



## **Leveraging Agriculture for Improving Nutrition and Health**

Concept Note for an International Policy Consultation  
2020 Vision for Food, Agriculture, and the Environment Initiative  
International Food Policy Research Institute<sup>1</sup>

### **OVERVIEW**

The International Food Policy Research Institute (IFPRI) proposes to undertake a global policy consultation, under the auspices of its 2020 Vision Initiative, to explore linkages among agriculture, nutrition, and health to inform policies and strategies to better leverage agriculture in improving nutrition and health outcomes. Persistent hunger, malnutrition, and ill health, made worse by the recent food and financial crises, threaten the ability of many countries to achieve the Millennium Development Goals (MDGs) by 2015. As a supplier of food and essential nutrients, as a source of income, and as an engine of growth, the agricultural sector has important implications for nutrition and health. Yet despite the potentially strong interactions and synergies among these sectors, policymakers and practitioners working in these areas continue to work in isolation from each other. Only recently has the potential of agriculture to sustainably reduce undernutrition, overnutrition, and ill health been recognized. These are all compelling reasons for IFPRI, as a leader in providing policy solutions to reduce poverty and end hunger and malnutrition, to play a catalyzing role, along with its partners, in bringing new information and ideas to the fore and building consensus for action on leveraging agriculture for improving nutrition and health.

The policy consultation will consist of a global conference to be held on February 10-12, 2011, in New Delhi, India, that will take stock of current knowledge, share ideas and innovations, identify cross-sectoral synergies and best practices, and create an evidence-based framework that spurs policy action. Leading global and regional experts and practitioners from the agriculture, nutrition, health, and related development sectors will be invited as active participants in plenary and parallel sessions. To disseminate conference results to stakeholders and interested parties throughout the world, innovative communication outputs such as webcasts, video excerpts, and new social media will be used. The policy consultation is expected to create a network for cross-sectoral dialogue and information sharing at all levels and to help stakeholders, through mutual learning, better design and implement strategies that tap into agricultural development for improved nutrition and health.

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## **RATIONALE**

In 2015, industrialized and developing countries alike will come together to assess whether the MDGs they adopted 15 years earlier have been met. Unless a policy shift occurs, success in meeting these goals will be hindered by the most serious and widespread health problem in the world—malnutrition. Globally, 35–55 percent of all childhood deaths are related to malnutrition, with 1 out of every 3 children classified as underweight or stunted.<sup>2</sup> The effects of malnutrition are long lasting and irreversible. For example, children without access to good nutrition in the womb and during the first two years of life suffer from lower cognitive function and development, reduced physical ability, and increased vulnerability to infectious diseases.<sup>3</sup> These shortcomings lead to poor productivity, low economic growth, and the perpetuation of poverty. Stunted mothers are more likely to have underweight children, and the result is a “malnutrition trap” that continues generation after generation.<sup>4</sup>

Hunger is an associated condition affecting an estimated 1.02 billion people, the highest number since 1970.<sup>5</sup> The challenges of hunger and malnutrition are complicated by the recent food and financial crises, which have placed increased stresses on livelihoods. The spike in the number of hungry people in 2006–09 highlights the devastating effect that higher food prices and an economic crisis can have on the world’s poorest people.

Against this shifting global landscape, governments and donors have shown an increased recognition of the links among agriculture, nutrition, and health. Specifically, there is renewed interest in how agriculture, as a source of livelihood for 80 percent of the global rural population, can be better leveraged to improve nutrition and health for the world’s most vulnerable people.<sup>6</sup>

Agriculture affects health and nutrition in very tangible ways.<sup>7</sup> As a source of energy and nutrients, fuel, medicine, fiber, and lumber, agriculture is vital to good health. It can lead to increased income, food security, and gender equity and can also increase the quantity and quality of food available to poor households. Agriculture is a source of livelihood for a sizable portion of the world’s rural population. Increased agricultural productivity raises household income, enabling households to achieve dietary diversity and good nutrition, as well as preventing malnutrition by making available resources on infants, young children, and expectant and lactating mothers. Agricultural growth also lowers food prices for the urban poor, contributing to overall economic growth. In China and Vietnam, for example, rapid, high, and sustained agricultural growth has led to substantial improvements in economic well-being, which in turn has led to significant reductions in poverty and hunger and improved nutrition and health outcomes.

Yet the negative effects of agriculture cannot be ignored. Producing, processing, distributing, and marketing agricultural products creates interactions with the environment that can harm human health through foodborne and waterborne diseases, parasitic vectors, zoonotic diseases, and pollution. An estimated 1.1

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<sup>2</sup> World Bank. 2006. *Repositioning nutrition as central to development: A strategy for large scale action*. Washington, D.C.: The World Bank.

