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## What role can Agricultural Extension and Advisory Services play in realizing gender equality and improved nutrition?

### About this online discussion

This document summarizes the online discussion *What role can Agricultural Extension and Advisory Services play in realizing gender equality and improved nutrition?* which was held on the FAO Global Forum on Food Security and Nutrition (FSN Forum) from 19 June to 9 July 2017. The discussion was facilitated by Hajnalka Petrics, Soniia David and Fatima Hachem from FAO, and Edye Kuyper from INGENAES.

In this discussion, participants shared ideas on the role Agricultural Extension and Advisory Services (AEAS) should have with regard to broader development. Participants were, in particular, invited to submit examples of AEAS successfully addressing gender inequalities and improved nutrition, but also to discuss the challenges that have impeded them to do so. Furthermore, participants were asked what the role and main activities of a global forum such as the GFRAS Nutrition Working Group should be in helping AEAS to become more gender-sensitive and able to contribute to improved nutrition.

Over the three weeks of discussion, participants from 26 countries shared 64 contributions. The topic introduction and the questions proposed, as well as the contributions received, are available on the discussion page: [www.fao.org/fsnforum/activities/discussions/extension-gender-nutrition](http://www.fao.org/fsnforum/activities/discussions/extension-gender-nutrition)

### Introduction

Women constitute a significant part – and in developing countries, often even the majority – of the agricultural workforce (Akinremi Julian, Jeston Lunda), as they are engaged in the various stages of crop production (Stanley Weeraratna, Lola Gaparova), livestock production (Lola Gaparova, Shahla Salah) and processing and marketing activities (Akinremi Julian). While women thus play a crucial role in providing their families with food (Stanley Weeraratna), at the same

time, they face substantial challenges related to gender inequalities, such as unequal access to resources, services and technologies, which significantly undermine food security and nutrition objectives. In addition, lower levels of education as well as sociocultural norms and values have limited women's power and ability to participate in decision-making processes within their families and societies (Gabor Figeczky).

There is a growing body of evidence showing that empowering women and promoting gender equality at the household and community levels leads to superior agricultural and development outcomes, including increases in farm productivity and improvements in family nutrition (Lola Gaparova, Akinremi Julian, Shahla Salah). In the context of the paradigm shift of Agricultural Extension and Advisory Services (AEAS) from a production-oriented, technology

transfer model to one with a greater emphasis on broader development objectives, a potential role for AEAS has emerged in promoting gender equality and supporting nutrition – an idea that received broad support from the discussion participants. As AEAS staff are able to reach farmers and women's groups and to closely interact with them, they are in a position to provide information and training on gender and nutrition (Frank Eyhorn, Dorine Odongo, Georges Bazongo).

## Broadening the AEAS mandate: including gender and nutrition

Participants suggested that in carrying out their activities, AEAS should adopt the following approaches and strategies in order to facilitate improved gender and nutrition outcomes:

- ▶ **AEAS should adopt a comprehensive approach.** In stressing that the agricultural pathway to nutrition hinges on women's participation in and control over agricultural activities – and in line with the AEAS shift towards achieving broader development goals – it was argued that AEAS should provide support in all value chain stages, considering aspects such as productivity, profitability, sustainability and household consumption (Mona Dhamankar, Gabor Figeczky).
- ▶ **AEAS should be demand-driven and needs-based.** This can be achieved as long as extension actors are perceived to be part of the community (Carlos Granado Fernandez) and the extension development process is participatory (JC Wandemberg, Gabor Figeczky).
- ▶ **AEAS should build on existing practices** (Lucy Quainoo). For instance, the likelihood of new technologies and ideas actually being applied by farmers is greater when they involve crops that people are familiar with than when a new type is introduced (Eileen Omosa).
- ▶ **AEAS could adopt a whole-of-family-approach** (Margaret Koyenikan), especially in imparting knowledge on nutrition (Mahesh Chander). However, women need to be particularly involved, as they represent the majority of food providers (Eileen Omosa).
- ▶ **AEAS should be modernized** (Botir Dosov). The adoption of ICT allows AEAS to scale up information services and extension operations (Gabor Figeczky) and to document community-level data on agriculture and related issues (such as nutrition). This data could in turn be shared with local public authorities to facilitate policies suited to local contexts (Joy Muller).
- ▶ **AEAS staff should recruit more female extension workers.** Their visibility when visiting farmers and discussing solutions can change local perceptions and

promote gender equality (Joy Muller). Also, female extension workers are often better able to help female farmers adapt to and adopt innovations (Gabor Figeczky), and to advise them on other (household-related) issues (Mahesh Chander).

