Healthy and productive life depends on food and nutrition security. Yet hundreds of millions of people suffer from hunger and other nutritional deficiencies, and the majority of those people derive their livelihoods from agriculture. We must recognize that the millions of people who manage agricultural systems – from the very poorest to the most commercialized producers – constitute the largest group of natural resource managers on earth. Their decisions, as well as those of the world’s 7 billion consumers, are key to global food security and the health of the world’s ecosystems. The conditions needed to achieve universal food security and nutrition, responsible environmental stewardship and greater fairness in food management intersect in agricultural and food systems at global, national and local levels.

In the face of an expected global population of 9 billion in 2050, pressure on the world’s agricultural and food systems will grow. Unless purposeful action is taken, even if the 60 percent increase in food production needed to meet effective demand is achieved, some 300 million people may still remain without adequate access to food. We can no longer ignore the interdependencies between hunger and malnutrition, and natural resources and the environment.

We have known since the first Rio summit about the nature of the challenges we face and how to address them. Where we have fallen short is in recognizing and addressing the governance challenges that must be overcome in order to take the steps needed to achieve commonly agreed goals. Ultimately, success in eradicating hunger and the transition to sustainable patterns of consumption and production will depend on the decisions of billions of individuals – both producers and consumers. To make sure that proper policies are implemented, fair and effective governance systems are needed – systems that are transparent, participatory, results-focused and accountable – at the global, regional, national and subnational levels.

From the above, it is clear that:

1. The Rio vision of sustainable development cannot be realized unless hunger and malnutrition are eradicated.
2. The Rio vision requires that both food consumption and production systems achieve more with less.
3. The transition to a sustainable future requires fundamental changes in the governance of food and agriculture and an equitable distribution of the transition costs and benefits.
KEY ACTIONS TO ACHIEVE THE FUTURE WE WANT

1. **Establish and protect rights to resources, especially for the most vulnerable**
   Clear tenure rights are needed to promote equitable access to and sustainable management of resources. Tenure has significant implications for sustainable development. As global competition for natural resources intensifies, asymmetries of power could lead more vulnerable groups to suffer loss of access to natural resources.

   Countries and their development partners should make use of the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security* in their food security strategies and policies. The guidelines are a reference for laws and policies governing access and ownership rights for land, fisheries, and forest resources.

2. **Incorporate incentives for sustainable consumption and production into food systems**
   For a transition to a sustainable future agricultural and food systems will need to “produce more with less” and diets will need to be sustainable. If individual consumers and producers are to take full account of the value of natural resources and the environment when making decisions, incentives for sustainable consumption and production must be incorporated into planning, institutions, technologies and value chains.

   Reducing food waste will not only increase available food supplies, it will also save natural resources. A 50 percent decrease in food losses and waste at the global level would save 1.350 km$^3$ of water per year – almost four times the annual rainfall of Spain.

3. **Promote fair and well-functioning agricultural and food markets**
   Well-functioning agricultural and food markets can provide incentives to producers and consumers to transition to sustainable consumption and production. Fundamental changes are needed to achieve a fairer and more effective system of international trade, especially in a time of rising and volatile prices. A new agenda for trade talks should pay particular attention to safeguarding the needs of food-insecure and food-importing countries, including more space for developing countries to use domestic policies to address their food security needs.

   Today, there are stronger links between food and energy markets and care must be taken so that agricultural and energy policies do not exacerbate commodity price volatility. On the consumption side, measures such as increasing flexibility in biofuel policies have been proposed to reduce pressure on food markets from biofuels. Opening international markets for both feedstocks and renewable energy products so production can occur where it is economically, environmentally and socially feasible would also help to broaden the market and reduce volatility.

   Improving domestic market infrastructure and building value chains accessible to small and low-income producers will increase agricultural incomes and facilitate access to food.
4 Reduce risk and increase the resilience of the most vulnerable

Food markets in many developing countries do not function well because of poor infrastructure, weak institutions and a lack of appropriate regulation. Well-functioning domestic markets will smooth variability, facilitate the transfer of food surpluses across geographies and manage price fluctuations over time. Improved information and transparency on supply, demand and stocks can also reduce volatility in markets.

Small farmers still face risks from both market and environmental shocks, so reducing vulnerability and increasing the resilience of livelihoods and food systems is increasingly important in both emergency and development contexts. Risk reduction and adaptation to climate change must be mainstreamed into national development policies (agricultural, rural development, food security and social protection), as well as public investments.

