**The Wicked Problem of Global Food Security**

There are many problems facing humankind that are both global in scope and have the potential to rapidly escalate into severe situations with life-threatening consequences. These problems have been termed *wicked problems* because they have, “cause and effect relationships that are difficult or impossible to define, cannot be framed and solved without creating controversies among stakeholders and require collective action among societal groups with strongly held conflicting beliefs and values,” (Dentoni et al. 2012:1). Due to the size, scale and complex interconnections of wicked problems, they are difficult if not impossible to completely solve.

One of these wicked problems is global food security. According to the UN, *food security exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food (UN 2010).*  Food insecurity is linked to a myriad of socioeconomic problems, including poverty, social inequality, poor health resources, poor working conditions and inadequate education. These in turn, result in a lack of access to the resources needed to produce or purchase food. In addition to socioeconomic factors, environmental degradation, loss of biodiversity, and unsustainable land use practices contribute significantly to the problem of global food security.

Global food security shares several characteristics with other wicked problems. The problem involves a large number of people and resolving the problem would come at an enormous economic investment. Because the problem has to be addressed at many spatial and temporal scales, a single overarching solution is not viable. While there are different opinions about how specific aspects of the problem could be mitigated, our understanding of both the problem and potential solutions are incomplete. Because wicked problems involve interconnected cultural, socio-economic and political systems, attempts to mitigate or solve a problem in one part of the system can propagate unexpected or unwanted change in the other parts.

Wicked problems cannot be fully solved, but they can be addressed, managed and mitigated. Addressing a complex problem like global food security requires using systems thinking and applying an interdisciplinary approach that identifies and addresses phenomena taking place in a variety of action arenas: sociology, economics, political systems, technology and science, to name a few. This module provides you with an introduction to tools you can use to developing conceptual frameworks for solving wicked problems.

Read the following short article to get an overview of wicked problems.

Ritchie, T. 2013 Wicked problems: Modeling social messes with morphological analysis. Acta Morphologica Generalis 2(1): 1-12. Available at <http://www.swemorph.com/pdf/wp.pdf>

Questions to consider:

1. What is a wicked problem?

2. In your own words summarize at least three criteria of a wicked problem.

3. Describe two criteria for dealing with a wicked problem.

**References**

Dentoni, D., Hospes, O., and Ross, R. 2012 Managing Wicked Problems in Agribusiness: The Role of Multi-Stakeholder Engagements in Value Creation. Special Issue, International Food and Agribusiness Management Review, 15(B): 1-165. This resource provides numerous papers addressing different aspects of food production and food security. <http://www.ifama.org/files/15spib.pdf>

UN High-Level Task Force on the Global Food Security Crisis 2010 Updated Comprehensive Framework for Action.

<http://un-foodsecurity.org/sites/default/files/UCFA_English.pdf>