<sup>3</sup> Ruel, M. and J. Hoddinott. 2008. “Investing in Early Childhood Nutrition”. IFPRI Policy Brief 8. Washington D.C.: IFPRI.

<sup>4</sup> World Bank 2006.

<sup>5</sup> Food and Agriculture Organization (FAO). 2009. “State of Food Insecurity 2009.” Rome.

<sup>6</sup> Discussion for Development. 2010. “Improving the Livelihoods of the Resource-poor Smallholder Farmers and Producers in Developing Countries: An Urgent Appeal for Action by GCARD”. White paper.

<sup>7</sup> Hawkes, C. and M. Ruel. 2006. “Understanding the Links between Agriculture and Health”. 2020 Focus 13. Brief 1. Washington D.C.: IFPRI.

billion people, for example, still lack access to safe drinking water.<sup>8</sup> Agriculture also poses serious health and environmental risks to producers and laborers. Exposure to bad weather, handling of chemical and biological products, long work hours, and the use of dangerous agricultural machinery are just some of the occupational health hazards faced by millions of agricultural workers every day. These challenges are only aggravated by a general lack of access to primary health infrastructure in rural areas.

Health and nutrition in turn are inextricably linked to agriculture. Farmers who are in poor health are unable to work, impacting production, productivity, and household income. Moreover, a population that is already suffering from hunger and malnutrition because of an inadequate food supply is unlikely to be highly productive—this situation can create a vicious circle of poverty, food insecurity, and ill health on a macro scale.<sup>9</sup>

To date, some early investments have exploited the synergies among agriculture, nutrition, and health. By breeding crops that are higher in nutritional value, biofortification for instance can help alleviate micronutrient malnutrition, a type of malnutrition resulting from a lack of vitamins and minerals in the diet.<sup>10</sup> Policymakers and investors are increasingly seeing promise in policies and programs that explore the nexus among these sectors, and much more remains to be done.

Assessing the role of agriculture in bringing about positive nutrition and health outcomes gives rise to a variety of questions. For example, does agricultural growth necessarily lead to improved nutrition and health? If so, how does this happen, and what type of agricultural growth pattern is most beneficial (for example, largeholder versus smallholder farming systems, staple foods versus high-value agriculture)? Is agricultural growth alone sufficient for effecting change, or will parallel investments in such areas as primary education, health, and sanitation be vital? How can agricultural systems and processes such as breeding and cropping be improved in order to enhance nutritional value of food crops? Can cross-sectoral synergies be identified at other points along the agricultural value chain? What role does gender play in these interactions? What past agricultural programs and policies have succeeded in substantially improving nutrition and health? Looking forward, how can these programs and policies be redesigned in the context of emerging developments? What are the roles of key actors in these and related sectors, and how can their capacity to collect and openly share information be strengthened? Finally, how can agricultural investments be leveraged so as to maximize improvements in nutrition and health?

These are some of the issues that IFPRI, as a leader in providing policy solutions to reduce poverty and end hunger and malnutrition, intends, along with its partners, to bring to the forefront of public awareness through a global policy consultation on “Leveraging Agriculture for Improving Nutrition and Health.” Few dialogues of this nature have taken place.

IFPRI’s 2020 Vision Initiative has organized four global and regional policy consultations since 1993 on key emerging issues influencing hunger and poverty. The centerpiece of each of these policy consultations has been an international conference. These conferences have strengthened information sharing, networking, and collaboration and have been instrumental in policy change processes. Hence, there are compelling reasons and opportunities for IFPRI to play a catalyzing role in this activity.

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<sup>8</sup> World Health Organization. 2010. “Health through safe drinking water and basic sanitation”. <[www.who.int/water\\_sanitation\\_health/mdg1/en/index.html](http://www.who.int/water_sanitation_health/mdg1/en/index.html)>

<sup>9</sup> Hawkes and Ruel 2006.

<sup>10</sup> HarvestPlus.org. 2010. <[www.harvestplus.org](http://www.harvestplus.org)>

## **OBJECTIVES**

The ultimate objective of this policy consultation is to inform, influence, and catalyze action by key actors—including policymakers, nongovernmental organizations, the private sector, educators, and researchers—to better use investments in agriculture to achieve nutrition security and good health for the world's poorest people. This objective will be realized by bringing together information and ideas on the linkages among agriculture, health, and nutrition; by identifying specific pathways whereby agriculture can enhance its positive impact and mitigate its negative impact on nutrition and health; by creating networks and providing fora for dialogue among key stakeholders; by identifying policies and programs that can be termed “best practices”; and by furthering knowledge and building consensus on priorities for appropriate action.

## **CONFERENCE**

The centerpiece of the policy consultation will consist of an international conference, with 3–4 roundtable discussions leading up to the event and subsequent stakeholder briefings wrapping up the process.

