



A Unique Opportunity For Collaboration: IPM-SANREM

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USAID
FROM THE AMERICAN PEOPLE

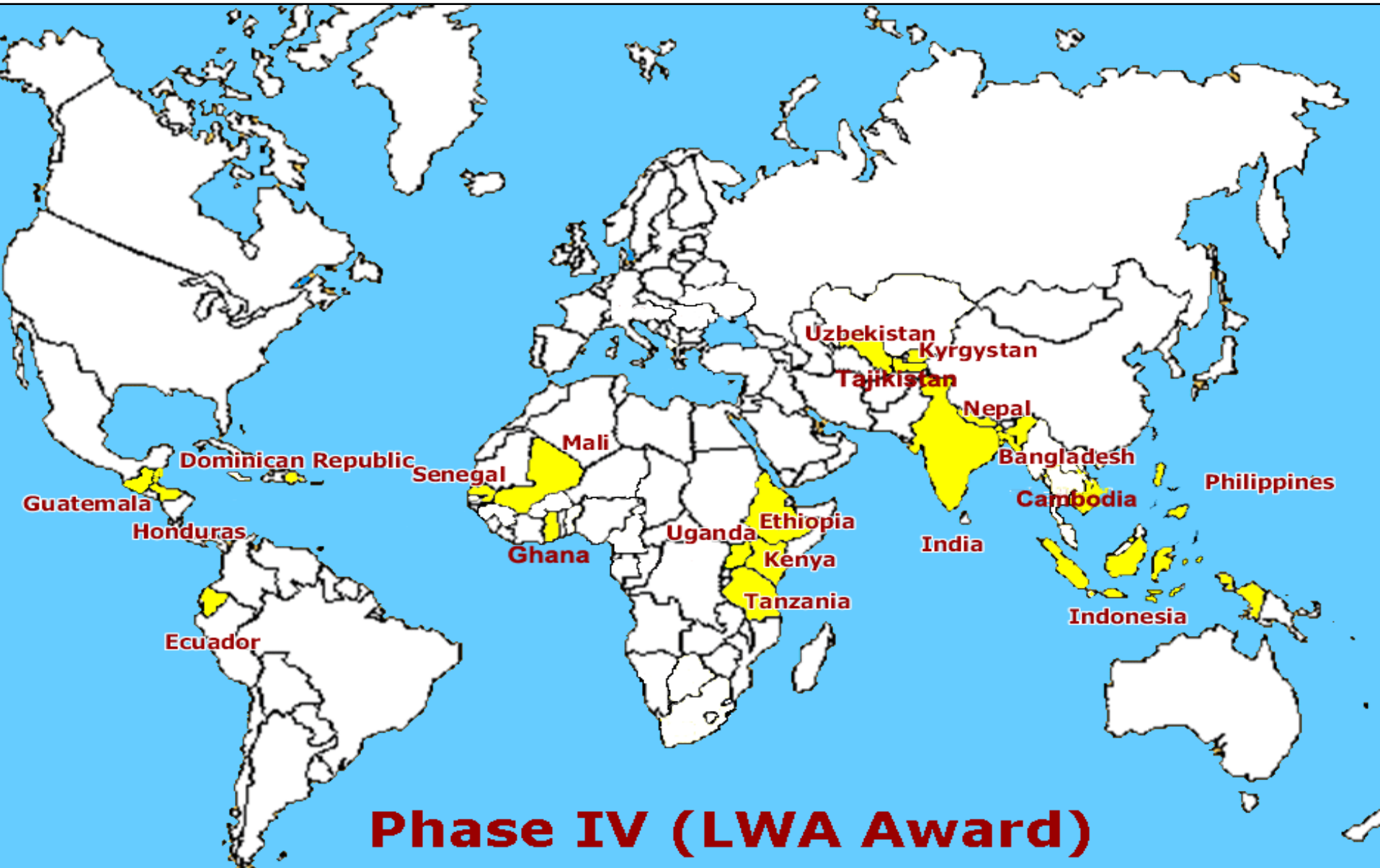




Collaboration Among CRSPs

1. Initiated by USAID
 - a) InterCRSP Project
 - b) Synthesis Project
2. Initiated by CRSPs (CRSP Council)
 - a) Synthesis Project
3. Involvement of PIs
 - a) J. Alwang – LAC projects (IPM-SANREM)
 - b) G. Norton – Impact Assessment (IPM-SANREM)
 - c) M.E. Christie – Gender (IPM-SANREM-Peanut)
 - d) S. Miller, S. Weller – (IPM – Hort CRSP)
 - e) K. Moore – Mali Assoc. Award, IPM CRSP
 - f) M. Mulvaney – IEE Preparation, Lebanon, IPM
4. Adoption of Technologies (IPM - SANREM)

IPM CRSP Participating Countries



Phase IV (LWA Award)

IPM packages being developed

Identified crops in each region:

- LAC - tomato, pepper, naranjilla, tree tomato, onion, blackberry, sweet potato
- West Africa - tomato, potato, cabbage
- East Africa - tomato pepper, onion, coffee, passion fruit
- South Asia - tomato, eggplant, okra, pepper, crucifers, cucurbits
- Southeast Asia - tomato, eggplant, onion, crucifers, pepper,
- Central Asia - wheat, potato, tomato





Components of IPM Packages

- Soil treatment – Solarization, VAM, *Trichoderma*
- Seed treatment – *Trichoderma*, *Pseudomonas*
- Physical control – Hot water, Sticky traps
- Grafting – Bacterial and Fusarium wilt resistance
- Cultural control – Roguing, Host free period
- Biopesticides – *Neem*, NPVs, Bt, *Metarhizium*
- Pheromone traps – Cut worms, stem borers
- Resistant varieties – For Virus and bacterial diseases
- Biological control – Use of parasitoids and predators

Trichoderma and Pseudomonas Production in India



***Trichoderma* Production in Indonesia**

By Bogor Agricultural University



By Farmers' Groups



Trichoderma and *Verticillium* use in the Philippines



Trichoderma Compost Production in Bangladesh



***Trichoderma* Workshop**

- Venue: TNAU, Coimbatore, India
- Dates: July 18- 22, 2011



Neem Products in India

Neem Tree



Neem Flowers



Neem Insecticide



Neem Seed Extract Preparation in Indonesia

Extraction



Bottling

Use of Pheromones in IPM



Pheromone production in India



Pheromone use in the field



Biocontrol Agents Production in Honduras



Predaceous mite collection in the lab



Orius bug production



Predaceous mite production

Cassava Mealybug

Phenacoccus manihoti

- Native of South America
- Introduced to Congo in early 1970s
- Spread to Rest of Equatorial Africa
- Thailand – 2009
- Indonesia - 2010
- Cambodia – 2010
- Philippines ?



Parasitoid: *Anagyrus lopezi*

Native of Paraguay and Brazil
Introduced to Africa – 1981

Thailand – 2009
Cambodia – 2010

