The USAID Agricultural Extension Support Activity (AESA) is being implemented by the Dhaka Ahsania Mission (DAM) in technical partnership with CARE Bangladesh and mPower with funding support from the USAID. The AESA project is addressing sustainable productivity, resilient livelihood and improved food security for smallholder farmers in the Feed the Future (FtF) zone of Bangladesh, which will be ended by February 2018.
Project Goal

The goal of the project is to “strengthen the existing extension system in southwest and central Bangladesh to sustainably improve food security and nutrition for smallholder farmers with an emphasis on women”.

Project Objectives

The major objective of the project is to enhance access to and utilization of agricultural extension services by smallholder farmers – both men and women. The project is working for building capacities and creating supports to a farmer demand-driven agricultural extension system, synergized by the use of information communication technology (ICT).

Working Area

In terms of geographic distribution, the project works in 26 upazilas of following 12 districts of the central and southwest part of Bangladesh:

<table>
<thead>
<tr>
<th>Regions</th>
<th>Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jessore</td>
<td>Jessore, Magura, Faridpur and Rajbari</td>
</tr>
<tr>
<td>Khulna</td>
<td>Khulna, Satkhira and Narail</td>
</tr>
<tr>
<td>Barisal</td>
<td>Barisal, Bhora, Pirojpur, Barguna and Patuakhali</td>
</tr>
</tbody>
</table>

Engagement with extension agents

- Needs based training and capacity building (technical /soft skills / ICT)
- ICT tools development and training
- Increased mobility (motorcycles)
- Improved communications (smart-phones, ICT apps)
- E-learning & ICT-enhanced professional development

Engagement with farmers

- Linkages to financial capital
- Demo plots
- Harvest post-harvest & Nutrition Messaging
- Linkages to quality inputs
- Seed quality/ improved varieties
- Judicious use of pesticides & fertilizer
- Improve linkages to markets

Increased Demand for Extension

- Linkages to quality inputs
- Seed quality/ improved varieties
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- Improve linkages to markets

Increased Demand for Extension
**Project Interventions**

**Component-1: Strengthening Farmer Producer Groups:**

The project directly works with 110,000 smallholder households to increase and enhance their access to improved extension services which ultimately leads towards increased household incomes, improved nutritional status and food security.

These farmers are mobilized into 3,942 farmer producer groups (FPGs) on 6 selected value chains: jute, chili, mung bean, dairy, beef fattening and fish. The farmers received training from the project on improved technical production practices as well as participate in the awareness raising session on gender and nutrition. Project not only work for their knowledge development but also facilitate them so that they can collectively work for their rights and benefits. Groups are assisted to link themselves with input and output market, financial institutes and public extension workers.

As a result of the project initiatives productions have increased significantly up to 50% as 105,344 farmers (49% female) have applied improved management practices and brought 27,594 hectares of land under improved technologies.

<table>
<thead>
<tr>
<th>FPG Type</th>
<th>No.</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dairy group</td>
<td>715</td>
<td>2,437</td>
<td>18,292</td>
<td>20,729</td>
</tr>
<tr>
<td>Beef fattening group</td>
<td>269</td>
<td>1,471</td>
<td>6,224</td>
<td>7,695</td>
</tr>
<tr>
<td>Jute group</td>
<td>1,289</td>
<td>24,712</td>
<td>11,863</td>
<td>36,575</td>
</tr>
<tr>
<td>Chili group</td>
<td>282</td>
<td>5,319</td>
<td>11,863</td>
<td>7,826</td>
</tr>
<tr>
<td>Mung bean group</td>
<td>1,014</td>
<td>16,536</td>
<td>12,581</td>
<td>29,117</td>
</tr>
<tr>
<td>Aquaculture group</td>
<td>373</td>
<td>6,019</td>
<td>4,441</td>
<td>10,460</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,942</td>
<td>56,494</td>
<td>55,908</td>
<td>112,402</td>
</tr>
</tbody>
</table>

**Innovation under component 1:**

**A-Card: farmers’ access to formal financial services:**

The smallholders’ access to finance through bank; popularly known by a short name: ‘A-card’ is a unique initiative of the project where the farmers are getting loans directly from a commercial Bank with the assistance of local Microfinance Institutions (MFIs). It is a flexible agricultural credit product with 10% interest rate and flexible payment terms with MFI/NGOs’ agent banking system that matched with agricultural production cycles.

