



LES COMMUNS, ARTICULATION AVEC LES SPHÈRES PRIVÉE ET PUBLIQUE

*COMMONS: LINKAGE WITH THE PRIVATE
AND PUBLIC SPHERES*



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Center for the Analysis of Social-Ecological Landscapes (CASEL)*

12^eme. Conference Internationale de la AFD

Paris, Dec 1-2, 2016

Connectivité, hétérogénéité, Interdépendance:
Défis et opportunités de gouvernance des biens communs

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The Ostrom Workshop in Policy Analysis and Political Theory

Indiana University Bloomington, United States



Global Assessment of Biodiversity and Ecosystem Services of the Inter-governmental
Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).



La Grande Accélération post-1950, et les biens communs mondiaux

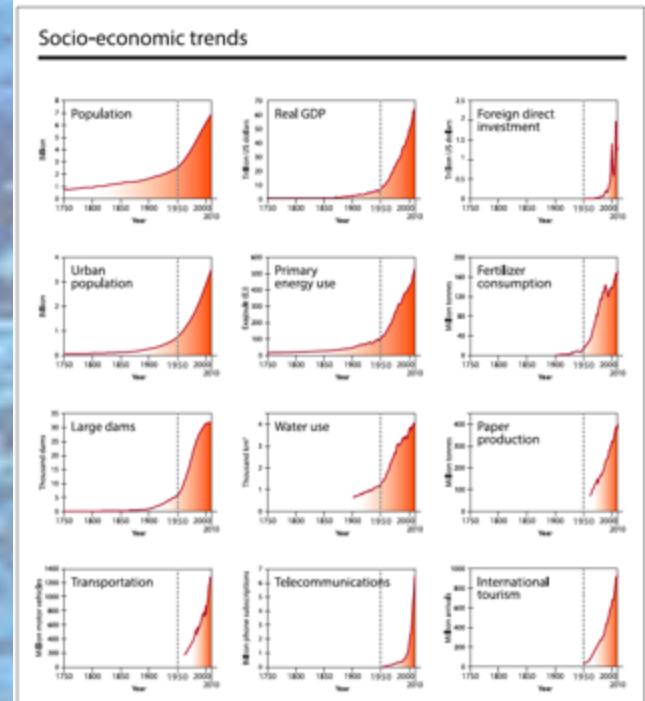


Figure 1. Trends from 1750 to 2010 in globally aggregated indicators for socio-economic development.
(1) Global population data according to the HYDE (History Database of the Global Environment, 2013)

Ses déplacements
régionaux,

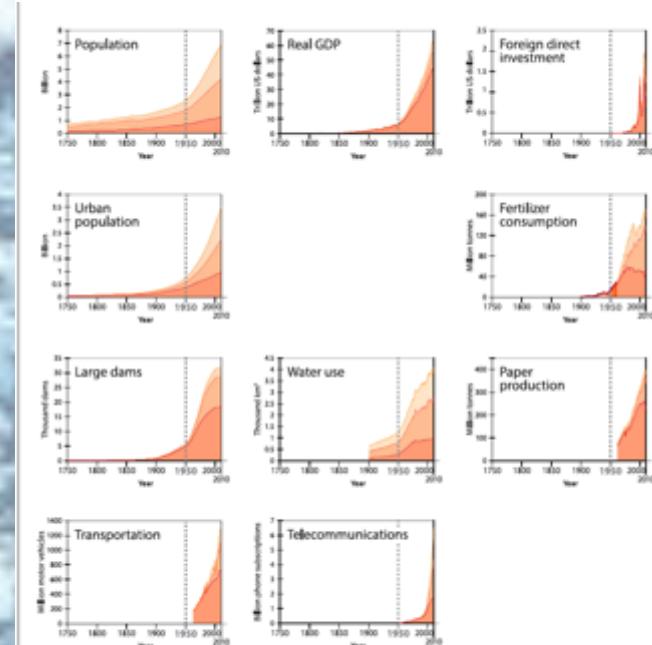


Figure 2. Trends from 1750 to 2010 for ten of the socio-economic graphs (excluding primary energy use and international tourism) with three splits for: the OECD countries, the so-called BRICS (Brazil, Russia, India, China (including Macau, Hong Kong and Taiwan where applicable), and South Africa) countries, and the rest of the world.

Et conséquences mondiales

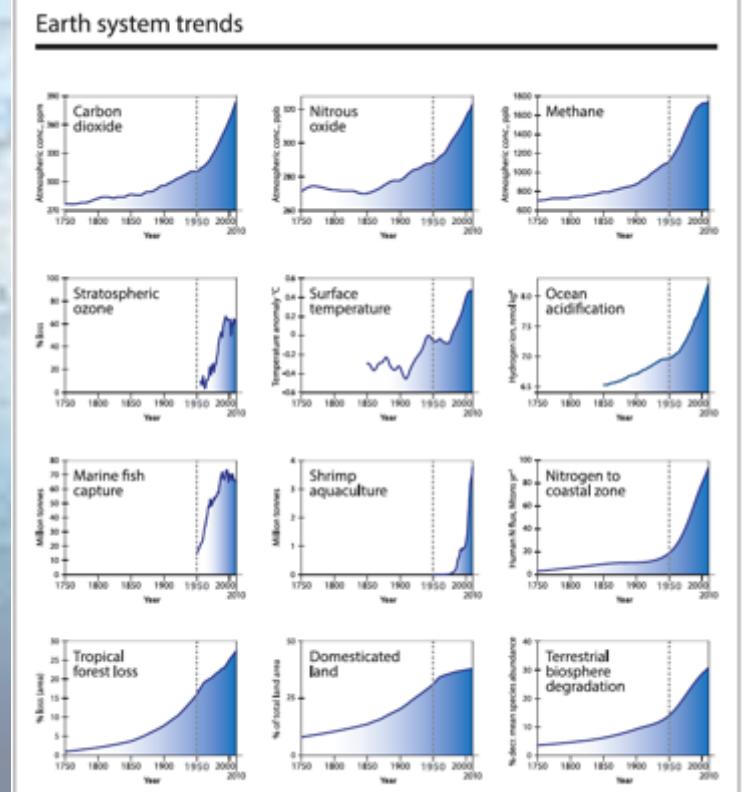
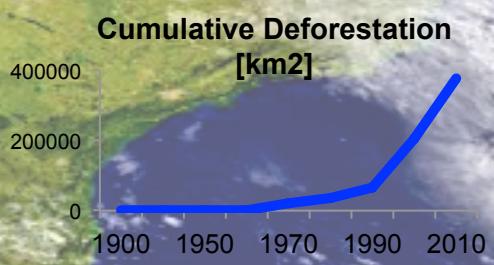
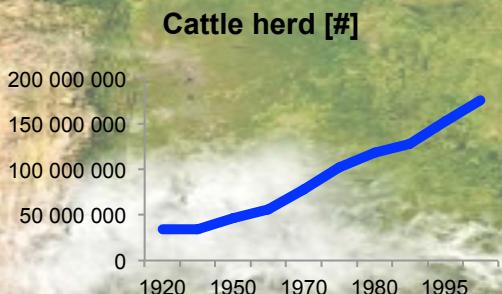
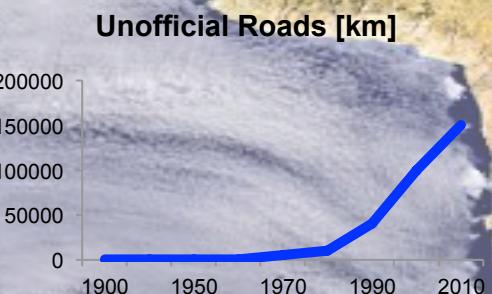
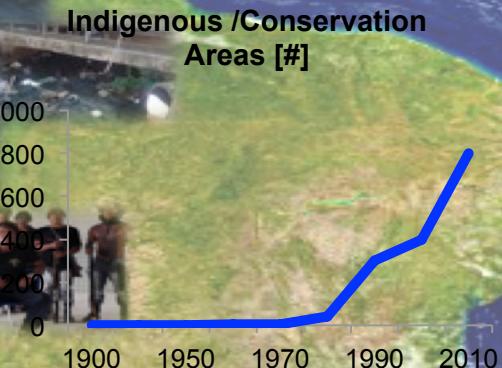
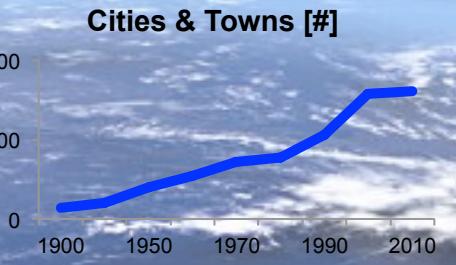
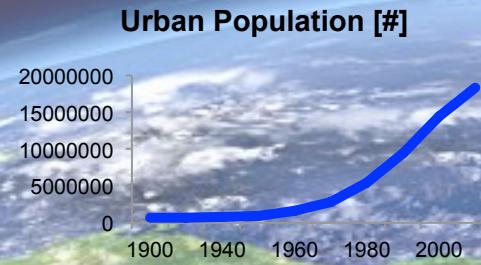
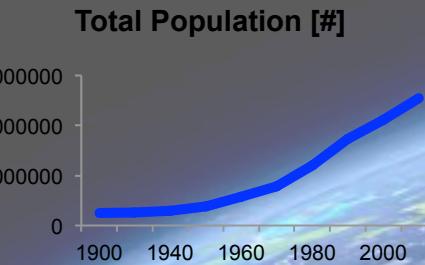
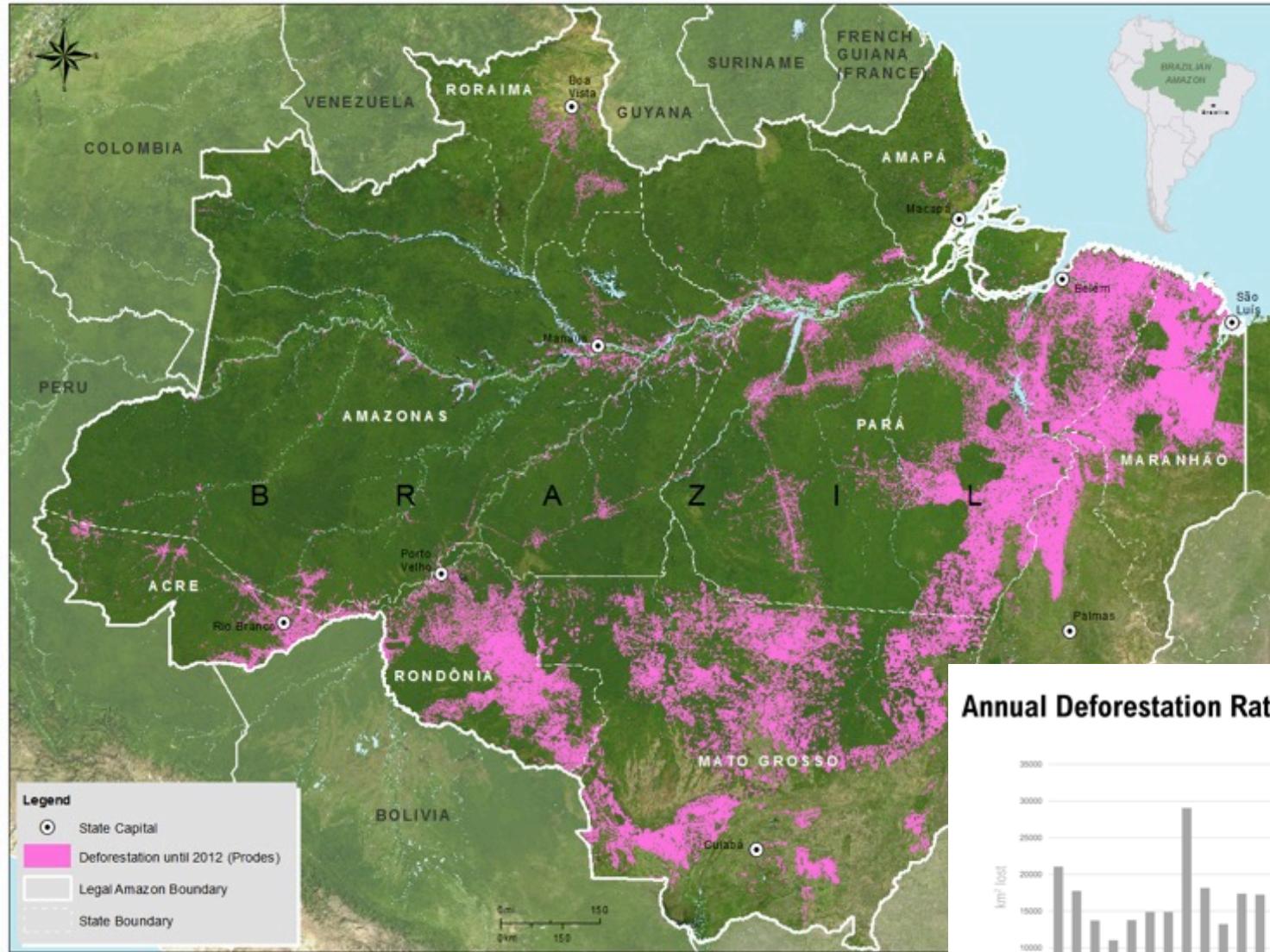


Figure 3. Trends from 1750 to 2010 in indicators for the structure and functioning of the Earth System.

