

# WHEN "FEEDING THE WORLD" PUTS FOOD SECURITY AT RISK

ARTICLE BY

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The 'Feed the World' slogan might present expanding agribusiness as the only solution to increasing population and hunger. Yet rather than providing answers, it only exacerbates the problem, destroying the nature it relies on, exacerbating poverty, and leaving whole populations and its very own farmers at the mercy of fluctuating market rates. However, there is another solution that benefits both consumers, nature, and small-scale farmers around the world.

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## **QUAND 'NOURRIR L'HUMANITÉ' MET LA SÉCURITÉ ALIMENTAIRE EN DANGER**

Nous aurions besoin de l'industrie agro-alimentaire pour 'nourrir l'humanité', mais deux agro-économistes nous expliquent pourquoi ce sont cette industrie et ce slogan qui empêchent une véritable sécurité alimentaire.

According to the United Nations, the world's population is set to hit 9.7 billion in 2050. It is legitimate to ask ourselves just how the planet will be able to feed all of those people, especially considering the already significant extent of hunger and malnutrition. European industrial farming – a practice barren of any social or environmental value – has always justified its otherwise dubious practices through the need to “feed the world”. It's hard enough to buy this narrative of virtuous sacrifice when it comes from the agro-food industry multinationals, but beyond this, it actually contradicts the basic principles of the anthropology of development<sup>1</sup>. Whilst this slogan is sometimes used in good faith, it reflects a dangerous vision of rural economies and how societies function. In reality, it violates the principles of food security, which, according to United Nations Food and Agriculture Organisation (FAO) should meet four criteria: availability, accessibility, resilience, and quality. The agro-food industry could not “feed the world” even if it wanted to. Agribusiness giants are unable to, even today. And by gradually destroying their means of

<sup>1</sup> Cf in particular the works of Jean-Pierre Olivier de Sardan, or the definition given by Pierre Pradervand: “Development is a process by which individuals and communities make themselves masters of their own resources, in the broadest sense of the word – social, cultural, spiritual, and material – in order to improve their situation, according to criteria that they have themselves defined”

production, they are reducing their capacity to do so still further, a situation exacerbated by the disruptive symptoms of climate change.

The destruction of local rural economies (here and elsewhere) does not safeguard the food security of rural societies. However, much more effective agricultural approaches exist which would enable each continent and community to feed itself.

### **SPECIALISATION TO THE DETRIMENT OF THE POOREST**

It is widely believed that Europe exports grain, milk, and meat to countries that cannot produce enough for their own needs. In fact, a significant proportion of food exports are sold to other industrialised countries (just over 40%, according to the latest Eurostat data, with the main importer being the US), particularly in the case of meat. Rather than food flowing from countries with 'efficient agriculture' to countries with 'inefficient agriculture', the industrial agricultural system is essentially an opening up of international markets, and specialisation of commodities, causing damage to economies and food production.

Let's take the example of European milk and meat production. This is largely reliant on plant protein (such as soya), imported predominantly from South America. Production is based primarily in landholdings that are holdovers

from the colonial period, and its traditionally highly labour-intensive land use. For decades, industrialisation and financial optimisation of production have led to labour being partly replaced by machines (and thus oil), and chemicals. Brazilian and Argentinian farm workers are moving en masse to the slums in big cities where they face hunger, yet Brazil is the number one exporter of food to the European Union (more than 10,000 million Euros worth per month). The country could easily actually feed its current population, yet each year 12 million Brazilians are counted among the 800 million people currently living in hunger, listed by the FAO. These 12 million men, women and children have moved from working on the land to living in poverty, as a result of U.S., Canadian, and EU industrial farming.

