



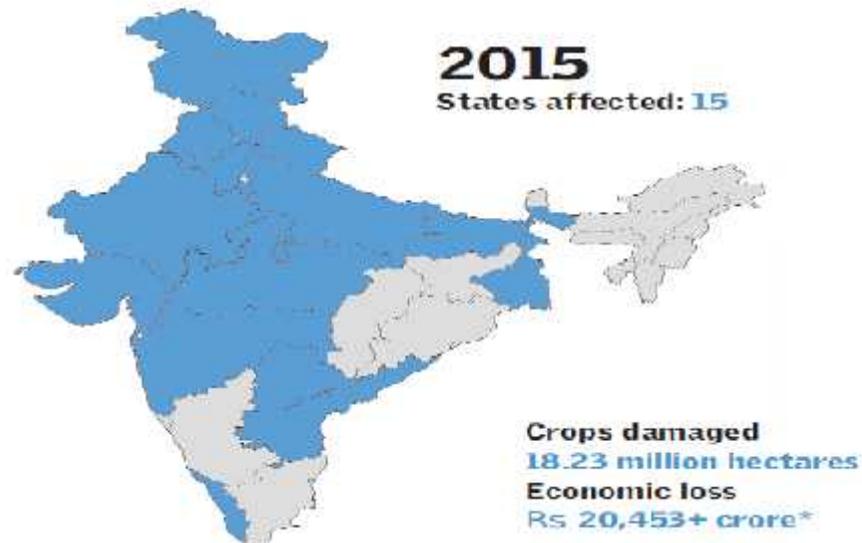
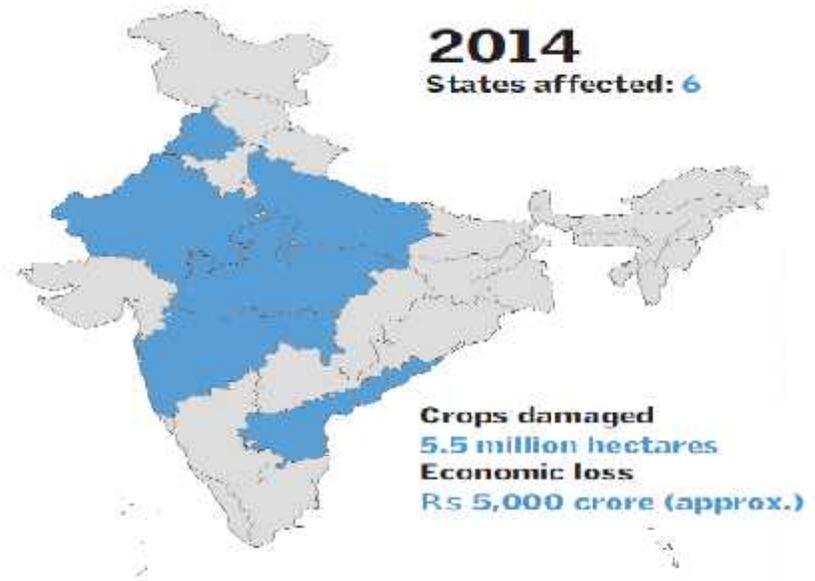
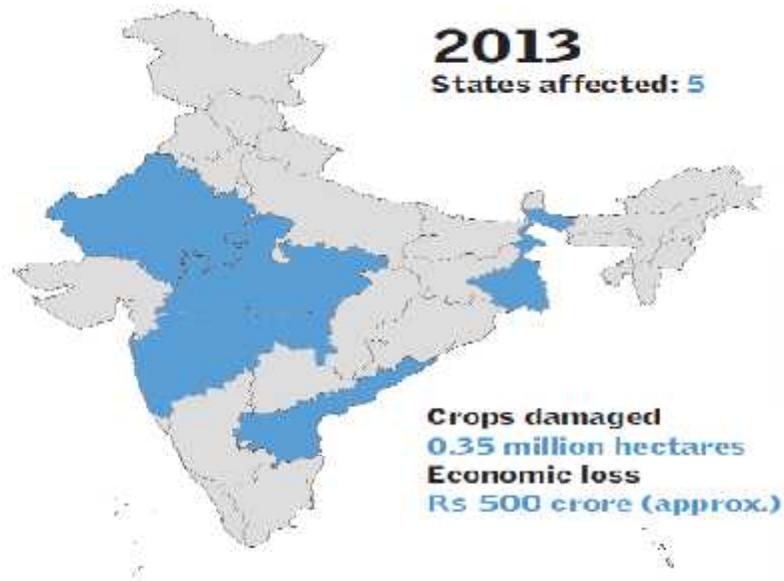
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*Relief and compensation during  
extreme weather events*

