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Learning from Past Climate Extremes Strengthening Agricultural Resilience to Climate Extremes

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Vulnerability and Adaptation to Climate Extremes in the Americas

Agriculture and Agri-Food Canada

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Outline:

- Understanding the past
- Agrometeorological extremes indicators development
- A changing climate – what does it mean?
- What does the future hold??

Looking back...

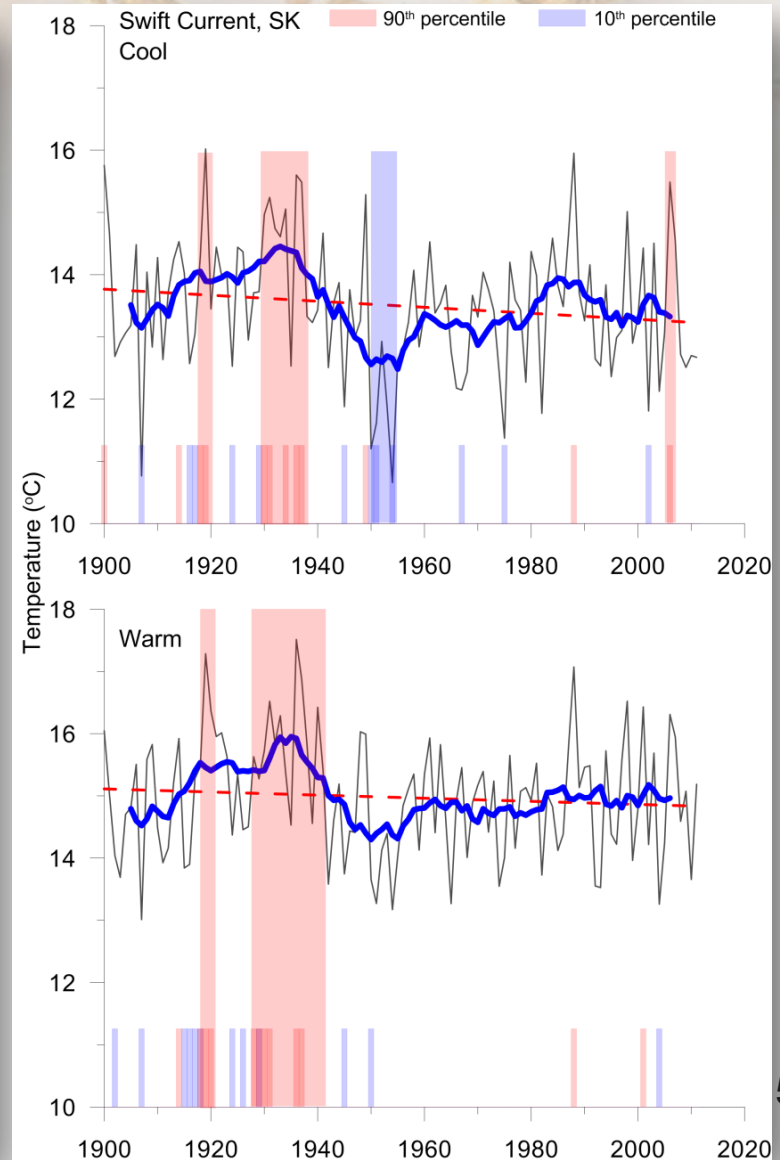
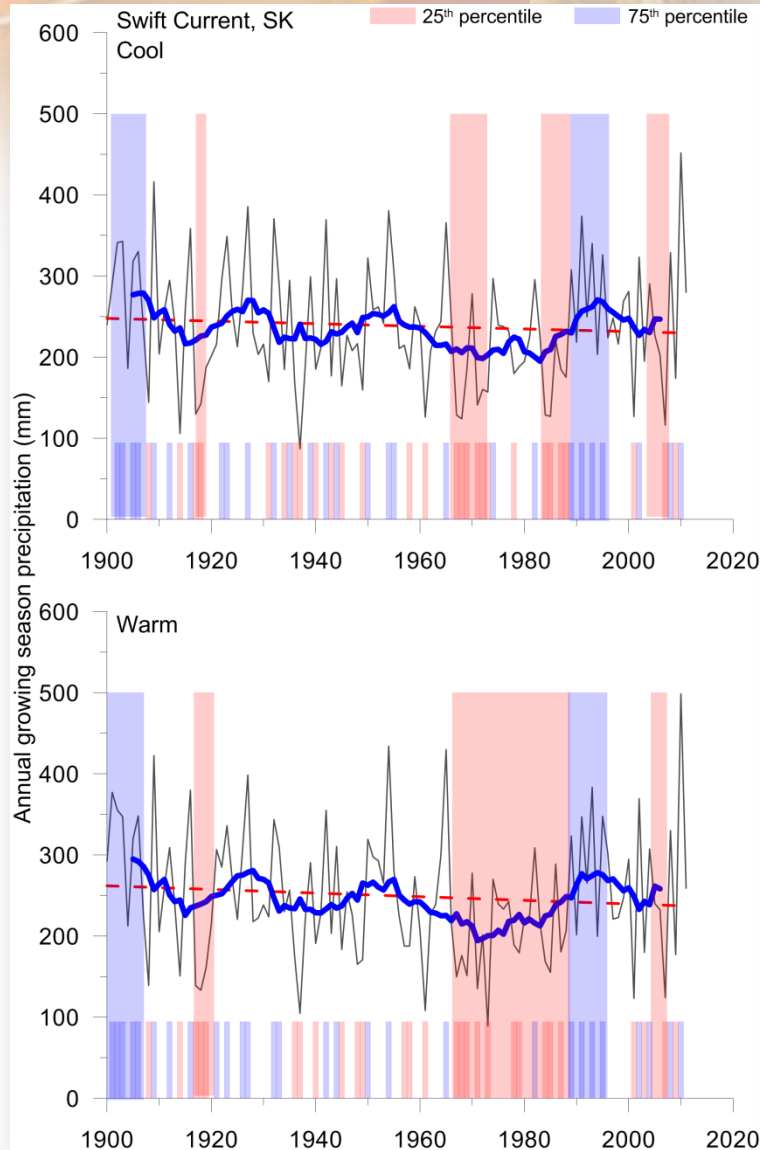


