

## Myths on hunger debunked

In order to have a better grasp of what hunger is all about, it is important to debunk some widely held myths that don't die easily.

These myths are often rather old and refer to past situations. For example, the perception of hunger as a consequence of food shortages fits rather well with explanations of famines of the past, but fails to explain most of today's food crises.

These myths generally result from a superficial analysis of hunger-related issues in the media where time available to present news is very limited (from a few dozen seconds to a maximum of a few minutes!). The consequence of this situation is that the media usually limit themselves to presenting the immediate causes of hunger without taking time to understand underlying causes (the cause of the cause, and the cause of the cause...). This is probably why climate or weather (droughts or floods) are so often referred to in order to explain hunger without trying to find out why nothing has been done to prevent or alleviate the consequences of negative climatic events.

This superficial way of looking at hunger is one of the reasons why myths are so resilient and persist in people's minds, preventing them from being fully aware of what has to be done to resolve the hunger issue sustainably.

We shall review some of these myths in the hope of finding the right words to finally banish them from the minds of our readers :

**Myth 1 : Hunger is due to a lack of food availability**

**Myth 2 : Hunger is the result of excessively rapid population growth**

**Myth 3 : Hunger is a consequence of weather events or of war**

**Myth 4 : An increase in food aid would eradicate hunger**

**Myth 5 : There is nothing we can do about hunger**

**Myth 6 : Most hungry people are in Africa**

**Myth 7 : Hunger is best illustrated by pictures of skinny children in refugee camps**

**Myth 8 : Hunger is a consequence of poverty**

**Myth 9 : In periods of economic crisis, it is too costly to fight against hunger**

**Myth 10 : The main issue to be resolved in order to eradicate hunger is price volatility**

**Myth 11 : GMOs are the solution for eradicating hunger**

**Myth 12 : Organic agriculture will never be able to feed the world**

**Myth 13: Investment by large private corporations is the only means to solve sustainably the food and hunger problem**

## **Myth 1: Hunger is due to a lack of food availability**

### **Wrong.**

Today the quantity of food available is greater than ever before and sufficient to feed everyone adequately. But still, there are around 1 billion hungry in the world.

Our planet produces enough calories and proteins to feed its population today. In order to be healthy, humans need to absorb at least 2000 calories/day. Today, the world produces the equivalent of 3500 calories per day and per person. The problem is one of access to this food : some eat much more than what they need (which creates health problems such as obesity, diabetes and cardiovascular diseases) and they waste food, while others eat much less than the minimum daily requirement to be in good health.

Income distribution is the reason behind the issue of variable access to food : those who do not eat enough do not have enough resources (income, gifts or resources from social safety nets) to be able to get all the food they need.

This is well illustrated by the fact that widespread hunger occurs even in countries which are food exporters. In those countries, food is exported while an important fraction of their population does not eat sufficiently.

A good example of this situation is India where, according to FAO, there were 217 million undernourished persons in 2010/2012, while the country was exporting rice. In fact, India was even the largest exporter of rice in 2012 (almost 9 million tons exported!).

Similarly in Ethiopia, during the 2008 food security crisis, there was plenty of food on market stalls but at prices out of reach of the poorer people, and millions of persons were unable to eat sufficiently.

In Chad, at the end of 2012, despite a good harvest, it is expected that a large part of the population will continue to have problems in buying their food needs because of their high level of indebtedness [read more]

The real cause of hunger is therefore not the limited availability of food, but the impossibility for a proportion of the population to acquire the resources required to gain access to the available food.

It is important not to confuse the issue of hunger in the world now with the issue of feeding the world's population in the future. The fact that most undernourished people earn their living from agriculture should not make us believe that producing more will solve the hunger issue. What is required is to give the opportunity to the hungry to have the means to live decently and eat sufficiently, and to ensure that they are not excluded from all the activities implemented to increase food security. This implies approaches to agricultural development that include these people and gives them opportunities to improve their lives. But this will not be sufficient. More will be required than just developing agriculture and agricultural development will have to go beyond simply increasing agricultural production...