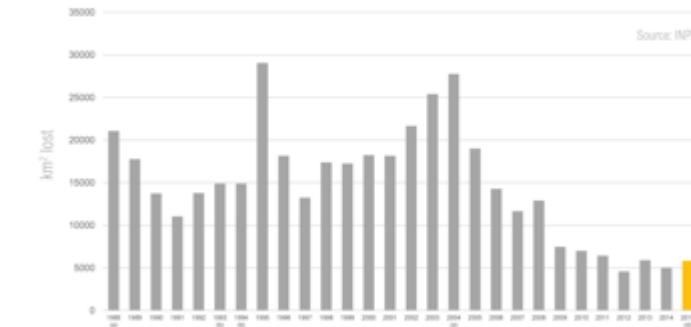
La “grande accélération” amazonienne



Déboisement



Annual Deforestation Rate in Brazil's Legal Amazon

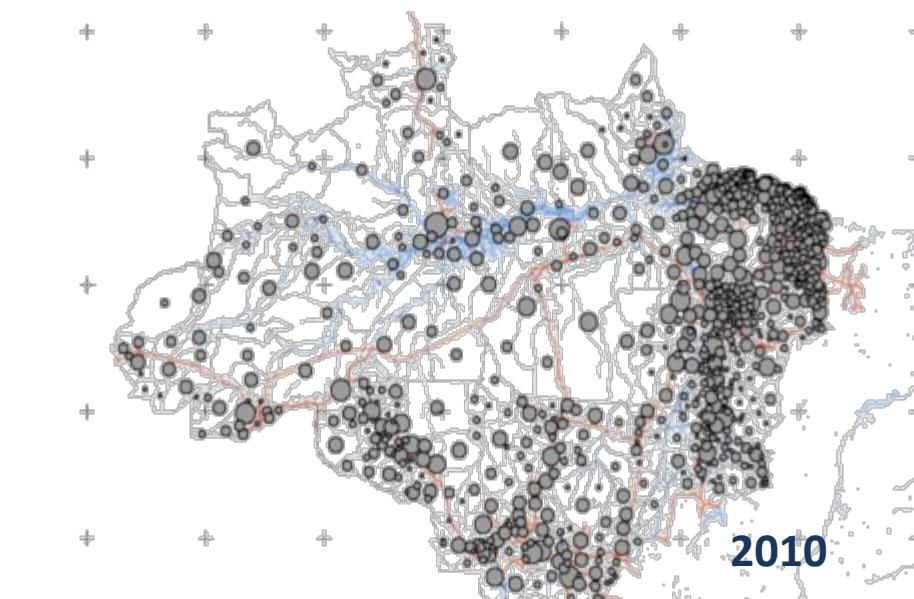
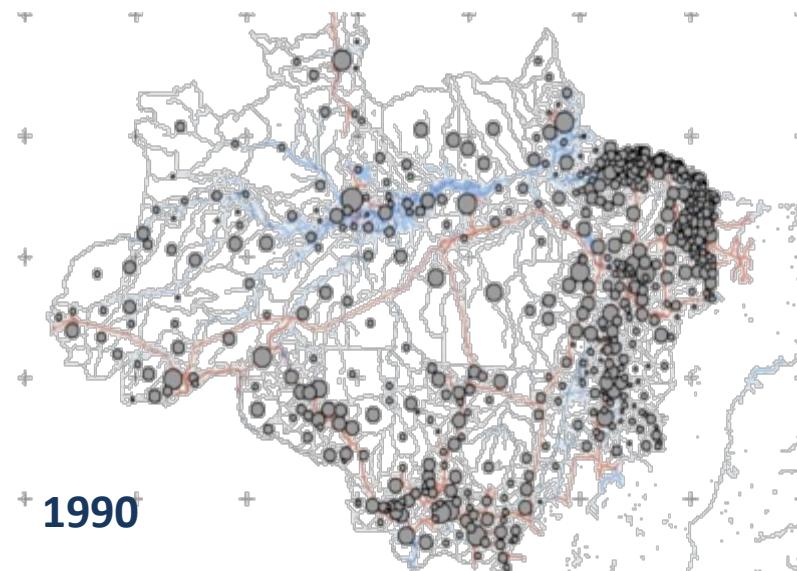
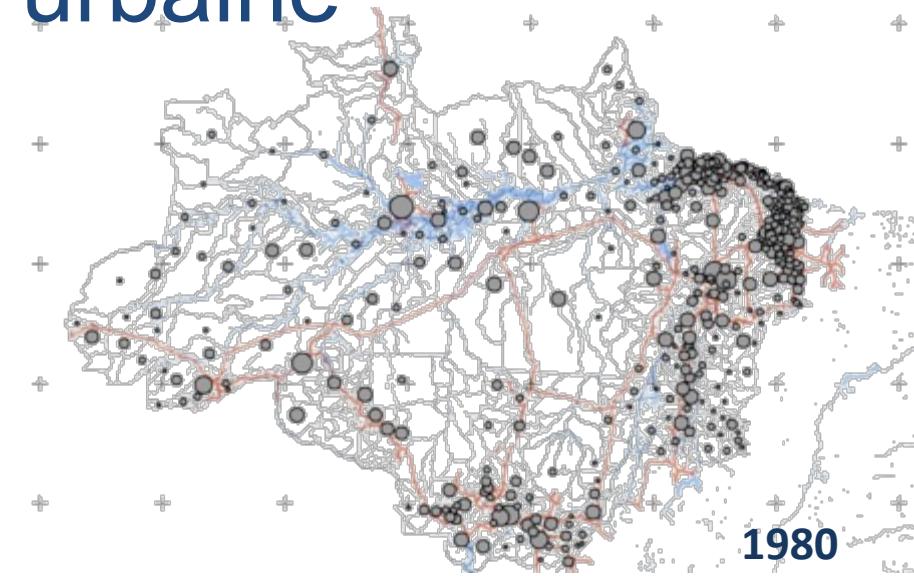
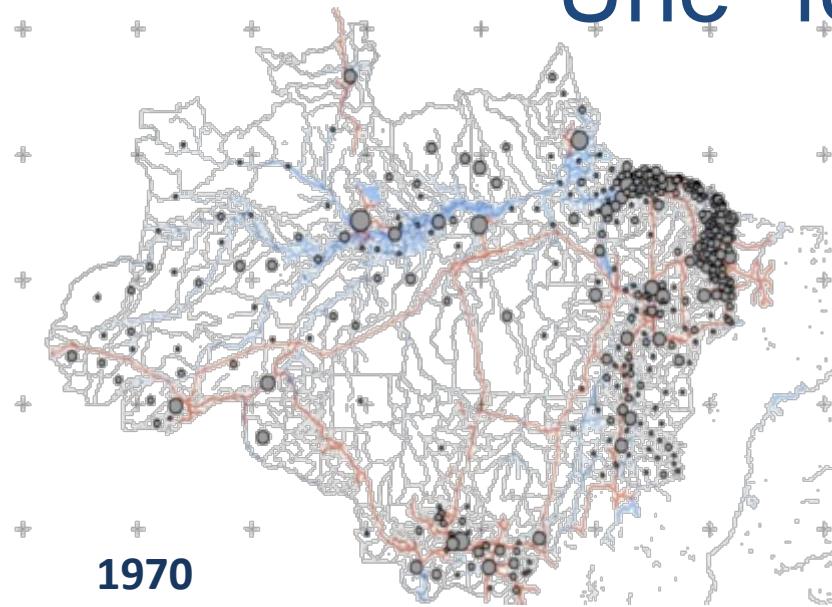


LEARN MORE: bit.ly/PRODESonGFW

WORLD RESOURCES INSTITUTE

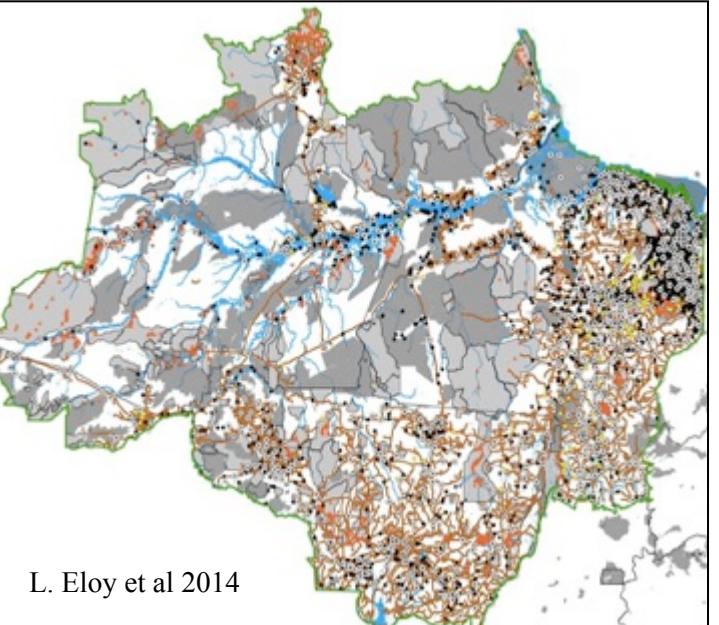
Sources: CGI/Imazon; INPE; WRI

Une "forêt urbaine"

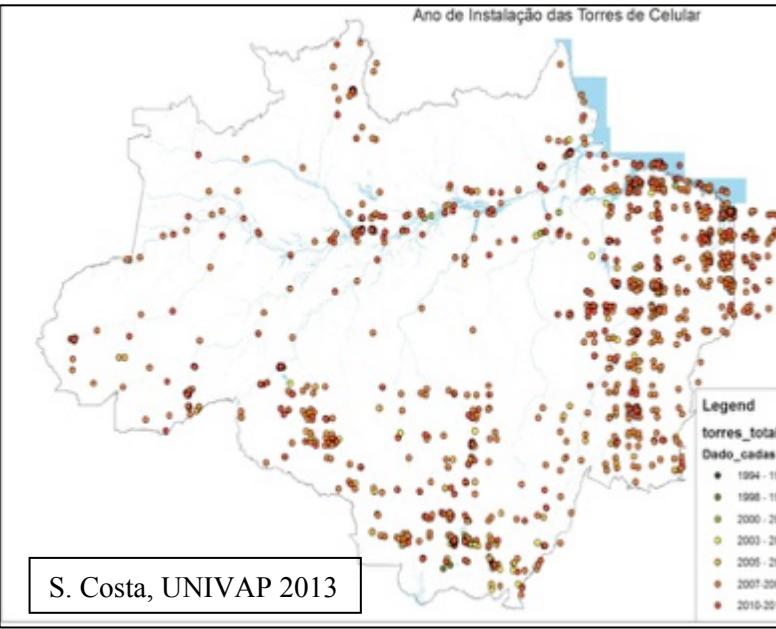


Costa, S. M. and E. S. Brondizio. 2009 Inter-Urban Dependency among Amazonian Cities: Urban Growth, Infrastructure Deficiencies, and Socio-Demographic Networks. REDES (Brazil) 14(3): 211–234

