trade effect on potential future GM food crops such as rice and wheat than on current GM crops mostly used for animal feed, processed food and non-food uses.

Finally, we identify the main spillover effects of national and international regulations on developing countries’ policy making: a) compliance with international agreements that do not necessarily correspond to domestic objectives, b) the fear of export loss due to trade-related regulations in large importers, and c) the trend towards harmonization of domestic regulations with the ones of large importers. We then suggest four policy arrangements on GM food to enable developing countries to satisfy production, consumption, international trade, and risk management objectives simultaneously while complying with their international obligations. These policy arrangements include two critical measures: the practical and efficient use of harmonized safety standards for imports, and the setting up of segregation strategies of GM versus non-GM for sensitive export commodities to respond to domestic or international consumer demand. We argue that the proposed policies will help mitigate the observed and future economic effects of trade-related regulations, allowing developing countries to fully benefit from the use of these productivity-enhancing technologies.


NATIONAL CONSULTATION ON REGULATION OF GM FOOD

On March 10, 2006, the Ministry of Health and Family Welfare published draft rules that, if finalized, will require the mandatory labeling of genetically modified foods in India. These rules (see page 2) will be the topic of a National Consultation to be held April 27, 2006, at the Ambassador Hotel in New Delhi. The Consultation is organized by Biotechnology Consortium India Ltd. and is sponsored by the All India Crop Biotechnology Association. For more information, please contact:

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Website: http://www.biotech.co.in
These rules may be called the Prevention of Food Adulteration (Amendment) Rules, 2006.

In the Prevention of Food Adulteration Rules, 1955 (hereinafter referred to as the said rules), the genetically modified or engineered organisms obtained through modern biotechnology; or engineered organisms obtained through genetic engineering or other means.

In addition to the labeling provisions as prescribed under these rules, the genetically modified food shall also conform to the following labeling requirements:

1. Objections or suggestions, if any, in respect of the draft rules, may be addressed to the Secretary, Ministry of Health and Family Welfare, Government of India, Nirman Bhavan, New Delhi – 110 011.

2. The objections and suggestions, which may be received from any person with respect to the said draft rules before the expiry of the period so specified, will be considered by the Central Government.

DRAFT RULES

1. (1) These rules may be called the Prevention of Food Adulteration (Amendment) Rules, 2006.
   (2) They shall come into force on the date of their final publication in the Official Gazette.

2. In the Prevention of Food Adulteration Rules, 1955 (hereinafter referred to as the said rules), after rule 37D, the following shall be inserted, namely, -

   (i) “37-E Labeling of Genetically Modified Food -
   Genetically engineered or modified foods means food and food ingredients composed of or containing genetically modified or engineered organisms obtained through modern biotechnology; or food and food ingredients produced from but not contained genetically modified or engineered organisms obtained through modern biotechnology;

   In addition to the labeling provisions as prescribed under these rules, the genetically modified food shall also conform to the following labeling requirements:

   (a) a GM food, derived there from, whether it is primary or processed or any ingredient of food, food additives or any food product that may contain GM material shall be compulsorily labeled, without any exceptions;

   (b) the label of all package(s) of GM food(s) or foods containing ingredients, derived from biotechnology or bioengineering or food additives or any food product that may contain GM material shall indicate that they have been subject to genetic modification. These provisions will be applicable to all such products both imported or domestically produced; and

   (ii) After rule 48-E of the said rules, the following shall be inserted, namely, -

   “48-F Restriction on Sale of Genetically Modified Food: -
   No person shall except with approval of and subject to the conditions that may be imposed by the Genetic Engineering Approval Committee (GEAC) constituted under the Environment Protection Act, 1986, manufacture, import, transport, store, distribute or sell raw or processed food or any ingredient of food, food additives or any food product that may contain GM material in the country:

   Provided that in case of imported genetically modified foods, the importer shall submit documents supporting the purported clearance at the time of import.”

A MESSAGE FROM USAID INDIA MISSION

Larry Paulson, Office of Economic Growth, USAID, New Delhi

USAID determined, about four years ago, to create a program in biosafety that would enhance national regulatory systems and frameworks that deal with disparate goals such as economic and regional development, and environmental protection, assisting their integration into a single national vision and the communication of both the vision and its implementation to stakeholders of all stripes.

The SABP-India program, begun a year and a half ago, seeks to support existing Indian authorities who are or may become involved in biosafety regulation, and with regulation implementers, technology users and interested civil society groups that may lead public dialogue on the ethical, legal, and social implications of biotechnology and plans for its operation. SABP-India supports capacity building activities, particularly within food safety disciplines.

