

Promoting effective agricultural extension - CABI's role and experiences

Dr Qiaoqiao Zhang, Director, Memberships

www.cabi.org

KNOWLEDGE FOR LIFE

Structure of the presentation



- The big picture - setting the scene
- Why is CABI involved in agricultural extension?
- How is CABI involved in agricultural extension in Asia?
- What are CABI's future plans in promoting effective agricultural extension?

Current situation



The big picture

- One billion going hungry
- Water and energy scarcity
- Climate change, global trade
- > 50% of population still rely on agriculture in Asia
- 40% of the food currently grown is lost to pests and diseases¹
- Reducing crop losses by 1% will feed millions more
- “The Last Mile Problem” in agric. extension still widespread
- The key is the access to **knowledge**

¹ Oerke 2006

Why is CABI involved in agricultural extension?



- **Determined** by our transformation, and Mission
- **Driven** by the needs of our member countries, particularly developing MCs
- **Enabled** by our extensive global reach, long history of solving practical agric. problems, solid science and knowledge base, and substantial publishing and knowledge management capabilities
- **Resulted** from our particular attention paid to Food Security, focusing on “Losing less, Feeding more” and putting “Research into Use”

What is CABI?



In brief

- **Not-for-profit**
- Established in **1910**
- Activities include: international development, scientific publishing and microbial services
- Owned by **47 member countries** (14 in **Asia-Pacific region**)
- Approximately **400 staff worldwide** at approx. 20 locations

**Transformed into truly international
development-led organization**

our mission



CABI improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment

How is CABI involved in agricultural extension?



- Improving food security to help alleviate poverty
- Improving access to agricultural and scientific knowledge
- Supporting farmers through training and advice on good agricultural practice
 - Promoting ICM/IPM solutions for farmers
 - Applying ICTs in agro advisory services
- Leading the Plantwise initiative
- Promoting effective national Plant Health Systems

Case Study



Bangladesh

2004– 2006

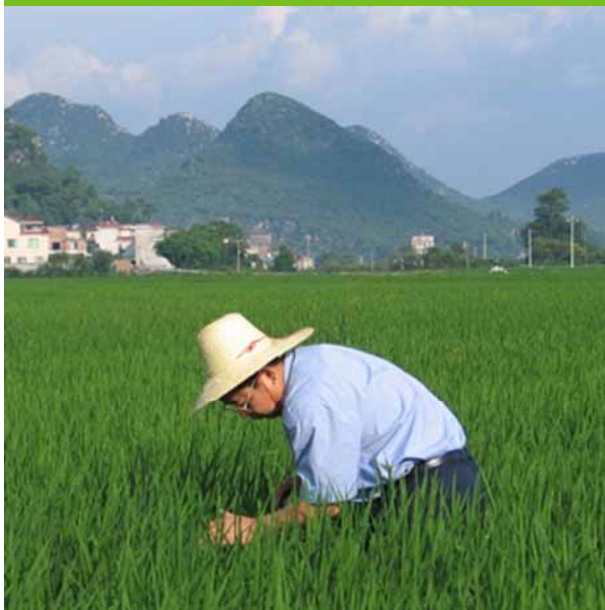
Funded by SDC

Good Seeds Initiative: seed health videos



- In Bangladesh, poor seed health is associated with rice yield losses of 10 to 15%
- Working with partners, we tested whether video communication could increase the number of women in rural communities using new techniques for improving seed quality
- A survey showed that after seeing the video 94% of women were aware of the need for proper seed drying as opposed to just 41% before
- Won a global prize for this work - 'International Visual Communication Award for 2004'

Case Study



**Laos, Myanmar,
Southwest China**

2011 – 2016

Funded by EuropeAid

Increasing rice production sustainably



- Biological control research to find agent for controlling rice pests
- Climate change study to ensure agents appropriate for future climatic conditions
- Design and roll out of low-technology, energy-saving production system for rural areas
- Development and dissemination of wider IPM strategy to all stakeholders
- Strategy to promote take-up by farmers

