



# CABI in the Americas & Caribbean

**Yelitza Colmenarez,**

**Ulrich Kuhlmann, E. Hidalgo & N. Ramnanan**

Americas & Caribbean Member Countries Consultation

10-11 February 2016, San Jose, Costa Rica

KNOWLEDGE FOR LIFE



# CABI

## AMERICAS & THE CARIBBEAN



Anguilla\*

Barbados

Bahamas



Bermuda\*

British Virgin Islands\*

Canada



Chile

Colombia

Jamaica



Grenada

Guyana

Montserrat\*



St Helena\*

Trinidad & Tobago

KNOWLEDGE FOR LIFE

# We work on behalf of 14 member countries



Anguilla\*  
Barbados  
Bahamas  
Bermuda\*  
British Virgin Islands\*  
Guyana  
Canada  
Chile  
Colombia  
Grenada  
Jamaica  
Montserrat\*  
St Helena\*  
Trinidad & Tobago  
\*UK overseas territories



## Potential member countries



Costa Rica



Brazil

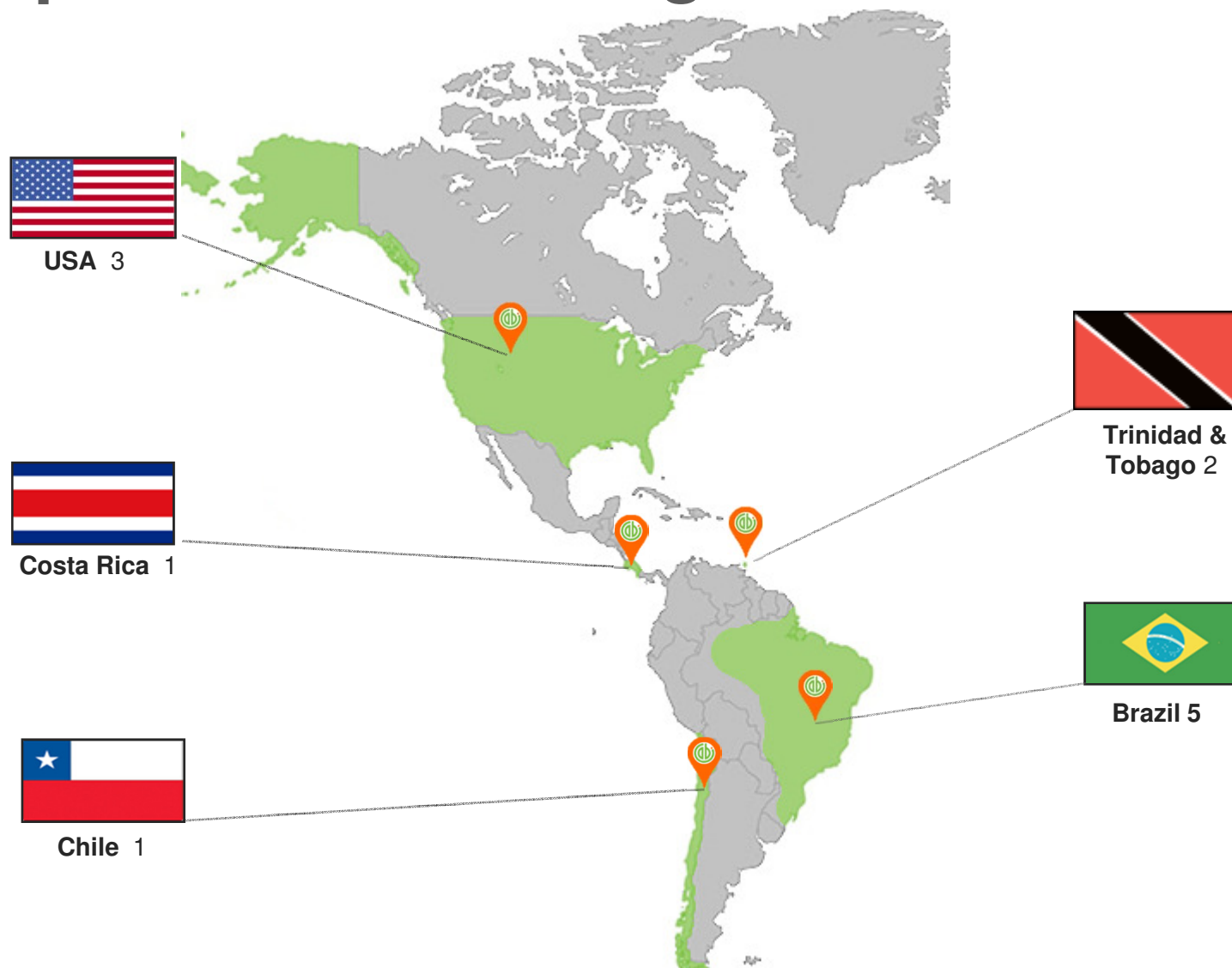


Panamá



Turks and Caicos\*

# CABI presence in the region





# Key Partners in the region



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

**DFID**

Department for  
International  
Development



Food and Agriculture Organization  
of the United Nations



**Federación Nacional  
de Cafeteros de Colombia**