Agriculture losses from unseasonal rains in  
early-2015: A case-study

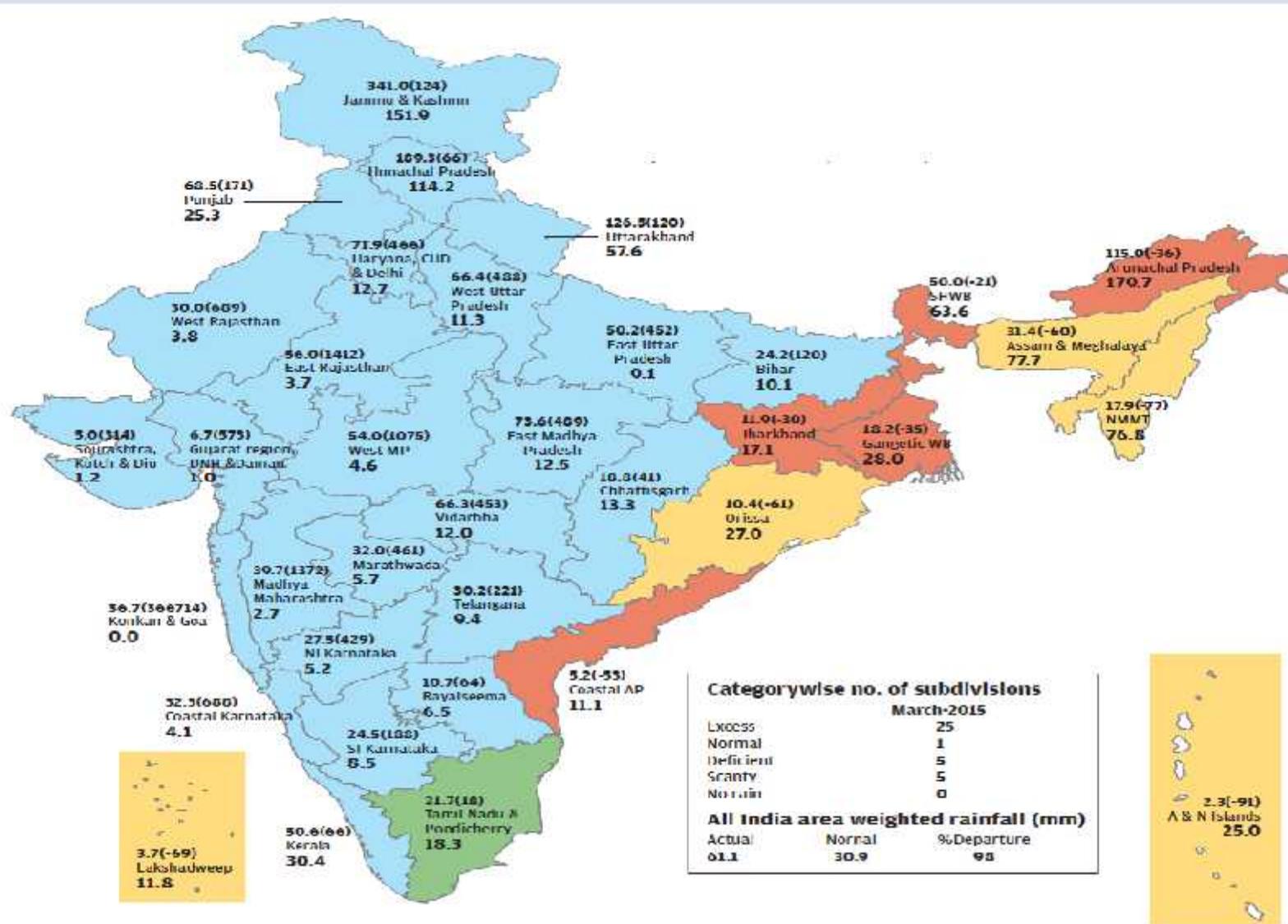
**Arjuna Srinidhi, CSE**

# When freak becomes the norm



## Wettest March in 48 years

The first few days of March brought heavy rainfall with major parts of the country seeing many times more rain than historically recorded. East Rajasthan saw an increase of 1,412 per cent over normal rainfall, central Maharashtra saw an increase of 1,372 per cent and western MP an increase of 1,075 per cent.



