

# Ensuring the world is fed

## Hunger could be eradicated throughout the world by 2050 if everyone works together to reduce waste, manage production and preserve natural resources

By José Graziano da Silva, director general,  
United Nations Food and Agriculture Organization

**A**s the G8 leaders once again gather to discuss global challenges at the Camp David Summit, food security and poverty reduction should take centre stage alongside the financial and economic crisis, climate change and sustainable development.

These challenges are closely linked. Food security can connect the dots along the path towards sustainable development. But development is not sustainable if people are left behind. Even today, the right to food – a basic human right – is absent from the lives of 925 million people.

Hunger is a global challenge. There are many valuable experiences and lessons to be gained worldwide, but there is still a lot of ground to cover. International actions must be complemented by others at the local level, because people do not eat in global markets. People eat in their homes, in their cities and in their villages. These are the battlegrounds that will define whether we win or lose the fight against hunger.

A revamped global governance system for food security is necessary to coordinate ongoing efforts and link them to the local level, transforming the international discussions into quick and effective action to tackle emergencies and advance towards the long-term goal of food security for all.

### Food security is good for business

The Committee on World Food Security (CFS) serves this function. It has recently been reformed to include representatives of civil society, the private sector and a range of international agencies and research institutions, making it one of the world's most inclusive international and intergovernmental bodies. It is the only global coordination mechanism for food security and supports country-led processes to reduce hunger and poverty. An example of how the CFS links global, regional and local levels is the recent approval of the Voluntary Guidelines on

the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. The CFS-led negotiations resulted in this milestone, which will improve how countries govern access rights to land, fisheries and forest resources.

Paradoxically, 75 per cent of the world's poor and hungry people live in rural areas. Many are subsistence and small-scale farmers with low productivity rates who survive on the food they produce for self-consumption or to sell in local markets.

The fact that in a world with plentiful food almost one in seven children, women and men is undernourished, is not only morally unacceptable and tragic, but absurd. Eradicating hunger would make everyone

***Paradoxically, 75 per cent of the world's poor and hungry people live in rural areas. Many are small-scale farmers***

richer. If children are properly nourished, they can learn more, lead healthier lives and will grow up to be more productive.

Investing in agriculture and nutrition to reach food security is good for business and good for governments. Agriculture can drive socially and environmentally sustainable economic growth, while adequate nutrition reduces costs in health, education and social security. Promoting food security, therefore, is an investment for society, not just an expense.

The world has the necessary conditions to guarantee food security for every citizen today and in 2050, when the population is expected to rise from seven billion to nine billion.

So the real question is not whether a growing population can be fed, but how. According to the Food and Agriculture Organization (FAO), between 2005-07 and 2050 agricultural production will have to

increase by 60 per cent to meet food demand. What can be done to guarantee food security without increasing agricultural output to such an extent, thus reducing the agricultural footprint on natural resources? We need a shift to more sustainable production and consumption patterns.

### Water consumption in agriculture

The use of water exemplifies this challenge. Agriculture represents more than 70 per cent of all water consumption. It takes 1,500 litres of water to produce one kilogram of cereal and 10 times that to produce one kilogram of meat.

In terms of consumption, food is managed and consumed in a hugely wasteful way. At the global level, one-third of all the food produced is lost or squandered. In low-income countries, more attention should be paid to



measures that target the production chain. In industrialised countries, the focus should be on nutrition education to reduce waste and encourage healthier diets, since more than one billion people are either overweight or obese.

Per capita waste of food products by consumers is around 115kg a year in Europe and North America. In sub-Saharan Africa and South and Southeast Asia, people throw away as much as 11kg a year.

If the amount of food waste and loss could be reduced by 25 per cent, 500 million people a year would have food, with no need to produce any more than we do today.

The Green Revolution of the 1960s greatly increased the amount of food that could be grown. But intensive use of inputs, fertilisers and pesticides takes its toll on natural resources so that, today, farming-as-usual

is no longer sustainable. The world needs a doubly green revolution, a paradigm shift to sustainable intensification of crop production, especially for small-scale farmers.