Infrastructure régionale et changements territoriaux



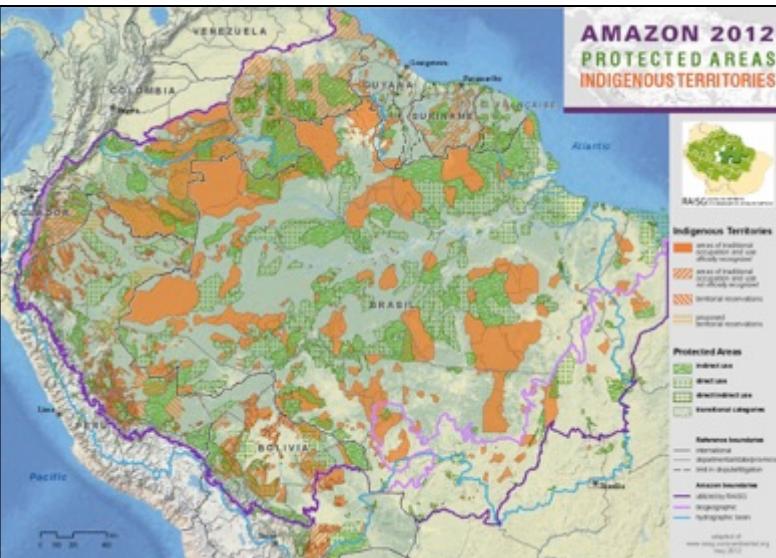
Road network



Cell-phone Towers - 1994-2012



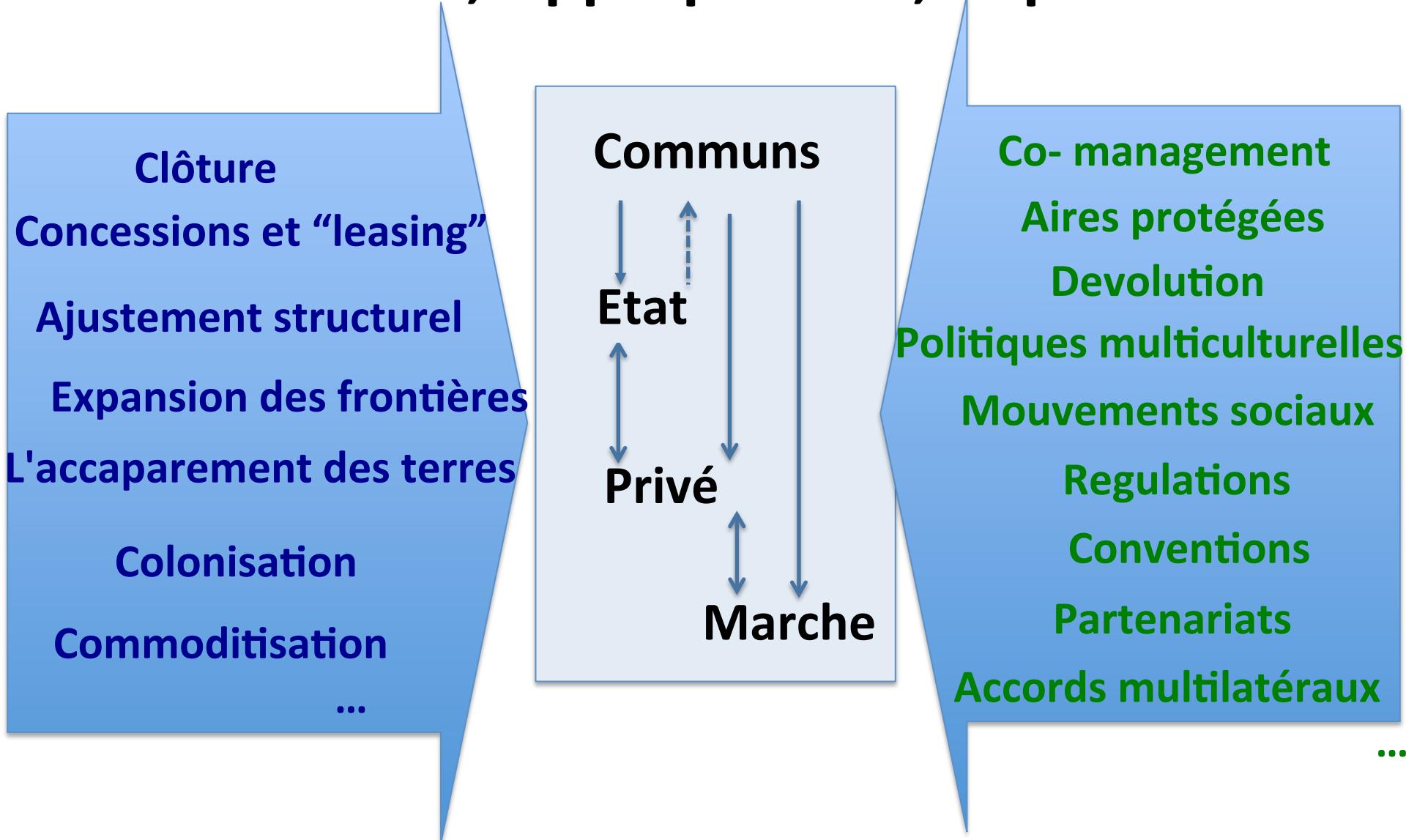
Existing and projected Dams



Reserves and protected areas

Biens Communs

Pressions, Appropriation, Réponses



Une complexité régionale en évolution

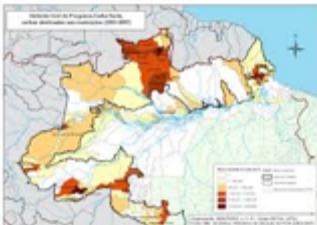
1960s/1970s



Planification centrale

Marchés extérieurs

agendas nationaux et mondiaux



1990s/2000s



Mosaïques socio-institutionnelles complexes

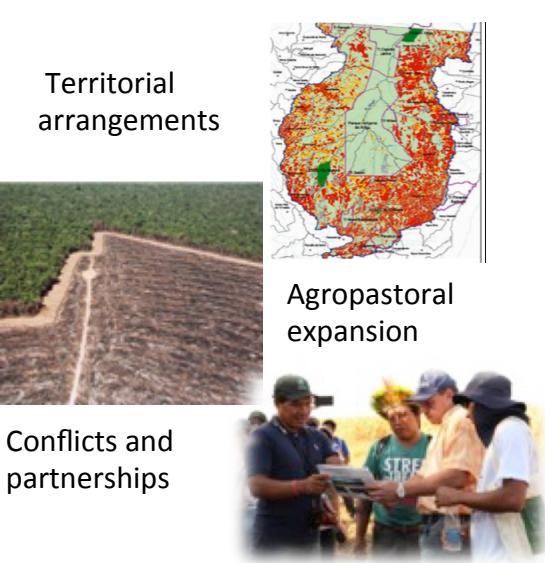
Systèmes économiques sous-régionaux

Réseaux interurbains

- .Transport
- .Mobilité et circulation
- .Urbanisation
- .Communications
- .Mouvements sociaux et organisation politique
- .Grilles d'énergie
- .Les modes de consommation
- Gouvernance territoriale décentralisée
- Transactions transfrontalières et contrebande



Un système régional en transition



**Extraction, production,
conservation dans des systèmes
de gouvernance contrastés**

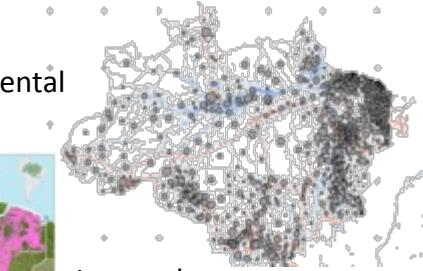


Urban Growth

Croissance urbaine, Pollution, Inondation



Environmental change



Inter-urban articulation



Physical/virtual connections

**Infrastructure &
Réseaux interurbains**



Pollution and
flooding



Social-
Environmental
impacts

Connectivité verticale et horizontale et complexité

Interdépendance socio-écologique

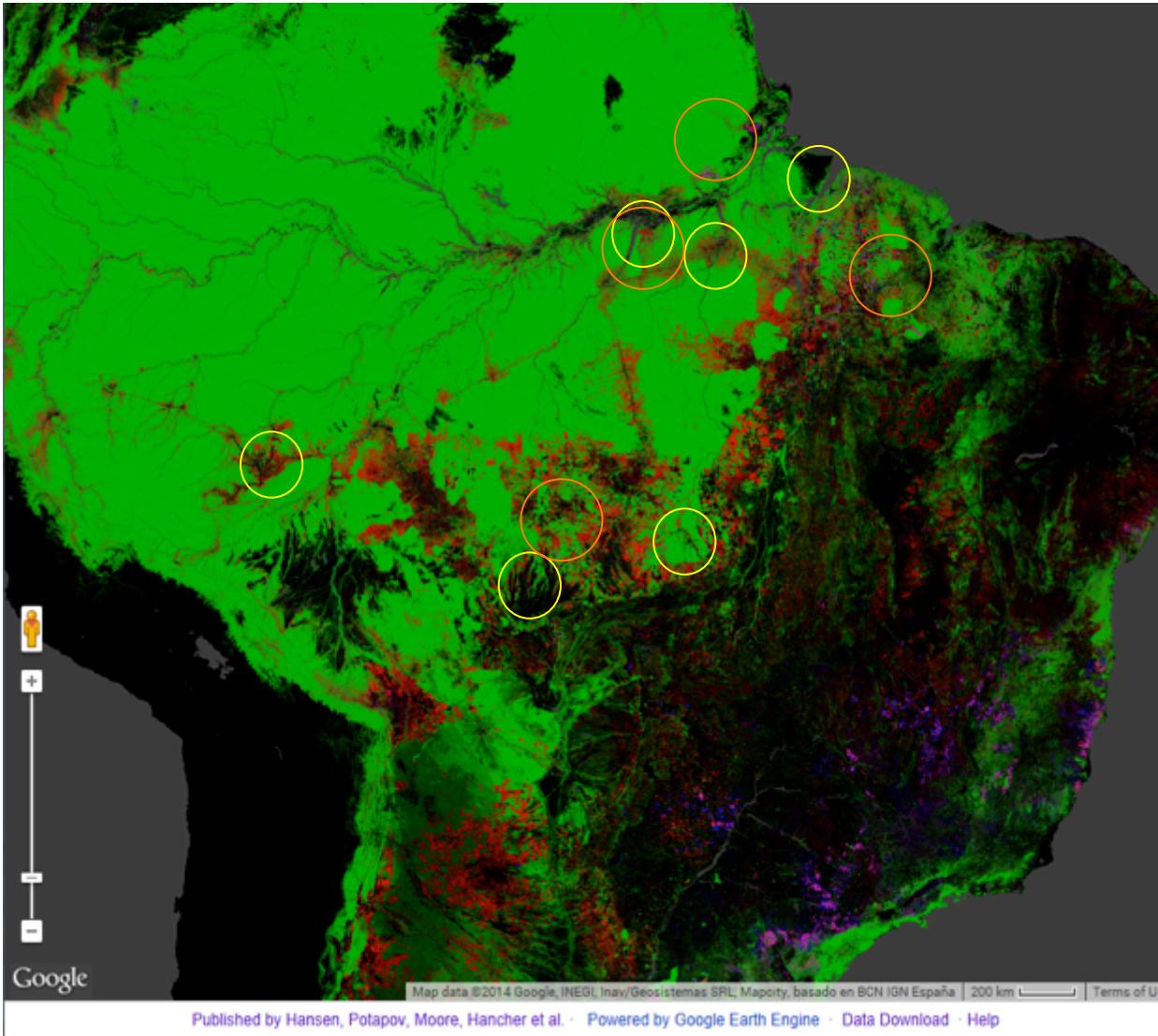
Enjeux institutionnels – écologiques [Fit & Interplay]": Couplage de la gouvernance et des processus biophysiques et écologiques

