

PhD Pilot Study Carteret Islands

NCCARF Climate Change Adaptation
and Governance Workshop
UNSW, Sydney • 17 November 2010

“If emissions follow a business-as-usual scenario, sea level rise of at least two meters is likely this century. Hundreds of millions of people would become refugees.” —Dr. James Hansen, Director NASA Goddard Institute, Adjunct Professor Columbia University



PhD Candidate Johannes M. Luetz
planetprepare@gmail.com





“ *For tomorrow belongs to the people who **PREPARE** for it today.* ”

—*African Proverb*

1. PhD Thesis Introduction
2. Pilot Study Objective
3. Proposed Methodology
4. Preliminary Results





Any other suggestions?

“climate refugees”,
“environmental refugees”,
“climate migrants”, “climate
exiles”, “climate evacuees”,
“climate displacees/
dislocatees”, “forced
migrants”, “climigrants” ...

The Labels → Societal Perceptions

“Refugee”

- “Refugee” good semantic fit: people literally “seek refuge”
- No choice
- Last resort
- Reactive
- Public empathy
- Perceived as “helpless”
- **“Victimisation”**

“Migrant”

- “Migrant” more matter-of-fact and legally precise
- Free will
- Form of Adaptation
- Proactive
- Public mistrust
- Perceived “freeloaders”
- **“Opportunism”**

Source	Projection	Timeframe
IPCC (2001)	150 million	2050
Myers (1995 and 2005)	200 million	2050
Myers (2006)	250 million	2050
Nicholls (2004)	50-200 million	2080
IOM (2009)	200 million	2050
Stern Review (2006)	150-200 million	2050
Christian Aid (2007)	1 billion	2050

CLIMATE CHANGE REFUGEE: “... *an individual who is forced to flee his or her home and to relocate temporarily or permanently across a national boundary as the result of sudden or gradual environmental disruption that is consistent with climate change and to which humans more likely than not contributed.*” (Docherty and Giannini, 2009)

CLIMATE REFUGEE: “... *people who have to leave their habitats, immediately or in the near future, because of sudden or gradual alterations in their natural environment related to at least one of three impacts of climate change: sea-level rise, extreme weather events, and drought and water scarcity.*” (Biermann and Boas 2007, 2008)

