



**SUSTAINABLE FOOD SECURITY
FOR ALL BY 2020**
September 4–6, 2001 ! Bonn, Germany



SUMMARY NOTE

Panel Discussion: 800 Million Still Hungry: Why Have We Made So Little Progress?
Panelist: Heinz Imhof, Chairman of the Board, Syngenta
Title: Combating Hunger: How the Agribusiness Industry Can Help

Tackling hunger needs many different contributions. The agribusiness industry can help best through technology. Supplying this depends on the right environment.

As we consider the causes of hunger, let us recall how complex it is to feed people. As well as planting, harvesting, and distributing food efficiently, all sorts of other factors also have to combine perfectly. Some have already been profoundly affected by technological change, including local innovations. Improvements in infrastructure have far-reaching benefits, for example, those that aid food storage and transport. It is difficult to prove that one individual factor is more important than another. What matters is that every contribution to making more food available is part of the solution. Those factors that can be influenced by human activity require very specific expertise.

The agribusiness industry is just one single part of the campaign against hunger. This has to be a multi-faceted campaign, because hunger is a multi-faceted problem. Our industry must concentrate on where its expertise can bring real benefits. That means on agricultural inputs. We have made great progress here, but there is still a lot of scope for more. The United Nations *Summary Human Development Report 2001* provides a clear example: "The reduction in undernutrition in South Asia from around 40 percent in the 1970s to 23 percent in 1997 — and the end of chronic famine — was made possible by technological breakthroughs in plant breeding, fertilizers, and pesticides in the 1960s that doubled world cereal yields in just 40 years."

That is impressive. But the figure "23 percent" reminds us that there is still a gap. It is growing at a daunting rate: the world's population is predicted to rise to eight billion by 2025, while calorie demands double. How can we help close that gap?

Products and technology help close the gap

Improving yields and food quality is the only sustainable choice — as opposed to extending the farmland area. Our key contribution is technology. This leads to new products — on the one hand through chemistry; on the other through biology, biotechnology, and genomics. With chemistry we aim, for example, for better targeting. The more scientists learn about insects, weeds, and fungal diseases, the better they can develop molecules that tackle specific problems. That has two advantages. It deals with the problem more completely, and further reduces burdens on the environment. The former raises yields; the latter helps intensive agriculture to be sustainable. Long-term, the knowledge we gain from genomics promises to speed up these processes dramatically, and help us produce even more healthy food.

Here are some chemistry examples: our company has an insecticide called Chess®. It stops carefully-targeted insect pests from wanting to eat. So the crops get a chance to grow and feed people. We also have a herbicide called Dual® Gold, an improved version of an older product. By selecting the relevant active molecule in the original larger compound, our chemists were able to halve the amount of herbicide needed. This means less "chemistry" gets into the environment, less packaging is required, and less fuel to transport the product. Yet the effects on the weeds that

compete with food crops are just as impressive as before. Our herbicides Touchdown® and Gramoxone® replace laborious hand-weeding, and help with zero-tillage agriculture. The benefits from reducing erosion are rapid, and long-lasting.

Another vital contribution from our industry is in the area of seeds. Today, most improvements are still made by conventional breeding. Increasingly, however, crops will be enhanced by modern biotechnology. Seed development will benefit more and more from the insights provided by genomics. As the UN *Summary Human Development Report 2001* puts it: "Transgenics offer the hope of crops with higher yields, pest- and drought-resistant properties and superior nutritional characteristics — especially for farmers in ecological zones left behind by the green revolution." Biotechnology offers hope of a much wider spectrum of improvements than do chemical farm inputs. Plants that can cope better with hard conditions, or produce healthier food, add crucial weight to the world's struggle against hunger and disease.

We in the research-based agribusiness industry are acutely aware that no contributors to that struggle can work effectively alone. We, and everyone else involved in this effort, want to be able to make a contribution. We can all only do so if we cooperate, adapt new technology to the requirements of the needy, and make this technology available in a socially responsible way. The business environment must also be right.

A full contribution requires the right environment

What does this mean in our industry? Unfortunately, some sections of society continue to block selected avenues of hope. To us, this often seems an automatic principle. A recent example is the criticism of "Golden Rice." Together with other approaches, "Golden Rice" could, one day, help reduce vitamin A deficiency and infant blindness. Yet before breeding work by IRRI has really begun, critics tell us the new product is inappropriate, and that people would do better to substitute some rice with vegetables like carrots. In our view, enhancing a key staple diet like rice *must* be a high priority. We should all support promising new approaches, even if they only look like partial solutions. We should also continue to engage in dialogue and continuous learning.

Also central to our contributions to producing more and better food is the business setting. Research successes often come from investment by private enterprise. That will continue to be the main setting in which people achieve results. For that to happen, it has to be accepted that warding off pests or breeding healthier crops is a justified way of earning a living. Our industry has demonstrated that it can make new technology available in a socially responsible way. We also continually show our ability to work in partnership with public and academic organizations as well.

Private investment is inextricably linked to a third factor that affects our ability to help. This is intellectual property. If we are to research into progress, we must have the chance of recouping the considerable investments involved. That is only possible if intellectual property rights are respected.

Another major factor is a stable and effective regulatory framework. This has to be based on sound science, and be reliable long-term. Facilitating such a regulatory environment in the developing world is another key to tackling hunger.

Despite the many hurdles the research-based agribusiness industry faces, we believe that we can contribute to the struggle against hunger. We can do so in our chief areas of expertise — chemical and biological products and technology. For that contribution to bear fruit, we need the pragmatic co-operation of numerous parties. Tackling hunger is one of the world's most important tasks. We want to work together to achieve all we can.

Note: The views expressed in this summary note are those of the author and are not necessarily endorsed by or representative of IFPRI or of the cosponsoring or supporting organizations.