#### **Preserving natural resources**

FAO calls this ecosystems-based approach 'Save and Grow'. It builds on traditional knowledge and adapts to local conditions and crop varieties, helping farmers to raise their productivity while at the same time preserving natural resources.

The focus on smallholders is important because they usually have the least access to resources, technology and training and lower yields than large-scale producers. But environmental virtue alone is not enough – farmers must see tangible benefits in terms of higher yields and reduced costs. With

the right management, those benefits can be delivered. For this greener revolution to succeed, there must be environmental awareness among intensive, industrial-scale farmers. This can be achieved by providing incentives for the sustainable practices and penalties for those that are unsustainable.

The old development models must be rethought. New ways to cooperate and learn from each other are needed, in both developed and developing countries. There is a wealth of knowledge to share and from which to learn.

The time to start building a food-secure 2050 is now. This is not a goal that FAO or any government can reach alone. The private sector, civil society, research institutions and academia all play an important role. If society joins together as a whole, hunger can be eradicated – before 2050. ■

An ecosystems-based approach to producing food called Save and Grow builds on farmers' traditional knowledge and helps to raise their productivity

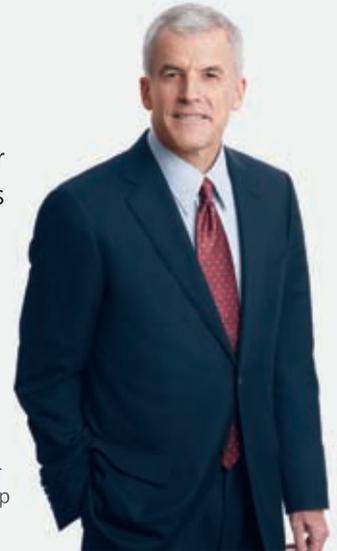


# Feeding Tomorrow

Throughout history, agriculture has been a driver of social progress and nutritious food has been the fuel for people to reach their full potential.

Today, with 7 billion people on the planet, there is greater demand than ever before to increase food production and allow more people in more countries to lead healthy, safe and productive lives.

At PotashCorp, we produce potash, phosphate and nitrogen to help farmers improve yields and produce more food. Our fertilizer ingredients help grow food – and by growing more food, we feed more hope for tomorrow.



**Bill Doyle**  
President and Chief Executive Officer  
PotashCorp

## Supporting the G8 Vision

With the world's population expected to reach 9 billion by 2050, farmers are being asked to boost production by as much as 70 percent over the next few decades, with the majority of that increase to come on existing farm land.

Achieving the required increases is possible, but requires a commitment to improving crop nutrition practices around the world. This will allow farmers to grow the crops needed to meet rising demand for food, fuel, animal feed and fibre without aggressively moving production to rainforests and other green space.

Adopting high-yield agricultural practices in more parts of the world is important to fighting against climate change and reducing greenhouse gas emissions. Since the 1960s, it is estimated that modern farming practices have kept 590 billion tonnes of carbon dioxide from entering the atmosphere.

This level of success is, in part, a product of the "Four Rs" of crop stewardship: right source, right rate, right place and right time. It is also a measure of the importance of another "R": research.

PotashCorp wholeheartedly supports the G8's global efforts to assure sustainable food security and improved nutrition. We view this as an important position in meeting the needs of the world today and for generations to come.

## Doing Our Part

An invigorated focus on global agriculture can help unlock the vast untapped potential of people around the world, especially in countries that have been traditionally undernourished.

It is our vision that farmers around the world will maximize the potential of their soils – and by doing so, they can help build a nutritious foundation on which their communities can thrive.

As a company, we will continue to pursue initiatives that encourage agricultural research and drive increased yields in a manner that is sustainable and environmentally responsible.

