



Ted Shepherd
Regina R Rodrigues

World Climate Research Programme

My Climate Risk

42nd Session of the WCRP Joint
Scientific Committee



INTERNATIONAL
COUNCIL
FOR SCIENCE



Our ambition



INTERNATIONAL
COUNCIL
FOR SCIENCE



My Climate Risk



Vision

The new science that is envisaged within MCR is not around models, or observations, or process understanding, but on how they are all used together within a context of deep uncertainty.



Goal

To develop and mainstream a 'bottom-up' approach to regional climate risk, which starts from the decision context (and the decision scale) and enables relevant climate information to be brought into that context.



Purpose

By developing a new framework for assessing and explaining the physically plausible climate drivers of regional climate risk, climate information will be made meaningful at the local scale.

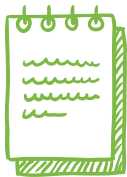
Progress so far



INTERNATIONAL
COUNCIL
FOR SCIENCE



My Climate Risk



Science Plan

- ✓ The overall goal of *My Climate Risk* is to develop **new paradigms** for regional climate risk assessment studies, e.g., through distilling generic vs. context-specific aspects.
- ✓ The key to this is process understanding of the variability/change of regional climate and climate extremes on targeted timescales, within a **particular local context**.
- ✓ *My Climate Risk* will largely draw on existing stakeholder engagement studies that have already generated knowledge on stakeholder needs, **working closely with locally grounded partners**.
- ✓ A canonical activity would be to discuss current risk in a given situation, with proximate explanations, and then develop **storylines of future climate-related risk** based on those explanations. In this way, the past can be related to the future within a risk framing.

Progress so far



My Climate Risk

Original Members	Country	Rep.	Career Stage
Regina Rodrigues	Brazil	CLIVAR	EMCR
Ted Shepherd	UK	—	SCR
Lisa Alexander	Australia	JSC	SCR
Jens H. Christensen	Denmark	JSC	SCR
Mat Collins	UK	CLIVAR	SCR
Francisco Doblas-Reyes	Spain	ESMOC	SCR
Francina Dominguez	USA	GEWEX	EMCR
Harry Hendon	Australia	SPARC	SCR
Daniela Jacob	Germany	RiFS	SCR
Gaby Langendijk	Germany	ESMOC	EMCR
Douglas Maraun	Austria	ESMOC	EMCR
Ali Nazemi	Canada	GEWEX	EMCR
Susann Tegtmeier	Canada	ESMOC	EMCR
Lin Wang	China	SPARC	EMCR

Membership



Increasing the number of members and improving diversity

New Members	Country	Rep.	Career Stage
Hanne H. Christiansen	Norway	CLiC	SCR
Amadou Gaye	Senegal	—	SCR
Paola A. Gomez	Colombia	GEWEX	EMCR
Kendra Gotangco	Philippines	—	EMCR
Sakshi Mankotia	India	CLiC	EMCR
Somnath B. Roy	India	—	EMCR

Progress so far



Membership

- ✓ 10 EMCR x 9 SCR
- ✓ 9 women x 10 men
- ✓ 7 Global South x 12 Global North



Progress so far



My Climate Risk

SRI 2021 – Round Table

- ✓ Designing new frameworks for using all the available sources of information on climate risk
Dr Anna Sörensson, University Buenos Aires, Argentina
- ✓ Bridging knowledge gaps in transdisciplinary research
Dr Chi Truong, Himalayan Univ. Consortium, Nepal
- ✓ Redressing the power imbalance between the Global North and Global South in the production of knowledge and use of information
Dr Laura Pereira, Stellenbosch University, South Africa and Stockholm Resilience Centre, Sweden
- ✓ Developing scalable tools for understanding and addressing climate risk within a local and social context
Dr Ros Cornforth, University of Reading, UK



Progress so far



My Climate Risk



Other Initiatives

- ✓ Workshop on Storying Climes of the Himalaya, Andes and Arctic
- ✓ Ocean Climate Risk – UN Ocean Decade

✓ **AGU FALL MEETING** Session
New Orleans, LA & Online Everywhere
13–17 December 2021

ICIMOD

HUC
Himalayan
University
Consortium



WCRP
World Climate Research Programme

CALL FOR PAPERS

PUBLISHING WORKSHOP

Storying climes of the Himalaya, Andes, and Arctic

Anthropogenic water bodies, multispecies
vulnerability, and sustainable living

9-15 October 2021 | Online

<https://www.wcrp-climate.org/news/wcrp-news/1699-storying-climes>

Vision



INTERNATIONAL
COUNCIL
FOR SCIENCE



My Climate Risk



Structure – Labs

A non-hierarchical ecosystem of labs/communities of practice; like a *mycorrhizal network*, sharing resources rather than competing for them, and anchored by 'mother trees' in the form of *regional hubs*



Vision



INTERNATIONAL
COUNCIL
FOR SCIENCE



My Climate Risk

VINTAGE SCHUMACHER



Small is Beautiful

A Study of Economics
as if People Mattered



Structure – Labs

From E.F. Schumacher's concept of "Intermediate Technologies" (a chapter in *Small is Beautiful*, 1973), production methods should be:

- ✓ used in workplaces located where people live now (rather than forcing them to migrate)
- ✓ cheap
- ✓ relatively simple
- ✓ using local materials and mainly for local use

In our case, we are producing *information*, so can draw on the worldwide storehouse of information through the entire **WCRP**

Challenges



INTERNATIONAL
COUNCIL
FOR SCIENCE



World Climate Research Programme

My Climate Risk

Lack of Continuity



The project cycle mode of operation and the competitive nature of the science funding model

Stakeholder Exhaustion



Repeated engagement from researchers which serves only the researchers

Documenting Outcomes



Challenges in documenting outcomes and in publishing transdisciplinary work

Equity and Legitimacy



“...inequitable North–South partnerships [are] borne out of a paradigm of knowledge deficit and capacity development that runs the risk of entrenching existing inequalities....Creating frameworks that enable the establishment of equitable partnerships requires a shift in perspectives on, and processes related to, the design, implementation and evaluation of success.” Vincent et al. (*Nature Climate Change*, 2020).

Next Steps



INTERNATIONAL
COUNCIL
FOR SCIENCE



My Climate Risk



Network of regional hubs



Grow network of *regional hubs* based on and driven by existing institutions who share values with MCR

The *regional hubs* should support and connect local labs and would be represented on the MCR science team, providing the connection to the rest of the WCRP

Connections to the *regional hubs* would be nurtured through a variety of mechanisms, including training, to develop trust and build long-term, equitable partnerships

Next Steps



INTERNATIONAL
COUNCIL
FOR SCIENCE



My Climate Risk



Evolution of Science Team

Delegated representatives
of JSC and of other WCRP
entities on science team
should be 'ex officio'

Regular members of
science team should be
willing to engage and
help move things
forward, with a good
regional representation





Thanks!

World Climate Research Programme

My Climate Risk

42nd Session of the WCRP Joint
Scientific Committee

