## **EXECUTIVE SUMMARY**

September 2016





# INVESTMENTS FOR HEALTHY FOOD SYSTEMS

Implementing the Framework for Action of the Second International Conference on Nutrition

Food systems encompass the many stages of converting natural resources and human effort into food to sustain human life. Our lives and those of our children will be longer and more productive with a food system that satisfies our nutritional needs at different stages of life, affordably and appealingly in a sustainable way. An investment vision that is guided by evidence of nutritional impact and is embraced by both the public and private sectors can shape the food system and its outcomes for decades.

#### THE PURPOSE

Food systems – from producer to consumer, from farm to flush – are created by a multitude of decisions from individuals, companies, and governments about what and how to produce, process, market and consume. Arguably, the most important of those decisions are about what to invest in, as those are the decisions that establish the long-term capacity and direction of a food system. This executive summary is intended to assist countries, and others, to make investments with long-term beneficial nutrition and health outcomes.



## WHY BE CONCERNED ABOUT FOOD SYSTEMS?

The world has seen a dramatic change in nutrition and health over a short 30-year period. The number of overweight and obese people now far exceeds those that are under-nourished while both conditions are often coupled with micronutrient deficiencies. Many of the same foods are eaten by people whose lives are otherwise vastly different – from the well-off Tokyo college student to the rural Nigerian farmer; and death rates and disability from diet-related diseases are plummeting in richer countries while rising in poor countries. The rapid rise in noncommunicable diseases is predicted to impede poverty reduction initiatives in low-income countries, particularly by increasing household costs associated with health care.

Decisions about what we eat and how are increasingly being made at a long distance by corporate conglomerates with the mass market in mind. And yet, except for periodic local famines and short-term food price spikes, the food systems of the world generally provide sufficient quantity of food for most of the world's growing populations, and adequate quality of food for many. Impressive increases in productivity and production have been achieved during the same period that the nutrition and epidemiologic transitions described above were happening.

These shifts – rising agriculture output, rising homogeneity of food intake, and rising overweight and obesity and diet-related disease – are directly tied to investment decisions made decades ago. Today's investment choices similarly will have long-lasting effects, and so they must look forward to the nutrition and health needs of tomorrow, rather than backward to yesterday's problems and today's solutions. There is urgency undergirding this perspective shift because food systems don't change overnight, and current trends are in the wrong direction.

The Sustainable Development Goals now call for sustainable agriculture, improved nutrition, reduced nutrition-related deaths, and responsible production and consumption (SDGs 2, 3 and 12). Those goals will be achieved only be creating healthy food systems for all.





## **HEALTHY FOOD SYSTEMS**

The world includes many types of food systems: from agrarian to industrial. Each has the potential to provide healthy, diverse and nourishing food for the people that are dependent on it. Whether it does so is strongly influenced by investment decisions made by the private and public sectors. Both sectors have a wide range of investment options which are intended to raise the value of future food system outputs, but only some of those investments will be *nutrition- and health-enhancing*.

A *healthy food system* happens when a farmer makes a choice to plant legumes and not only rice, when a transporter gets perishable micronutrient-rich fruits and vegetables to market while they can still appeal to choosy consumers, when a dairy cooperative has access to reliable refrigeration to avoid spoilage, and when consumers can access a wide variety of affordable and safe foods to meet their nutritional needs.

Clearly, there is no single definition of a *healthy food system*, or investment that guarantees healthy food system results. Essential features of a healthy food system are achieving a low level of all forms of malnutrition in the population, and using land and water resources efficiently and sustainably. On these points, all stakeholders can agree. But what else is important? Agreement on what constitutes healthy food system outcomes will go far to raise the priority of nutrition, even for stakeholders with very different perspectives. Recognizing that there is enormous variation in countries' abilities to meet those goals, but also believing that healthy and sustainable outcomes are reasonable goals for any food system, this Policy Brief describes investment opportunities for three different types of food systems, with examples from each.

