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The World Bank presents its recipe to achieve zero net GHG emissions by food

The World Bank has a long experience with designing recipes and recommending good practices. In the past, they have had diverse destinies and levels of efficacy.¹

The World Bank's "new" recipe

A new mouth-watering recipe book on food attracted our attention. Its title is "[Recipe for a Livable Planet: Achieving Net Zero Emissions in the Agrifood System](#)"



World Bank

From the start, its objectives are clear. They include reducing by one third anthropogenic GHGs by making the food system more resistant to climate change and ensuring that vulnerable people will not suffer from this transition [[read p. xxi](#)].

¹ In particular, readers will remember the liberal recipes put forward at the time of structural adjustment (in collaboration with the IMF) as well as the poverty reduction strategies that were expected to help 'developing countries' to graduate out of under-development and their population from poverty [read [here](#) and [here](#)].

The method is also quite clear. As food-related GHGs come from all countries (two thirds being emitted by low- and middle-level income countries), all countries should participate in this transition by adopting a systemic approach involving agriculture as well as all other food-related activities. It will be a matter of reducing GHG emissions and of tapping the huge opportunity offered by the food system to combat climate change by fixing carbon in the soil and in ecosystems.

By following the World Bank's recipe, the authors believe that it would be possible to halve food-related GHG emissions by 2030 and achieve zero net emissions by 2050. For this, \$260 billion would have to be invested every year (meaning and 18-fold increase of the level of current investment).² Part of the resources to be invested could be mobilised by reallocating subsidies that have a negative impact on the environment.³

The recommendations made by the authors of the report are differentiated according to the level of income of countries:

- for rich countries, it would be required
 - to develop renewable energies;
 - to provide financial and technical support to low- and middle-level income countries in their effort to cut their GHG emissions;
 - to reduce the impact of consumption by their population by reflecting in the price of various food products their environmental and health costs, and by reallocating food subsidies to goods causing less emissions.
- For middle-level income countries, it would be required
 - to reduce GHGs by diminishing deforestation and by adopting production technologies such as agroforestry;
 - to use opportunities for reducing emissions of methane by livestock and paddy fields, and improve carbon storage in the soil by adopting appropriate technologies;
 - to reduce GHG emissions during the production of fertilisers, losses and waste and in household consumption.
- For low-income countries, it would be required
 - to reduce deforestation and improve forest management;
 - to take part in [carbon markets](#) to preserve forests and biodiversity, and develop employment;
 - to improve agricultural production techniques, particularly by adopting agroforestry.

To concretise those ideas in reality, the authors of the report recommend using digital technologies, the development and adoption of technological innovations and the mobilisation of institutions at international, national and local levels.

² To put this figure in a broader context, read in particular [here pp. 1-2](#) and [here](#).

³ e.g. subsidies on fossil energies [[read pp. 4-5](#)].

What should we make of this new recipe and of the underlying thinking?

The recommendations made in the report are mostly based on ideas that have already been put forward by other organisations and authors. Here, they are particularly well documented but lack originality, and their value added basically amounts to their endorsement by the World Bank.

On the positive side, authors should be congratulated on the fact that they clearly state that acting on the global food system is crucial for avoiding an exacerbated climate change and its dramatic consequences. For them, the required investment is fully justified, and this alone, is good news.

There is also a clear improvement compared to earlier Bank standards, as the recommendations formulated are not blanket, one-size-fits-all, recommendations but, this time round, make a distinction among different situations, even if this differentiation remains somewhat rudimentary and with probably relatively limited operational implications.

On the negative side, it is regretted that the authors ground some of their recommendations on a rather restricted way of reasoning that largely rests on working assumptions that do not consider the deep changes that appear absolutely necessary if declared objectives are to be achieved. In that sense, their claim that their report constitutes the first exhaustive strategic framework for limiting the impact of the food system on the climate seems exaggerated, as it avoids certain fundamental strategic issues that should be dealt with in order to propose convincing operational solutions.

An example illustrates how the reflection conducted by the authors abstains from envisaging some indispensable changes in the way the global economy operates, if the objectives set by them are to be achieved. Thus, they write, hiding behind a report of the European Commission [\[read\]](#) that:

“reducing fertiliser or adopting organic farming would reduce emissions by 15 percent but could also reduce agricultural production by 5 percent, increase world food prices by 13 percent, and raise the cost of healthy diets by 10 percent” ([pages xxxi and xxxii](#))

However, such a strategic choice is based on two implicit assumptions that can be strongly criticised:

1. The mode of food consumption would remain unchanged in the future, in particular that the level of consumption of animal products would not decrease (yet, this is an explicit part of the recommendations made in the report) – while it is known that livestock production uses, globally, around one half of the grains produced and transforms it into food in a quite inefficient way.
2. That productivity of organic agriculture (and more largely of ecological agriculture – even if this term does not appear there) would not evolve in the future, while it is more than likely that this productivity could greatly

increase if only a small portion of the annually mobilised \$260 billion according to the strategy (see above on page 2) were allocated to research in these fields.