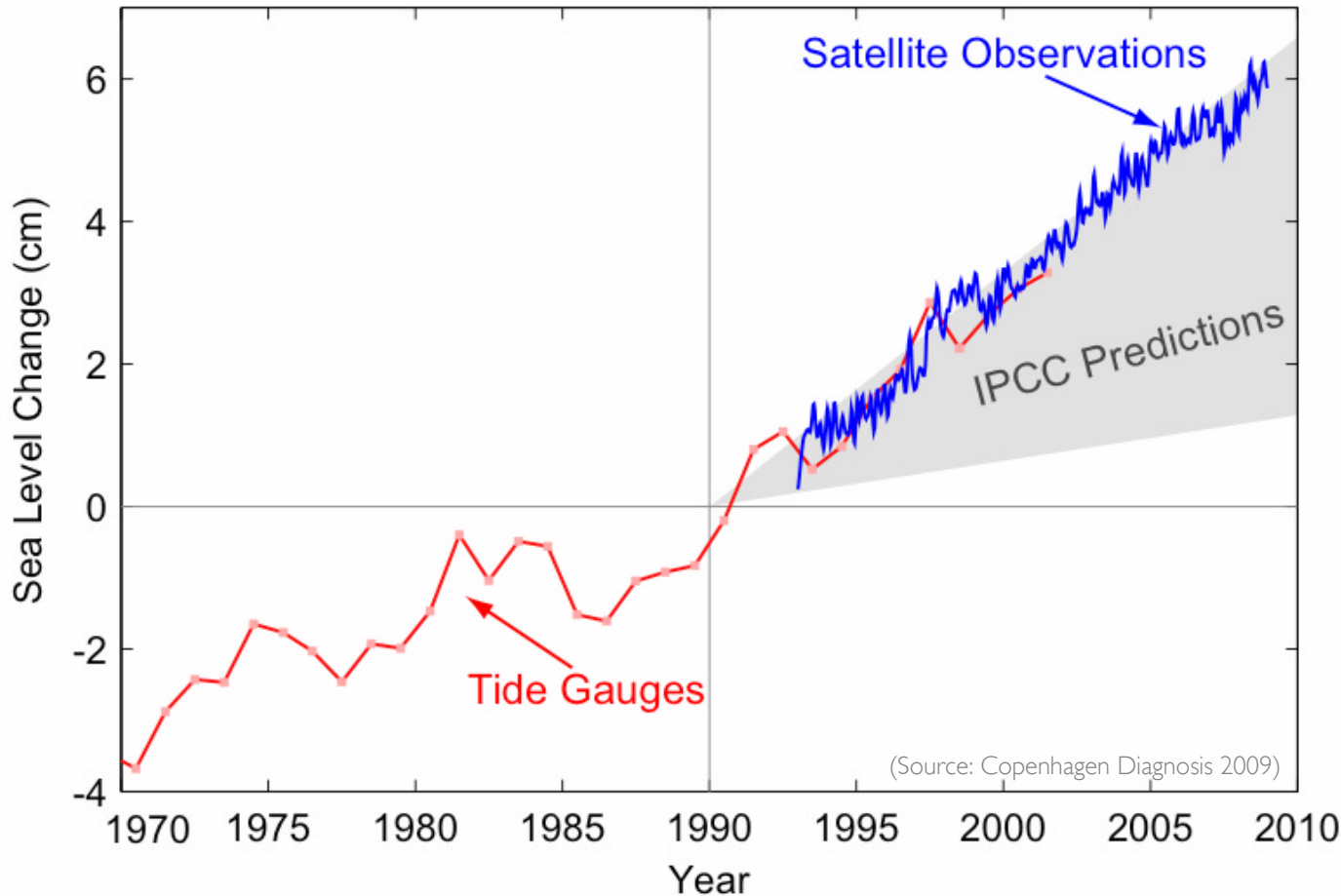
ENVIRONMENTAL REFUGEES: *“... persons who can no longer gain a secure livelihood in their traditional homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortages and climate change, also natural disasters such as cyclones, storm surges and floods. In face of these environmental threats, people feel they have no alternative but to seek sustenance elsewhere, whether within their own countries or beyond and whether on a semi-permanent or permanent basis.” (Myers and Kent 1995, pp 18-19)*

ENVIRONMENTAL MIGRANTS: *“Environmental migrants are persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad” (International Organization for Migration IOM, 2007).*



“ there could be perhaps as many typologies as there are papers on the subject. ”
(Richard Black, 2001)

