



Evaluation of adaptation to water-related risk in the Mekong Delta: A multi-criteria analysis of response decisions

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Evaluation of adaptation options/measures: Research gaps & motivation

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Vietnamese Mekong Delta (VMD)

- Evaluation of strategies rarely inform decision-making in Vietnam

Evaluation practice

- Evaluation is often underemphasized and too narrow

Theory & Concepts

- Few integrated concepts and theories which could provide a comprehensive frame for such approaches



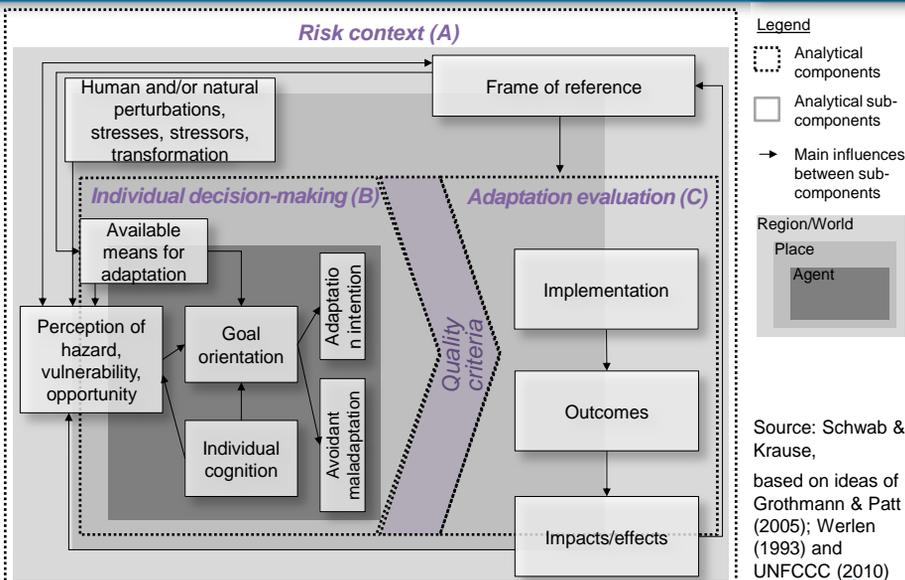
Development of evaluation framework

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1. • Understand **risk** and **vulnerability context**
2. • Identify existing and potential adaptation **strategies** (different levels and stakeholders)
3. • Identify **criteria** that determine success/failure of strategies and that need to be considered to ensure sustainability
4. • **Evaluate** selected adaptation strategies based on criteria
5. • **Compare** MCA results with vulnerability implications of selected strategies

Conceptual framework for adaptation evaluation

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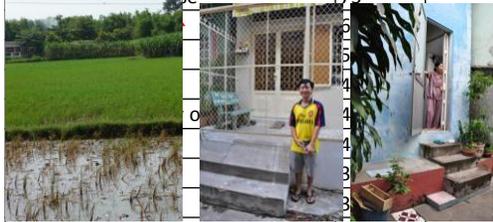


Identified risk-related response strategies (coping/adapt.) WISDOM
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Rural areas (Rice farmers; salinity)	% of hh
Introduce a third season	94
Increase fertiliser	76
Invest in productive assets	73
Take a loan	66
Buy fertiliser/pesticides on credit	63
Increase the scope of work	58
Change the crop or variety	49
Pump fresh water in the field	44
Sell productive assets	42
Migrate to urban areas	41
Buy food on credit	40
Change crop calendar	30
Produce again/refill	31
Reduce inputs	22
Invest in livestock	22
Take children out of school	22
Seek another job	22



Urban areas	% of hh
Ask local government for help	13
Send children away during flood days	13
Join saving group	12
Vocational training programme	8
Move away	12



Source: Schwab & Krause 2014

Criteria for household-level adaptation decision-making WISDOM
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Rural case study

