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Leveraging agriculture to tackle non-communicable diseases: report on a seminar leading up to the UN high-level meeting on non-communicable diseases

Non-communicable diseases were once thought to be a rich-country problem, but no longer. Three of five deaths worldwide are now attributed to just four noncommunicable diseases - heart disease, diabetes, lung disease and cancer. Obesity, which has been linked to an increased risk for some of these diseases as well as other health concerns, is on the rise in both developed and developing countries. Growing global concern about these issues prompted the UN General Assembly to hold a highlevel meeting on the topic on 19-20 September 2011. In advance of that meeting, the International Food Policy Research Institute (IFPRI) hosted a panel discussion on 7 September that explored how to take advantage of the connections between agriculture and non-communicable diseases, given that many people in developing countries depend on agriculture not only for food, but also for their livelihood.

Major drivers and emerging trends

Tim Lang of City University London said that although the problem of non-communicable diseases has been well documented for decades, it has largely been ignored by the development community as a 'Western society issue'. The evidence shows, however, that nearly 80% of deaths related to non-communicable diseases occur in low- and middle-income countries.

The problem of non-communicable diseases stems mainly from the production-focused food system developed in the 1930s. This approach championed the idea that increasing outputs through better technology, investment and distribution would lead to health gains and human progress. Cultural factors, such as marketing, media and social aspirations that equate prosperity with changing diets, have also contributed to the rise in non-communicable diseases. In the 21st century, however, the production-centred paradigm is no longer sustainable.

To reverse current trends, Lang emphasized that the food system urgently needs a new framework and new principles. What is needed is a 'systems approach' rather than an 'individual farm approach', a focus on consumption in addition to production, and a greater emphasis on plants and less on meat and dairy products.

Building a healthier food system

Rachel Nugent of the Chicago Council on Global Affairs said that a new and broader understanding of agriculture and health linkages and their potential global impacts is emerging, as shown by IFPRI and its 2020 Vision Initiative's February 2011 conference 'Leveraging Agriculture for Improving Nutrition and Health' and the UN September 2011 high-level meeting. However, given that these meetings have had lower levels of funding than other health-related meetings (such as those on AIDS and other communicable diseases), expectations for fulfilling the promise of this new understanding are not high.

Nevertheless, the increasing focus on non-communicable diseases is an indication of the growing concern about the economic burden these diseases are imposing around the world. In lower- and middle-income countries, a large number of young people, who form a critical part of a productive workforce, suffer from these diseases. The cost of treatment has the potential to overwhelm low-resource health systems.

Research shows that nutrition plays a large role in the development of non-communicable diseases. Nugent pointed out that independent of calories or obesity, dietary quality – defined by foods and diet patterns rather than individual nutrients – is a major risk factor for chronic diseases. To build a healthier food system, a wider range of actors, each with their own goals and function in the food system, need to be involved. Potential opportunities for enhancing this transition include value-chain approaches and mutual metrics.

The role of the private sector

Derek Yach of PepsiCo noted that despite 300 years of steady improvements in nutrition due to private and public efforts, hunger and malnutrition persist. This problem highlights the need for greater engagement across stakeholders and sectors. Private companies from a variety of industries, from agriculture to food processing to retail and food service, all have important roles to play.

Private industry is already working with the public sector to contribute to better health and nutrition outcomes. For the G20 Working Group on Food Security,

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a private sector consultation provided some key recommendations to governments. These included increasing investment in food value chains, improving the functioning of agricultural markets, increasing technology innovation and distribution, giving greater attention to environmental sustainability, and shifting focus to improving nutrition. Overall, he said, agriculture needs to be able to sustainably meet the nutritional needs of both the rich and the poor.

According to Yach, PepisCo, the world's second-largest food-and-beverage company, has been working to understand and address global nutrition challenges through science and partnerships. Like other food companies, it has, for example, undertaken an initiative to increase fruit and vegetable products and decrease salts, fats and sugars in its products. Such initiatives may take time, however, to gain consumer acceptance.

Conclusion

Discussion following the presenters' remarks touched on the difficulty of redirecting health interventions toward a preventive rather than a curative approach to health issues, the remaining gaps in knowledge concerning the relationship between nutrition and non-communicable diseases, the challenge of changing consumer behaviour in ways that improve health and nutrition, the need to shift to plant-based agriculture in spite of the fact that animal-based agriculture often offers greater income security, and the specific steps that farmers can take to create more nutritious crops.

Agriculture, the panellists agreed, can be a powerful tool in the fight against non-communicable diseases, but using this tool effectively will require significant changes in the organization of the entire food system, from the farm to the table.

To see video of the seminar and link to panellists' presentations, go to http://www.ifpri.org/event/leveraging-agriculture-tackle-noncommunicable-diseases.

Zhenya Karelina* International Food Policy Research Institute Washington, USA **Corresponding author*: Email z.karelina@cgiar.org

> Heidi Fritschel International Food Policy Research Institute Washington, USA Email: h.fritschel@cgiar.org