



Approaches and results on the development of agriculture insurance in LAC  
Washington DC  
February 15, 2013

# Promoting Access to Agricultural Insurance in Developing Countries

**Agricultural Insurance Development Program (AIDP)**

**A partnership between the World Bank and the Netherlands Ministry of Foreign Affairs**

Daniel Clarke

Senior Specialist, Disaster Risk Financing & Insurance (DRFI) Program, World Bank



Ministry of Foreign Affairs of the  
Netherlands



**Disaster Risk Financing  
and Insurance Program**



Agriculture and  
Environmental Services



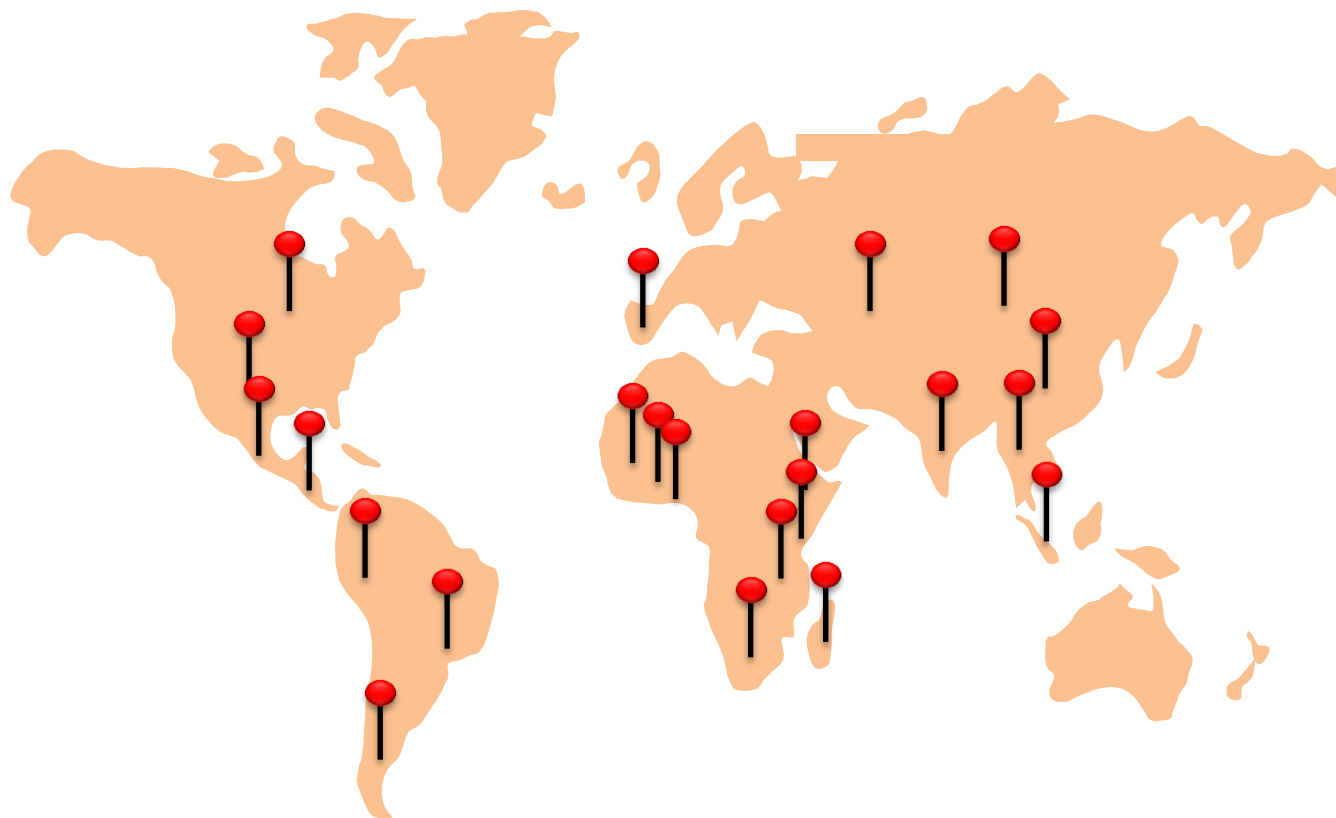
## **Agricultural insurance can contribute to growth and poverty reduction**

