

Hilal Elver, UN Special Rapporteur on the Right to Food

Distinguished guests and friends,

It is reassuring to see that so many experts, diplomats, and leaders are here today, engaging in this incredibly important dialogue about the future of food. Developing concrete solutions for tackling hunger and malnutrition in the years to come **requires making use of the knowledge, innovation, and existing tools at our disposal, but above all, on empathy and compassion.**

Starting with biotechnology, we have an enormous toolbox that includes both low-tech solutions (such as biopesticides and biofertilizers), as well as high-tech solutions (such as those involving advanced genomics), which might have a potential to help produce the 60 % more food that is needed to feed the world population in 2050, and do so without destroying the environment, or harming social structures. We had the previous experience with the “**green revolution**” that greatly increased the production of food, but inflicted a huge cost on the environment and had some serious adverse social impacts that are still causing damage.

As a result, we know that focusing too much on technology, while ignoring the root causes of these underlying issues is dangerous. Technology alone is not a solution and it should not be perceived as a “quick fix” to erase the effects of destructive policies and practices.

Today, despite producing enough food to feed the population of the world, hunger and malnutrition are on the rise. Extreme weather events, mostly attributable to climate change and violent conflicts, as well as destructive economic policies, are producing environmental degradation,

mass migrations and human rights violations, harshly affecting the most vulnerable among us.

Meanwhile, manipulation of science and attacks on scientific integrity at the highest levels of governments has left many skeptical of innovation. All of this begs the question: Why hasn't scientific innovation been able to solve global hunger and malnutrition challenges?

I believe that current industrial agriculture despite the claim of high productivity, has serious downsides: food waste, poor working conditions, polluted ecosystems, undermining quality for the sake of quantity, mistreating animals, increasing GHG emissions, displacing agricultural labor, and disrupting traditional farming communities. Simply, the human rights of food system actors, including agricultural workers, smallholder farmers, and consumers are often ignored, or their rights violated. This disappointing pattern has continued, even though the 2030 Global Agenda of Sustainable Development claimed that "no one [would be] left behind."

Moreover, new biotechnologies, mostly developed and owned by the private sector are protected by patents and other intellectual property rights. In the context of seeds, for example, four multinational agrochemical firms control over 60% of global seed sales. Rather than being respected as belonging to a shared commons, utility patents are restricting farmers' freedom to preserve and exchange seeds and interfering with breeders' rights to use the seeds for research.

While these innovations, as claimed, might help protect the biodiversity of crops and ecosystems, they must also support the diversity of food system actors. Biotechnology has the potential to accentuate inequalities and cause human rights violations affecting the most vulnerable populations.

Reconciling biotechnology with agroecology, traditional knowledge, and human rights will help ensure that all relevant actors have an opportunity to engage in the development and use of biotechnology.

Silicon Valley is becoming a leading global hub for food innovation: new technologies, such as automated vertical farms, aquaponics, vitro meats, artificial animal products will be on the agenda next 10 years if not earlier. This includes the emerging field of personalized nutrition that will offer healthy eating choices based on DNA. We may all soon have to get used to the new tastes of meat-free meat, and dairy-free 'dairy' products.

These technologies will have a profound effect on how we eat, live and produce in the future. The effects may be mostly positive, **allowing us to more easily make a global transition to plant-based diets, which the recent EAT-Lancet Commission report, and other experts have explained, is integral to the future of food.**

However, implementing "the precautionary principle" will help reduce harmful, unintended consequences and side effects arising from these new technologies. Still some important countries do not recognize, much less apply, this key international law principle.

Unfortunately, the universal realization of the right to food and elimination of hunger, now affecting almost a billion people, remains an ambitious, still remote goal. Governments in both developed and developing countries **continue to endorse trade liberalization, regressive unilateral measures, financial speculation and the commodification of agriculture.** These practices perpetuate inequalities and add to the concentration of wealth within food systems, infringing upon the right to food.

Meanwhile, climate change continues to be often regarded as a taboo subject, an issue for future generations, instead of a very serious, very current threat to our wellbeing and even survival. **Migrants and refugees**

displaced by the impacts of climate change, economic problems, and violent conflicts are frequently **treated as if an exception to the human rights obligations of governments. These obligations should be treated as a key component of the food system workforce to which governments owe adequate legal and social protections.**

For the first time in human history the challenges we face threaten the species as a whole, not just particular societies or civilizations. Faced with these global scale challenges, we have to cope by relying on problem solving frameworks that continue to be organized around state sovereignty, national interests, and the logic of global capital.

The current world order is not oriented toward solving global scale problems. Diplomats after the two world wars, were preoccupied with peace and security, did not understand that international challenges were becoming more comprehensive, posing unprecedented threats to human survival. Moreover, **states are unequal and have different values, and clashing priorities that place severe limits on cooperation sensitive to the global public good.**

These concerns might signal a negative destiny for our future. However, this is not my message. We have the capacity to create humane, healthy and sustainable food systems. **My own response to these challenges is to advocate a human rights based approach to overcome the difficulties posed by an over-reliance on technocratic and market solutions.**

What is this approach? It is a restorative thinking, telling us that we can arrive to decent food policy by balancing and protecting human interests as identified by international human rights principles. These principles require promoting participatory, transparent and inclusive systems, supporting the integrity of scientific discovery and application, and adhering to principles of equality and non-discrimination. It is vital that the most vulnerable sector of societies are protected and empowered,

including women, children, smallholders and peasants, indigenous peoples, migrants, and minorities. **Their equitable inclusion in food production and access to innovations is a fundamental aspect of a human rights approach.**

More practically, investing in capacity building for technology transfer and in intellectual property rights management in developing countries will prove **necessary for these technological innovations to support and benefit the most marginalized and vulnerable communities**, especially smallholder farmers that includes women and youth.

Scientific discourse, always need to be supplemented by a normative dimension, and human rights based approach can be helpful in reaching this goal.

I will leave you with this final thought: the future of food is already here. Now is the time to rebuild food systems based upon a foundation of human rights, incorporating principles of sustainability, trust, inclusion, transparency, health, and equality. If we wait until the future to take transformative steps, it will be too late. Let us begin now with an appropriate sense of urgency.