The overall program goal is to more effectively address biosafety within a sustainable development strategy, anchored by agriculture-led economic growth and trade, and environmental enhancement. Its mission is to empower partners’ science-based biosafety decision making while strengthening capacity to implement biosafety systems.

SABP-India has made notable contributions in the past year in awareness and knowledge-building at both grassroots...
MESSAGE FROM THE EXECUTIVE CHAIRMAN, BANGLADESH AGRICULTURAL RESEARCH COUNCIL

Dr. M. Nurul Alam, Executive Chairman, Bangladesh Agricultural Research Council (BARC)

Since the inception of the South Asia Biosafety Program (SABP), under a Memorandum of Understanding signed by Agriculture and Biotechnology Strategies (Canada) Inc. (AGBios), the Bangladesh Agricultural Research Council (BARC), and the International Food Policy Research Institute (IFPRI), BARC has been working very closely with SABP to implement its activities in Bangladesh.

I am very happy to report that during the past year BARC and SABP have jointly organized several national and regional training workshops and discussion meetings. Through these workshops many scientists, experts and representatives from NGOs and the private sector have been trained and, as a result, we have been able to develop a group of local experts on agricultural biotechnology and biosafety who now act as resource persons at most of the workshops.

Other BARC/SABP activities have made it possible to update researchers, journalists, policy makers, and members of the private and NGO sectors on recent advancements in agricultural biotechnology and biosafety.

It has been our pleasure to have the Minister for Agriculture, the Minister for Environment and Forests, the State Minister for Agriculture, and the Secretary, Ministry of Agriculture, take part in the workshops and discussion meetings and provide policy support in these important areas. Because of their active support and commitment, agricultural biotechnology activities have been taken up as an important tool in the research and development agenda of the policy and strategy on biotechnology in Bangladesh.

Another important initiative of SABP was to publish a monthly newsletter. This newsletter has raised awareness and helped to disseminate news of SABP and the latest developments related to agricultural biotechnology and biosafety.

I am very much aware that a regular publication like this is a very hard job. I would like to congratulate the SABP team members working in Canada, Washington DC, Bangladesh and India for their untiring efforts to make it a success. I would also like to thank the contributors, especially the guest columnists, who spared some of their valuable time for the newsletter.

I would like to thank my colleagues at BARC, namely, Dr. Md. Abdur Razzaque, Member Director (Crops) and Dr. M. Khalequzzaman A. Chowdhury, C.S.O. (Crops) for their constant cooperation and assistance in partnership with

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Dr. D.J. MacKenzie and Dr. M. Imdadul Hoque for the successful implementation of SABP activities in Bangladesh. Special thanks to USAID for supporting the SABP activities in Bangladesh. Finally, I sincerely wish for the continued success of SABP and the newsletter in the coming years.

ONE YEAR OF SABP ACTIVITIES IN BANGLADESH IN REVIEW

Prof. Imdadul Hoque - SABP - Bangladesh Country Coordinator

The South Asia Biosafety Program (SABP) has been functioning in Bangladesh since February, 2005. Its aim is to assist the Bangladesh government in implementing a transparent, efficient and responsive regulatory framework to ensure the safety of new foods and feeds and their impact on the environment. To this end it signed Memorandums of Understanding with the Ministry of Environment and Forests and with Bangladesh Agricultural Research Council.

To foster an awareness of the recent developments in agricultural biotechnology and biosafety among the various stakeholders, including policymakers, SABP organized training workshops, discussion meetings, etc. A secondary objective was to develop local human resources to assist in implementing a biosafety regulatory framework.

Over the past year, through the SABP/BARC-organized workshops, SABP has been able to train 116 members of the Department of Agricultural Extension (DAE), 87 scientists from the National Agricultural Research Systems (NARS), 25 university and college-level teachers/researchers, 19 members of the private and NGO sectors, and 16 students. Through co-sponsorship of the 3rd International Botanical Conference, SABP was able to disseminate the same information to 90 university teachers, 40 college-level teachers, 46 from NARS institutes, 34 from private/NGO sectors, 52 graduate students and 11 foreign scientists.

The participation and active support and commitment of the Minister of Agriculture, the Minister of Environment and Forests, the State Minister for Agriculture, the Secretary, Ministry of Agriculture, and the Executive Chairman of BARC, at the inaugural ceremonies at all the SABP workshops brought attention to agricultural biotechnology activities and contributed to their increased profile.

SABP assisted in the further education of 14 Bangladeshi scientists/policymakers on biosafety, food safety assessment related issues by sponsoring their participation at training workshops held in India, Sri Lanka and The Philippines. Through this sponsorship SABP was able to help develop a group of local experts on agricultural biotechnology and biosafety who are now acting as the resource persons in most of the SABP-organized workshops.