Together with other members of the global fertilizer industry, we support the International Plant Nutrition Institute (IPNI), a not-for-profit, science-based organization that has stationed scientists in many countries for hands-on involvement in agricultural research and development programs. IPNI's goal is to identify methods to achieve higher crop yields and to teach people how to improve production.

We believe farmers can produce enough food for our growing population. Like a seedling sprouting from the soil, food security solutions will rise from a foundation of research.



**9 billion+**

Expected global population by 2050

Source: United Nations

**~ 50%**

Current crop yield directly attributable to fertilizer use

Source: Agronomy Journal (January-February 2005), IPNI

**70%**

Estimated increase in crop production required by 2050

Source: FAO

**90%**

Expected percentage of required new crop production to be grown on existing cropland

Source: FAO



**PotashCorp**  
Helping Nature Provide

# Why the farmer should be put first

## Sustainable investment in agriculture is the most effective way to reduce rural poverty, improve food security and stimulate economic growth

By Kanayo F Nwanze, president, International Fund for Agricultural Development

In recent years, agriculture has gone from obscurity to occupying a central spot on the G8 agenda. For those working in rural development, this revival of international attention is very welcome, as is the recognition of an increased role for private-sector investment.

Private investment in agriculture usually suggests the involvement of large organisations. But, cumulatively, smallholders are significant investors in this sector. There are around 500 million small farms in the world. More than 95 per cent of agricultural holdings in developing countries are less than 10 hectares. In Asia and sub-Saharan Africa, about 80 per cent of farmland belongs to, or is cultivated by, smallholders. Around two billion people depend on these farms for their livelihood.

Smallholders invest not only their own money, but also their time and labour in their farms. Therefore, it is fair to say that they are the primary on-farm investors in agriculture in developing countries. New investments in agriculture must be sensitive to the requirements of smallholders if they are to achieve the desired result of improving global food security and reducing poverty.

### The power of smallholders

Investing in agriculture in developing countries is the single most effective method of improving food security for the world's poorest people, while also stimulating economic growth. Growth generated by agriculture is at least twice as effective in reducing poverty as growth in other sectors. Experience repeatedly shows – in countries such as Burkina Faso, China, Ghana, India, Thailand, Vietnam and elsewhere – that smallholders can lead agricultural growth.

Successful small farms can transform destitute rural landscapes into vibrant

economies, resulting in local demand for locally produced goods and services that also spur non-farm employment in services, agro-processing and small-scale manufacturing. This demand, in turn, leads to a dynamic flow of economic benefits between rural and urban areas so that countries have balanced and sustained growth.

There are sound economic reasons for supporting smallholder farming. Farming production systems have few economies of scale. Small farms are often more productive, per hectare, than large farms when agro-ecological conditions and access to technology are comparable. In India, for example, smallholders contribute more than 50 per cent of total farm output, even though they cultivate only 44 per cent of the land.

### ***New investments must be sustainable – economically, environmentally and socially***

One reason for this high productivity rate is that small farmers have a strong personal incentive to get the most out of their land and from their own family labour. Another reason is that family farms have very low management costs and are labour intensive, while larger farms are often heavily mechanised or have high costs involved in managing the workforce.

Nevertheless, in many developing countries, particularly in sub-Saharan Africa and parts of Asia, poor farmers do not produce enough to feed themselves and their families. Instead, they are net buyers of food and, with incomes of less than \$1.25 per day, they cannot afford to buy much.





Women make up a large proportion of the agricultural labour force in developing countries, but often encounter unique constraints.

If the goals in investing in agriculture are to improve the food security of those who are hungry and to improve the economies of developing countries, then the aim should be to transform smallholder agriculture into successful businesses that are profitable and generate surpluses, and that can help provide career opportunities and a potential pathway out of poverty and hunger.

#### Targeting the investment

When one talks about farmers in developing countries, one is often talking about women. On average, women make up 43 per cent of the agricultural labour force in developing countries. In East and Southeast Asia and in sub-Saharan Africa, this figure rises to almost 50 per cent. In investing in rural areas, the capacity of women farmers to invest more effectively and with less risk must be supported, given that women in rural societies face greater constraints. Rural women usually have more limited land tenure, less access to credit and equipment, and fewer market opportunities than have men.