## Myth 2: Hunger is the result of excessively rapid population growth

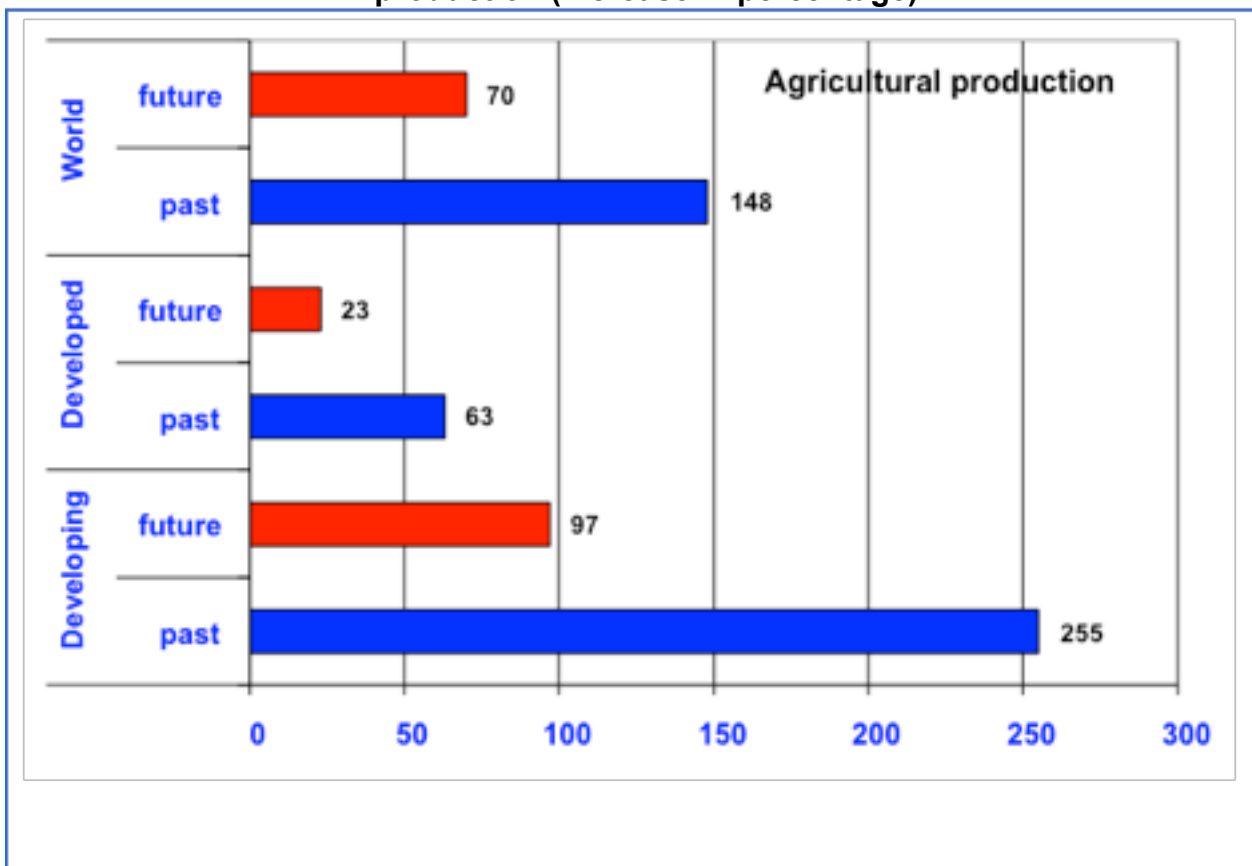
**Wrong.**

World population increased by 133% from 3 billion in 1960 to more than 7 billion in 2012. World food production increased even faster, by 146% between 1961/63 and 2005/07. It increased by 255% for non-industrial countries over the same period. Despite this remarkable performance, there are still many hungry people in the world.

World population is projected to reach 9 billion by 2050, representing an increase of 29%. This has been estimated to imply a 60 to 70% increase in food demand because of changes in the level and composition of food consumed by people as their incomes rise (more meat, fruits and vegetables ; less cereals and tubers).

The rate of increase of production required for the 40 years to come will therefore be considerably less than what it was during the last four decades, even in the case the composition of diet continues to evolve according to past trends (see diagram). Moreover, the amount of food required to eliminate hunger today is very small compared to total food availability (less than 1% of total food production according to [Trueba and MacMillan](#)) and to the total food wasted.

**Past (1961/63- 2005/07) and projected (2005/07 – 2050) evolution of agricultural production (increase in percentage)**



These figures may induce some optimism, as the effort required in the future will be much lower than what has been done in the recent past. There are, however, some important pending questions:

- Is this projected increase in production possible while adopting technologies that are less damaging to natural resources (soil, water, forests and genetic resources), produce less greenhouse gases and are more accessible to the mass of small producers who constitute the bulk of the hungry?
- Can future food consumption be based on diets that contain less animal products which are more demanding on natural resources and emit more greenhouse gases ?

**(read more on longer term issues)**

It is hoped that changes in food consumption patterns that can already be observed (reduction of consumption of animal products) will be confirmed in the decades to come and that the pressure on our planet's resources will be less than now expected. There is a need to find ways to encourage these directions of change.

