

## Efforts to Regulate Cultivation Regarding Genetically Modified Crops in Hokkaido

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### (Introduction)

This is Mr. Hashimoto, I am the Director of the Food Policy Division for the Government of Hokkaido. I very much appreciate the opportunity to participate in this conference. Also I am grateful to be able to present Hokkaido's ordinance regulating GM crop cultivation, the first such regulation established by a prefecture in Japan.

### (About Hokkaido)

Please take a look at the 1<sup>st</sup> page of the documents distributed to you. Hokkaido is situated in the northern part of Japan and has an area of 83,000 square meters. It is as big as Austria. Hokkaido accounts for 5% of the total Japanese population, about 5,600,000 people, that is a little more than the population of Denmark. Hokkaido's main industries are agriculture, forestry and fisheries as well as food manufacturing. Please take a look at the 2<sup>nd</sup> page. Hokkaido produces about 22% of the total calorie-based food self-sufficiency of Japan, which makes Hokkaido the largest food producing region in Japan. Production of several agricultural products and fishery products are number one in Japan.

### (Status of usage of GM crops in Japan)

However, Japan's total food self sufficiency is only 40%, which is extremely low. Thus Japan imports GM maize, GM soybeans and GM canola for feed and oil production purposes in large quantities. There is a GM food labelling regulation in Japan, although the regulation does not cover processed foods in which genetically modified DNA cannot be detected after heat treatment, such as edible oils and soy sauce, and also does not cover animal feed. Moreover, the threshold level for unintended GM contamination is set as up to 5%, which was decided by considering the actual conditions of the imported GM crops. Please have a look at page 4. Most of the citizens of Hokkaido are basically positive about research and development in GM technology, but they are alarmed about the consumption of GMOs. Additionally, there is strong opposition to GM crop cultivation. Moreover, most of the producers oppose GM crop cultivation. Therefore, there are currently no commercially cultivated GM crops in Japan, only some out-door research cultivation. There have been some cases where some producers and companies have conducted cultivation of some GM crops in past years, and also there are still a few producers who are expressing an interest in labour-saving GM crop cultivation.

### (Establishment of Hokkaido's own ordinance to regulate GM crop cultivation)

There are 47 prefectures and about 1,800 municipalities in Japan. They all have their own parliamentary body, which has the power to approve local ordinances provided that they do not conflict with national laws. In Hokkaido, we have 180 municipalities and a prefectural government.

Please turn to page 5. The Hokkaido Government established the “Hokkaido Food Safety and Reliability Ordinance” in March 2005, in order to create a safe and reliable image for Hokkaido food brands. On the basis of this ordinance, we are promoting farm methods like environmentally friendly organic farming, and reduced agricultural chemical and synthetic fertilizer use. At the same time, we are also recommending the production of safe and reliable processed food using raw materials from Hokkaido’s crop and livestock farms. Of course, the premise is that the raw materials must be NON-GM.

Please turn to page 6. Hokkaido established the “Hokkaido Preventive Measure Ordinance against Crossing by GM Crop Cultivation” in order to prevent crossing or commingling (cross-pollination) of NON GM crops by open-air cultivation of GM crops. It was the first ordinance restricting GM crop open-air cultivation set up by a prefectural government in Japan.

In Japan, the safety of GM food is assessed under the Food Sanitation Law, and the safety of GM feed is assessed under the Feed Safety Law. Moreover, the safety of the natural ecosystem is assessed under the national Cartagena Law, which was established in accordance with the Convention on Biological Diversity. GM crops cannot be imported, produced, distributed or sold without going through each assessment.

However, there are no national laws preventing the crossing or commingling of GM crops with NON GM crops. Therefore, the Hokkaido government made a decision to establish its own regulation. This ordinance sets strict rules for GM crop cultivation in order to protect NON GM crops from contamination by GM crops. In Hokkaido, to conduct GM field trials requires notification to the Governor, and commercial cultivation of GM crops requires approval from the Governor of Hokkaido.

The aim of this ordinance is to prevent GMO contamination of NON GM crops, and to prevent confusion in agricultural production and food distribution. We do encourage the biotech industry, including GM research, but at the same time we act prudently on GM crop commercial cultivation as much as possible in order to eliminate adverse impacts on the

production of NON GM crops. The ordinance is to secure the “coexistence” of GM crops and NON GM crops by imposing strict conditions for GM crop cultivation.

(Criteria for prevention of crossing)

Please turn to page 9. In accordance with the ordinance, buffer zone distances between GM crops and NON GM crops have been established for 5 GM crops; rice, soybeans, maize, rapeseed and sugar beet. The distances that must exist between GM crops and NON GM crops are, for example, 300 metres for rice, and 20 metres for soybeans. For the case of non-flowering crops, there is no need to set a buffer zone.

(Status of the implementation of test research on validating the regulation for prevention of crossing)

Please turn to page 11. The research body of the Hokkaido Government has been conducting tests in order to re-examine the buffer zone issue and accumulate data since 2006 by using NON GM crops.

Please turn to page 12. The test results confirmed that crossing has occurred even at a distance of 300 metres for rice, presumably by wind, and 135 metres for soybeans, presumably caused by insects, and also 600 metres for maize, presumably by wind. We will continue this research for a further two years, in order to accumulate scientific data for the prevention of crossing.

(Implementation of the GMO Consensus Conference)

Please turn to page 13. The Hokkaido Government held a “Consensus Conference” concerning GM crop cultivation in 2006, the first time such a conference has been organized by a prefectural government in Japan. The holding of this conference was one part of the “risk communication” with which we wish to insure the safety and reliability of food in cooperation with the citizens of Hokkaido. We have heard that this is already an established method in countries like Denmark. We chose 15 people from among the citizens of Hokkaido after a public call for applications, and that citizen panel met four times, holding 40 hours of talks with experts as well as discussion among themselves, to complete their work with a citizen’s proposal.

Please turn to page 14. The proposal demands reinforcement of long-term toxicity testing and GM food labelling regulations. It also demands an announcement by the Hokkaido Government not to allow commercial cultivation without the consent of the citizens of

Hokkaido, and mentions that there were opinions both for and against GM crop cultivation.

The Hokkaido Government will take the recommendations of the Consensus Conference into consideration in its own policy deliberations. Concerning national regulations, the Hokkaido Government will make a request to the national government to take necessary countermeasures.

(Future tasks)

The Hokkaido ordinance is premised on absolute prevention of crossing by GM crop cultivation, and it is mandatory for GM crop cultivators to monitor verification of this. However, the test results indicate the difficulty of attaining absolute zero GM contamination.

In the ordinance, there is a rule for a review and re-examination of the ordinance from 2009. We will therefore be listening to opinions from citizens and experts in order to go forward to this review on a scientific basis.

(In conclusion)

I have had the pleasure of explaining to you the situation and activities now taking place in Hokkaido. I will enjoy listening to explanations and opinions from the participants of this conference in order to strengthen future investigation by learning from all of you.

Thank you very much for your attention!