Transcription
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April 19, 2007

At the beginning is the seed. The Committee on the Future of Food has recently drawn up a Manifesto on the Future of Seeds, to which I'd like to introduce you briefly. Seed is the beginning of our food and of agriculture. Seeds are also the pivotal issue in terms of coexistence between GMOs and non-GMOs in agriculture. If you destroy the foundations of a building, you need no longer bother with the roof. Today, we are facing probably the biggest challenges in the history of agriculture. How, in 2050, can nine billion people feed themselves from soil that, over the past 40 years, had its life blood sucked out by destructive practices? And, how can agriculture cope with the inevitable climate change ahead of us, while minimizing its further acceleration?

There are two major concepts about how to cope with these challenges. One is an open source concept, a concept of using diversity and the other is what I would call the Microsoft concept, a concept of global uniformity and acceleration of technology. Let me give you a current example: drought resistance. Quite obviously, increased drought-tolerance of seeds is an important goal of future breeding. All varieties with increased drought tolerance available at this moment and bred over the past ten years in a targeted manner are based on conventional breeding. There is a huge spectrum of varieties that have drought-resistance properties and we have only started to exploit the available diversity of such varieties. Nonetheless, virtually all public investments of the European Union and its member states have gone into research approaches based on genetic engineering, trying to transfer individual traits which are believed to contribute to drought resistance. There are no practical results of this research up to now, no new varieties produced by these means. We simply cannot afford such techno games on such pressing issues in the current situation.

Another example is the economic consolidation of the seed sector. Forty years ago, there were more than 1000 seed companies in Europe. Today only several hundred are left, and five to seven transnational companies dominate 70% of the market for major crops. Can we afford this type of concentration? Can we afford such loss of expertise, of knowledge, of breeders, and the closures of research laboratories that would be able to contribute to solving the problem?

The United Nations Food and Agricultural Organization, FAO, estimates that 75 % of agricultural diversity has been lost over the past 100 years. What are we going to do with the remaining 25 percent? Do we rely on global genetic uniformity or shall we try and activate the diversity we still have? A variety needs to adapt to environmental conditions. If it is just stored in the deep freezers of gene banks, there is a great risk that varieties are going to become extinct. They need to be planted and used in order to survive.

As a general rule, over-specialization reduces the ability to adapt to changing conditions. This has been the most important reason for the extinction of species in natural history. Analogously, by the way, it has also been a major reason for the downfall of human civilizations. Trying to rely on a single solution to problems dramatically increases the risk of failure. Today, there are so many risks facing agriculture and facing the very existence of our life, we cannot rely on a single solution.

All of this ties in with the contamination of non-GMO seed with GMO. As you know, there is still a plan within the European Union to allow for so-called thresholds for the contamination of conventional seeds with GMOs. Just imagine one of these GMOs, which was thought to be safe, turns out not to be as safe as scientists had initially thought. This has happened frequently with all kinds of substances approved at one point and withdrawn later as their detrimental health or environmental impacts became known. In such a case, literally all seeds, which might be contaminated with the GMO in question would have to be recalled. And this might be all seeds of a given species. As seeds replicate, the risk simply cannot be contained if something goes wrong. Bayer's unapproved GM rice LL601, of which probably just one bag had been erroneously introduced into the basic seed of a different variety, is a good example. Five years later more than one fifth of all long grain rice imported from the USA contained LL601 and had to be removed from supermarket shelves. In Texas and Louisiana, rice farmers still struggle to remove LL601 from their seeds and have not succeeded so far. Imports of rice from the US to Europe have since collapsed. This is just a foretaste of what can happen should we allow GMO contamination of all our seeds. Today in the European Union, there are still no emergency plans for such cases of seed contamination. There is no joint concept as to how to recall a GMO, which proves to have detrimental impacts.

This leads to a subsequent risk, which probably has even more devastating impacts: seed breeding becoming a high-security exercise. How can ordinary farmers and breeders ensure that the seeds they use are not contaminated? Will they have to test all their material with expensive PCR methods? Who can afford this? Yes, a few transnational companies can, but not ordinary farmers and rarely small and medium-size breeding operations. Will those companies, which presently are trying to introduce GMOs into our agricultural system be the only ones, who can guarantee the non-GMO quality that we at the moment take for granted? This would be the end of free exchange of seeds. For some companies, Monsanto, Bayer, Syngenta, BASF, Limagrain, KWS, Pioneer, such an exclusion of the people from seed propagation and exchange would certainly be very interesting and financially attractive. But this overspecialization could be fatal for the rest of the population. One logical alternative to prevent GMO contamination is sterility. Preventing the seed from propagating in order to prevent the spread of their risk is a technologically logic concept and such "terminator" seeds are already being developed, despite the fact that they are banned under the global Convention on Biodiversity. The reason they are still banned is that the price of this strategy would be the end of the free propagation of life. Nevertheless such terminator technologies are actually being promoted and funded by the EU research program under the name of "transcontainer" and promoted as a contribution to allowing the coexistence of GMO crops and non-GMO crops.

At the very beginning of life is the seed. If their further development and maintenance is left exclusively to the rules of the global market, this is a sure recipe for disaster. Not because the companies are bad or evil, but because they have to adapt to the rules of the market or else become extinct. And the rules of the market differ fundamentally from the rules of evolution and natural diversity. And, by the way, they also contradict our desire for diversity of taste and culture. These are some of the arguments of the "Manifesto for the Future of Seeds" to keep seeds as a global heritage of mankind, of past and future generations, as global commons. We need to increase public investment in breeding and maintenance and control over the diversity of seeds for our very survival and, therefore, we call for the democratization of the seed economy. Thank you.

(Applause)