### **Myth 3: Hunger is a consequence of weather events or of war**

#### **Wrong**

War and extreme weather events (droughts, floods) can have a dramatic impact on people and put them in extreme situations of hunger and poverty, because of crop failure, interrupted production or a breakdown of marketing systems. Much can be read, seen or heard about such events in the media. But they constitute only the tip of the hunger iceberg.

For example, in 2005, the food crisis in Niger, Sudan and the Horn of Africa, as well as in Southern Africa put 35 million Africans in an emergency situation that required food aid. This very high figure is, however, quite small when compared to the 250 million people that were suffering from chronic hunger at that time on the continent.

In 2012, the Horn of Africa crisis that was well covered in the media involved around 12 million people in Djibouti, Ethiopia, Kenya and Somalia. However, estimates show that in these countries there are around 50 million people suffering from chronic hunger.



It is chronic vulnerability and the physical weakness it induces that is largely responsible for the fact that any shock (economic, political, health or climatic) can quickly bring millions of people to an extreme state of deprivation and poverty. This situation has sometimes been called “the forgotten emergency”, a situation quite different from the emergencies that are mentioned in the media. This invisible phenomenon is not very telegenic but is an integral part of the reality of hunger.

Around 1 billion people are in a situation where their undernourishment makes them unable to work to their full potential and makes them as victims of diseases that would be harmless for able-bodied persons.

## **Myth 4: An increase in food aid would eradicate hunger**

### **Wrong**

Food aid can save human lives in extreme emergency situations (war, drought, earthquake, cyclone, etc.). But it is extremely costly and tends to deter local production when it is used in cases where it is not absolutely required.

A study showed that each dollar of food aid distributed costs 2.13 dollars to the US budget, because of the existing quasi-monopoly for the provision and transport of food, and the use of inefficient means for local transport and distribution. Furthermore, at least five months are required to deliver US food aid to the location where it is distributed.



Despite the cost and inefficiency of food aid, it attracts more financial resources than agricultural development assistance. For example, in 2002, OECD countries allocated 4.8% of their official development assistance to finance food aid, compared to 4.7% for agricultural development assistance (OECD/DAC statistics). At approximately the same time, the European Commission used 5.5% of its official development assistance to support the development of agriculture, forests and fisheries, while 7.3% were allocated to food aid.

Over the years, food aid has become an institutionalised system which allows industrialised countries to subsidise their agriculture without breaking WTO rules and to compete unfairly with producers in non-industrialised countries that are not in an emergency situation. Through their PL480 law, for example, the US have thus been able to distribute 350 million tonnes of food over 50 years, although quantities have been progressively decreasing over the years.

Food aid serves better the purpose of the countries that provide it than those who benefit from it: it allows governments to offer support to producers in providing countries that is not taken into account in the estimates of support provided made in the framework of the WTO.

Food aid has also been often used for geopolitical purposes. For example, the US has been accused of using food aid to bring down the Ethiopian government during the 80s.

Locally, food aid contributes to undermining weak local commercial networks and reducing demand and prices in local markets. It may induce a tendency to dependency and changes in food habits that may contribute to the penetration of local markets by imported products (e.g. wheat flour in tropical countries) which cannot be grown locally.

It can also be diverted to the benefit of local elites that may re-sell products brought in by food aid agencies. In some cases, it has also been used to feed the army or its distribution

was restricted to areas that were favourable to the government in place, to the detriment of those supporting the opposition (as in Zimbabwe for example).

Finally, food aid may have a negative impact on the support that governments give to agricultural development. This was well illustrated in the Ugandan Prime Minister's opening speech to the first meeting of the Ministers of Agriculture of the Common Market for Eastern and Southern Africa (COMESA) in November 2002, where he explained that certain decision makers believe that they will always benefit from emergency support in case of a food crisis and that it is therefore in their interest to use the money they have at their disposal to invest in sectors other than agriculture.

To conclude, it is possible to say that food aid is certainly useful, but it must be used only in cases where food availability is the problem. In addition, its management should be carefully monitored and checked to avoid any misappropriation. But in all cases, food aid does not constitute a solution to hunger as it does not try to address the root causes of chronic food insecurity but only caters for emergency situations.

## **Myth 5: There is nothing we can do about hunger**

### **Wrong**

Hunger is not inevitable. It is a consequence of policy choices. It is a result of the way in which the international food system is organised, of the limited resources mobilised to fight against poverty, of the neglect in which family farming has been left during recent decades, even though small agricultural producers and rural workers are precisely those who constitute the majority of the hungry.

Many of the non-industrialised countries have tended over the years to reduce the part of their budget used to support food and agriculture, and official development assistance to agriculture represents a reduced share of development aid, falling from close to 17% of the total in the 70s to around 3% at the turn of the century. Despite this, there has been faster growth of agriculture in non-industrial countries than in industrial countries!