New investments must also be sustainable – economically, environmentally and socially – so that the benefits last, through the years and the generations. Anyone who has travelled into the rural areas of developing countries will have seen the aftermath of unsustainable development: broken tractors abandoned in fields, withered and untended trees, forsaken hillside terraces. This is the residue of development efforts that did not respect and respond to local conditions, whether cultural or environmental, and that did not work with the local community from the start.

Similarly, the Green Revolution that transformed Asian agriculture in the 1970s focused on reducing the number of crops and increasing reliance on improved seeds, fertilisers and better irrigation. It produced remarkable short-term gains, but came at a cost to the environment and to local species.

In the years since the Asian Green Revolution it has become clear that agricultural growth must be ecologically sustainable and that a diverse range of species, genetic variation and ecosystems is necessary in order for the land to be able to provide for future generations of farmers.

Indeed, in many developing countries, simply optimising conventional approaches, such as the simple use of fertilisers and

micro-irrigation, could yield dramatic results. Only about six per cent of the total cultivated land in Africa is irrigated, compared to 37 per cent in Asia. Irrigation alone could increase output by up to 50 per cent in Africa. Small increases in fertiliser use could also yield dramatic improvements in yields without risk to the environment, since farmers in sub-Saharan Africa use, on average, less than 13kg of fertiliser per hectare. This compares with 73kg in the Middle East and North Africa, and 190kg in East Asia and the Pacific.

There is also a critical need to develop national and regional markets, to ensure that productivity gains from new investments have the intended economic impact on developing-country economies. Similarly, there is an urgent need to invest in basic rural infrastructure. Today, about 30 per cent of the food produced is wasted, largely as a result of the absence of such basic necessities as markets, warehouses and paved roads.

#### Community-driven development

At IFAD, we see time and time again the transformation that occurs when development is sustainable and when local people are involved from the start. Last year, I visited Zongbega, a village in a drought-prone region of Burkina Faso, where smallholders are using simple water-harvesting techniques such as planting pits and permeable rock dams, along with crop-livestock integration. As a result, they have restored land that was once degraded and have increased their productivity. In Niger, a water-harvesting project in the Illela department is still going, more than 15 years after the funding ended – a fine example of the benefits of community-driven development.

In recent years, IFAD has been scaling up what it knows works, strengthening value chains, extending rural finance and creating new market opportunities for smallholders and other poor rural people. This year, as world leaders meet for the G8 in May and the G20 and the United Nations Conference on Sustainable Development in Rio in June, there is an unprecedented opportunity to solidify the role of public-private partnerships in support of agriculture. I hope their deliberations will take into account the biggest on-farm agriculture investors in developing countries: smallholder farmers. ■

# Unlocking the power of partnerships for the world's poor and hungry

**A world free of hunger and malnutrition is possible where there is decisive leadership and a desire to meet the needs of the poorest and most vulnerable**

By Ertharin Cousin, executive director, World Food Programme

**T**he world faces no more pressing challenge than global food security and nutrition, ensuring everyone maintains access to enough nutritious food. Today, across Asia, Africa and beyond, nearly one billion people are hungry and malnourished. Economic shocks, continued high and volatile food prices, as well as the growing impact of climate change and natural disasters, have sparked unrest and undermined progress towards the Millennium Development Goal of reducing global hunger by one half.

Yet the battle against global hunger and malnutrition remains winnable. With decisive leadership, transformative partnerships and targeted assistance, governments, the private sector, all non-governmental organisations (NGOs) and international organisations can leverage proven ideas and innovations to meet the urgent needs of the poorest and most vulnerable in the world, while building the capacity of countries, communities and peoples to feed themselves.