GOBIERNO DE LA  
REPÚBLICA DE HONDURAS



SECRETARÍA DE AGRICULTURA  
Y GANADERÍA



THE UNIVERSITY OF THE WEST INDIES  
ORIENS EX OCCIDENTE LUX



**International  
Potato Center**

Agricultural research  
for development



**SERVICIO  
FITOSANITARIO  
DEL ESTADO**  
MAG COSTA RICA



**Universidade Federal de Viçosa**  
Ensino, Pesquisa e Extensão para a  
Sociedade Brasileira



**Gobierno  
Autónomo  
Departamental  
Santa Cruz**



**PERÚ**  
Ministerio de  
Agricultura y Riego

Instituto Nacional  
de Innovación Agraria



KNOWLEDGE FOR LIFE





# Key facts about the region: Diverse agroecosystems





# Agroecosystems vs production level



Photo: [www.theepochtimes.com](http://www.theepochtimes.com)

**Small farmers**  
Manual processes

**Medium- Large farmers**  
Mechanized processes



Photo: REUTERS / Paulo Whitaker/Files



# Agroecosystems - Mono-cropping vs Sustainable Production





# Potential of the Neotropical region high biodiversity



Photos: Yelitza Colmenarez



# Increased demand for nutritional and safe products



Photo: [www.funkyforest.com.au](http://www.funkyforest.com.au)

