

The Integration of Nutrition into Extension and Advisory Services:

A Synthesis of Experiences, Lessons, and
Recommendations

Jess Fanzo, PhD

Bloomberg Distinguished Professor of Global Food Security and Ethics
School of Advanced International Studies and the Berman School of Ethics

Johns Hopkins University

jfanzo@gmail.com



Extension and Advisory Services: A Vital Component of Ag Development

- EAS are the different activities and sets of organizations that provide the information and services needed and demanded by farmers and other actors in rural settings.
- EAS are important to ensure that the smallholder farmers' needs are being met, while enabling them to achieve food security in the face of risk and uncertainty.
- There are an estimated **800,000** official extension agents worldwide with more than 90% located in the developing world.

Extension for nutrition sensitive agriculture?

- Extension agents are often mentioned as a promising platform for the delivery of nutrition knowledge and practices to rural communities.
- Why? Because they reach and interact closely with farmers.
- However, the context and mechanisms for delivery on the ground have been less clear or under-evaluated.

Purpose

To assess current integration of nutrition in EAS, document training provided to EAS agents, and identify challenges and opportunities for the integration of nutrition.

Methods for Data Collection & Analysis

- A mixed methodology
- An extensive literature review covering the following databases: PubMed, ISI Web of Science, Agris, Google Scholar, Econlit, and IBSS
- Online surveys and semi-structured key informant interviews with stakeholders
- Data were collected between December 2012 and June 2013

Table 1. Keywords for Literature Search.

First key search term	Complementary secondary key search terms
Rural advisory service	Nutrition Diet
Agricultural advisory service	Home economics Consumption
Agricultural extension	
Rural extension	
Participatory extension	
Farmer field school	

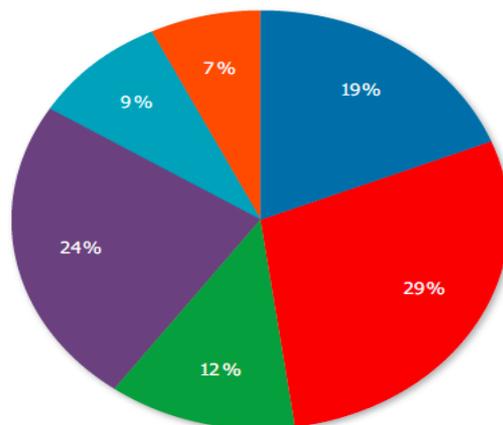


Figure 1: Survey respondents by organization type

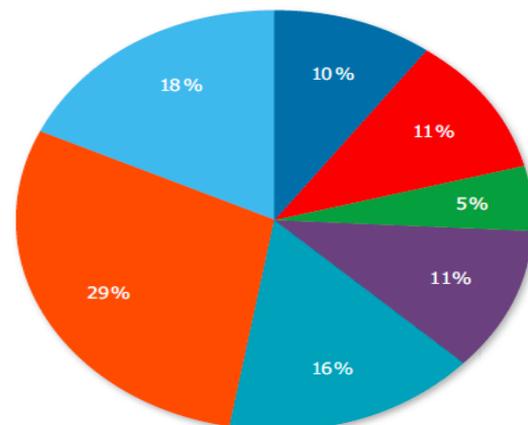


Figure 2: Interview respondents by organization type

Status of Inclusion of Nutrition in EAS

- Countries have approached integration of nutrition into EAS differently at the national, provincial, district, and community levels.
- The approach is strongly dependent on the capacities of the national governments to coordinate multi-sectoral strategies and resource constraints faced by individual countries.

Table 2. Practices Promoted by EAS Broken Down by the Three Major Pillars of Food Security.