### **FOOD DUMPING DESTROYS RURAL COMMUNITIES**

Poor farmers working very small land parcels also contribute to feed production for South American livestock; their precarious situation makes them highly dependent on volatile world prices. Agricultural speculation – large financial groups capitalising on relative shortages to buy and stock food, thereby forcing up prices – and World Trade Organisation (WTO) rules dictate that the products must be sold at prices below cost, i.e. at a loss. Small-scale family farms produce 80% of the world's food and yet three-quarters of

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people suffering from hunger are from small farming communities. They are victims of a system which forces them to grow products for export (livestock feed, palm oil, cotton, coffee, biomass for bio-fuels, etc.), and at the mercy of price speculation. Once their harvest has been sold, they have nothing left over to be able to buy food.

This problem of speculation and trade quotas also affects other types of production. Agricultural Europe orchestrates the reliance of some countries on wheat exports: thanks to subsidies, European wheat can be sold at a loss to developing countries, preventing the development of local production, which cannot compete with these bargain basement prices. Price fluctuations are therefore devastating to the least privileged in the importing countries, and people who are dependent on imports for their food do not have food security.

### FARMERS IN THE NORTH ALSO LOSE OUT

It is not the case that the system guarantees food security in 'rich' countries at the expense of 'poor' countries. Farmers in Europe, North America, and Canada are also struggling: occupational illness due to pesticide exposure, depression, and poverty abound. The profits produced by the sector mostly benefit agribusiness, mass retail, and speculators. The number of farmers in Europe has dropped spectacularly in 50 years (by 17% between 2005 and 2010), concentrating production in oversized farms that depend on banks and public subsidies for their survival. These very production methods are also in danger: depleted soil, dying out of pollinating insects, and polluted water, etc. What type of medium and long term food production can we possibly hope for if the production methods destroy its most fundamental resource – nature?

A handful of multinationals are monopolising the means of food production, particularly seeds (a commercial sector with one of the highest

<sup>2</sup> For example, 95% of the EU market in vegetable seeds is controlled by five multinationals, according to a 2014 report by Ivan Mammana, commissioned by the Greens-EFA in the European Parliament.

concentrations in the European Union<sup>3</sup>). This should be a major source of concern for European and national institutions. The number of varieties<sup>3</sup> being grown has already dropped substantially as a consequence (by 75% during the 20th century according to the FAO), undermining agrarian systems and making them more prone to parasites and illnesses. There have been many mergers in the sector (Dupont and Dow, Syngenta and Chem China, Bayer and Monsanto), which is extremely worrying. These companies offer seeds that are engineered to be used with pesticides and chemical fertilisers they also sell, creating an economic model which makes farmers completely reliant on their products and leaves them in an extremely vulnerable position.

## **POVERTY IS THE PRIMARY CAUSE OF HUNGER**

It is clear, as acknowledged by the FAO's Director General, that “*the predominant agricultural model today does not respond to the food security challenges of the 21st century*”. By organising the dependence of certain regions of the world, imposing export crops that do not contribute to feeding local people, allowing speculation of commodities, and promoting land grabbing, it has created poverty, and thus hunger. We must do away with the idea that certain regions of the world have a food deficit: aside

from war, earthquake, or climate disaster, hunger is generally due to poverty, and not to structural shortages, even if adapting farming systems to climate change is of course a key issue.

The belief that food security can be achieved by simply producing greater volumes of food comes down to a false understanding of food security that reduces it to an overall quantity produced on a global scale. However, as was previously stated, according to the FAO there are four necessary conditions to ensure food security.

First of all, there needs to be enough food. However, importing it from other countries causes dependency and undermines food sovereignty in the countries in question, and is only possible for countries with major budgetary resources from another activity, generally oil production.

To be able to buy food, people must have enough income to pay for it. As we just saw, the workings of world markets do not guarantee this condition; in fact, the opposite is the case, even before taking into account the other factors affecting social and economic inequality.

Resilience means that agricultural production must be able to remain stable in the face of changing climate conditions, which is not

<sup>3</sup> A plant variety has one genotype and a set of stable and transmissible characteristics.

possible without living, healthy ecosystems. By contributing 18% to 30% of anthropogenic greenhouse gas emissions and in polluting soil and water, promoting soil erosion and the decline in pollinating insects, the current agribusiness model strengthens more than tempers the effects of climate change on yields. From an agronomy point of view, the centralisation and standardisation of seed production and the uniformisation of techniques run counter to the quest for resilience.