Global sea level change 1970-2010

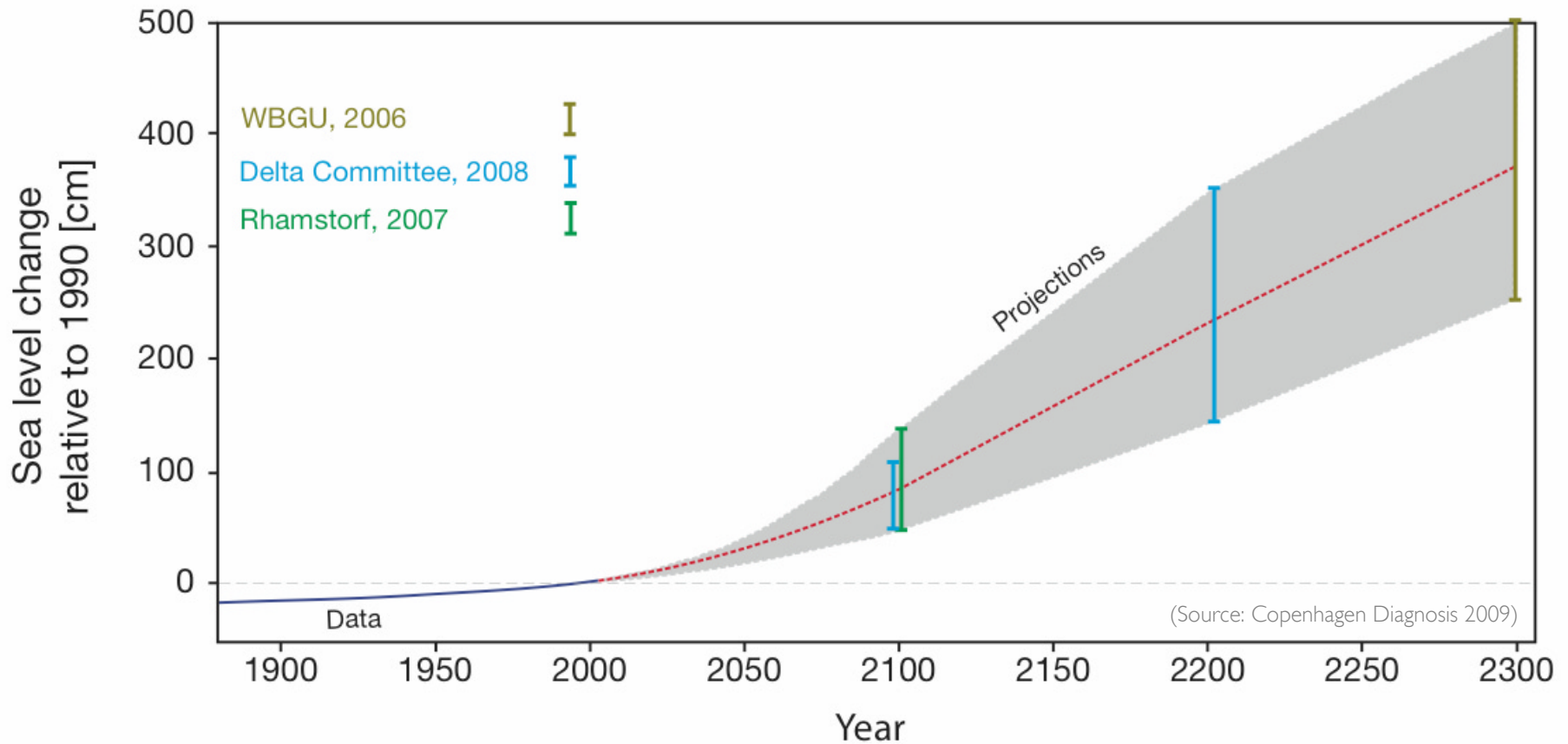


**SLR by
2100:
1-2m**

**Last 15
years:
5cm SLR ~
80% faster
than IPCC**

**SLR by
2300:
up to 5m**

Future sea-level projections





“Our results reveal that hundreds of millions of people in the developing world are likely to be displaced by Sea Level Rise within this century.”

(World Bank Policy Research, 2007)

(Photo: Johannes Luetz)

“ The objective of public policy should not be to prevent migration, but rather to ensure that it can take place in appropriate ways and under conditions of safety, security and legality ... [which] makes it all the more urgent to carry out **in-depth micro-level empirical research** to understand the changes that are taking places, how they affect various groups, and what response strategies their groups adopt. ”

—S. Castles, *In: Afterword: What Now? Climate-induced Displacement after Copenhagen*, [Ed.] Jane McAdam, 2010 [Forthcoming]



**At micro /
local-level
ascertain
preferred:**

- Terminologies
- Locations
- Solutions

Human subjects framework (3 areas):

- *Self-description*: preferred nomenclature
- *Self-determination*: preferred destinations
- *Self-government*: preferred processes/ solutions

Video: <http://www.vimeo.com/4177527>

- Trial data generation
- Observe issues raised
- Focus / fine-tune questionnaire