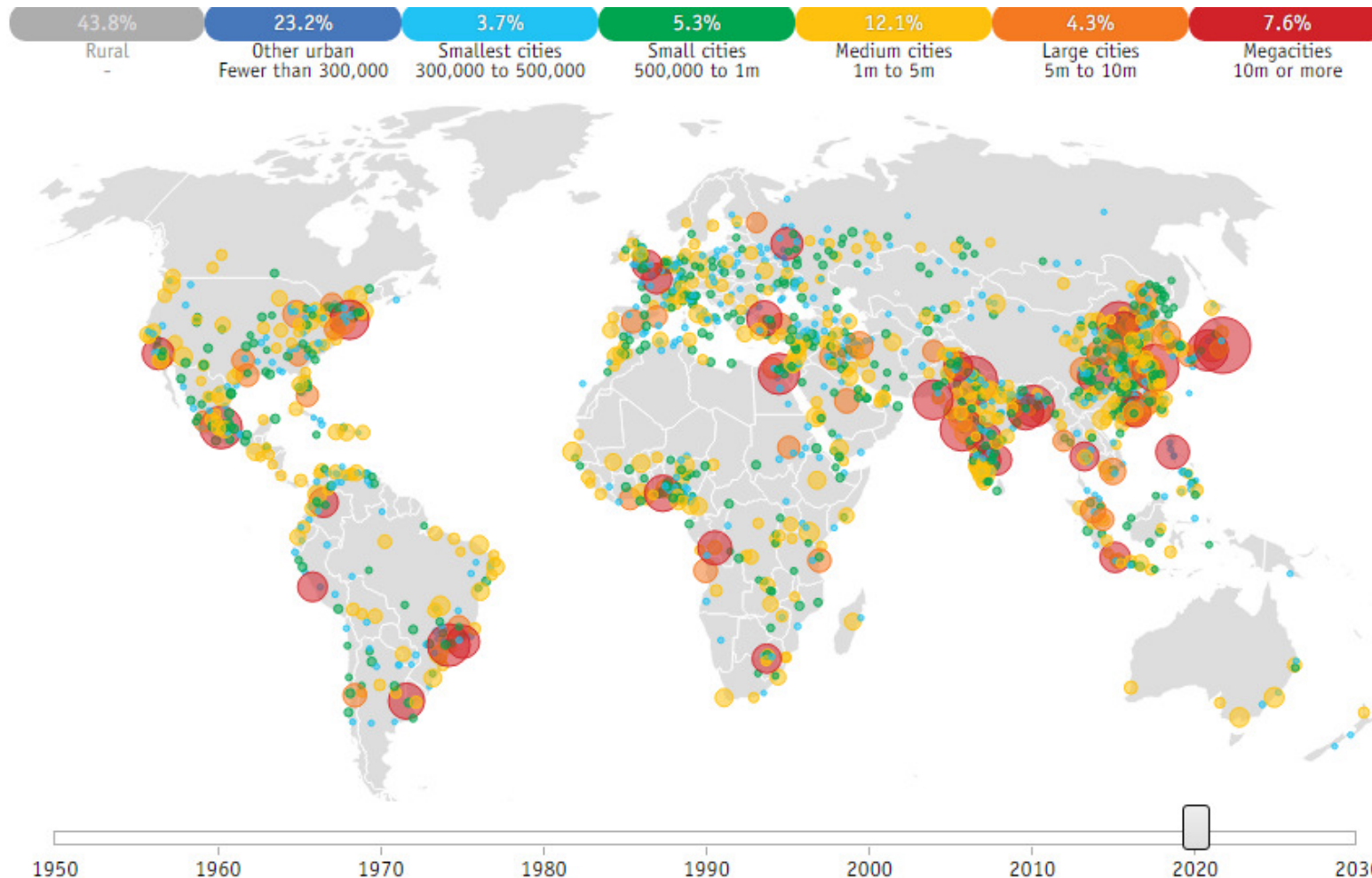
KNOWLEDGE FOR LIFE





# Challenges: growing population / appetite

## Population dynamics - 2020



Source: UN

\*Dataset comprises urban agglomerations with 300,000 inhabitants or more in 2014. Data are for countries existing in 2014, mapped on modern borders. Projections from 2014.



# Challenges: Calendar of application and technology of application of pesticides



**CIÊNCIAHOJE**  
REVISTA DE DIVULGAÇÃO CIENTÍFICA DA UFPA  
NÚMERO 176 - VOLUME 101 - DEZEMBRO 2017 - R\$ 10,00

**SOBRECULTURA**  
As tensões do cotidiano carioca na novela *Avenida Brasil*

**DAVID EDELMAN**  
Neurocientista defende que animais podem ter consciência

**CIÊNCIA PARA SURDOS**  
Novos sinais são criados para incluir deficientes no ensino de biologia

**TERRA DE AGROTÓXICOS**  
Brasil lidera consumo de substâncias banidas

**ALIMENTOS MAIS CONTAMINADOS POR AGROTÓXICOS**

Fonte: Anvisa

Lavar os alimentos retira apenas o agrotóxico que está na superfície, e não o que foi absorvido pela planta.

Senado Federal



# Challenges: Limited infrastructure

## Quarantine

### Point of entry



# Introduction of new pests into the region



*Helicoverpa armigera*



*Citrus leafminer*



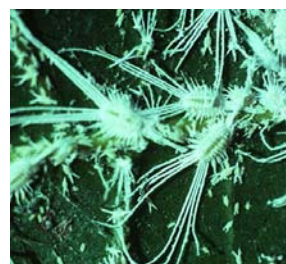
*Anastrepha obliqua*



*Tuta absoluta*



*Rhynchoporus ferrugineus*



*Rastrococcus invadens*



Red Palm Mite



Lethal Yellowing



Papayae mealybug



*Scirtothrips dorsalis*



*Diaphorina citri*



Sago Palm Scale



*Neoleucinodes elegantalis*



*Drosophila Suzukii*



# Priority areas identified during the last Regional Consultation 2012-2013

- Trade and market access and development
- Knowledge management, communication and use
- Plant health
- Biodiversity and invasive species management