Finally, there is the question of quality. Standardised systems of industrial agriculture are increasingly singled out for their poor quality, in terms of health and nutrition, as well as for the potential dangers posed by some of the products they use (pesticides, GMOs). The most recent instance of this issue is the controversy surrounding the herbicide glyphosate<sup>4</sup>. The United Nations International Agency for Research on Cancer has stated that it is a likely carcinogen, yet the European Food Safety Authority (EFSA) disagrees, basing its defence on studies that have never been published and that were produced by the industry itself<sup>5</sup>.

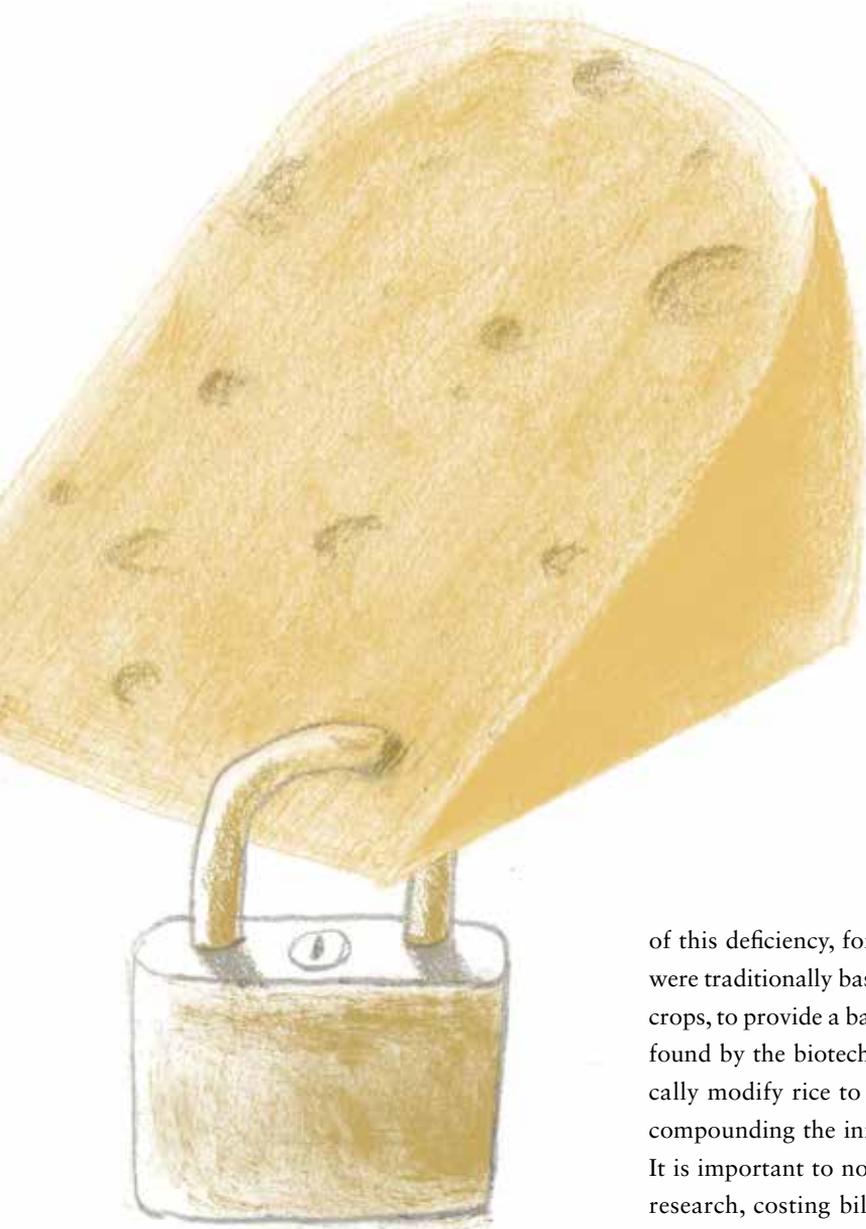
Food quality also depends on crop rotation. And yet the whole thinking behind the unfortunately dubbed 'green revolution'<sup>6</sup> involves impoverishing cropping systems and concen-

