

## AVIAN FLU SCHOOL (AFS)

### PROJECT DESCRIPTION

*The Avian Flu School (AFS) was designed to help minimize the health and economic impact of H5N1 highly pathogenic avian influenza (HPAI) by providing the training necessary to improve a community's ability to prevent, respond to and recover from an outbreak of HPAI. The AFS collaborates with faculties of veterinary medicine, the ministries of agriculture and health and with various international agencies involved in HPAI response to conduct effective training courses. The multi-tiered, train-the-trainer program is designed to educate animal health, public health, and agricultural extension workers about HPAI, enabling them to deliver this information at the community level in developing countries. The program works at three levels. Tier I is the training of instructors among existing professionals at the national level. Tier II is the training of district veterinarians, agricultural extension staff, wildlife managers and public health workers and is to be conducted by the new AFS instructors, trained in Tier I. Tier III works at the village level, whereby individuals trained in Tier II further transfer their knowledge and skills to community leaders and villagers. Additionally, as part of an initiative to research and improve village poultry health and productivity, the AFS implemented a village-level training and research project in three regions of Tanzania where Newcastle disease vaccinations are being conducted and monitored.*

### PRINCIPAL INVESTIGATORS

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### SUMMARY OF ACHIEVEMENTS

- The AFS, through its national-level (Tier I) Train the Trainer program, trained 134 avian flu prevention and response instructors in the ministries of animal health, public health, agriculture and faculties of veterinary medicine in Nigeria, Kenya, Tanzania, Uganda, Ghana, and Djibouti. At the district level (Tier II), in Tanzania and Djibouti, 178 people were trained, while 184 Tanzanian villagers and community leaders received training at the village level (Tier III). Nearly 500 individuals received AFS training in 2006-2007.
- A total of 74 women participated in the AFS trainings at all levels. Eighteen women attended the national level (Tier I) train-the-trainer workshops, resulting in trained instructors of both genders in each of the four AFS project

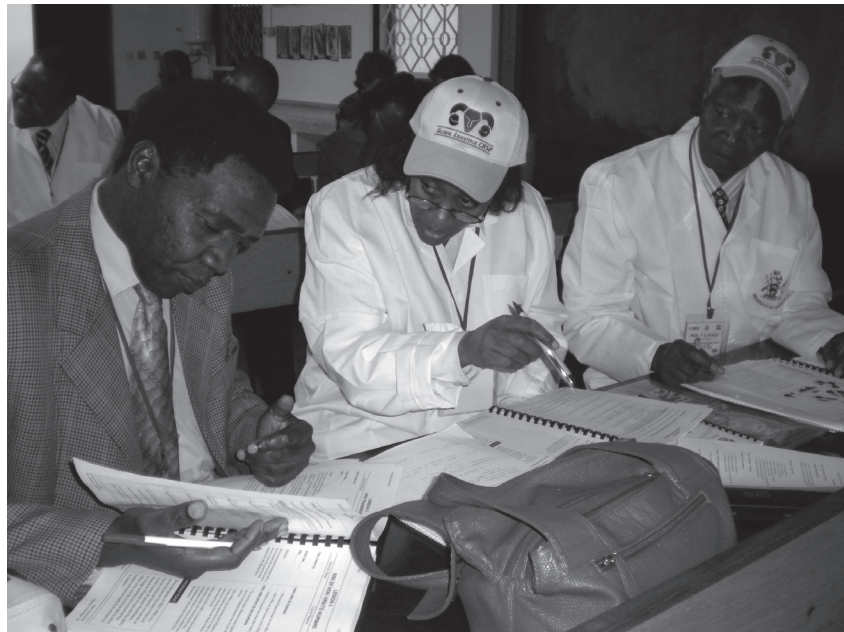
countries (Tanzania, Kenya, Uganda and Ghana). Furthermore, women's groups have been a target audience for trainings in the implementation of the village-level Newcastle disease vaccination and poultry health training program in Tanzanian villages.

AFS Non-Degree Training for 2006-2007			
Country	Male	Female	Total
Austria	1	0	1
China	1	0	1
Djibouti	32	4	36
Egypt	1	0	1
Ghana	22	2	24
Israel	1	0	1
Jordan	1	1	2
Kenya	17	4	21
Tanzania	322	56	378
Uganda	22	4	26
United States	2	3	5
<b>Total</b>	<b>422</b>	<b>74</b>	<b>496</b>

- Following the AFS briefing and training of community leaders and local government officials in Tanzania, the district of Iringa formulated and adopted a new policy to make Newcastle disease vaccination and improvement of poultry health a priority for development and has implemented a district-wide Newcastle disease vaccination program.
- The Avian Flu School utilizes technologies, such as the FluDetect test kit, a rapid antigen detection kit for birds, developed through biotechnology research. In 2006-2007, 152 animal health and human health professionals in Uganda, Kenya, Tanzania, Djibouti and Ghana were trained in using the FluDetect test

kit so that they may incorporate it into their early detection program in the field.