Key criteria	Source of identification
Costs	4 Household group discussions (n=61) / literature review / interviews
Implementation time	
Autonomy/Implementability	
Income	
Environment	
Long-term impact	
Flexibility	
Future risk	

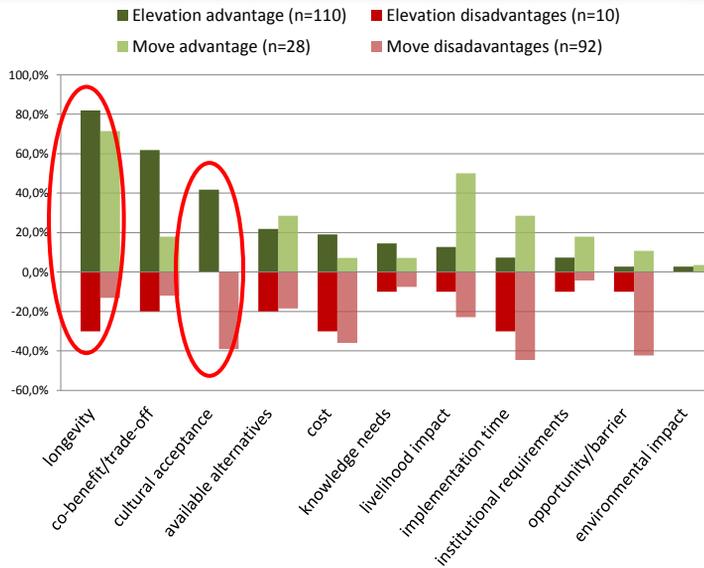
Urban case study

Key criteria	Source of identification
Cost	Household and expert interviews, literature
Longevity	Household interviews
Available alternatives	Household interviews literature
Benefit/drawback	
Livelihood impact	
Opportunity/threshold	
Cultural acceptance	Household interviews literature
Knowledge needs	Literature
Implementation time	Literature
Institutional requirements	Literature, household interviews
Environmental impact	Literature, expert interviews

Source: Schwab & Krause 2014

Criteria ratings for house elevation and moving in urban An Lac Ward (n=120)

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Source: Krause 2014

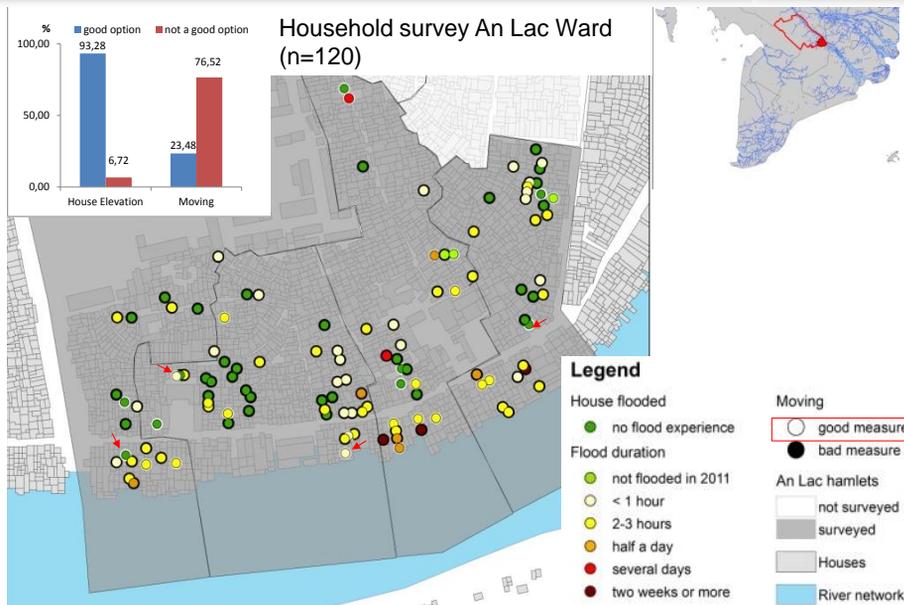
Rationale | Concept | 1. Risk Context | 2. Strategies | 3. Criteria | 4. Evaluation | 5. Vulnerability Effects | Conclusions

