



IMPACT ASSESSMENT

global program

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Impact Assessment

program summary

The Impact Assessment Global Theme interacted with the Regional Programs and Gender Global Theme on impact work. Two Ph.D. dissertations are in process for South Asia, one for Bangladesh, and another for India. The former is assessing the economic impacts of the pheromone traps, and the other, the impacts of the onion IPM program. An M.S. thesis is in process to evaluate the impacts of the potato IPM program in Ecuador. A Ph.D. thesis is underway at NC State on impact assessment of onion IPM in the Philippines. An undergraduate research paper is in process on the impacts of parasitoid control of papaya mealybug in India.

Brief planning and training sessions on impact assessment were held in Bangladesh, Nepal, India, Ecuador, Guatemala, and Uganda. A three-week short-term training was completed at Virginia Tech for an economist from Ghana. A six month short term training was completed at Virginia Tech for an economist from India. A baseline survey was completed in Tajikistan by economists from Michigan State. IPM adoption surveys were completed in Ecuador, Ghana, Bangladesh, and India.

Working with regional programs

Surveys were finished in Bangladesh for adoption of pheromone traps and in India for adoption of onion IPM. A survey was completed in Ecuador on adoption of potato IPM. Another survey was completed in Ghana on adoption of vegetable IPM (in conjunction with the Gender Global Theme). A baseline survey has begun in Tajikistan by economists at Michigan State.

Short-term training on impact assessment

Three-week impact assessment training was given at Virginia Tech for an economist from Ghana. A six-month impact assessment training program was held at Virginia Tech for an economist from India. On-site visits were made by PIs to Bangladesh, India, Nepal, Ecuador, Guatemala, and Uganda. Visits were made to the Philippines and Tajikistan by economists from Southeast Asia and Central Asia regional programs, respectively.

Specialized in-depth impact assessments of poverty, environmental, nutritional, gender and other impacts

A manuscript was prepared and submitted to a Bangladeshi journal based on former M.S. student Leah Harris's thesis. The thesis assessed the effectiveness and optimal mix of funding for a set of dissemination approaches for specific types of IPM practices in Bangladesh. The results from the her model suggest that more farmers could be effectively reached by reallocating funding that is currently used for interpersonal communications (i.e. extension agent visits and farmer field schools) to more widespread methods such as mass media and field days. The model also suggests that a dynamic dissemination strategy is necessary to encourage adoption of IPM technologies with differing characteristics and levels of complexity.

A manuscript was prepared and submitted to a journal on assessing gender impacts of IPM in Honduras. A three-step framework to identify women's crops and technologies was developed in conjunction with the LAC regional program. In step one, total potential benefits from research are

estimated; step two allocates those benefits between men and women; and step three incorporates technology-specific parameters to refine the estimates of potential benefits. The framework as applied in Honduras resulted in steps one and two providing the most information on the magnitude and distribution of benefits, but that refinements in step three can affect rankings of research program impacts on women.

In conjunction with the LAC regional program, an economic surplus analysis was combined with household data to predict the economic impacts of agricultural research on IPM for eggplants, onions, peppers, and tomatoes and on poverty reduction in Honduras. Tomato IPM resulted in the largest income gain at \$8 million followed by \$5 million for pepper, \$3 million for eggplant, and \$2 million for onions.

Additional tasks completed include:

1. an M.S. thesis underway at Virginia Tech to assess the ex post economic impacts of the potato IPM program in Carchi Ecuador;
2. a Ph.D. thesis underway at Virginia Tech to evaluate more precisely the ex post impacts of the pheromone trap IPM practice in Bangladesh;
3. a Ph.D. thesis nearing completion at TNAU on the impacts of the onion IPM program in India;
4. a Ph.D. thesis underway at NC State to evaluate the onion IPM program in the Philippines; and
5. an undergraduate research paper underway on impacts of parasitoid control on papaya mealybug in India.