- The three faculties of veterinary medicine in Kenya, Uganda and Tanzania decided to incorporate and utilize portions of the AFS curriculum in the instruction of veterinary students in poultry medicine.
- In Tanzania, a total of 184 community leaders and public officials received training on poultry vaccination for Newcastle disease and the benefits of improving poultry health. Trainings on the recognition and early reporting of avian flu have fostered new strategies for veterinary extension, including strategies for increasing poultry vaccination.
- Improving the health and productivity of village poultry can improve food security for the rural poor. The AFS developed and is researching strategies for extending poultry health training and veterinary extension to villages. For example, strategies for increasing poultry vaccination are being studied in three wards of Tanzania.



*At a national-level AFS training in Kenya in July 2007, animal and human health professionals are trained to be avian flu prevention and response instructors. Photo by David Bunn.*

- Chicken production is an appropriate activity for micro-enterprise development. Small investments can allow households to develop small poultry production businesses. However, a few diseases have significantly limited the potential of chicken production in developing countries. The AFS project has developed strategies for improving chicken health and production.



- Thousands of rural households in Tanzania are benefiting from the Newcastle disease vaccination program in Iringa District, and hundreds of households within the study areas of Morogoro and Mtwara regions are benefiting from Newcastle disease vaccination and improvements in poultry health.

*While speaking with village poultry farmers in Morogoro, Tanzania, AFS team members, including Project Manager, David Bunn, assess the effectiveness of the Newcastle disease vaccinations and learn of poultry health problems. Photo by Danielle Knueppel.*

AFS Funding for 2006-2007	
Total Core Funding	\$305,729
Total Cost Share	\$72,342
Leveraged Funding	\$159,000
USAID Buy-ins	\$50,000

## RESEARCH BRIEFS

### GL-CRSP Research Brief 08-01-AFS: An Assessment of the Avian Flu School's Interactive 'Train the Trainer' Courses

**Author:** Carol Cardona, University of California, Davis

**Summary.** The Avian Flu School (AFS) was designed to help minimize the health and economic impact

of H5N1 highly pathogenic avian influenza (HPAI) by providing the training necessary to improve a community's ability to prevent a HPAI outbreak, and to respond to and recover from an outbreak. AFS is a multi-tiered, train-the-trainer program designed to educate animal health, public health, and agricultural extension workers about H5N1 HPAI, enabling them to deliver this information at the community level in developing countries. A pilot program of the four-day course, which consists of four modules and a practical session, was taught at the University of California, Davis; Sokoine University of Agriculture, Morogoro, Tanzania; and Texas A&M University in 2006. A total of 83 teachers, observers, coordinators, and trainees participated in the pilot courses. Course evaluation scores, provided by trainees, improved from four out of five during the first pilot course at UC Davis to over 4.4 out of five for the last pilot course at Texas A&M. Evaluation scores for the individual modules similarly improved. After minor modifications to the content in response to comments received during the pilot courses, additional courses were taught in Tanzania, Kenya, Uganda, Ghana, and Djibouti.

**GL-CRSP Research Brief 08-02-AFS: An Overview of the Newcastle Disease – Avian Influenza Control Research Project**

***Authors: Peter Msoffe, Sokoine University; Carol Cardona, University of California, Davis***

*Summary.* In 2007, the Newcastle Disease Avian Flu Control Research Project, a sub-project under the Global Livestock CRSP Avian Flu School, was initiated in Tanzania. The project is aimed at: 1) designing a model for a sustainable Newcastle disease vaccination program in rural villages, 2) assessing the prevalence of poultry diseases, and 3) designing methods and strategies for improving poultry health at the village level. Village chicken vaccinations were organized, supervised and conducted by trained village vaccinators in selected villages in three wards, one ward each in Mtwara, Morogoro and Iringa regions. The briefing and training of local policy makers and local agricultural leaders is very important to the success and sustainability of village-level Newcastle disease vaccination programs and poultry development efforts.

**TEAM MEMBERS**

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**COLLABORATING INSTITUTIONS**

**University of California, Davis, Wildlife Health Center (*lead institution*)**

Department of Veterinary Services, Kenya  
Makerere University, Uganda  
Ministry of Agriculture, Animal Industry and Fisheries, Uganda  
Ministry of Health, Kenya  
Ministry of Health, Uganda  
Ministry of Livestock and Fisheries Development, Kenya  
Sokoine University of Agriculture, Tanzania  
Texas A&M University  
University of Nairobi  
USAID Mission to Tanzania  
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