

PRESENT STATUS OF THE WRSA-SUPPORTED RABBIT DEVELOPMENT PROJECT IN HAITI

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ABSTRACT

Haiti is the poorest country in the Western Hemisphere. Formal efforts to expand small-scale rabbit production in Haiti with the aim of alleviating poverty have been made since 1996 through the Farmer to Farmer (FTF) program that is coordinated by Partners of the Americas and funded by the U.S. Agency for International Development. The *modus operandi* of this program is to send out American volunteers with specialty skills (*e.g.*, rabbit health, reproduction, project development, forage production, and food safety) for 2 to 3 weeks to train mostly farmers, but also students and professionals, at key project locations. Following the more recent devastating earthquake in Haiti in January of 2010, this and other humanitarian efforts have been intensified to further expand rabbit farming enterprises to over 1,000 resettled rural families. In general, farmer enthusiasm towards rabbit project success has been high. Survey data reveal that the people are most willing to raise rabbits and consume the meat on a regular basis. In terms of housing, sheds constructed using a quonset-hut style design have been more recently promoted by the host organization, Makouti Agro-Enterprise. Typical of many projects in the LDCs, local diets are forage-based. However, many farmers have struggled in offering a quality diet even though feed ingredients as supplements exist locally. In addition, common health-related problems include low body condition, infertility, and slow growth, which appear to be largely associated with poor quality diets. Common diseases include ear and skin mange and coccidiosis. Hence, retraining efforts continue to focus on feeding and health, as well as on general management, and good progress is being achieved. In 2010, the ongoing rabbit program was aided with monies donated by the World Rabbit Science Association (WRSA). The WRSA gift was used to improve the technical knowledge on rabbit production through farmer training and the purchase of breeding stock and equipment. Since receiving WRSA funding assistance, 3,075 farmers have received rabbit training by FTF volunteers and Makouti staff in 123 separate training sessions. In addition, Makouti staff locally manages the project. They have been working closely with several rabbit experts for many years now and have acquired much knowledge and useful experience, which has not only been applied to advance this project, but to ensure eventual self-sufficiency status. To date, 1,718 rabbit producers maintain 1,246 production units (consisting of 32,642 total breeding rabbits) have been established in four regions, which have directly benefited 6,931 participants. Over the past 2-1/2 years there has been a 142% increase in the number of breeding rabbits. The average increase in monthly income from rabbit sales is 19.55 USD per family (some families are earning over 200 USD per month), which relates to 403,043 USD over the past three years. A positive sign is that most rabbits are sold for breeding rather than for meat because of the growing popularity of rabbit farming. In conclusion, despite major challenges, much progress has been realized towards strengthening the foundation of the rapidly expanding meat rabbit industry in Haiti. The monetary gift by the WRSA is greatly appreciated, which will ensure that the project will continue to improve many people's lives in Haiti for years to come.

Key words: Rabbits, poverty alleviation, project development, sustainability, Haiti.

INTRODUCTION

Although rabbits have been in Haiti for centuries, likely first introduced by French and(or) Spanish colonists, who had the tradition of small-scale rabbit raising as a source of meat, it has only been in more recent times that rabbit production has been seriously considered as an agricultural enterprise for the purpose of benefitting the masses. Perhaps the first scientific published report on rabbit production in Haiti was by Kentor (1990) who explored the feasibility of rabbit production in 1967. In his paper, he stated that “Haiti could become the rabbit capitol of the Western Hemisphere”! The rabbits’ diet was inexpensive, being based on forages and with supplements involving agricultural by-products (*e.g.*, brewers’ dried grains, rice bran, wheat shorts, and molasses). However, it took 18 to 24 weeks to produce a 1.8 kg (4 lb) liveweight fryer, presumably due to shortcomings of the local diet, as well as the adverse tropical climate. Despite this challenge, it was felt that rabbits still had a high potential of benefiting low income families, especially considering that Haiti is the poorest country in the Western Hemisphere.