In the agriculture and food sectors, investment is intended to increase production, productivity, affordability, and access to agriculture and food. This can include government efforts to attract private sector investment in healthy food systems. Examples of desired actions include creating nutrition-enhancing value chains, supporting smallholder and family farmers, and improving infrastructure. This policy brief focuses on those investments which can be made by the public sector – including incentives to encourage the private sector – to raise the nutrition and health values of what is produced, processed, marketed and consumed within a range of food systems, and across the full range of commodities that enter the food system, including aquaculture, crops, livestock, and forestry.

The recommended investments are based on the available limited and variable quality evidence from country experiences. Stronger recommendations will require greater evidence in three areas: assessment of financial rate of return from alternative food system investments, measurement of nutrition and health impacts of nutrition-sensitive investments, and experiences from a wider range of countries and food system types, as outlined in the Technical Report on which this Policy Brief is based.

# **MEASURING THE HEALTHYNESS OF THE FOOD SYSTEM**

Three main types of food systems are described below using measures of demographics, agricultural productivity, environmental sustainability, food availability and diversity, and food accessibility to highlight the differences. Whatever it offers on these dimensions, each food system creates distinct nutrition needs, challenges, and investment opportunities for its population.

UNSCN

- Industrial/mixed food systems (e.g. U.S., Australia, Korea, Germany, Bulgaria) are often highly productive, and require varying amounts of energy and water resources. Food is generally inexpensive and diverse, and consumers rely excessively on highly processed foods that are often high in fats, sugars and salt.
- **Transitioning food systems** (e.g. Ecuador, Mauritius, Brazil) are less productive, and consumers are more dependent on staples and yet spend a larger share of their budgets on food, with moderate to high reliance on processed foods.
- Emerging and rural food systems (e.g. Honduras, Cameroon, Senegal, Nepal) have low productivity and less urbanization, and consumers are heavily reliant on staples, and consume less food of animal origin.

The categorization of many different food systems into three types risks ignoring important distinctions, but has the benefit of highlighting commonalities in their needs, and therefore, in the types of investments that will address the needs and challenges that arise in each type. It allows for generalization from the small body of evidence that exists about which investments are most suitable in different food systems.

## INVESTMENTS TO ACHIEVE A HEALTHY FOOD SYSTEM

Careful investing in agriculture, food systems, and institutions can put people to work today in ways that will produce healthier food systems tomorrow – whether the starting point is a rural or an industrial food system. The table below offers examples of five types of investments that have been proven or are deemed likely to enhance the nutrition and health outcomes within food systems. They are: *improving food value chains, implementing nutrition-sensitive agricultural programs, strengthening governance and institutions, improving infrastructure, and using Research & Development (R&D) and new technologies.* (Green indicates proven effective, orange indicates deemed likely effective.)