Managed by the Chinese MoA-CABI Joint-Lab for Biosafety

Knowledge Solutions @ Farm Gate



IKSL-CABI joint program



Synopsis of the service

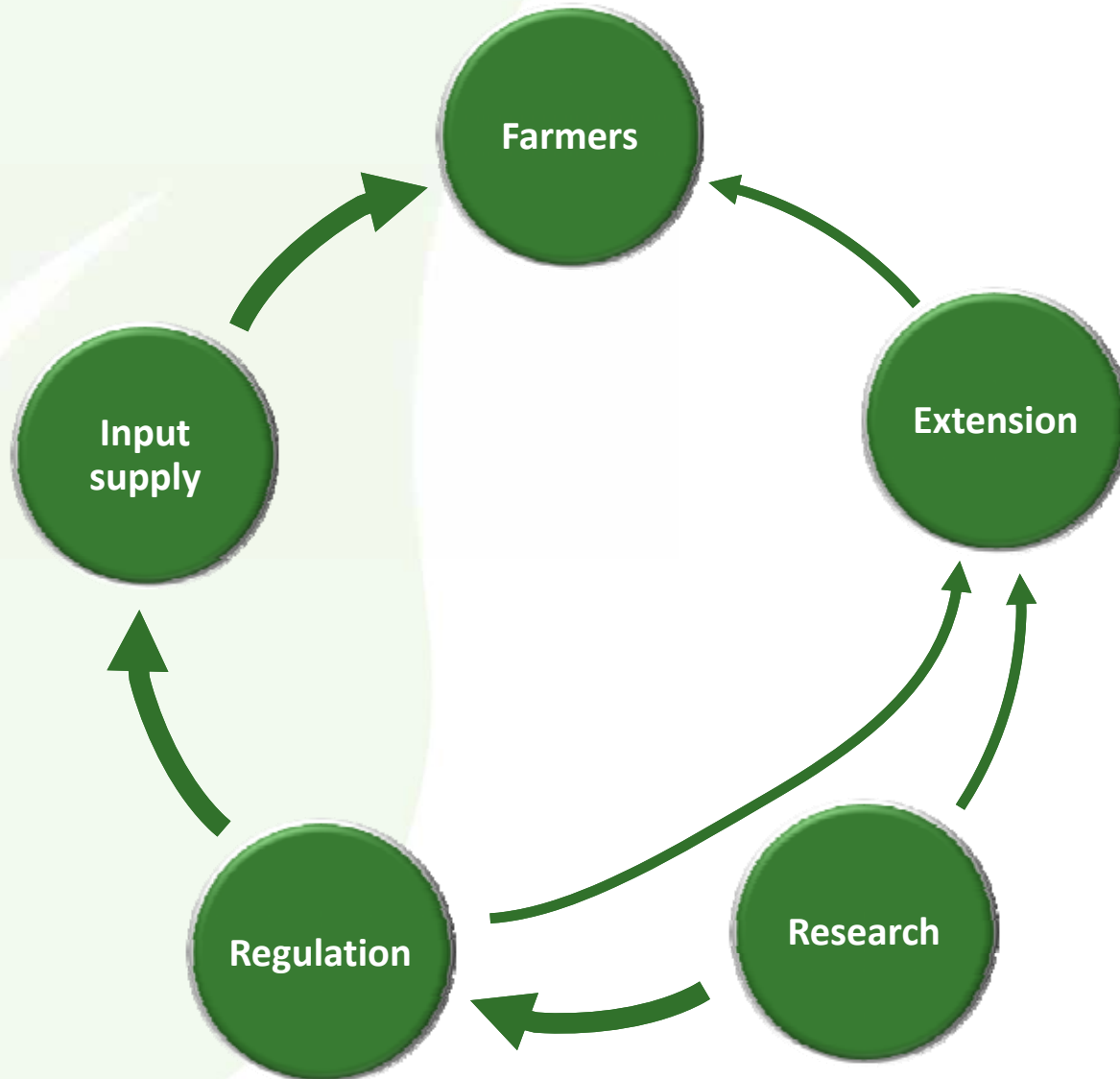
- Farmers subscribe through Airtel prepaid mobile connection (Branded as Green SIM)
- Farmers (5m) get 5 voice messages everyday in local language (crop, animal, market etc)
- A dedicated Farmers' helpline manned by IKSL helpline operators
- Farmers pay normal call charges for using the service
- Yields increased by 22%