So if one digs behind the immediate causes of food insecurity, whether chronic or transitory, it appears that the causes could have been eliminated or at least strongly reduced if appropriate decisions had been made by governments or by the international community.

The 2007/2008 food security crisis is a perfect illustration and it can be explained by a series of errors or shortcomings ([read more on food crises](#)). These errors and shortcomings often result from the balance of power existing in industrial countries as well as in non-industrial countries which are in favour of agriculture in rich countries and penalise the sector in poor countries ([read more on this subject](#) – in French only – translation to be available soon).

This situation, although somewhat discouraging should also be a source of hope. If hunger is a consequence of decisions taken by humans, then this means that other decisions can undo the network of causes of hunger. This message of hope requires that each of us mobilise in order to influence policies in a direction that will ultimately lead to a real eradication of hunger.



## **Myth 6: Most hungry people are in Africa**

### **Wrong**

FAO estimates that there were 868 million undernourished persons in the world in 2010-2012 (last official figure available at the time of drafting this text). Out of this total, 239 million people lived in Africa or less than 27% of this total.

At the same date, Asia had 568 million undernourished persons or 2/3rds of the food insecure people in the world.

India alone had 217 million undernourished persons (slightly less than all Africa), while China, despite the remarkable reduction of hunger observed over the years, still had around 158 million undernourished.

The myth that most of the hungry people live in Africa probably comes from the fact that there are more extreme situations and food crises in Africa because of war or extreme meteorological events. Hunger in Africa is therefore more present in the media who generally limit themselves to covering this type of crises. Because of this, Africa is also more visible in the campaigns organised by NGOs active in the area of emergency food assistance.

**Consult FAO's State of Food Insecurity in the World 2012**

## **Myth 7: Hunger is best illustrated by pictures of skinny children in refugee camps**

### **Wrong**

The unacceptable pictures of children in an acute state of undernourishment that can be found in the media at the time when crises make the headlines are not representative of what hunger really is. These are pictures taken in extreme situations that fortunately only concern a few tens of million people in the world, as has been the case recently in the Horn of Africa. The fact that 260,000 people died of starvation in Somalia in the 2008-2010 famine is horrific, but much larger numbers are dying prematurely each year because of chronic hunger.



But the mass of people suffering from hunger (around one billion persons) are not experiencing such extreme suffering as can be seen endured by children in these widely disseminated pictures. This mass of people however live in a state of physical weakness that often does not give them the energy to work and graduate from the dire situation in which they live. This physical weakness makes them also more vulnerable to diseases as it affects their immunity to infections.

Chronically hungry people find themselves in a state of great economic vulnerability that leaves them unable to cope with any shock (e.g. bad harvest because of a climatic incident or a pest invasion, soaring food prices, etc.) that can catapult them into a state of extreme deprivation.

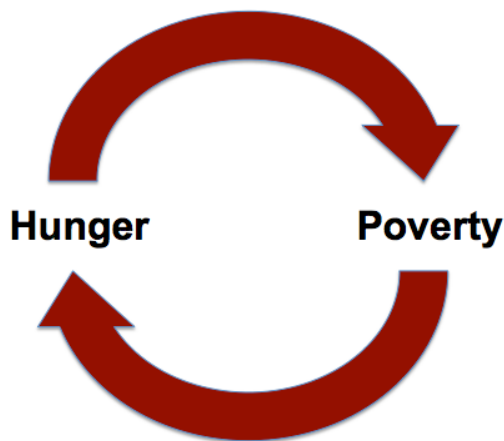
This is very important to consider, as solutions adapted to deal with situations of extreme emergency (food aid) cannot adequately address the situation of the majority of the hungry. These latter cases require different forms of support that will allow them to exit from vulnerability and become able to sustain their living by working and earning sufficient income to meet their needs in an autonomous fashion.

## **Myth 8: Hunger is a consequence of poverty**

### **Yes, but...**

Hunger is a consequence of poverty, as lack of income is the main cause for people not having access to sufficient food to enable them to enjoy an adequate diet.

But there is more to it. Hunger itself causes undernourished people to be trapped in poverty. So there is a vicious circle linking hunger and poverty.



Indeed, poverty is also a consequence of chronic undernourishment. Numerous studies have shown that undernourishment contributes to keeping people in poverty.

A hungry person has a reduced physical and intellectual development, and his(her) working capacity is reduced. He or she is also more likely to become ill and therefore not to be able to work at all.

Undernourishment is also a vector of inheritance of poverty. Women who are weak because of insufficient food during pregnancy, give birth to smaller and more fragile children who are more likely to suffer from a physical handicap at birth.

Similarly, an undernourished child has a reduced performance at school, first because of a reduced concentration for studying – because of hunger – but also because of an inadequate intellectual development.

