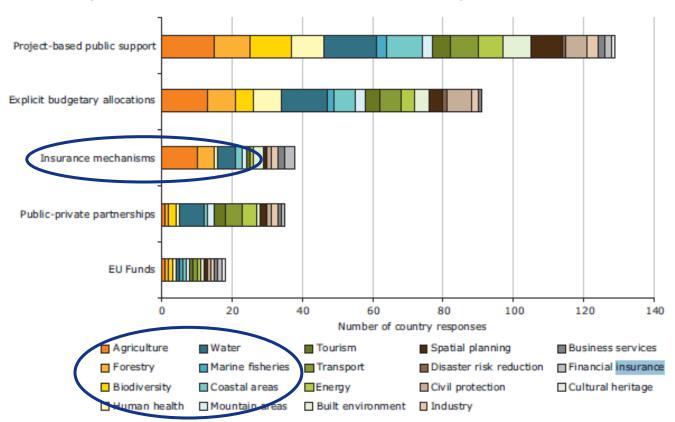






## Insurance is an important financing mechanism for resilient land use in the EU

Financing mechanisms in place for implementing adaptation in 20 EU countries<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> European Environment Agency, National adaptation policy processes in European countries, October 2014





## Insurance is a risk transfer mechanism, but a potential for risk reduction exists

Insurance services can address...

...Financial Risk

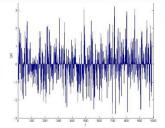
Risk transfer

Agricultural insurance / micro-insurance

Indemnity based



Index based



...Physical
Risk

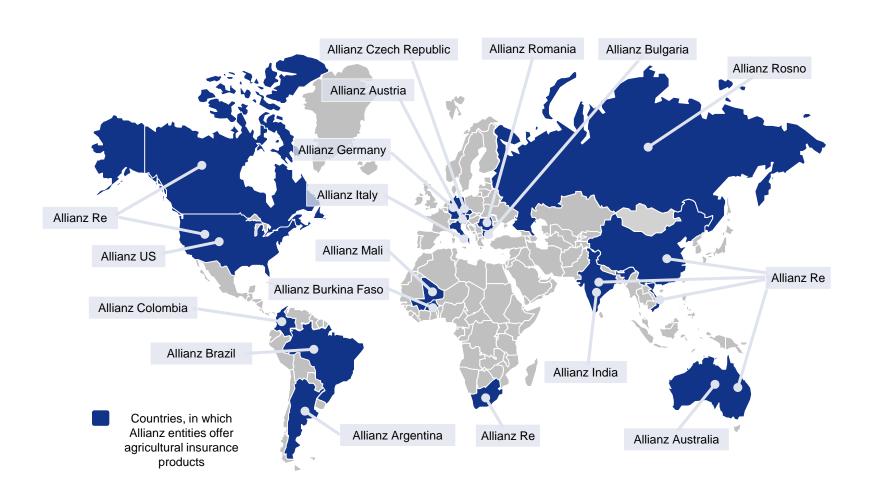
#### Risk reduction

- •Educate and advice customers (financial planning, planting patterns)
- •Incentivize risk-reducing behaviour (lower tariffs for implemented irrigation systems or right selection of crops, payout before event)
- •Inform about approaching risks (e.g. weather alerts via mobile phone, radio etc.)
- •Involvement in policy-making, e.g. land use planning, risk monitoring e.g. via satellite images



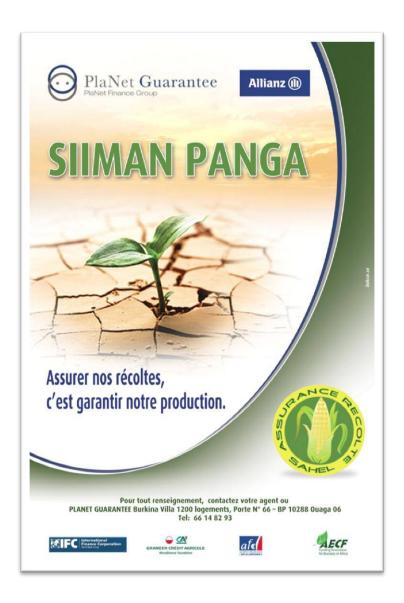


#### Allianz insures over 100 million farmers worldwide





#### Example from Africa: Sahel Crop Insurance



- •Since 2011
- •In 2013 over 15,000 farmers in Burkina Faso and Mali took out policies with Allianz Africa.
- Insurance policy coupled with loan for seed purchase
- Index-based, easy payouts
- Basic financial education for farmers
- •Caution: Feeling of security, incentivizing risky behaviour



"When the rains failed I was really surprised when the insurance company came the long way to my village to bring me the news that I receive an insurance payment for my seed loan.".

BARTHELEMY KOHOUN
A FARMER FROM POUNDOU,
A VILLAGE OF 4,000 PEOPLE
IN BURKINA FASO

# © Allianz Climate Solutions GmbH 2014

### Allianz (II)

#### Example from Asia: RIICE



- Public-private partnership since 2012
- •7 Asian countries
- Development of remote-sensing system which serves as an early-warning system
- Basis for development of insurance market for smallholder rice farmers



"We want to transfer the financial risks that small-holder farmers face from natural catastrophes to the formal insurance market. Through the remote sensing technology we have a reliable and unbiased tool to calculate insurance premiums and evaluate the losses."

