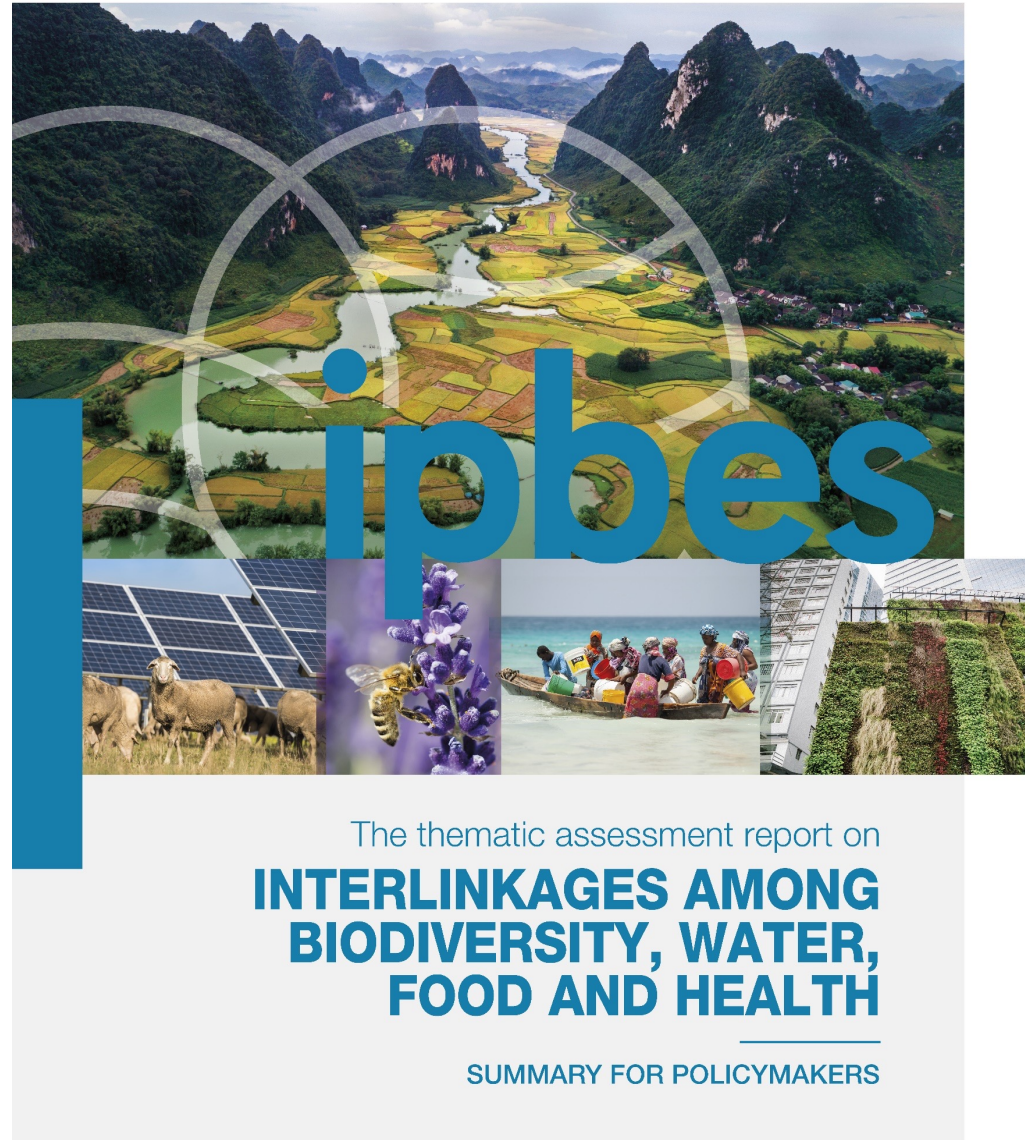




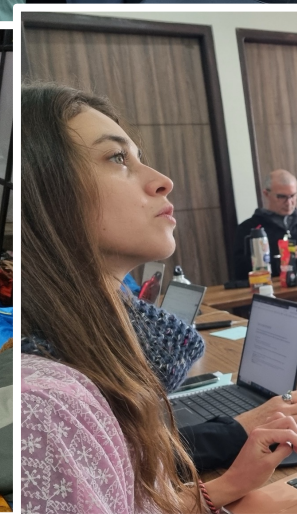
Patrick Giraudoux
Professeur émérite d'écologie