Finally, poverty is often the enemy of risk taking: a poor person will hesitate to get involved in risky economic activities even if they could be more profitable.

## **Myth 9: In periods of economic crisis, it is too costly to fight against hunger**

### **Wrong**

Fighting hunger is a profitable investment that generates economic growth. Several studies have shown that a reduction in hunger and an improvement of nutrition impact directly on economic growth. This improvement is because the enhanced physical and intellectual capacity of that part of the population whose ability to perform to their full potential has been constrained by their hunger, enables them to contribute to and benefit from economic growth.

A series of studies conducted by the World Food Programme estimate the cost of hunger. This cost is incurred because of the loss of millions of hours of work, reduced labour productivity, slower learning by children at school, deaths due to undernourishment and increased health costs. These studies estimate that hunger costs annually USD 4.7 billion (16.5% of GDP) to Ethiopia, USD 3.7 billion (1.9% of GDP) to Egypt, USD 900 million (5.6% of GDP) to Uganda and USD 92 million to Swaziland (3.1% of GDP).

According to the FAO, the cost of undernutrition and micronutrient deficiencies can be estimated at 2 to 3 percent of global GDP, equivalent to USD1.4–2.1 trillion per year.

Resources required to fight hunger sustainably through developing agriculture and employment in both rural and urban areas are much lower than the cost of hunger or the amounts spent to try and resolve other problems.

For example, FAO and the New Partnership for Africa's Development (NEPAD) estimated in 2002 that there was a need to invest USD 4.6 billion annually to achieve food security in Africa over a period of less than 15 years. This figure is ridiculously small if compared to aid provided by OECD countries to their agriculture (more than USD 350 billion annually) or the resources mobilised by the international community to manage the international financial crisis (up to USD 2000 billion by the US alone, to manage their Financial Stability Plan in February 2009).

The momentum generated by the High Level Conference of 2008, the World Food Summit held in Rome in June 2009, followed by the G8 meeting in L'Aquila in August of the same year, led to pledges of more than 20 billion dollars in aid for agriculture at the time when the food crisis was hitting both rich and poor countries. Unfortunately, the financial and economic crisis contributed to reducing the interest of rich countries in food issues. So they finally mobilised only some very limited additional funding (only a few billion USD in 2009)...

## **Myth 10: The main issue to resolve in order to eradicate hunger is price volatility**

### **Wrong**

Towards the end of 2010, when certain food prices increased, the media, international organisations (FAO, OECD, IFPRI, etc.) and the G8/G20, chaired by France, chose as priority theme the issue of price volatility. In making statements on the issue they tend to use the terms "price increase and price volatility", or "price volatility and speculation" interchangeably.

However, if volatility is related to the uncertainty of price changes and defined by the degree of variation of prices (estimated by the coefficient of variation of observed prices), various studies referred to in the OECD/FAO Agricultural Outlook Report for 2010-2019 show that volatility did not increase during the years immediately before 2010 and that it was even less than what had been observed during the 70s. Volatility results from the fact that in agricultural markets supply and demand have very special characteristics. On the one hand, supply is highly dependent on climatic conditions and does not react rapidly to market conditions. On the other hand, demand is, at least for staple products, relatively inelastic to price changes, as these products are essential for consumers. These characteristics of demand and supply and of agricultural markets are favourable to the occurrence of price surges in cases where there is a fall in production, particularly when there are insufficient stocks that could be released to compensate for the shortage of production or when interest rates are very low and encourage hoarding of stocks. This is precisely what happened in 2008 and again in 2010-2011. This may also occur frequently in land-locked countries that are isolated from the main external sources of supply because of excessive transport costs for imports.

Even if it may be of some use to analyse volatility purely from the perspective of how markets operate, it does not appear to be a high priority. Any change in market regulations or in policies that seek to reduce price volatility will not resolve the fundamental question, namely that of the need for a sustainable increase of agricultural production, the reduction of its dependence on climatic conditions and the encouragement of economic operators to maintain a minimum food security stock.

One can wonder if the importance given to the issue of volatility and its partial resolution by the implementation of new rules to regulate speculation is not being used as a diversion to hide the fact that the International Community has not been able to deliver on its pledges made during the High Level Conference held in Rome in June 2009 and the subsequent G8 Summit in L'Aquila in August to mobilise more than USD 20 billion for investment in agriculture. But that was before the peak of the financial and economic crisis...

## Myth 11: GMOs are the solution to eradicate hunger

### Wrong

GMOs are at the heart of many controversies, of which the most recent is the direct consequence of the study conducted by Prof. Séralini on the health impact of consuming Monsanto's GMO maize NK603<sup>1</sup>.