Interdépendance des infrastructures

Systèmes socio-infrastructure-écologiques:
L'interdépendance entre les biens communs naturels et les biens humains

- Implications pour la conceptualisation et l'analyse
- Implications pour la gouvernance

La nature des problèmes d'action collective a changé

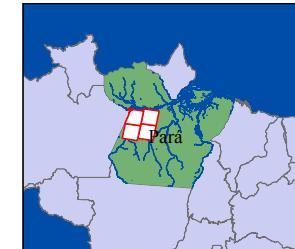
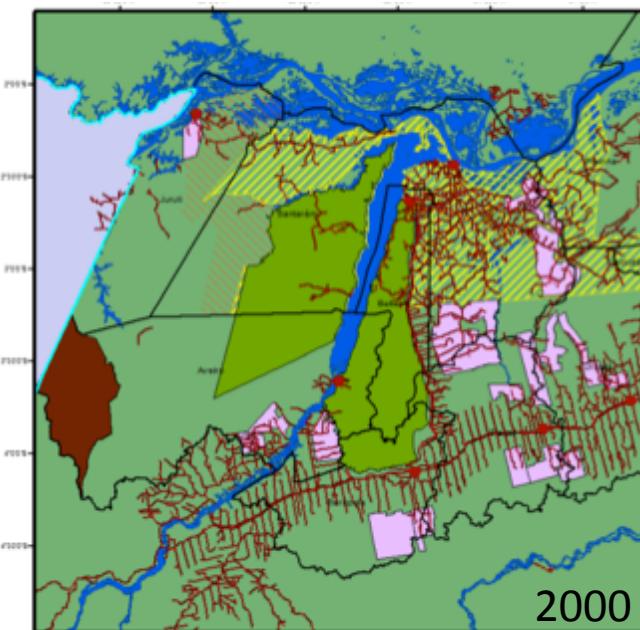
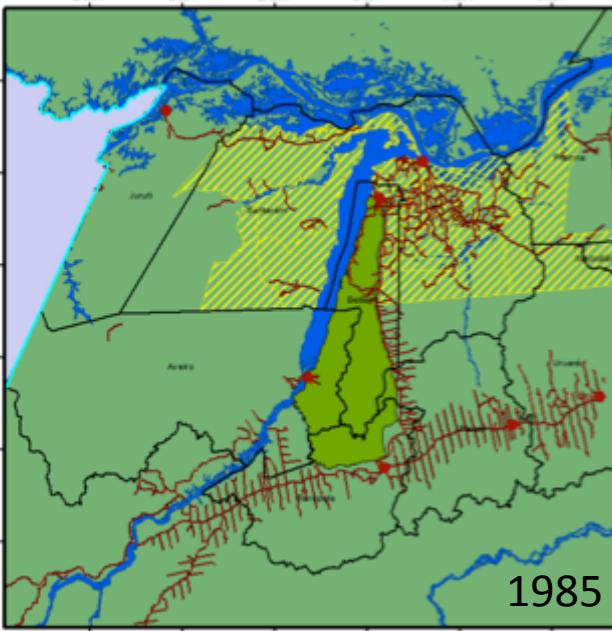
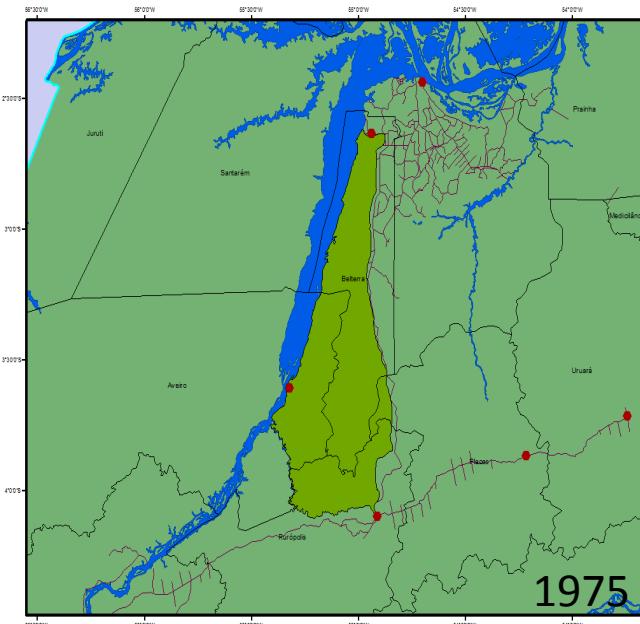


Sur le terrain:
compréhension
des processus
sous-jacents de
l'action collective
et les
arrangements
institutionnels

1. Interdépendance socio-écologique

Enjeux institutionnels – écologiques [“Fit and Interplay”]:
Couplage de la gouvernance et des processus biophysiques
et écologiques

Évolution de la complexité institutionnelle dans la Amazonie: Région Santarém, BR 163, TransAmazon



Legend

- % Municipal Capitals
- Municipality Limits
- Road and Trail Network - 2010
- Primary Rivers
- Federal Conservation Unit
- Federal Land in Process of Land Tenure Regularization
- State Land in Process of Land Tenure Regularization
- Mining Concession
- Federal Smallholder Settlement Project
- State Smallholder Settlement Project
- State Agro-Extractive Settlement Project
- Federal Agro-Extractive Settlement Project
- Federal Conservation
- Settlement Project
- Federal Public Forest for Timber Concessions

Nathan Vogt - INPE
April 2013

Des formes contrastées d'interactions avec la nature



Connectivité
Ecosystémique
Social
Economique



Gouvernance des ressources
naturelles

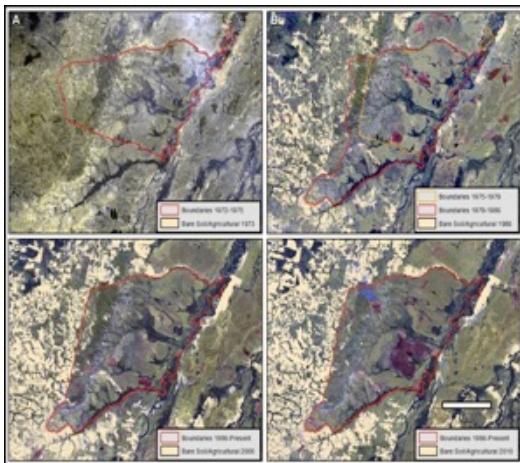


Formes d'attachement
Cultural et symbolique
Extraction de resources
Services environnementaux
Conservation

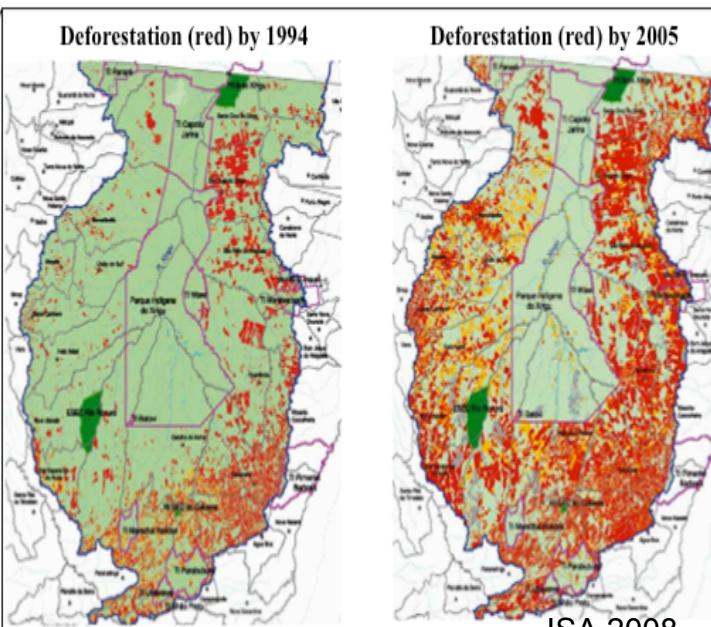


Île de la gouvernance du paysage:

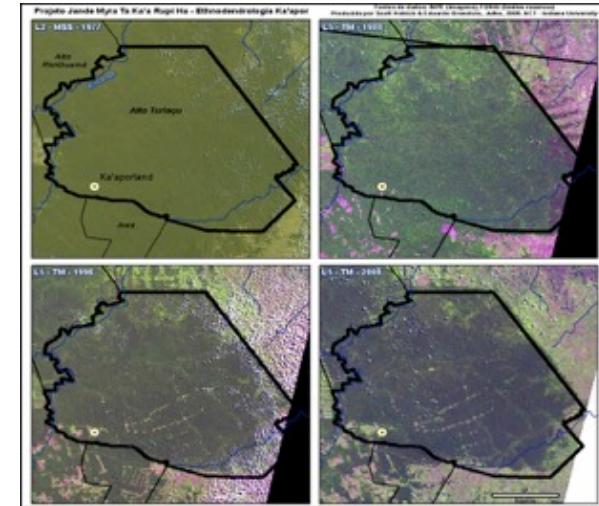
La connectivité et les limites des systèmes de gouvernance par niveau



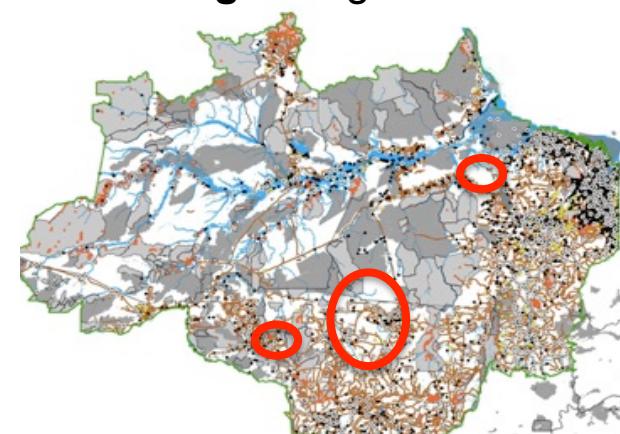
Xavante Indigenous Reserve



Xingu Indigenous Park
Source: Instituto Socioambiental [ISA 2007]
<http://www.vikatuxingu.org.br/revista/revista-ingles.pdf>



Ka'apor Indigenous Reserve



> 40% in Indigenous and Conservation areas



Réaction et pro-action: Les formes émergentes de capital social



Indigenous Militia against loggers
The Washington Post, Nov. 2015



Small farmers, communities protesting soy expansion and water pollution
(Santarem/BR 163, field photos)



Discussing reforestation plans across boundaries
(Canarana, Xingu Indigenous Park, Rosely A. Sanchez)

