Farmer to Farmer Program and Aquaculture without Frontiers: Aquaculture Niche project

Trip Report: GUYANA, June 2011

A visit was conducted to Guyana by AwF volunteers Fitzsimmons and Pamila Ramotar, from the University of Arizona, from the 13th – 21st June 2011. The overall purpose of the visit was to conduct meetings with various institutions such as the Department of Fisheries, Guyana Trade and Investment Support (GTIS), University of Guyana (UG), follow up visits to various farms, collect brackish water shrimp samples from various farms to identify the species found in Guyana and to conduct a workshop for the Trafalgar Union Women's fish farming cooperative.

a) Field visits

Region #5 and 6

On the 14th June 2011 a field visit was conducted to Mr. Ronald Arjune Farm located at Whim, Berbice, Region # 6 while on the 18th June 2011 a field visit was conducted to Andre Poonai's farm located at Onverwagt, Region #6. The purpose of the visits was as follows:

- 1. To monitor their progress of development
- 2. To collect shrimp samples so that there can be a proper identification of the brackish water shrimp found in Guyana.
- 3. Provide technical assistant advice to the farmers
- 4. To initiate possible marketing of brackish water shrimp to potential investor(s).

Several shrimp samples were collected and various discussions were held relating to aquaculture management especially on shrimp production.

Region # 9

Integrated Farm Management (IFM) combines good business, good husbandry and good environmental practice. It requires an understanding of the biological and ecological interactions of the farm. Unlike organic farming IFM is not the same fixed system everywhere. It recognizes that each farm is different so each develops its own programme to fit its circumstances.

A field visit was conducted to Rockview, Annai from the 15th-17th June 2011. The purpose of the visit was to start a small integrated system, establish a Memorandum of Understanding (MoU) between Rockview, Annai, Guyana Trade Investment Support (GTIS) and AquaFish CRSP and to meet with members of the North Rupununi District Development Board (NRDDB).

During the trip a small solar panel, battery, controller, and pump were provided to Mr. Collin Edward who is currently establishing an integrated farm at the above location. A short demonstration course was conducted to explain how the equipment is used.



Meetings

Annai

On the 16th June 2011 Dr. Fitzsimmons met with the some of the Members of NRDDB to discuss the following:

- 1. An update of the project and future collaborations with Annai
- 2. Request of a letter from the community, agreeing to the establishment of the demonstration farm site
- 3. Aquaculture management techniques such as fish species that maybe suitable to rear at Annai, e.g Tambaqui (*Colossoma macropomum*), Hassar (*Hoplosternum littorale*) and why Tilapia (*Oreochromis* spp) may not be suitable to rear at Annai, feeding, water quality, pond designs and construction, etc.
- 4. Establishment of integrated demonstration farm at Annai
- 5. Establishment of a MoU between Rockview, Annai, GTIS and AwF

List of Participants

Names	Address
Collin Edwards	Rockview, Annai
Kenneth Forde	Aranaputa
Sixtus Nash	Aranaputa
Michael Williams	Toshao- Annai
Rodney Davis	Aranaputa
Hugh Greaves	Aranaputa
Sucil Kissoon	Aranaputa
Randy Collant	Aranaputa
Ivor Marslow	CEO- NRDDB, Annai



After the meeting was concluded a field visit was conducted to Mr. Sucil Kissoon's place at Arnaputa Village. Mr. Kissoon is also establishing an integrated aquaculture farm and has a 30 ft x 15 ft x 8 ft pond constructed. During the visit technical advice was provided on how to improve his pond design, feeding, water quality and management of the fishes.

Informal training

Eleven persons participated at a short informal training/ meeting which was held at Trafalgar Union Women's Coop Farm, CDC, Trafalgar Union on the 20th June 2011.

During this event several issues relating to aquaculture and the Coop were discussed and included:

- Global perspective of fish culture and production
- Culture systems- semi intensive
- Why the culture of Tilapia its characteristics was a point of discussion, i.e. it is a hardy species, seedstock are easily available, traceable, and good fish for export.
- Overview of quality, traceability, sustainability, Best Aquaculture Practices (BAP's), and certification preferences of buyers
- Aquaculture management pond design, feeding, water quality, harvesting, importance of record keeping, economics, research and development (constant improvement process)



Fitzsimmons leading workshop

Feeding fish at Trafalgar Union Women's Coop

Project Goals of the Coop:

- Production of quality Tilapia for export 450-550 grams average weight
- Commercial fish farming techniques, management and staff
- Improve and build infrastructure such as permanent pump station and fish handling equipment
- Water chemistry fundamentals so that management can make decisions on pond fertilization, feeding, management of fish stocks and how to comply with Best Management Practices for increased profits and compliance with national and international standards.
- Work ethic and initiative so that any problem identified by the Farm Manager and staff can be acted upon immediately to increase profitability of the business.
- Establishment of the entity independently

Short Term Objectives:

- Transfer and sort all fish to eliminate females and wild fish species this requires that all ponds
 be drained and all males transferred to adjacent ponds. The females and wild fish should be
 disposed of immediately if possible, sold but not stored alive where they can contaminate the
 water.
- Build permanent pump station
- Reinforce guard tower before it collapses.

List of Participants

Names Addresses

Trafalgar Union Shenella Lewis LLoyda Angus Trafalgar Union Trafalgar Union Marina London Charlotte Harris Trafalgar Union Patsy Fraser Trafalgar Union Trafalgar Union Unia Mona Wanda Casey Trafalgar Union Irene Clements Trafalgar Union Oscar Paul Trafalgar Union Erwin Casey Trafalgar Union **Aubrey Clements** Trafalgar Union Kevin Fitzsimmons University of Arizona

Ray DeWandel GTIS
Mr. Rodwin GTIS
Mr. Walter GTIS

University of Guyana

On the 20th June 2011 a meeting was held with Mr. Laurence Lewis, Dean of the Faculty of Agriculture and Dr. Kevin Fitzsimmons. During the meeting there were several discussions regarding the MoU with UG and the University of Arizona, training of lectures and student, future projects, researches, lab equipment future funding and collaboration between the two universities. On June 21st, Fitzsimmons returned to UG to meet with Dr. Subramanian Gomathinayagam to discuss his interest in a sabbatical at the University of Arizona.