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Food security – a permanent challenge for us all

Report¹

Committee on Social Affairs, Health and Sustainable Development Rapporteur: Mr Fernand BODEN, Luxembourg, Group of the European People's Party

Summary

Food – our most basic need and right – is not scarce on our planet, but nearly 1 billion people still go hungry or are undernourished. At the same time, twice as many men and women overeat, putting their health at risk. Worldwide, ever more food is produced – and lost or wasted. With the demographic boom, widening social inequalities and natural resources being increasingly strained, food insecurity will affect more and more needy people. Addressing current imbalances and problems of governance remains a daunting challenge for current and future generations.

To enhance the affordability, quality and safety of food, Council of Europe member States must strengthen solidarity mechanisms, food controls and labelling requirements, as well as regulatory measures and research on emerging food risks. For securing sustainable supplies, they need to ensure more responsible consumption of food, invest in sustainable farming and combat climate change and chemical pollution more effectively.

^{1.} Reference to committee: Doc.12442, Reference 3738 of 24 January 2011.

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A. Draft resolution²

1. On a planet with 7 billion people and abundant natural resources, one billion people are hungry or undernourished and, at the same time, two billion are overweight or obese. Worldwide, famine kills one person every second and a child dies every five seconds from the consequences of malnutrition. With the economic crisis, food insecurity affects ever more needy people, even in Europe. Overcoming current imbalances will be key to providing sufficient and adequate food, as well as decent living to all human beings.

2. Food is our most basic need and right. If we cannot secure access to sufficient, safe and nutritious food for present and future generations, our health, development and fundamental rights are hampered. However, even though there is no shortage of food in the world, we constantly face food crises, particularly man-made ones. If we fail to address the problems of governance, these will only escalate. The Parliamentary Assembly considers food security as one of the greatest challenges of the 21st century. This challenge concerns us all and the problems can only be resolved with enough political will and citizens' involvement.

3. As social inequalities keep widening between and within countries, more solidarity is needed to enhance food security through development policies and strategies, in particular as regards the Millennium Development Goals, the Sustainable Development Goals, global trade negotiations and consultations on the post-2015 governance framework. Given that sustainable food supply is increasingly threatened by demographic, environmental and market factors, our collective policy choices affecting food systems must seek better a balance between needs and resources.

4. The Assembly is deeply concerned about the scale of food waste and its impact on our living conditions. Indeed, between 30% and 50% of food in the world is being lost. Nearly half of food still fit for human consumption is thrown away in developed countries, whereas it could, if recovered, help wipe out hunger and malnutrition for nearly 870 million poor people worldwide. The population at large needs to make better informed consumer choices.

5. The demographic boom together with shifts in diet wield growing pressure on the environment and ultimately food supply. Climate change, land abuse, chemical pollution and shrinking natural resources in turn harm the quality and quantity of food production. Agriculture will remain central to achieving food security, but it needs to embrace more sustainable practices.

6. Food trade has become a critical link between producers and consumers. However, certain faults in the global trading system, such as speculation, corporate capture and fraud, aggravate the volatility and the level of prices and the diversity and quality of food supplies. This calls for better market regulation and food controls at national and international levels, as well as for measures to guarantee sufficient incomes for farmers. The Assembly also welcomes fair trade initiatives offering social and ecological guarantees to both producers and consumers.

7. The importance of food safety as a vital component of food security cannot be overestimated. Recurrent food scandals – worldwide and in Europe – attest to the fact that adulterated, contaminated or sub-standard food can not only harm our health, but can also kill. To enhance food safety and to reduce health risks, in particular for the most vulnerable population (such as children, pregnant women and sick or allergic people), the benchmarks on food hazards and labelling requirements for processed foods must be strengthened.

8. In view of the above considerations, the Assembly urges member States to:

8.1. as regards sustainable production of food,

8.1.1. intensify action to combat climate change – for example by concluding a global Kyoto-2 agreement by 2015 – and chemical pollution with a view to better balancing quantity and quality of food supplies;

8.1.2. invest in sustainable farming (including "ecologically intensive" agriculture and organic farming), including through tax and regulatory measures;

8.1.3. accelerate the development of second-generation agrofuels from biomass waste or non-food plants, and in the meantime reduce the use of food crops for making biofuels;

^{2.} Draft resolution unanimously adopted by the committee on 9 September 2013.

8.2. concerning more responsible consumption of food,

8.2.1. reduce loss and waste throughout food production, distribution and commercialisation systems;

8.2.2. hold national awareness-raising campaigns on the harmful effects of food waste on food security;

8.2.3. provide the public with proper food education so as to promote healthy eating habits and reduce the increasingly widespread problem of excessive weight and obesity;

8.3. with regard to enhancing food safety,

8.3.1. strengthen food controls to better detect economically motivated fraud and irregular substances in the composition of foodstuffs;

8.3.2. ensure that food products are labelled in a transparent, clear and objective way;

8.3.3. increase support for independent research on new or emerging food risks on human health from low-dose but long-term exposure to, notably, genetically modified organisms (GMOs), endocrinal disruptors, nanotechnology and cocktail effects of chemical residues in food, with a view to adjusting the existing reference norms;

8.3.4. ensure that the commercial use of new technologies and chemical substances in the food sector is subject to rigorous scientific examination so as to identify regulatory measures that may be required;

8.4. as concerns affordability of food,

8.4.1. strengthen solidarity mechanisms to combat poverty, which obstructs access to food by the population concerned;

8.4.2. increase development aid devoted to agriculture and improved food preservation, and honour aid commitments entered into;