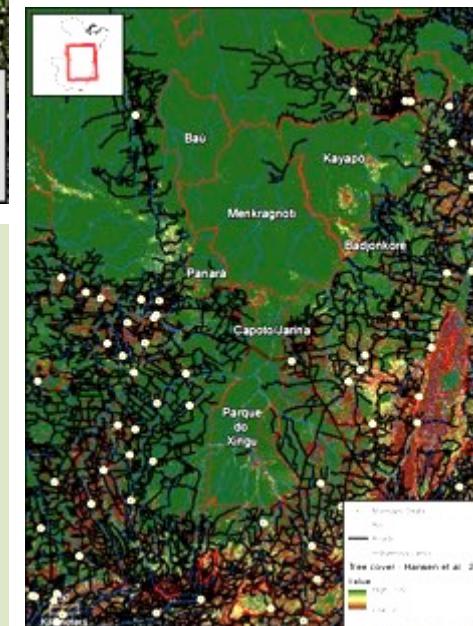
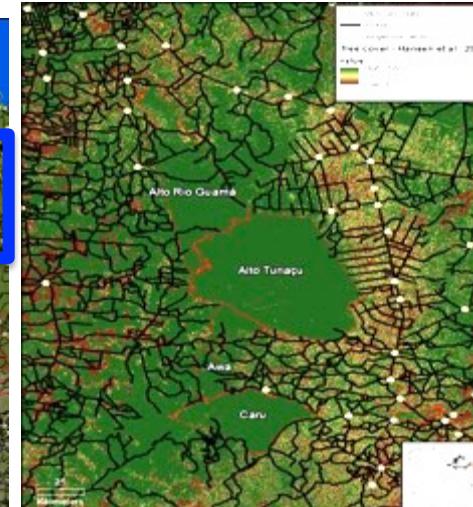
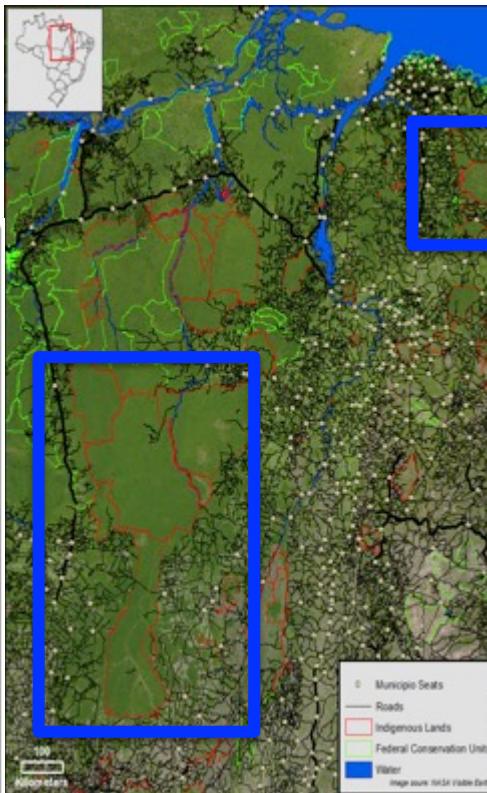
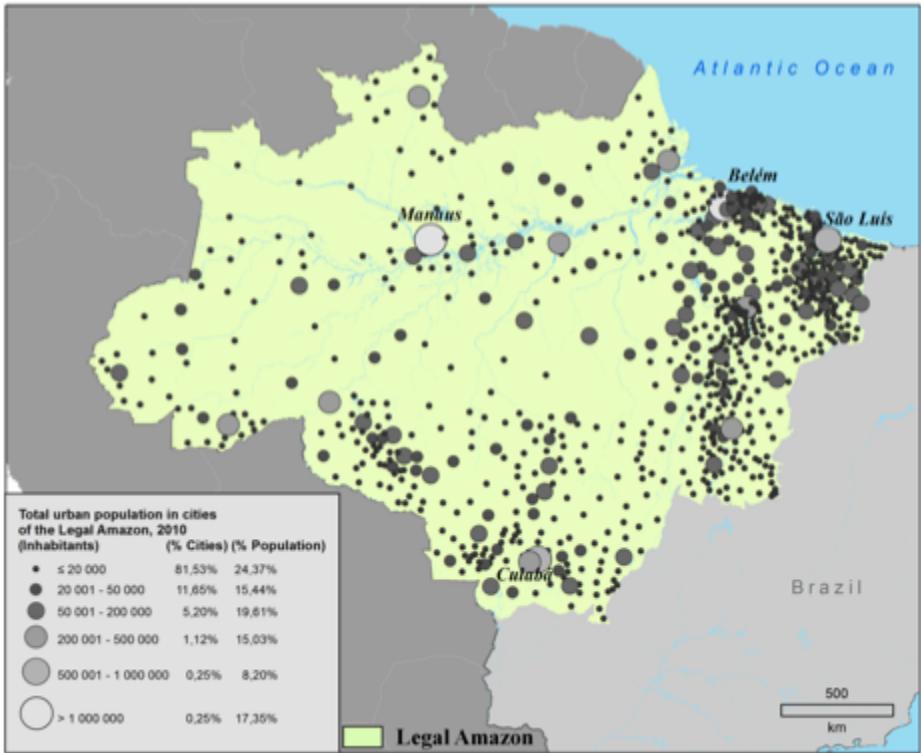
2-Interdépendance des infrastructures

L'expansion des systèmes socio-infrastructurel-écologiques;

L'interdépendance entre les biens communs naturels et les biens humains

Le manque d'infrastructure urbaine

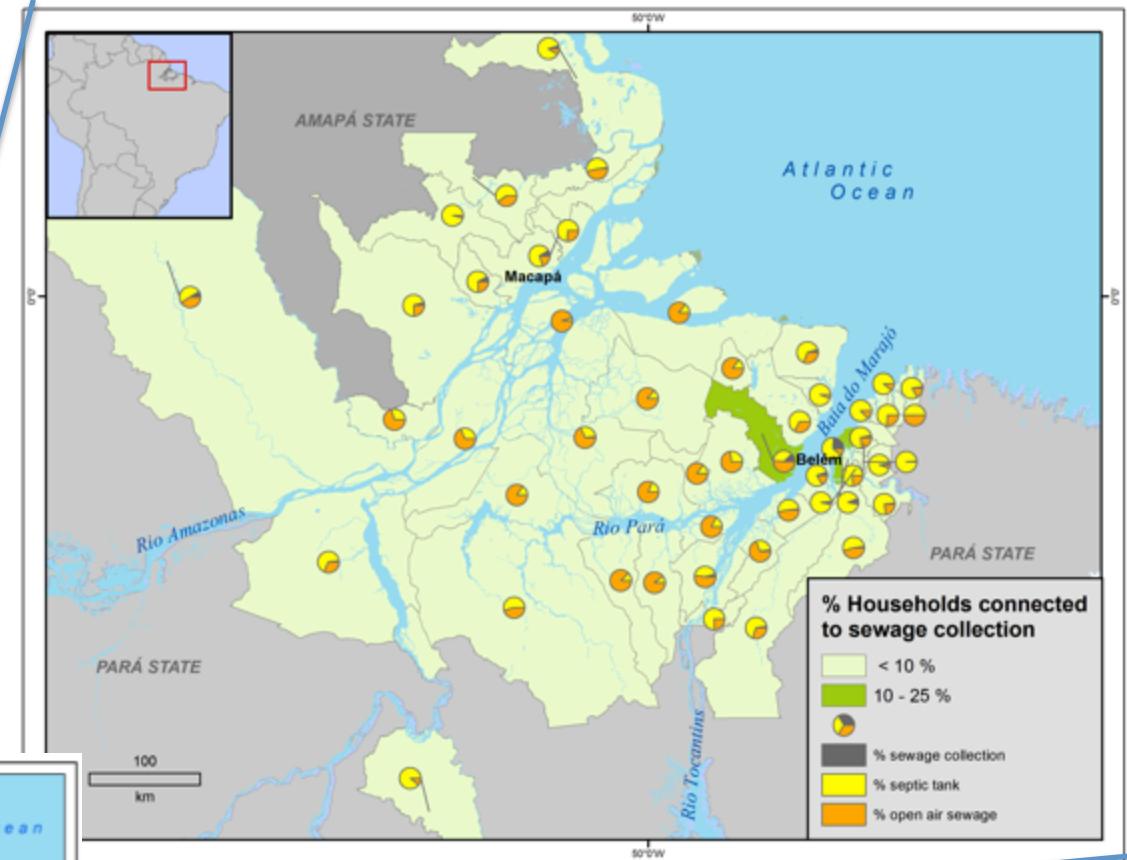
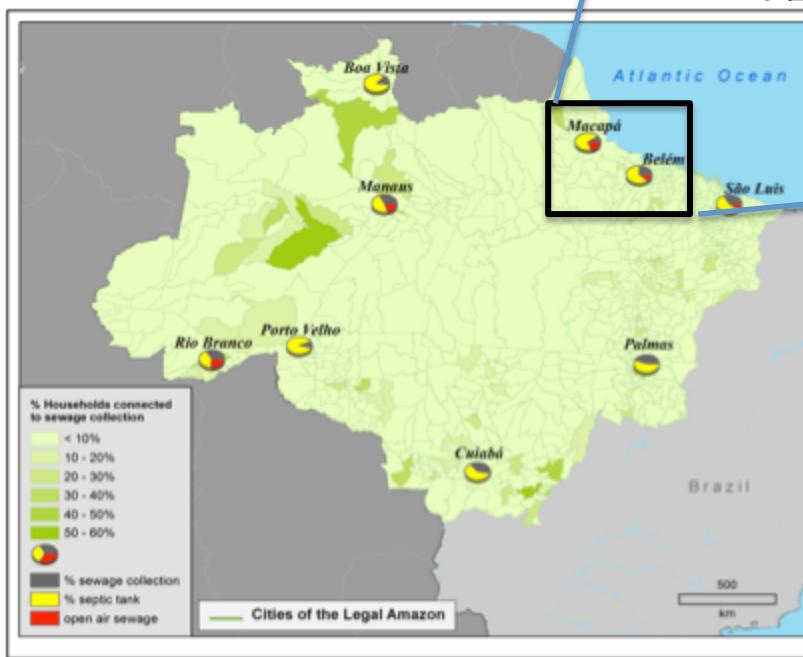
Co-évolution des réseaux urbains, zones agropastorales, Réserves



Inter-Urban networks

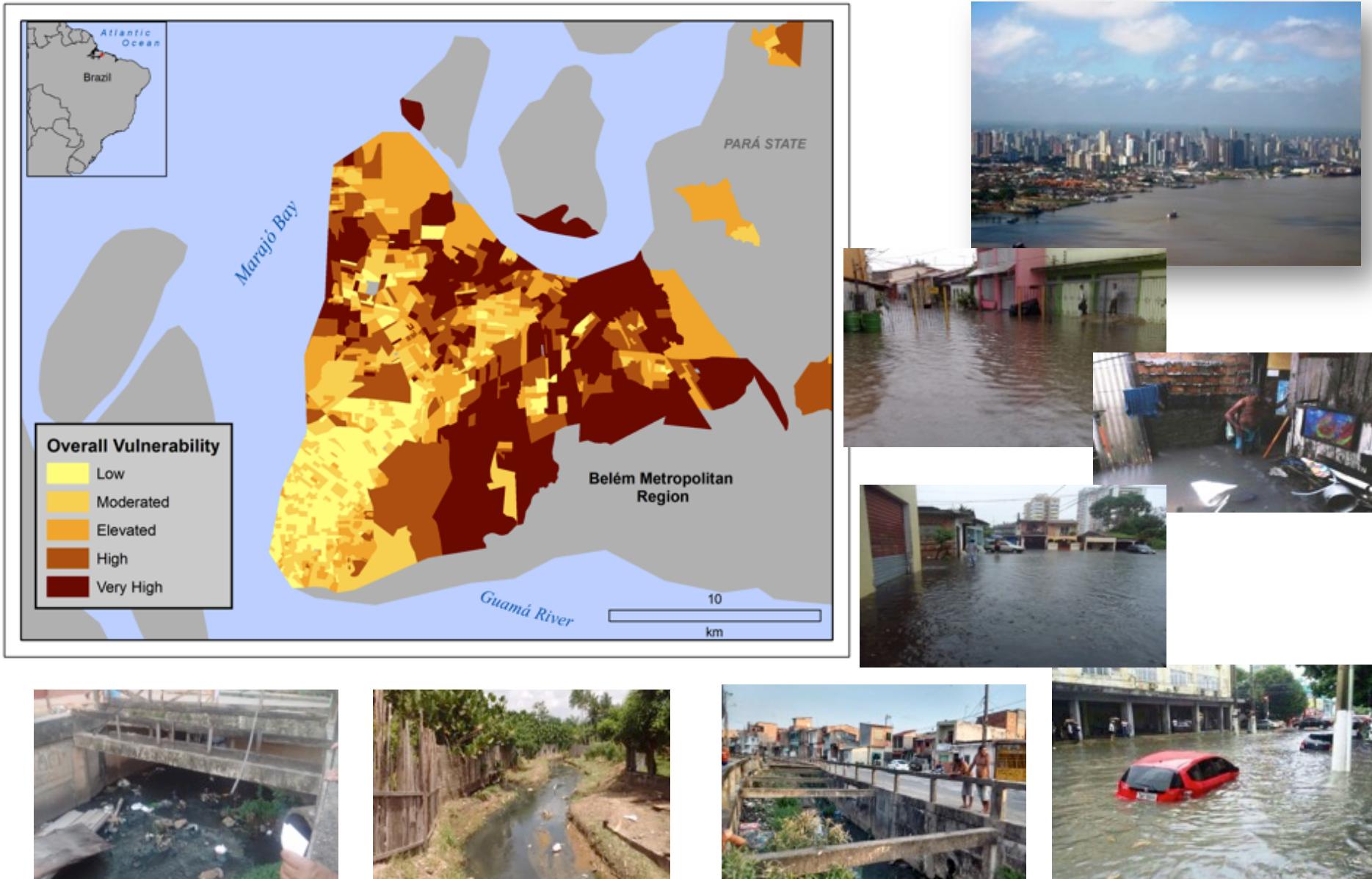
Sub-regional urban-agricultural-conservation-indigenous connectivity