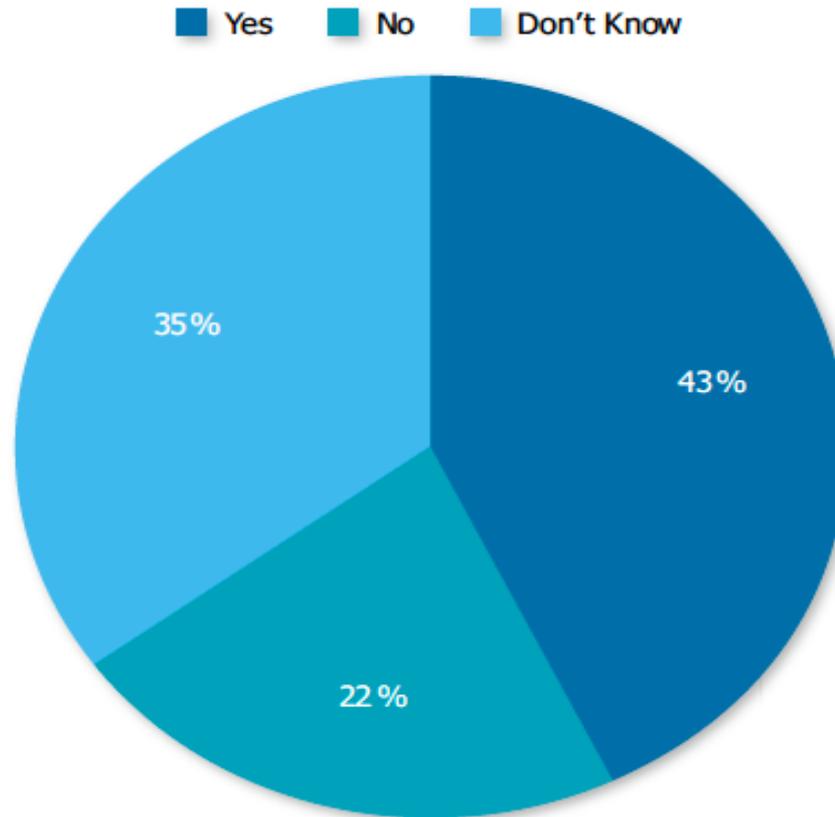
Pillar	Practice
Availability	Crop diversification and increased nutrient-dense foods through the introduction of nutritious food and biofortified crops
	Home gardening systems: urban, container, and small plot gardening
	Effective farming techniques to raise quality of production and yield (drip irrigation, intercropping, and inputs)
	Reduction of postharvest losses (improved techniques for harvesting, drying, and storage)
	Enhancement of nutritional quality through postprocessing techniques to remove antinutrients
	Breeding animals for protein sources
Access	Enhanced marketing strategies for nutrient-rich vegetables
	Improved linkages to markets
	Increased availability of missing sources of nutrition through tracking of seasonal foods
	Income generation
Utilization	Increased dietary diversity
	Use of complementary foods rich in nutrients and Infant and Young Child Feeding (IYCF) counseling
	Recipes and food preparation techniques that maximize nutritional benefits of local foods

Nutrition Training of Extension Agents

- There is extensive pre- and in-service training on nutrition taking place within EAS at different levels: within projects, within vocational training, and within the formal education system.
- Mainly receive training on crop production for improving nutrition, and on food preparation, preservation, and hygiene.
- Peer to peer engagement, positive deviance, and model farmers, are all avenues that have been tried.

EAS with Nutrition Skills

Respondents who think extension workers should have specialized nutrition skills



Recommendations on Training from Stakeholders

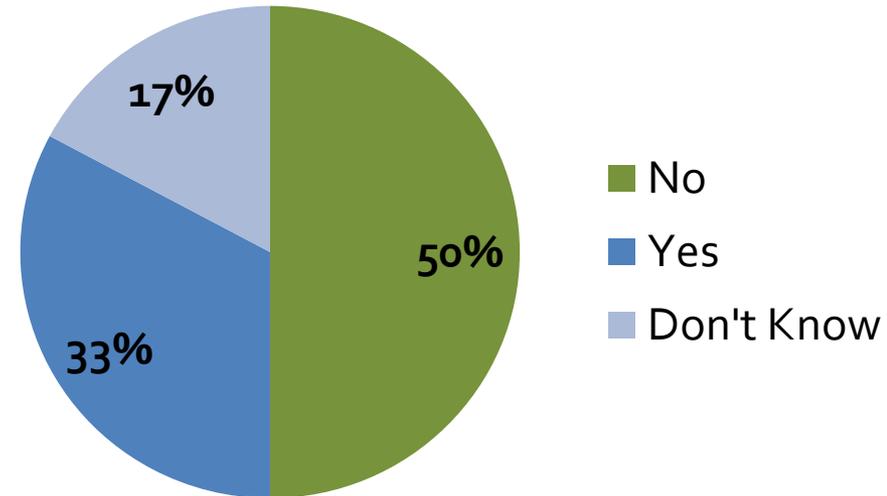
1. Trainings should be on-going, reinforced, and mentored, in order for the addition of nutrition as a topic to be sustainable.
2. The field itself can be used as a classroom for training on nutrition agronomy by using field plots, greenhouses, and local biodiversity and ecosystems.
3. Soft skills are key: Facilitation and negotiation skills.
4. Promote nutrition as a topic at the two-year post-secondary or vocational schools where agriculture extension agents are trained, so that it is recognized and accepted as a discipline.
5. Historically, the topic of nutrition was equated with food preparation, which falls to the female in many cultures. Training materials should present nutrition in a social context, accessible to both men and women.

Nutrition Training of Extension Agents



We've come a long way
baby...or have we?

Survey respondents who think female
extension agents have
different roles compared to male agents



Types of Extension Workers and Other Rural Workers

- Nutrition often falls through the cracks for both extension workers and health workers at the community level.
- There is little duplication of duties at the community level with regard to nutrition.
- There are a number of EAS models that also apply to nutrition.

