

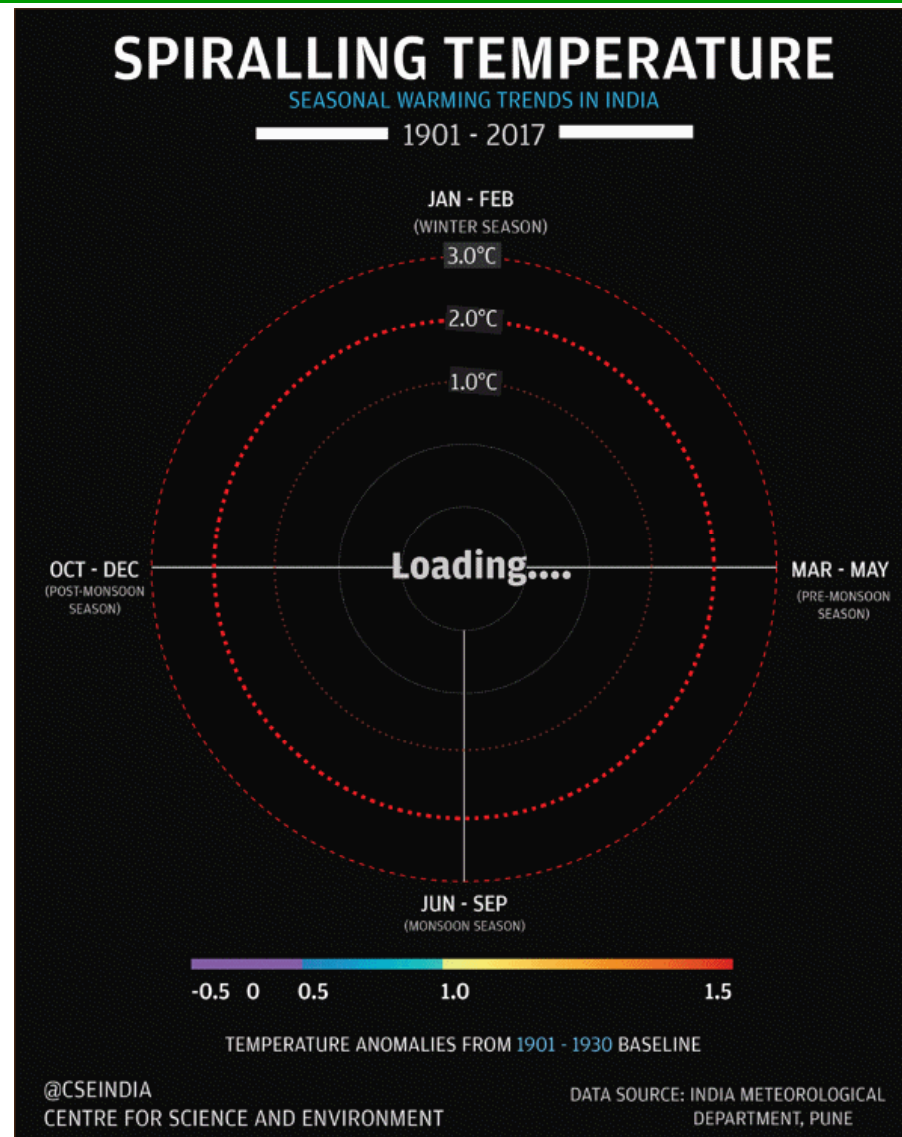


Background and context Pradhan Mantri Fasal Bima Yojana

Chandra Bhushan

Deputy Director General
Centre for Science and Environment
New Delhi

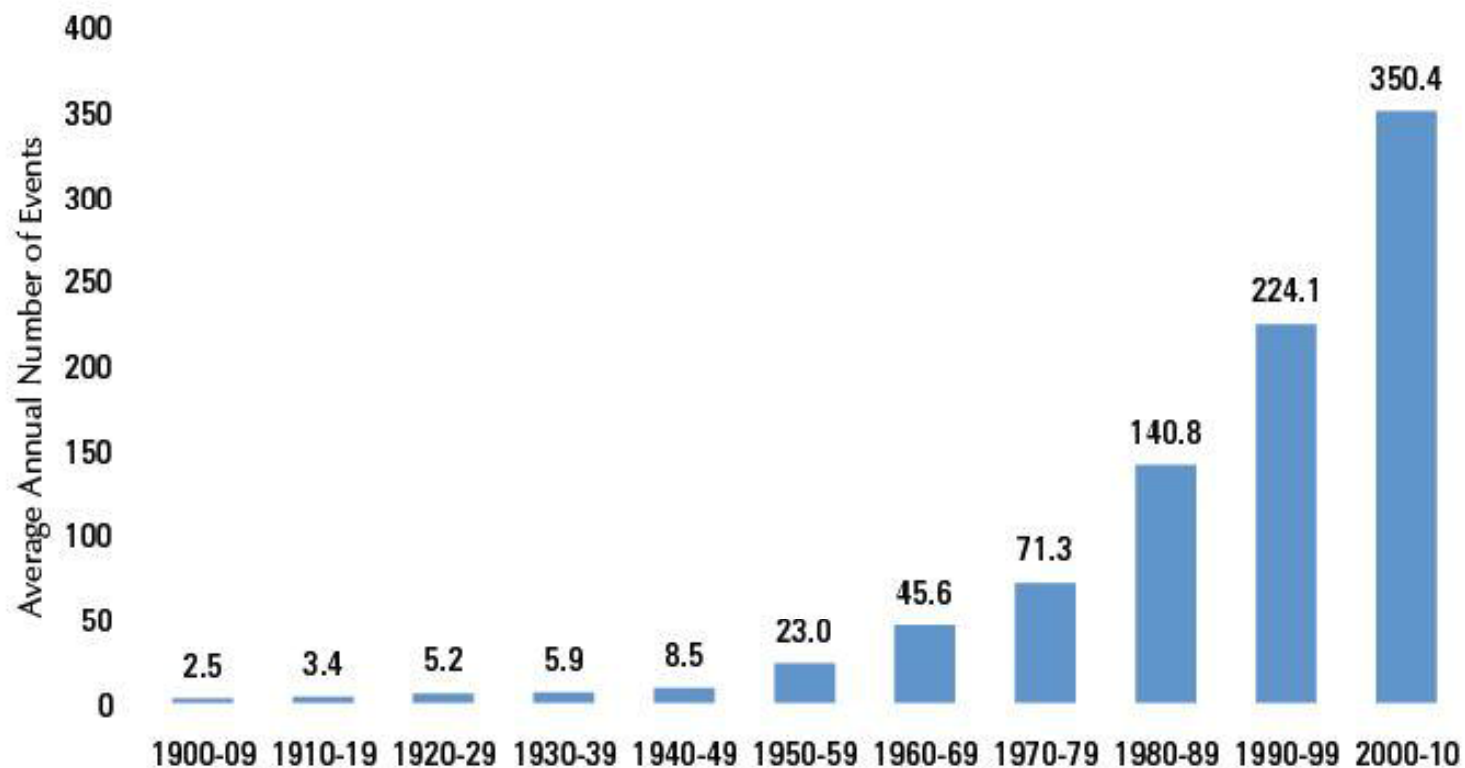
Mitigation efforts not sufficient: Towards a $> 3^{\circ}\text{C}$ world



Increasing frequency of extreme weather events



Figure 1: Average Number of Extreme Weather Events per Year by Decade, 1900–2010



Note: For the last period, 2000–2010, the annual number of events is based on an 11-year average. Statistics from the last “decade”—2000–2010—and the data for 2010 and perhaps even 2009 must necessarily be considered preliminary at this writing (March 2011).

Source: EM-DAT (2011).

