

# THE BOEUNG

## A SENSITIVE COMMON THREATENED BY UNCERTAINTY IN INTENSIFICATION PROCESS

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CIRAD – dir ES – UPR GREEN



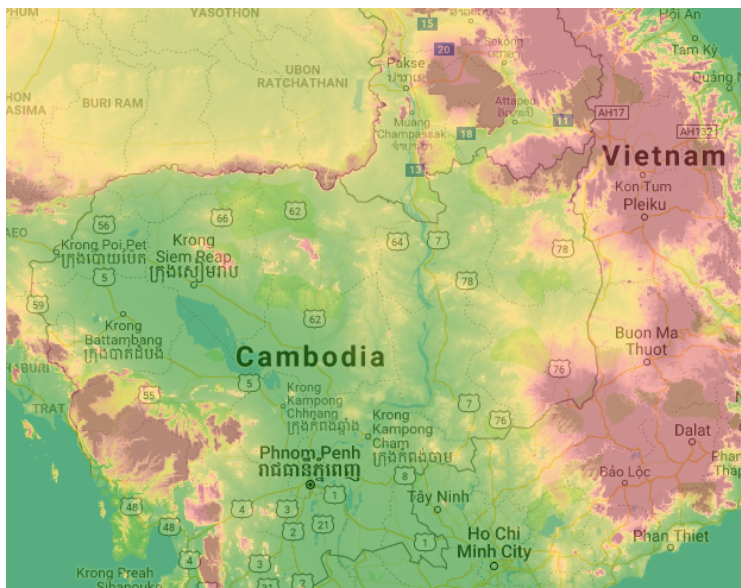
1. Global Context
2. Hydro-social context
3. Games to talk about socio-environmental solidarity
4. Conclusion: the development paradox

# GLOBAL CONTEXT

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# Cambodia's geography of vulnerability

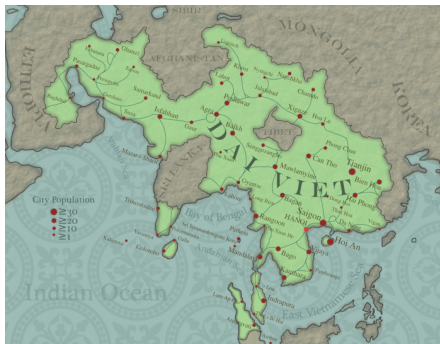
Cambodia's geography no natural border! (Chandler 1998)





# A state needed rising flood plain

Regarding J. C. Scott (2009), states need rice to ensure that their control over the population and their bureaucracy thrive.



# Pol Pot social destruction

*"no Cambodian government had ever tried to change so many things so rapidly ; none had been so relentlessly oriented toward the future or so biased in favor of the poor" (Chandler, 1996, p.209)*

Increase the number of colmatage channels to 'send sediment' to boeung/wetlands.

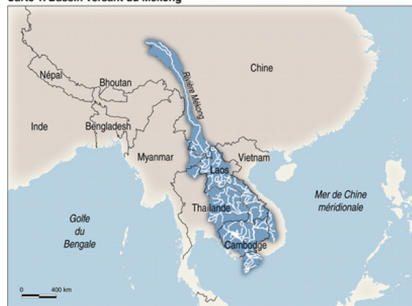


# HYDRO-SOCIAL CONTEXT

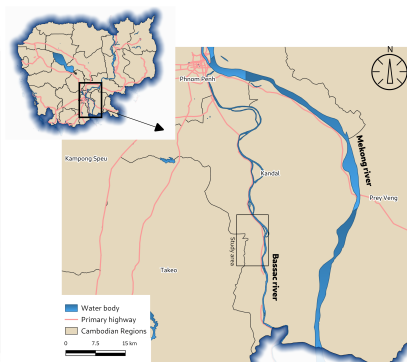
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# Our study in the watershed area

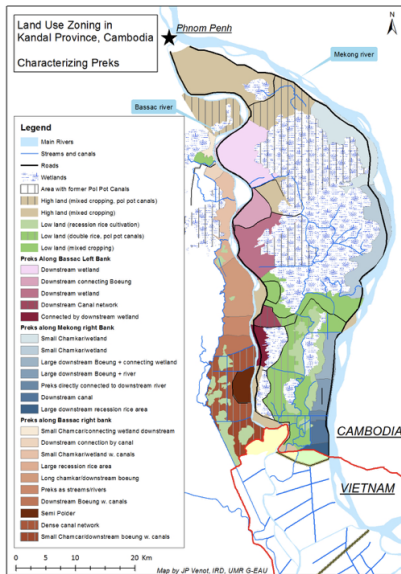
Carte 1. Bassin versant du Mékong



Réalisation : Laboratoire de cartographie, Département de géographie, Université Laval



# Prek in south of Cambodia



# Prek anatomy

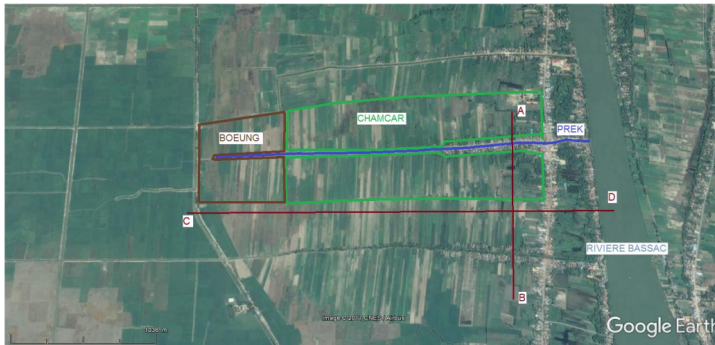


Figure 2 : Schéma explicatif des chamcars et boeungs  
Source : Google Earth      Crédit : Auteur