8.4.3. foster food security in fragile countries, particularly in sub-Saharan Africa and southern Asia, by improving small farms' resilience and rural livelihoods, assisting good regional governance in agriculture and food policies, and enhancing aid to vulnerable populations;

8.4.4. support the minimum human rights principles applicable to large-scale land acquisitions or leases identified by the United Nations Human Rights Council, and seek the broadest geographical coverage for their application through development co-operation programmes and international trade agreements;

8.4.5. promote food security by establishing a new universal framework for post-2015, integrating the Millennium Development Goals and the Sustainable Development Goals;

8.5. in respect of regulatory mechanisms,

8.5.1. ensure full implementation of the human right to adequate food by recognising, in their legislation, the enforceability of this right, together with the related human right of access to clean water;

8.5.2. seek to harmonise the use of the precautionary principle across Europe and beyond in respect of food supplies, with a view to ensuring adequate protection of public health;

8.5.3. support the efforts of the United Nations agencies, the World Trade Organization (WTO) and the Organisation for Economic Co-operation and Development (OECD) to shield foodstuffs from financial speculation, to stem price volatility of food staples and to promote the establishment of food reserves at national or regional levels, as appropriate;

8.5.4. phase out market-distorting export support for agricultural products and support progress in WTO negotiations on the Doha Round so as to improve food security in developing countries;

8.5.5. ensure that an international climate change agreement in 2015 recognises food security risks and highlights the importance of valuing natural capital in the pursuit of the objectives set out in the United Nations Framework Convention on Climate Change.

B. Explanatory memorandum by Mr Boden, rapporteur

1. Introduction

1. Food³ is a basic human need. It is essential to life and development and so food security underlies all our rights. As the participants of the World Food Summit of 1996 put it, food security can only exist "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life". Since everyone needs food, ensuring security and sustainable production of food should be a high political priority for all authorities.

2. Our planet could supply enough food for all. However, nearly 1 billion people suffer from hunger or malnutrition, mainly in the developing world, where 100 million children are underweight.⁴ At the same time, about two billion men and women are overweight or obese.⁵ Over 6 million children die every year from the consequences of malnutrition – one child every five seconds – and famine kills one person every second worldwide. Because of the economic crisis, food insecurity is affecting more and more needy people, even in Europe. With the global population hitting 7 billion in 2011 and forecast to reach 9 billion by 2050, key challenges in future decades will be to provide adequate food and decent living conditions for all human beings.

3. The world needs urgent change, but progress on food security is too slow. As the 2015 deadline for achieving the Millennium Development Goals (MDGs) approaches, it is almost certain that the target of halving the number of starving people will be missed in many needy regions. Yet without broad improvements in food security, human development and the realisation of other MDGs will be hampered. New approaches have to be prepared to mainstream food security through consultations on post-2015 governance.⁶ To better understand the global implications of this challenge, we need to consider issues of quality as against quantity, and explore the social, economic and environmental context of food security.

4. As we shall see in this report,⁷ there is no shortage of food in the world. Food crises we face are largely man-made and merely highlight the problems of governance. This relates to how safe and nutritious the food we produce is, whether we can access and afford it, and the way we consume it. An avalanche of food scandals in recent years has shaken our trust in the systems that supply us with food. These problems can only be resolved with enough political will and citizen involvement. This report builds on Assembly committee hearings on food security⁸ and contributions by many experts. I am particularly grateful to Mr Olivier de Schutter, United Nations Special Rapporteur on the right to food, for his written comments.

2. Food – a fundamental human right

5. The right to food, according to the United Nations Special Rapporteur on the subject, is realised when every human being has physical and economic access to adequate food. This access must be regular, permanent and unrestricted, either directly or by financial means, to food that is not only sufficient but also of adequate quality, in order to ensure a fulfilling and dignified life.

6. The right to food is now well established in international human rights law. It has been enshrined in major international legal instruments of modern times, including:

the Universal Declaration of Human Rights of 1948 (Article 25);

^{3.} Food mainly comprises products supplied by agriculture and fisheries.

^{4. &}quot;The State of Food Insecurity in the World 2012", FAO; "Levels and Trends in Child Mortality", UNICEF, 2011.

^{5.} Data of the World Health Organization for 2008.

^{6.} The Committee on Social Affairs, Health and Sustainable Development is working on a specific report in this field: "The World Beyond 2015 – Europe's contribution to the post MDG Framework" (rapporteur: Sir Alan Meale).

^{7.} I was appointed rapporteur to succeed Ms Francine John-Calame (Switzerland, SOC) and Mr Bernard Marquet (Monaco, ALDE), who have left the Assembly.

^{8.} Hearing of 28 November 2011, held by the former Committee on the Environment, Agriculture and Local and Regional Affairs, with the participation of: David Hallam, Director of Economic and Social Department at the FAO; Sergio Piazzi, Secretary General of the Parliamentary Assembly of the Mediterranean (PAM); Francisco Mombiela, Secretary General of the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM); and Hans Rudolf Herren, President of the Biovision Foundation (a non-governmental organisation (NGO) based in Switzerland). On 3 June 2013, the Committee on Social Affairs, Health and Sustainable Development discussed food safety with Eric Poudelet, Director for the safety of the food chain, Directorate General on Health and Consumers (DG SANCO) of the European Commission, and Anne-Laure Gassin, Director of Communications of EFSA (European Food Safety Authority).

