USAID’s Afghanistan Agricultural Extension Project-II (AAEP-II) helps Afghanistan’s Ministry of Agriculture, Irrigation and Livestock (MAIL) deliver extension services to rural clientele by strengthening cooperation and linkages between MAIL and the other government agencies like Directorates of Agriculture, Irrigation, and Livestock (DAILs).

Key components of AAEP-II are applied training in appropriate agriculture technologies for DAIL extension staff, administrative capacity building, and utilization of teaching farms, (Provincial Model Teaching Farms (PMTF)), farmer field schools, farmer field demonstrations, and other resources to teach and demonstrate the benefits of improved farming, crop storage, and other technologies in five core provinces (Balkh, Herat, Kabul, Nangarhar, and Kunduz). Purdue leads the efforts in Herat Province. UC Davis, Washington State University, Texas A&M, and University of Maryland lead the efforts in the other targeted provinces. The project also provides small grants for working groups to facilitate projects that improve extension worker capacity and provide a sustainable benefit to farmers.

Purdue has a focus on building capacity in postharvest storage and integrated pest management. Purdue faculty are working directly with Herat DAIL employees to teach them storage and pest management concepts so they will be able to teach other extension staff the techniques.
Overview:
The Purdue Improved Crop Storage (PICS) program is an integral part of AAEP II’s aim to build capacity of extension workers and aid farmers. The majority of farmers in Afghanistan use traditional crop storage methods such as the kandu and burlap sacks. These storage methods allow for air to enter and exit and thereby lose a significant amount of their harvest to insects, rodents, and moisture. PICS bags use hermetic storage principles and are made from 3-layer, high density polyethylene. The bags are made locally and promoted by the Herat DAIL to help farmers effectively store crops and protect from pests and moisture.

In September 2015 AAEP II’s Wasim Hakimi, alongside DAIL Plant Protection Manager Basir Tabib trained the DAIL Cooperatives Dept. in Herat City.

Training Objective:
The objectives of this training were to build the capacity of extension worker skills in the field and introduce new technology aimed at enhancing household food security and income potential. The training improved the technical ability of the extension worker and demonstrated effective ways to provide extension services. After the training the DAIL Cooperative leaders will be expected to replicate the training in their respective districts.

Workshop Activities:
AAEP II met with members of the DAIL Cooperative Dept. at the Plant Protection Building in Herat City. Wasim Hakimi and Eng. Basir Tabib began the training with PowerPoint presentations that explained the hermetic storage concept and their benefit to farmers and traders. The group discussed the storage problems that farmers face in Herat, primarily pests. Wasim then shared how the PICS bags are made and relevant research from within Afghanistan and from other countries where the bags are being used.
In the afternoon, participants were provided samples of the PICS bags and seed to set up “on-farm trials” or demonstrations. The activity showed how to effectively use the bags and create a hermetic seal. After the activity, participants discussed how they will conduct the training in their districts.

**Workshop Outcomes:**
The AAEP II and DAIL led training provided the DAIL Cooperative Dept. new knowledge and skills that will improve their job performance. Wasim also shared all the PowerPoint material with the participants so they could refer to them in the field. The introduction of PICS bags should assist DAIL extension efforts and households to improve food security and income.

**Next Steps:**
To conclude the training, participants registered with AAEP II’s Wasim Hakimi to plan site visits. The site visits will include a field-based training and the establishment of “on-farm trials” in rural villages which will be led by DAIL extension workers and cooperative leaders. Since the DAIL Cooperative Dept. works with existing farmer groups it will allow extension workers to engage large groups of farmers. Some participants represent insecure districts that AAEP II cannot travel to – in this case AAEP II will provide a camera, sign-in sheets, and PICS bags to establish the demonstrations.