1. Agriculture is an uncertain business, particularly for the poor
2. Risk is costly
  - Improvements in risk mitigation, transfer or coping could have large benefits
3. Agricultural insurance can:
  - Reduce risk
  - Increase productivity (by supporting sustainable credit markets)
4. Agricultural risk is covariate  $\Rightarrow$  formal insurance necessary



## **Lots of pilot agricultural insurance schemes but many have not scaled up, and hence have had little impact on rural livelihoods**

### **Index-based agricultural insurance programs (and pilots): Geographic Distribution**





Ministry of Foreign Affairs of the  
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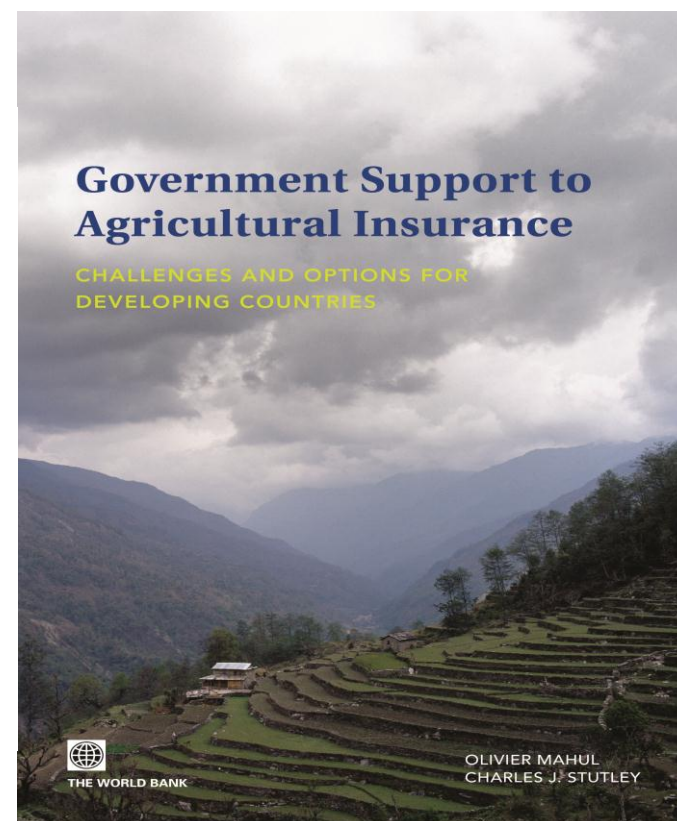
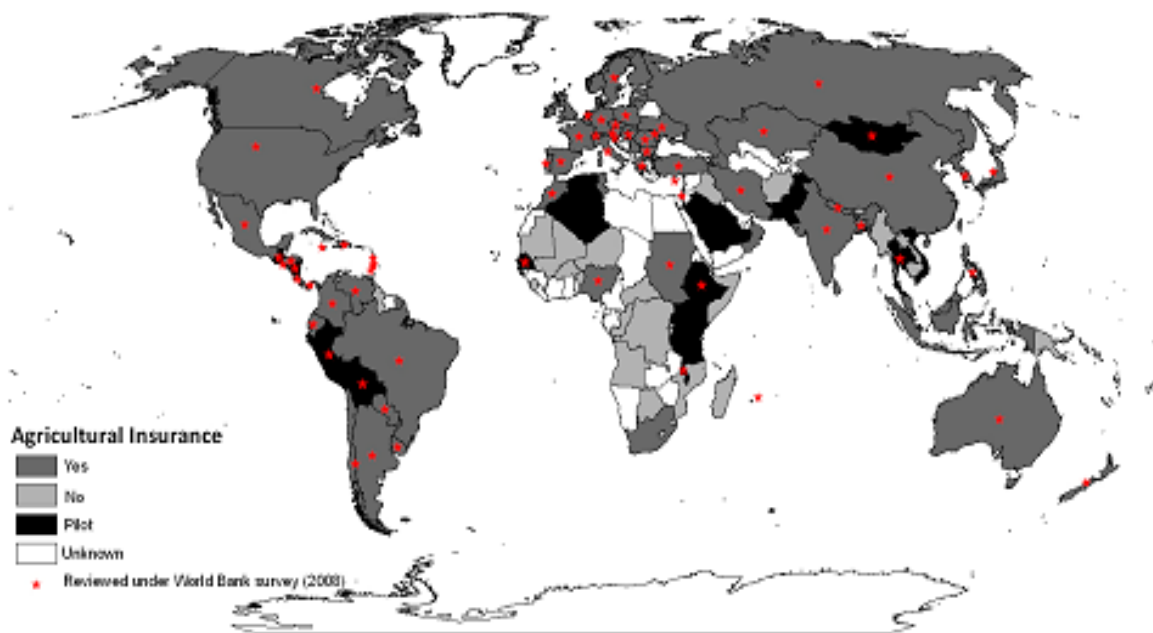
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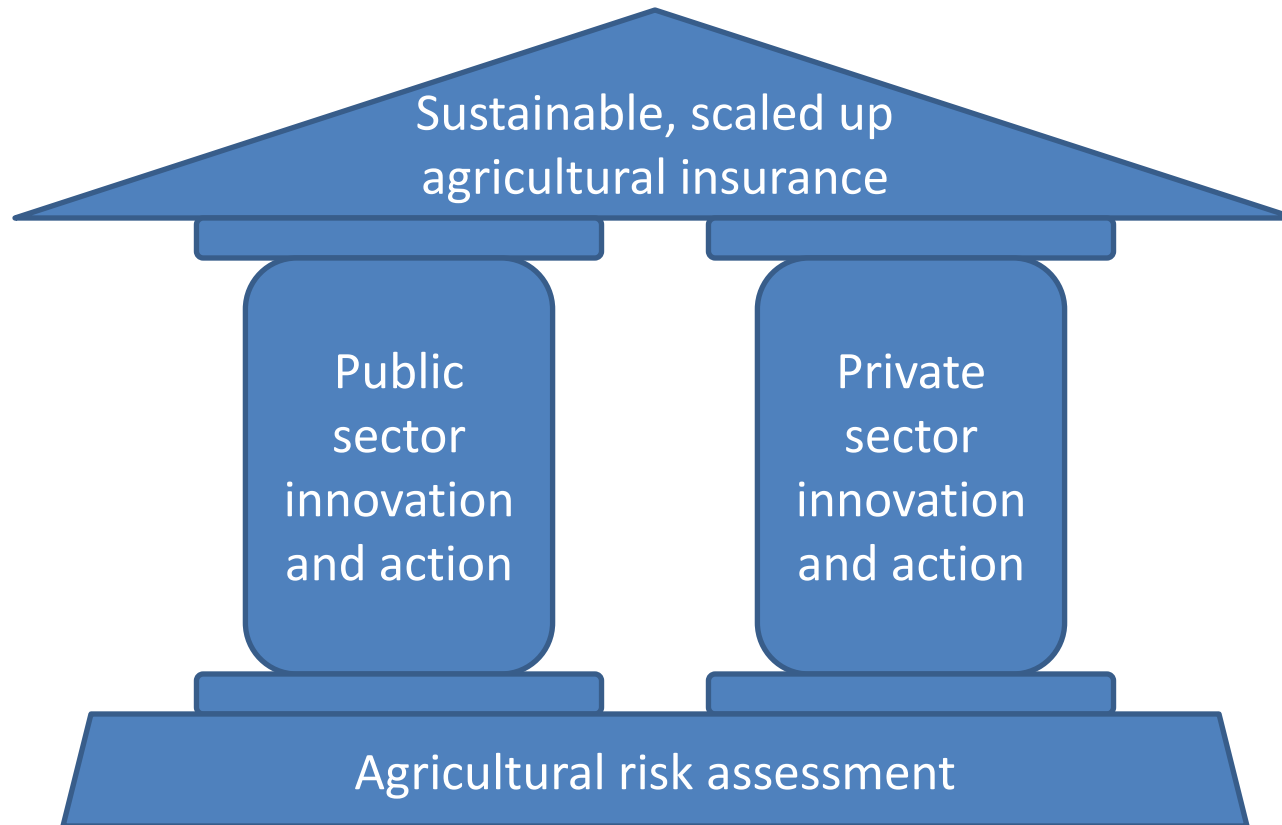
# Agricultural Insurance Review (2010)

## Review of agricultural insurance programs in 70 countries





# Experience suggests that sustainable, scaled up agricultural insurance programs require strong public and private sector pillars

