



# INCREASING ACCESS TO AGRICULTURAL EXTENSION SERVICES AMONG RICE VALUE CHAIN ACTORS - NEW APPROACHES

## Summary:

This policy brief takes a look at the policy framework around Extension Service delivery to actors within the rice value chain in Nigeria. The paper also presents some recommendations on modern, gender sensitive, and cost effective approaches to agricultural extension services. This policy brief recommends the replication and expansion of the Women in Agriculture (WIA) Extension Program among rice value chain actors in Nigeria. The Women Extension Volunteer (WEV) model is recommended.

## 1. INTRODUCTION

Nigeria, almost food self-sufficient in the 1960s, has become a food-deficit country importing large quantities of foods. In 2010, the value of Nigeria's imports of food and beverages was EUR 2.974 million (NBS, 2011). About 85 per cent of Nigeria's total land area is agricultural land (78.5 million hectares) out of which 39.5 million ha is arable. Of the arable land, only 60 per cent has so far been cultivated. Lack of access to finance among value chain actors have immensely contributed to the sector dwindling fortunes.

Rice is a major staple food in Nigeria. Due to its large population, Nigeria is also the region's largest consumer of rice in absolute terms. The country's estimated annual demand for milled rice is 5.2 million tonnes, while the average national production is 3.3 million tonnes. The supply and demand gap of 1.9 million tonnes can only be bridged by importing rice. Nigeria's rice processing capacity is 2.8 million tonnes of paddy (Jica, 2013)<sup>1</sup>

<sup>1</sup> Status of NRDS Implementation in Nigeria, Presentation at the Fifth General Meeting of CARD, 5-6 February 2013, Dakar, Senegal

Meeting the demand for rice depends on farmers' ability to produce the desired quantity and quality of produce.

**“Farmers’ ability to meet production requirement is also significantly affected by their technical know-how of contemporary methods of rice production”.**

A study conducted by Tologbonse, et al (2008)<sup>2</sup> on information needs of rice farmers in Niger State disclosed that majority of farmers (89.9%) need information about crop production. This is similar to the findings of Wesseler and Brinkman, 2002<sup>3</sup> who reported that information needs of rice farmers are centered on production.

**“Although extension workers have been deployed to state Agricultural Development Programmes which have jurisdiction over agricultural extension services, the number of deployed staff is small and are not necessarily experts in rice cultivation” (CARD, 2009) .**

As a result, the level of technical expertise and supervisory capacity specifically with regard to rice cropping is a problem.

This policy brief takes a look at the policy framework around Extension service delivery to actors within the rice value chain in Nigeria.

The paper also presents some recommendations on modern, gender sensitive, and cost effective approaches to agricultural extension services that facilitate improved yield.

## **2. POLICY ENVIRONMENT FOR EXTENSION AND ADVISORY SERVICES**

The effective implementation of Extension delivery in Nigeria practically begun with the establishment of the Agricultural Development Projects (ADPs). ADPs survived with support from the World Bank (1975-1995).

<sup>2</sup> Tologbonse, D; O. Fashola and M. Obadiah (2008). Policy Issues in Meeting Rice Farmers Agricultural Information Needs in Niger State. Journal of Agricultural Extension Vol. 12 (2) p 84-85.

<sup>3</sup> Wesseler, G. and Brinkman, I.M. (2002). Bridging information gaps between farmers, policy-makers and researchers and development agents. Paper presented at the regional conference on Agro-forestry impacts on livelihoods in Southern Africa: Putting research into practice. Aventura Warmbath, South Africa, 20-24 May, 2002. CTA Working Document Number 8030

Midway into the implementation of the ADPS (1991), a policy of a unified agricultural extension service (UAES) which mandated extension delivery through a single extension agent to the farmers for the complete farming system was enacted for the ADPs, to improve effectiveness and efficiency of the extension service.