- the United Nations Food and Agriculture Organization (FAO) Constitution of 1965 (the preamble);
- the International Covenant on Economic, Social and Cultural Rights of 1966 (Article 11);
- the Convention on the Elimination of All Forms of Discrimination against Women of 1981 (Articles 12 and 14);
- the United Nations Convention on the Rights of the Child of 1989 (Articles 24 and 27).⁹

7. The right to food is also becoming a common feature of national Constitutions. Among the 24 States that have already incorporated this principle constitutionally are Bangladesh, Brazil, India, South Africa and Ukraine. Indeed, public authorities and governments play a critical role in the implementation of the right to food and ensuring food security. They are responsible for facilitating their population's unrestricted access to food and protecting against violations. Moreover, they have an obligation to help those in need who are incapable of acquiring food themselves.

8. The so-called "food insecurity and vulnerability information mapping systems", in place since 1996, show that in large areas of Asia, the Pacific and sub-Saharan Africa alone, about 817 million people are still affected by hunger or malnutrition. Their right to food is infringed or insufficiently protected. The FAO has, in the meantime, issued 19 recommendations to States, covering agriculture, food policies and food security, consumer protection by legal means and at institutional level, as well as emergency situations and international co-operation.

9. As the United Nations Committee on Economic, Social and Cultural Rights has clearly established, people whose right to adequate food has been violated¹⁰ can file a complaint under the Optional Protocol to the Covenant. The latter has made this right enforceable and can grant protection as a result. This is exactly what happened in the Ogoni case in 2001, when the African Commission on Human and Peoples' Rights found that Nigeria had infringed the Ogoni communities' right to food.

10. Although the right to food has been recognised internationally, regionally and nationally, too many States still refuse to recognise the enforceability of this right. This means that the right to food is unevenly protected by national authorities. I believe that all member States of the Council of Europe should recognise the enforceability of the right to food in their legislation and should fully respect international obligations to properly protect this fundamental human right. Indeed, evidence on children fainting from hunger at school and swelling figures of the jobless queuing for food aid are now increasingly reported in Europe, particularly in countries the most severely affected by the economic crisis.¹¹

3. Threats to food security

11. In the past, the greatest threats to food security were wars, natural disasters and adverse weather conditions. These still exist today, but they have a range, a scope and dimension that they never had before. This is because we ourselves have become the main threat to our own food security. Even though the world produces enough food of good quality, its availability and affordability to the poor is far from guaranteed. The following overview highlights three principle sources of food insecurity – demographics, the environment and markets – which have local causes but global consequences.

3.1. People: how many and how to feed them?

12. The population boom now and in the coming decades, as well as improved living conditions, are gradually eroding food security, with a larger share of the world population now demanding a more varied supply of food of sufficient quantity and quality. Demographic growth and urbanisation have changed both what we eat and what we waste.

^{9.} The right to food has also been enshrined at regional level through the African, American and European human rights protection systems, particularly the African Charter on Human and Peoples' Rights of 1981, the American Convention on Human Rights of 1969 and, implicitly, the European Social Charter of 1961 (ETS No. 35).

^{10.} A "violation" means any discrimination with regard to access to food on grounds such as race, sex, religion or political opinion. It also means that victims should have judicial or quasi-judicial remedies at national and international level which enable them to obtain reparation for the violation. Violations may be the result of a State's actions or omissions.

^{11.} See conclusions of the Council of Europe Commissioner for Human Rights after his visit to Spain on 4-7 June 2013 and articles in the *International Herald Tribune* – "More children in Greece are going hungry" of 17 April 2013 and "Spain recoils as its hungry forage trash bins for a next meal" of 24 September 2012.

3.1.1. Changing consumption patterns

13. As our planet is getting crowded, we see important changes in consumption patterns of a more numerous urban population and shifts in the composition of diets. This is particularly evident in meat consumption which has grown rapidly in the last decade from about 37 to 42 kilograms per person per year. At the current rate, over 52 kilograms of meat will be consumed per person per year by 2050. According to the FAO, nearly half of the world's cereal production is currently used to make animal feed. As it takes roughly 7 kilograms of cereals and 5 000 to 15 000 litres of water to produce just one kilogram of beef and only slightly less for other types of meat, implications for the future are huge.

14. Despite the energy value of meat, the United Nations Environment Programme (UNEP) estimates that the loss of calories resulting from the use of cereals to feed animals instead of human beings represents the annual caloric needs of 3.5 billion people. Reallocating part of these cereals to human consumption could help wipe out famine and malnutrition. However, while there is over-consumption of meat in developed countries, a reasonable increase in meat consumption could play a very positive role in most developing countries, especially in relation to children's growth.

15. Ironically, overeating is causing serious health problems and higher mortality rates.¹² Studies of the World Health Organisation (WHO) show an alarming increase in obesity and overweight. The number of obese people more than doubled between 1980 and 2008 worldwide, and about one in three adults aged over 20 is overweight. More and more children and young people are affected by this problem, too.¹³ Over half of the European adult population is concerned by the problems caused by excessive weight. WHO warns that excessive weight undermines health through greater incidence of metabolic disorders and heart diseases, high blood pressure and cholesterol, as well as insulin resistance and cancers.

3.1.2. Food waste

16. We also face another paradox: whereas we make more food to combat hunger, we also waste it more. Between 30% and 50% of the food produced worldwide is being lost. According to the FAO, the volume of food wasted by each person in Europe and North America/Oceania is 95 to 115 kg per year, as compared to 6 to 11 kg in sub-Saharan Africa and South and South-East Asia. This wastage occurs at all levels of the food supply chain, from the gathering and processing of the product to its transport, distribution and finally its consumption.