## Scientific breakthroughs

At the 2009 L'Aquila Summit, the G8 brought the world together behind comprehensive solutions to the challenges of hunger and malnutrition – providing the leadership and global high-level public will required to support increased agriculture productivity, connect smallholder farmers to markets and promote access to sufficient nutritious food.

This year, G8 leaders have a critical opportunity to build on the promise of L'Aquila. By uniting public- and private-sector partners behind national plans, they can begin to change the face of hunger and malnutrition in the world through appropriate policies, programmes and national investments. They can scale up proven programmes, share scientific breakthroughs, improve the nutritional status of women and

children, strengthen resilience to financial and climatic shocks, and empower countries in Africa and elsewhere to achieve their vision of a world free of hunger and malnutrition.

As the world's largest food assistance agency fighting hunger worldwide, the World Food Programme (WFP) is already working to achieve this vision in more than 70 countries on four continents. Over the past 20 years, many countries have shown the way forward – launching national programmes that directly benefit their citizens and, in some cases, transitioning from being a recipient of WFP food assistance to being providers of food assistance to other countries.

WFP is learning from these examples and partnering with international organisations

***Business as usual is not enough. The world's food security landscape is changing dramatically***

such as the Food and Agriculture Organization, the International Fund for Agricultural Development, UNICEF, the World Health Organization, the World Bank and members of the United Nations Secretary General's High Level Task Force on the Global Food Security Crisis on answers to food security and nutrition challenges through risk-management strategies.

WFP is also partnering closely with governments and the donor community to develop disaster risk-management frameworks and early-warning tools in many countries and regions, including in the most affected areas of the Horn of Africa and the Sahel. With Brazil, WFP has partnered to open



the Centre for Excellence against Hunger as a global resource for sharing information, expertise and technical assistance on school feeding, nutrition safety nets and best practices that connect family farmers to markets. Through ground-breaking strategic partnerships with the private sector, WFP is deploying initiatives to build capacity, reduce hunger and eliminate malnutrition.

In partnership with the Bill and Melinda Gates Foundation and the Howard G Buffett Foundation, under its Purchase for Progress (P4P) Initiative, WFP is empowering smallholder farmers in 21 countries, many of them women, with training in improved production, post-harvest handling and other key agribusiness skills. It is working with the African Union and private-sector



Hunger can be eradicated where new policies are in place, connecting smallholder farmers to markets and providing access to nutritious food.

financial institutions on cost-effective weather insurance tools that will help countries plan for and respond to the impact of droughts.

#### **Effective safety-net systems**

These successful partnerships must be sustained, leveraged and scaled. That means going beyond sharing information and collaborating on projects to systemic policy reforms, concerted strategies and programmatic changes required to significantly decrease hunger and strengthen food security and nutrition around the world. To meet today's challenges and capitalise on new opportunities, WFP and its partners must continue seeking innovative solutions, ensuring their joint efforts are driven by and responsive to local impact and experience,

while building local, national and regional capacity. The G8 can play a powerful role by supporting partnership platforms such as the Scaling Up Nutrition (SUN) movement, promoting national multisectoral policies and institutional arrangements that support improved nutritional status, and building the capacity of governments and vulnerable communities, enabling them to better anticipate and manage risks, including through effective safety-net systems.

#### **The power of partnerships**

Business as usual is not good enough. The world's food security landscape is changing dramatically with shifts in global markets, the rise and fall of national and regional economies, the effects of climate change

coupled with the rising volume and severity of natural disasters, gains and losses in development, and increased vulnerability to a range of systemic shocks.

At the same time, potential solutions to world hunger are also diversifying and multiplying from new breakthroughs in technology and the successes of emerging economies, through to local innovation and on-the-ground leadership.

The G8's continued leadership and focus on food security and nutrition are essential to unlock the power of partnerships between governments, farmers, the private sector, NGOs and international organisations.

