How reduction of FLW can - and must - contribute to “sustainable intensification”

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Photo: Tania Runge

MACS-G20 2022, Denpasar, Indonesia, July 5th, 2022

The title of this year's MACS-G20 meeting:

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This roof must be supported by stable pillars …

Sustainable intensification
to meet food security and environmental objectives

Agriculture

- Climate smart soil management
- New AgriTech solutions
- Plant breeding
- Low emission livestock farming
- Higher productivity in organic farming
- Smart irrigation systems
- Advice & education for smallholders
- etc. pp.

Land-independent food production

- Urban gardening systems
- Vertical farming
- Production in bioreactors
- Aquaponics systems
- Meat production in vitro
- New protein sources
- etc. pp.

Consumption patterns, diet shifts

- more sustainable dietary patterns
- Less highly processed food
- Questioning increasing consumption of meat
- balanced diets (content of nutrients, vitamins and trace elements)
- etc. pp.

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… but without one of the most important pillars our "sustainability house" would collapse

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This pillar is called “Food losses & waste reduction”

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Food losses & waste reduction

- Reliable initial knowledge regarding FLW dimension
- Monitoring the develop--ment of FLW volume
- Reduction measures (primary production, storage, processing, wholesale, retail, consumption)
- Evaluation of reduction measures, adaptation

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Food Losses & Waste in figures

- **one-third of all edible food is wasted**
  - 14 % already from farm to retail
- **monetary loss for global economy: $ 940 billion per year**
  - more than 6 times the Official Development Assistance budget spent in 2018 by Development Assistance committee
- **8 % of annual global GHG emissions**

- **blue water footprint is 3 x volume Lake Geneva**

Gustavsson et al., 2011; FAO, 2013

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...while

- **one in nine people worldwide is undernourished**

- **10 billion global population is expected in 2050 which leads to**
  - Food gap
  - Land gap
  - GHG emission gap

Significant reducing FLW could contribute positively to all three issues

FAO, 2019

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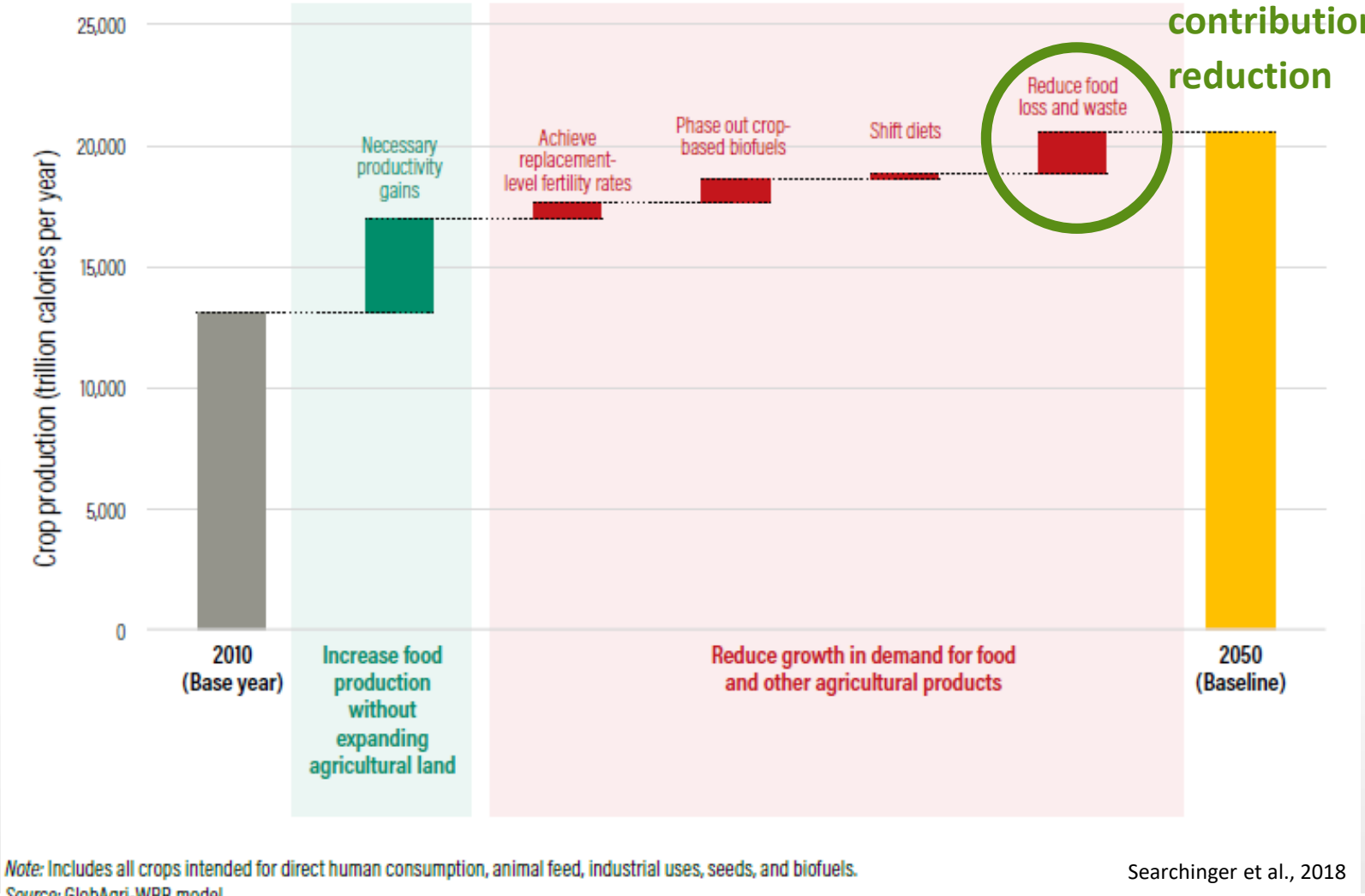
Just to look at the example of the Food gap:



Note: Includes all crops intended for direct human consumption, animal feed, industrial uses, seeds, and biofuels.
Source: GlobAgri-WRR model.

Searchinger et al., 2018

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How to move forward to reduce FLW? How can G20 contribute?

Collaboration Initiative on FLW launched at MACS-G20

- Aim is to pool promising research findings, innovative technological and logistical solutions, successful campaigns etc. concerning FLW reduction.
- Goal is to organize "tangible" progress.

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- Aim is to pool promising research findings, innovative technological and logistical solutions, successful campaigns etc. concerning FLW reduction.
- Goal is to organize "tangible" progress.
- **One major activity of our Collaboration Initiative:**
  annual Regional FLW workshops in cooperation with respective G20 presidency
  - November 2018, Buenos Aires - Target region: Latin America and Caribbean
  - October 2019, Tokyo – Target region: South East Asia
  - October 2020, Riyadh – Target region: Gulf council countries & Yemen
  - November 2021, Italy – Target region: Mediterranean countries
  - October 2022, Yogyakarta – Target region: ASEAN countries

Please remember previously mentioned “sustainability house”

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Two key findings from our Regional FLW workshops so far:

First finding:

All content-related components of the FLW-pillar of our "sustainability house" are subject of discussions among the participants of the attending countries:

1. **Baseline** – reliable initial knowledge regarding FLW dimension

2. **Monitoring** the development of FLW volume

3. **Reduction measures** (primary production, storage, processing, wholesale, retail, consumption)

4. **Evaluation** of reduction measures, adaptation

Two key findings from our Regional FLW workshops so far:

Second finding:

The workshops are not only attended by academics or politicians, but also by city and municipal officials, heads of local food banks, people responsible for communal catering (schools, hospitals etc.).

Their objective:

Exchange experiences, learn from each other which reduction attempts work well and which do not (and why not)

Two resulting planned courses of action of the Collaboration Initiative:

With regard to the first finding:

Brokerage and support of (bilateral) partnerships among advanced and less advanced G20 members and non-members in terms of above mentioned four systematic steps to tackle FLW:

1. Setting up baselines
2. Establishing monitoring systems
3. Implementing reduction measures
4. Evaluation of reduction approaches, adaptation

So far, first exchanges with experts in Saudi Arabia and China, currently planned with Indonesia (e.g. as part of the upcoming Regional FLW Workshop in Yogyakarta in October 2022)

Two resulting planned courses of action of the Collaboration Initiative:

With regard to the second finding:

There is a worldwide system of town twinnings.

These partnerships mostly focus on
- student exchanges
- cultural exchanges
- economic relations, etc.

The exchange of experiences on FLW control often does not play a role yet, although many cities are making efforts on their own.

Therefore, the Collaboration Initiative aims to stimulate and support relevant cooperation between already partnered cities.

Possible blueprint for second course of action: C40 Good Food Cities Declaration

Mayors of 14 global cities together with their citizens try to achieve a ‘Planetary Health Diet’ for all by 2030

- with balanced and nutritious food reflective of the culture, geography, and demography of their citizens
- by using their procurement powers to change what kind of food cities buy
- to introduce policies that make healthy, delicious and low-carbon food affordable and accessible for all
- **reduce food loss and wasted food by 50 % from 2015 figures**

Possible blueprint for second course of action: C40 Good Food Cities Declaration

The 14 cities signing the C40 Good Food Cities Declaration in October 2019 are:

Barcelona (Spain), Copenhagen (Denmark), Guadalajara (Mexico), Lima (Peru), London (UK), Los Angeles (USA), Milan (Italy), Oslo (Norway), Paris (France), Quezon City (Philippines), Seoul (South Korea), Stockholm (Sweden), Tokyo (Japan) and Toronto (Canada).

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In red: cities in G20 countries

Thank you very much! Terima kasih banyak!

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