17. Rich countries are especially responsible in this regard because they throw away too much food still fit for human consumption. In fact, almost half of the food in developed regions is thus wasted, approximately 300 million tonnes per year or more than the entire net food production of sub-Saharan Africa. If this food could be recovered, it would be enough to ensure that almost 870 million hungry and poor people worldwide were better nourished.

18. Wastage also costs millions to consumers and undermines our living space. Since actual and estimated product losses are factored into the price of food, consumers are being automatically penalised through higher prices, especially for fresh food (vegetables, fruit, milk, meat and fish). In addition, eliminating food garbage alone costs between \in 55 and \in 90 euros per tonne in Europe and generates about 170 million tonnes of CO₂ emissions. Reducing food waste would thus not only increase quantities and affordability of food available but would also enable a more efficient use of our resources. In a global context of growing threats to food security, it is all the more urgent to tackle this problem. One of the hidden costs which we are asking future generations to pay is the threat which food waste is causing to our environment.

^{12.} For example, the excessive consumption of meat has been shown to increase the prevalence of disorders such as cancers (of the colon and prostate), cardiovascular diseases, hypercholesterolemia and hypertension, as well as obesity, osteoporosis, type 2 diabetes, cognitive impairment, gallstones and rheumatoid polyarthritis.

^{13.} See Assembly Resolution 1804 (2011) and Recommendation 1966 (2011) on safeguarding children and young people from obesity and type 2 diabetes.

3.2. Environmental limits to growth?

19. Population growth has had a major impact on the environment, whose degradation inevitably threatens food security. In order to satisfy growing and changing needs, natural resources and biodiversity are often sacrificed. There are many consequences: climate change; land abuse due to certain farming methods; and deterioration of water, air and soil quality as a result of the use of agro-chemicals. Some of the environmental damage is irreversible.

3.2.1. Climate change

20. Climate conditions have always threatened harvests, but climate change brings a new dimension to this threat. We are increasingly confronted with extreme climatic events such as droughts, floods, tornadoes or exceptional heat or cold which affect harvests and yields. There have been many examples of such natural phenomena in recent decades that devastated major food growing countries, including the United States, Russia, India, China and many African countries. Climate change also impacts on animal and plant health due to increased migration of diseases, crop pests and invasive species.

21. It is now clear that agriculture alone accounts for at least 13% to 15% of global greenhouse gas emissions which feed climate change. These man-made emissions are further amplified throughout the food chain (processing, packaging, transport and refrigeration) and as a result of deforestation (which alone produces an additional 19% of emissions) due to the expansion of crop areas and pastures. The resulting climatic hazards to food security are consequently on the increase.

22. Climate change is a particular threat for food supply in Asia and Africa, where undernourishment is already very widespread. An increase in average temperatures combined with a decrease in seasonal rain is starting to have a dramatic effect on the subsistence agriculture on which so many people in these countries depend. In Europe too, research laboratories in the Mediterranean region have already signalled lower crop yields due to slight increases in average temperatures. In other words, we are producing less just when we should be producing more.

3.2.2. Farming methods and land abuse

23. To ensure the food security of the growing population, by some estimates, overall agricultural production should increase by 70% by 2050. However, some high-intensity farming methods lead to land abuse. Paradoxically, agricultural techniques intended to create greater crop yields cause soil impoverishment and erosion, as well as biodiversity loss and reduced fertility, all of which in turn harm food production.

24. Farming pollutants, for example, are undermining quality food production. Apart from their direct negative impact on human and animal health, chemicals used in agriculture¹⁴, food processing¹⁵ and polluting industrial activities have a cumulative effect on the environment and on biodiversity, whose impact on food security cannot be underestimated. Harvests are also reduced as a result of the gradual disappearance of bees and other pollinating insects which have been strongly affected by the use of certain phyto-sanitary chemicals.

25. The misuse of chemicals, but also desertification, soil depletion and erosion caused by aggressive farming, as well as urbanisation, have led to a radical loss of arable land. Moreover, farmlands face increasing competition from other economic sectors due to expanding infrastructure, such as roads and railways, or industrial facilities. Some countries, mainly in sub-Saharan Africa, are confronted with a growing phenomenon of large-scale land acquisitions or long-term leases by multinational companies and foreign States. Experts liken this process to land-grabbing that will affect the food security of the populations concerned, as foreign participation generally serves global markets and not the local communities.

3.2.3. Agrofuels

26. Our enthusiasm for biofuels, which are widely promoted as environment-friendly energy and as part of sustainable development strategies, has only threatened food security further. The rapid expansion of agrofuels in recent years has raised doubts about their efficiency. As early as 2009, the Assembly cautioned

^{14.} Such as pesticides, herbicides, fungicides and some fertilisers.

^{15.} For example, biologically active additives and colourings.

against the use of food crops to make biofuels, which it found damaging both to food production and the environment.¹⁶ The European Union, for its part, recently had to admit that a target of making 10% of biofuels by 2020 negatively affected reduction in greenhouse gas emissions and the indirect change of land use¹⁷.

27. On the one hand, the increasing use of food crops to make biofuels resulted in a decrease in the food available for human consumption. On the other hand, it has also contributed to an escalation in food costs worldwide. According to a July 2008 World Bank report, agrofuels accounted for 75% of the increase in food prices. The United Nations Special Rapporteur on the right to food warns that the current path in producing biofuels for transport is largely unsustainable and could result in violations of the right to food. It is therefore vital to ensure a more rapid transition to the second generation of biofuels made from agricultural waste and non-food crops.