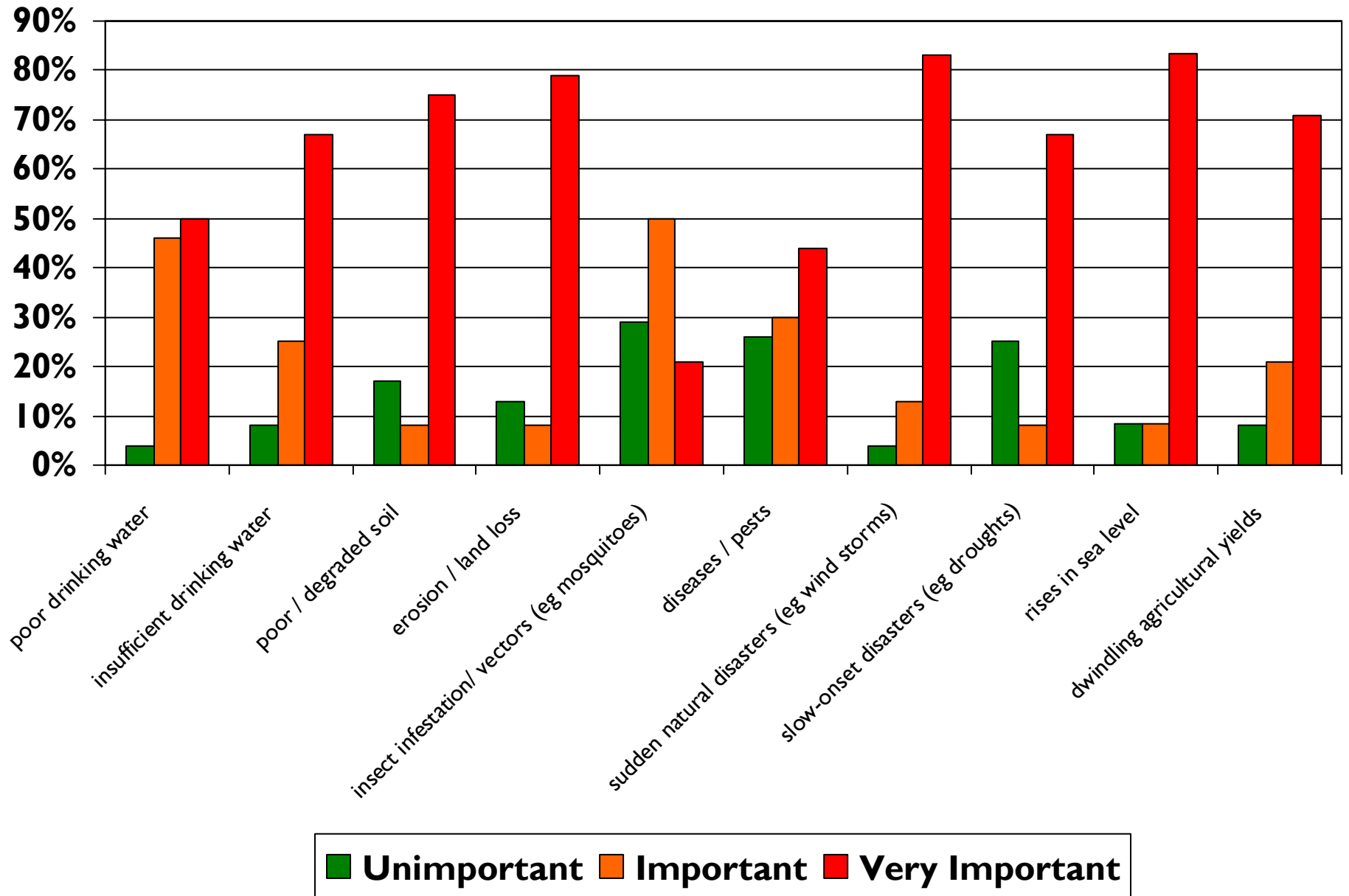


Question: Which environment or climate-related problems contributed/contributes to your decision to leave? How important was/is each factor? Please rate each factor as “unimportant” OR “important” OR “very important”.

