**COMENTS TO THE DOCUMENT:**

**Monitoring and long-term effects of LMOs released into the environment**

Elizabeth Bravo

GM crops monitoring is essential once they have been released into the environment, because the risk assessment is only based on possible scenarios, and GM are by nature unpredictable, so their impacts can be properly assessed only by continuous monitoring.

Monitoring should be a tool for decision-making. If during the risk assessment it was not identified a scenario that produce damage (in the environment, human health or biodiversity) it can be found be monitoring.

Information obtained in the monitoring process should be used to reverse a decision, and for example, suspend a permit for release of an LMO. Monitoring should not only lead to risk management measures, but to take decisions on permits already granted. ie a permit must be reversed if monitoring indicates that damage to health, environment and biodiversity.

Monitoring should also be used as an instrument to evaluate damage, so it should be used as a tool in the implementation of the Protocol of Nagoya and Kuala Lumpur. For this reason, it is essential to ensure the independence of who does the monitoring. The monitoring process can not be done by the applicant.

Monitoring must be permanent, until the abandonment of the GM crop field, and later in the abandonment plan. You cannot have a limited time, because the impacts can be cumulative and long-term.

Monitoring should also include the effects of the technology package (which is used with the GM seed) on biodiversity, sustainable use and impacts on health.

In relation with the identification and prioritization of adverse effects and the choice of indicators and parameters for monitoring, since what we are trying to overcome uncertainty of impacts of LMO, those aspects that were not foreseen in the risk assessment, monitoring should look the effects of LMO in a more general fashion, at least initially. Then, once you have some results that show you that this GMO is producing this no expected impact, you can select what factors should be monitored in a longer term. Decision on the indicators, time and where to monitoring, should be taken based on real data, not on hypothesis.

Monitoring should farmers' perceptions and also of those affected by health effects, using tools of the social science, and also epidemiological tools such as statistics, medical histories.

 Monitoring cannot be restricted spatially. It should be done throughout the territory covered with GM crops, especially in a initial stapes. Indicators should also be made using the perception of the actors described above.

The baseline should not be limited to the receiving environments, buy also on the epidemiological epidemiological status of the population