Sustainable Consumption and Production Patterns: Focusing on Health Outcomes

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<table>
<thead>
<tr>
<th>GOAL 1</th>
<th>End poverty in all its forms everywhere</th>
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<tbody>
<tr>
<td>GOAL 2</td>
<td>End hunger, achieve food security and improved nutrition and promote sustainable agriculture</td>
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<td>GOAL 3</td>
<td>Ensure healthy lives and promote well-being for all at all ages</td>
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<td>GOAL 4</td>
<td>Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all</td>
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<td>GOAL 5</td>
<td>Achieve gender equality and empower all women and girls</td>
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<td>GOAL 6</td>
<td>Ensure availability and sustainable management of water and sanitation for all</td>
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<td>GOAL 7</td>
<td>Ensure access to affordable, reliable, sustainable and modern energy for all</td>
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<td>GOAL 8</td>
<td>Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</td>
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<td>GOAL 9</td>
<td>Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</td>
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<td>GOAL 10</td>
<td>Ensure sustainable consumption and production patterns</td>
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<td>GOAL 11</td>
<td>Make cities and human settlements inclusive, safe, resilient and sustainable</td>
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<td>GOAL 12</td>
<td>Ensure sustainable consumption and production patterns</td>
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<td>GOAL 13</td>
<td>Take urgent action to combat climate change and its impacts*</td>
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<td>GOAL 14</td>
<td>Conserve and sustainably use the oceans, seas and marine resources for sustainable development</td>
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<td>GOAL 15</td>
<td>Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</td>
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<td>GOAL 16</td>
<td>Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</td>
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<td>GOAL 17</td>
<td>Strengthen the means of implementation and mobilize resources for sustainable development</td>
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*的目标可能因国家和国际政策的需要而有所不同。
Remembering the Consumption Side

• While SDG12 has plenty of targets that focus on food production resilience and mitigating waste and loss of food, there is less emphasis on the consumption side of food and diets.

• This requires better linkages of sustainable climate and environmental friendly production practices to consumer behavior and its implications on diets and health outcomes.
Food Production: Climate Scenarios

Percentage changes in maize productivity relative to a scenario without climate change:

-5
-10
-15
-20
-25
-30
-35
-40


CO₂ produced (pounds of CO₂ per pound of product):

- Milk: 1
- Cheese: 10.8
- Chicken: 1.8
- Pork: 4.9
- Salmon: 6
- Shrimp: 12
- Beef (only meat): 20
- Oat flakes: 0.7
- Flour, wheat: 0.5
- Carrots: 0.2
- Tomatoes, greenhouse: 2.7

Source: "Livestock's Long Shadow," by the United Nations Food and Agriculture Organization, 2006; Lantmannen
Our diets and health will be affected as we reach planetary boundaries

Steffen et al. January 2015, Science
Diets fit well within the Sustainable Development Agenda

Sustainable Diets

Well-being, health
- Disease burden of population
- Consumption/eating patterns
- Lifestyle
- Age

Biodiversity, environment, climate
- GHGE emissions
- Food marketing
- Ecosystem services
- Urban vs. Rural households

Equity, fair trade
- Income levels: (1) population; (2) national
- Food affordability
- Globalization & Trade
- Government food policies, including subsidies

Eco-friendly, local, seasonal foods
- Water use for irrigation
- Land use
- Soil
- Crop diversity
- Materials for packaging

Cultural heritage, skills
- Food/menu traditions
- Religion
- Knowledge, education
- Class/status

Food and nutrient needs, food security, accessibility
- Quantities of food produced and consumed
- Quantities of calories, sugars, saturated fats consumed
- Amount of Nutrients/vitamins consumed
- Consumption/eating patterns

Eco-friendly, local, seasonal foods
- Food and nutrient needs, food security, accessibility
- Cultural heritage, skills
- Sustainable Diets fit well within the Sustainable Development Agenda
Diet Scenarios on Health

Tilman and Clark, Nov 2014 Nature
Diet Scenarios on Health

Tilman and Clark, Nov 2014 Nature
A Closer Look at SDG 12 Through a Health Lens

• **Target 12.1** Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
  - Develop scenarios of sustainable consumption and production recommendations and their impact on NCDs and climate indicators into national action plans
  - Include sustainable consumption and production into formal education curricula for school children

• **Target 12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

• **Target 12.8** By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
  - Develop usable dietary guidelines that take into consideration dietary impacts on health outcomes and environment
  - Design effective, regulated labeling strategies with information on environmental footprint and health benefits

• **Target 12.9** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production
  - Design effective operational research portfolios that provide evidence on how what sustainable productive systems look like across landscapes
  - Fund food and agriculture technologies with dual benefits on health and climate
What is needed in research

- Need a better *understanding* of what is considered “sustainable”
- Need more *measures* of how to measure diets and their sustainability
- Need more *evidence* of how policies and programmes impact diversity and quality of diets
- Need more *documentation* from the field on operations research that describes *how* eating patterns influence climate variability and environmental degradation in different contexts (HIC, LMIC, different livelihood and agroecosystems)

Source: Wisegeek
The Global Nutrition Report’s View on SDG12

“Research on sustainable food systems and diets can offer structure and indicators on this policy debate”

http://globalnutritionreport.org/
What is needed in policy

• The topic of sustainable diets and food systems inherently requires input and collaboration of multiple disciplines and institutions (health, agriculture, nutrition, environment, ecosystems, social welfare, infrastructure, water, etc).

• Effective mechanisms of collaboration are challenging: financings, accountability, & coordination mechanisms remain scattered.

• Difficult to collaborate when it remains unclear what a “sustainable diet” looks like in a particular context.
What is needed in programming

• More guidance is needed on what a sustainable diet would mean economically, for all food value chain actors in the high, middle and low income settings.
• More emphasis on incentives and consumer demand for sustainable diets.
Do dietary recommendations = the food supply?

US and Swedish food-based dietary recommendations in weight compared with global Supply averages for 2009

Keating and Wiggins, ODI 2014
Things are Changing…

“Positive changes in individual diet and physical activity behaviors, and in the environmental contexts and systems that affect them, could substantially improve health outcomes.”

-- 2015 Dietary Guidelines Advisory Committee Membership
Summary

• More on consumption/diets should be included in the SDG12 but it remains unclear what indicators are most important to track over time.
• More research, better policy coordination and programmatic guidance is needed to better understand how to operationalize, monitor and scale “sustainable diets” in specific contexts.
• Environment and climate are high profile sustainable development agenda items. It is becoming increasingly more clear that diets play a contributing role to environmental degradation, climate variability and planetary boundaries.