- ▶ **Women should be better targeted when establishing contacts with farmers.** Instead of contacting the head of the household, AEAS staff should contact women when sharing information (Mahesh Chander); also, they could contact female farmers and male farmers separately with specific information (Emile Hougbo).
- ▶ **AEAS should identify the entry point to women's empowerment, and assess their ability to make and implement decisions.** AEAS can identify and work with local "influencers" in the communities to devise engagement strategies that will tailor messages relevant to women's sphere of control, in order to facilitate improved gender equality and nutrition (Dorine Odongo).
- ▶ **AEAS should partner with other organizations such as women's cooperatives and the private sector** (Richard Leo, Mahesh Chander). The better AEAS providers are connected with diverse stakeholders, the greater their potential to offer multifunctional services (Gabor Figeczky).

Furthermore, it was suggested that AEAS carry out the following specific activities to support women's empowerment and improved nutrition:

- ▶ **AEAS should facilitate women's access to services and resources.** Specifically, access to land, inputs, information, credit, markets and processing facilities should be considered (Mona Dhamankar, Gabor Figeczky).
- ▶ **AEAS should promote digital literacy among women.** ICT can be used for technology transfer and to ensure access to information on nutrition (Atinuke Lebile, Mahesh Chander).
- ▶ **Investments should be made in time-saving technologies.** This will improve food security, nutrition

and income generation (Aklilu Nigussie), and allow for engaging women in strategic activities such as political participation (Takele Teshome).

- ▶ **Self-help groups for women should be formed and supported.** These groups could for instance be engaged in nutrition education (Mahesh Chander).
- ▶ **Technical support to small-scale livestock and poultry production should be provided.** These activities, often carried out by women, play an important role in household nutrition security and small savings (Mahesh Chander).
- ▶ **AEAS should support women's education and training (Dr Amanullah).** Topics include carrying out online sales, accessing employment opportunities, the use of improved seed varieties, fertilizer use (Akinremi Julian), resource management, health and nutrition (Parikshit SampatRam),

and risk and financial management (Gabor Figeczky). Vocational training could be provided using online videos (Paul Rigterink).

- ▶ **Women and men need to be sensitized on gender roles and relations (Mona Dhamankar),** for example by raising awareness of the fact that often, girls are served less nutritious food than boys (Amtul Waris).
- ▶ **Nutrition education should be provided (Gabor Figeczky).** AEAS staff could carry out nutrition campaigns or a special session on nutrition at local schools (Amtul Waris, Muhammad Yaseen).
- ▶ **Dietary diversity should be promoted.** Women should be encouraged to grow nutritious crops (Muhammad Yaseen), for example through the provision of necessary inputs (Amtul Waris).

## AEAS and youth empowerment

### Empowering youth in agriculture

A number of participants stressed that AEAS should be particularly supportive of youth participation in agriculture. As youth are more oriented towards profitability than productivity, AEAS should focus more on value chain extension than on only giving production advice (Mahesh Chander). In addition, integrating ICT into AEAS operations would increase both youth involvement (Fardous Mohammad Safiul Azam) and food system efficiencies; moreover, the familiarity of youth with ICT would enable them to connect farmers with markets (Mahesh Chander).

However, experiences from India for example show several challenges youth face regarding their engagement in agriculture and how they can benefit from AEAS:

- ▶ **Policy-makers and AEAS staff do not sufficiently consider youth participation in AEAS.** Nonetheless, there should be efforts to ensure age and gender balances. Youth clubs that already exist could be engaged or otherwise created to promote gender equality, nutrition-sensitive farming and balanced diets.
- ▶ **Youth do not own land.** AEAS staff only contact those who already own land, even when these people are not themselves engaged in agricultural operations. Instead, AEAS should approach those actually working in the field.
- ▶ **Youth do not have access to finance due to lack of collateral.** AEAS staff could organize youth competitions for innovative ideas to improve agricultural practices and nutrition (Mahesh Chander).