3.3. Global markets: serving who's interests?

28. Food production today is intrinsically linked to its distribution and markets. Although we produce enough food of sufficient quality to feed everyone in the world, too many people do not have access to food or cannot afford enough. Asymmetries in the global trading system aggravate poverty and lead to various forms of abuse, such as food speculation and fraud, which erode food security.

3.3.1. Food trade and speculation

29. Because farming and food production are an important source of income, the terms of international trade agreements are crucial to national food security. In some ways, ongoing trade liberalisation offers new opportunities to farmers and food producers, but it also exposes them to global competition. Many developing countries in the WTO therefore seek to adjust tariffs on key products to protect subsistence farming and sustainable development of local communities. Without safeguard clauses, subsidised agricultural exports from western countries can undermine the capacity of farmers in developing countries to compete internationally and gain a decent income.

30. This can be illustrated with the seed trade. The current trade rules and intellectual property rights protections tend to better serve the interests of large biotechnology/agrochemical companies than those of the many small farmers and consumers. Local farmers have to struggle to ensure a sufficient diversity of seeds available on the market, better protection of traditional seed varieties for sale and their right to have access to non-branded seeds. Without this defence, biodiversity is undermined and our food chain is captured by multinational firms.¹⁸

31. General economic conditions are also of major importance for food supplies. The onset of the world financial and economic crisis in 2007-2008 depressed the global food trade, provoking hikes in food prices and even food crises. According to the FAO, food prices went up by 22% between January and February 2011. Similarly, the World Bank report in summer 2011 found that staples such as wheat, soybean oil and sugar were respectively 55%, 47% and 62% more expensive than a year ago. Maize prices also increased by 84%, partly as a result of US demand for biofuels. Naturally, the poor and the unemployed were the most vulnerable and the most affected by food speculation.

32. As the United Nations study shows, such radical rises in the price of essential food commodities can only be explained "by the emergence of a speculative bubble".¹⁹ The study stresses the impact of deregulation on the use of derivative contracts for major food crops (rice, wheat, maize, soybeans) and calls for bold

^{16.} See Resolution 1667 (2009) on growing food and fuel.

^{17.} See Directive 2009/28/EC on the promotion of renewable energy sources. The European Union has proposed a new directive relating to the quality of petrol and diesel fuels (see COM(2012)595 final) that seeks to reduce the target of biofuels made from food crops in the energy mix to 5% by 2020 and to tighten up criteria for reduction in greenhouse gas emissions for new facilities.

^{18.} For instance, the multinational Monsanto alone holds the patents on 36% of all tomato, 32% of all sweet pepper and 49% of all cauliflower varieties registered in the European Union. In addition, due to rapidly growing demand, palm oil production is ousting other local crops and causing widespread deforestation in South-East Asia, Africa and parts of South America.

^{19. &}quot;Food Commodities Speculation and Food Price Crises", Briefing Note 02, September 2010, Olivier de Schutter, United Nations Special Rapporteur on the right to food.

improvements in food trading to reduce price volatility. Moreover, it seems urgent to correct the commercial mechanisms for intermediation between farmers, who are being squeezed by the pressure of ever lower purchase prices, and traders, who raise their profit margins and prices charged to consumers excessively.

3.3.2. Food fraud

33. With so much at stake in the food markets, it is hardly surprising that there is increasing evidence of substandard and fraudulent food products entering food supply chains. These are seriously threatening public health in all countries. Media reports on adulterated olive oil,²⁰ dioxin-contaminated chicken, counterfeit wines and fake organic foods have exposed numerous flaws in food safety. Europe's "horsegate" scandal in early 2013, when horsemeat was passed off as beef, but also the import of contaminated foodstuffs from South-East Asia, particularly China, and the mislabelling of fish varieties worldwide show serious problems in terms of traceability, labelling and quality control throughout the food chain.

34. The low-cost phenomenon has not only affected the quality of food supplied, but also food controls and our ability to detect fraud. The economic crisis has further reduced the capacity of national food inspectorates, whereas risks are rising exponentially with the globalisation of trade. When consumers are cheated regarding the exact origin or composition of food products, their trust in food supply systems erodes. But when fraudsters flood markets with dangerous food, consequences can be dramatic. In general, about 4.5% of food inspections in the European Union detect fraud problems. Some experts consider food fraud as a special threat to public health because the contaminants are atypical and our control systems are ill-adapted to look for myriads of potential poisons.

4. The challenge of food safety: ensuring quality

35. Food safety is a vital component of food security. Its importance cannot be overestimated. If the quality of what we eat is compromised, food can severely harm our health, both now and in the future. Adulterated, contaminated or sub-standard food not only causes degenerative diseases and disorders leading to new pathologies and increasing antibiotic resistance, but can also kill. Worse still, it can disrupt the reproductive system, which could have long-term consequences on the human species.

36. Among the various hazards to food safety are chemicals found in agricultural pesticides, herbicides and fungicides.²¹ Residues of heavy metals, dioxins and radioactive pollution also poison what we eat. Microbiological contamination with bacteria, viruses and parasites continues to be a serious danger for all of us. Now even the medications used in stock-rearing, such as antibiotics and vaccines, neuroleptics and hormones, can prove fatal when deployed on an industrial scale. Some experts add genetically modified organisms (GMOs) and nanotechnology²² to this list, as certain studies show that they may be carcinogenic or harmful to health in other ways over the long-term.

