

Picture removed



Smarter agriculture: new approaches for smallholders and extension providers

Eric Boa and Peter Baker

CABI

www.cabi.org

KNOWLEDGE FOR LIFE

Be Smart

- farmers
*effective use of resources,
manage change, reduce risk*
- extension workers
*advise, instruct, inform, listen,
respond*
- researchers
*develop solutions, new
technologies*

Picture removed

PICTURE REMOVED

Focus on extension services
smart responses, regular contact

Extension: can do better

- widen access, be more responsive
reach <10% of target
- use evidence-based approaches
ad hoc methods, weak choice, uncertain value
- become a profession
career structure, training, performance-based

Picture removed

Improving extension is difficult

- Opaque concepts
innovation systems, farmer empowerment
- Limited research
what works best, where and how
- Complex structures
public, private + third sectors
- Tainted history
train and visit, privatization failures
- Low, unreliable funding
over-reliance on projects, weak government support

Picture removed

They all do extension (of a kind)
NATIONAL crop protection
REGIONAL depts. agriculture
SECTOR NGOs + livelihood projects
TOPIC project-based

MINISTRY OF FOOD & AGRICULTURE
PLANT PROTECTION & REGULATORY
SERVICES DIRECTORATE
NATIONAL HEADQUARTERS

Picture removed

Picture removed

Picture removed

Simple approaches, basic tools

- Plant clinics
any extension provider, regular operations, public places
- Training
broad-based, diagnosis, advice
- Clinic registers
regular data capture, validation

Picture removed



COTE D'IVOIRE

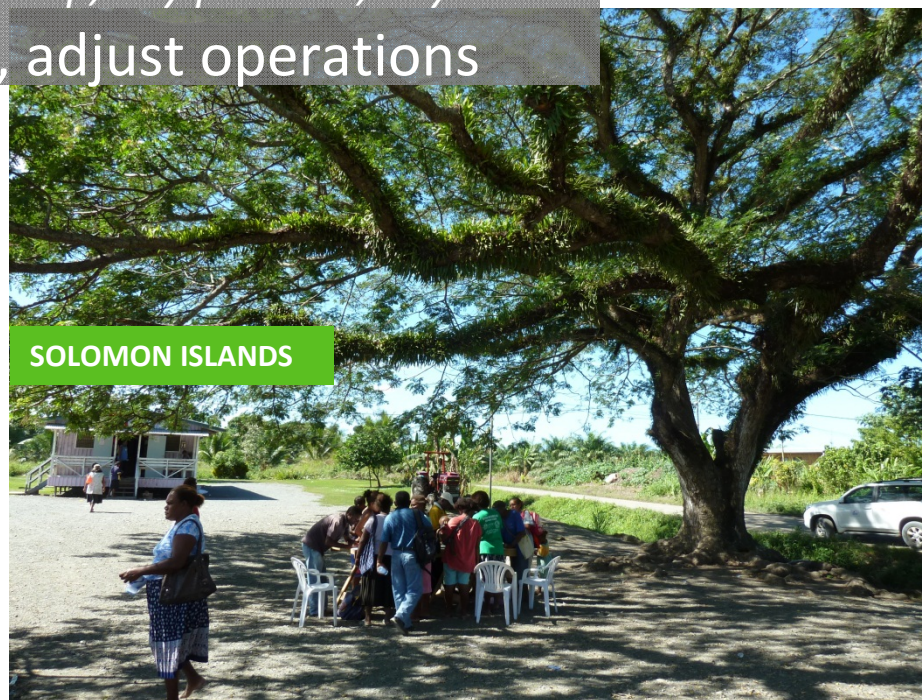


BOLIVIA

PLANT CLINICS: *any crop, any problem, anywhere*
Trial, adapt, adjust operations



INDIA



SOLOMON ISLANDS



FIELD DIAGNOSIS

TRAINING: *basic techniques*
Practical, pragmatic



FACT SHEETS

The art of advice:
selecting good options

- where did you learn about it
- how do you know it works
- where can you get materials
- who uses it
- who doesn't use it and why



ART OF ADVICE



INTERVIEW TECHNIQUE

Plant clinic data

- Surveillance – new and emerging diseases
- Monitor farmer demands
- Review recommendations, standardize advice
- Identify training needs
- Measure benefits – impact assessment





Which problem is most important?

