



December 28, 2012

Mr. Gregorio Cruz
Natural Resources Conservation Service
Conservation Innovation Grants
PO Box 2890, Room 5231, South Building
Washington, DC 20013-2890

**FINAL WRITTEN PERFORMANCE PROGRESS REPORT FOR THE PERIOD ENDED SEPTEMBER 30, 2011
NRCS-69-3A75-9-160 TECHNOLOGY TRANSFER FOR ENHANCED MANAGEMENT AND UTILIZATION OF
POULTRY LITTER IN PUERTO RICO**

The referred grant was approved and corresponding agreements between NRCS and FIDA were signed between the 22nd and the 29th of September 2009. The grant agreement was made effective for the period from October 1, 2009 to September 30, 2011.

Previously, Federal Financial Report in SF 425 format was submitted for the reporting period ended March 31, 2011 informing the utilization of a total of \$19,773 of grant funds.

This project focuses on a surface water quality conservation goal and the objective was to transfer technology for proper management and final use of poultry manures to avoid environmental hazards associated with manure disposal from poultry operations taking steps to better assure regulatory compliance by poultry farmers. The farmers have been made aware of the regulations that exist, the environmental concerns, and manners to more properly manage the waste materials and final use alternatives. Potential final users have been included in the training efforts to create additional demand for the material. Technical personnel (agronomists that advise farmers and coordinate programs) were included along with farmers in the goals for training. Final users of the materials included visualize cattle feeding and in crops fertilization.

The work plan called for 13 educational activities throughout the island of Puerto Rico. Later an amendment was requested and a trip to National Poultry Waste Management Symposium was authorized.

The series of activities agreed upon to be carried out, including the visit by 11 participants to the Greensboro North Carolina Poultry Waste Management Symposium have been carried out. The activities and their targeted audiences are summarized in the following table:



Fondo de Innovación para el Desarrollo Agrícola de Puerto Rico

Corporación Pública Subsidiaria de la Autoridad de Tierras de Puerto Rico

	<u>MUNICIPALITY</u>	<u>TARGET PUBLIC</u>	<u>NUMBER ATTENDEES</u>	<u>MONTH</u>
1	Barranquitas	Broiler Growers	53	May 2010
2	Santa Isabel	Broiler Growers	76	June 2010
3	Camuy	Egg Producers	43	May 2010
4	College of Agronomists	Agronomists	78	July 2010
5	Hatillo	Composters, Technical personnel and Organic Farmers	36	July 2010
6	College of Agronomists	Agronomists	28	Sept 201
7	Caguas Regional Office Department of Agriculture of PR	Department of Agriculture Agronomists	34	Sept 2010
8	Cayey	Cattle Raisers	25	Oct 2010
9	Isabela	Agronomists	22	Oct 2010
10	Gurabo	Composters, Organic Farmers and Agronomists	15	Oct 2010
11	Barranquitas	Broiler Growers	38	Dec 2010
12	Adjuntas	Composters	16	Dec 2010
13	Cabo Rojo	Cattle Raisers	32	Dec 2010

The additional authorized activity that consisted of sending a group to attend the National Poultry Waste management Symposium was carried out with the attendance of 11 participants including 9 poultry farmers split between growers from two broiler producing enterprises and egg producers and two governmental officials: the coordinator of the training series and one advisor belonging to Agricultural Extension Service. Estimates originally provided for food, site rentals and for trip to National Poultry Waste Management Symposium proved to be accurate. The analysis of budgeted versus actual funds utilization to September 30, 2011 is presented following.

Considerable savings were achieved in speaker fees, instructional materials and bus rental expenses. Speaker fees proved in reality to be much less than originally estimated because most people in Puerto Rico qualified to provide speeches for training are employed by the University of Puerto Rico, the Extension Service, Agricultural Experimental Stations, the Environmental Quality Board, the Natural and Environmental Resources Department and were able to provide their services free of charge when activities were celebrated during regular working hours' schedule. This has been thanks to their employer agencies. In that manner most speakers participated free of charge. Only one bus was rented for a field trip to egg production farm.



BUDGET VERSUS ACTUAL EXPENSES PER BUDGET ITEM				
	AMENDED BUDGET		ACTUAL EXPENSES	BALANCES UNSPENT
	SUBTOTAL	TOTALS		
Speaker Fees		7,000	3,000	4,000
Instruction Materials		6,000	2,000	4,000
Food	7,500	14,500	14,005	495
Sites, tables, chairs	7,000			
Bus rental		2,000	275	1,725
Manual Writing		0		0
Manual Printing		0		0
Promotions		500		500
Coordination		2,000	2,000	
Trip Greensboro, NC		14,000	14,267	-267
HOG Raisers		14,000	2,750.88	11,249.12
TOTAL		60,000	38,297.88	21,702.12

Recommendations and Observations from FIDA:

- The activities in general were very concurred and more than 500 farmers were impacted.
- Puerto Rico needs more orientation towards good practices regarding poultry waste.
- These initiatives should be made available to all the sectors of agriculture that deal with waste management.
- In these seminars different alternatives were offered for the use fecal waste. For example bio digesters, oxidation covers and other. A lot of our local farmers have not had the opportunity to see these advances. It would be nice to include model demonstration on a future occasion.
- The visit to North Carolina was very instructive for the farmers as they were able to see other practices of conservation for waste management. Some of the participants have already put into practice some of these ideas.
- It's very important for our farmers to adhere this knowledge. The language barrier is a problem for our farmer to sometimes put into practice these options simply because of not knowing they exist.
- In the future the cost of implementing these practices should be included as well as the benefits these bring to the farming industry.
- It was a pleasure for FIDA having the opportunity to work directly with NRCS to bring this knowledge to our farmers and were willing to continue to do so in the future.

Sincerely,

Miguel A. Santiago Córdova, MS
FIDA Executive Director