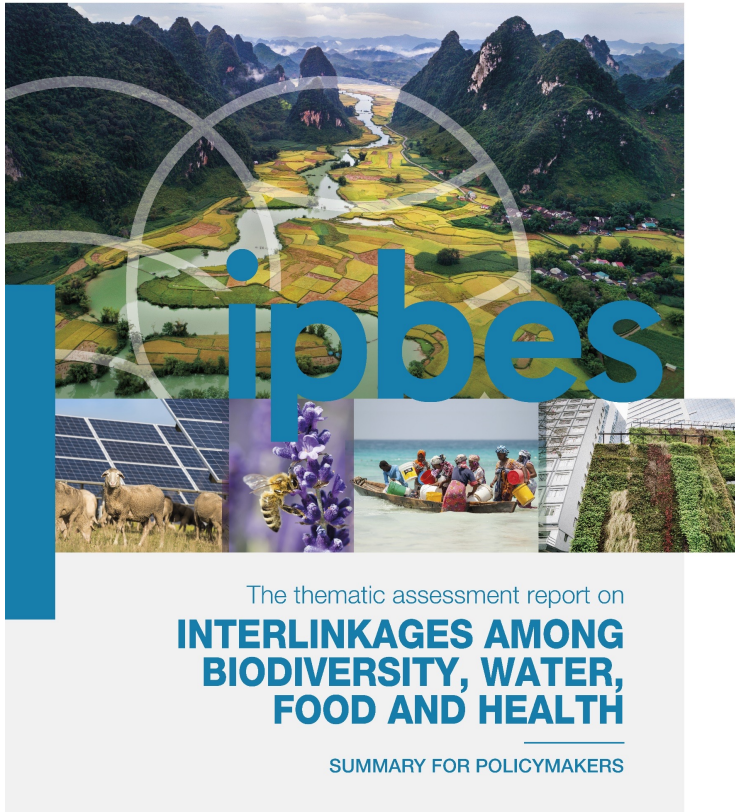
L'évaluation Nexus de l'IPBES : sortir de la pensée en silos



... en 18 diapos



3 Nexus : le problème



Le monde est confronté à des crises interdépendantes de perte de biodiversité, d'insécurité hydrique et alimentaire, de santé et de changement climatique qui s'amplifient les unes les autres.

Les traiter en silos séparés s'est avéré inefficace et contre-productif.