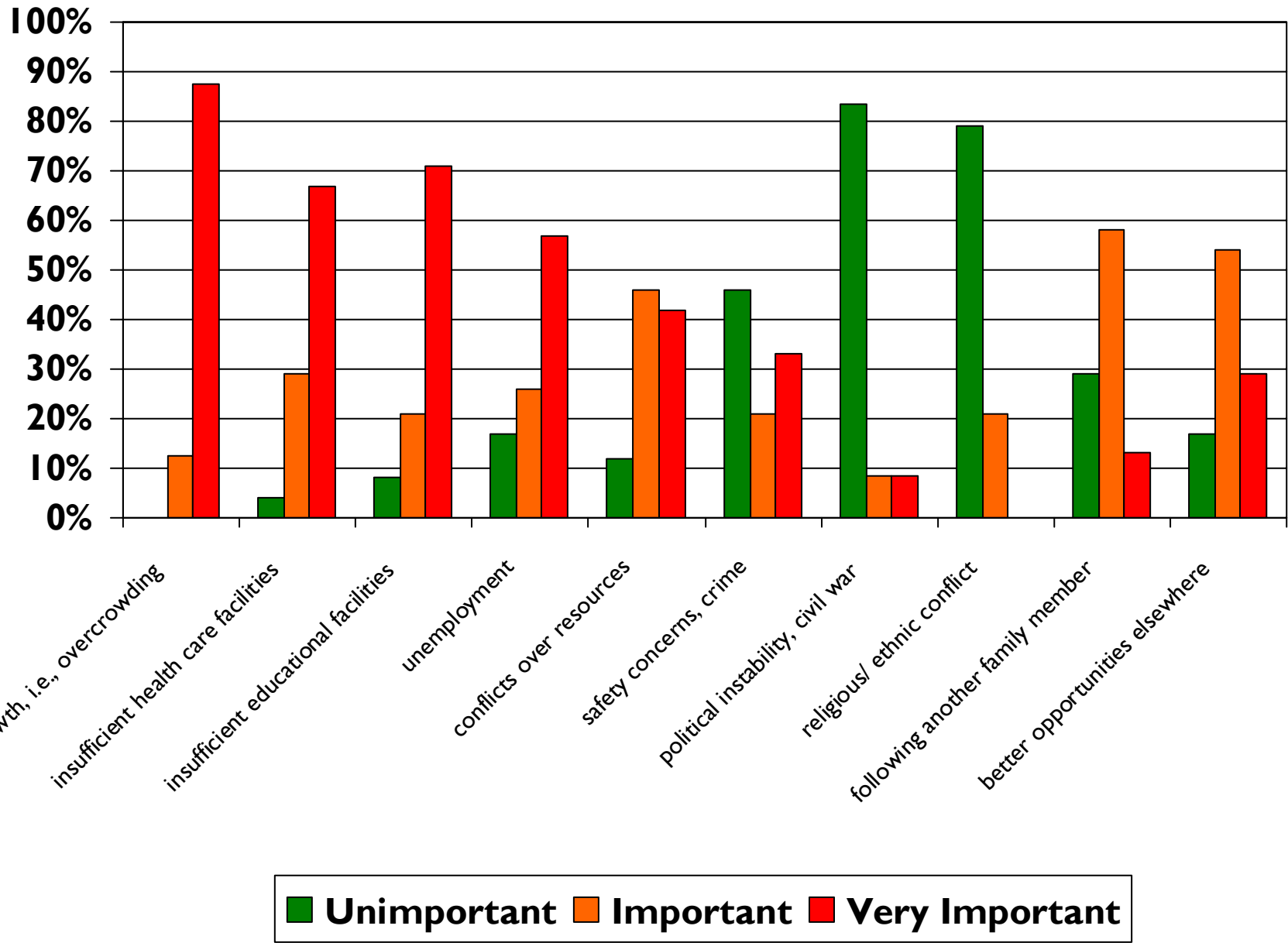
Reason	Unimportant	Important	Very important
poor drinking water			
insufficient drinking water			
poor / degraded soil			
erosion / land loss			
insect infestation/ vectors (eg mosquitoes)			
diseases / pests			
sudden natural disasters (eg wind storms)			
slow-onset disasters (eg droughts)			
rises in sea level			
dwindling agricultural yields			
other problem:			
other problem:			

Question: Which non-environment or climate-related problems also contributed/contributes to your decision to leave? How important was/is each factor? Please rate each factor as “unimportant” OR “important” OR “very important”.