Participants shared several initiatives aimed at empowering youth in agriculture. For instance, INGENAES and YPARD Bangladesh have collaborated to mentor young professionals and improve their skills. YPARD members from Bangladesh and Nepal have participated in trainings and workshops organized by INGENAES that specifically focus on the issues of gender and nutrition, such as "Addressing Gender Issues in Agricultural Value Chains" and the Regional Symposium on Integration Nutrition and Gender in Agri-extension (Fardous Mohammad Safiul Azam). Another example is that of YPARD Nepal, which has started the "EduMala Mentoring Programme", focusing on underutilized food crops, food processing methods, and food and dairy entrepreneurship (Dinesh Panday).

### Empowering youth as AEAS agents

In addition, one of the participants, Dinesh Panday, stressed that youth should be given a central role as AEAS agents. These agents would face a number of constraints, however, ranging from practical limitations (e.g. lacking means of transport to reach the communities) to inadequate attention given to education for soft skills, which would hamper them from effectively "delivering the message". Regarding education, youth knowledge needs to be improved on indigenous, nutritious plants, as well as on gender issues and innovative ways to address them (Kafui Agbe).

## AEAS challenges and limitations in improving gender equality and nutrition

Participants noted the various problems AEAS staff encounter in their work. First of all, issues were pointed out that generally affect the effectiveness of AEAS:

- ▶ **Lack of institutional support:** In particular, the restructuring of extension systems in countries where structural adjustment policies have been implemented has brought with it a reduction in personnel and logistical and financial means, as well as the abandonment of regular training of extension agents – who are consequently no longer (sufficiently) operational in the field (Georges Bazongo).
- ▶ **Perceptions and mindset with regard to AEAS:** AEAS has been projected as a "push model" where the beneficiaries are the recipients and the service providers are the helpers, which has hampered effective participation and sustainability. Consequently, private sector involvement in AEAS provision still lags behind: adequate incentives for farmers to commit their own resources are lacking, and there are misconceptions about property rights – i.e. farmers perceive extension as a public good (Adewale Oparinde).
- ▶ **Inadequate means of transport,** making it difficult to reach farmers in remote areas. Public transport is frequently not available; hence, extension workers need to travel by foot or (motor) bike (Stanley Weeraratna).

Furthermore, specific challenges were pointed out regarding the possibility of AEAS addressing gender and nutrition issues in its activities:

- ▶ **Developing countries lacking the financial resources to expand AEAS:** The government may employ extension agents, but these receive a low salary and little support to implement programmes, and thus reach only a small percentage of the intended beneficiaries (Dick Tinsley).
- ▶ **Extension workers "having enough on their plates":** As they are not able to handle more issues (Mahtab S. Bamji), nutrition may not be seen as their priority (Funmilayo Bosede Olajide).
- ▶ **Lack of universal approaches, methods and tools:** Gender and nutrition issues are context-specific, and tailored approaches need to be developed (Botir Dosov).
- ▶ **The traditional focus on economic objectives and increasing productivity** (Gabor Figeczky), which has led to insufficient attention given to gender and nutrition goals

(Takele Teshome, Georges Bazongo). Regarding the latter, the focus is more on staple crops than on diversifying production (Georges Bazongo). In addition, resource use efficiency and environmental protection are low on the political agenda, hindering efforts to develop a coherent nutrient management strategy (Gabor Figeczky).

