Title: Monitoring and management of the South American Tomato Leafminer, *Tuta absoluta*, in Nepal

What was accomplished OR what it is and how it works:

*Tuta absoluta* is an invasive pest of tomato from South America that crossed the Atlantic in 2006 and spread through Europe, the Middle East, Africa, and parts of Asia. Through the IPM Innovation Lab’s Asia Vegetable IPM project, the program:

- Conducted awareness workshops in Nepal before leafminer invasion.
- Provided pheromone traps for monitoring the invasion.
- Conducted management workshops.
- Developed non-chemical pesticide technologies for *Tuta absoluta* management.
- Developed an IPM package for tomato cultivation incorporating the management of *Tuta absoluta*.
- Ensured resilience for small-scale producers in the face of a potentially devastating production shock.
- Is working with about 200 Community Business Facilitators to market IPM technologies.

Why is it important:

- Tomato is one of the most important crops in Nepal for smallholder farmers.
- *Tuta absoluta* is a devastating pest that arrived in Nepal in 2016.
- It can result in greater than 80% loss in tomato yields.
- It has the potential to cost Nepal over $50 million per year.
- Awareness workshops and early monitoring prevented economic losses.
- IPM technologies reduced the use of chemical pesticides and conserved natural enemies in the fields.

Who will benefit?:

- The public of Nepal by having chemical pesticide-free tomato production and a safer environment.
- Farmers whose livelihoods depend on tomato cultivation.
- Nepalese tomato consumers.

Who was involved:

- Nepal’s Department of Agriculture
- Nepal’s Plant Protection Directorate
- Nepal Agricultural Research Council (NARC)
How was it accomplished (needs to be very brief):

- Open Field: Conducted area-wide management using traps, bio-agents, botanicals.
- Development of supply chains for IPM solutions.
- Organized technical trainings for government, private sector, farmers, and other stakeholders.

Next steps, if relevant:

- Expansion of monitoring and management of *Tuta absoluta* throughout Nepal.
- Disseminate management technologies developed for *Tuta absoluta* to other countries in South and Central Asia and Africa.
*Tuta absoluta* damage on a tomato leaf in Nepal. Photo credit: iDE Nepal

*Tuta absoluta* damage on a tomato fruit in Nepal. Photo credit: iDE Nepal
*Tuta absoluta* awareness workshop (March 2015, Kathmandu, Nepal). Photo credit: iDE Nepal