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[↗ www.fao.org/fsnforum/Integrating_nutrition](http://www.fao.org/fsnforum/Integrating_nutrition)

Integrating nutrition into the curricula of agriculture education institutions: Strengthening human capacity to promote nutrition-sensitive agriculture

In many countries, agricultural development has traditionally focused on raising productivity and maximizing production of cereals. For example, in Ethiopia it is evident from a 2015 report that 67.24% of the total cultivated area grows cereals, amounting to 61.5% of total production composed of cereal crops (CSA, 2014/15 Meher season agricultural sample survey for private holding farmers). The same survey results show that only 0.98% of total area of production is covered by vegetables, with only 1.55% total production as vegetable. This production system indicates a problem of dietary diversification where cereal crops are staple foods which constitute a major portion of the national diet. In effect, because a majority of the national food supply is cereal, it is difficult for people to access foods that are richer in protein and minerals, such as milk, meat, fish, eggs, beans, vegetables, and fruits, which are often more expensive than cereals.

Recently the term “nutrition sensitive agriculture” has emerged as a way to define agriculture investments made with the purpose of improving nutrition. The overall objective of nutrition-sensitive agriculture is to make the global food system better equipped to produce good nutritional outcomes. Increases in food production do not necessarily guarantee to improve diets or nutrition.

In addition to the production and consumption patterns found, a shortage of adequately trained agricultural workers providing nutrition services and support is thought to contribute to persisting high rates of malnutrition in Ethiopia (40.4% stunting; 25% underweight; 5% wasting, and 3% overweight/obesity, mini Ethiopian Demographic Health Survey 2014). The shortage of extension workers with nutrition knowledge and skills has been noted in other countries as well, including the most high-burden malnutrition countries of the world.

The lack of nutrition training of agricultural workers is acknowledged globally as a significant barrier to combating malnutrition through agriculture and food systems. Without social and behavioral changes, improved dietary diversity and consumption patterns, food storage, hygiene and preparation practices, the high prevalence of malnutrition may continue, even if incomes, production and productivity increase.

Based on the growing interest in identifying ways in which agriculture can contribute to improved nutrition outcomes, it is valid and timely to review the possible scope and role of agricultural training institutions in promoting nutrition-sensitive agriculture, that is making food systems better equipped to produce good nutritional outcomes.

Ethiopia is one example of a country that has set out to tackle under nutrition by making agriculture more nutrition sensitive and there may be other countries that are taking this direction.

The purpose of this on-line discussion is to share views and experiences of individuals, projects institutions and countries on how to integrate nutrition into the curriculum of agricultural training institutions, and how to strengthen pre-service education for agriculture students so as to develop a competent workforce that is capable of promoting nutrition-sensitive agriculture.

The leading questions for our discussion are:

- **What should be the role of agricultural colleges and higher education institutions to promote nutrition sensitive agriculture?**
- **What is meant by “integrating nutrition into the curriculum”? Does this mean nutrition knowledge alone or also include some competencies in promoting desirable food and dietary behaviors? In other words, what are the absolutely essential competencies of "nutrition" to include in the training of agricultural workers? Do the institutions see the relevance of including nutrition into the curriculum?**
- **For what purpose? What is expected to result from this extra curriculum element? How do we expect graduates (i.e. agricultural workers) to use the new knowledge and skills in their daily work? What can they do to promote food and dietary diversification and better nutrition outcomes?**
- **Do you have experiences of integrating nutrition in to the curricula of agricultural higher institution? If yes, how will the curriculum change contribute to national nutrition goals or to nutrition objectives adopted by the governments? What are the opportunities, challenges, successes, lessons learnt?**

I thank you in advance for the time and the genuine thoughts that you contribute by responding to these questions. Your practical experience in integrating nutrition into the curricula of agricultural educational institutions is of great importance to facilitate the emergence of a competent workforce in the area of nutrition-sensitive agriculture.

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