- ▶ **Inadequate coordination and collaboration between health and agricultural institutions:** Food security and gender policies are designed and implemented independently (Mylene Rodríguez Leyton).
- ▶ **Poor linkages between research organizations, extension services and farmers:** Consequently, research is often not demand-driven, and the priorities of women are rarely brought into the research agenda. Poor linkages also hinder feedback loops from farmers. Adoption rates are low, and marginalized groups (such as women) especially do not have access to information (Takele Teshome).
- ▶ **Inadequate knowledge and training:** Training and technical levels do not match current needs. Training in modern communication techniques is lacking (Gabor Figeczky) and extension agents' knowledge on gender and nutrition is poor (Georges Bazongo, Stanley Weeraratna, Kafui Agbe). Nutrition is often not taught as a separate subject in agricultural education (Mahtab S. Bamji).
- ▶ **Gender beliefs and attitudes** (Lucy Quainoo): Women's crucial role in agriculture and in providing nutrition has not been adequately recognized (Mylene Rodríguez Leyton); as a result, AEAS has long been dominated by males (Jeston Lunda, Mahesh Chander). Knowledge is perceived to be a preserve of men (Jeston Lunda), and women are left out of extension activities (Mahtab S. Bamji, Eileen Omosa).
- ▶ **Under-representation and status of women among AEAS staff** (Georges Bazongo): Often extension workers are male, and these workers experience difficulty relating to women in order to understand the causes of gender inequalities and identify solutions (Jeston Lunda). When female extension staff are present, replacements are often not appointed in cases of pregnancy or childbirth (Stanley Weeraratna).
- ▶ **Female farmers' resource constraints:** In particular, technical solutions promoting women's economic empowerment are not successful because the women do not have the necessary investments funds, and need to make money immediately (Paul Rigterink).



Last, participants pointed to inherent limitations on what AEAS can actually achieve for nutrition:

- ▶ Nutrition depends not only on diet, but also on general health conditions, for which AEAS is not directly responsible.
- ▶ There is a permanent motivational gap between having cash in hand and the uncertain promise of better health through improved home consumption. This tension exists not only for farmers, but also for AEAS and government authorities who pride themselves on increasing rural prosperity.
- ▶ AEAS is not in a position to address the whole household food situation; it deals with what people grow for food, not with what they buy. For any given context, this raises the question of where the main nutrition threats to health come from: home-grown dietary monotony, the empty calories in purchased food, or both (Jane Sherman).
- ▶ Although the diets that are being promoted may be highly desirable, it is questionable whether the people targeted can afford and supply them. Agronomic technology is typically developed through small plot research, which can determine the physical potential of an area, but does not include the question of what is needed to expand that "small plot result". In fact, it requires that farmers implement practices for which they do not have the required means and energy (Dick Tinsley).

## Capacitating building for AEAS

Referring to the challenges AEAS faces in operating effectively, in particular when improving gender equality and nutrition, participants stressed the need for regular capacity building and reviewing of curricula (Philip Ifejika, Margaret Koyenikan).

It was argued that policies must provide the regulatory framework for curricula development based on quality assurance, accreditation of AEAS providers, continuous in-service education and needs assessments. Better information about the needs of farmers – which would significantly benefit AEAS – would be facilitated through adult learning and participatory methods to enable extension agents to work with farmers as equal partners. Farmer-to-farmer and locally based extension approaches involving paraprofessionals are effective in providing flexible and cost-effective services (Gabor Figeczky).

With specific regard to gender equality and nutrition, it was suggested that AEAS staff should be trained in gender-differentiated methodologies and nutrition (Gabor Figeczky, Eileen Omosa). In particular, attention should be paid to intrahousehold dynamics that influence decision-making related to agriculture and that have a bearing on nutrition outcomes – examples being decisions on which crops to produce, and which food to use for home consumption. Extension agents could then mentor and monitor communities in making these "gendered choices" (Mona Dhamankar). Also, there was a strong call for increasing the knowledge on nutrition by including it in pre- and in-service curricula. For example, a short online self-study course in food and nutrition could be developed (Jane Sherman).



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## The role of a global forum such as the GFRAS Nutrition Working Group

The discussion participants envisaged an important role for a global forum, such as the Global Forum on Rural Advisory Services (GFRAS) Nutrition Working Group, in supporting the move towards more gender- and nutrition-sensitive AEAS. First of all, it was argued that the forum should be an avenue for collective action towards better nutrition for all (Botir Dosov, Gulzada Kudaiberdieva), and provide a platform for multilateral discussion and sharing of knowledge and resources. Furthermore, it should focus on the harmonization of AEAS models, although attention should always be paid to context specificities (Botir Dosov).