5 Invest public resources in essential public goods, including innovation and infrastructure

There has been significant under-investment in public goods and services for agriculture, especially those of relevance to smallholder producers, and in co-management and community-based management of common pool resources such as fisheries, forests and water resources.

The quantity and quality of investment for research and dissemination of sustainable food production and handling technologies, as well as in physical and institutional infrastructure to facilitate appropriate private investment, needs to be increased. Technologies to increase resilience, such as drought- and heat-resistant crop varieties, adapted to the local climatic and geographic conditions and to the needs of smallholders, are clearly important in the context of climate change adaptation and risk management.

Targeted public investment in public goods and institutions must also underpin private investment to realize sustainable agriculture. Public investment can leverage much larger flows of private investment along value chains by creating a conducive investment environment and reducing barriers to the transition to sustainable systems.

- Smallholders farm around 80 percent of arable land in Africa and Asia.
- Three-quarters of the world’s poor and hungry live in rural areas and most of these depend on agriculture for their livelihoods.
- Forty percent of the world’s degraded lands are located in areas with high poverty rates.
- Agricultural ecosystems are by far the largest managed ecosystems in the world. Sustainable management of agricultural resources is key to sustainable development.
- The crop and livestock sectors use 70 percent of all water withdrawals and, together with forestry, occupy 60 percent of the earth’s land surface.
- Livestock production alone uses 80 percent of global crop and pasture area.
- Food systems consume 30 percent of the world’s energy.
- Oceans cover 70 percent of the earth’s surface and sustain fisheries and aquaculture; aquaculture also accounts for a rapidly growing share of land and freshwater use.
- Agriculture accounts for approximately 30 percent of total greenhouse emissions, and is projected to be a significant source of future emissions growth.
The Future We Want will not materialize as long as hunger and malnutrition persist, and it will not materialize without sustainable management of agriculture and food systems. To achieve a world without hunger through sustainable development the Rio+20 participants must commit to:

1. Accelerate the pace of reducing hunger and malnutrition with a view to eradicating these in the near future.


3. Support the efforts of all stakeholders working in food and agriculture, especially in developing and least-developed countries, to implement technical and policy approaches to agricultural development that integrate food security and environmental objectives.

4. Ensure an equitable distribution of costs and benefits from the transition to sustainable agricultural consumption and production, and that people’s livelihoods and access to resources are protected.

5. Adopt integrated approaches to managing multiple objectives and linking financing sources for achieving sustainable agricultural and food systems.

6. Implement governance reforms based on the principles of transparency, participation and accountability to ensure policies are carried out and commitments are fulfilled. The Committee on World Food Security can serve as a model for these reforms.

**FAO and Rio+20**
The Food and Agriculture Organization (FAO) is a specialized agency of the United Nations. Serving all countries, FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy. FAO is also a source of knowledge and information, and helps developing countries and countries in transition modernize and improve agriculture, fisheries and forestry. FAO has 191 member nations, two associate members and one member organization, the European Union.

**What is FAO's mission?**
FAO’s mission is articulated in Latin by its motto *fiat panis*, which translates into “let there be bread”. Achieving food security for all is at the heart of FAO’s work – to make sure people have regular access to enough high-quality food to lead active, healthy lives. Its work extends across sustainable agriculture, forestry, fisheries and food systems. Wise use of natural resources and environmental protection, as well as economic and social equity and progress are central in FAO’s programme.

**How does FAO's mission relate to Rio+20?**
The Rio+20 negotiations highlight seven areas that need priority attention, namely jobs, energy, cities, water, oceans, disasters and food. FAO’s mission and actions cut across each of these areas.

We can’t claim success in sustainable development until the basic right to food for all has been fulfilled. Safety nets and social protection systems are urgently needed. For the longer term, sustainable agriculture strengthens livelihoods and meets increasing demands for food. Reducing food losses and waste will further reduce agriculture’s environmental footprint and help ensure food security. Synergies between achieving food security and sustainable consumption and production need to be captured and trade-offs managed. This is at the heart of FAO’s mandate.

**Key actions undertaken by FAO**
In this context, FAO’s actions range from setting internationally recognized standards for food and natural resources management, to supporting national programmes in agriculture, fisheries and forestry, to local implementation of sustainable agriculture, fisheries and forestry. Together with the International Fund for Agricultural Development and the World Food Programme, FAO is committed to making the Rio+20 vision believable and achievable.