GMO supporters emphasise their potential in terms of fight against pests, resistance to herbicides or drought, improved assimilation of certain elements (P or N) or improvements in the nutritional value of products. They often justify the promotion of GMOs on the grounds that they will "reduce world hunger".

Opponents of GMOs insist on the public health and environmental risks (for example because of an increased use of pesticides – see [Greenpeace video](#)) that these organisms create, as well as on the issue of private appropriation of the genetic composition of living organisms (e.g. seed companies such as Monsanto).

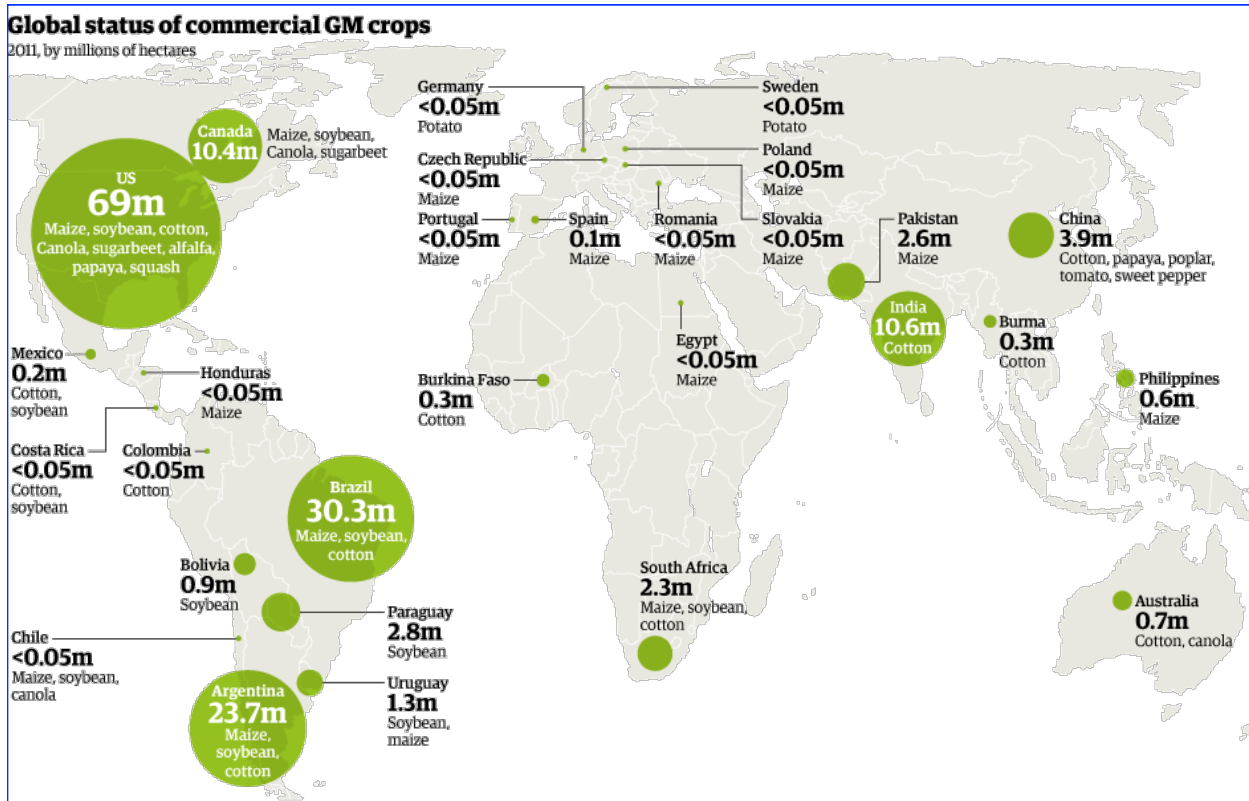
From the point of view of world hunger, it is important to consider whether GMOs can constitute a solution. Starting from the fact that hunger is essentially a question of distribution of wealth, of difficulty in access to food by a sizeable proportion of the population because of poverty, and considering that an important part of the undernourished earn their living from agriculture, it is possible to say:

- It is very unlikely that GOMs constitute a solution for people living from agriculture and suffering from hunger. Indeed, GMOs are accessible only through the purchase of seeds which requires financial resources that the concerned populations do not have. Moreover, as most of GMO seeds can only be used for one season (seeds kept from the previous harvest do not generally have the characteristics of purchased GMOs, or, if they do, the producer would need to pay a fee as GMOs are patented by private companies), the expense has to be repeated every year. Therefore the cost of using GMOs makes them inaccessible for poor farmers.
- A generalised use of GMOs by producers able to afford them could, if they live up to their breeders' claims, imply a reduction of the costs of food. Poorer producers, who cannot afford GMOs, would then have problems to sell their produce at a remunerative price and would see their income reduced, making them poorer or inducing them to accelerate their movement out of agriculture.
- For those persons who are not suffering from hunger and who do not earn their living from agriculture, the reduction of the price of food that would be a consequence of the generalised use of GMOs, would have a positive impact on their real income (purchasing power), but with possibly increased health risks.