It was suggested that the forum undertake the following actions:

- ▶ Conduct research, gather and promote successful experiences, identify their success factors (Mylene Rodríguez Leyton, Georges Bazongo), and assess lessons learned (Mylene Rodríguez Leyton).
- ▶ Provide capacity-building programmes for AEAS (Funmilayo Bosede Olajide) and disseminate the existing e-learning materials to integrate gender and nutrition developed by AEAS. The e-learning could be accompanied by face-to-face sessions (Mona Dhamankar).
- ▶ Identify local, cultural and religious constraints on gender equality and formulate solutions with local communities (Fardous Mohammad Safiul Azam). Specifically, the forum should work on projects aimed at improving the skills and leadership of women (Mylene Rodríguez Leyton).
- ▶ Raise awareness on nutrition and health in schools, universities and other localities, and develop materials for family workshops on gender and nutrition (Fardous Mohammad Safiul Azam). Furthermore, assist AEAS in providing women's organizations with education on health and nutrition (Stanley Weeraratna).
- ▶ Advocate for inclusion of nutrition and gender sensitivity in higher agricultural education (Mahtab S. Bamji).
- ▶ Raise awareness that the capacity of AEAS has been underutilized, and should consciously be included in food security and nutrition programmes (Funmilayo Bosede Olajide).
- ▶ Identify young professionals and youth think tanks, and engage them in the forum's work in order to generate new ideas (Fardous Mohammad Safiul Azam).



## Examples of AEAS successfully addressing gender inequalities and nutrition

### Cameroon

The Mboro people, a minority group with a nomadic lifestyle, have been increasingly affected by climate change. Men have been forced to travel farther to let their cattle graze, leaving behind their women and children, who are dependent on them for food. To improve women's economic and physical access to food, ecofriendly gardening systems have been implemented that integrate economic, nutrient-rich and indigenous crops. AEAS agents working with the women focus on: 1) reducing the dependency on men by building a market for the economic crops; 2) nutrition education; 3) fostering social networks and empowering women, by bringing farming women together and linking them to market women; and 4) building a culture of savings (Pride Ebile).

### Ethiopia

The Livestock and Irrigation Value Chains for Ethiopian Smallholders (LIVES) project – implemented by the International Livestock Research Institute and the International Water Management Institute, in partnership with public and private partners – has been building the capacity of public extension services to design and deliver gender-responsive AEAS. In particular the implementation of two participatory approaches, couples training and household coaching and mentoring, has been successful. For instance, women in male-headed households have become leaders of value chain activities and have increasingly influenced household decision-making. Furthermore, close engagement with extension staff along with facilitation of couples training and household coaching and mentoring has increased the willingness and ability to increase women's participation in AEAS events (Azage Tegegne).

### India

In Telegana, Dangoria Charitable Trust has been promoting income-generating crops while simultaneously developing homestead gardens to improve household nutrition. Other focus areas include organic cultivation methods, backyard poultry with high egg-yielding breeds, value addition, and behaviour change regarding health, nutrition and sanitation, with women in particular being targeted. The organization has been able to increase female participation in its activities by sending invitation letters directed at women, who are allowed to bring their husbands. In addition, improved transportation and mobile phones have promoted women's engagement.

Knowledge, Attitude and Practices surveys and household food consumption surveys show that the interventions have had positive results (Mahtab S. Bamji).

### Kyrgyzstan

The Small Business and Income Creation Programme, implemented by Helvetas and the Aga Khan Foundation in the Osh Region, involves gender-sensitive planning in efforts towards poverty reduction, addressing inequalities between villages and cities and the improvement of employment opportunities (Botir Dosov).

### Nigeria

The experience of HarvestPlus in implementing biofortification programmes showed that stronger economic incentives – i.e. beyond those directly linked to the farming household's utilization of the services or products provided – need to be built in for farmers to increase their participation and resource commitment, and ultimately to enhance the effectiveness of AEAS. The HarvestPlus project involved the "creation" of local entrepreneurs to be at the forefront of AEAS provision in their community, along with the appointment of "rural facilitators" to provide AEAS in their communities and also act as bulking agents, dealing with the orders for agricultural produce coming from urban areas. The fact that there is constant demand for their produce creates economic incentives: farmers are motivated to cultivate more nutritious crops, and locals are motivated to provide nutrition education to farming households. Complemented with the "train-the-trainers approach", this intervention concept can significantly contribute to behaviour change (Adewale Oparinde).