Reason	Unimportant	Important	Very important
population growth, i.e., overcrowding			
insufficient health care facilities			
insufficient educational facilities			
unemployment			
conflicts over resources			
safety concerns, crime			
political instability, civil war			
religious/ ethnic conflict			
following another family member			
better opportunities elsewhere			
other problem:			
other problem:			



Non-Environment-Related

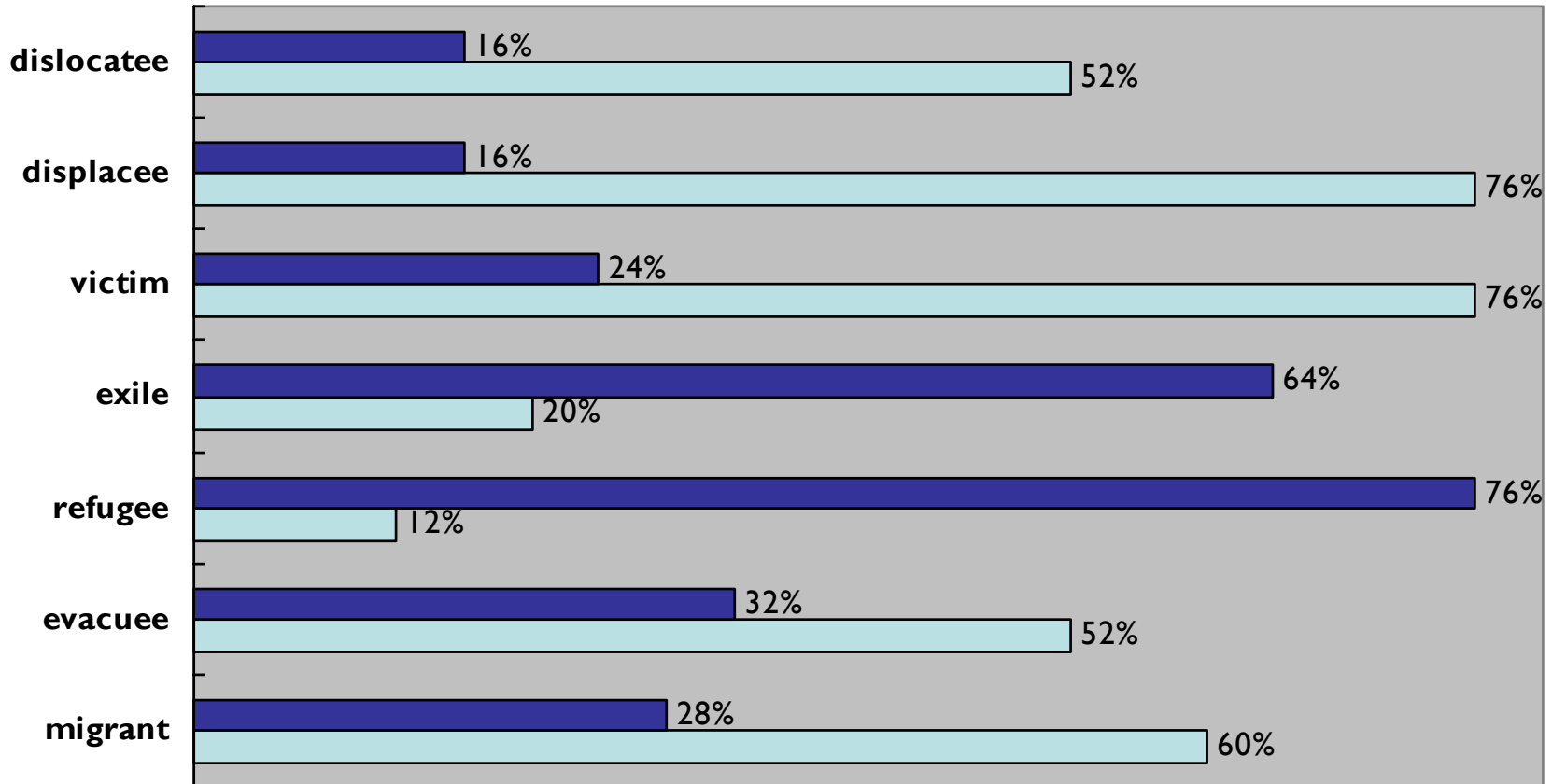




Environment and non-environment-related drivers reinforce each other

Question: Different members of the public characterise people in your situation by different labels. From the list below, please indicate how accurately each term characterises the identity of affected people? From the list below, please rate each term based on your emotional response to it as “good” OR “bad” OR “don't know”.

Identity	Good	Bad	Don't know
migrant			
evacuee			
refugee			
exile			
victim			
displacee			
dislocatee			
