From complexity to more timely and relevant food security intervention: Novel methods and their utility in the food and nutrition security assessment and information systems.

Nathan Morrow*1 and Nancy Mock
1Tulane University – United States

Abstract

Status quo paradigms of evaluation design and data collection are experiencing a ‘big bang’ disruption from novel and rich data streams that leverage emergent information and communication technologies coupled with dramatic increases in connectivity. Food security and nutrition are complex problems that continue to be a primary focus of both emergency and development programs and policy. Food and nutrition security evaluation and information systems (FNSI) have a long history of integrating traditional data collection methods with emergent technology such as geographic information systems and remote sensing. This paper briefly reviews the evolution of FNSI from a complex systems perspective. It then analyzes the utility of recent technological advances and provides examples of how novel methods of information capture, curation, analysis and communication strengthen FNSI. A new analytical framework is presented based on a value stream comparison of conventional information and emergent FNSI. The paper’s conclusions highlight remaining gaps and challenges.

Keywords: Food Security, Resilience assessment, Complex adaptive systems

*Speaker