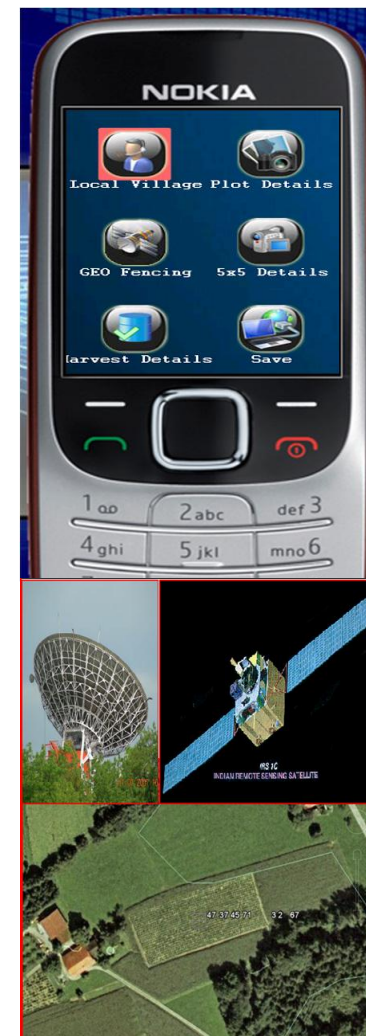




## Example: Crop insurance in India

- Programs were piloted to scale up
  - Commitment to program over a long time period
  - Compulsory for borrowing farmers
  - Large subsidies
  - Coordinated long term investments in data market infrastructure
    - Crop cutting experiments
    - Weather station infrastructure
    - Remote sensing data
- Substantial involvement of private sector since 2007

⇒ Currently ~30m insured







## The Agricultural Insurance Development Program (AIDP) builds on IBRD experience working with agricultural insurance programs that have achieved scale

- **Partnership:** between DRFI Program, ARMT and Netherlands Ministry of Foreign Affairs
- **Mission:** To support countries in implementing sustainable, cost-effective public private partnerships in agricultural insurance that increase the financial resilience of rural households, as part of their broader agricultural risk management strategy.



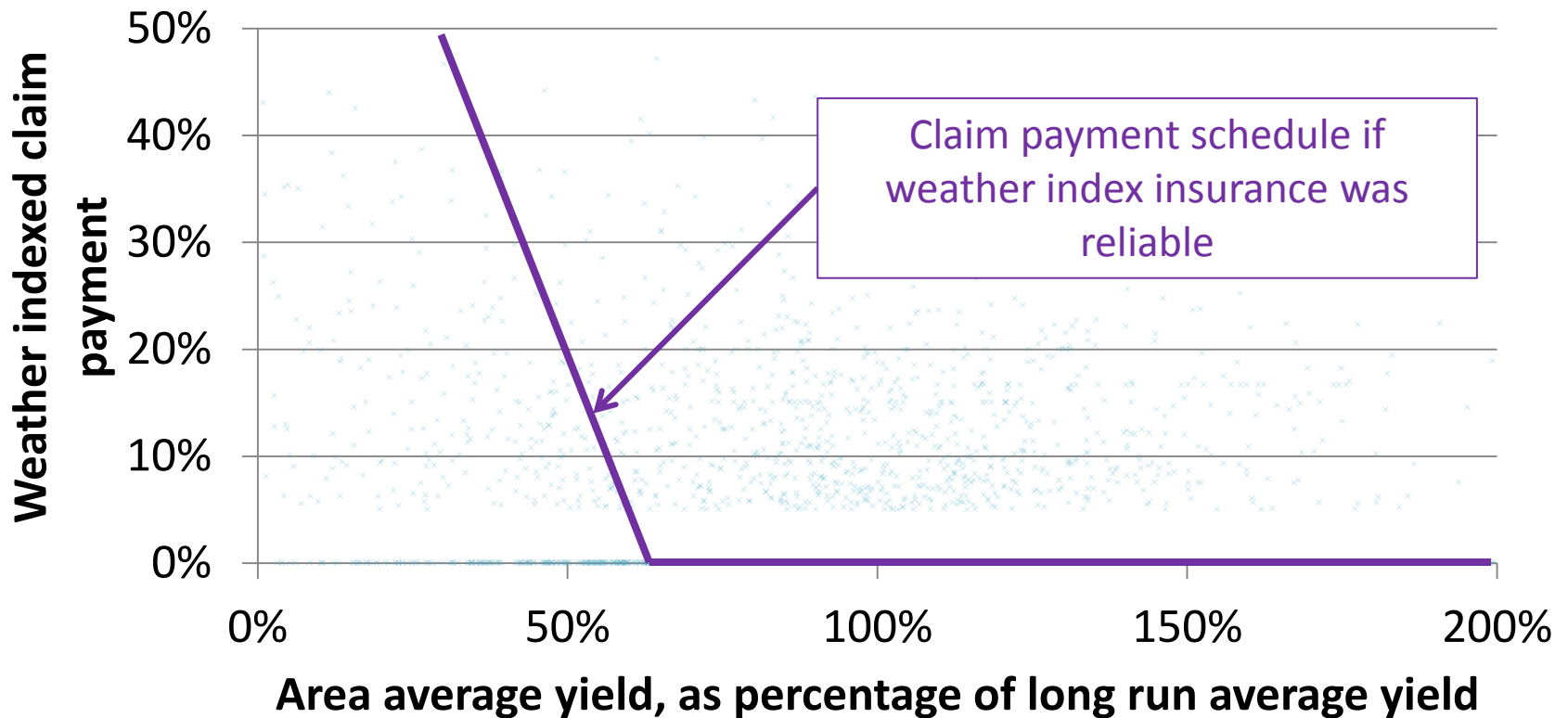
## AIDP strategy: Five problems to solve