37. The effects of these products on human health – even in small amounts – and of mixtures thereof ("cocktail" effects) have not yet been sufficiently studied. Indeed, the standard research protocols currently used by scientists advising European food safety authorities limit toxicity studies to three months and focus on individual contaminants' maximum tolerable thresholds in laboratory animals. The needs of the more vulnerable population such as children, pregnant women and sick or allergic persons, who are much more sensitive to food hazards than the population in general, are not properly taken into account.²³ This calls into question a good many of the existing reference standards at European level.

38. One notorious case of food contamination occurred in China in 2008. It was the so-called "melamine scandal" provoked by a toxic substance which had been illegally added to powdered baby milk. The ingested melamine led to massive kidney failures and resulted in a number of infant deaths. Baby food containing toxic contaminants, such as inks, has also been detected on several occasions in European countries.

^{20.} Milk, honey, saffron, coffee and apple and orange juices are the most typical adulterated foods reported.

^{21.} For instance, in mid-July 2013, media reported the death of 23 children and dozens of hospitalisations in India after eating school meals contaminated by a phyto-sanitary chemical.

^{22.} See Assembly Recommendation 2017 (2013) "Nanotechnology: balancing benefits and risks to public health and the environment" (Doc. 13117, rapporteur: Mr Valeriy Sudarenkov). Current EU labelling rules require indicating nanocontents in the plastic packaging of food and could in future be further extended to other types of packaging.

^{23.} See Assembly Recommendation 1863 (2009) and Doc. 11788 "Environment and health: better prevention of environment-related health hazards", as well as proceedings of a Conference on Environment and Health: Indoor Pollution and Multi-System Illnesses (Strasbourg, 5 December 2008).

39. Moreover, recent research has established the toxicity of certain substances such as bisphenol A,²⁴ an endocrinal disruptor, which is widely present in plastic food containers. It is particularly dangerous to babies if used in making feeding bottles. The presence of this substance in the lining of many food and beverage cans also intoxicates the general population. Although the European Union, Canada and the United States have already banned the use of bisphenol A in baby bottles, its mainstream uses in the food sector remain to be addressed. As of 2014, any presence of chemical substances with potential effects on endocrine systems will have to be signalled, in the European Union, through the labelling of food products and any new substances with similar risk potential will be refused certification.

40. The uncertainties over GMOs are another issue worrying European consumers. Although EU rules require GMO contents of more than 0.9% to be signalled through the labelling of food products, GMOs are massively present in the feed for animals that are later used for human consumption. This is despite the lack of scientific proof that food thus produced is safe enough when exposure is frequent and long-term. The latter aspect is highlighted in a recent study that has linked long-term feeding of laboratory animals with GMO maize to cancer.²⁵ Yet the ensuing controversy and alarm caused among both the scientific community and the population proved to be short-lived and the EFSA position on the matter is rather reassuring.

41. Yet the food crisis which has caused the deepest distress in the international community so far is the one arising from bovine spongiform encephalopathy (BSE), commonly known as "mad cow disease". This fatal brain disease of cattle was initially diagnosed in the United Kingdom in 1986. Ten years later, early-onset Creutzfeldt-Jakob disease was identified for the first time and a link between the two diseases was rapidly established, confirming that this was the human variant of BSE. The shock wave across the international community has led to greater awareness that the quality of food matters as much, if not more, than quantity.

42. This event led to the reform and tightening up of health regulations, with immediate effects on the frequency of checks on the quality of food products. This also helped to clarify the responsibilities of all those involved in the food chain from the farmer to the consumer. However, the break out of *Escherichia coli* bacteria across Europe in 2011, which caused numerous kidney failures and even deaths,²⁶ has shown that checks and controls in the food chain are still insufficient, notably for microbiological contaminations. Food safety "from field to fork" remains an ongoing challenge and calls for cross-sector strategies to better safeguard the quality of what we eat.

43. Finally, we need to be more attentive to the effects food has on our health. To this end, we need independent scientific information about food-related risks²⁷ and to promote healthy eating habits among the population. To enable consumers to choose the best dietary options in accordance with their needs and preferences, the labelling of food has to be legible, easy to understand and accurate. Several members of the Assembly have signalled regulatory problems regarding the sale of energy drinks to children because of the harmful effects such drinks may have on health and behaviour.²⁸

5. Strategies for strengthening food security

44. As has been shown, food security cuts across many sectors ranging from demographics to the environment and markets, but also public health. International relations, given the ever closer interdependence of countries worldwide, play an important role in mitigating negative trends and better exploiting new opportunities for improving food security.

^{24.} Bisphenol A or "BPA" was first criticised in 1996 because of its low-dose toxic effects on animals. In the 2007 Chappel Hill Consensus on BPA, some 40 scientists highlighted its effects on precocious puberty in girls, neurological and behavioural effects, hormone-dependent cancers and cardio-vascular risks. The US Food and Drug Administration, in its report of September 2010, warned about hazards to fetuses, babies and young children.

^{25.} See the paper on "Long-term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize" by Gilles-Eric Séralini, Emilie Clair, Robin Mesnage, Steeve Gress, Nicolas Defarge, Manuela Malatesta, Didier Hennequin, Joël Spiroux de Vendômois, Food and Chemical Toxicology, 2012, http://dx.doi.org/10.1016/j.fct.2012.08.005.

^{26.} Although contamination was thought to originate from organic cucumbers grown in Spain, it was later proven that the source of the problem were infected fenugreek seeds imported from Egypt. According to EFSA records, 3 950 persons were infected and 53 died.

^{27.} This remit has been given to the EFSA within the European Union.

^{28.} See the motion for a resolution (Doc. 13120) tabled by Ms Dangute Mikutiene and others.