The first documented but not legislated National Policy on Agriculture was adopted in 1988 at the height of the State-wide ADP Era, and was “expected to remain valid for about fifteen years, that is, up to year 2000” (FMARD, 2001)<sup>4</sup>. In 2008, the Government of Nigeria promulgated a new policy by way of the National Food Security Program document which provided for the establishment of Agricultural Extension Services (FMAWR, 2008)<sup>5</sup>.

Despite these achievements, a wide gap still exists in the delivery of extension services, particularly in the rice value chain. For instance, there are 54 extension personnel assigned to Ebonyi State, each of which is responsible for around 8,000 farm households. In the case of Niger state, one extension worker is responsible for 1,600 households (CARD, 2009). Accordingly, it is considered physically impossible for extension staff to provide regular service to their constituent farmers (CARD, 2009).

## **3. POLICY OPTIONS FOR IMPROVING EXTENSION SERVICE DELIVERY**

Various innovative initiatives have emerged as good practices within different agricultural extension service delivery systems. Some of these initiatives, including gender sensitive approaches are discussed as follows:

### **3.1. Gender-sensitive agricultural Extension through farmer group approaches**

In Tanzania, the Farmer-to-Farmer extension developed by the Farmers’ Groups Network (MVIWATA) has promoted women’s

<sup>4</sup> FMARD (2001): “Federal Republic of Nigeria: New Agricultural Policy Thrust” Federal Ministry of Agriculture and Rural Development, Abuja.

<sup>5</sup> FMA<sup>5</sup> FMAWR (2008). Nigeria’s National Food Security Programme. Federal Ministry of Agriculture and Water Resources, Abuja, Nigeria.

participation in networking and decision-making processes. The approach underscored the multifaceted nature of farmers' issues and the need for empowering farmers through their direct involvement, while identifying priority problems and testing out practical solutions identified by researchers and the farmer groups (Mattee and Lassalle 1994).

Farmer groups are characterized by their diversity as they included not only separate women and men farmer groups, but also mixed groups which worked closely with field officers to disseminate different agricultural innovations and practices.

The approach used by MVIWATA was successful in many ways, notably in bringing together female and male farmers on issues of common interest (for instance, crop production and farm management), and enhancing communication and building social solidarity among the farmers. It was also documented that farmers' groups acted as the guarantor to enable male and female members to gain access to credit facilities (Mattee and Lassalle 1994).

This was reported by Onyibe (2001) in Odurukwe et al (2006)

### **Box 1: Women in Agriculture (WIA) Extension Program in Nigeria**

The Women in Agriculture (WIA) Extension Program in Nigeria also built on a farmer group approach. As female farmers' contribution was largely underestimated in different agricultural development strategies (ADPs), the WIA program was developed to improve access to EAS for women farmers in rural settings. In an effort to integrate a gender focus into ADPs, a WIA unit was created with trained female extension agents working directly with Increasing access to agricultural extension and advisory services 7 rural women farmers throughout the country to identify their technical and information needs, and support them through training and technology dissemination to increase their productivity (Onyibe 2001; Odurukwe et al. 2006).

WIA extension workers assisted women in establishing group farms to provide advice on marketing agricultural products, and train them on recommended agricultural technologies (e.g. processing, storage etc.). Formation of women farmers' groups facilitated the dissemination of agricultural innovations and provided them with better access to farm inputs and credit facilities. Over the years, the program has proved to be effective in incorporating female farmers' needs into national agricultural development strategies and uplifting the socio-economic wellbeing of women beneficiaries in rural areas. The inaccessibility of the program to many female farmers in remote areas however, limited the adoption of WIA packages, and the involvement of women in the selection and design of technologies, resulting in lower adoption rates (Odurukwe et al. 2006).

Similar models have been tried in the Federal Republic of Nigeria through the Women in Agriculture (WIA) Extension Program (box).