In 1996, the Partners of the Americas’ Farmer to Farmer (FTF) program was implemented in Haiti that involved a variety of projects (*e.g.*, peanut production, beekeeping, and bamboo). Small animal production is one of three FTF projects that transfers knowledge to Haitian farmers throughout the relevant value/production chains. The *modus operandi* of this program is to send out American volunteers with specialty skills (*e.g.*, rabbit health, reproduction, and project development, forage production, and food safety, marketing, and meat quality assurance) for 2 to 3 weeks to train mostly farmers, but also students and professionals, at strategic project locations. According to FTF records, the first volunteer to work in Haiti to assist the infantile rabbit program effort was Dr. James McNitt. He served four times as a volunteer between 1999 and 2004 and provided basic training in rabbit farming in all aspects of production (*e.g.*, breeding, housing, management, and nutrition) and explored market opportunities for rabbit meat, and, hence, laid a solid foundation for the program. In 1999, he reported that rabbits were “relatively scarce” in Haiti. Rabbits have been obtained periodically from the Dominican Republic.

Over the following years, rabbit raising activities would evolve into a more focused project as it showed greater potential and popularity in Haiti. Eventually, the program would be managed by the non-governmental organization and agribusiness cooperative, Makouti Agro-Enterprise. From 2007 to present, Dr. Myriam Kaplan-Pasternak has assisted this project numerous times. She has been active in conducting training and on-site supervision of rabbit farms, but in particular has maintained a very close working relationship with Makouti staff, which has been of critical importance in terms of project integrity.

Then, on January 12th, 2010, a devastating earthquake shook the heart of Haiti, altering millions of lives forever. This came on the heels of decades of economic and political degradation and four violent hurricanes in 2008. Since this disaster and the exodus of many urban residents to rural areas, the Haitian people have taken a keen interest in adding rabbit meat production to their arsenal in their fight against poverty and hunger, which has also been promoted by the Ministry of Agriculture. In a heartfelt response to this disaster, in 2010, the ongoing rabbit program was expanded, in part, with the aid of monies donated by the World Rabbit Science Association (WRSA). The aim of this humanitarian campaign effort has been to further expand the program by improving the technical knowledge base and the availability of breeding stock and equipment to farmers.

The objective of this paper is to report to the WRSA on the present status of the rabbit project in Haiti, which is aimed at benefiting numerous impoverished families, both economically and nutritionally, through training and the adoption of small-scale rabbit production enterprises.

MATERIALS AND METHODS

Project rationale

In Haiti, the average annual income is 1,155 USD (CultureGrams, 2010). According to the FAO (2012), 5.5 million people or 57% of Haitians are undernourished in terms of both caloric and protein intake. On average, the individual rabbit farmers involved with the FTF program have a household

family size of 6 members and are farming less than one hectare of land. The justification for the project is based on rabbit meat being an excellent source of protein that can supplement farmers' diets and also increase their income from their small farms. Hence, and like many other past and present rabbit projects, the program has a clear dual-goal focus. Moreover, a regular supply of inexpensive and nutritious meat can be produced, even by the poorest of the poor.

Training approach and technical start-up package

To address the poverty problem, the FTF program sends volunteers directly to the people in rural communities who provide technical training for new and experienced rabbit producers. The training approach is to provide short lessons on key topics that include, for example, cage construction, diet and nutrition, disease prevention and control, reproduction, rabbit management, slaughter and meat quality. Lessons are practically taught, often at demonstration farms, and with opportunities for hands-on activities and ample time for active discussions. Training usually involves 2 to 3 days per group, but this may occur over several weeks to allow farmers time to discuss their new-found knowledge within their communities and also complete assignments, such as forage plots establishment and cage construction.

As described in the FTF Haiti trip report by Lukefahr (2010), the project intervention or technical package provided to a trained farmer consists of materials for an approximate 16 x 16 foot shed built from 8 cement pillars, wood poles as a frame, boards for siding, and 16 aluminum sheets for roofing (800 USD). Rabbit housing consists of 4 cages (each comprised of 4 holes or individual compartments) for breeding rabbits and 4 cages for growing rabbits (800 USD). Breeding stock includes 12 does and 2 bucks of breeding age (20 USD/doe and 15 USD/buck for a total of 270 USD). This start-up package involves a total loan of about 2,000 USD. The farmer then signs a contract in which he/she agrees to pay back 400 USD each quarter (in-kind) through the value of 40 market rabbits. Overall, the farmer is expected to pay 1600 USD or 75% of the original loan. It is anticipated that once the loan is honored the farmers will realize the return of 1,000 USD per quarter. These figures are based on the assumed annual production level set by Makouti of about 400 market fryers (12 does producing 5.5 fryers from 6 litters per annum, a total of 396 rabbits). Through a revolving fund, Makouti makes regular purchases of building supplies, wire rolls for cages, breeding stock, *etc.*, to assist trained farmers in setting up their rabbit enterprises.