1. Lack of clarity over the respective **roles** of the public and private sector in promoting agricultural insurance.
2. Lack of the **risk market infrastructure** necessary to support constructive competition.
3. Insurance providers and public decision makers often lack **technical capacity**.
4. Many of the products offered through recent pilots have been technically feasible from the insurance provider's perspective, but have not offered **client value**.
5. Tools and indicators used for **monitoring and evaluation** are often not fit for purpose, particularly for index insurance programs.



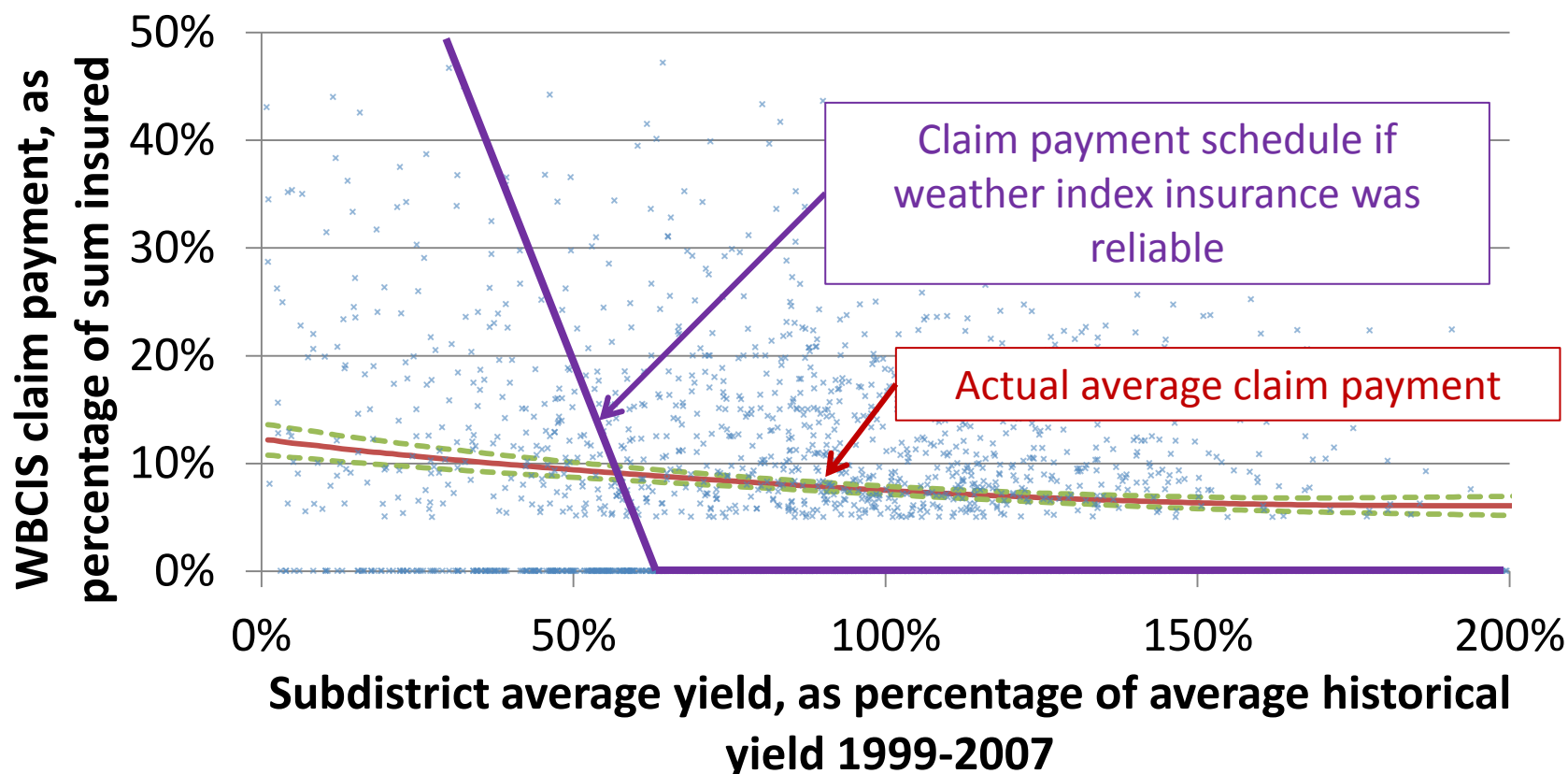


## For example, evidence on client value for weather index insurance is lacking





## Weather index insurance may not offer reliable protection to some farmers $\Rightarrow$ low client value?



9 years of data, 318 products sold across one state in India. Source: Clarke et al. (2012)



## Six solution pillars of AIDP

### Agricultural risk assessment

- More systematic use of risk information in agricultural risk management
- Led by ARMT with input from AIDP

### Institutional capacity building

- Identify and clarify roles of the public and private sectors
- Capacity to use insurance principles and tools to achieve social objectives

### Data market infrastructure

- Coordinated investments in collecting, auditing and managing insurable data
- Public support / financing

### Technical capacity building

- Best practice product design
- Risk-based pricing and cost-effective risk financing
- Legal & regulatory framework

### Private sector

- Risk-based pricing
- Efficient delivery, distribution, and claims settlement
- Timely adoption of new technologies

### Monitoring and Evaluation

- Gather and disseminate evidence of impact
- Statistical analysis of products and basis risk



## **Comparative advantages of the World Bank Group in public private partnerships for agricultural insurance**

1. Convening power
2. Partnership with ongoing programs
3. Specialist technical expertise and experience
4. Link to overall agricultural risk management and policy dialogue
