



*5 June 2013*

**4<sup>th</sup> Global Forum  
of Leaders for Agricultural Science and Technology  
Chinese Academy of Agricultural Sciences  
“Agricultural Technology Transfer And Food Security”**

**Keynote Speech**

Ladies and Gentlemen,

The world has made strides in the fight against hunger and in increasing agricultural production, and yet nearly 870 million people still suffer from chronic undernourishment. In 1990-92 they were one billion.

The proportion of hungry people in the world has also fallen: from 18.6 percent to 12.5 percent since the early 90's.

These numbers show that, although we are moving in the right direction, there is still a lot to be done.

But these numbers also do not reflect the success stories that exist.

Eighteen countries have already reached the ambitious goal established in 1996 at the World Food Summit organized by FAO to halve the total number of hungry people between 1990 and 2015. Three of them are in Africa: Djibouti, St Tome and Principe and Ghana.

Another 20 countries have already met the Millennium Development Goal of halving the proportion of hungry people by 2015. And many others are quite near to achieving the first Millennium Development Goal, such as China for example.



FAO will recognize this progress in a special ceremony that will take place during the FAO Conference in June.

These stories need to inspire all countries to move forward, but they should not make us complacent: after all, even if we reduce hunger by half, what do we say to the other half?

That is why I believe we need to set an even bolder goal: the complete eradication of hunger, malnutrition and extreme poverty by 2025, in line with the Zero Hunger Challenge launched by UN Secretary-General Ban Ki-moon during the Rio+20 Sustainable Development Conference.

This common vision of a hunger-free and sustainable world emerged in the post-2015 consultation process that has been led by FAO, WFP and the Governments of Colombia and Spain.

How do we get there?

First, by acting together to transform political will into concrete action. I am not only speaking about the commitment of governments, but of an entire society. And I am not speaking of isolated efforts. We need to integrate, coordinate and complement the work we do.

Second, we need to understand that the world today faces interconnected challenges that cannot be tackled separately: hunger and food insecurity, climate change, energy issues, persisting poverty and the economic crisis all influence -- and are influenced by -- each other.

Third, we need to look at the actual causes of hunger and respond to them.

After World War Two, the main cause of hunger was insufficient production. Since then, food production and productivity have increased and, today, food per capita availability is 40 percent higher than before.

Science has played an important role in this, since the Green Revolution was the main reason for such a production increase and is credited to have saved some one billion people from hunger.

However, this production increase, and the fact that we have enough food for all, has not been able to end hunger.

This is due to the fact that, today, the main cause of hunger is not lack of food, but insufficient access to it: people do not have the money to buy the food they need or the means to produce it.



This means that we need a more comprehensive approach to guaranteeing food security that connects production with protection.

FAO is responding to this need by transforming the way it works and sharpening our focus on five strategic objectives. They are:

First, ending hunger and malnutrition;

Second, increasing production in a sustainable manner;

Third, reducing rural poverty;

Fourth, improving food systems and their fairness;

And, fifth, increasing the resilience of rural livelihoods to threats and crises.

A sixth objective complements these strategic objectives: guaranteeing the quality of our technical and normative work globally.

As you can see, these six goals cut across many areas of people's lives and address multiple challenges that are inter-connected.

And even if the world has gone through many changes in the last decades, one thing remains the same: To reach the ambitious goal of ending hunger and malnutrition, we still need to look at the rural areas of developing countries, because it is here that over 70 percent of the world's hungry live. And many of them are small-scale or subsistence farmers.

In most developing countries they are the main responsible sources for producing the food that is consumed locally. It's a cruel paradox: they produce the food, but at the same time are among the world's most food insecure population.

Some look at them as part of the problem, we look at them as part of the solution to the hunger problem.

There is a huge potential in subsistence and small-scale farming that has yet to be tapped. A huge potential to increase production and the availability of food in poor rural areas, and to improve livelihoods and lives.

Not only the lives of the farmers themselves, but of whole communities in which they are inserted, if we are able to create or strengthen local production and consumption circuits.