Poor countries and poor communities suffered the most

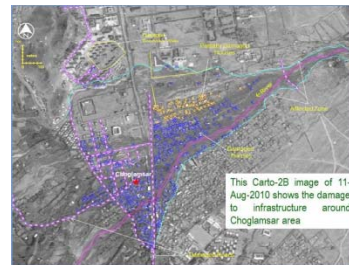


- Of the ten most affected countries due to extreme weather events (1994–2013), nine were developing countries (*EM-DAT*)
- Between 2001 and 2006 low income countries lost about 0.3% of annual GDP due to extreme events; developed nations lost about 0.1%. (*SREX*)
- Studies establish that climate related risks are unevenly distributed – poor countries and poor in poor countries suffer proportionally higher; **population dependent on the agriculture sector is worst affected**

Facing the brunt of extreme rainfall events



Mumbai 2005



Leh 2010



Uttarakhand 2013

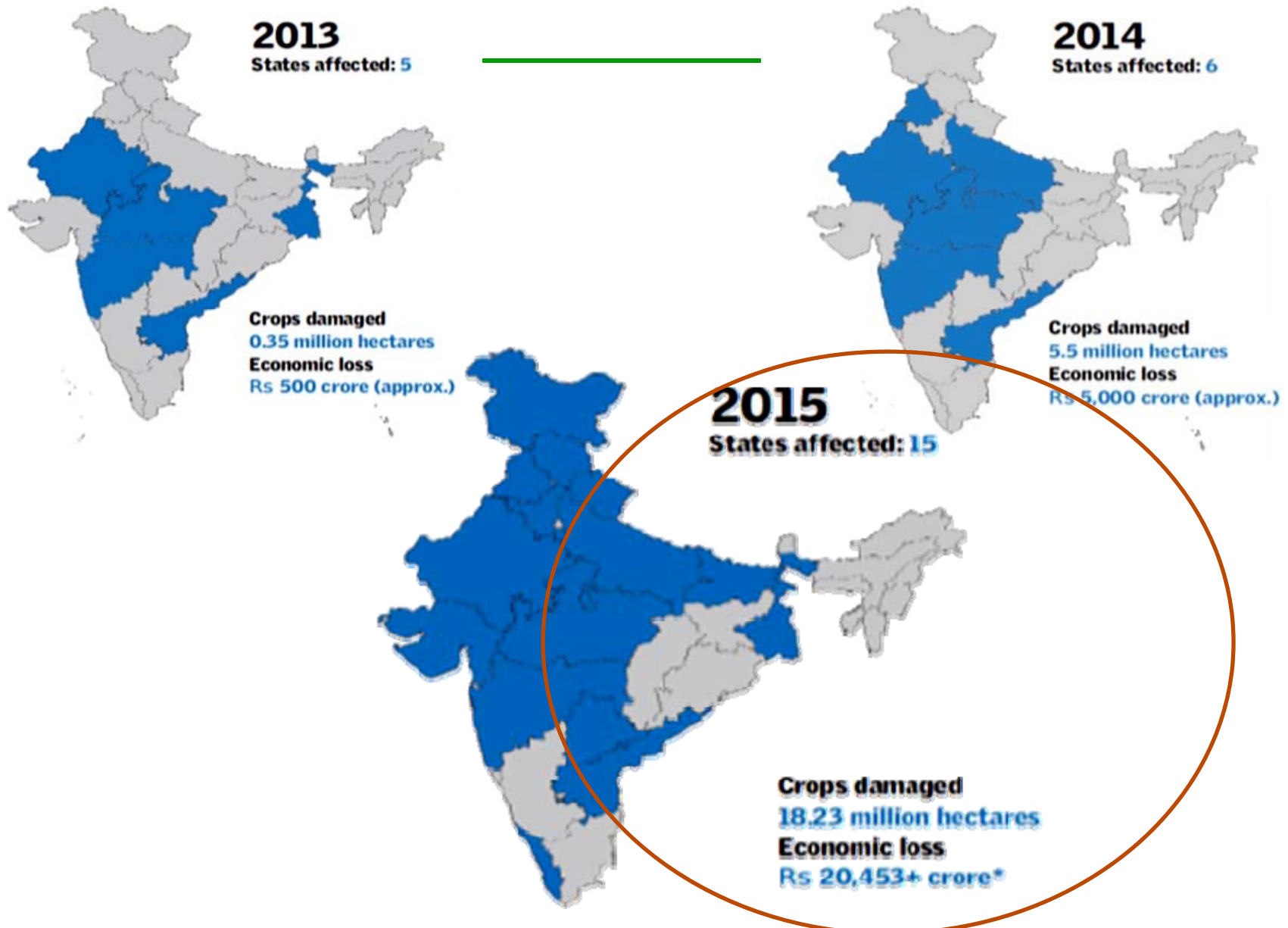


J&K 2014



Chennai 2015

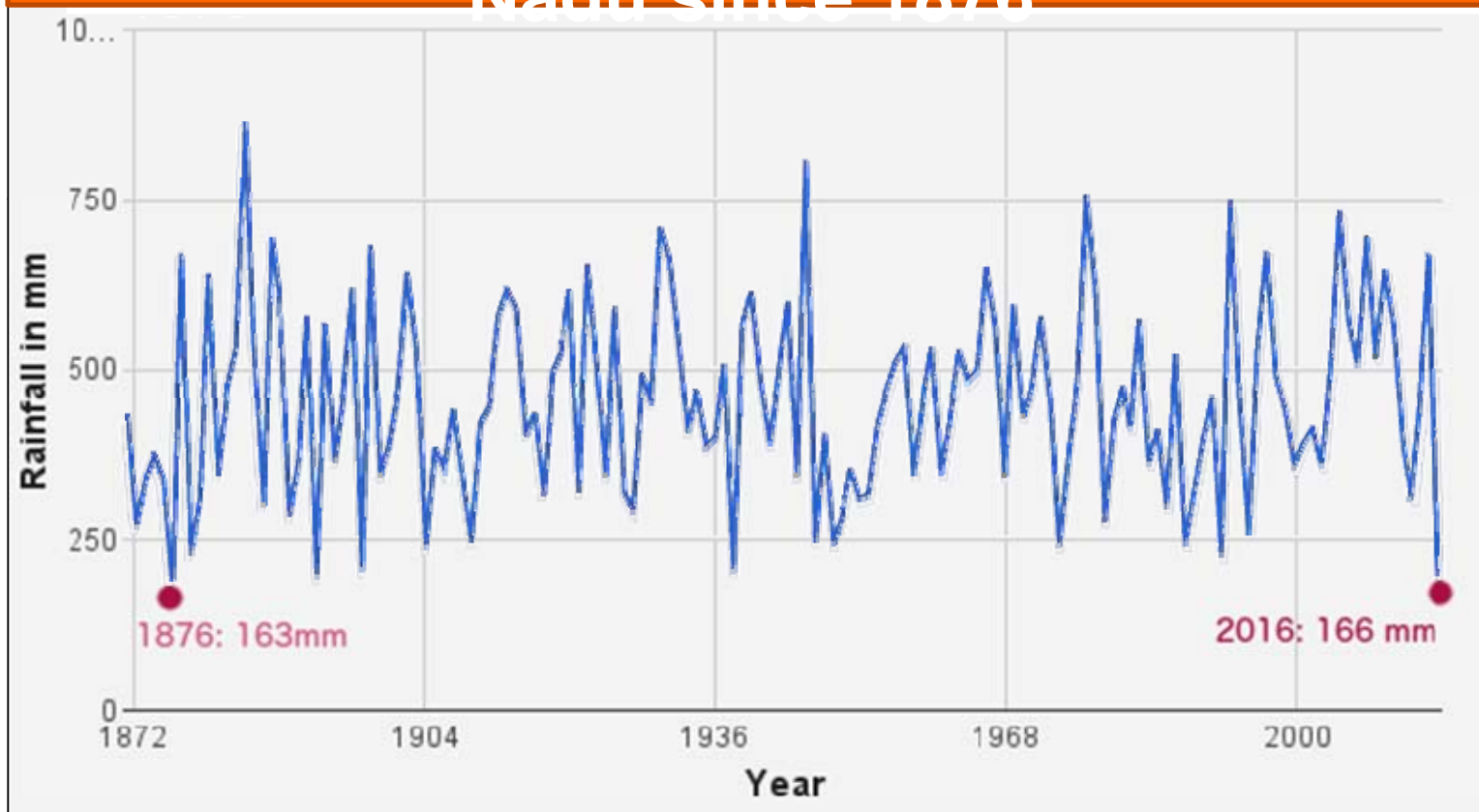
Impact on agriculture due to extreme weather