Distinct EAS Types

Generalists

Nutrition specialists

Generalists with access to
Specialists

Home economic agents

Lead farmers/community
volunteers

Farmer field school
facilitators

Community health workers

Educators

Challenges of EAS in Integrating Nutrition

- **Challenge 1:** Ineffective nutrition training and lack of awareness.
- **Challenge 2:** Unclear organizational mandates.
- **Challenge 3:** Women's inclusion in EAS.
- **Challenge 4:** Reduced mobility and poor access to the materials that extension agents need to carry out their duties.

Systemic Challenges

- **Challenge 1:** Agriculture and nutrition sectors speak different “languages.”
- **Challenge 2:** Importance of coordinate planning and dialogue among the relevant agriculture, nutrition, and health actors.
- **Challenge 3:** Resources.



Survey responses regarding the challenges and requirements for integrating nutrition:

- "...*Training and time. They need to be well prepared and time-allocated - extension agents are already **over-burdened with tasks.***" [Development Practitioner]
- "...*Cost of additional human resources, training for communication skills as well as **logistics and equipment** for information collection and dissemination.*" [Government agent, Ministry of Agriculture, Liberia]
- "*Conventional extension agents require refresher courses for them to give professional focus to nutritional messages and that **is quite costly.** Lobbying with organizations to mainstream nutrition is also costly.*" [Government Agent, Malawi]
- "*They will also need a **means of transport** (preferably a motorcycle) and monthly pay/allowance to fuel and service the motorcycle.*" [Professor, Uganda]

The Opportunities of EAS Integrating Nutrition

- The vast majority of online survey respondents in this study—64 out of 68—believed that agricultural EAS are a valid mechanism by which to deliver nutrition information to households.
- Reasons Include:
 - Established infrastructures.
 - Reach.
 - Community trust.
 - Cultural awareness.
 - Empathy and understanding.

Opportunities for EAS and Nutrition

- Establishing an *enabling environment*: multi-sectoral coordination and skilled human resource development.
- Creating *demand* for better nutrition, and for increased nutrition education and options.
- *Leveraging* community leaders and champions, utilizing technology to effectively communicate, and the creative use of human resources, can all help to elevate nutrition within EAS.

Harnessing Technology

- *WeFarm*
- *Rapid SMS* to register female farmers in Rwanda
- *Digital Green* using participatory videos to promote sustainable agricultural practices in India



What is needed to integrate nutrition into EAS?

- **Well, a lot...**
- Political will
- Financial commitment
- Motorbikes, cell phones, top ups
- Mechanism to assess performance
- Reinvigorate training – linking landscapes to consumption; BCC; value chains, bundled income generation
- Utilize different modes of rural communication
- New technologies



Resources



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Jessica Fanzo, Quinn Marshall, Joyce Wong, Rafael I. Merchan,
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A Global Forum for Rural Advisory Services (GFRAS) and the World
Bank Secure Nutrition Knowledge Platform Collaboration

Article

Integration of Nutrition Into Extension and Advisory Services: A Synthesis of Experiences, Lessons, and Recommendations

Jessica Fanzo¹, Quinn Marshall^{2,3},
Darja Dobermann⁴, Joyce Wong^{2,5},
Rafael I. Merchan^{2,6}, Mona I. Jaber²,
Alejandro Souza^{2,7}, Neelam Verjee⁸,
and Kristin Davis⁹

Abstract

Background: The need for nutrition-sensitive agriculture is well recognized and of growing interest to global development players. Extension and advisory services (EAS), with their established infrastructure, provide a unique opportunity for nutrition interventions to be implemented at scale with significant reach.

Objective: To assess current integration of nutrition in EAS, document training provided to EAS agents, and identify challenges and opportunities for the integration of nutrition.

Methods: A mixed methodology was used, which included a systematic literature review covering the following databases: PubMed, ISI Web of Science, Agris, Google Scholar, Econlit, and IBSS. In addition, online surveys and semistructured key informant interviews with stakeholders were performed. Data were collected between December 2012 and June 2013.

Results: Based on this study, the most common integration of nutrition into EAS is through efforts to increase the availability of nutritious food. The nutrition training of extension agents is often inadequate, particularly in the realm beyond technical agricultural skill. Additionally, a lack of career

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¹ Institute of Human Nutrition and the Center on Globalization and Sustainable Development, Columbia University, New York, NY, USA

² School of International Public Affairs, Columbia University, New York, NY, USA

³ United Nations World Food Programme, Rome, Italy

⁴ School of Biosciences, University of Nottingham, Nottingham, UK

⁵ Alliance for Bangladesh Worker Safety, San Francisco, CA, USA

⁶ Catholic Relief Services, Ghor, Afghanistan

⁷ Inter-American Development Bank, Rio de Janeiro, Brazil

⁸ Independent Consultant, Nairobi, Kenya