## Trip Report - Research Trip to Nepal and Bangladesh

Dates of Travel: June 5th - July 18th

**Travelers Names and Affiliations**: Leah Harris, Graduate Research Assistant, Virginia Tech

**Purpose of Trip:** This research trip was planned so that data could be collected for my Master's thesis on optimal approaches for disseminating Integrated Pest Management (IPM) in Nepal and Bangladesh.

**Sites Visited**: (See report below)

## **Description of Activities/Observations:**

During the visit I met with stakeholders (both public and private organizations) involved with IPM research and dissemination in each country. Additionally, I was able to meet with farmers who have incorporated the IPM technologies in their vegetable production. The itinerary for the trip is presented below.

June 5<sup>th</sup> – Depart from Roanoke Regional Airport; Roanoke, VA June 6<sup>th</sup> – Layover in Bangkok, Thailand

June  $7^{th}$  – Arrive at Kathmandu International Airport; Kathmandu, Nepal June  $8^{th}$  –

- 10am to 12pm Field visit in Lalitpur
  - Observed IPM technologies for cabbage and cucurbits bagging, pheromones, and soil amendments.
- 1pm to 4pm traveled to Pokhara
   June 9<sup>th</sup>
  - 7:30 to 10am Field visit in Dhikurpokhari to observe tomato grafting technologies to prevent bacterial wilt.
  - 10am to 12pm Field visit at Bhalam VDC to observe tomato grafting nursery with Mr. Ram Bahadur Hamal
  - 1pm 3:30pm visit NARC Horticulture Research Station in Malepatan
    - Observed tomato grafting technology and demo from Senior Scientist Mr. Ram Bahadur K.C.

June 10<sup>th</sup> – Participation in DFID field visit

- 7:30am to 12pm Dhikurpokhari VDC;
  - Interaction and discussion with Research Into Use (RIU) thematic group – Discussed plans for IDE to work with DFID to implement the RIU program that would help disseminate the Participatory Market Chain Approach (PMCA) in Nepal.
  - Interaction with Agro-Inputs supplier at Marketing and Planning Committee (MPC) – talked about current MPC functions, constraints, and hopes for future growth.

- Visit with Dalit vegetable production group discussed constraints and hopes for the development of their marketing group.
- 1pm to 2pm Visit with Horticulture Research Center; Malepatan, Pokhara
  - Observed tomato grafting technologies.
- 2pm to 4:30pm Interaction with Didi Bahini vegetable production group and observe farmers fields; Armala VDC, Jumleti Village
  - Visited a production site facilitated by IDE's Rural Prosperity Initiative (RPI). Farmers are using micro-irrigation technologies and are linked to a local collection center.
- 4:30pm to 5:30pm visit Chipledhunga area
  - o Interaction with a supplier of micro-irrigation technologies (MIT).
  - o Visit input supplier, Mr. Gyanendra Chalise
  - o Visit vegetable wholesaler and retailer Mr. Ram Mani Dahal

## June 11th -

- 8:30am to 10:30am Observe collection center and interaction with MPC; Sarketari, Syangja
- 12:30pm to 1:30pm Observe collection center and interaction with MPC; Gairathok, Syangja
- PM Travelled to Pitlek, Syangja Observed Multiple Use Water Systems (MUS)

## June 12<sup>th</sup> –

- 6:30am to 9am travelled to Palpa
- 9am to 10am Interaction with Apex body that helps coordinate farmer groups and collection centers.
- 10:30am to 12:30 Interaction with MPC and visit to rural communication center
  - o Discussed media resources that are available to local farmers
- 1:30pm to 2:30pm Observe coffee production area; Barangdi
  - o Discussed current pest problems Coffee White Stem Borer
  - o Compared farmer practices to IPM practices.
  - o Farmer expressed dissatisfaction with new IPM practices.
- 3pm to 5pm Observe vegetable production area and Multiple Use Water System (MUS); Chitrungdhara

#### Iune 13th -

- 7:30am to 11:30am Observe IPM CRSP plot and interaction with farmers; Betkuiya, Rupandehi.
  - Observed cucurbit plots compared plots with pheromone traps to plots using traditional farmer practices.
- 1pm 4:30pm Travel to Kathmandu departed from Bhairahawa Airport June 14th Office work at IDE Office, Kathmandu, Nepal June 15th
  - Work at IDE Office
  - 11am Meeting with Department of Agriculture, Plant Protection Directorate Dr. Yubak Dhoj G.C.