45. In order to address these multiple challenges, European policies on food security emphasise responses to food shortages and food quality problems by putting them at the centre of poverty- and hazard-reduction strategies. They also acknowledge the root causes of food insecurity, including environmental degradation, poor productive systems and ill-functioning markets, as well as social inequalities. Risks to food security must not only be prevented, but also anticipated.

5.1. Measures to enhance food safety

46. As a result, the general principle governing European strategies and initiatives to protect food security and in particular food safety in recent decades has been precaution. Whenever scientific evidence of food safety is "insufficient, inconclusive or uncertain", whenever preliminary research indicates "reasonable grounds for concern" regarding the potential dangers for human, animal or plant health, caution is the watchword.²⁹ The so-called precautionary principle³⁰ responds to the high level of protection sought by the European Union. If a potential threat is established, this may result in restrictions in food trade.

47. However, if Europe frequently evokes the precautionary principle, the United States prefers a mere risk analysis. European regulations³¹ provide that any emergency measures taken by the authorities must be followed by a scientific review within a reasonable time. The United States contests this approach considering that, as long as there is no scientific proof of product harmfulness, world trade should not be restricted, such as in the case of the dispute over the growth hormones given to cattle. The United States therefore views the EU ban on the import of hormone-treated meat as disguised protectionism. Clearly, the precautionary principle needs to be used cautiously.

48. At European Union level, food safety concerns gave rise to the establishment, in 2002, of the European Food Safety Agency (EFSA) and the entry into force, in 2006, of the "Hygiene package".³² Whilst the EFSA is in charge of assessing risks in the food sphere and giving scientific advice on the subject, the hygiene package safeguards high sanitary standards in food production and imposes specific rules on foodstuffs of animal origin. EU farmers and food producers are required to use quality control systems.³³ If need be, the European Union's Rapid Alert System can be set in motion: in 2012 alone, it issued 547 alerts and stopped 1 743 dangerous cargos at the border; non-EU countries are also informed about problems.

49. At the global level, the Codex Alimentarius, or food code, set up jointly by the FAO and WHO in 1961, aims to ensure food safety, protect consumers and preserve the environment through controlled codes of practice. It also implements health and plant health regulations under the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)³⁴ which aims to ensure food safety while preventing excessively strict regulations from favouring national producers. The Codex Alimentarius Commission, its executive body, works closely with national governments who may use the Codex's recommendations to draw up their own standards and rules on the safety, labelling and import or export of food. The FAO and WHO offer special assistance to developing countries in order to ensure their compliance with the Codex's rules and involve them fully in the global food market.

5.2. Environmental and agricultural policies

50. The green economy and one of its components – agriculture and fisheries – are central in sustainable development and the eradication of poverty and hunger, as the Rio+20 Conference in 2012 acknowledged. The United Nations Special Rapporteur on the right to food also pleads for a type of agriculture, as well as fisheries, which are more environmentally sustainable and socially fair. The food supply system should serve to

^{29.} Communication from the European Commission on the precautionary principle, 2 February 2000.

^{30.} The principle first emerged in German positive law, with the adoption in 1974 of an Act on acid rain which talked of the "*Vorsorgeprinzip*". Initially, the principle was applied only to the protection of the environment. It related mainly to risk analysis, assessment, management and communication.

^{31.} Regulation (EC) No. 178/2002 on laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.

^{32.} The "Hygiene package" based on Regulation (EC) No. 178/2002 was later supplemented by Regulations 852/2004 and 853/2004.

^{33.} These include the Hazard Analyses and Critical Control Point (HACCP) system and quality control standards such as the International Standards Organisation (ISO 9000) and the European Standard (ES 29000).

^{34.} This WTO agreement of 1994 sets out the conditions under which governments can introduce sanitary or phytosanitary measures with an impact on international trade.

guarantee that food is available to everyone, boost small farmers' incomes and secure our ability to satisfy future needs.³⁵ Addressing climate change effectively, such as by concluding a binding global agreement on a Kyoto-2 protocol, is an objective that should be firmly supported by all Council of Europe member States.³⁶

51. To tackle climate change more comprehensively, possible local solutions include improvements in farming practices. Food crops, land use and irrigation techniques will have to be adapted to the warming climate. In this regard, ecologically intensive agriculture and sustainable farming have a strong potential. They seek to optimise the natural functions of ecosystems in order to achieve yields comparable to those of conventional agriculture, while not only curbing the use of chemicals and environmental degradation, but also improving the marketing of food supplies. The European Union is now turning towards sustainable agriculture and fisheries with a view to better integrating ecological, economic and social limits through its production system.

52. Alternative methods for promoting food security also include organic farming. For the FAO,³⁷ it can not only contribute to food security but also reduce pollution. Indeed, crop rotation makes soil more fertile and improves yields, whereas chemicals are replaced by biological strategies. More stable ecosystems thus help to secure our right to a healthy environment and to food of better nutritional quality. By favouring short distribution channels, organic farming also enables reduced emissions. Lastly, as this type of farming requires more labour, it creates jobs and fosters rural development. Yet however ecologically or socially laudable, organic farming cannot be a universal solution as long as the prices of its products are much higher and the yields lower than those harvested by means of intensive agriculture.