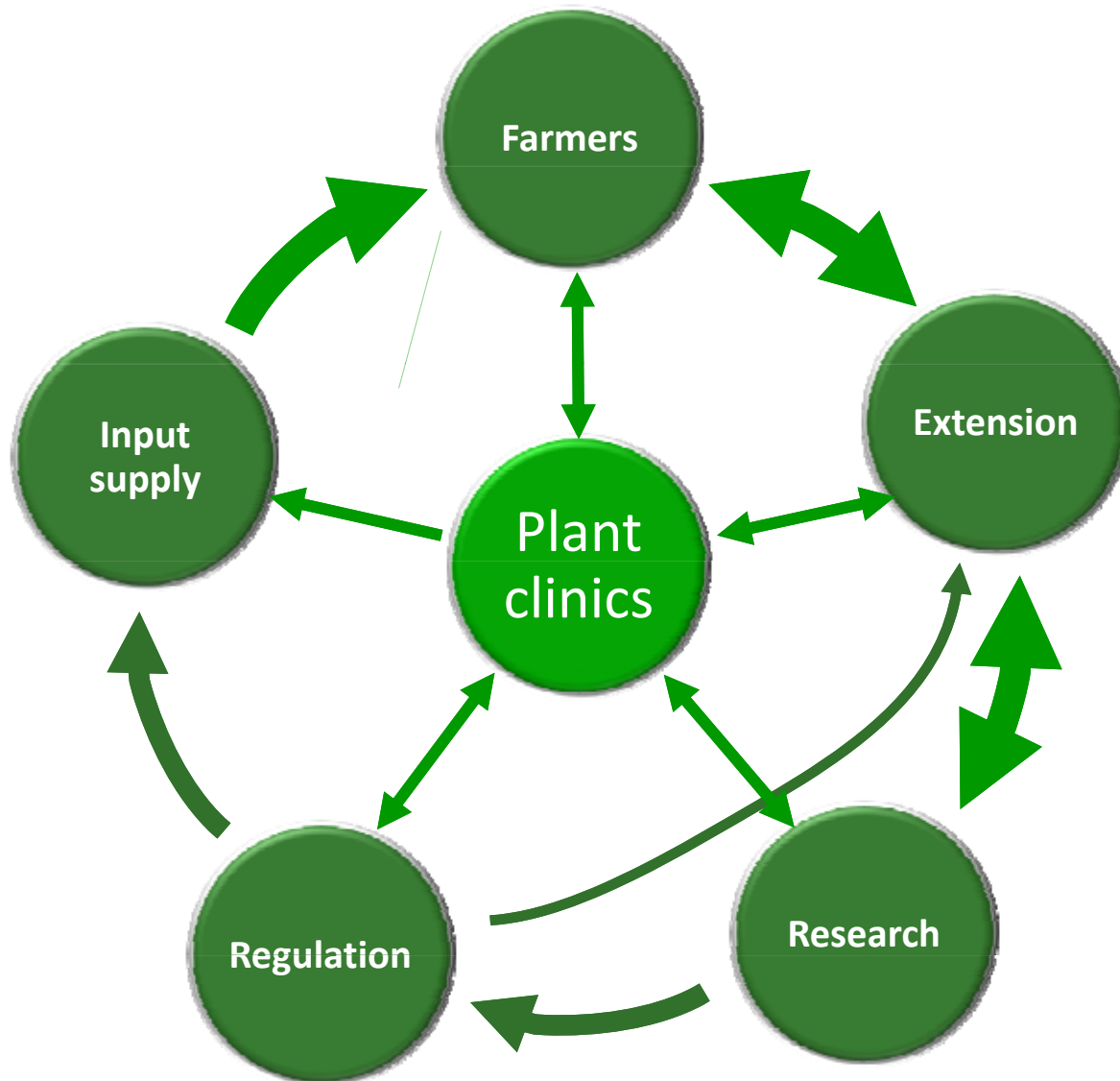
What CABI is doing

- Helping IKSL in in-house Knowledge Management
- Providing Scientific backstopping to helpline operators and local experts
- Developing customized content for dissemination
- Capacity building of IKSL in areas of Crop Health Diagnosis and Advance Pest & Disease warning

Plantwise – a Global initiative

- Strengthen Plant Health Systems using **plant clinics** as an entry point
- Develop a knowledge bank that supports country knowledge and data management and develops a global resource







Where are we now?

- 🌱 **Proven:** First clinic, Bolivia, 2002
- 🌱 Over 10 years scaling up
- 🌱 >180 clinics
- 🌱 Fully working prototype of a knowledge bank
- 🌱 ~100,000 smallholder farmers and their families already helped
- 🌱 60 local partners
- 🌱 7 international partners
- 🌱 ~\$28 million initial funding