 Discussed the government model being use to research and disseminate IPM practices.

#### June 16th -

- Work at IDE Office
- 2pm Meeting with Dr. Bishnu Prasad Aryal, Deputy Director General of Planning Committee with DOA
  - Discussed how IPM technologies are verified and disseminated by government and private stakeholders.

## June 17th -

- Work at IDE Office
- 3pm Meeting with Dr. Braja Kishore Prasad Shaba, Secretary of Vice President's Office of Nepal
  - Discussed current agricultural situation in Nepal, constraints, and hopes for growth.

#### June 18th -

- 11:30am Meeting with Dr. Madan P. Pariyar
- 4pm Meeting at FAO

#### June 21 –

- 10:30am Meeting with Dr. Bharat Prasad Upadhyay, Executive Director of CEAPRED
  - Discussed CEAPRED's current involvement disseminating IPM technologies to farmers and the costs involved in their efforts.
- 12:30pm Meeting with Mr. Ganesh Baniya, Agro-vet
  - o Collected synthetic and organic pesticide sales data.
  - o Discussed sales of pheromone traps.
- 3pm Meeting with Mr. Manindra Malla, Caritas
  - Discussed current Caritas activities to disseminate IPM information; ie. Field days and FFS.

## June 22<sup>nd</sup> – Travel to Dhaka

## June 23rd -

- 10:30am to 12:30am Meeting with Bangladesh Rice Research Institute (BRRI) scientists
  - Discussed how rice is produced in Bangladesh, IPM practices used, constraints, and hopes for growth of the industry.

#### June 24th –

- 9am to 9:30am Meet with Dr. M.A. Hoque; Director of BARI HRC.
  - o Introduction and welcome
- 10am to 12pm Meet with Dr. Shahabuddin Ahmad and Dr. G.M.A. Halim of HRC
  - o Discussed current IPM technologies used in vegetable production.

- 2pm to 4:30pm Meet with Dr. S.N. Alam and visit entomology bio-controls lab
  - Discussed bio-control and pheromone technologies.
  - o Tour of bio-control and pheromone laboratories.
  - Discussed how BARI assists private companies in Bangladesh; i.e. Ispahani, Safe Agriculture Ltd

#### June 28th -

- 9am to 1pm Meeting with Department of Agricultural Extension Agricultural Information Service
  - Visit Ikoria Farmer's club
  - Meet with extension coordinators
- 2pm to 3:30pm Meeting with Mr. Rezaul Karim Siddique of Mati-O-Manush agricultural TV program.
  - o Discussed program content and emphasis on IPM.

## June 29th -

- 9:30am to 12:30pm Attend BARI Entomology Division Annual Review
- 2:30pm to 4:30pm Meeting with BARI Agricultural Economics Division
  - Department is relatively new Discussed hopes for growth and for the upcoming baseline survey.

June 30th – Work at IPM CRSP Office – reviewed notes, wrote follow-up emails July 1st –

- 9:30am to 12:30pm Meeting at the Department of Agricultural Extension (DAE) Agriculture Extension Component (AEC)
  - Discussed dissemination activities used by AEC. Collected data on the number of farmers reached, costs, etc.
- 2pm to 4pm Meeting with Dr. M.A. Hamid Miah, IRRI Liason Scientist
  - Discussed Bangladesh rice production, research developments, and IPM constraints.