Agriculture remains one of the keys to improving the lives of the most vulnerable families, particularly in Asia and Africa due to the great proportion of population living in rural areas. But today's agriculture needs to be different from that of the past.

To fight hunger and malnutrition we will need to find more sustainable ways to feed the nine billion people who will populate our world in 2050. According to our latest estimates, this means that we should produce 60 percent more food by 2050.



Why? Because the Green Revolution increased production through the intensive use of chemical inputs and natural resources that take too heavy a toll on the environment.

So sustainability is key. And the only way we can be sustainable is if we look at both how we produce and how we consume food.

On consumption, let me just say that about 30 to 50 percent of all food produced is lost or wasted.

On production, in the same way that science and technology played an important role in the Green Revolution, it has an important role to play now to increase production. But the solutions we need are different.

Then, we needed to increase production. We succeeded to do so through the intensive use of chemical inputs and natural resources.

Now, we need a double green revolution, increasing production and productivity while preserving our natural resources.

In agriculture, we will need to work together to produce “more, with less” (Save and Grow), especially in developing countries, where almost all population growth is expected to take place.

FAO projections indicate that, globally, 77 percent of the gains in production will be achieved by increasing yield growth and cropping intensity on existing farmlands, rather than by increasing the amount of land used for agriculture.

Only 14 percent of the increase is likely to come from boosting cropping intensity, and 9 percent from the expansion of land use.

Innovation will be important. So will public and private investment in agricultural research and development.

Science and technologies, if shared generously and appropriately through training and knowledge exchange, can make an enormous difference in the lives of farmers, especially small-scale producers.

China, for example, has supported small-scale farmers by enhancing research and extension in agriculture, and boosting overall investment in agriculture.

China’s national strategy for agricultural development has placed the rural sector and modern farming at the centre of its plans for the years to come.

FAO and other UN agencies have been happy to support this effort.



Last year, FAO and the Government of China signed a joint cooperation framework, for 2012 to 2015, to help carry forward the Government's national development policy objectives related to agriculture, forestry and aquaculture.

China has successfully increased food production. And, like other countries represented here today, China is using its know-how to help other countries reach the same goal.

China has been active in South-South cooperation, sharing its agricultural knowledge, technologies and experiences with other countries, such as Liberia and Senegal.

Ladies and gentlemen,

It is very important to find innovative and cost-effective ways to develop and deliver agricultural technologies and provide training directly to farmers and other producers.

Change will be needed to make this happen.

Currently, there is striking under-investment in agricultural R&D in low- and middle-income countries compared to industrialized countries.

Most developing countries do not allocate sufficient funding and capacity to developing and maintaining strong agricultural Research and Development programs.

In the year 2008, low- and middle-income countries spent just over half a dollar on R&D for every 100 dollars of agricultural GDP, while developed countries spent three dollars on average.

And these investments are unevenly spread throughout the developing world.

Emerging countries are making relatively large investments, which are triggering impressive productivity growth.

But many countries are lagging far behind, especially those in sub-Saharan Africa.

We already have a vast number of techniques that could have a significant impact on small-scale production but are out of the reach of poor farmers. And I am not talking of the latest scientific innovations. In many cases, they are technologies and techniques that have been around for many years.

Together with innovation, I urge you to help make this accessible to the small-scale farmers.

**In today's globalized world, people and countries are more and more dependent on each other. International mechanisms can help to support research in, and the transfer of, agricultural technology.**



Today, most international transfer of agricultural innovations to developing countries still occurs through North-South collaboration, but this is increasingly complemented by growing South-South cooperation, especially related to tropical agriculture.

I mentioned China's efforts earlier. This trend is also supported by countries like Argentina, Brazil, Chile, Cuba, Egypt, Indonesia, Malaysia, Nigeria, Singapore, Tunisia and Viet Nam.

There has also been more interest in triangular cooperation, where donors provide development assistance to Southern governments who, in turn, carry out programs to assist other developing countries.

Thank you very much.