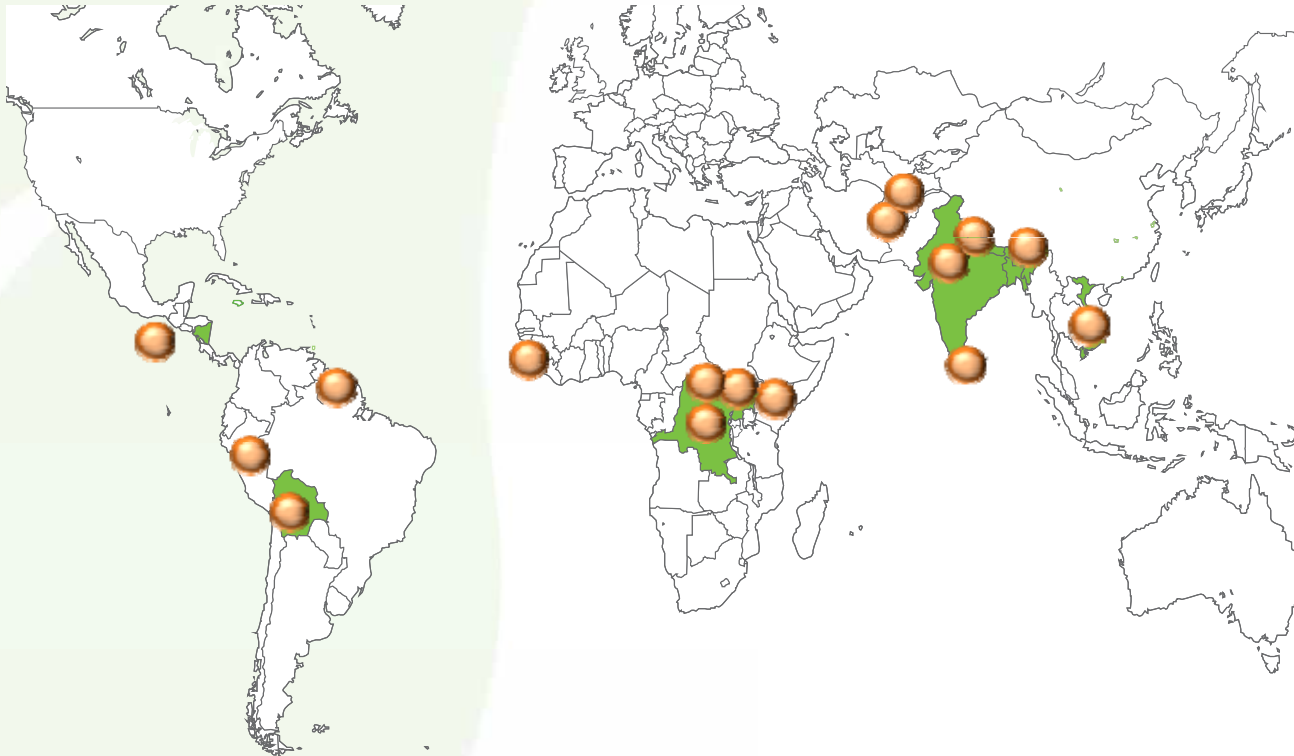


How the clinics work

- Free or low cost at the point of use
- Set up at local meeting places, such as markets
- Farmers bring a sample into the plant clinic
- They receive a diagnosis and a 'prescription' from the plant doctor giving practical treatment advice



Where clinics currently operate



Afghanistan, Bangladesh, Bolivia, DR Congo, India, Kenya,
Nicaragua, Nepal, Pakistan, Peru, Rwanda,
Sierra Leone, Sri Lanka, Suriname, Uganda, Vietnam

Knowledge bank

- 🌱 Identification tools
- 🌱 Treatment and mitigation advice
- 🌱 Fact sheets and practical help
- 🌱 Mapping and analysis tools
- 🌱 Clinic data
- 🌱 Over 2,500 pests on 100 crops
- 🌱 Pest risk assessments
- 🌱 Quarantine information
- 🌱 Legislation and safety information
- 🌱 Supporting literature



Impacts (Bangladesh)

- Increasing income
(Average \$325 per family)
- Preventing losses and
improving yields (9%
increase)
- Reducing costs of
production (\$16.71 p/ha)



Way Forward



What are CABI's future plans?

- Continue to promote effective agric. extension systems and Plant Health systems
- Continue to put “Research into Use”
- Continue to advise farmers on good agricultural practice
- Continue to train farmers and extension workers through participatory approach
- Expand ICT applications in agro advisory services
- Extend the Plantwise initiative more widely

Our vision

By 2016, five million more farmers globally will have access to the knowledge they need, to feed their families and lift themselves out of poverty



Our goal for the Plantwise

- 🌿 \$50 million over next four years
- 🌿 538 plant clinics by 2013
- 🌿 Fully active knowledge bank
- 🌿 800,000 smallholder farmers and their families by 2013, 5m by 2016

Long-term strategy including sustainability in place



Long term sustainability

- 🌱 Donor funding supports scale-up and roll-out phase
- 🌱 Plantwise must become self-sustaining in the long term
- 🌱 **For individual countries**, we see a mix of possible models:
 - Adoption and funding by national governments
 - Adoption and funding by individual states/provinces
 - Payments from farmers, directly or through cooperative associations
 - Provision by agro-input dealers to build customer relationships
 - Sponsorship from traders, retailers, food manufacturers to secure supply chains, reduce input costs and improve quality
 - Agro-industry sponsorship to promote brand values
- 🌱 **For CABI**, funding will come from:
 - Fee-for-service activities: training, accreditation, quality assurance
 - Distance learning and continuing professional development
 - Analytical services, reports and consultancy derived from data

merci
cảm ơn
stuh-tee
salamat
asante sana
Assalamualikum zikomo
urakoze
thank you mahalo Nui Loa
ke itumetse
terima kasih
dhanyawaad
xie-xie mersi epharistó