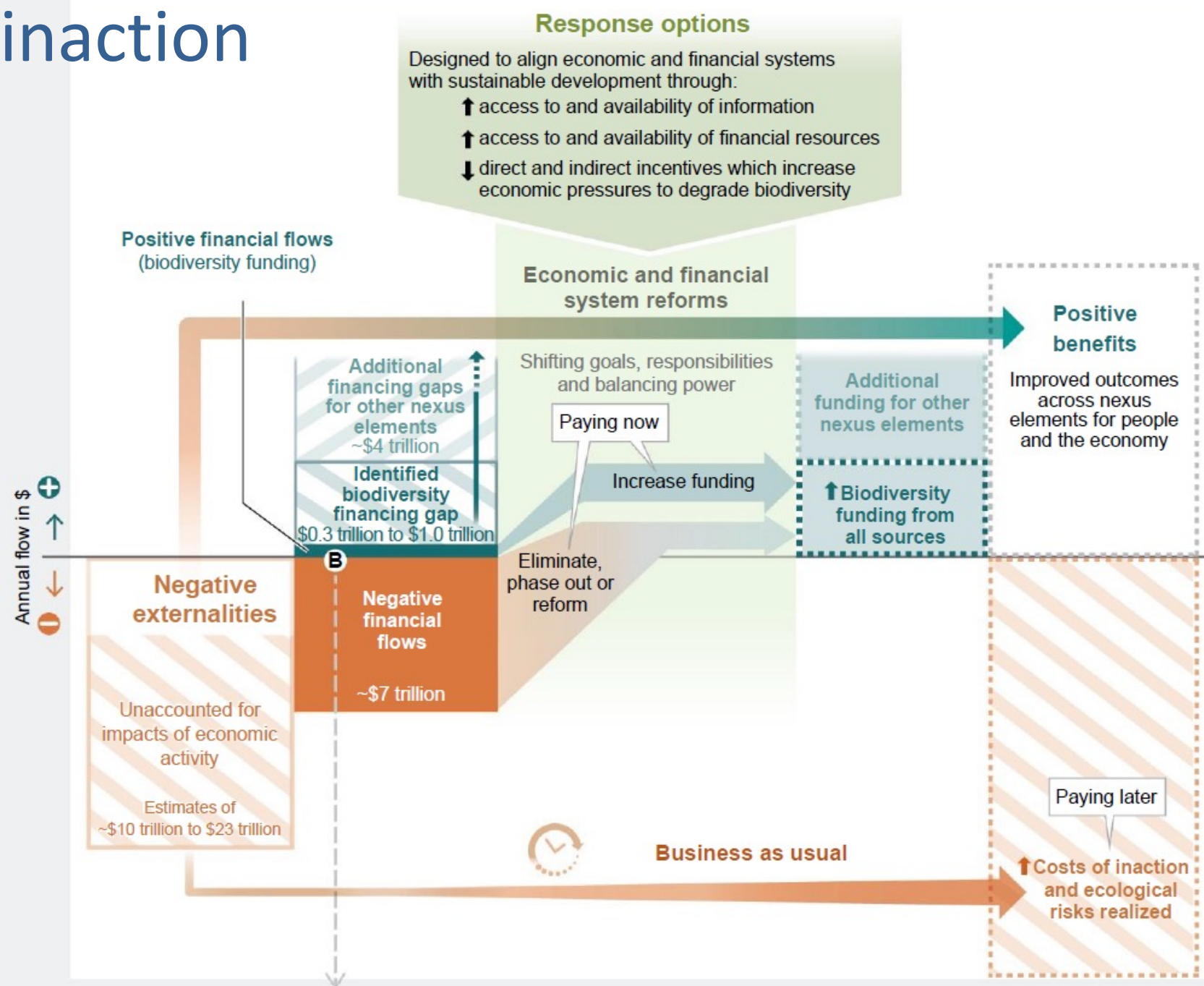
Les bonnes idées qui, en silo, peuvent tourner mal...

- Augmenter la production alimentaire
 - > Agriculture conventionnelle des années 60 à nos jours > pollutions, perte de biodiversité, de diversité alimentaire, santé, etc.
- Séquestrer du carbone
 - > plantation indifférenciée d'arbres > biodiversité, espaces dévolus à la production alimentaire, etc.
- Diminuer les émissions de GES > diminuer la consommation de viande
 - > éliminer aveuglément « l'élevage » :
 - Remplacement par une agriculture intensive conventionnelle (pesticides, nitrates, décarbonation des sols...)
 - Impact sur la biodiversité et les paysages (montagnes, zones arides, etc.)