### LEGEND:

■ Excess (>20% or more) ■ Normal (>19% to 19%) ■ Deficient (20% to 39%) ■ Scanty (60% to 99%) ■ No rain (100%) ■ No data

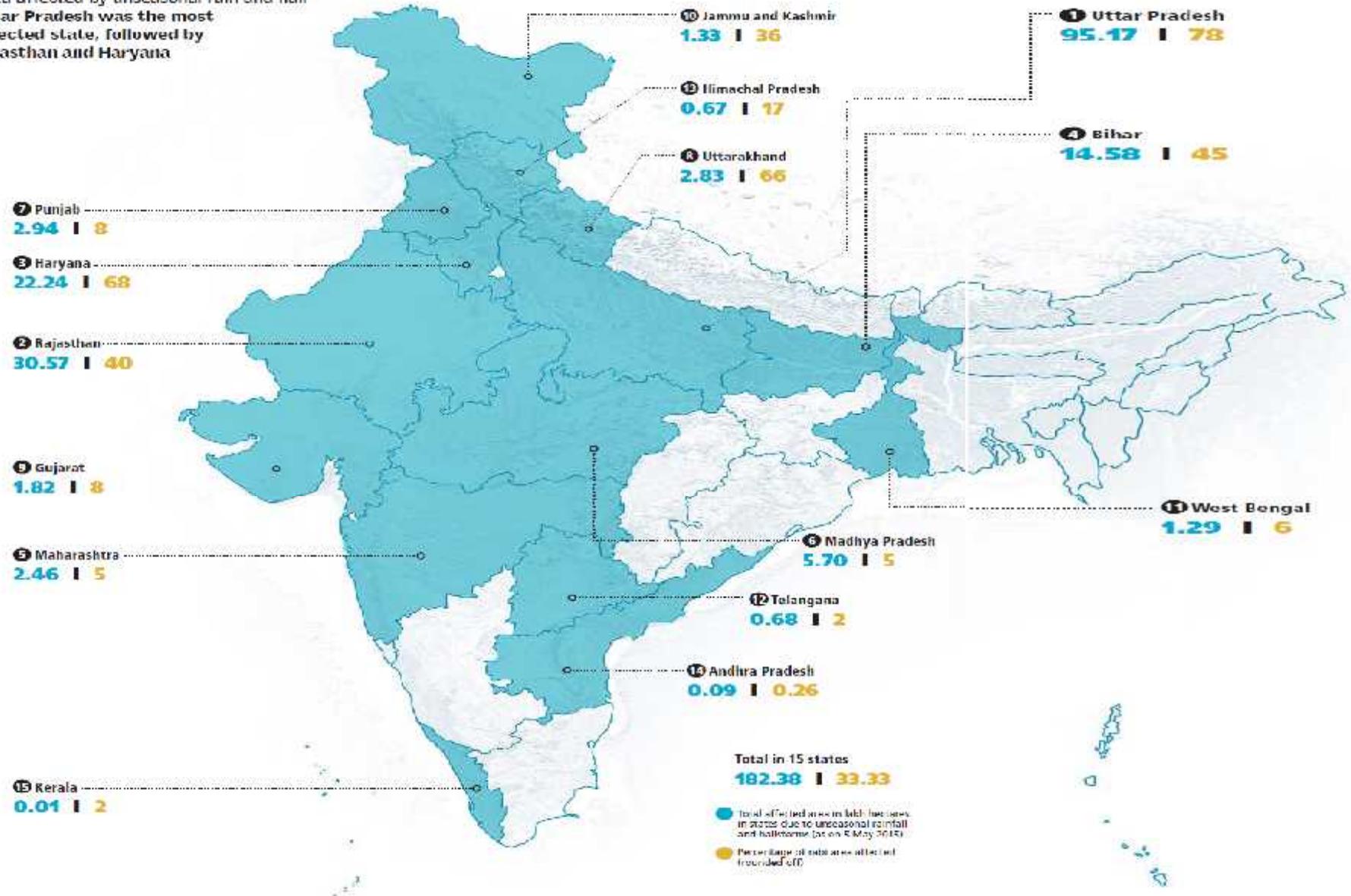
### NOTES:

(a) Rainfall figures are based on operational data.