- What conditions persisted in the past?
- Are patterns and trends changing?
- What does this mean for agricultural producers?
- What can we expect in the future?

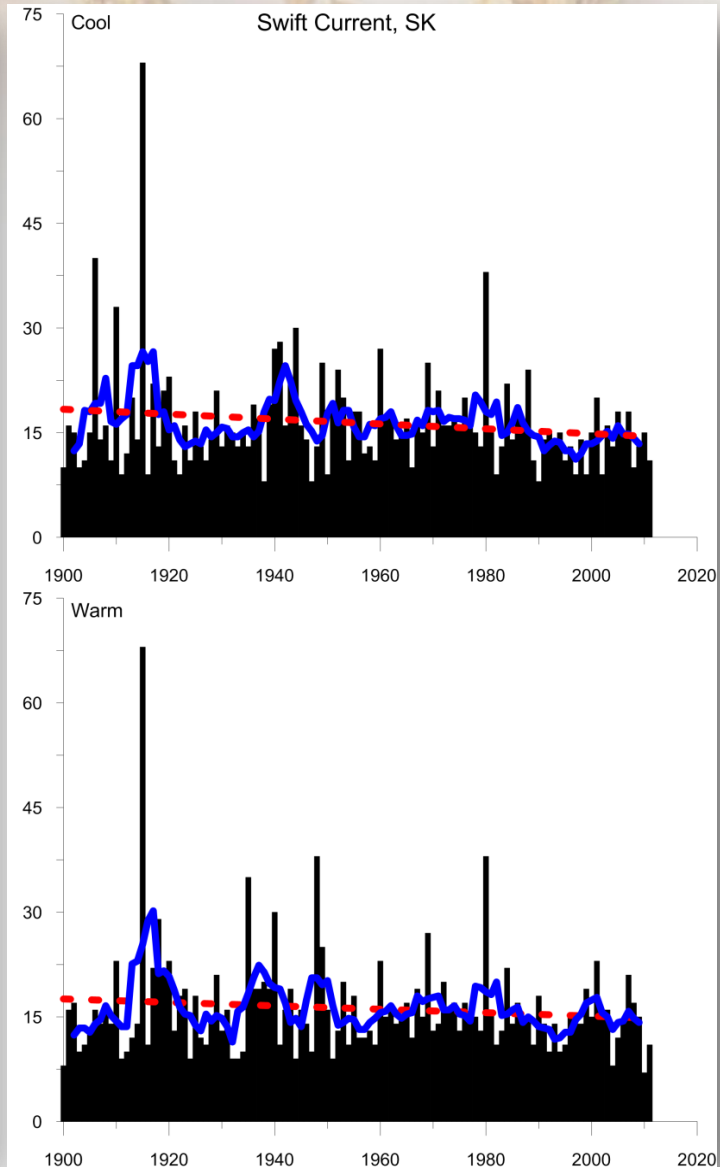
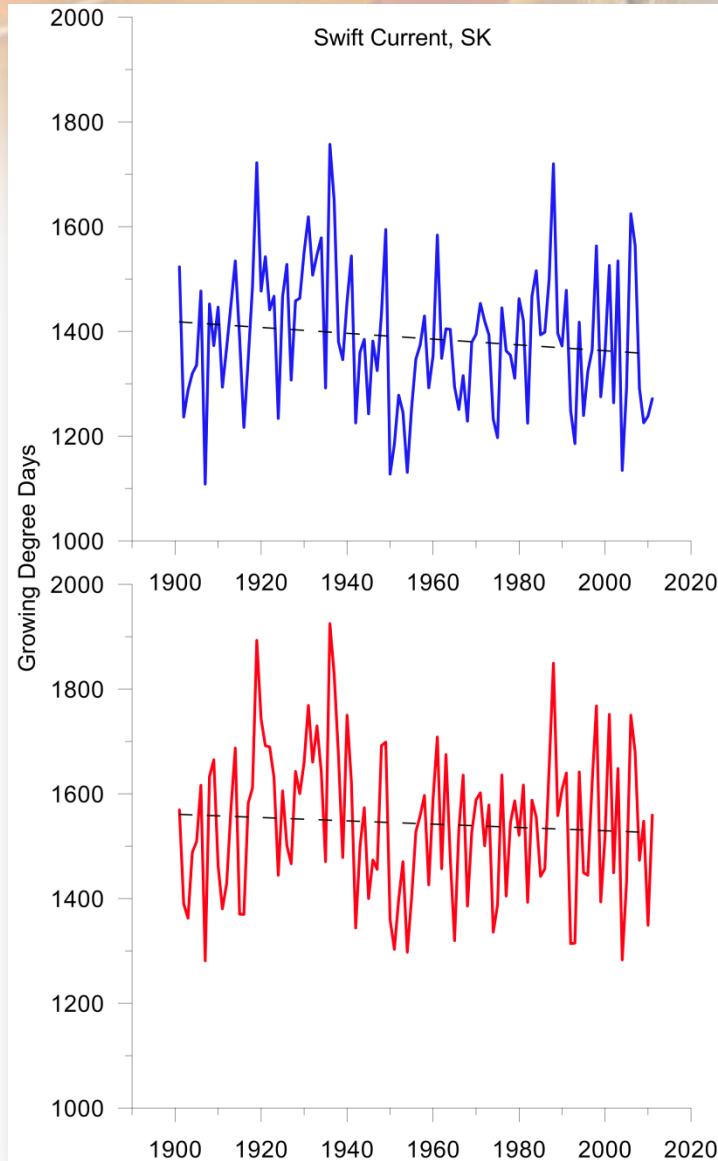
Growing season classification:

Crop Type	Cool Season Crops				Warm Season Crops		
Crop Name	Wheat	Oat	Barley	Canola	Corn	Bean	Soybean
GDD Range	1538 to 1680	1483 to 1750	1269 to 1540	1152 to 1445	1173 to 1779	1100 to 1300	1186 to 1719
Criteria	On an average, cool-season crop: 1485				On an average, warm-season crop: 1375		
Time frame	April 1 - August 31				May 1 - September 30		

Agronomic variability and trends:

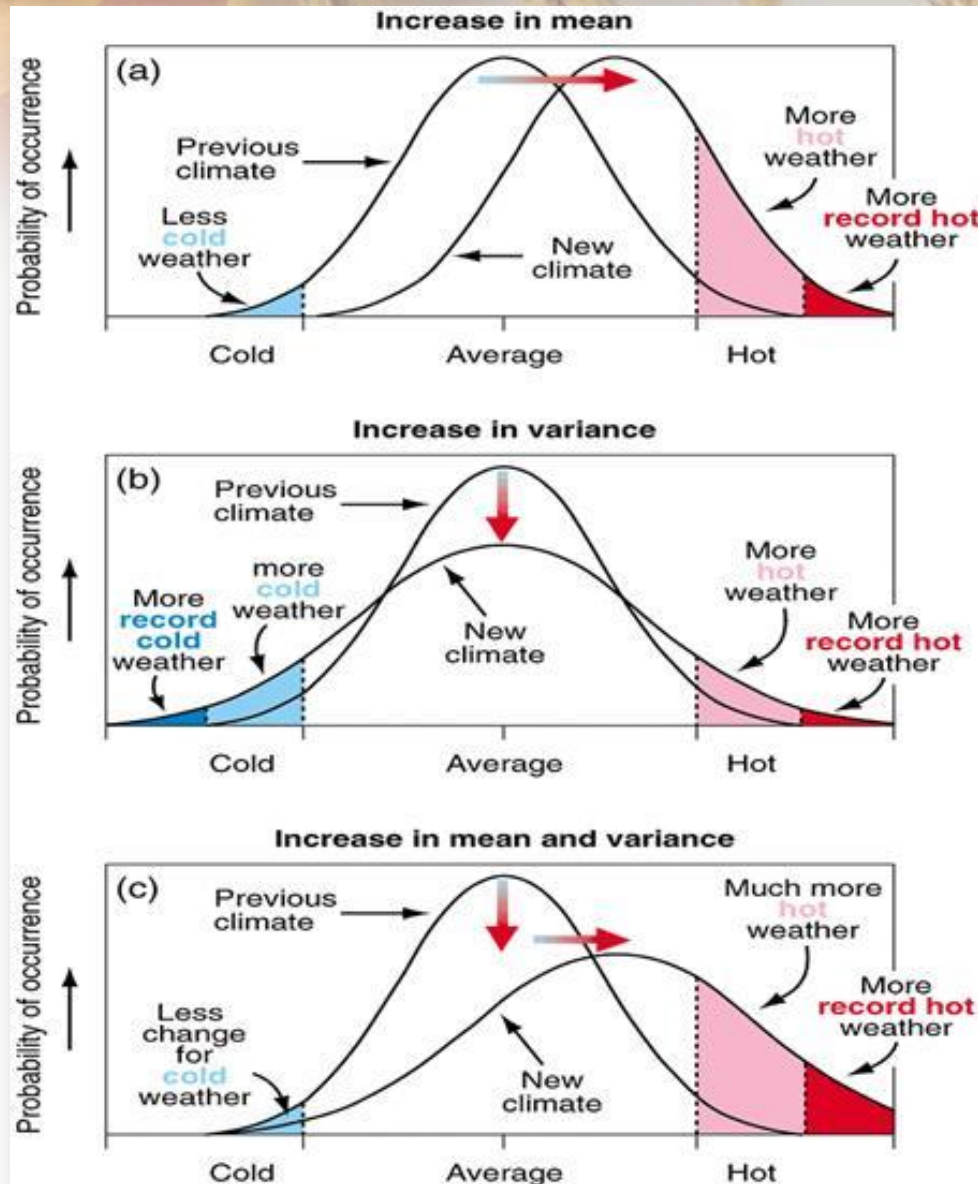


Agronomic variability and trends:

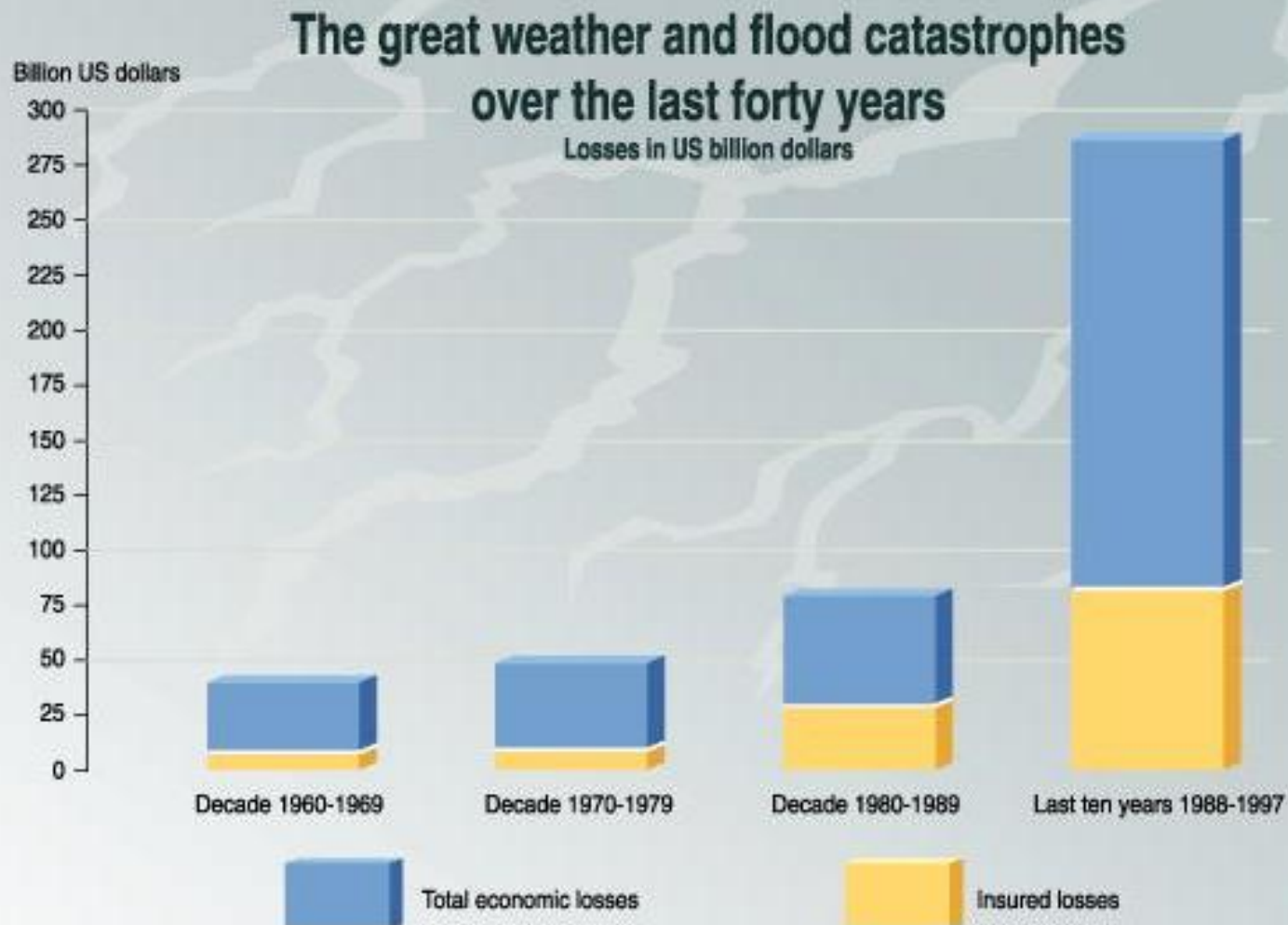


A changing climate...