(continued on page 4 - see Review)

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CALENDAR OF EVENTS (BANGLADESH)

<table>
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<th>Event</th>
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<td>Regional Workshop on the Awareness Building on the Recent Advances of Agricultural Biotechnology &amp; Biosafety</td>
<td>South Asia Biosafety Program (SABP)</td>
<td>TBA</td>
<td>Khulna &amp; Barisal Divisions</td>
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AGRICULTURAL RESEARCH CHAIRMAN, BANGLADESH AGRICULTURAL RESEARCH COUNCIL

Dr. M. Nurul Alam, Executive Chairman, Bangladesh Agricultural Research Council (BARC)
Message from USAID India - continued from page 2

(farmer) and regulator levels. Both are important to building social consensus and the regulatory transparency that supports a consensus. USAID looks forward to a gathering momentum over the next year.

ONE YEAR OF THE SABP NEWSLETTER

Purvi Mehta-Bhatt, SABP - India Country Coordinator

This month we mark the first anniversary of the South Asia Biosafety Program (SABP) newsletter.

I recall the preliminary discussions we had regarding the frequency of the newsletter. We had originally planned to publish it once every four months but the response to the first newsletter and the increased number of SABP activities encouraged us to make it a monthly publication.

The newsletter is subscribed to by hundreds of readers in India and Bangladesh, both rural and national, as well as international readers. Its content is not limited to reports on the various SABP activities. Many other organizations like TERI and ISAAA have used it to announce their own events and activities. The response to the newsletter has been beyond what we had initially anticipated.

As we celebrate the first year of the newsletter, I would like express our gratitude to all the guest columnists who have been very generous in contributing their viewpoints and articles. I would also like to thank the entire SABP team based in Canada, Washington DC, India and Bangladesh. And finally, to all our subscribers, thank you for your positive feedback. We look forward to keeping in touch with you through the newsletter each month!

Review - continued from page 3

The SABP newsletter is distributed to researchers, policymakers, university and college-level academics and most of the university/NARS/NGO libraries. Through its monthly distribution of 350 electronic and 500 hard copies, which feature a guest column and information about the latest agricultural biotechnology activities and news in the region, the newsletter has become a forum to regularly disseminate news of SABP and other new developments in agricultural biotechnology and biosafety.

Through BdBC/SABP activities it has also been possible keep our local print and electronic media journalists up to date on the latest developments in agricultural biotechnology and the benefits to Bangladesh. As a result, regular news articles are being published in the national dailies highlighting the benefits of biotech crops and their impact on food security and poverty alleviation.

SABP plans to organize two more regional workshops in the Barisal/Khulna and Sylhet Divisions of Bangladesh. Along with BARC, SABP is currently working on the development of a Standard Operating Procedure (SOP) for the Field Trial of Transgenic Crops.

GM CROPS, DRUGS CRITICAL FOR INDIA’S DEVELOPMENT: MINISTER

While some nations like France may be wary of genetically modified food, India cannot afford not to invest in technologies that will boost production and can also serve to address the nutritional deficiencies of India’s largely vegetarian population, Kapil Sibal said.

“We can’t close our eyes to biotechnology for agriculture,” he said at a biotechnology conference in Chicago.

“At the same time we cannot deviate from the goal of sustainable development in terms of environment and the basic interest of the farmer and consumer safety. So our approach is a case by case basis.”

Yields in India are significantly lower than in most other nations and the current production growth rate will have to triple if India will be able to feed its growing population.

Scientists are currently working on creating crops enriched with a significantly higher iron content that will allow the 70 percent of South Asians with iron deficiencies improve their hemoglobin counts.

See the full article at: http://agbios.com/sabp_main.php?action=ShowNewsItem&id=7439

GOVERNMENT TO GIVE GM AGRI-COMMODITIES A BOOST

The Economic Times (India) - April 4, 2006

India’s foreign trade laws are set to catch up with the advances in agricultural biotechnology, the science behind a fast expanding global market, in genetically modified (GM) crops.

The government is now working on bringing a framework to regulate trade in genetically modified agricultural commodities called living modified organisms (LMOs) used as seeds or food. There is already a regulatory process in place for limited import of such materials for research.

The framework, which the commerce ministry is working on with the Department of Biotechnology, will also prescribe the maximum allowable presence of genetically modified content in an import consignment and will require documentation to trace its presence at every stage of grain-handling and food production.

See the full article at: http://agbios.com/sabp_main.php?action=ShowNewsItem&id=7425

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