The EAT Foundation and the World Business Council for Sustainable Development (WBCSD) through FReSH convened to put together Science to Solutions Dialogues. This second dialogue which took place in Washington DC on 24-26 April 2018, brought together business scientists, academic scientists and civil society to dialogue about how we can ensure a shift towards more sustainable livestock production systems and how we can inspire consumers to shift toward more sustainable and healthy protein sources. The following paper summarizes the discussion and emerging solutions space for business to provoke initial discussion and feedback.

Lowering meat consumption in Western diets and avoiding the adoption of high-meat intake in countries undergoing nutrition transitions have been identified as the most important dietary shifts individuals and populations can make to reduce the environmental footprint of food and to improve people’s health. This amounts to a 4-8 fold reduction in meat consumption in Western diets. While shifting to healthy meat consumption level is paramount, the meat included as part of a healthy diet must come from sustainable production practices that reduce environmental impacts – climate in particular. Production systems, particularly livestock systems, need to be evaluated using a holistic set of indicators capturing the ecosystem services provided, and the restorative value of a particular production system. The group recognized that a one-size-fits-all solution is not the answer – a variety of protein solutions need to be explored in different contexts to provide healthy diets within planetary boundaries. These solutions will require a new narrative that promotes resilient production systems, values not only the protein source but other outputs and ecosystem services provided by those systems, engages stakeholders across the value chain, and ensures that consumers can trust the solutions.

The dialogue identified the major barriers – ranging from business inertia to consumer habits – to promoting high-quality, healthy and sustainable protein sources. The group then identified how these barriers could be overcome by phasing out, repurposing and accelerating specific industry actions to create an enabling environment for producers and consumers to meet health, social and environmental goals. By connecting science with solutions, this dialogue is proposing ambitious steps that can be taken by all stakeholders in the value chain to make a variety of healthy and sustainable protein solutions accessible and attractive to consumers, producers, farmers and businesses.

Bounded by healthy consumption levels, the Dialogue built a common understanding of the challenges, the existing evidence base and gaps, barriers and levers. Participants explored three complementary solution spaces related to the protein challenge: inspiring consumers to shift to more sustainable, healthful and appealing sources of protein; shifting to more sustainable livestock systems; and creating the enabling conditions for those systems to become mainstream. Participants recognized the need to prioritize those solutions that would produce net-positive impacts on health, society, business and the environment.
The challenge: Shifting to more sustainable livestock systems

- Diversify animal protein sources – including fish from aquaculture – to minimize their global negative environmental and health impacts.
- Focus on fields that maintain or increase soil carbon; increase resource reuse; harness the potential of pasture restoration; and reduce or eliminate nutrient leakage from farms.
- Rethink feeds and feed composition: increase numbers of grass fed livestock; where grain feed is used, reformulate feeds, increase/improve the use of feed byproducts, and balance feed use efficiency with animal welfare.
- Use breed diversity to optimize environmental compatibility and ecosystem services tailored to specific regions.
- Encourage circular production, including locally or regionally integrated systems.

To facilitate thinking though generalized impacts of solutions, FReSH asked participants to consider impacts on social, environmental, and health dimensions, and to test the business case for the solutions.
The challenge:
Creating enabling conditions for sustainable livestock systems

- Set ambitious business goals that are aligned with long-term return on investment perspectives and interim milestones.
- Create economic incentives for better management practices, with a focus on the development of a harmonized framework for 'true cost of food' accounting of food.
- Develop, advance and accelerate sustainable livestock roundtables that include all stakeholders along the value chain.

The challenge:
Bringing consumers to shift to more sustainable and healthful protein sources

- Develop appealing new recipes and meal kits to encourage behavior shifts to healthy and sustainable amounts of animal sources of protein.
- Encourage healthy, high-quality protein sources that include a greater proportion of plants through, for example, blended animal/plant protein products.
- Identify scalable sustainable protein sources, such as insects, and then address the supply chain, agricultural and regulatory challenges that prevent taking the product to scale.
- Create a variety of accessible and affordable protein solutions by making connections from farm to food in meal settings, such as schools and other food service channels.

FReSH seeks critical feedback in the outcome of the People Planet Protein Outcome document, and in particular reflections on the scope of solutions discussed. Please send feedback to Alain Vidal, FReSH Lead at Vidal@wbc sd.org

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We would like to thank the participants who contributed to the discussions with open minds and ideas.

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