## Cross cutting

- Climate smart agriculture
- Institutional capacity building
- Publication of, and access to, authoritative information resources



# Plant Health

## Integrated Pest Management

- ✓ Development of an Integrated Pest Management (IPM) package to control Red Palm Mite in Dominica and Brazil. 6 Dominica Ministry of Agriculture' staff got trained on IPM topics and around 250 farmers reached in both countries.
- ✓ Pest management strategies for Fruit Fly, *Tuta absoluta*, *Neoleucinodes elegantalis* and coffee berry borer in South America integrating our activities as part of Government National programme. Around 1500 farmers reached.

## Technical material

- ✓ Around 359 Factsheets were produced on different plant protection topics and 307 pest management decision guides.



## Trade and market access

### SPS compliance and capacity building

- ✓ Emergency Action Plan developed for Frosty Pod Rot in Trinidad & Tobago funded by GEF. National community sensitize to the risk of FPR.

### GAP capacity building

- ✓ Implementation of GAP and SPS in commodities like Cotton, Sesame, Fruits and Vegetables, Multiple countries.
- ✓ 11 key stakeholders trained to identify the Frosty Pod in Costa Rica to reinforce the Surveillance of the disease.
- ✓ Around 6 persons trained in Brazil from Dominica on IPM to control key pests attacking Coconut palms.

### Climate change

- ✓ Working in key commodities in Brazil and Colombia to help farmers on climate change adaptation.





# Knowledge management and Capacity Building

## Rational Pesticide Use

- ✓ Collaborative work with the government and private companies to train 45 extension officers and 120 farmers in Colombia and 40 and 60 in Trinidad and Tobago respectively.

## Invasive species

- ✓ Technical capacity developed through the implementation of 11 management project as part of the mitigation of IAS in the insular Caribbean initiative.
- ✓ One staff from MoA in Trinidad and Tobago trained in the UK in bio-pesticide development as part of the Red Palm Mite management project funded by GEF.

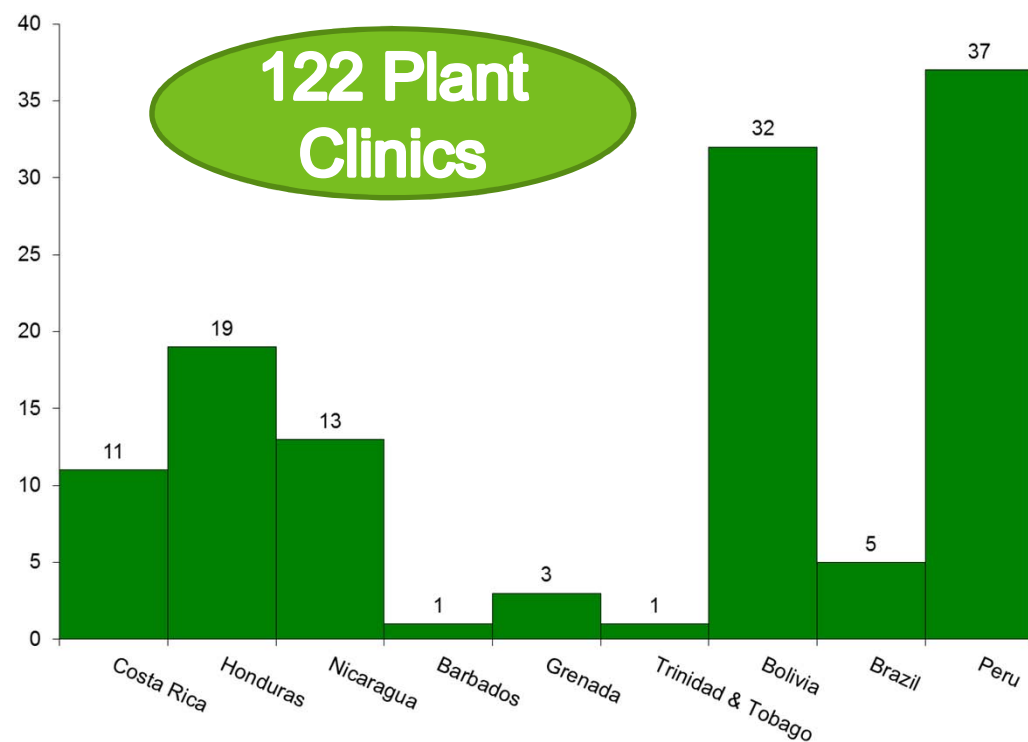
## Diagnostic and pest management

- ✓ Around 1,000 extension officers and technicians trained in Latin America and Caribbean as part of the PW programme.