Mite damage
Fungal leaf curl
PHYTOPLASMA YELLOWS



Plant clinics are only one approach

- Combine extension methods

clinics and FFS;

- Mass extension

plant health rallies

- Work with input dealers

trusted relationships

- Cross-sector

in step, not in-parallel

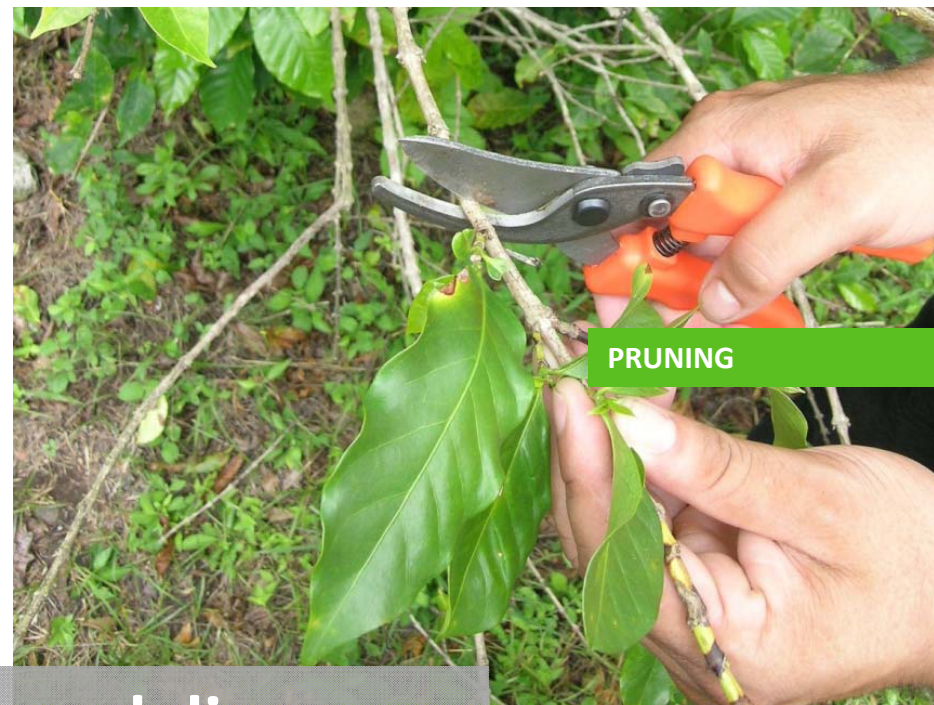
Picture removed

AGROVET NEXT TO PLANT CLINIC | KENYA

artist Lucy Watts