other term: _____			
other term: _____			



	migrant	evacuee	refugee	exile	victim	displacee	dislocatee
Bad	28%	32%	76%	64%	24%	16%	16%
Good	60%	52%	12%	20%	76%	76%	52%

“ The climate change that the world is already locked into has the potential to result in large-scale development setbacks, first slowing, then stalling and reversing progress in poverty reduction, nutrition, health, education and other areas ...
Hoping – and working – for the best while preparing for the worst, serves as a useful first principle for adaptation planning. ”

—2007/2008 UN Human Development Report:
Fighting climate change : Human solidarity in a divided world.

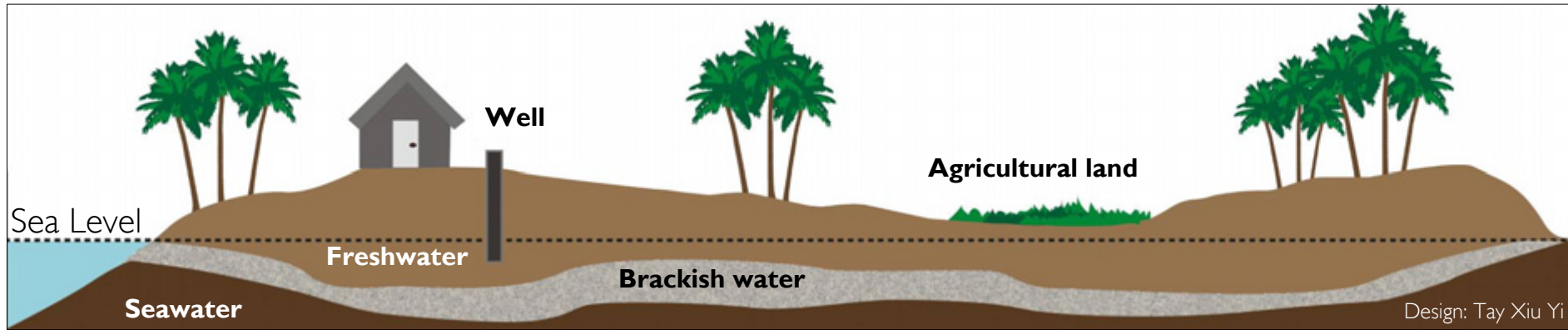
Thank You! PhD Sponsors:



“ Top-down bureaucratic rationality may not achieve much when it comes up against very different ways of thinking and living. All the more reason why **we need far more local-level research**, to inform strategies for responding to climate-induced displacement. ”

