



## **Appeal to the Representatives of Nations and International Institutions Meeting in Marrakech**

The 22<sup>nd</sup> session of the Conference of the Parties (COP 22) of the United Nations Framework Convention on Climate Change (UNFCCC) will be held in Marrakech from November 7 to 18, 2016. The first objective of the Marrakech conference will be to start work on the implementation of the Paris Agreement.

In the run-up to this event, which will put the climate at the center of global political debate, attention is focused on the energy, heavy industry and transport sectors, while the relationship between food and climate still has a more marginal role in discussions.

And yet, as Slow Food has already pointed out in the document it produced last year for COP 21, not only does food production represent one of the main causes—and victims—of climate change, it could also become one of the solutions.

The profound connection between agriculture and climate change is also highlighted by this year's *State of Food and Agriculture report from the FAO*, which states that the agricultural sector is currently responsible for a fifth of all greenhouse gas emissions, deriving primarily from the conversion of forests to agricultural land, as well as from animal and plant production.

According to the IPCC Fifth Assessment Report, the planet's average temperature has risen by 0.85°C in the last 100 years. Monthly heat records were broken for a record 15th month in a row between April 2015 and July 2016, and forecasts leave little hope for improvement in the future. According to climate simulation models, without limits on greenhouse gas emissions the average temperature could rise by up to 5°C by the end of the century, but a rise of even 2°C would bring devastating environmental and social consequences. Once unusual phenomena, such as extreme heatwaves, floods, droughts and hurricanes are becoming more commonplace, and biodiversity is being eroded at an unprecedented rate. Meanwhile, the rising temperature of the oceans and their increasing acidification is undermining their capacity to stabilize the climate.

Beyond the purely environmental consequences, there will also be a severe impact on society, and the victims will be, above all, the world's poorest people. Every day, millions are losing land and sources of water and food, and risk becoming climate refugees. According to a World Bank report, climate change and its consequences could push over 100 million people into poverty by 2030. These people already live in the planet's most disadvantaged regions. As the recent FAO report shows, the problems of hunger, poverty and climate change must be tackled together.

While by now there is no question that human activities are the main cause of climate change, with the food industry playing a key role, in this document we want to focus on two urgent and necessary paradigm shifts.

The first concerns the industrial **production and consumption of meat**. The link between livestock farming and climate change has been shockingly clear since 2006, with the publication of the FAO report *Livestock's Long Shadow*. In particular,

according to a 2013 revision of the report, industrial animal production and ever-higher meat consumption are responsible for 14.5% of greenhouse gas emissions, if the entire supply chain is taken into account, from the cultivation of crops for feed to final consumption. Greenhouse gas emissions are joined by other negative consequences for the environment: the pollution of the soil and water due to agricultural runoff, the overexploitation of water resources used to rear animals and irrigate the intensive monocultures grown for their feed, and the destruction of habitats and ecosystems to create new farmland.

This situation will worsen. The FAO has predicted that global meat consumption, which has increased fivefold since the middle of the 20th century, could double again by 2050. The planet cannot support such a situation, and the negative effects are already clear now: not just on the environment, but on human health, animal welfare and social equity.

What is needed, therefore, is a radical, concerted intervention to educate the public to change their eating habits in order to support virtuous small- and medium-scale farms wherever possible, and reduce our dependency on industrialized agriculture.

In the West, where meat consumption per capita is highest, we must promote a clear message that eating less meat, but of higher quality, benefits everyone, and encourage the consumption of more plant-based proteins, as well as incentivize more conscious purchasing habits based on sustainability. At the same time, we need to encourage a different approach to food production and farming, which has a lower environmental impact and applies stricter animal welfare criteria. The themes of meat consumption and animal welfare are closely connected; at a global level, in fact, animal farming systems have become ever more intensive precisely because they need to meet consumer demand for cheap products, and by the pressure put on farmers to satisfy large-scale retail.

Another area of intervention must be **soil fertility**. Having healthy, living soil, is essential in order to guarantee food security and preserve biodiversity, as well as to protect us from environmental disasters, climate change and food emergencies. Defending the soil is an integral part of any imagined future for human, plant and animal life.

And yet soil fertility is increasingly under threat. Human activity—from bad agricultural practices to rampant urbanization—has heavily damaged the health of the world's soil, causing erosion, salinization and desertification. Today, 13% of the world's land is in danger of degradation, while in some countries, like Italy, that figure is as high as 30%. Every year, millions more hectares are put at risk.

