

Opportunities at the Intersection of Public Health, Nutrition, Agriculture, and Environment

Large and actionable opportunities for society sit at the intersection of public health, nutrition, and environmental conservation. Economic, scientific, and entrepreneurial indicators point clearly in this direction, but gaps in knowledge and common language on this frontier are also pervasive.

From the scientific perspective, the complex relationship between nutrition and vitality in people and undervalued characteristics of nutrients in food crops, soils, and biodiverse ecosystems sits at the center of these opportunities. From the social and economic perspectives, a diverse range of business models, social initiatives, and public policies are putting these relationships into play in innovative ways, but these efforts remain largely isolated. The potential for integrating and scaling their impact seems big.

On one hand, evolving nutritional science is showing how the density, spectrum and bioavailability of nutrients in our diets affects rates of obesity, type 2 diabetes, micronutrient deficiencies (the “hidden hunger”), epigenetics, and basic food security, as well as more commonly known malnutrition problems. Few if any commercial food systems measure or assign market value to nutritional qualities like these.

On the other hand, diverse evidence points to environmental and agricultural forces driving direct reductions in essential nutrients in foods, from plant breeding (aimed at traits like uniformity and storage life, but ignoring nutrition and taste), to declining soil biology, to increasing carbon dioxide in the atmosphere. Even given these factors, however, the sustainable agriculture and environmental conservation sectors seldom prioritize impact on human nutrition or potential support for their work from the health and nutrition fields, nor do these environmental factors tend to be internalized by food, farming, and healthcare enterprises or their investors.

At the same time, leading scientists and an array of innovative, entrepreneurial examples around the world are building evidence and supporting the thesis that great opportunities lie at this intersection for shifting our environmental, farming, food and health systems simultaneously and systemically toward improved outcomes for people and the planet.

Near-term actions focused on these opportunities could certainly include the following:

- Synthesizing existing scientific and economic knowledge, as well as examples and approaches of enterprises that function in this space
- Identifying key leverage points and hurdles that affect attempts at this kind of action

- Publishing case studies on leading examples
...in health, food, agriculture, and environment
...in innovative approaches among business, social, and policy initiatives
- Developing a strategic “roadmap”
...including who is doing what, connections, and gaps; metrics and measurements;
markets analyses; systems dynamics (in the science, economics, and/or learning); and
identification of key nexus points (i.e. microbiome in soils and in human bodies)
- Convening demonstration projects or innovation labs
...to link and further develop “nutrient value chains” reflecting these synergies
...potentially including farmers, plant breeders, lab scientists, nutritionists, chefs,
entrepreneurs and others
- Supporting social entrepreneurs and other changemakers in this field with investment
and infrastructure, and spreading their insights and inspirations

Initial data, examples, and relationships exist in each of these areas. The opportunity seems ripe for bringing them together now, and Nourishⁿ and its affiliates are strategically positioned to advance this dialogue and help stimulate change in the paradigm around food, health, and environment.

About Nourishⁿ

Nourishⁿ is a U.S.-based corporation leading a global network of analysts, systems-focused social entrepreneurs, and science advisors who stimulate enterprises and economies built around tangible, regenerative relationships between people and ecosystems -- what we call *Nourishment Economies* and *#NutrientValueChains*. Our priorities include supporting and studying social and business entrepreneurs in this realm, developing young talent via innovations in school systems, identifying and supporting governance protocols based on nourishment principles, and new metrics in healthcare food systems, and agriculture. See www.nourishn.com.