5 Les coûts de l'inaction

- ✓ **10 000 à 25 000** milliards de dollars par an au monde (PIB mondial = 105 000 milliards de dollars).
- ✓ Retarder l'action aujourd'hui augmentera sérieusement les coûts de l'action ultérieure
 - deux fois plus pour la biodiversité à 10 ans
 - 500 milliards de dollars supplémentaires par an pour la mise en place d'une politique de lutte contre le changement climatique

A NEED FOR TRANSFORMATION OF ECONOMIC AND FINANCIAL SYSTEMS



Protéger les écosystèmes

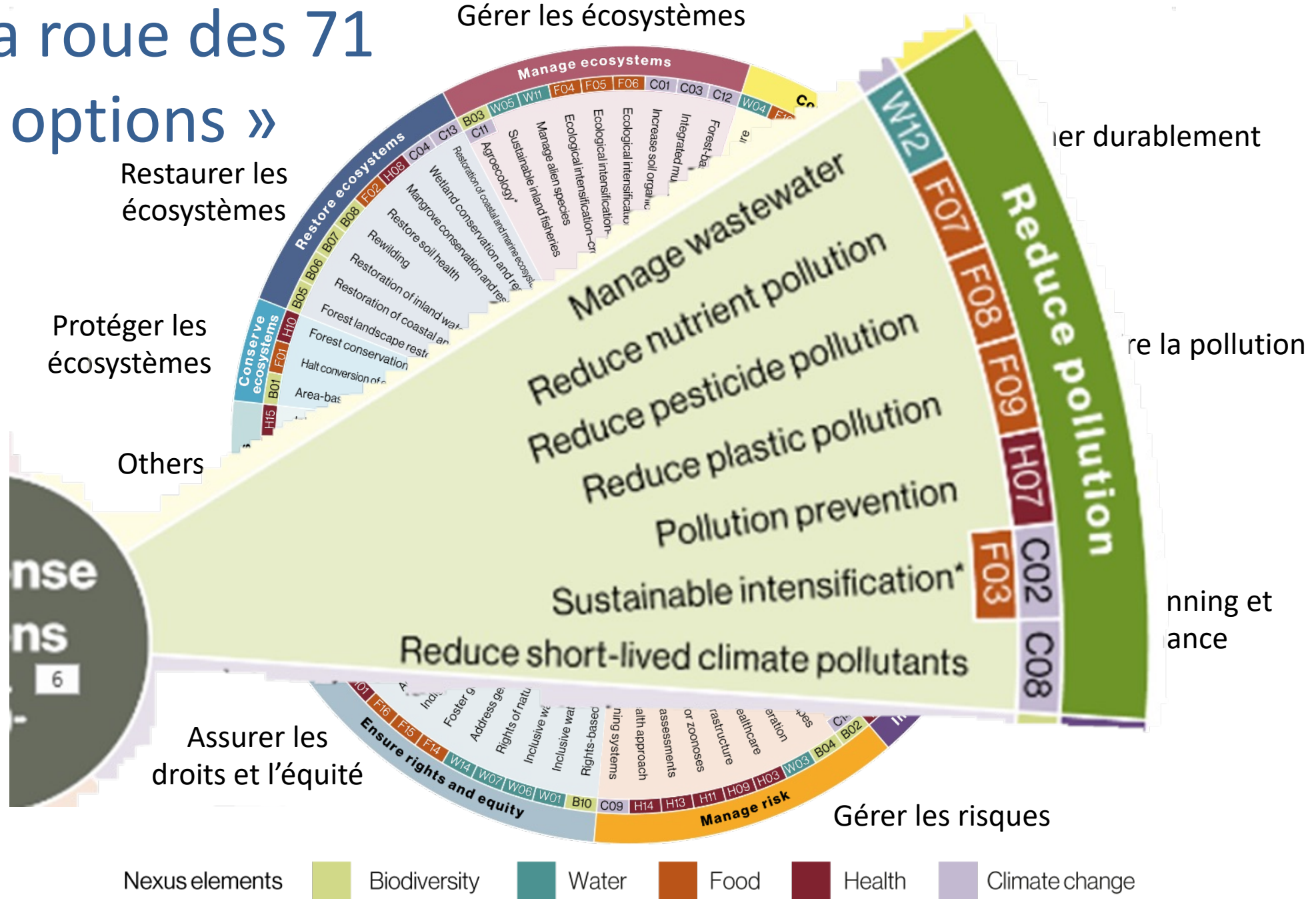
Others

Assurer les droits et l'équité

Gérer les risques

re la pollution

nning et
ance



Les « options »