Together, we can successfully address these complex challenges and help to create a food-secure world. ■



# Investing in Africa's farmers: We are on the right track

**We are at a watershed moment in Africa's development when agriculture has been re-discovered as the fundamental driver of the continent's economic and social development.**

Africa has the greatest challenge of food security today but it also has the greatest potential to feed itself as well as the world. With the world's population expected to reach 9 billion by 2050, food production will have to double over the next few decades.

Agriculture has always been the backbone of sub-Saharan Africa employing almost 70 percent of our workforce, and contributing up to 80 percent of our GDP. Yet the vast majority of the human assets and capital of Africa have been locked out of this economic sector across the entire agricultural value chain – from farming to research, innovation, product development and market participation.

It is the smallholder farmers who currently supply most of Africa's food and they do this with minimal resources and little support, each working alone on a farm usually less than two hectares without the basic necessities of good seeds, healthy soils, finances and good policies. This is why African agriculture has fallen far behind that of every other continent with yields at one-quarter the global average.

AGRA's vision for the millions of smallholder farmers in Africa is a deeply exciting one. It is of an agricultural renaissance, a vision of a food secure and economically prosperous Africa, marshaling the capacities of a new generation of agricultural scientists, extension professionals and entrepreneurs across the entire food value chain. It is a vision that is beginning to be shared globally by many in the donor community and on the continent by a growing number of governments and businesses. There is an increasing recognition that with progressive policies and adequate resources invested in smallholder farmers, Africa does have the potential to become the breadbasket of the world.

That potential is already starting to be realized and we are already seeing success stories in country after country across Africa. We see smallholder



[www.agra-alliance.org](http://www.agra-alliance.org)



farmers prospering as a result of bigger crop yields, rural families thriving as a result of increased incomes and whole communities benefiting from the growth of small agribusinesses.

But real, lasting change requires sustained and targeted investments by the global community and African governments. Investments are needed on a scale to reach millions of smallholders in many diverse and remote environments. Only then will decades of neglect be reversed and Africa's subsistence farming system transformed into a sustainable, market oriented commercial activity that both feeds and employs Africans.

Today, there is a growing and palpable momentum in Africa's fight for food security, prosperity and sustainable agricultural development with investments and actions to promote an African Green Revolution gaining ground. Some 30 African countries with the support of the donor community are taking the necessary actions to catalyze an agricultural revolution in Africa. Recent G8 and G20 summits have raised food security to the top of the agenda and generated massive financial commitments to African farmers. This G8 gathering in the USA must be no different. This is a moment not to be missed. Together, we can grow Africa out of poverty.

**Since its formation in 2007, AGRA has become the partner of choice for many international and African institutions, corporations and governments working to enhance the economic empowerment of African smallholder farmers. It was one of the first truly African-led organizations to recognize the potential of Africa's smallholder farmers to feed the continent and to act as an engine of growth for overall development.**



# Continuing the progress in global food production

**Despite impressive outputs, the agricultural sector struggles to meet demand as populations rise and diets are upgraded, and land is diverted for biofuels**

By Donald GM Coxe, chair, Coxe Advisor

**I**t is no coincidence that the largely unexpected surges in global demand for food have, in most cases, been met during the time that the G8 has evolved as an international forum for addressing world problems. The cooperation among leading countries on food policies has been a major contributor to global progress. Nevertheless, there is no room for complacency. There are three food-based challenges facing world leaders today.

First, how does the world respond to localised crop failures or food shortages that unleash malnutrition, starvation and, potentially, political destabilisation?

Second, how, over the long term, does the world increase food production and improve distribution policies to deliver enough basic food as the global population grows, at a time when rising incomes in formerly poor countries create even faster increases in demand for high-protein foods, such as meats, dairy products and oils?

Third, how does the world design and implement policies to prevent food prices from rising more rapidly than incomes, at a time when an increasing amount of corn, wheat and edible oils is being diverted from use as food for use as fuels?

The so-called Arab Spring began with a desperate Tunisian who immolated himself because he could not afford to buy enough bread for his family. Unaffordable food was a contributing factor in some of the other Arab revolutions and remains a major factor in the ongoing crisis in Sudan.