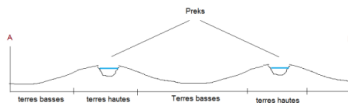


Figure 3 : Schéma coupe A-B de la topographie des terres entre deux Preks  
Source : Auteur



Figure 4 : Schéma coupe C-D de la topographie du terrain  
Source : Auteur

# Amphibious area

20/09/2017



02/05/2018

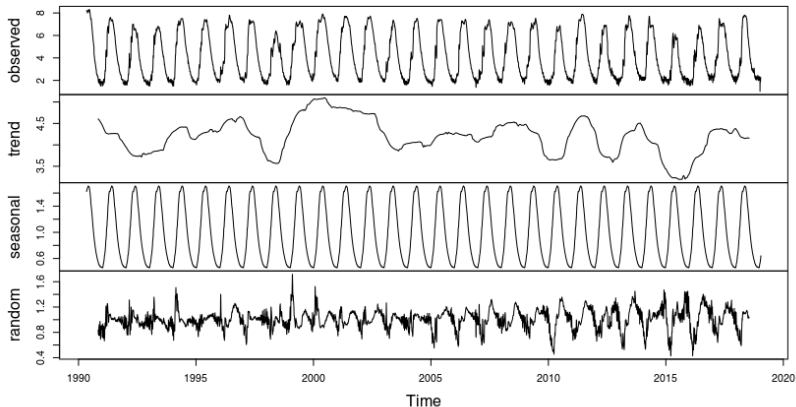


06/12/2018



# Between abundance and scarcity

**Decomposition of multiplicative time series**





# Uncertainty or risk

*"It will appear that a measurable uncertainty, or "risk" proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all. We shall accordingly restrict the term "uncertainty" to cases of the non-quantitative type."*

Knight (1921)

- Risks → Prevention
- Uncertainties → Caution



# Unrivaled development: falsity of the world

- Prek in a development aid process: construction of hydraulic infrastructure rehabilitation for agricultural intensification (Linton (2010) call it modern water paradigm)
- Falsity of the principle of equivalence (Adorno 1979). A socially unjust intensification that denies the importance of the socio-environmental changes it can induce.



# Stakes

- An amphibious zone misunderstood by the different forms of the State since colonization
- Late development
- A recent desire to rehabilitate preks to intensify agricultural production



# GAMES TO TALK ABOUT SOCIO- ENVIRONMENTAL SOLIDARITY

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# Games material

2 games questioning each other

- Game 1 : With policy makers (PDOWAM, PDA (province) and heads of municipalities). Goal : explain and explore their different visions of territory planning.
- Game 2 : With farmers. Goal : explain and find collective way to manage preks areas.



# Games as an arena for human principles and values

Co-construct the game to shift questions from the real world to the world of shared values



# Policy maker game board

- **Scenario 1:** Water fully controlled, on a territorial scale (canals and gates). Continuing to promote water storage in the canals during the dry season.
- **Scenario 2:** Water control not done on a territorial scale. Some Prek are rehabilitated and others are not → spatial segregation between areas where intensification is possible (polders) and areas where it is not possible due to non-rehabilitation. **Farmers no longer consider water as a common vector.**

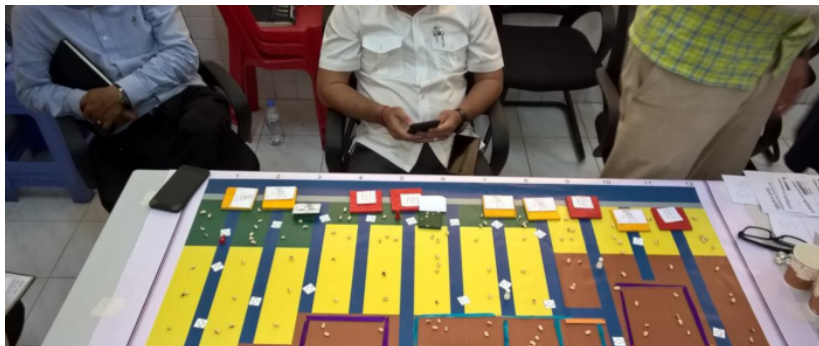


# Policy-maker: Some results

Explicit in real life 2 opposite views between PDA and PDOWAM (compatibility with Sithirith (2017)).

- PDOWAM → intensification
- PDA / municipality → more environmental justice

The around board game is a right place to compromises. We needs/we will upscale this game approach.





# Farmers game board

- Represent their environment with main infrastructure and plots
- Simulate different drought → impact of a flood



# Farmers : Some results

- 2 perception of reality regarding the game board → the issue was not only sedimentation at the entrance of the Prek but sedimentation all along the prek
- Reveal land grabbing issues in exchange for pumps → loss of faith.

Despite the door they face uncertainty but the lack of trust reveals a dead end.



# Global results

- Bueing and territory are considered as a common good by policy maker but as a "private" goods for farmers
- Some pockets of resistance are collectively organized to manage water together

After S. SPRINGER (2016), we consider, "*the common good is always a geographical manifestation of mutual aid*" → Can we and how to encourage diffusion of collective management practices ?



# CONCLUSION: THE DEVELOPMENT PARADOX

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# The development paradox

- Agricultural intensification vs local ecological solidarity: 2 sides of the same issue of improving livelihoods
- Decisions are made beyond the local level (national and international) → deprivation of development models



# Games of power and Power of games

highlight power relationships and give voice to all



# Learning perspectives

- From local action to territorial process (Thanks so much to our ISC partners)
- A game to select the territories suitable for international intervention in the feasibility study
- Empowerment of the local partner in the support process



# Special Thanks





Thank you for your attention



You can find this presentation on [github](#) 