Absence virtuelle de services d'assainissement en Amazonie

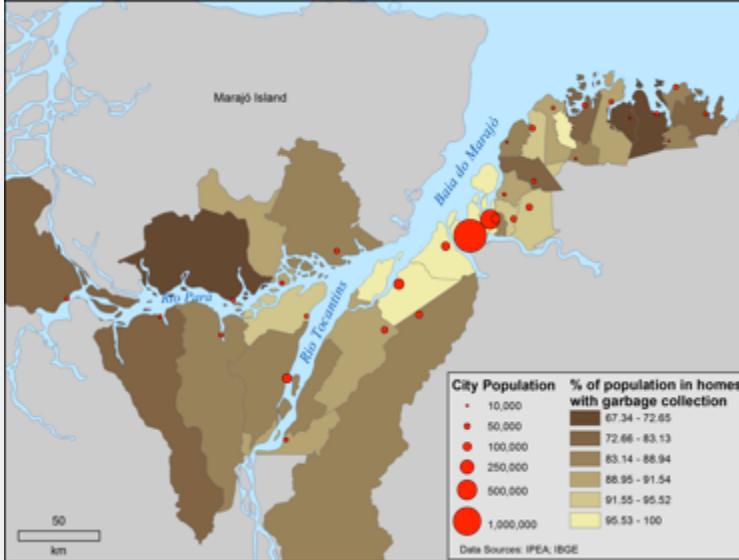


Vulnérabilité sociale aux inondations dans les zones urbaines du delta de l'Amazone

60 à 90% de la population De modéré à très haut degré de vulnérabilité



L'urbanisation et l'impact de la pollution

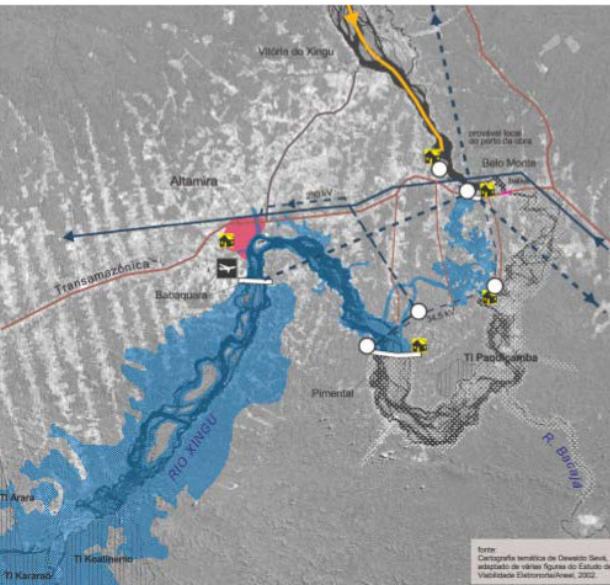


Functional Inter-dependence: limits to local level responses

L'infrastructure contrôle de plus en plus les processus socioécologiques



Existing and projected Dams

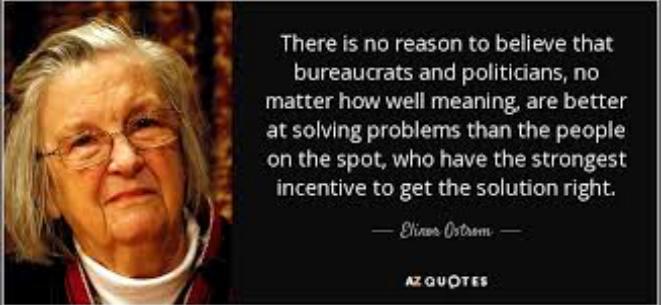


Belo Monte Dam [photos Google images]

Implications pour la conceptualisation, l'analyse et la gouvernance

Defis conceptuels et outils analytiques

Principes et Défis pour la Gouvernance



Principes de conception institutionnels

1. Limites clairement définies: 1.1 sociale; 1.2 physique
2. Congruence entre les conditions locales, l'appropriation, des règles de provisionnement;
3. Adaptabilité des arrangements de choix collectifs;
4. Contrôle approprié et surveillance en poste;
5. Sanctions progressives et réalisables;
6. Les mécanismes de résolution des conflits;
7. Droits reconnus à organiser, principe de subsidiarité;
8. Entreprises imbriquées; polycentralité.

Ostrom, E. (1990). *Governing the Commons*. Cambridge University Press.
Cox et al 2010. *Ecology & Society*

Défis entre échelles

1. Adéquation/coupage entre les systèmes sociaux et écologiques
2. Frontières entre les systèmes de gouvernance
3. Autorité à travers les niveaux
4. Sanctions et contrôle entre différents niveaux
5. Le partage des connaissances entre les groupes sociaux

Brondizio, E. S., E. Ostrom, O. Young. (2009)
Annual Review of Environment and Resources. Vol 34:
255

Comprendre la connectivité: Approches, outils analytiques, dispositifs narratifs

Théorie des systèmes mondiaux

“Vie sociale des choses”

Chaînes de produits

Ethnographie multi-localize

Théorie Acteur-Réseaux

Analyse des réseaux sociaux

Systèmes socio-écologiques

Situations d'action adjacentes

Assemblages

Interdépendance fonctionnelle, Fit, Interplay

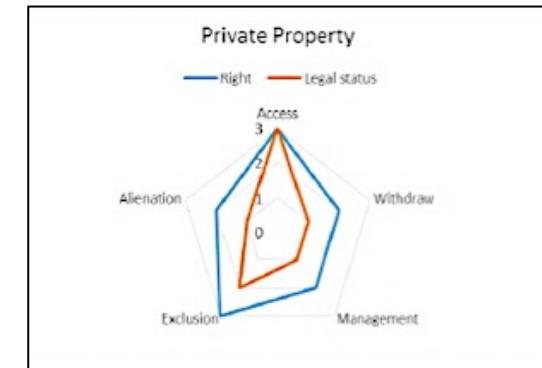
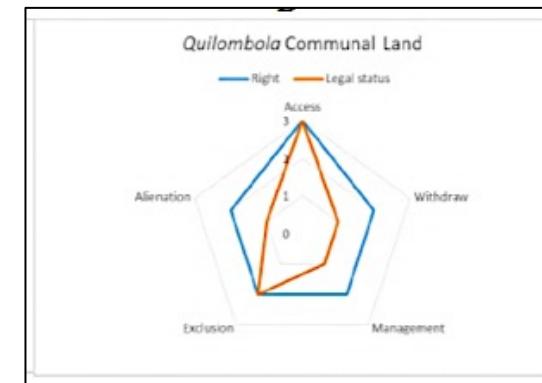
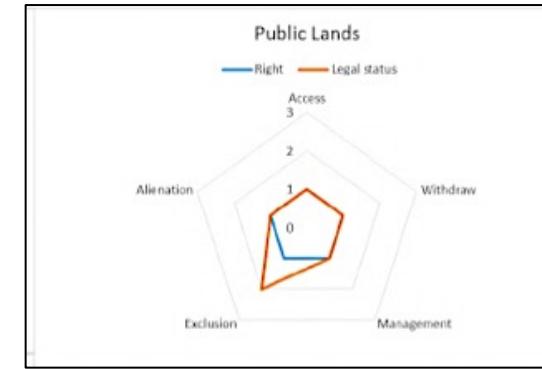
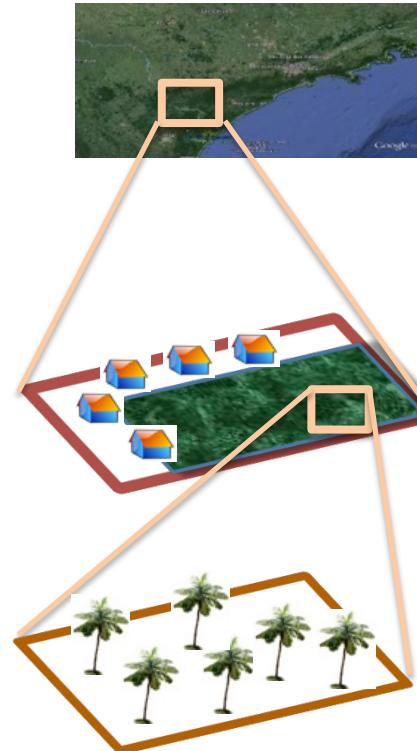
Téléconnexion - Télécoupages

Arrangements verticales et horizontales complexes de "ensemble de droits"

-Accès
-Retirer
-Gestion
-Exclusion
-Aliénation / transfert



-Accès ouvert
-Propriété privée
-Propriété publique
-Propriété commune



Ostrom's: Cadres IAD et SES

Institutional Analysis and Development Framework (IAD): A focal collective action situation

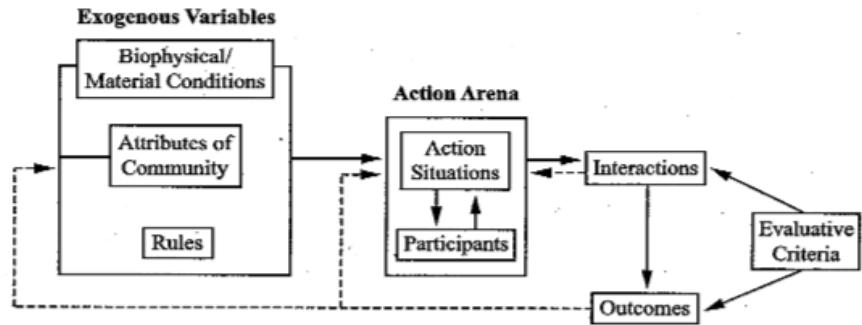


Figure 1.2. A framework for institutional analysis. *Source:* Adapted from E. Ostrom, Gardner, and Walker 1994, 37.