(b) Small figures indicate actual rainfall (mm), while bold figures indicate normal rainfall (mm). Percentage departures of rainfall are shown in brackets.

Source: IMD

Area affected by unseasonal rain and hail  
**Uttar Pradesh was the most affected state, followed by Rajasthan and Haryana**



Crop damaged in 15 states of India – Feb, March, 2015

## Unseasonal rain and hail: Close to one third of Rabi crop affected – Feb to April, 2015



- ❖ Total area under rabi crops in the country 61.5 million hectares. Of this, 18.2 million hectares, i.e. 29.61 per cent of the sown area affected.
- ❖ Wheat, barley, gram and other pulses were the most affected foodgrains, production fell by about 8.6 million tonnes, or 6.5% of food grain production, valued at about Rs 15,777 crore (~US\$ 3 billion).
- ❖ oilseeds, drop in production -14.8 %, worth about Rs 4,676 crore (~US\$ 1 billion).
- ❖ Total loss - approximately Rs 20,453 crore (~US\$ 4 billion)

# Ways in which a farmer can tide over immediate losses

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- State disaster response payments
- Payments through Insurance coverage
- Access to credit



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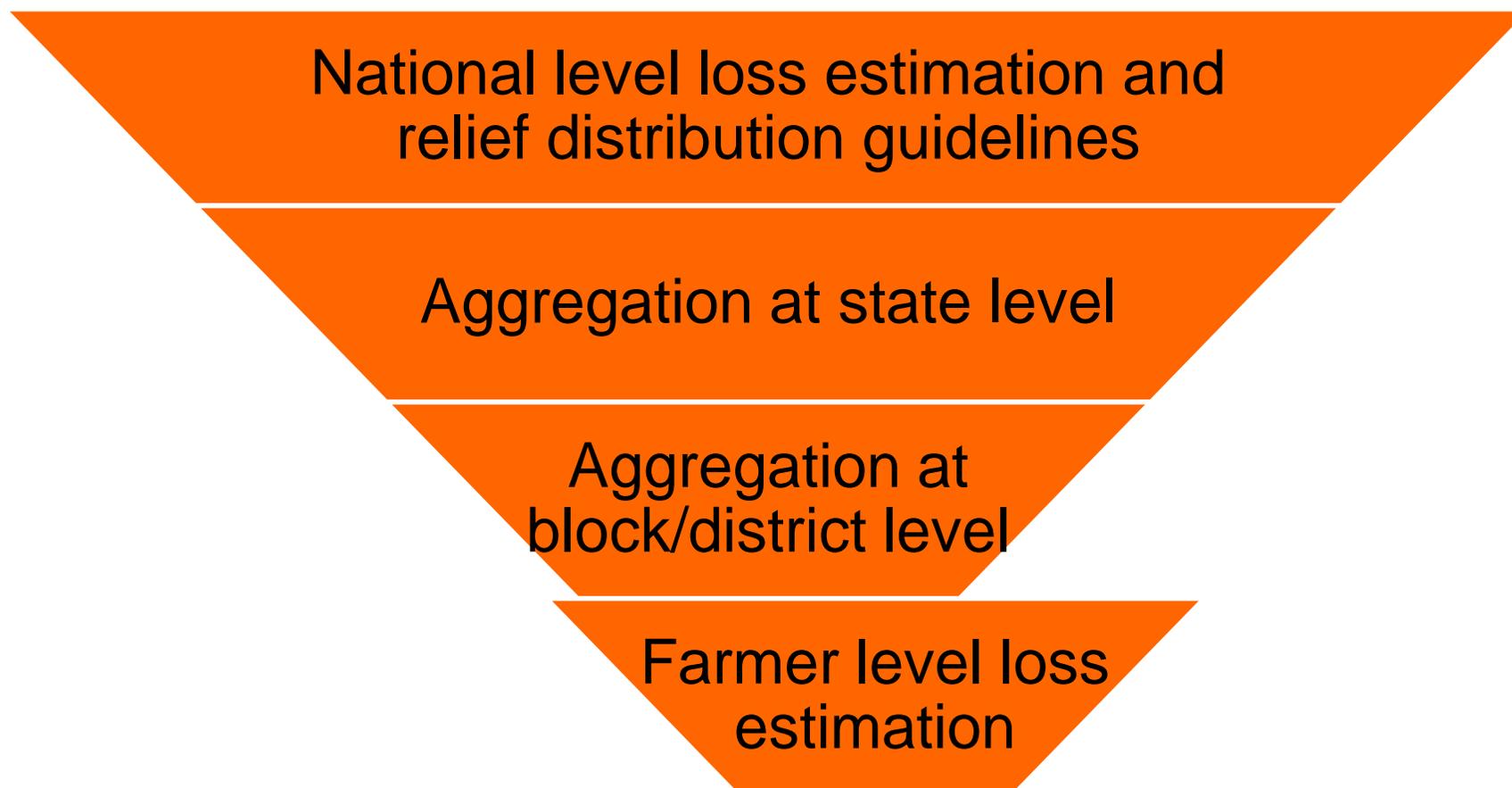
# STATE DISASTER RESPONSE