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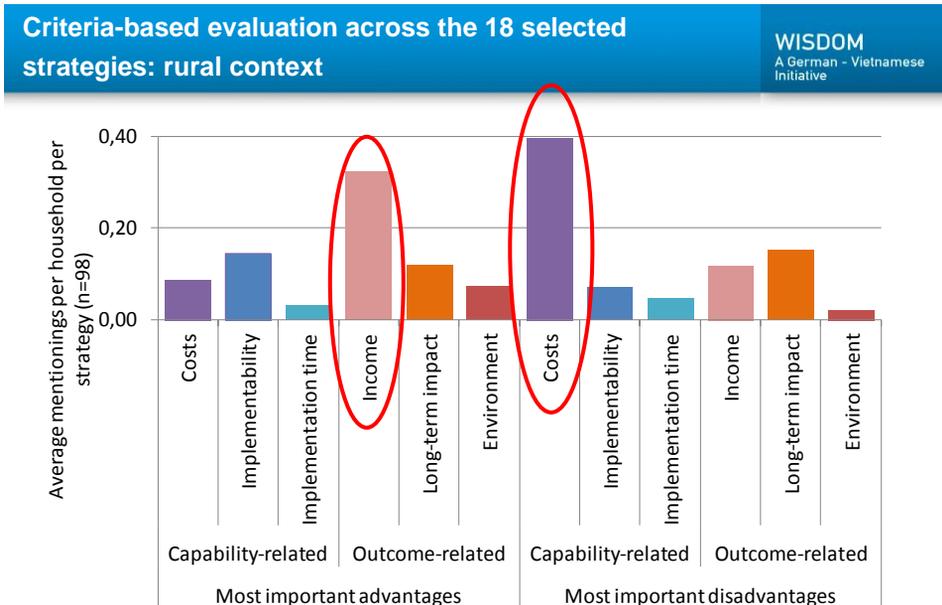


Household flood experience and evaluation of moving (urban case study)

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Source: Krause 2014



Source: Schwab 2014

Rationale | Concept | 1. Risk Context | 2. Strategies | 3. Criteria | 4. Evaluation | 5. Vulnerability Effects | Conclusions

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MCA results against the background of vulnerability changes

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- MCA provides a profound basis to assess local priority setting and acceptance of CCA
- However, “good” as judged subjectively does not always equal actual vulnerability reduction
 - Rural: Introducing a third rice crop: Positively judged by households, but increased vulnerability substantially
 - Urban: Moving to flood-proof area: negatively judged by households, but positive for long-term risk reduction

Rationale | Concept | 1. Risk Context | 2. Strategies | 3. Criteria | 4. Evaluation | 5. Vulnerability Effects | Conclusions

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5-step MCA methodology

- allows to clearly identify key criteria for the judgments about options that otherwise often go unnoticed (e.g. life span of a measure, co-benefits, implementation time)
- helps to structure and weight these criteria
- allows to engage with a debate around trade-offs/rifts btw.
 - different subjective criteria
 - different adaptation options
 - different actors groups
 - etc.
- yet, 'subjectivity-oriented' MCAs needs to be coupled with additional consideration of 'objective' long-term vulnerability effects

Relevance and potential contribution (?)

Vietnamese Mekong Delta (VMD)

- identifies locally accepted CCA strategies and the key criteria without neglecting long-term vulnerability implications, thus, motivating action

Evaluation practice

- helps to push for wider application of evaluation in practice through suggesting a strategic and coherent methodology

Theory & concepts

- provides an integrated frame for comprehensive evaluation and adaptation science (risk context, individual decision making, evaluation)

Thank you for your attention!



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