# Plantwise

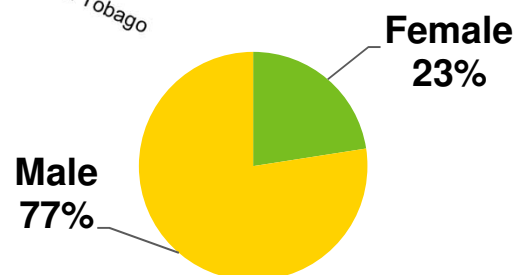
15,077

Farmer's queries recorded



1,071

Plant doctors trained



Gender of farmers reached

Costa Rica • 158

Honduras • 382

Nicaragua • 835

Barbados • 406

Grenada • 331

Trinidad & Tobago • 1,319

Bolivia • 10,508

Brazil • 140

Peru • 1,124



# Biodiversity and invasive species management

## Invasive species management

- ✓ Biological Control of “Rubber vine” *Cryptostegia madagascariensis*.
- ✓ Mitigating the Threats of Invasive Alien Species in the Insular Caribbean (GEF- UNESP) – 5 national strategies and coordinating mechanism completed.
- ✓ Collaborative work to control and avoid spread of invasive species and quarantine pest in the Caribbean and South America.
- ✓ Survey for biocontrol agents conducted in the Nariva Swamp in Trinidad and Tobago as part of the Red Palm Mite management project fund by GEF. Three entomopathogen and one insect identified in laboratory tests as potential control agents.



# Biodiversity and invasive species management

## Microbial resources

- ✓ Survey for biocontrol agents conducted in the Nariva Swamp, Trinidad and Tobago. Three entomopathogens and one insect identified in laboratory tests as potential control agents.
- ✓ Linkage of microbial ID service with Plantwise diagnostic clinics. Around 45 samples processed. Multiple countries.
- ✓ Surveys for insect killing microorganisms from extreme habitats in Chile. 600+ insect-killing and/or plant growth-promoting microorganisms (fungi, bacteria and nematodes) collected from all over Chile, funded by Darwin Initiative.





# Join efforts in Plant Health



# Join efforts in Plant Health



- 🌿 Think Global Act Local with a Regional Focus
- 🌿 In order to face the key challenges like Climate change and Invasive Species having a regional approach

US Dept of State, Geographer  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
© 2014 Google  
Image Landsat





# Regional Initiatives

## Quarantine pest platform

- Strengthening the collaboration among key institutions in the region. Coordinated by EMBRAPA.

## Caribbean Plant Health Directors Forum

- Collaborative efforts and unified strategies to strengthen plant health safeguarding throughout the Greater Caribbean Region. Coordinated by USDA- APHIS, CARICOM, IICA.

## South American Biological Resource Centre Network

- Establishment a South American regional Biological Resource Centre Network. Coordinated by INIA Chile and CABI.



# Going forward in the Americas & Caribbean

*Think Global Act Local with a Regional Focus*

- Work with LOs to ensure **partnership with MCs**, responding to MC needs as expressed in CABI Medium Term Strategy 2020
- Enable **research and technology transfer on sustainable** production.
- Develop more bi-lateral/multi-lateral **collaboration** through South to South / North to South collaboration.
- Adopt **value chain** approach, working with small and medium agribusinesses for close farmer-market linkage.
- **Strengthen our collaboration with key institutions** in the region and increase the number of member countries in Latin America.





Assalamualikum शुक्रिया xie-xie  
mercí zikomo **gracias** efharistó  
お礼がとう **thank you**  
obrigada tak  
urakoze ke iturnetse zikomo  
danke terima kasih dhanyawaad asante

**Yelitza Colmenarez**  
**y.colmenarez@cabi.org**