## Disaster response payments - more about immediate relief than 'compensation' for losses



- ❖ 'Relief' payouts are just a fraction of the total costs incurred by the farmer—typically about 1/3<sup>rd</sup> of input costs. Thus far from being a 'compensation' mechanism
- ❖ Relief appears to be much more of a 'political' decision than one based purely on the input costs
- ❖ For instance, Uttar Pradesh will pay to the tune of maximum of Rs 18,000 (US\$ 360) per hectare and whereas the Delhi government will give Rs 50,000 (US\$ 1000) per hectare as 'relief' package

# Relief estimation



# Issues with relief estimation



- ❖ Enormous delays and huge amounts of corruption in the system. Mainly stems from the fact that:
  - ❖ Current system is so dependent on eye estimation of the *patwari* (village accountant)
  - ❖ There is a shortage of manpower for estimating crop loss
  - ❖ The inadequate technical capacity of *patwaris* to make estimations leads to delays and frequently revised estimates;
- ❖ The 'relief' amounts are insufficient, particularly in cases where there is no other substantial 'compensation' mechanism
- ❖ Agricultural labourers and farmers dependent on leased lands for instance not eligible for any relief



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# AGRICULTURE INSURANCE

# Crop insurance schemes in India

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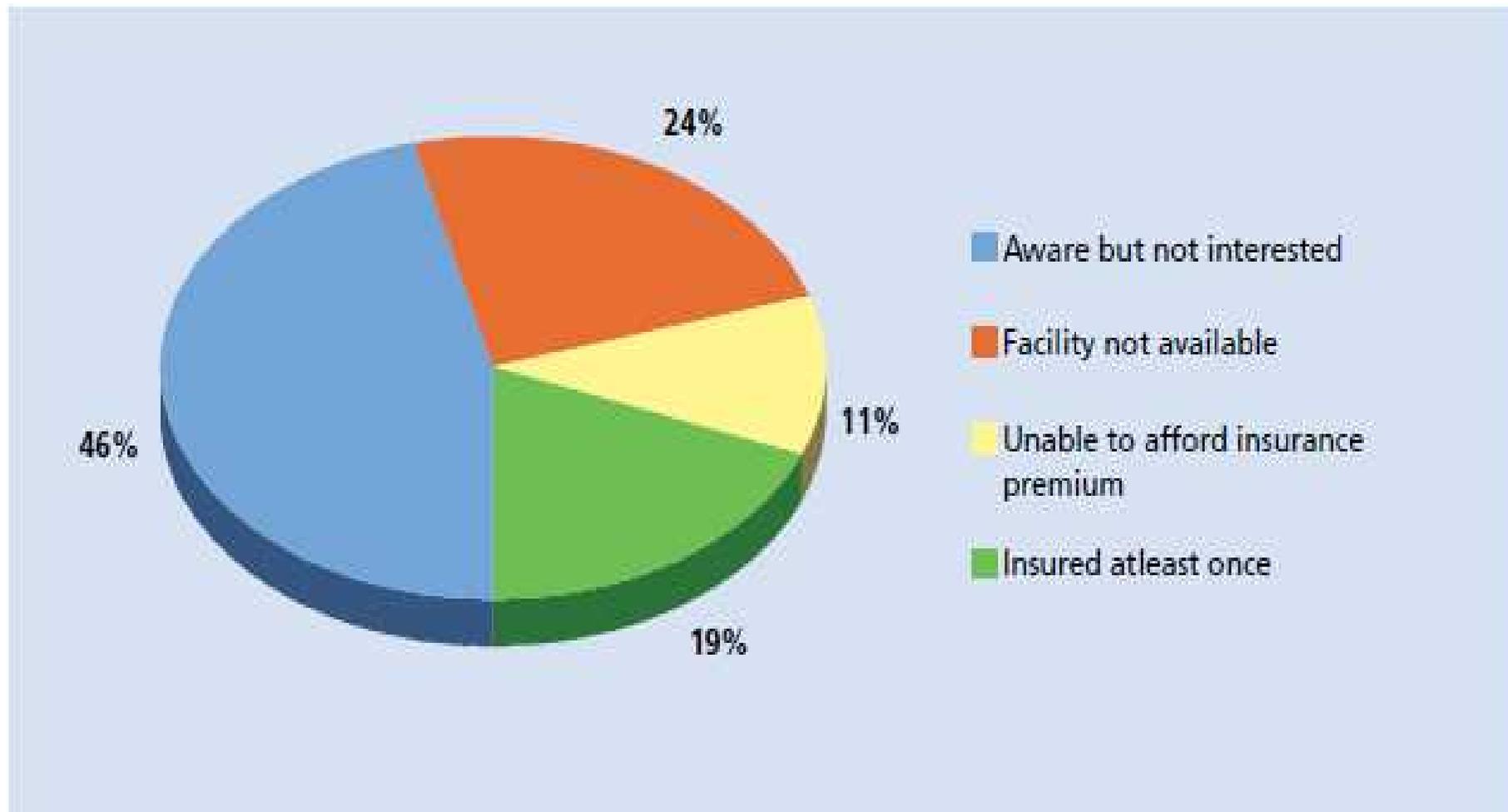
- ❖ National Agricultural Insurance Scheme (NAIS)
- ❖ Modified National Agricultural Insurance Scheme (MNAIS)
- ❖ Weather-Based Crop Insurance Scheme (WBCIS)