AMER AHMED
ALLIANZ RE CEO



#### Main hurdles for developing insurance for climate resilience

Hurdles vary in...



#### ...developed markets

## Customer acceptance and understanding

- •Customers expect government to protect them from extreme weather events
- •Do not understand the level of risk or believe that their property is at high risk of further flooding
- •Reluctance to accept recommendations coming from the private sector side

#### ...emerging markets

#### **Institutional hurdles**

- •Low familiarity with insurance; direct insurance reaches only a small fraction of vulnerable population
- •Limited purchasing power to cover the cost of insurance.
- •Limited financial infrastructure

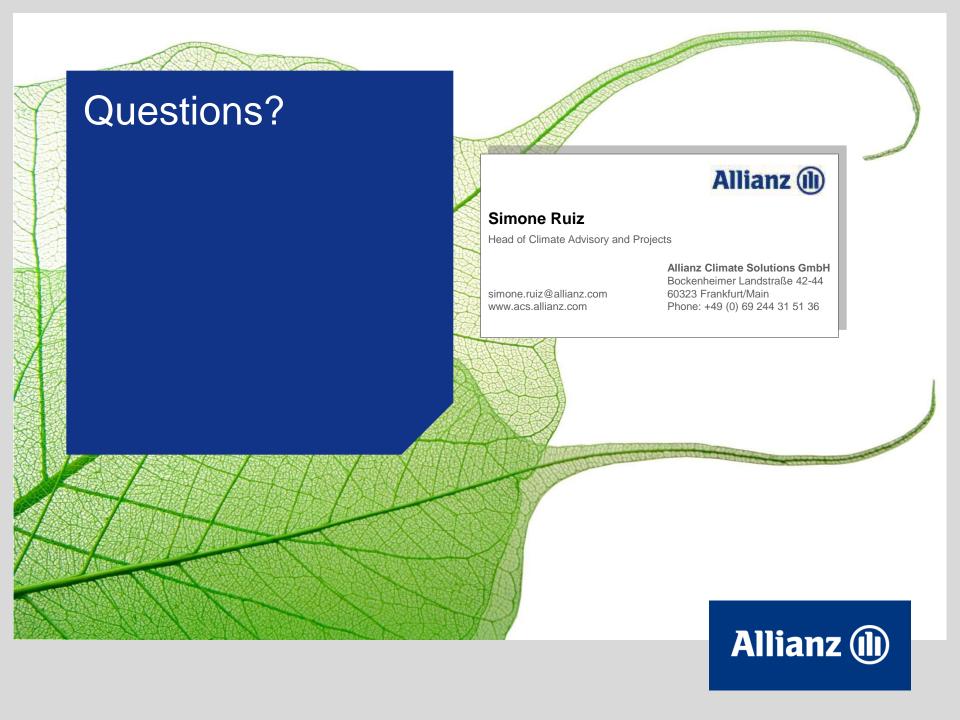


V

Insurers have a role to play in developed countries to incentivize behavioral change



The expansion of insurance instruments protecting from financial and physical risks in developing countries is still limited by institutional hurdles





# Example from the Caribbean: Livelihoods Protection Policy



Munich Climate Insurance Initiative

- •An Munich Climate Insurance Initiative project, public-private partnership
- •Since 2011 in Grendada, St.Lucia, Jamaica
- •First index-based weather insurance in the Carribean
- •Cooperation with Ministries of Agriculture to encourage farmers to plant more drought/wind resistant crops
- •Collaboration with agricultural input suppliers in oprder to provide policy holders with better seed variety and lower prices



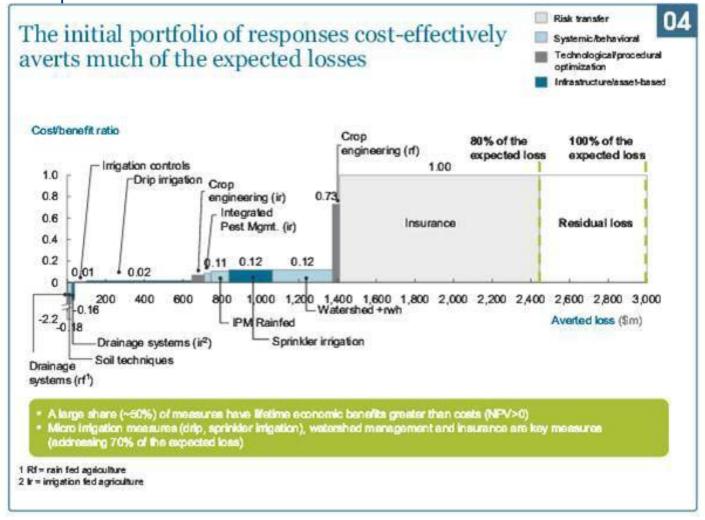
"Even having insurance I don't want a hurricane as they are devastating for our country. I also know there is still lots of preparation I need to do to protect my crops, but I am happy that I won't lose everything when the next big storm hits."

ELISIA MARQUIS SAINT LUCIAN BANANA FARMER



# Risk transfer in the portfolio of responses to expected agricultural losses

An example from Maharashtra<sup>1</sup>





## Risk layering and the application of financial instuments