Climate Change



Co\$ of Extreme\$...

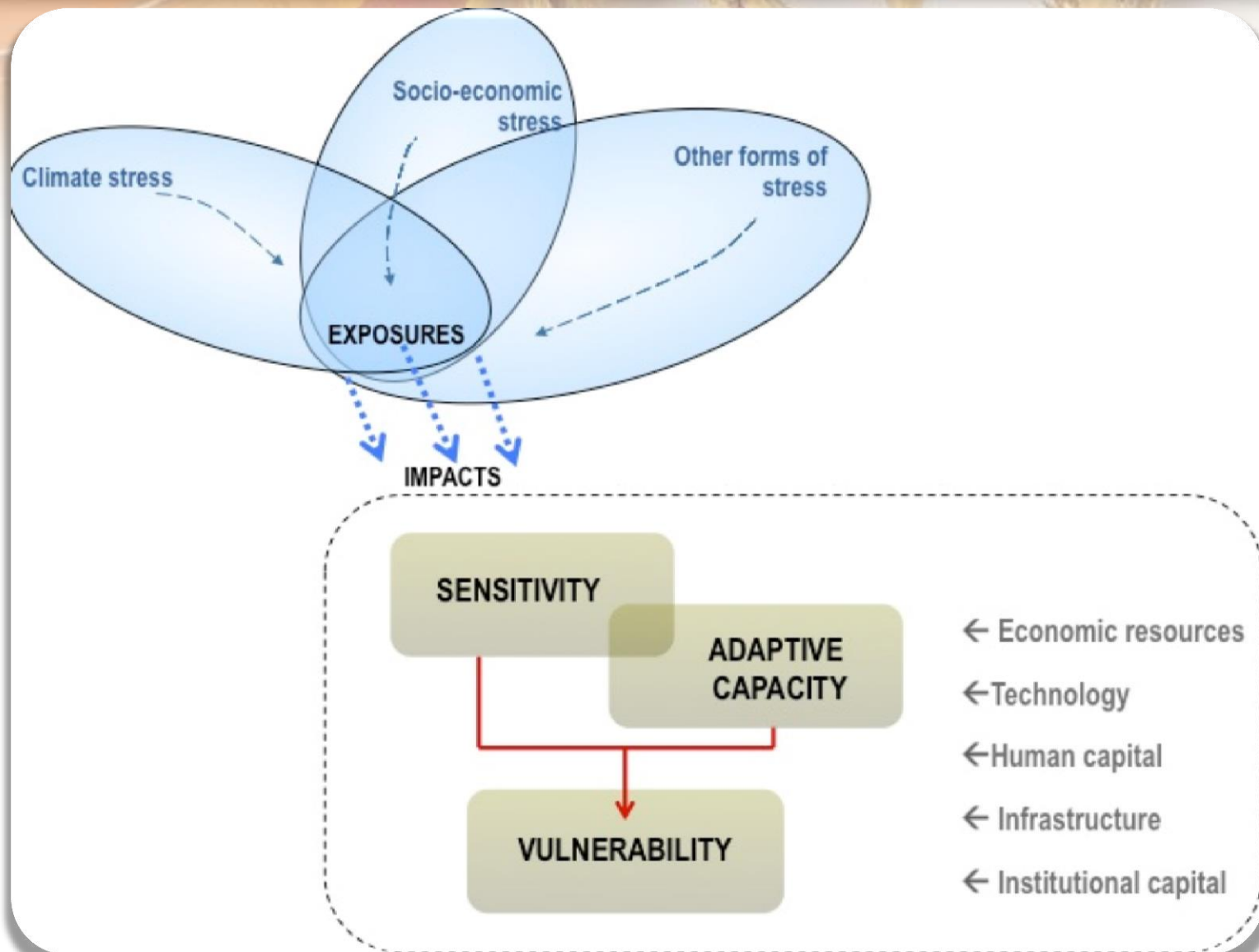


What's in it for us??

?? How vulnerable are we ??



Vulnerability of the future...





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