

*Evolving Messages of the IPCC on Adaptation  
to Scientific Communities:  
Based on Content Analysis of the IPCC Reports on VIA  
from FAR to AR5*

**Yinlong XU**  
**1-IEDA/CAAS, Beijing**  
**2-PROVIA SSC member**



## Outline

- 1. Background**
- 2. Methodology**
- 3. Analysis Results**
- 4. Conclusions & Looking forward.....**



## Background--Review on the IPCC Reports

### **FAR 1990:**

WGII-Impacts Assessment

WGIII-Response Strategies

*(Including Adaptation & Mitigation)*

### **Supplementary 1992:**

Impacts Assessment

### **SAR 1995:**

WGII-Impacts, Adaptations and Mitigation

of Climate Change: Scientific-Technical Analyses

### **TAR 2001, AR4 2007, AR5 2014:**

WGII-Impacts, Adaptations and Vulnerability



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## Methodology

### **Key words selected:**

**Tool:** Academic Leximancer®

**Criteria for the selection:** relevance of the words with climate change and adaptation is in high rank of the IPCC VIA reports.

**Comments:** to avoid the noise of the information, we just have the statistical analysis on the context in the reports, excluding SPM, TS, references, and the glossary, annex, etc.

### **Analysis method:**

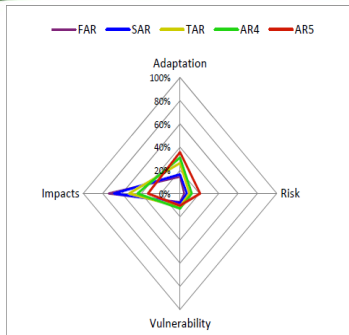
**Trajectory analysis from FAR to AR5**

--Lagrangian, rather than Eulerian



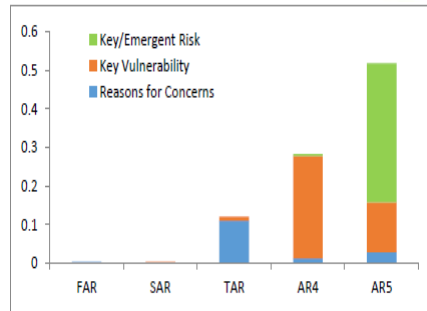
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# Scientific Basis for Adaptation Decision



Relative proportion of **Risk** is greatly increased in AR5~~

Strongest relationship between adaptation & V&R



**Reasons for Concern:** few times in FAR & SAR, peak in TAR;  
**Key Vulnerability:** few times in SAR & TAR, peak in AR4;  
**Key/Emergent Risk:** few times in AR4, peak in AR5



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# Basic elements for adaptation FAR-AR5

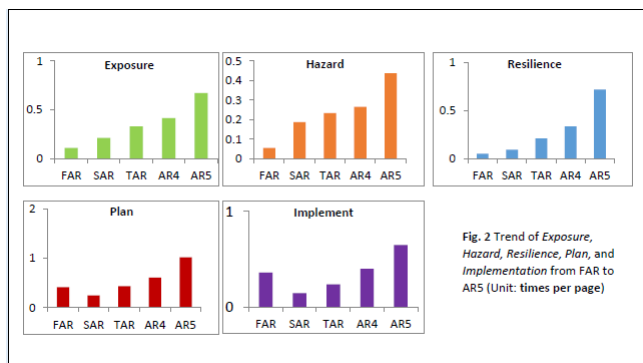


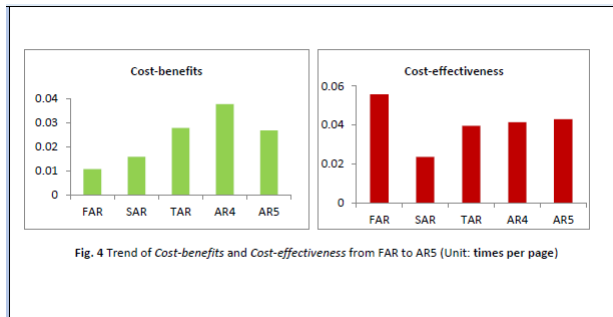
Fig. 2 Trend of Exposure, Hazard, Resilience, Plan, and Implementation from FAR to AR5 (Unit: times per page)

*How to discuss the adaptation in the reports, these basic elements would not change~~*



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## Cost-benefits, or Cost-effectiveness?

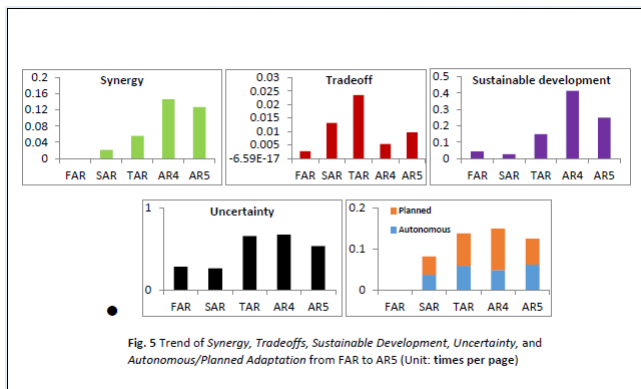


Balances for ecological benefits & socio-economic benefits, rather than just economic benefits



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## General terms enriched with more specific meaning



Nexus vs Synergy/Tradeoffs;