Social-Ecological Systems Framework (SES): Systems-sub-systems

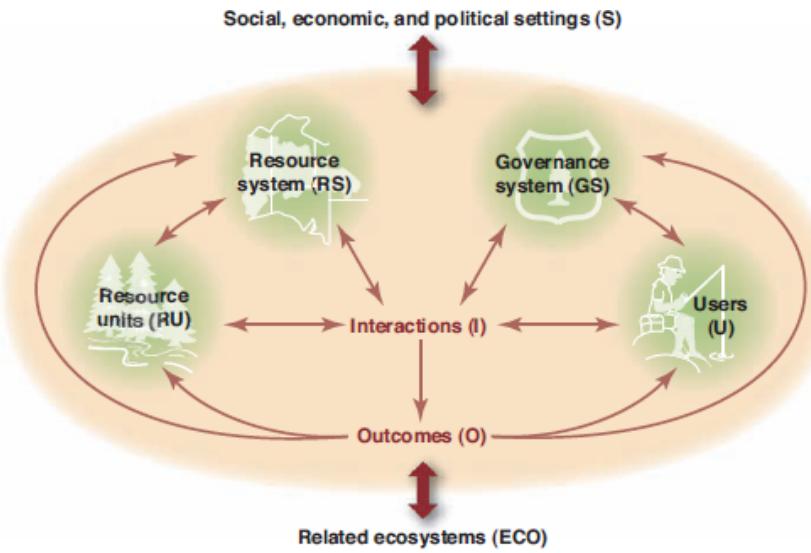
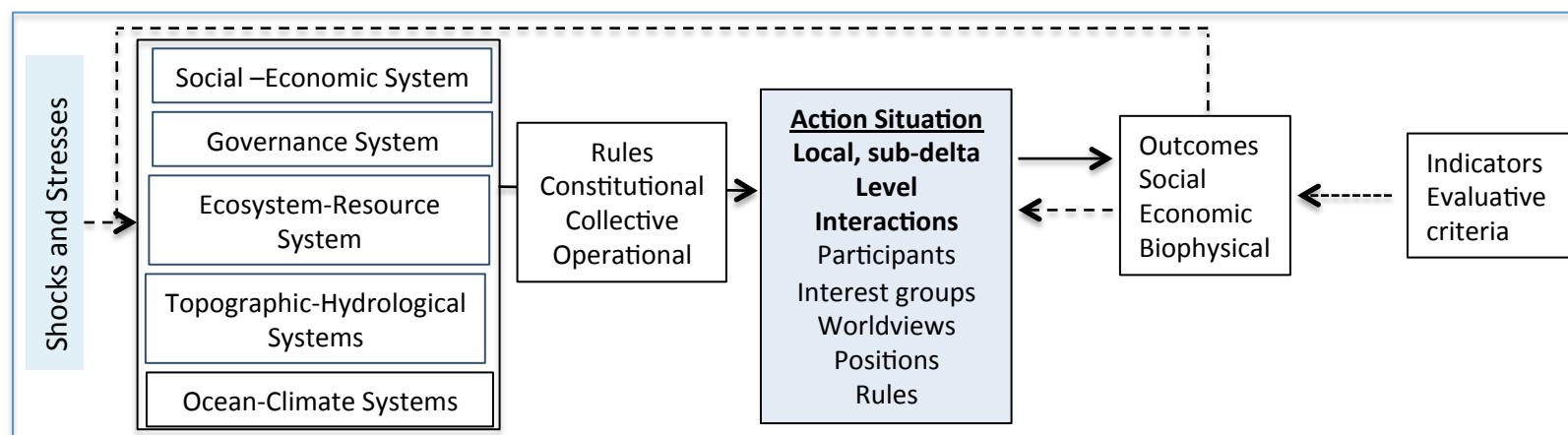


Fig. 1. The core subsystems in a framework for analyzing social-ecological systems.

1990's

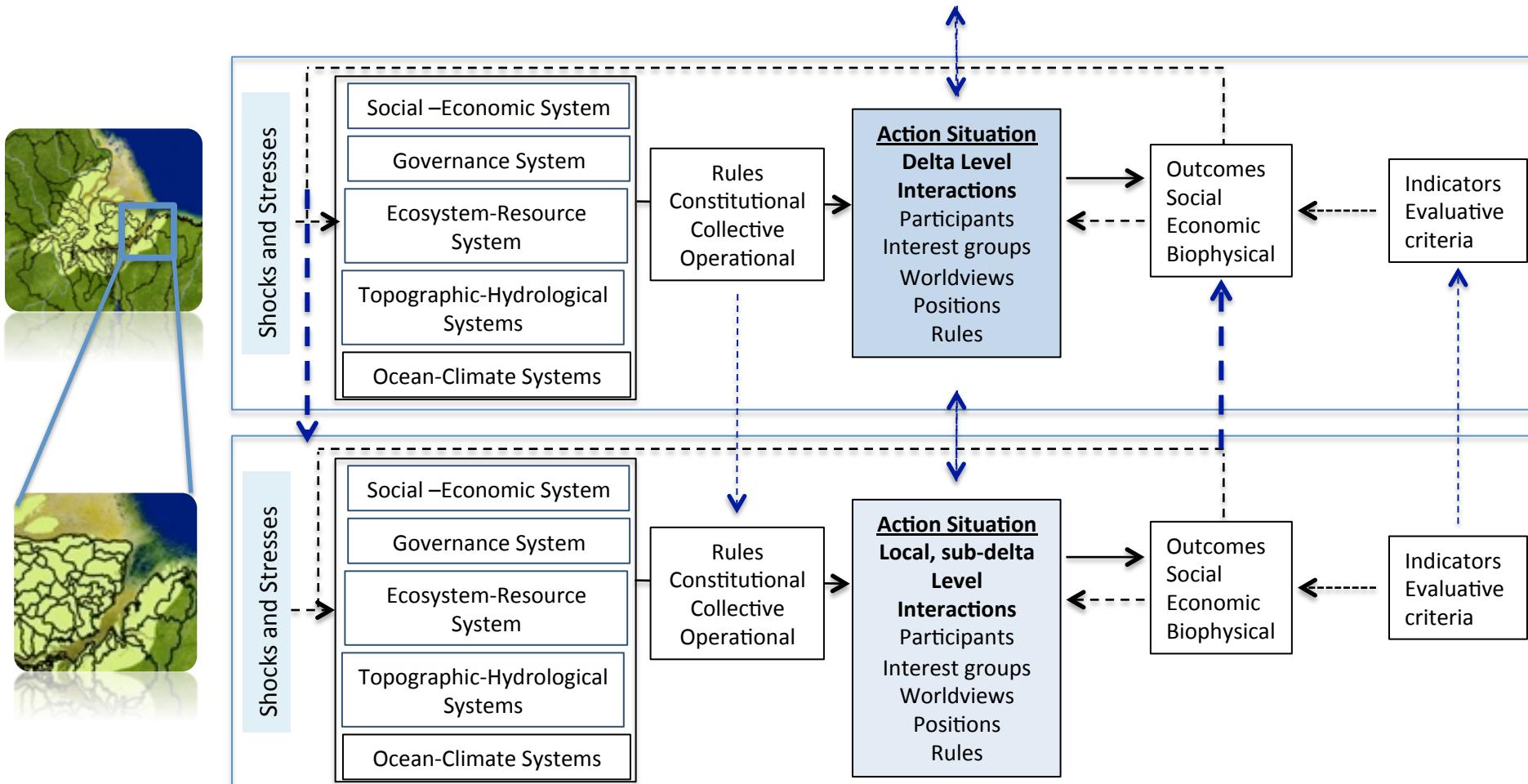
2000's



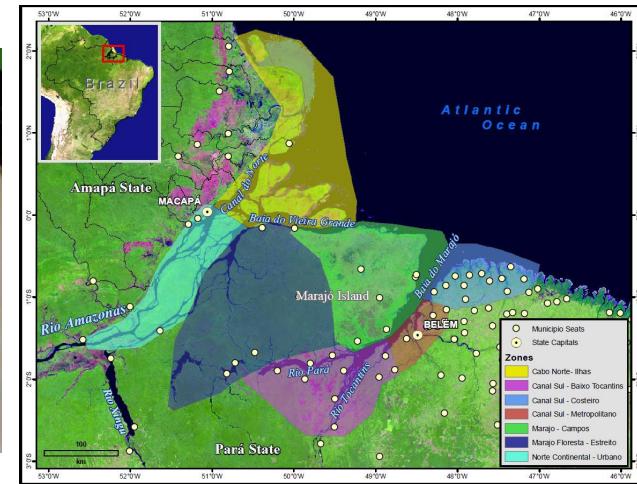


Assessing collective action problems in the Amazon estuary-delta

Brondizio et al 2016 Sustainability Sciences

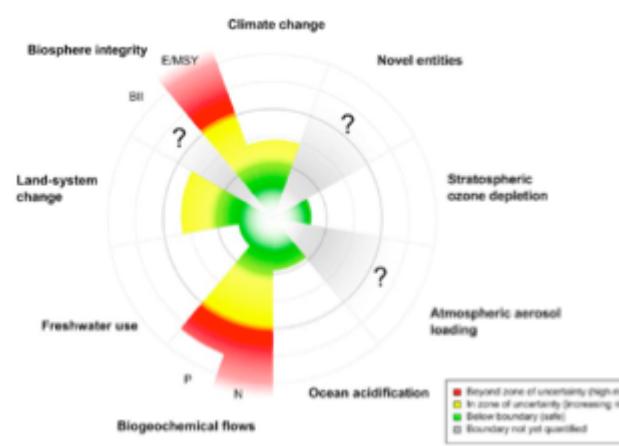


La cartographie participative du paysage: Relever les impacts et les risques dans l'echelle sous-régionale du delta

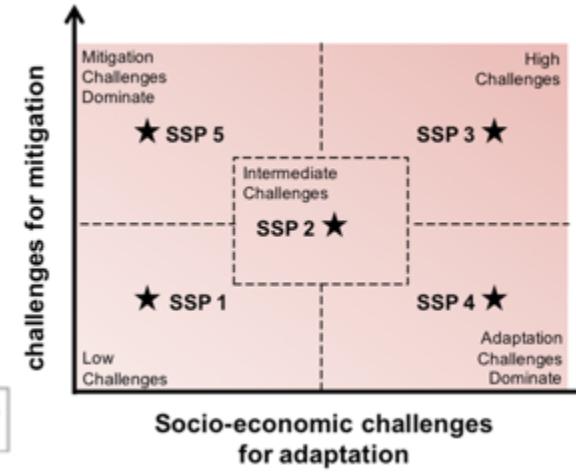


Défis de la gouvernance polycentrique

Divers narratives et visions pour un avenir mondial



Planetary boundaries



IPCC Pathways



SDGs

Accent sur le changement environnemental et les inégalités mondiales
Crise et rareté
Opportunités et édemption: transformation vers la durabilité
Gouvernance mondiale orchestrée
Approche technique et monétaires

Divers Narratives et visions pour un avenir local

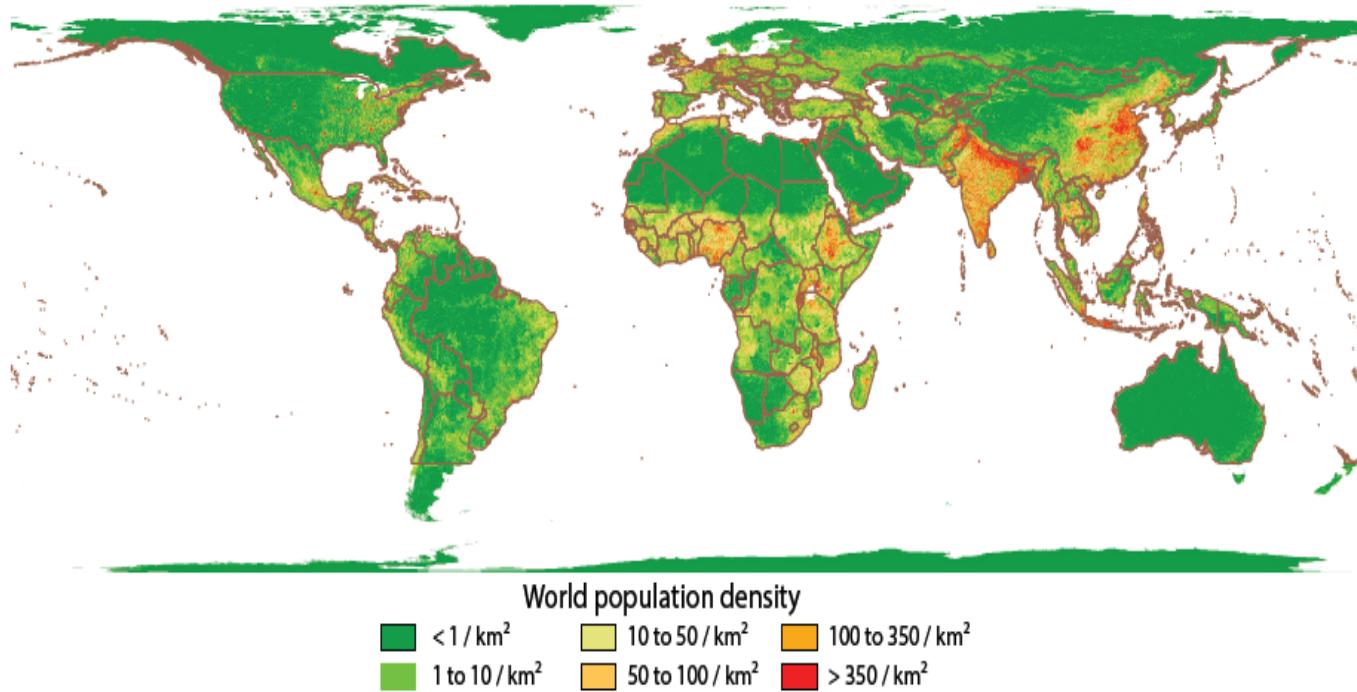


Production alimentaire locale et durable

L'accent sur les ontologies locales et les différences culturelles

Souveraineté et indépendance

Une planète urbaine ou une planète inter-dépendante?