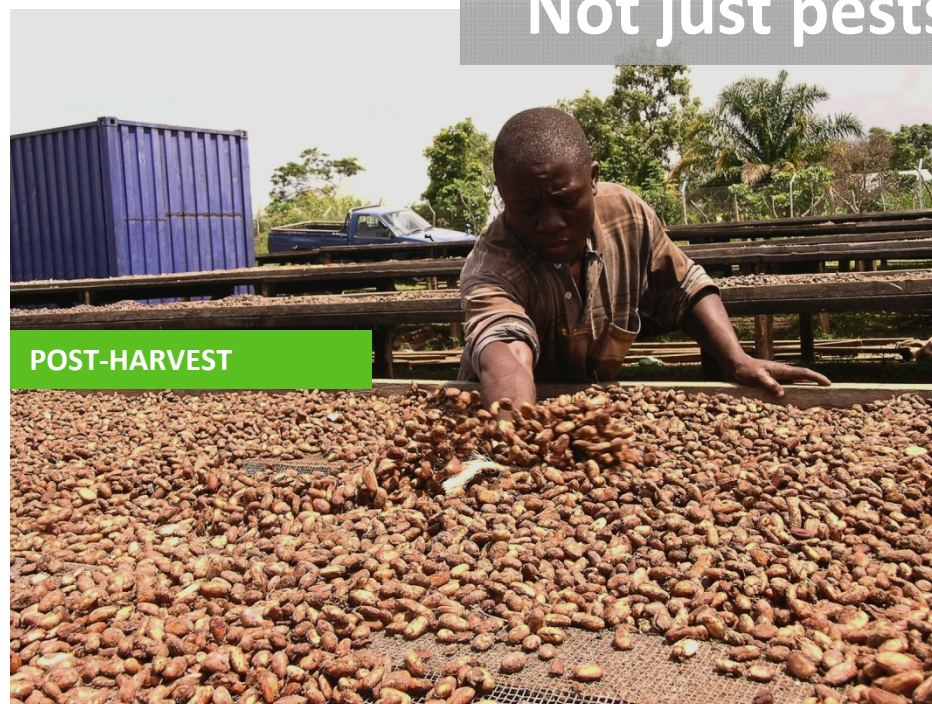


SOIL FERTILITY



PRUNING

Not just pests and diseases



POST-HARVEST



PLANTING ADVICE



Going Public: plant health rally



Adapting to climate change

Many studies to develop:

- Models
- Impact assessments
- Risk maps
- Vulnerability assessments
- Pilot implementation projects

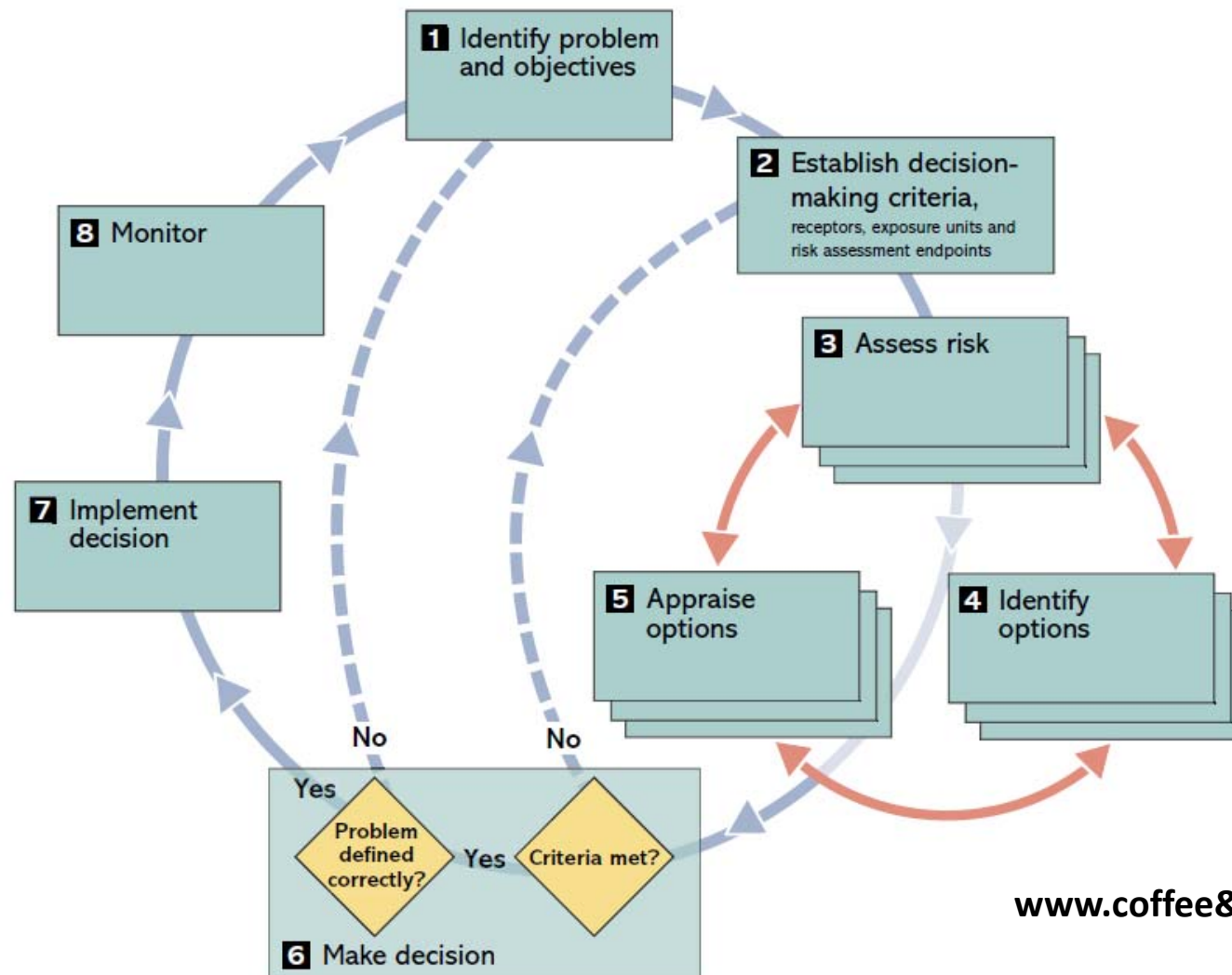
Farmers, extension providers, coops lack:

- guidance on how to develop a practical, logical approach for adaptation to meet short, medium and long-term goals

Practical tools for adaptation



A risk based framework to identify and mitigate main risks



Adaptation is a continuous process

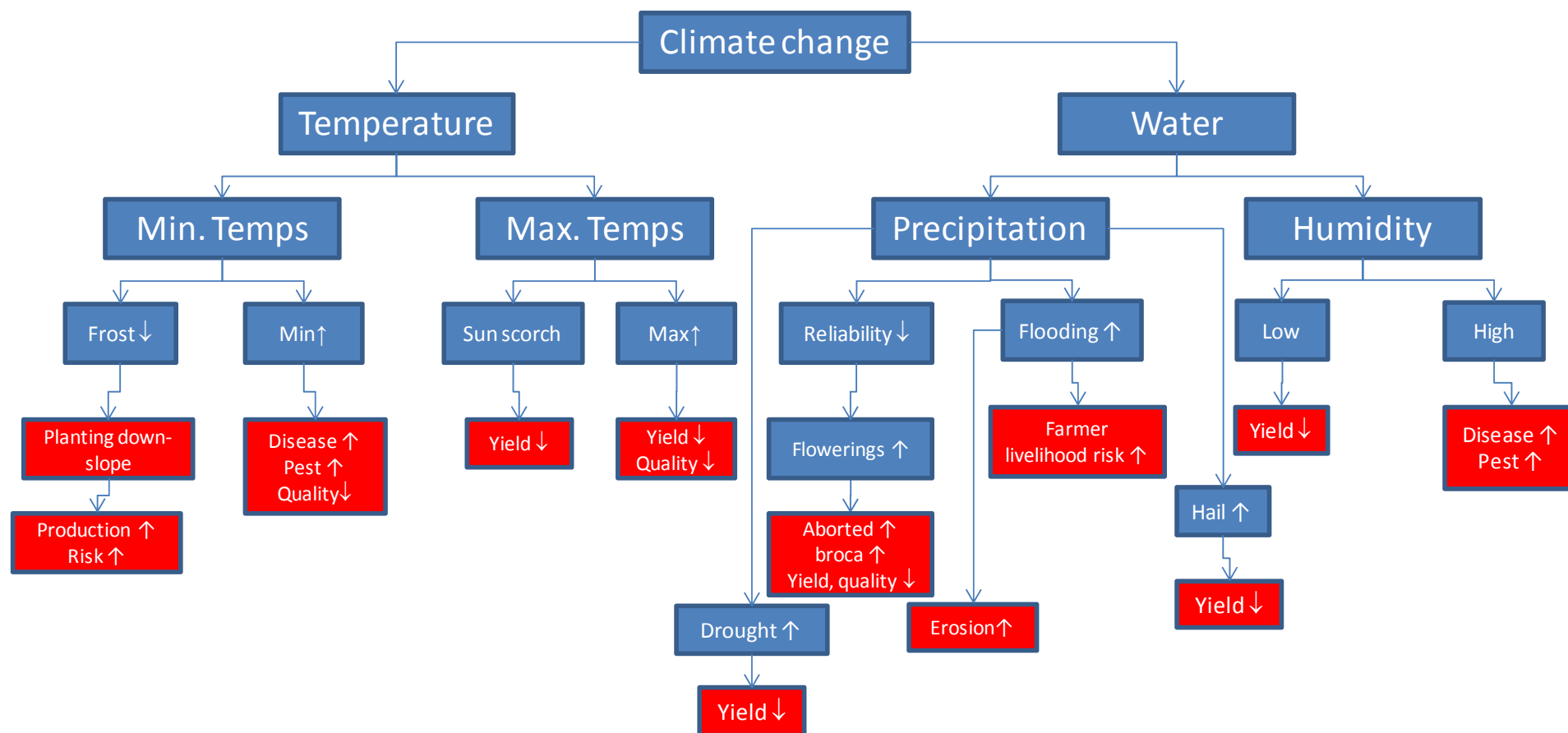
- The framework recognizes inherent difficulties of adaptation
- Has flexibility to include qualitative and semi-quantitative ('quick and dirty') methods to get going
- The process is cyclical; practitioners continuously evaluate and improve knowledge