Climate-resilient pathway vs Sustainable Development

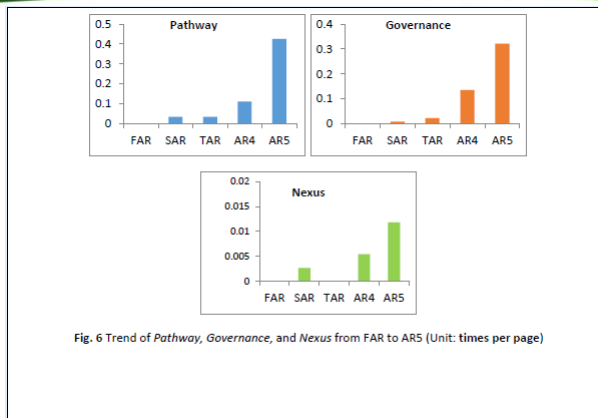
Urgent/Emergent Risk vs uncertainties

Incremental/Transformational Adaptation vs

Autonomous/Planned Adaptation



## Approaches for Adaptation



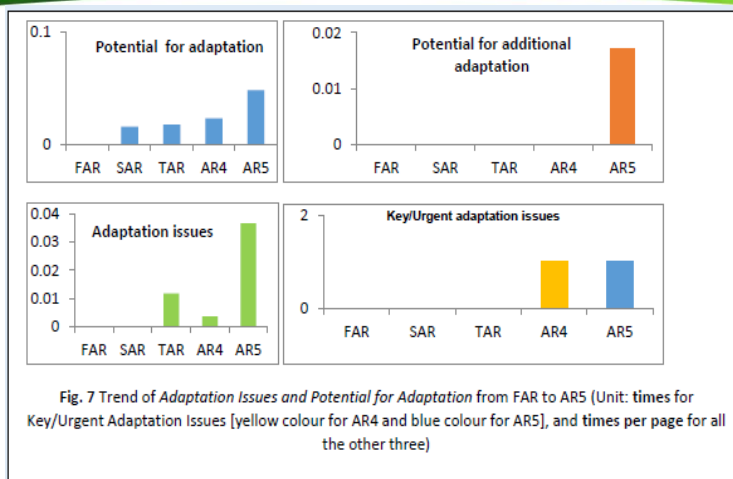
Pathway & Governance: peak value in AR5?

Nexus: more discussion in AR6?



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## Specification of Adaptation



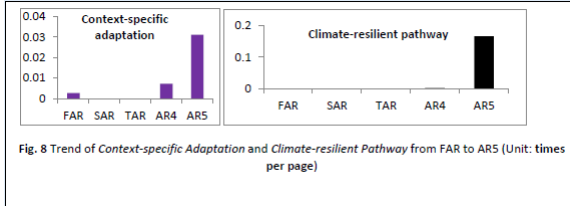
Potential for adaptation → Potential for additional adaptation

Adaptation issues → Urgent adaptation issues

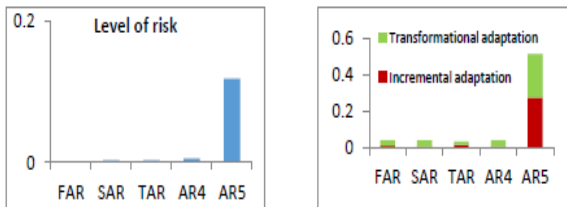


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## Theoretical mechanism of adaptation

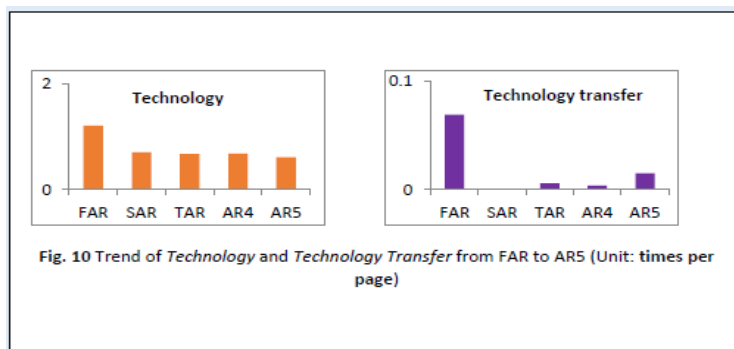


There would be more discussion on context-specific adaptation, climate-resilient pathway, level of risk, and incremental/transformational adaptation in AR6?



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## Adaptation Technology & Technology Transfer



Discussion on adaptation technology not increased, and very few discussion on technology transfer.



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## Conclusions

Adaptation decision needs more analysis on vulnerability & risk;

In the AR6, there would more discussion on: Urgent/emergent risk, level of risk, urgent adaptation issues, nexus, potential for additional adaptation, climate-resilient pathway~~

From AR6, it is needed more discussion on the theoretical mechanism of adaptation  
~~technology transfer



## Looking forward.....

Still preliminary, more analysis needed~~

- Regional & sectoral analysis
- **What are the top 10 terms used in IPCC reports?[terminology]**
- What is the connection between WGI & WGII?[methodology]

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### Co-authors:

Kuo Li, Christopher Gordon, Xiaoming Wang,  
Janak Pathak, Mengting Zhang, Yujing Zhang,  
Jie Pan, Hui Ju, Yingchun Li, Yong He, Xue  
Han, Xin Ma

IEDA-CAAS leverage fund

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谢谢 ! -Xie Xie !

Thank you !