5. Potential to leverage with ongoing projects for scaling up and financing



## AIDP Activities

- **Financial agricultural risk assessment**, to ensure that any agricultural risk transfer solutions are consistent with government's agricultural risk management plans.
- **Public institutional capacity building** on how insurance principles and tools can be used to promote social objectives.
- Working with governments on **data** for agricultural insurance, supporting coordinated market investments in collection, auditing and management of insurance-quality data to provide a foundation for affordable, reliable protection against large agricultural shocks.
- Actuarial and other **technical capacity building** to support design, pricing, risk financing and monitoring and evaluation.
- Design and implementation of a **monitoring and evaluation** framework to meaningfully assess the welfare impact of agricultural insurance programs.



## **AIDP: Work Program (starting)**

1. Proposed priority countries
  - Benin
  - Bangladesh
  - Kenya
  - Indonesia
  - Senegal
2. Support to on-going projects:
  - Mongolia
  - India
3. Other countries (subject to client demand, funding and specialist capacity)





## Contacts

Olivier Mahul, Program Coordinator

[omahul@worldbank.org](mailto:omahul@worldbank.org)

Daniel Clarke

[dclarke2@worldbank.org](mailto:dclarke2@worldbank.org)

Fatou Assah

[fassah@worldbank.org](mailto:fassah@worldbank.org)



# Scaled up crop insurance programs typically face many challenges that require long-term commitment

Weather data

Remote sensing data Reach more farmers Distribution

Consumer protection Publicly funded data Compulsion

Long term effort Operational capacity Risk financing

Learning and evaluation Disruptive technologies

Crop cutting experiments Product design

Basis risk

Align private sector incentives

Consumer understanding

Actuarial capacity

Legal and Institutional Framework

Statistical analysis of basis risk Perceived data quality

Technical Support Unit Scaling up innovations

Barriers to entry Consumer knowledge Index design

Reinsurer of last resort

Private sector incentives

Data audit mechanism

Premium subsidies

Claim settlement