### **A. Structure**

The conference will feature plenary and parallel sessions. It will likely comprise three parts:

- Taking stock of the current situation;
- Assessing emerging developments; and
- Identifying what works and prioritizing action

The conference will open by taking stock and assessing the obstacles that have traditionally stood in the way of exploiting the synergies across agriculture, nutrition, and health, such as differences in frameworks and professional languages, as well as issues of transparency and incentives. The role of agricultural growth and its effect on nutrition and health will be explored.

The second part of the conference will focus on responding to emerging drivers, identified as having the most substantial global implications for achieving future positive outcomes in agriculture, nutrition, and health. Among those themes and issues are: emerging and persistent diseases such as HIV/AIDS, avian influenza, malaria, and tuberculosis; climate change; demographic shifts; and macroeconomic forces associated with globalization.

The third part of the event—representing the heart of the conference— will focus on how agriculture can be leveraged to improve nutrition and health. Sessions will address (1) agricultural growth patterns and key interventions that have successfully improved nutrition and health in the past, and how these can be multiplied or scaled up; (2) how future synergies can be strengthened, whether through capacity strengthening, new frameworks, mechanisms for accountability and transparency, program design and implementation, or key policy levers; and (3) priorities for short-, medium-, and long-term action and roles and responsibilities of key players.

### **B. Participants**

The conference is expected to bring together leading experts and practitioners from agriculture, nutrition, health, and related development sectors. They will comprise policymakers, leaders from nongovernmental organizations and the private sector, educators, and researchers, at the local, regional, and global levels. Special effort will be made to include individuals with expertise in designing and implementing

policies, programs, and other innovations that use agricultural development for health and nutrition.

### **C. Timing**

The conference will be held on February 10-12, 2011.

### **D. Location**

The conference will be held in New Delhi, India. Currently, South Asia is the region of the world with the highest percentage of children who are malnourished. India in particular has exhibited extremely high malnutrition rates and low agricultural growth in the past few years, raising the question of whether the two are related.<sup>11</sup> Within this context, key stakeholders in the region, as well as around the world, are seeking timely, relevant ways to leverage agricultural growth for better nutrition and health.

## **COMMUNICATIONS TO ACHIEVE IMPACT**

Several communication activities will support the substantive parts of the policy consultation with state-of-the-art communication tools:

- A series of 3–4 roundtable discussions will be undertaken in order to articulate key issues and drivers, incorporate different perspectives into the process, and build up policy momentum prior to the conference.
- Conference speakers and panelists will be selected for their expertise and authority, capacity to effect change, ability to inspire participants, and contributions in constructively furthering dialogue and debate. Sessions will be structured in a way so as to invite different viewpoints, with formats including but not limited to presentations, panel discussions, moderated debates, and consensus-building exercises. Technology permitting, online participants will be able to contribute their comments and ideas during session Q&As.
- New and exciting communication modalities will be used during the conference. The conference itself will be webcast, with 2- to 3-minute video clip highlights being extracted and posted online for public access and comment. Media briefings will be staged, with an effort to reach media outlets in developing countries and journalists representing nontraditional groups such as youth. Social media tools such as Facebook, LinkedIn, Twitter, Youtube, and Flickr will be essential for generating interest from new stakeholders. The possibility of a blog featuring video clips and podcasts is also currently being discussed.
- Immediately after the conference, in addition to the material already mentioned, powerpoints and session discussion summaries will be made available online. Policy briefings will be conducted with selected stakeholders to share the information generated by the activity and achieve substantive cross-sectoral cooperation in carrying out the recommended policy actions.

## **EXPECTED OUTPUTS**

Prior to the conference, selected background papers and/or policy briefs will be commissioned from leading experts as background material. Immediately after the conference, session materials such as powerpoints and summaries will be made available online. Later on, the materials resulting from the research

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<sup>11</sup> Global Hunger Index. 2008. Washington DC: IFPRI.

and conference activities will be gathered in an electronic proceedings volume for online distribution. Finally, a popular-language booklet of 20–25 pages, drawing on the key findings of the conference, will be produced to inform and inspire action. Pending funding, this booklet would be translated into several languages.

### **EXPECTED IMPACT**

The aim of these activities is to (1) help key stakeholders better understand the linkages among agriculture, nutrition, and health; (2) increase awareness of the ways in which agriculture can be leveraged; (3) create a network for cross-sectoral dialogue and information sharing at all levels; and (4) help stakeholders to better design and implement strategies that tap into agricultural development for improved nutrition and health.

### **PARTNERS**

While IFPRI will be fully responsible for the design, content, and implementation of this activity, it is approaching partners in the public sector, private sector, and civil society to cosponsor the global policy consultation.

### **ADVISORY COMMITTEE**

An international advisory committee of leading experts and practitioners will be formed. The committee will provide guidance on conference themes, participants, and background materials.