Ahafo) that are the major cowpea producing areas in Ghana. The recorded increases in production, primarily due to research and extension support, have been substantial. Given the major concern of farmers is how to store their harvest for future use and also to meet good prices in the lean season. The problem is infestation by the storage weevil *Callasobruchus maculatus* during storage. The weevil can cause up to 100% grain loss in unprotected harvest.

Available post-harvest control practices including chemical treatment have not been entirely effective and are also associated with phytosanitary concerns. The need for an effective and efficient storage practice, which is also environmentally friendly and farmer friendly, was brought to the fore by the Purdue Improved Cowpea Storage (PICS) technology. The PICS technology involves storage of grain in three bags, an exterior woven bag with two inner airtight hermetic bags, without the use of chemicals. The airtight condition created by the two inner hermetic bags suppresses the growth and development of the storage weevils. The method is thus very cost effective with 100% grain recovery from storage and also very safe as no chemicals are involved.

As part of the dissemination of the PICS technology in Ghana, this baseline survey was conducted to assess the level of adoption of cowpea storage technologies in the country. The results can inform the dissemination process and form a basis for evaluating the success of the PICS project in Ghana.

**MATERIALS AND METHODS**

Both primary and secondary data were collected for the study. The two types of data describe the characteristics of the sampled cowpea producing communities and households. Secondary data were collected mainly through desk studies. Two rounds of surveys were conducted for the collection of the primary data. These included community and household surveys.

The study covered four political regions (Northern, Upper East, Upper West and Brong Ahafo) that are the major cowpea producing areas in Ghana. A multi-stage sampling procedure was followed for the selection of the cowpea producing communities and households. Eight communities in each of the four regions and 10 households per community for a total of 320 households were surveyed.

**RESULTS AND DISCUSSION**

Six cowpea storage technologies were identified with the sampled farmers (Figure 1). The most popularly known among them was the insecticide technology (phostoxin and actellic), followed by the ash and sun drying technologies. About 8% of the farmers showed knowledge of the triple and double bagging cowpea storage technologies. The double bagging technology was more popular with farmers in the Northern and Upper West Regions. The drum technology was the least known, and was known only to the farmers selected from the Northern and Upper East Regions (Figure 1).

The study further revealed that extension services, research, NGOs and fellow farmers were the main sources of information on the storage technologies (Figure 2). With the exception of extension services, all the farmers had access to research and NGOs.

Further analysis of the data showed that the insecticide technology of cowpea storage was adopted by about 60 percent of the sampled households (Figure 3). About 15 percent of the sampled farmers adopted the ash technology while 11 percent the sun drying technology. The triple bagging technology was the least adopted storage technology.

The sampled farmers stored more than 70 percent of their harvested cowpea by the insecticide technology (Figure 4). The ash storage technology accounted for an average of about 42 percent of the harvested cowpea. The double and triple bagging technologies together was the third most popular storage technology as it accounted for about 36 percent of the harvested cowpea. Sun drying technology accounted for about 25 percent of the harvested cowpea. The drum technology was the least popular technology as only 11 percent of the produce was stored using the technology.

**CONCLUSIONS**

The results suggested some level of awareness and adoption of improved cowpea storage technologies including the triple bagging technology by farmers in Ghana. These were as a result of the activities of extension, research and NGOs as well as farmers themselves. Thus, there is a high potential of adoption of the new PICS technology through proper targeting of households and aggressive promotional activities.

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