Densité de population: <1 personne par kilomètre carré

~ 57% de l'Asie

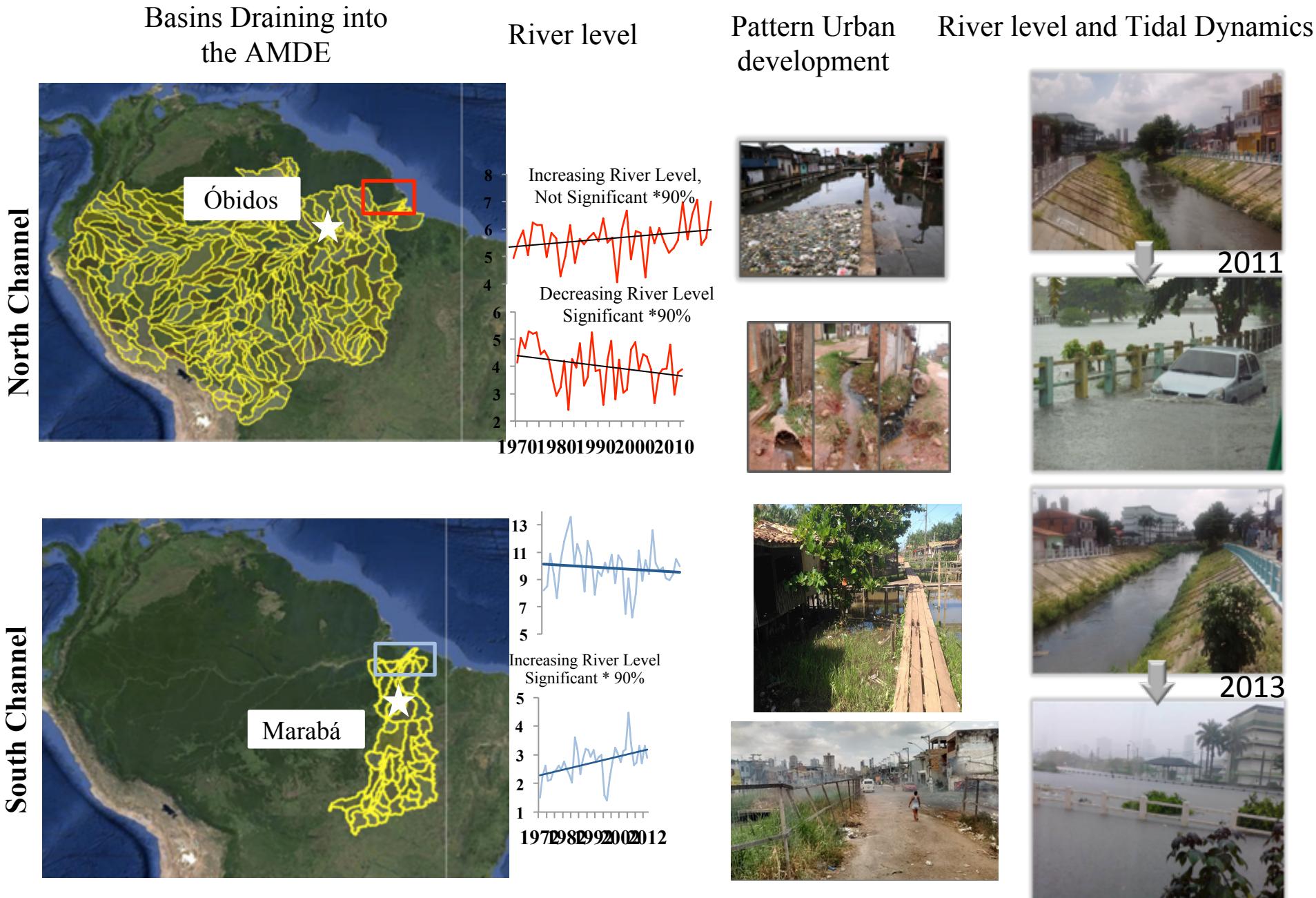
= La majeure partie du désert du Sahara

~ 81% de l'Amérique du Nord

~ 94% de l'Australie

Figure 1: World population distribution and density, 2010. Map prepared using data at 1km resolution derived from the Landscan Data Platform of the United States Oak Ridge National Laboratory. <http://web.ornl.gov/sci/landscan/>

Changements hydrologiques observés dans Amazon Delta 1970-2012 et inondations urbaines



Repenser les rôles, les droits et les besoins locaux dans un monde urbain mondialisé



ENVIRONMENT

Environmental governance for all

Involving local and indigenous populations is key to effective environmental governance

By Eduardo S. Brondum^{a,1} and
François-Michel Le Tournais^{a,2}

na world increasingly thought of as overpopulated, sparsely populated spaces remain a dominant feature—67% of Asia, 41% of North America, and 39% of Australia have population densities below 1 person per square kilometer equivalent to the population density of most of the Sahara desert (1). These vast, sparsely populated landscapes include rural settlements, towns, agricultural spaces, extractive economies, indigenous lands, and conservation areas. They are crucial for climate change adaptation and mitigation, from carbon sequestration to provisioning of water, food, and energy to cities. Yet governmental and nongovernmental initiatives tend to mostly pay lip service to the diverse views and needs of their populations. Without more inclusive governance, attempts to mitigate and adapt to climate change and conserve ecosystems will be compromised.

governance and biodiversity and in meeting global climate change mitigation goals has been firmly asserted in international conventions such as the Convention on Biological Diversity (CBD article X)(2), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (3), and the Paris Agreement (4). The political will and commitment made at the COP21 climate meeting in Paris in 2015, however,

equally important for the future of our planet and its people, is to involve local and indigenous populations in governance decisions and to respect their rights and needs. This is the central message of the Paris Agreement, which emphasizes the importance of local and indigenous populations in greening

PHOTO: M. HENRIKSEN/SCIENCE

Department of Anthropology, Center for the Analysis of Social-Ecological Landscapes, and University Workshop in Political Theory and Policy Studies, Indiana University, Bloomington, IN 47405, USA; Center for Research and Documentation on the Americas, Paris, France; Institut des Amériques, 52, rue Férou, Paris, France (e-mail: fletournais@ia.org)

127(2) 61–62 (2018) • DOI: 10.1126/science.1294186

Published by AAAS



Logging concessions, Dams, Biofuel plantations



Protests N. Dakota Access Pipeline
Standing Rock Indigenous Reservation



Ranchers Stand-off Oregon Wildlife Refuge

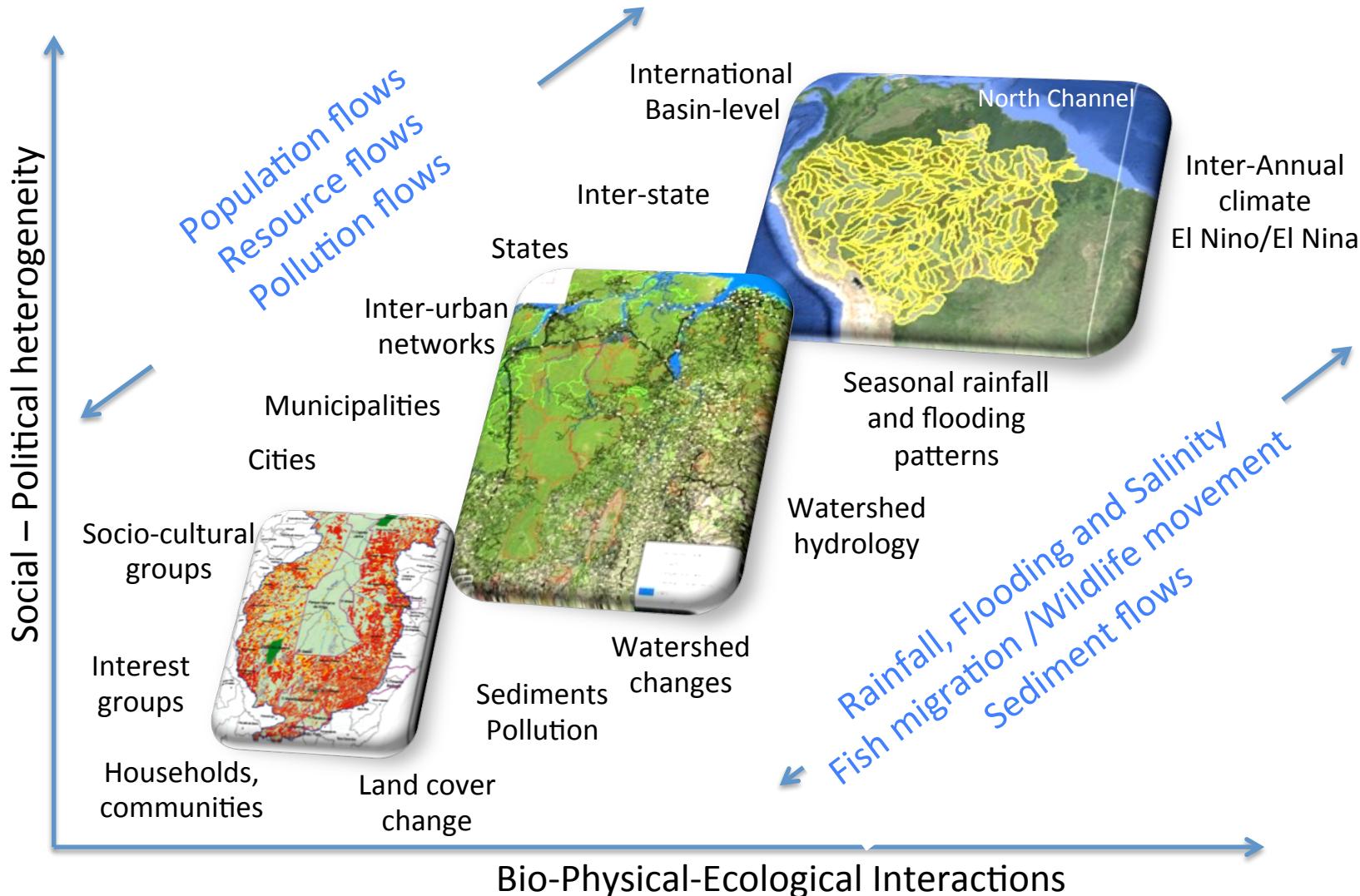


Protests Kenya Geothermal energy plant



South America Indigenous protests REDD+

Établir un pont entre la gouvernance et les processus biophysiques, écologiques, infrastructurels



Quelle vision et programme de recherche pour les communs?