Les effets

options

éléments

biodiversité

alimentation

dans

réchauffement

climat

Response option								Response option							
Conserve ecosystems	B01	Area-based conservation						Integrate planning and governance	B09	Integrated landscape and seascape approaches					
	F01	Halt conversion of ecosystems of high ecological integrity							B12	Land and sea planning					
	H10	Forest conservation for health							W02	Integrated water infrastructure					
Restore ecosystems	B05	Forest landscape restoration							W08	Transboundary water cooperation				NE	
	B06	Restoration of coastal and marine systems				IC/NE			W09	Groundwater governance					
	B07	Restoration of inland water systems							W13	Water-sensitive urban infrastructure					
	B08	Rewilding							W15	Community water management					
	F02	Restore soil health							F12	City region food systems					
	H08	Mangrove conservation and restoration for health							H12	Integrated watershed-health interventions					
	C04	Wetland conservation and							B02	Urban nature-based					

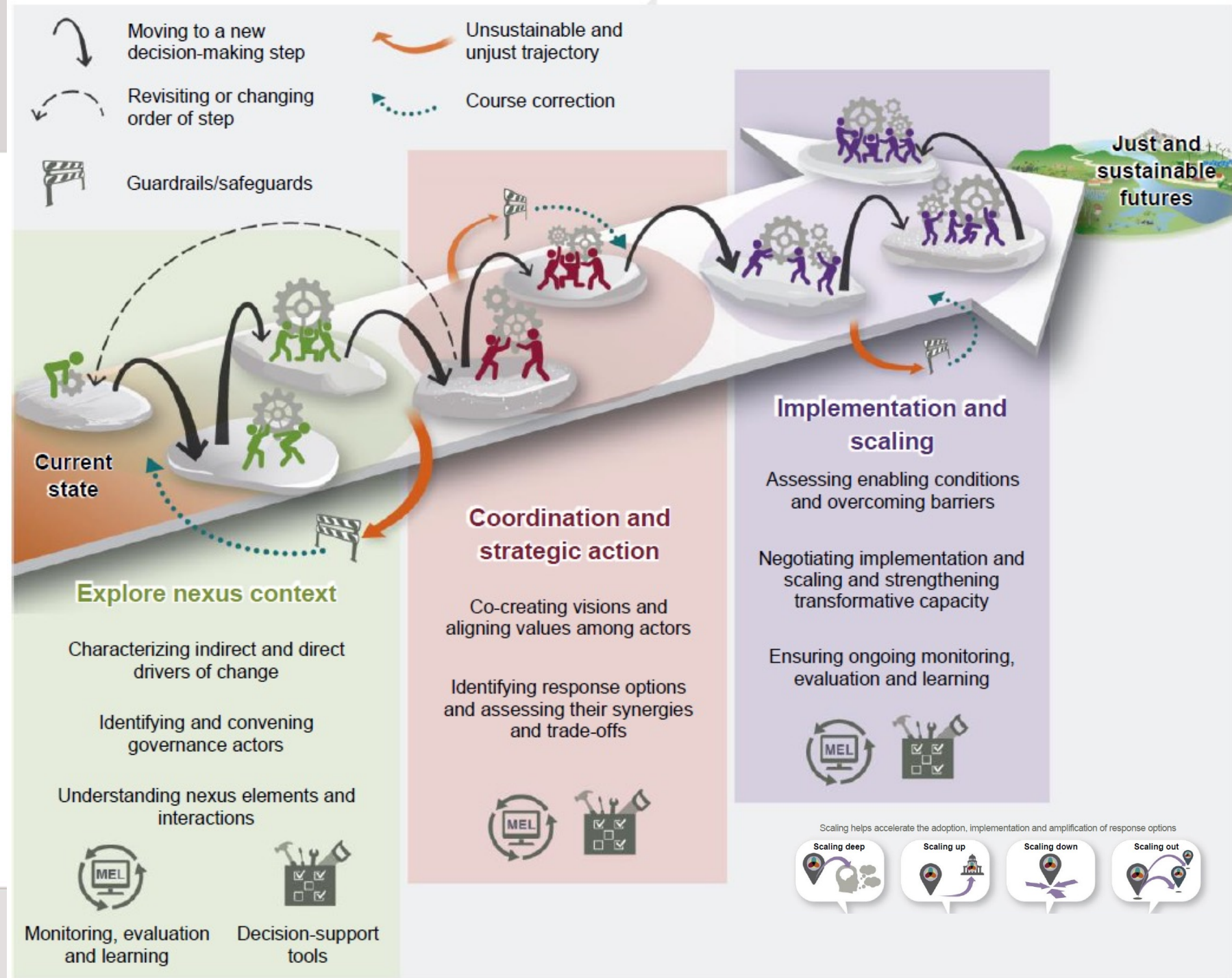
Reduce pollution	F08	Reduce pesticide pollution	●	●	●	●	—
	F09	Reduce plastic pollution	IC	●	●	●	●
	H07	Pollution prevention	●	●	●	●	●
	C02	Sustainable intensification*	●	●	●	●	●
	F03	Reduce short-lived climate pollutants	—	NE	●	●	●
Average impact score							
Positive impact				Negative impact			
●	≥ 2.5	●	≤ -2.5	—	No impact		
●	> 1.5 and < 2.5	●	< -1.5 and > -2.5	IC	Inconclusive		
●	> 0 and < 1.5	●	< 0 and > -1.5	NE	No evidence		