Climate Change is upon us



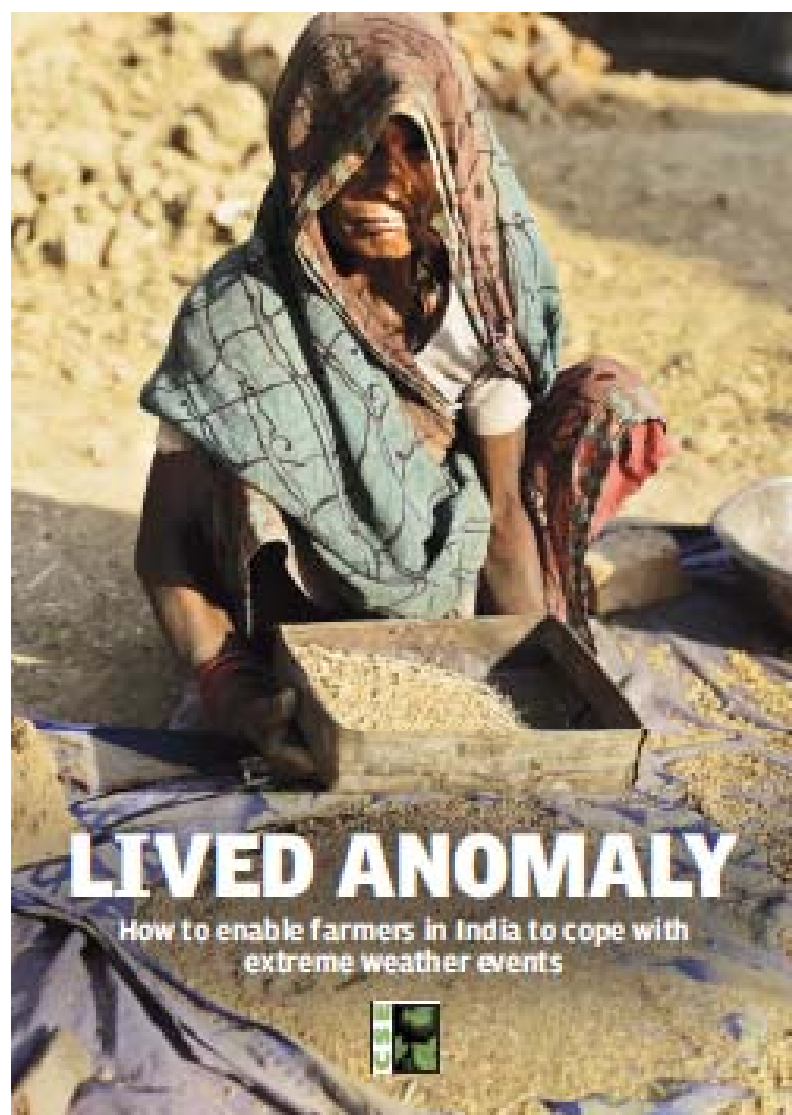
Worst Ever North East Monsoons in Tamil Nadu since 1876



Dealing with vulnerability in agriculture sector



- ❖ Addressing vulnerability and building resilience through various adaptation measures
 - ❖ Changes/ improvements in cropping, livestock, land & water management
 - ❖ Introduction of climate risk assessment & management tools like weather data, early warning systems etc.
 - ❖ Agriculture value addition & improved market access,
 - ❖ Increase income of farmers through diversification
 - ❖ Reducing number of people employed in agriculture etc.
- ❖ Relief and rehabilitation
- ❖ Insurance



Current relief mechanism fails to provide safety net



- the chaotic and politicized 'relief' scenario
 - Eye estimation is the foundation of crop loss and relief assessment
 - Time consuming and inaccurate assessments
 - Huge scope of corruption in the system
 - Insufficient amounts to cover losses
 - Large fraction of affected people excluded
 - No rationale - Huge differences in relief amounts from 13,500 to 18000 to 50,000 per ha for same crop