# Penetration on agriculture insurance



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- ❖ NSSO 2013 survey - very small segment of agricultural households insured their crops against possible crop loss
  - ❖ **10.31 per cent** farmers covered by crop insurance in country in the *rabi* (winter) season for 2013–14 and about **19.81 per cent** were insured during *kharif* (monsoon) 2014

# Farmer's awareness about crop insurance



Source: ASSOCHAM, 2015

# Issues with agriculture insurance in India

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- ❖ Lack of awareness of insurance schemes and the process of application and making claims;
- ❖ Insurance products unattractive:
  - ❖ Lack of competition means that insurance products are poorly designed and not farmer friendly
  - ❖ Premium amounts add to the burden of small and marginal farmers;
  - ❖ Clauses, such as reporting of losses due to hailstorm within 72 hours of the event are difficult to comply with;

# Issues with agriculture insurance (contd)

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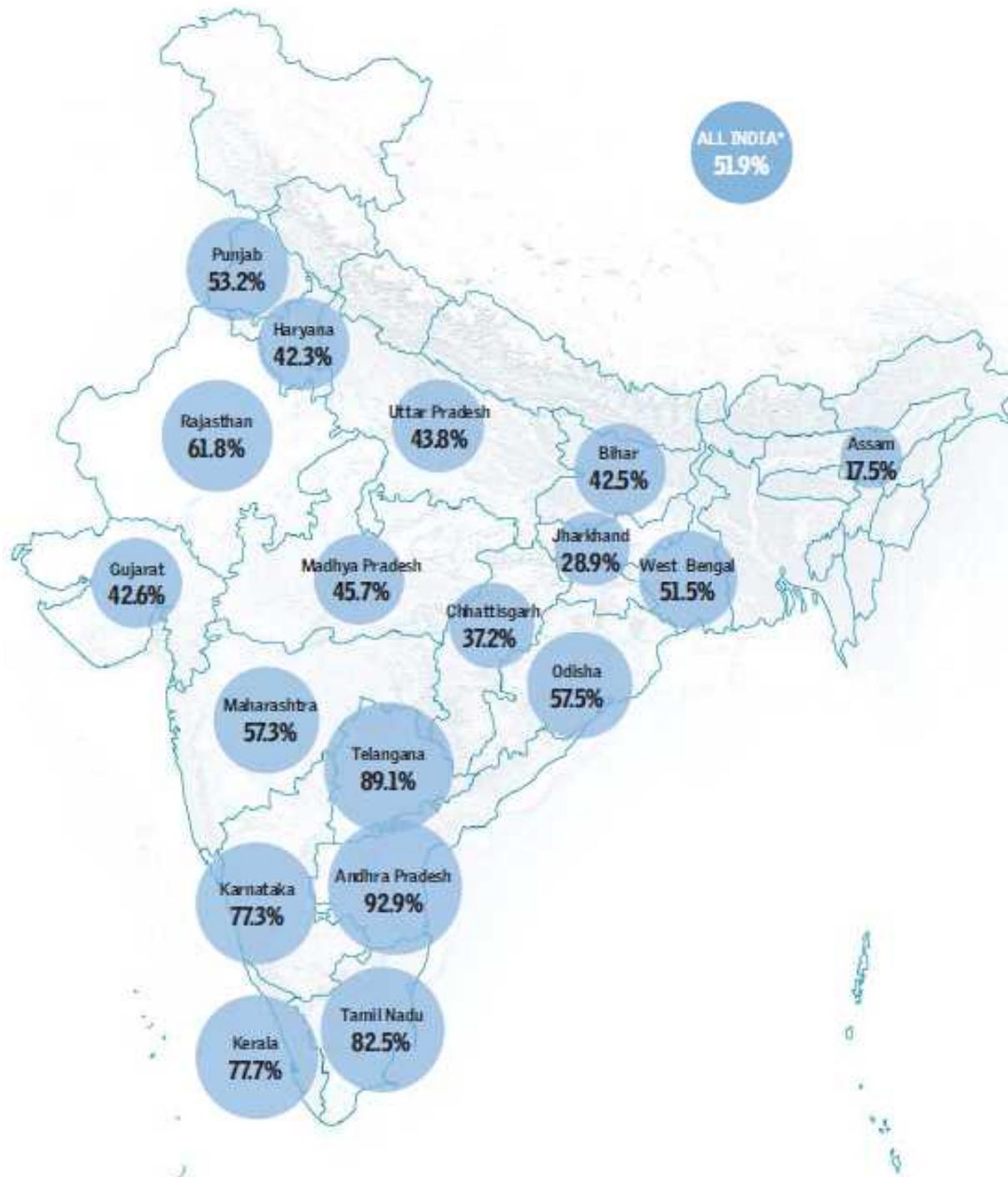


- ❖ Lack of confidence in the benefits on insurance coverage:
  - ❖ There is insufficient manpower to deal with large volume of claims. Takes 6 months to a year to make final settlements;
  - ❖ Delays or defaulting on loan repayment leads to insurance policies becoming void, compounding hardship for farmers;
  - ❖ Insurance payout is not based on assessment at the individual farmer level which means that some farmers get less payout than actual damages;