## **3.2. Gender-sensitive Agricultural Extension through farmer group approaches**

The Women Extension Volunteer (WEV) Approach in Ghana was designed with the aim of providing affordable extension delivery systems and increasing extension service coverage to female farmers in remote areas of Ghana<sup>6</sup>. The WEV model is the result of collaborative efforts of the Ghanaian Ministry of Food and Agriculture (MOFA) and the Voluntary Service Overseas (VSO) Ghana, a non-governmental organization. The model is based on the key leadership role of the community-based female volunteers in supporting the community farmer groups through facilitation and basic training on topics discussed during WEVs regular meetings (Hird-Younger and Simpson 2013)<sup>7</sup>.

<sup>6</sup> Mbo'o-Tchouawou, M. and Colverson, K. 2014. Increasing access to agricultural extension and advisory services: How effective are new approaches in reaching women farmers in rural areas? Nairobi, Kenya: International Livestock Research Institute (ILRI).

<sup>7</sup> M. and Simpson, B. 2013. *Women extension volunteers: An extension approach for female farmers*. MEAS Case Study #

2. Urbana, USA: Modernizing Extension and Advisory Services (MEAS).

The WEV model has proven innovative in addressing some issues that prevent female farmers from accessing extension services in northern Ghana. The primary benefits to female farmers included the capacity strengthening of female farmer groups through the central role that female women volunteers play as experienced agents in their communities. In addition, facilitating communications and establishing connections between female farmers and extension services providers also enhanced learning. Moreover, the objective of the WEV to supplement public extension services was achieved, as WEVs acted as community-level liaisons to increase access to extension information and services among female farmers who were traditionally underserved<sup>8</sup>.

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<sup>8</sup> Mbo'o-Tchouawou, M. and Colverson, K. 2014. Increasing access to agricultural extension and advisory services: How effective are new approaches in reaching women farmers in rural areas? Nairobi, Kenya: International Livestock Research Institute (ILRI).

### 3.3. Using Information and Communication Technologies (ICTs) for Extension delivery

ICT-based solutions are increasingly being advocated by extension practitioners for use in agricultural production and marketing systems. These range from traditional radio programs using add-on features, to television shows using short message services to request information on agricultural varieties or farming practices, to the emerging mobile technology services and internet<sup>9</sup>.

Increasing use of ICTs can potentially speed up the effective dissemination of information. It also enhances the interactive functionality provided by traditional and modern ICT services (Jain et al. 2012; Agu 2013; Manfre and Nordehn 2013)<sup>10</sup>.

Rural areas in Nigeria are progressively being provided with telecentres where women farmers can access varied agricultural information using traditional means but also new applications such as e-mail, internet browsing and distance-learning tools (Agu 2013).

A recent study by Manfre and Nordehn (2013) revealed the increasing women's ownership of and control over mobile phones in rural Kenya as an important contribution to increasing access to agricultural information services delivered by mobile technologies.

#### 4. Recommendations

1. To the Federal Ministry of Agriculture and Water Resources, and the State Agricultural Development Programme, this policy brief recommends the replication and expansion of the Women in Agriculture (WIA) Extension Program among rice value chain actors in Nigeria. The planning of the Women in Agriculture (WIA) Extension Program should however, consider:
  - Extending the programme to remote and hard to reach communities to increase the rate of adoption
  - Involvement of women in the selection and design of technologies to increase the rate of adoption particularly among women.
2. The Women Extension Volunteer (WEV) model is recommended to Non-Profit Organisations (NGO) and voluntary based organization for replication in Nigerian rice value chain. The Federal Ministry of Agriculture and Water Resources, and the State Agricultural Development Programme on the other hand, should provide the needed assistance and support to interested NGOs for successful implementation.

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<sup>9</sup> Mbo'o-Tchouawou, M. and Colverson, K. 2014. Increasing access to agricultural extension and advisory services: How effective are new approaches in reaching women farmers in rural areas? Nairobi, Kenya: International Livestock Research Institute (ILRI).

<sup>10</sup> Manfre, C. and Nordehn, C. 2013. Exploring the promise of information and communication technologies for women farmers in Kenya. Cultural practice, LLC, MEAS Case Study #4. Urbana, USA: Modernizing Extension and Advisory Services (MEAS).