Project logistics and program staff

As stated previously, the rabbit project is coordinated by Makouti, which is financially supported, in part, by Partners of the Americas through a grant from the U.S. Agency for International Development (POA, 2012). The Farmer to Farmer Program has a country coordinator (Mr. Benito Jasmin), who is also the technical advisor for Makouti, and only two field officers, so the program largely depends on local Makouti technicians and a steady flow of American volunteers to assist in their training mission. Volunteers are recruited by Partners of the Americas to assist the project based on present need, often in response to recommendations made by previous volunteers. For example, a forage expert might be requested prior to the time of growing season so that farmers can be taught how to establish forage plots. Besides their involvement in conducting training, Makouti field officers are also responsible for making regular on-farm visits to monitor farmer's progress, and especially to detect any early problems, such as a disease or poor feeding practices. Annually, within budget and manpower constraints, the Makouti office decides how many training sessions and how many farmers to assist in various communities. Each community is assisted by one DT (technical leader) who is a general, professional agriculture worker/trainer and one co-DT from the pool of Makouti employees (also involving cooperation with the Ministry of Agriculture) who will be solely in charge of rabbit project-related activities on farms. Priorities are made based on family need and the anticipated likelihood of success. Regular surveys are also taken to obtain critical information, such as willingness of families and neighbors to consume rabbit meat, benefits felt by participants, and demand of meat by potential businesses and(or) market trends.

RESULTS AND DISCUSSION

Training impact

In 2010-2011, a total of 123 formal training sessions were conducted and 712 field trips were made involving Partners of the Americas' FTF volunteers and Makouti technicians who trained a total of 3,075 rabbit producers, including university agriculture students. The program is also focused on the inclusion of women in receiving rabbit training. During the reporting period, 53% of trainees were women. As is well documented in the literature, women more so than men spend more time at home, are more knowledgeable about basic health and nutrition, work more harmoniously in groups, and are more likely to spend their increase in income wisely (*e.g.*, buying food of higher quality and paying tuition fees to send their children to school). In addition, a rabbitry was built at the Universite de Notre Dame d'Haiti in Les Cayes and a second one was recently established at the Universtie d'Haiti in Port au Prince. This program effort is continuing to grow and is helping to strengthen the foundation of the expanding meat rabbit industry in Haiti. These activities were financially supported, in part, with the gift of WRSA monies. The training of agriculture students is considered to be a special, long-term effort because, after gaining practical experience in raising rabbits, it is expected that these "rabbit prophets" can truly later impact the masses by training farmers in their assigned village posts.

Survey results

FTF/Makouti recently completed a major survey on program impact. Preliminary data show that 9 out of 10 Haitians would like to eat rabbit meat (up from 28% in 2008) and 3 out of every 10 Haitian farmers would like to raise rabbits (80% of Haitians are farmers). In the aftermath of disasters, food distribution systems always fail in Haiti. One survey revealed that many families attributed their survival to their rabbits. It was also learned that Haitians have mostly been spending their new rabbit income on better educating their children. Another positive sign is that most rabbits are sold for breeding rather than for meat. And, as rabbit meat is a sought-after product by restaurants and hotels in the Cap-Haitien and Port-au-Prince areas, rabbit production is becoming increasingly popular throughout the regions where rabbit projects have been introduced.

Present challenges and future outlook

Perhaps the greatest limitation to village rabbit production has been the low diet quality and(or) quantity of suitable feedstuffs as procured on small farms. After over 20 years of rabbit production experience in Haiti, Kentor (1990) claimed that "feedstuffs are our biggest cost, our biggest problem, and our continuous challenge". Lukefahr (2010) stated that the feeding of commercial pellets in small-scale operations (less than 12 does) is generally not encouraged. However, for larger enterprises there may be profit opportunities because in Haiti there is no doubt a high market demand for both meat rabbits and breeding stock. A small feed mill, consisting of a hammer mill and a pelletizing machine, has an estimated cost of 5,400 USD (excluding the importation cost from Europe; present prices may be higher). The small mill has the capacity of producing 1 metric ton batches of pellets. Nonetheless, other issues may emerge, such as obtaining quality local feeds, storage of feeds, additional hired labor, method of feed delivery, and maintenance of equipment, which need to be seriously considered to justify this major investment.