### Sri Lanka

The Sri Lankan Government's Poverty Alleviation Programme included the promotion of home gardening. Home gardeners were assisted in obtaining the necessary inputs through the establishment of local microenterprises – mainly involving women – concerned with producing seeds and planting material, vegetative propagation, and manufacturing organic fertilizers and biopesticides. Participatory discussions on nutrition and agricultural methods, involving farmers, health officers and extension agents, contributed to the success of the programme (Stanley Weeraratna).

## Multicountry initiatives

### Bangladesh, Ghana, India, Malawi, Mali and the United Republic of Tanzania

The results of the "Pathways" initiative by CARE, focusing on women farmers, show that expanding extension services can have significant impacts on gender. Achievements include: 1) a triple increase in women's access to extension, with access particularly gained through Farmer Field and Business Schools; 2) a significant increase in the number of "empowered" women according to the Women's Empowerment in Agriculture Index; 3) increased ability of women to influence household decisions about assets; and 4) better access to high-quality inputs. Women have gained respect and power in the household and the community by "being the person who got agricultural knowledge from an extension agent", becoming better farmers, and consequently gaining higher incomes (Emily Janoch).

### Ethiopia, Kyrgyzstan, Nepal, Pakistan and Peru

The Nutrition in Mountain Agro-ecosystems project, funded by the Swiss Agency for Development and Cooperation, aims to improve the sustainability and diversity of diets (Gabor Figeczky, Frank Eyhorn, Gulzada Kudaiberdieva). The focus of the project has been on: 1) raising awareness on nutrition; 2) sustainable small-scale farming; 3) diversification of home-based food production; 4) small-scale animal husbandry; and 5) post-harvest handling.

The project has helped to increase farm incomes, strengthen the role of women, improve family health, protect natural

resources, and increase resilience to market fluctuations and climate change. Producing and selling a variety of nutritious products improves the nutrition situation of local communities and provides business opportunities for farmers (particularly women) and other actors along the value chain. In addition, it serves local policy goals related to improving health, alleviating rural poverty and reducing environmental impacts (Frank Eyhorn).

### Uganda and Zambia

The Sustainable Nutrition for All project implemented jointly by SNV, KIT and CDI involves public AEAS in nutrition activities. Adopting a community-based approach has proven to be effective and sustainable, with community representatives contributing without honorariums.

The project has been concerned with integrating extension agents in nutrition coordination committees that interface with communities along with health technicians and schoolteachers. In addition, the extension agents work closely with community-level nutrition champions who function as the link between the nutrition committee and the community. Other activities include providing technical expertise for establishing school and home gardens; regarding the management of the latter, they have been oriented towards nutrition issues as well as intrahousehold dynamics. Specifically, they are concerned with consumption and associated behaviour change, and follow up on these aspects regularly. (Mona Dhamankar).





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## VIDEOS

AccessAgriculture – Feeding improved chickens  
<http://www.accessagriculture.org/feeding-improved-chickens>

AccessAgriculture – Making business from home raised chicks  
<http://www.accessagriculture.org/making-business-home-raised-chicks>

AccessAgriculture – Taking care of local chicken  
<http://www.accessagriculture.org/taking-care-local-chicken>

AccessAgriculture – Working together for healthy chicks  
<http://www.accessagriculture.org/working-together-healthy-chicks>

## WEBSITES

AgroNigeria  
<https://agronigeria.com.ng>

Colorado State University – Smallholder agriculture  
<http://www.smallholderagriculture.com>

Dangoria Charitable Trust  
[www.dangoriatrust.org.in](http://www.dangoriatrust.org.in)

FAO / TECA – Promoting women's participation and leadership in producers' organizations  
<http://teca.fao.org/discussion/promoting-women%E2%80%99s-participation-and-leadership-producers%E2%80%99-organizations>

Global Forum for Rural Advisory Services  
<http://www.g-fras.org>

JUCCCE – Food Heroes  
<https://www.juccce.org>

Mountain Agro-ecosystem Action Network  
<https://maan.ifoam.bio>

Young Professionals for Agricultural Development  
<http://www.ypard.net>

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