## The value of international cooperation

The Food and Agriculture Organization (FAO) and the World Food Programme (WFP) of the United Nations are responsible for responding to food crises by organising and delivering emergency food supplies. For decades, they

generally had access to adequate supplies of grains because of surpluses accumulated under price-support programmes in the United States, Canada and Europe. Those surpluses gradually melted away, and the FAO and WFP have, on occasion, been forced to issue crisis calls for extra supplies after droughts, floods, locust plagues or other localised food disasters.

In that sense, the two agencies are the modern equivalent of Joseph's strategy in Egypt in the biblical story – accumulating and storing crops in good times against future emergencies. Now they need sustained support from food-producing countries. In particular, they need assurances that food will trade freely across the world, and that major food-exporting countries will do everything possible to avoid imposing embargoes that suddenly drive global food prices skyward.

## The challenges of increasing demand

Due to improved farming practices across most of the world, grain output continues to expand impressively. However, as millions more people each year upgrade their diets through a greater consumption of meat, eggs, farmed fish, milk and cheese, the demand for corn, sorghum and soybeans keeps climbing, and global food prices are routinely rising faster than inflation.

Raising the protein consumption of billions of people to healthy levels is one of the greatest triumphs in the history of human development. The goal for the G8 is to continue promoting such progress.

This is, in practical terms, the work that the Bill and Melinda Gates Foundation has been doing in Africa. The African continent has the potential, given good governance and extensive use of modern technologies, not only to feed itself, but also to become an important net supplier to the world.



The most contentious remaining barrier to ending starvation and improving diets across Africa is the European Union's continued opposition to genetically modified seeds. The seeds that Africa most needs have inbred traits to resist seasonal droughts and repel pests and diseases without massive use of insecticides and herbicides. Perhaps the G8 could authorise an independent study of the successful large-scale use of such technologies in South Africa, and of the risks and rewards



of opening European markets to some African-produced genetically modified foods. Other studies have shown that such liberalisation would lead to major increases in production and nutrition, and would help to create a class of self-sufficient farmers participating in global food markets.

There is another factor to take into consideration. The last time that the world experienced serious inflation was in the 1970s – a time when cost of foods and fuels

rose dramatically, causing two recessions. There are worrying signs of a recurrence. Since 2000, the price of Brent crude oil has risen from \$25 to \$124. That kind of price pressure has triggered even stronger demand for biofuels derived mostly from corn, sugar and oilseeds. In the United States, biofuel consumes 40 per cent of corn production – five billion bushels – for ethanol and 19 per cent of soybean oil. According to the US Department of Agriculture, biodiesel and

ethanol production from the six main crop regions of the world is projected to rise over the coming decade by 50 per cent for biodiesel and 40 per cent for ethanol. The implications for global food prices of such massive diversions are serious.

In practice, once a quota for biofuel allotments is imposed, that amount has ‘first call’ on actual production, which means that any disappointments in crop production during the growing season are more heavily reflected in food prices. Two years ago, when the chief executive of Nestlé was asked how to

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reduce food prices, he replied: “Eliminate ethanol subsidies”. Since then, the US Congress has wisely moved ethanol towards market pricing, cutting its subsidies, which means its price will be driven primarily by crude oil prices and the global price of ethanol. However, the industry lobby is putting pressure on Washington to mandate an increase in ethanol usage from 10 per cent per gallon of gasoline to 15 per cent.

The G8 could consider commissioning a study of the impact of further sharp increases in allocations of foods for biofuels. Unless grain and oilseed production keep up with the rising demand for renewable fuels, food prices will have to rise, and the possibility of a major weather-induced food price shock increases.

The past decade’s record of increasing food production and reducing famines testifies to the success of the liberalisation of global food trading and the increasing use of scientifically tested inputs. Moreover, farmers’ incomes in many emerging economies have strengthened.

Challenges remain, but the world has learned what works to fight malnutrition, starvation and rural poverty – for the first time in human history. ■