As of 31 July 2017, 3,100 farmers (of which 64% women) have registered with three MFIs/NGOs (Society Development Committee (SDC) in Faridpur, Grameen Jano Unnayan Sangstha (GJUS) in Bhola
and Socio Economic Development Organization for the Poor (SEDOP) in Khulna) under the initiative. A total of USD 190,000 have been disbursed to 1,100 farmers of which 57% are women. Total 30 input retailers are participating in the initiatives in three locations. The first lot of 465 loan receivers, of which 63% were women, have made full payment of their loans (USD 77,000) with interest through agent banking outlet.

**Component 2: ICT based extension solution for the farmer**

The AESA project has developed and systematically embedded a variety of e-Ag apps and tools into the existing agricultural extension services so that these are available to the farmers and various agricultural stakeholders. The overall aim of the project through ICT is to provide easy access to up-to-date information on improved farming practices and agricultural markets adapted to local contexts. The project introduced ICT apps are also being used to strengthen the capacities of agricultural extension officials and at the same time, help capture accurate data from the fields.

AESA project has developed various ICT Apps like Farmer Query System (FQS), Crop Diagnostic Apps (CDA), SAAO Diary, etc. More than 90,000 queries were sent for ICT based solutions through the FQS by the farmers for their agricultural production in last one year.

**Innovation under component 2:**

**Digital monitoring system for DAE:**

For smooth and effective functioning of the field level activities of the Department of Agricultural Extension (DAE), a tool has been developed by the project in consultation with the DAE management. This is a digital monitoring and reporting format system for the field based staff. The tool is termed as ‘Dash board’.

The objectives of this model is to demonstrate a digitalized monitoring system to strengthen and increase the follow-up of DAE officials. The activities can be monitored by the DAE top management and DAE field officials (UAOs at upazila level and DDAEs at district level).

The monitoring system provides scopes areas of improvement for the DAE management at field level activities so that they take necessary and effective measures to address those issues.

The DAE high officials have expressed their interest to run the monitoring system online and in all districts of Bangladesh in future.

**Component 3: Strengthening capacity of public and private extension agent**

The project has provided training to enhance public extension agents’ capacity not only on technical area but also on life skill like gender, nutrition, facilitation technique, ICT to the 900 field level staff of Department of Extension (DAE), Department of Livestock (DLS) and Department of fisheries (DoF). The project, jointly with the DAE conducted a training need assessment (TNA) and based on the outcome of the assessment, training program was organized. The training was a unique one as it is the first time any national NGO collaborated with a government body.

The project also works with the national and local private sectors so that they can provide necessary and qualitative supports to the farmers at field level. Project facilitate different private companies like ACI, Mega and ensure training of the private extension agent in presence of concern public departments. The project works, facilitates and links different private extension agents with the farmers.
With project facilitated training and learning sessions, around 900 public and 1,100 private extension agents have gained knowledge to become resource persons at grass root level. Business linkage meetings were conducted between the FPGs and private extension agents in more than 90% of project FPGs as a result of which farmers are able to save around USD 51000 within two cropping season.

Innovation under component 3:

Agricultural Extension Service Centers (AESC) established at block level in partnership with DAE:

The project along with the Department of Agricultural Extension (DAE) analyzed the present structure of DAE’s extension service delivery mechanism to farmers at fields and decided to demonstrate an improved agricultural extension service delivery model. The model is known as Agricultural Extension Service Centers (AESC). The AESCs are operated at the block level from where the DAE field staff – the Sub Assistant Agriculture Officer (SAAO) provides necessary extension supports to the farmers.

The ultimate aim of the AESCs is to establish “one-stop agriculture service centers” in which farmers can come to get information and advice related to their field crops and horticulture production.

Project achievement till July 2017

Developed skilled extension agents:

Around 900 public and 1,100 private extension agents and 11,000 farmer leaders become resource person which ensure around 15,000 quality learning sessions.

Economic empowerment:

105,344 farmers (49% female) have applied improved management practices and brought 27,594 hectares of land area under improved technologies.

ICT based solution for AES:

More than 90,000 query has been sent by the farmers to get ICT based solution for their agricultural production within last one year.

Economic empowerment:

105,344 farmers (49% female) have applied improved management practices and brought 27,594 hectares of land area under improved technologies.

Women empowerment:

49% of women reported an increase in their decision-making power over production and 64% decrease in workload. 116 women participated in UP election and 28 were elected.
Lessons Learnt

- Capacity building of private extension agents is very important to ensure quality services to smallholder farmers, especially for the women (project private sector study observed that only 19% of private extension agents provided reliable and correct advises to the farmers on farm production);
- This is difficult for the Smallholder farmers to adopt improved technology without having adequate financial resources for investment;
- Recognition of women as farmers is vital to ensure proper extension services and formal financial inclusion;
- Introduced five key practices training could help smallholder farmers than that of the large farmers to increasing their farm production.