#### Iuly 4<sup>th</sup> –

- Visit to Ispahani Biotech Limited
  - Meeting with Director collected data about bio-control and pheromone sales, production costs, advertising, etc.
- $\,\circ\,$  Tour of bio-control laboratory and sex pheromone production facility July 5th July 6th Work at IPM CRSP Office reviewed notes, wrote follow-up emails, searched for reports about the dissemination of IPM. July 7th
  - Work at IPM CRSP Office
  - Visit to BRRI Research Library
    - o Collected papers regarding rice IPM

#### Iuly 8th -

- Meeting with Dr. Nahar and tour of BARI laboratory
  - Learned about producing trichoderma and then using it for the production of tricho-compost.
- Work at IPM CRSP Office

Iulv 11th -

- 8am to 1pm Travel to Mennonite Central Committee (MCC); Bogra
- 2:30pm Meeting with MCC Director and other staff
  - Discussed current involvement with IPM CRSP and how the technologies are disseminated. Collected data about number of farmers reached and costs of dissemination activities.

## July 12th -

- Meeting with GKSS
  - Observed production of tricho-compost, tricho-leachate, and vermicompost.
  - Visit to farmer's field using pheromone traps and soil amendments.
  - Visit to farmer's market

## July 13th -

- Meeting with Safe Agriculture Bangladesh Ltd.
  - o Discussed current sales, production costs, and advertising activities.
  - o Tour of bio-control and pheromone laboratories.
- Visit to farmer's field observed pheromone traps.

## July 14th -

- 9am Follow up meeting with MCC staff
- 10am to 2pm Travel back to Gazipur
- 2pm to 3pm Work at IPM CRSP Office

#### July 15th - Work at IPM CRSP Office

- Discussed follow-up questions with Dr. Karim.
- Met with Dr. Nahar to review PowerPoint presentation about trichocompost.

July 17<sup>th</sup> – Depart from Dhaka International Airport

July 18th – Arrive at Roanoke Regional Airport

The research information that was collected during this trip will be used in my Master's thesis. Quantitative data will be used to construct a linear programming model that will outline a cost-effective dissemination strategy that could be used by organizations that disseminate IPM information to farmers. The qualitative data that was collected will be compiled to provide background information and offer context for the economic model. This research project should be completed by May 2011 under the supervision of Dr. George Norton (advisor), Dr. Jeff Alwang, and Dr. Dan Taylor.

#### **Nepal Contacts:**

Name	Organization	Position
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Bed Kumar Shrestha	IDE Nepal	Area Co- Coordinator, Pokhara Region
Beni Bahadur Basnet	District Agricultural Development Officer	Senior Agriculture Development Officer (SADO)
Bharat Prasad Upadhyay	CEAPRED	Executive Director
Binod Shah	FAO Nepal ; National IPM Programme	Programme Manager
Binod Sharma, Ph.D.	IDE Nepal	Government Program Development Specialist
Birendra Brd. Hamal	Regional Agriculture Directorate	Director; Malepatan, Pokhara
Bishnu Prasad Aryal	Planning; DOA Nepal	Deputy Director General
Braja Kishore Prasad Shaba, Ph. D.	Government of Nepal; Office of the Vice- President of Nepal	Secretary

Catherine Martin	DFID Bangladesh	Senior Private Sector and Market Development Advisor
Churamani Neupane	Staff - Palpa Rural Communication Center	Media staff
Duncan Overfield, Ph.D	DFID Nepal	Economic Adviser, Deputy Team Leader Inclusive and Sustainable Growth Team
Ganesh Baniya	Kathmandu Agro Concern Pvt. Ltd.	Managing Director (Agrovet)
Ganesh Kumar K. C.	FAO Nepal Support to National IPM Programme, Phase II	Institutionalization Support Expert
Kalpana Dhital		District Manager, Syangja
Laxmi Karki	IPM CRSP	Activities facilitator
Luke Colavito, Ph.D.	IDE Nepal	Country Director

Madan P. Pariyar, Ph.D	IDE Nepal	Program Development Specialist
Madusudan Ghale, Ph.D	NARC- Horticulture Research Division	Division Chief
Manindra Malla	Caritas Nepal	
Navin Dahal	DFID Nepal	Private Sector Development Adviser
Raju Joshi	Social Welfare Council	
Rudra Thapa	IDE Nepal	District Manager, Palpa
Sarala Sharma, Ph.D	NARC - Division of Plant Pathology	Plant pathologist Khumaltar, Lalitpur
Shailendra Shrestha	IDE Nepal	Butwal, Rupandehi, Program Manager