Type of intervention and link to improved nutrition	Food system type		
	Industrial and mixed	Transitioning	Emerging and rural
IMPROVING VALUE CHAINS to improve access and availability of nutritious, safe and diverse foods	Explore opportunities to target populations with specific nutritional needs, such as young children living far from fresh food sources in food deserts.	Improve supply chain linkages for producers and traders of nutritious foods.	Directly increase household access to nutritious foods where markets are weak, through eg, self-production.
Investments in this category focus on increasing the efficiency and effectiveness of supply chains that convey healthy food to populations. These are primarily private sector actions, potentially with public subsidies.	Sources in rood deserts.	Fortify staple foods with iron and iodine.	Fortify staple foods with iron and iodine.  Raise consumer demand for nutritious non- staples and (bio-) fortified foods through value chain and social marketing.
AGRICULTURAL INTERVENTIONS to improve nutrition	Align agricultural subsidies with nutrition and health needs of the population.	Increase production diversity.	Home gardening accompanied by nutrition education.
Investments in this category improve the diversity and availability of key foods for specific populations.		Technical assistance and education to improve farmer's nutrition awareness and	Increase production diversity.
		capacity to meet standards.	Increase ownership of large livestock, especially in female-headed households.
GOVERNANCE AND INSTITUTIONS to improve nutrition	Change laws to allow public institutions such as schools and hospitals etc to source local foods.	Contracts between farmer organizations and supermarkets to produce nutritious and high value-added foods.	Increase nutrition sensitivity of social safety nets.
Investments in this category utilize mechanisms outside the agriculture sector, such as legal and regulatory systems, to increase availability and affordability of healthy food and reduce consumption of unhealthy foods.	Increase nutrition sensitivity of social safety nets.	Increase nutrition sensitivity of social safety nets.	Regulate FDI and marketing activities of transnational food companies.
	Regulations and voluntary instruments to improve nutrient content of processed foods.	Formalize land tenure rights.	Utilize NGOs to deliver interventions where government capacity is low.
INFRASTRUCTURE Enhancement for nutrition	Offer grants to support institutions to create infrastructure linking to local farm production.	Enhance farmer access to electrical and telecommunication infrastructure where it is lacking.	Improve post-harvest handling.
These investments provide the essential substrate to raise efficiency of the production process, especially those with large capital		Improve post-harvest handling.	Strengthen rural transport infrastructure.
costs.		Make mobile telecommunications available to smallholder farmers such as through public-private partnerships.	Make mobile telecommunications available to smallholder farmers through developing public-private partnerships.
		Invest in drip irrigation for sustainable and stable production of fresh produce such as micronutrient rich fruits and vegetables.	Invest in drip irrigation for sustainable and stable production of fresh produce, such as micronutrient-rich fruits and vegetables.
TECHNOLOGY AND RESEARCH & DEVELOPMENT to enhance nutrition	Invest in productivity-enhancing and resilience-enhancing crop Research & Development.	Invest in productivity-enhancing and resilience-enhancing crop Research & Development.	Support infrastructure for small livestock and aquaculture, including aquaponics.
These investments encourage innovation, creation and application.	Governments encourage private sector product development and formulation that support healthy diet and improved nutrition.	Support infrastructure for aquaculture, including aquaponics.	



## **KEY MESSAGES**

- Investments to support healthier food systems are at hand for countries that wish to implement the ICN2 Framework for Action.

  Investments to improve nutrition and health range from large-scale infrastructure improvements to small-scale technical and marketing support, and should be complemented by regulatory and voluntary measures, consumer education and incentives.
- Every food system has the capacity to produce the healthy food that is needed for good nutrition and human health.
- **Food system investments need to be tailored to specific contexts.** Investment decisions should take into account food system variation and learn from other experiences.
- Investments have a higher pay-off when enabling conditions are present, and when interventions reinforce one another by creating multiple types of capital (human, financial, physical).
- While most investing for the food system is made by the private sector, **the public sector holds primary responsibility for providing public goods and enhancing social values** by filling gaps not addressed by the private market. The public sector should test new ways to leverage its investments and regulatory power to incentivize the private sector to include improved nutrition among its goals.
- **Public investments in food systems should be aligned with other social goals.** Too often, agricultural and industrial policies ignore the social and health implications of their expenditure. Government has a responsibility to increase social well-being and should align investment policies toward that end.
- Significant gaps remain and need to be closed in the knowledge available to countries and investors about how to select among the investment choices, and which to prioritize for a given food system and nutrition context.
- Development banks and other financial institutions should provide contextualized financial information to better identify promising investments that improve nutrition and health.

### References

A discussion paper on this topic was prepared by Dr. Rachel Nugent, University of Washington Department of Global Health. This Report forms the basis of the Policy Brief's Key Messages. Additional references are cited. The discussion paper is available at: <a href="http://unscn.org/en/publications">http://unscn.org/en/publications</a>

Global Nutrition Report 2015, www.globalnutrition.org, published by IFPRI, Washington DC.

State of Food and Agriculture 2012, Investment, Food and Agriculture Organization, Rome.

Anand, S. et al. 2015. Food Consumption and its Impact on Cardiovascular Disease: Importance of Solutions Focused on the Globalized Food System. Journal of the American College of Cardiology, v.66, no. 14.

Follow us on https://twitter.com/UNSCN



# **Acknowledgements**

The authors of this executive summary are Professor Rachel Nugent, Vice President for Global Non-communicable Diseases at Research Triangle Institute International and Dr Daniel Grafton, Department of Global Health, University of Washington, USA. The project is managed by Marzella Wüstefeld PhD, UNSCN Secretariat. The funding support by the Government of the Federal Republic of Germany, through BMEL, is gratefully acknowledged.

With support from



by decision of the German Bundestag