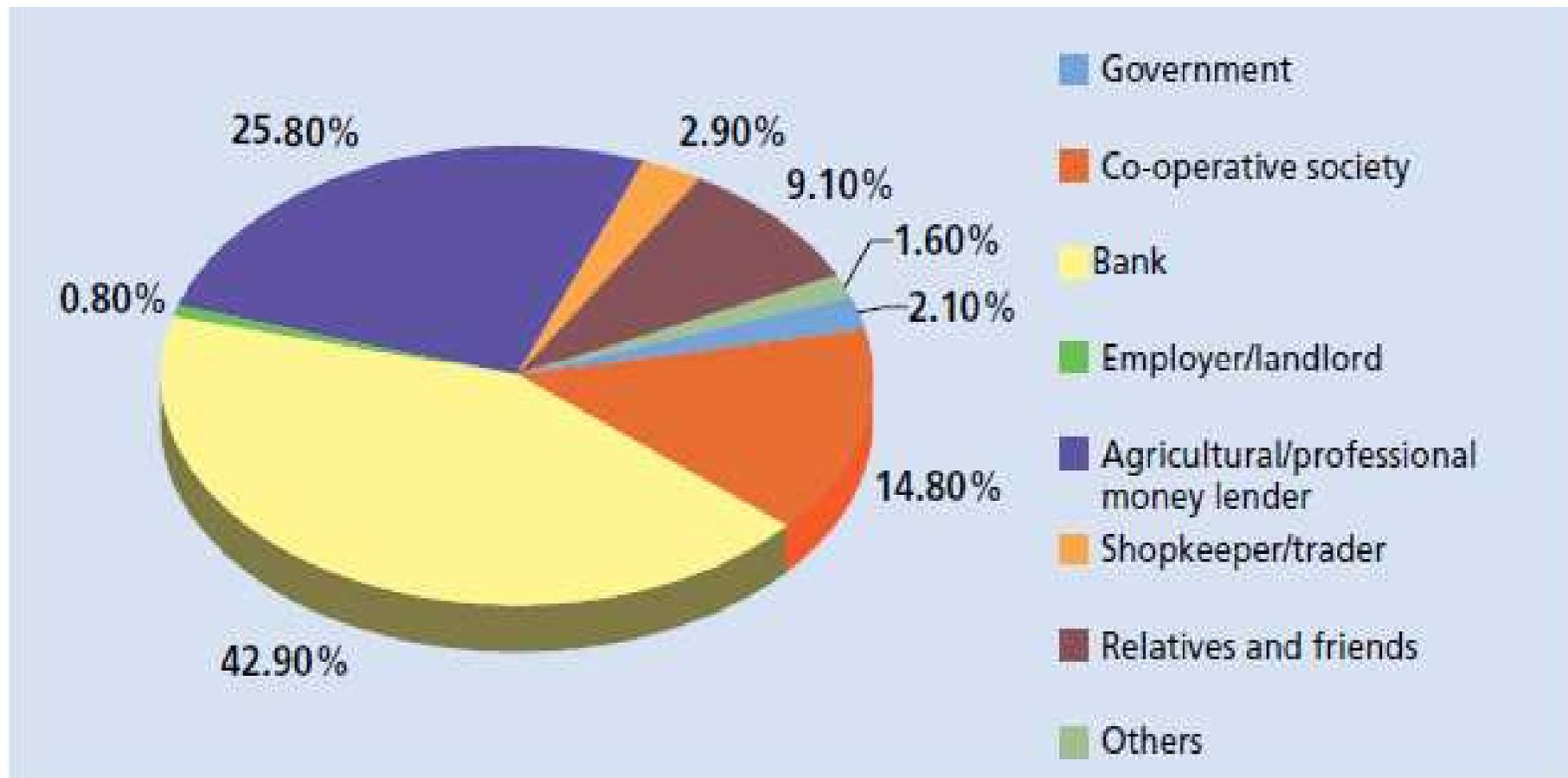
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# ACCESS TO CREDIT



Proportion of indebted agricultural households in the country

# Distribution of loans in agrarian households



Source: Key Indicators of Situation of Agricultural Households in India NSS 70th Round (January–December 2013), National Sample Survey Office, December 2014

Access to institutional credit marked by:



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- ❖ poor awareness about scheme details and lack of financial counselling
  - ❖ tedious paperwork; proof of credit worthiness
  - ❖ discretionary powers of officials and corruption;
  - ❖ insufficient loan amounts;
  - ❖ competition from and easy and flexible access to private moneylenders.

# What we need...



- ❖ Integrate modern scientific methods for crop loss and damage estimation with traditional methods that also begin to use digitised land records
- ❖ Transparent and quick relief and insurance payouts
- ❖ Making crop insurance attractive and feasible for farmers, subsidise the premiums rather than spend enormous amounts on relief
- ❖ Easier access to institutional credit and enforce linkages to insurance
- ❖ Relook at the economics of agriculture in general – targeted subsidies for small and marginal farmers, better minimum support prices, etc

# Overall agrarian reform in need



Monthly income and savings of agricultural households (July 2012–June 2013)

Almost 70 per cent of Indian farmers incur losses

Size class of land possessed (hectares)	Percentage of agricultural households in the country	Total income, including wage/ salary, cultivation, farming of animals and non-farm business (in Rs)	Total consumption expenditure (in Rs)	Net investment in productive assets (in Rs)	Net saving/ deficit (in Rs)
0.01–0.40	31.89	4,152	5,401	251	-1500
0.41–1.00	34.90	5,247	6,020	540	-1313
1.01–2.00	17.14	7,348	6,457	422	469
2.01–4.00	9.35	10,730	7,786	746	2,198
4.01–10.00	3.66	19,637	10,104	1,975	7,558
10.00 +	0.41	41,388	14,447	6,987	19,954
All sizes	100 %	6,426	6,223	513	-310

Source: NSSO



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Thank you!

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