Shree Baba Pradhan, Ph.D.	NARC - Entomology Division	Senior Scientist
Yubak Dhoj G. C., Ph.D	DOA – Plant Protection Directorate	Program Director (Joint Secretary) National IPM Co- coordinator

# **Bangladesh Contacts:**

Name	Organization	Position
A. K. G. Md. Enamul Haque, Ph.D	BRRI	BRRI Director
A. N. M. Rezaul Karim, Ph.D	IPM CRSP	Bangladesh Site Coordinator
Abdul Muqit, Ph.D.	BARI Plant Pathology Division	Senior Scientific Officer
G. M. A. Halim, Ph.D	BARI - Horticulture Research Center	Scientific Officer

Kbd. Md. Ibrahim Khalil	Ispahani Biotech Bangladesh Ltd.	Senior Scientific Officer
M. A. Hamid Miah, Ph.D	IRRI	Liason Scientist for Bangladesh
M. Shahi Alam, Ph.D	BRRI	Chief Scientific Officer Agricultural Economics Division
M. Shamsul Alam, Ph.D	DAE - Agricultural Extension Component (AEC)	Assistant Senior Advisor
Mahfuj Ara Begum	BRRI	Senior Scientific Officer: Entomology Division
Mahmuda Akter	BARI - Agricultural Economics Division	Scientific Officer
Mahmuda Anwar	DAE - Agricultural Information Service (AIS)	Web Management Specialist
Md Golam Rasul, Ph.D	Bangabandhu Sheikh Mujibur Rahman Agricultural University	Professor

Md. Arefur Rahaman	Mennonite Central Committee (MCC)	Staff
Md. Jahangin Alam	Mennonite Central Committee (MCC)	Staff
Md. Kamal Hossain	Mennonite Central Committee (MCC)	Staff
Md. Mahmudannabi	BARI Division of Entomology	Senior Officer
Md. Maqbul Hussain Talukder	DAE - Agricultural Extension Component (AEC)	Project Director
Md. Mirza Shehab Uddin Sohel	GKSS	Staff
Md. Mokulesur Rahman	Mennonite Central Committee (MCC)	Director
Md. Mostafa Kawal, Ph.D	BRRI	Principal Scientific Officer: Plant Pathology Division

Md. Nazmul Bari	BRRI	Senior Scientific Officer: Entomology Division
Md. Rezaul Islam	DAE - Agricultural Extension Component (AEC)	Master Trainer
Md. Sadique Rahman	BARI - Agricultural Economics Division	Scientific Officer
Md. Shafiqul Islam Mamin, Ph.D	BRRI	Principal Scientific Officer: Adaptive Research Division
Md. Taufique Arefin	DAE - Agricultural Information Service (AIS)	Ag Extension Officer
Md. Zayedul Hasan	Mennonite Central Committee (MCC)	Staff
Mohibul Hasan	BRRI	PSO: Entomolgy Division
Mr. Md. Abulkalam	DAE - Agricultural Information Service (AIS)	Staff

Mr. Serajul Islam	Safe Agriculture Bangladesh Ltd.	Managing Director
Mst. Rebeka Sultana	GKSS	Executive Director
Nahar, Ph.D.	BARI Plant Pathology Division	Scientific Officer
Phil Birkey	Mennonite Central Committee (MCC)	Staff
Quazi Md. Shafiqul Islam	BARI - Agricultural Economics Division	Senior Scientific Officer
Rezaul Karim Siddique	Mati O Manush; Bangladesh T.V.; Dept. of Management at Savar College	Anchor, Associate Professor
Shahabuddin Ahmad, Ph.D	BARI - Horticulture Research Center	Scientific Officer
Syed Nurul Alam, Ph.D	BARI Division of Entomology	Principal Scientific Officer

# Leah Harris 07/27/2010

	DAE - Agricultural Extension Component (AEC)	Master Trainer
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