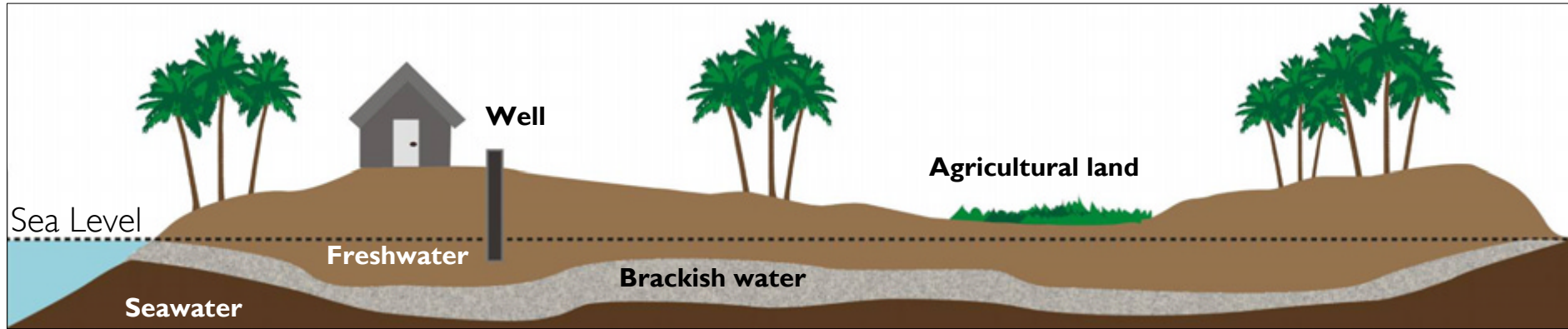
—Stephen Castles, *In: Afterword: What Now? Climate-induced Displacement after Copenhagen. Book's closing/concluding sentence.*
[Ed.] Jane McAdam, 2010 [Forthcoming]

Figure 1: Normal sea level



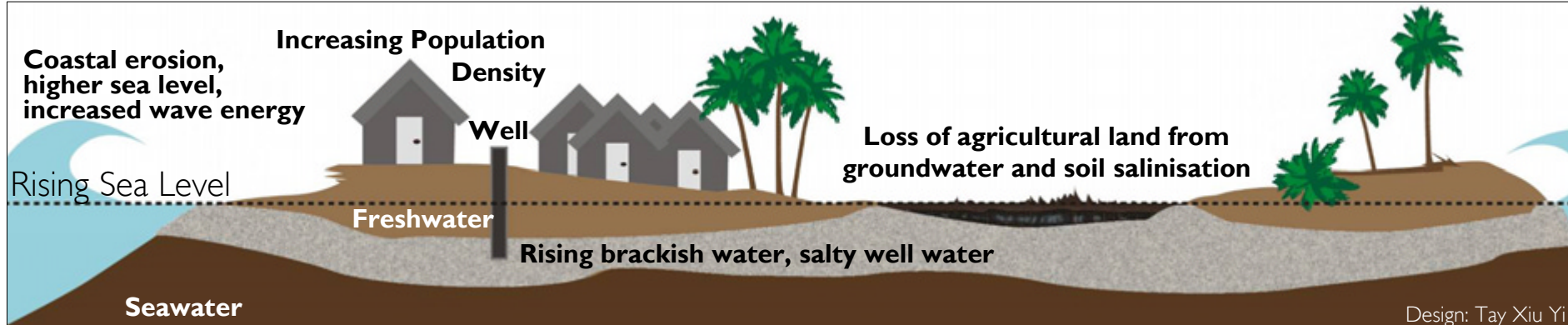
Island Submergence

Figure 1: Normal sea level



Island Submergence

Figure 2: Rising sea level



Design: Tay Xiu Yi

Photo: Johannes Luetz



**Island of Petats:
Contaminated
Open Well**

Papua New Guinea: Island of Petats, contaminated open well

Luke Rutsie (36), Petats: “The well water tastes very salty – islanders now use it only for cooking and bathing.”

Island of Pororan: Contaminated Closed Well



Photo: Johannes Luetz

Papua New Guinea, island of Pororan,
contaminated closed well

Francis Giran (59), Pororan: “The well water has become salty and unfit for consumption. This World Vision-built pump is brown with rust.”

PLANET **PREPARE**

Protect Development
Research Priorities
Empower Communities
Partner And Network
Advocate Justice And Change
Reinforce Disaster Defences
Educate Children

2008 World Vision Preparedness Study