It appears therefore that the use of GMOs does not constitute a solution to hunger. In fact it is quite the contrary!

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<sup>1</sup> Séralini, Clair, Mesnage, Gress, Defarge, Malatesta, Hennequin, Spiroux de Vendômois, **Long term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize**, Food and Chemical Toxicology Volume 50, Issue 11, November 2012, Pages 4221–4231



Source: IAAA/The Guardian

For more information read:

- [Genetically modified crops](#) FAO's point of view (2001)
- [Biotechnology: meeting the needs of the poor?](#) (FAO 2004)
- [Agricultural biotechnologies in developing countries: options and opportunities in crops, forestry, livestock, fisheries and agro-industry to face the challenges of food insecurity and climate change](#) (abdc-10) report (FAO 2010)
- <http://www.greenpeace.org/international/en/campaigns/agriculture/problem/genetic-engineering/> Anti GMO website
- <http://www.monsanto.com/newsviews/Pages/biotech-safety-gmo-advantages.aspx> Pro GMO website
- [Les OGM une solution au problème de la faim dans le monde ? ? ?](#) (in French only)



## Myth 12: Organic agriculture will never be able to feed the world



### Wrong

Although this myth is not directly related to the issue of hunger but rather that of the capacity in the medium or long term of world agriculture to feed a growing population, the debate on the choice between an agriculture based on the use of chemical products (chemical fertiliser, pesticides and herbicides) and an agriculture that is less dependent on the use of chemicals containing fossil energy (ecological agriculture, organic agriculture) is relevant to the issue of world hunger.

This discussion may be structured in two parts

- Can an agriculture that is less dependent on chemicals feed the world?
- What effect would the development of such an agriculture have on world hunger?

On the **first question**, it is frequent to hear agricultural leaders, politicians, experts and representatives of big companies state that abandoning conventional “chemical” agriculture would imply a reduction of world agricultural production by 30 to 50%. Certainly, if conventional agriculture were abruptly replaced by an agriculture that does not rely on chemical inputs and that would not have adopted other agricultural practices, this would have immediate and devastating effects on food production. It would lead to crops suffering from deficiencies, which would be subject to all sorts of diseases and would be in competition with a wide array of competing weeds.

But that is not the alternative. The alternative is to replace conventional agriculture by an agriculture that uses management techniques for crops and for animal production based on the harnessing of ecological services, that are based on results of scientific research and of experiments implemented successfully throughout the world. This change would require extensive training of producers and a period of transition that would probably result in a slight reduction of production in the most intensively cultivated regions now using conventional agriculture. It would however replace existing agriculture by an agriculture that manages natural resources sustainably and produces less greenhouse gases. This replacement would take place essentially in industrial countries and would involve only a fraction of agriculture in non-industrial countries where smallholders generally only use small amounts of chemicals and where agriculture is relatively less productive. However, organic or ecological agriculture would contribute to increase substantially smallholder production. This increase would ultimately more than compensate for the possible decrease in production in industrial countries and would contribute to redistributing agricultural production in the world. Even in areas where agriculture uses chemical inputs moderately, the transition to an organic or ecological agriculture would contribute to



increased production. This is what emerges from the documentation produced during the International conference on organic agriculture and food security held at FAO Headquarters from 3 to 5 May 2007. This is also supported by a study conducted by the International Food Policy Research Institute (IFPRI) according to which the adoption of organic agriculture would strongly increase agricultural production in Africa and would reduce food imports by the continent (Halberg 2006).

million tonnes

	<b>Industrial Countries Conventional Agriculture</b>	<b>Industrial Countries Organic Agriculture</b>	<b>Non-industrial Countries Conventional Agriculture</b>	<b>Non-industrial Countries Organic Farming</b>
Grains	179	166	1026	1204
Tubers	97	86	294	795
Vegetables	150	131	530	1081

Source: Badgley et al. 2007

On the **second question**, it is quite clear that the transition from conventional agriculture to organic or ecological agriculture would have a positive effect on the reduction of world hunger. This for three main reasons:

- It would create more employment in agriculture. This type of agriculture requires more labour and a more sophisticated management than conventional agriculture which is highly mechanised and where the fight against diseases, pests and weeds is done chemically, and soil fertility is managed by the application of chemical fertilizer. Soil fertility management and integrated pest management requires more labour than the techniques used in conventional agriculture. More labour means more employment, more income for labourers and therefore an improved capacity to have access to food.
- As the technologies used in ecological and organic agriculture use less purchased inputs, they are easier to adopt by poor farmers than those used in conventional chemical agriculture which requires the farmer to have the capacity to purchase inputs (improved and patented seeds, fertilizer, herbicides, fungicides and pesticides). They can also lead to the doubling (or more) of yields and of labour requirements, which contributes to more income. Small farmers would therefore see their production and their competitiveness improved considerably compared to the large producers. This would enhance their capacity to take part in the market, raise their income and improve their living conditions. Simulations conducted by researchers suggest that an increase by 10% of yields would reduce the number of poor in Sub-Saharan Africa by 7% (Byerlee et Alex, 2005).
- As ecological and organic agriculture tend to use multiple crops, often cultivated in association, this will reduce risks for the producer through diversification, contrary to conventional agriculture that mostly advocates monocropping that increases vulnerability to diseases and pests. Production under these alternative agricultures is more stable which contributes directly to the stability dimension of food security.

To conclude, it appears that conventional chemical-based agriculture is neither indispensable to feed the world, nor likely to resolve the issue of world hunger. Rather, the adoption on a large scale of ecological and organic agriculture is more likely to solve the issue of world hunger by securing sustainably sufficient food for the world population while safeguarding the planet's natural resources. It would also reduce the impact of food production on the processes of climate change by cutting fossil fuel dependence.



Further readings:

- International Conference on Organic Agriculture and Food Security, FAO, Rome, 3 to 5 May 2007
- Christensen Fund's diagram comparing in ecological agriculture with industrial agriculture

## **Myth 13: Investment by large private corporations is the only means to solve sustainably the food and hunger problem**

### **Wrong.**

The opinion that only investment by large private corporations can solve sustainably the food and hunger problem has been prevailing for some time among international organisations, political leaders, experts and the media.

The reason for this is that the responsibility for the failure to combat against hunger and for the occurrence of the 2007/2008 food security crisis has been largely attributed to governments and their alleged inability to assist efficiently and effectively those who suffer from hunger and, more generally, food producing farmers. The logical consequence of this view is to turn to the private sector with hope that it could solve the problem. This view is reinforced by the fact that today governments are seeking ways to cut public expenditure. It is true that the private sector, particularly the private financial sector, has immense resources (equivalent to several times the value of global GDP), which, if they were well invested, could help to resolve the abovementioned problems. [\[read\]](#)



But this diagnosis and this new doxa forget three fundamental points:

- If governments have been ineffective in their combat against hunger, it is in great part because they were forced by their development partners - particularly the financial institutions like the IMF and the World Bank - to cut their expenditure and withdraw from direct intervention in their economies (structural adjustment)
- As a consequence, small farmers have largely been excluded from basic agricultural services that could have helped them to increase their production and improve their livelihoods [\[read\]](#)
- The objective of the private sector is first and foremost to make profit for its shareholders. Leaders of private corporations do not feel that they are responsible

for the promotion of development or the fight against poverty and hunger. For them, most of the 570 million family farms are a constraint rather than an opportunity, and they would prefer to control directly land and water resources in order to produce - an activity that is increasingly profitable since agricultural prices started to rise, ten years ago - rather than to have to deal with a large number of small farmers. It is this preference that explains the huge movement of land grabbing that occurred since the beginning of this century [[read](#)]

Moreover, large private corporations envisage agricultural production mainly in its industrial version that rests on monoculture, the massive use of chemical inputs and sophisticated equipment and that depends on a small number of plant species and varieties (often hybrids or GMOs).

The consequences of adopting this approach would be doubly negative and would imply:

- An increasing marginalisation of the mass of small farmers who would be deprived of their land, would only have very limited employment opportunities<sup>2</sup> and would be forced to migrate to cities and join the ranks of the impoverished people living in the shanty towns of large cities
- The generalisation of non sustainable agriculture that would further contribute to the degradation of natural resources ([land](#), [water](#), [forests](#) and [biodiversity](#)) and reinforce climate change (through increased greenhouse gas emissions) while becoming more vulnerable to it. [[read](#)]

And it is not the [Principles for Responsible Investment in Agriculture and Food Systems](#) that will provide protection to rural communities!

To conclude, the approach based on investment in food and agriculture by large private corporations, as it is envisaged, in particular, by the [New Alliance for Food Security and Nutrition of the G8](#), far from solving sustainably the issues of hunger and future provision of sufficient food for the world population, would be counterproductive, because:

- It would marginalise hundreds of millions of small farmers that it would put in chronic hunger and poverty
- It would make the provision of food for the world more vulnerable and less sustainable.

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([Materne Maetz](#), October 2012  
Last update March 2015)

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<sup>2</sup> Large 'modern' farms use much less labour than pre-existing or neighbouring family farms, as much as 50 times less in many cases!