53. Farming policies intertwine closely with trade and environment. EU countries are seeking to reform their Common Agricultural Policy so as to better balance farming support with consumer needs, food quality standards and environmental protection requirements. Pending a global agreement at the WTO on the phasing out of market-distorting export subsidies, the European Union has already cut its export refunds sharply. Closing key chapters, such as agriculture, in the Doha Round of trade negotiations and strengthening the safeguard clauses for developing countries could give a new impetus to the fight against food insecurity.³⁸

54. In the same vein, we have to redouble efforts to achieve the Millennium Development Goals, notably the first one, which is a significant reduction in extreme poverty and hunger by 2015 – and beyond. Indeed, about 75% of the poor and food-insecure in the world today live in rural areas and depend on small-scale farming for a living. Better organisation of small farmers, for example through co-operatives, would enable them to process the food they produce and gain a better bargaining position in food markets.³⁹ Lastly, we need to increase development aid, especially for agriculture (currently only 4% of all aid) and honour our commitments on development aid.

55. The global action on food security also relies on better co-ordination among States and various national authorities. The G20 ministers of agriculture did precisely that when they launched, in 2011, the Action Plan on Food Price Volatility and Agriculture, reaffirming the right of everyone to adequate food and the importance of national food security. To counter volatility of food prices, the plan proposes to boost farm productivity, market transparency,⁴⁰ and policy co-ordination, as well as improving risk management by governments, firms and farmers, and the regulation of agricultural markets. Finally, the United Nations Special Rapporteur on the right to food has identified "minimum human rights principles applicable to large-scale land acquisitions or leases" whose implementation European States could promote more vigorously.⁴¹

^{35.} Report of 20 December 2010 (A/HRC/16/49) by the United Nations Special Rapporteur on the right to food.

^{36.} An initiative in this respect has been launched by John Prescott (United Kingdom, SOC) of the Committee on Social Affairs, Health and Sustainable Development (see Doc. 13224). The first Kyoto Protocol under the United Nations Framework Convention on Climate Change (UNFCCC) expired in 2012.

^{37.} As stated at the Conference on organic farming and food security held in May 2007.

^{38.} See Communication from the Commission to the Council and the European Parliament on "An EU policy framework to assist developing countries in addressing food security challenges", Com(2010)127 final.

^{39.} See the report by Mr Olivier de Schutter, United Nations Special Rapporteur on the right to food, to the UN Human Rights Council regarding Agribusiness and the right to food (A/HRC/13/33 of 22 December 2009, paragraph 31).

^{40.} To this end, the Agricultural Market Information System (AMIS) was put in place. It is fully operational since 2012.

^{41.} See his report to the United Nations Human Rights Council of December 2009.

5.3. Handling food crises, emergencies and waste

56. In the food sector, it is essential to be proactive and react quickly when crises occur. EU rules⁴² allow it to adopt emergency measures on food imports from third countries to protect human health or the environment if the risk cannot be contained by the members States themselves. States, however, may then adjust the extent of supervision to the level they wish. This legislation also makes it possible to prevent the import of highly radioactive foodstuffs. For instance, after the Fukushima nuclear accident, the European Commission⁴³ imposed special conditions on the import of food and animal feed originating in Japan. Even so, there is a need for inspections of imported or locally produced foodstuffs to be both systematic and rigorous.

57. Tackling food waste must be an absolute priority for action to enhance food security. The launching of a global campaign against food wastage in January 2013 by specialised United Nations agencies (UNEP and FAO) should encourage all Council of Europe member States to hold similar campaigns at national level. The European Union has set itself a target of halving food wastage by 2020 and further ideas will be put forward in 2014 on the sustainability of the food supply system, with emphasis on the problem of food wastage. The EFSA is also working to rethink "sell-by" and "best before" dates for certain types of food products.

58. One possible remedy to cope with food insecurity is to hold food reserves at national or regional levels. It was the world food crisis of 2007-2008 that highlighted this need. This practice can be an effective way of reducing the volatility of crop prices, limiting speculation and supporting farmers' revenue, as well as mitigating natural risks, making food more affordable and curbing famine. There are also targeted global programmes designed to combat famine, such as the Food Security Thematic Programme⁴⁴ for the world's poorest countries and the FAO's Special Programme for Food Security⁴⁵ covering low income countries with food deficits. To tackle food insecurity in conflict zones, the role of the international community and in particular the UN World Food Programme (WFP) remains paramount.

6. A quest for solutions: conclusions and recommendations

59. As we have seen, food security – in both quantitative and qualitative terms – cannot be taken for granted in many parts of the world, including Europe. It is an ongoing challenge for governments to ensure that adequate food and water supplies are available to the population today without compromising the living conditions of future generations. To achieve this, we need to use natural resources responsibly, to adjust our strategic orientations and to pursue coherent cross-sector policies for combating poverty, developing rural areas and managing food supply chains intelligently. Our sound strategies and instruments need better implementation.

60. A series of measures, as set out in the draft resolution, can be recommended to the member States in connection with the issues raised in this report. Our key objectives for the future are the development of a sustainable agriculture and measures to combat hunger and poverty. We therefore need to tackle climate change more effectively, reduce food waste substantially and show greater solidarity with the poorest countries and vulnerable population groups. Moreover, investing in quality and safety of food supplies proves increasingly pertinent for preserving public health and securing the enjoyment of all fundamental human rights.

^{42.} See Regulation No. 178/2002 (Article 53).

^{43.} See Implementing Regulation (EU) No. 297/2011.

^{44.} The programme seeks to identify the root problems and places agriculture at the heart of the international debate on development. The programme covers all developing countries, with a primary focus on children under the age of five, communities massively affected by chronic illnesses, women and small-scale farmers.

^{45.} This programme has attempted since 1994 to improve food security by creating jobs and income both in the farming sector and in others, while promoting access to food and South-South co-operation.