Evidently, abandoning these implicit assumptions would make the claim lose its credibility, thus threatening very powerful interests:

- those of industrial livestock production firms that are still strongly supported by the financial sector, as seen in a recent article on hungerexplained [[read pp. 5 to 7](#)], as well as
- those of large agroindustrial companies (including fertiliser producing firms) that, through the effective privatisation of food and agricultural research, have taken over most of technological innovation, orienting it towards innovations that are mainly designed to allow these firms to make more profits, rather than acting in favour of the general interest [[read p. 10](#)] as they often argue in their communication material⁴.

In a way, the strategic thinking conducted in the World Bank report resembles a simple projection of the present within a framework where only a few elements are allowed to change, the others – probably because they deal with matters of power, interests and therefore of politics – being kept unchanged⁵.

In the part of the report that presents the method of work adopted by the authors [[read pp. 6 to 9](#)], it is symptomatic to see that the food system is depicted as a set of activities (production, processing, storage, etc.), results (jobs, food security, biodiversity, etc.) and drivers (demography, economic growth, technologies, etc.) in which there are no signs of actors (producers, enterprises, consumers, governments, in particular) and of the power relationships that rule them. The food system is described like a kind of huge machinery that would run “naturally”, empty of any presence of humanity.

Thus, it is no surprise that with such a worldview, the solution rests with technology and innovation, institutions and their governance being, finally, just the required oil to grease the wheels of the machine.

The fact is, however, that by relying on technology and innovation to resolve problems, the authors of the report give the keys of the machine to the very actors – the big firms of agribusiness – who have created them in the first place. In that sense, they seem to be among those who believe that the best way to preserve biodiversity in a national park is to ask poachers to become rangers!

⁴ See some examples [here, p. 5](#).

⁵ Hungerexplained has already had the opportunity to show that, depending on the limits of the analytical framework used, the analysis can lead to very different and sometimes contradictory results [[read here p. 2 and the following](#) and [here](#)]

But, as stated the last FAO report on the future of food,

“Technological innovations are part of the solution – provided new technologies and approaches are also accessible to the more vulnerable” [\[read p. xxii\]](#).

Indeed, it is difficult to imagine how, in such a worldview as the one presented in the World Bank report, it would be possible to ensure achieving the objective mentioned above (p. 1) specifying that “that vulnerable people will not suffer from this transition”. Rather, it appears to be a recipe that leads to further exclusion [\[read\]](#) of the weakest.



In chapter 4 of the report, devoted to actions to be implemented, actors eventually appear. Investment is in the hands of governments, private companies and financial institutions, and their responsibility is put under the control of various alliances [\[read pp. 1 and 2\]](#) and certifying bodies on which hungerexplained readers have already had the opportunity to form their opinion [\[read\]](#).

Policies and incentives are set by governments and directed towards economic actors, and inclusion will require that “governments and civil society must work together to ensure the agrifood system transformation is equitable, inclusive, and just”, this wish being illustrated by a series of examples presented pell-mell and from which it is difficult to draw any practical lesson or clear principles. As for governance, it is hardly present in an implicit way and mostly in the title of references given in the long bibliography.

But here again, everything that has to do with relations among actors has gone lost in the shortcomings of the authors’ thinking.

Conclusion

The World Bank report reviewed here presents a mass of very interesting and useful information for a better understanding of the climate–food interlinkages.

It is, however, to be regretted that the prospective thinking conducted by its authors suffers from considerable lacunas. The recipe produced for use by the world, if it were implemented (and the Bank probably still has the resources to do it to a wide extent) would likely not meet with more success than the recipes of structural adjustment and economic liberalisation during recent decades, as it does not really take into account the power and domination aspects that, if they are not challenged, will maintain the global food system on the path it has been following, namely one that undermines its economic and environmental sustainability and generates continuously growing inequalities [[consult our thematic page on inequality](#)].

To know more:

- Sutton, W.R., A. Lotsch and A. Prasann, [Recipe for a Livable Planet: Achieving Net Zero Emissions in the Agrifood System](#) (2024), Agriculture and Food Series, World Bank, 2024 (en anglais).
- FAO, [L’avenir de l’alimentation et de l’agriculture: Moteurs et déclencheurs de transformation – Résumé](#), FAO Rome, 2023.

Selection of past articles on [hungerexplained](#) related to the topic:

- [In spite of the huge economic and social costs resulting from environmental degradation, the way we invest is not changing](#), 2024.
- Opinion: [Carbon Markets Biased, Distorted, Undermined](#) by Jomo Kwame Sundaram, 2024.
- [‘Natural meat’ and futurist fantasies?](#) by Maria Grazia Quieti, 2024.
- [The “food and agricultural transition” is ongoing – Nine changes tell us to what kind of world it is leading us](#), 2023.
- [The grip of private interests on global food governance and its mechanisms](#), 2023.
- [Responsible businesses or greenwashing? The certification industry in support of multinationals](#), 2021.
- [Exclusion](#), 2013.

Mains themes linked to this article : [Future of food](#), [Climate and food](#), [Governance](#), [Inequality](#), [Multinationals and their image](#) and [Power](#).