In addition, health-related problems include low body condition, infertility, and slow growth, which appear to be largely associated with poor quality diets on farms that struggle with feed security. Common health problems include ear and skin mange and coccidiosis. Hence, retraining efforts continue to focus on feeding and health, as well as on general management, and good progress is being achieved.

Despite major challenges, much progress has been realized in strengthening the foundation of the rapidly expanding meat rabbit industry in Haiti. As of October 2011, a total of 1,718 rabbit producers maintain 1,246 production units (consisting of 32,642 total breeding rabbits) have been established in four regions, which have directly benefited 6,931 participants. Nearly all rabbit producers in the program are now reporting increases in production and sales of rabbits (Figure 1). Across several project locations, over the 2-1/2 year survey period there has been a 142% increase in the number of

breeding rabbits with a present average of nearly 19 breeding rabbits per family. In terms of economic impact, the average increase in monthly income from rabbit sales is 19.55 USD per family, which relates to 403,043 USD over the past 3 years. And as the local demand for rabbit meat increases it is anticipated that the impact will become more widespread in Haiti. Lastly, those persons who are interested in monitoring the progress of the Haitian rabbit project can do so at the Blog site of the Partners of the Americas (<http://farmertofarmer.blogspot.com>).

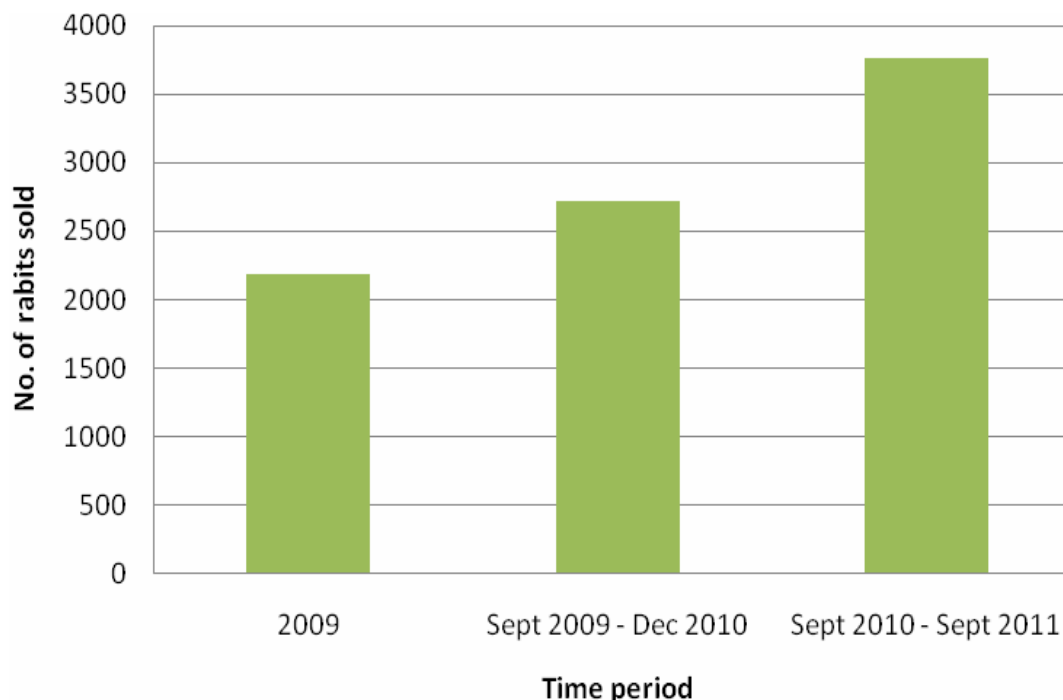


Figure 1: Rabbit sales involving farmers that sell through the Makouti Agro-Enterprise system

CONCLUSIONS

As stated previously, over the course of the FTF Program, volunteers have worked alongside and trained Makouti staff, in all aspects of rabbit production. In this way, when the FTF program ends, new rabbit producers can consult directly with Makouti's rabbit experts, increasing the local ownership and sustainability of the project. In conclusion, the assistance of the WRSA in donating about \$7,500.00 is greatly appreciated by Makouti. These monies have been put to good use to improve many people's lives in Haiti for years to come.

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