Agricultural insurance not for all

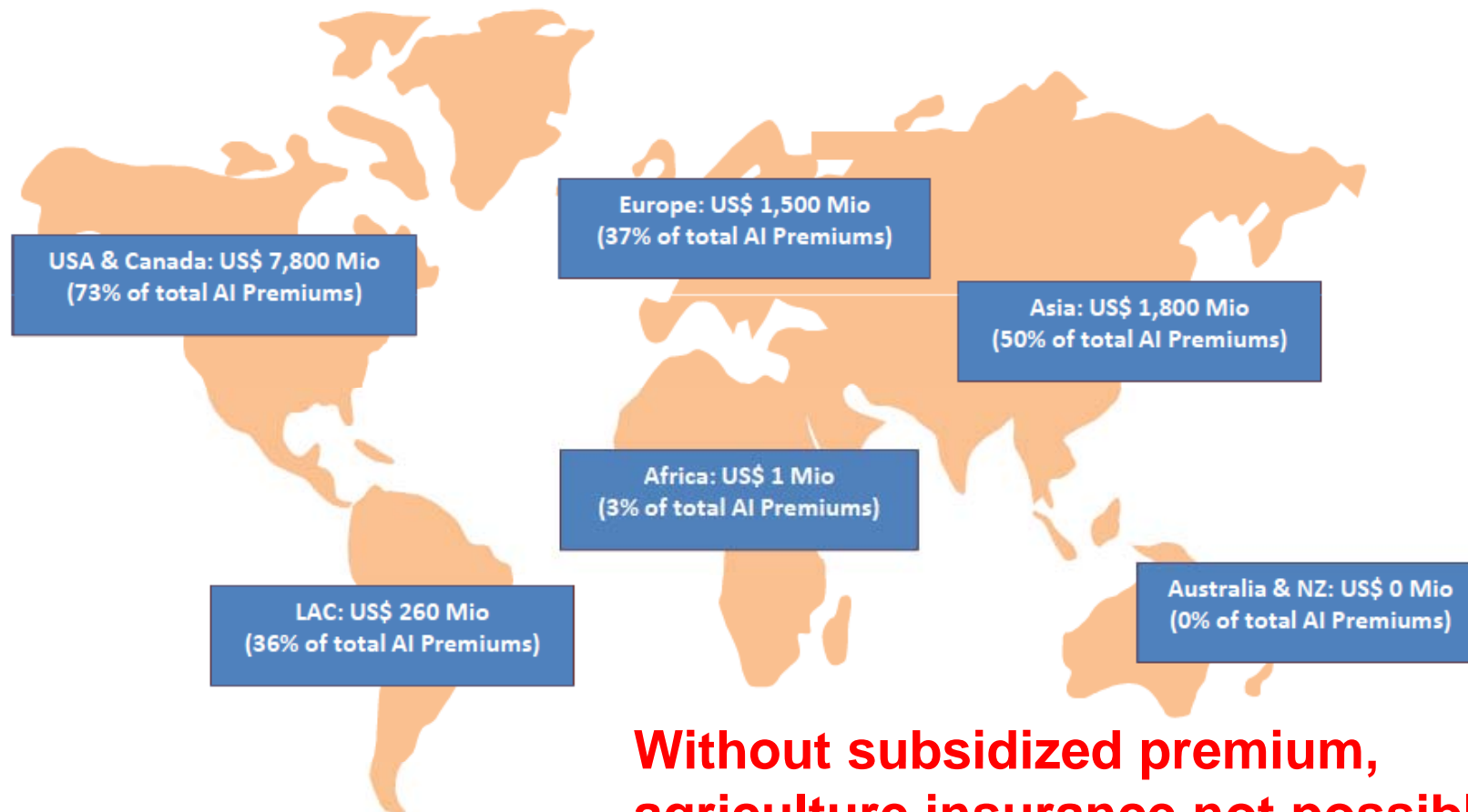


-
- Access to insurance is poor; the national average is about **20 per cent**
 - **Premium** to be paid for crop insurance is considered an additional burden and farmers do not want insurance
 - Waiting **six months to a year** for final settlements
 - Poor use of technology

Agriculture insurance unaffordable to most farmers



Government support for agricultural insurance



**Without subsidized premium,
agriculture insurance not possible in
developing countries**

Agricultural insurance for all



-
- Access to government supported universal agriculture insurance
 - Use of modern technology for loss assessment and quick payment of compensation
 - Include non-loanee farmer, share-croppers etc.
 - Bring transparency and accountability