Picture removed

TOO MUCH/NOT ENOUGH WATER

Picture removed

Brazilian coffee farmers adapt: principal threats identified



GETTING ADVICE AT A CACAO DEPOT



FARMER TRAINING & DEMO PLOT

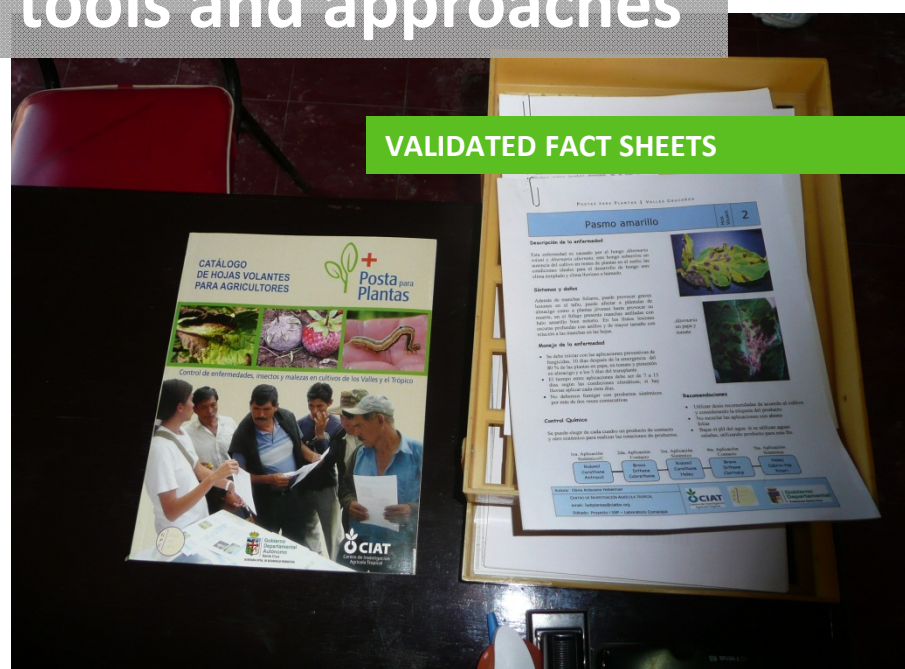


Adapt extension tools and approaches

MOBILE PHONES and ICTs



VALIDATED FACT SHEETS





Extension

Effective delivery of the right tools and efficient organisation of services is critical to adaptation.

The End

Picture removed

Eric Boa

e.boa@cabi.org

Peter Baker

p.baker@cabi.org