trating food production on one or two staples (rice, wheat, corn, etc.), leading in turn to shortages which have serious consequences. A case in point which received a lot of press coverage is Syngenta's 'golden rice'. Syngenta's supposed attempt to fight vitamin A deficiency, suffered by a third of the world's infants, show the limits to this type of thinking. This deficiency could easily be tackled through good, diversified, eating habits, as vitamin A is contained in many vegetables. It's the shift to monoculture which partly explains the increase in the prevalence

4 The active ingredient in the herbicide 'Roundup'

5 Four Green MEPs have requested access to these studies and are still in discussion with the EFSA on this matter

6 Since the 1970s, the European and North American model, based on standardised seed, monoculture, mechanisation, and a reliance on fertiliser and pesticides, has been promoted throughout the world under the misleading label of 'The Green Revolution'



of this deficiency, for Asian farming systems were traditionally based on a wide diversity of crops, to provide a balanced diet. The solution found by the biotech industry was to genetically modify rice to include vitamin A, thus compounding the initial agronomic mistake. It is important to note that after 20 years of research, costing billions of Euros, this rice still has not been grown because of its poor yields and lack of useful vitamin A content (vitamin A in genetically modified rice is not absorbed by the body).

Industrial agriculture does not guarantee world food security. It responds solely (and only in part) to the FAO's first criterion, and this only by creating a reliance on subsidised agriculture and dependence of some countries on others. In this way, it actually undermines compliance with the three other criteria.

## EFFECTIVE ALTERNATIVES EXIST

Development should not be confused with growth; it is only lasting and real if it is endogenous, that is to say if it uses resources from the communities affected. This basic rule must also be applied to agriculture; numerous farmers and agronomists place great importance on it and have for decades<sup>7</sup>. This rule comfortably meets the criterion of resilience. Indeed, agriculture can only be resilient – adaptable to climate change – if it interacts with its natural environment. Ecosystems are brilliant regulators, and also offer natural security to farmers, on condition that they are allowed to interact naturally and are not destroyed by pesticide use.

Since the current conventional 'model' is based on a centralised and standardised selection of

seeds, it requires land artificialisation, causing a structural fragility which cannot be sustainable. Increasingly standardised and specialised farming doesn't work efficiently in non-temperate

areas, because it leads to wastage of solar power and depleted soil. Monocultures also consume so much fossil fuel that the energy balance is in the red, so there is no future in it. Monoculture is progressively destroying soil through erosion and pollution, which 'eats up capital'.

Farming must be a constant co-evolution between land, society, and techniques. This means that there cannot be a universal model, and that the resources of local farmers must be valued, particularly the seeds that the communities choose themselves. In the majority of countries, farming yields are greatly improved by intercropping (several crops grown at the same time on one plot of land), which has the threefold advantage of optimising the use of sunlight, protecting the soil, and guaranteeing a varied diet. All these techniques enable farming communities to feed themselves and stay out of poverty. Furthermore, by maintaining rural jobs and decentralising production, they provide access to food and consolidate availability.

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<sup>7</sup> See the work of NGOs such as Agrisud and AVSF, and researchers such as Marc Dufumier, Miguel Altieri, François de Ravignan, and Jules Pretty

These principles have been found in the approach entitled ‘organic farming’ since the 1930s, also sometimes more recently referred to as ‘small scale farming’ or ‘agroecology’. They have demonstrated their efficacy as much in volume as in resilience, quality, and accessibility. If Europe is really committed to fighting hunger in the world, it must vigorously support them, which means stopping food dumping, putting an end to land grabbing, and fighting the economic model of dependency-speculation. In other words, it must stop massive exports and start building autonomous ecological farms at home. By producing less, but better, we can bring the world food system, as well as our own land, back into a healthy equilibrium.

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