In the last 50 years, chemical fertilizers, high-yield seeds, pesticides, monocultures and water resources used to irrigate the land have dramatically increased yields, and tripled agricultural production worldwide, while the surface area of cultivated land has increased by just 12%. However, these factors have also heavily damaged soil fertility.

This is why Slow Food believes it is essential to recognize the soil as a common good and to protect it from excessive overbuilding, contamination, erosion, loss of organic matter and loss of biodiversity.

Intervening to promote good, clean and fair livestock farming and a reduction of meat consumption on the one hand, and to protect soil fertility on the other, also means changing the agro-industrial food production model. Since the 1950s, this model has embraced the philosophy of productivism, infinite growth and economic liberalism, excluding environmental protection from its priorities.

The impact of this system is proving to be increasingly devastating for the environment, as well as rendering local communities increasingly vulnerable and threatening small-scale family farming, which still produces 70% of the food consumed in the world.

The transport, processing and distribution of food also contributes to the environmental impact of this production model. The packaging, packing and distribution phases require enormous quantities of energy. The huge distances travelled by food to reach our tables contribute to greenhouse gas emissions, due to the heavy use of fossil fuels. By now, consumers are used to finding the same products available all year round, often shipped from faraway countries. The processed and packaged foods found

in supermarkets are often made using very energy-intensive industrial processes, requiring the use of preservatives and additives, and come packaged in materials that are unsustainable in terms of both their production and disposal. As a result, the health of both individuals and the environment suffers.

Another consequence of this system is food waste along every step of the chain. Around 1.3 billion tons of food (a third of the planet's entire production) goes to waste annually, in the fields and farms, through the processing and retailing phases, and in our kitchens. This immense quantity of food waste has a high ecological, economic, ethical and cultural cost.

In order to confront the problem of global warming, it is essential that governments renew and strengthen their commitment to limiting emissions. But this alone is not enough. We need a radical paradigm shift—economic, social and cultural—and the promotion of a new kind of agriculture, one that is sustainable and respectful of the environment.

Modifying a few production processes is not enough. The entire food system needs to change, and agroecological practices must be adopted. Agroecology integrates environmental, social, economic and political aspects into a global approach. It looks at agricultural systems as dynamic entities made up of living organisms (plants, animals, microorganisms) which interact with the environment (soil, water, climate, light). It evaluates their sustainability not only based on ecological factors but also on the well-being of populations. It preserves natural equilibriums, integrating traditional knowledge and technical innovation. Agroecology is against monocultures and for diversification, valuing local plant varieties and animal breeds. It reduces dependency on fossil fuels, pesticides and chemical fertilizers. It is based on techniques that preserve the moisture and fertility of the soil, increasing its carbon storage capacity. It protects the land from erosion and slows the desertification process. It promotes sustainable forms of livestock farming, based on native breeds, which are better suited to the local climate and geography, and on techniques that respect animal welfare and good pasture management.

We also need a radical turnaround of trends in distribution and consumption methods.

Shorter distribution chains must be encouraged and promoted, by reducing intermediaries and developing forms of direct sale in the countryside, promoting access to local and sustainable products and supporting solutions that establish direct relationships between producers and consumers, like food-buying groups and community-supported agriculture.

Public purchasing power can change the nature of production and distribution, and help a more environmentally-friendly food system to grow and flourish. Citizens must be encouraged to make conscious choices and adopt sustainable ways of eating: by prioritizing fresh, local, seasonal products; limiting meat and dairy intake; eating more grains, vegetables and legumes; carefully reading labels; avoiding processed foods with too many ingredients and choosing products with minimal or environmentally-friendly packaging.

It is essential to reduce food waste along the entire food chain, and to restore its true value, such that we do not treat it as a commodity, nor as refuse.

It is essential to introduce funding and subsidies for producers who apply agroecological standards, encouraging the wider adoption of more sustainable practices.

With this document Slow Food asks the representatives of the nations and international institutions gathered in Marrakech to take the decisive role of the food system into serious consideration, given its profound link with the climate, and not to relegate it to the margins of the discussion.

We appeal for the promotion of international policies able to radically change the current food system. This is the only way to ensure a better future—cleaner, healthier and fairer—for the generations to come.