Align financing	F13	Reform public spending	●	●	●	●	●
	C10	Global cooperation for finance and technology	●	●	●	●	●
Others	B11	Multilateral environmental agreements	●	●	●	●	●
	B14	Reconnecting people with nature	●	●	●	●	●
	H05	Nature on prescription	—	—	●	●	●
	H15	Integrated health education	●	●	●	●	●
Nexus elements							
Biodiversity Water Food Health Climate change							

Les options

Feuille de route :

- Approche par résolution collaborative de problème
- Itérative
- Dépendante du contexte



Exemple : irrigation et bilharzioses

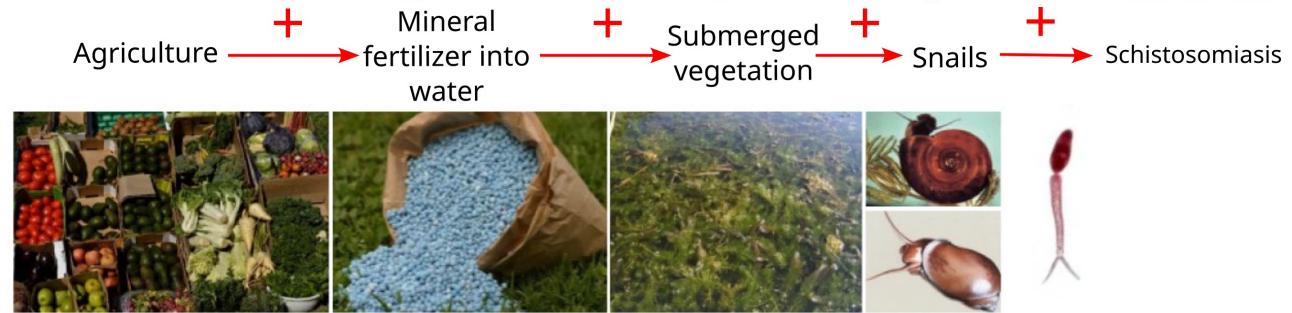
Djama Dam

St Louis Richard-Toll, Sénégal



Rohr et al. A planetary health innovation for disease, food and water challenges in Africa.

Nature. 2023 ;
619(7971) : 782-7.



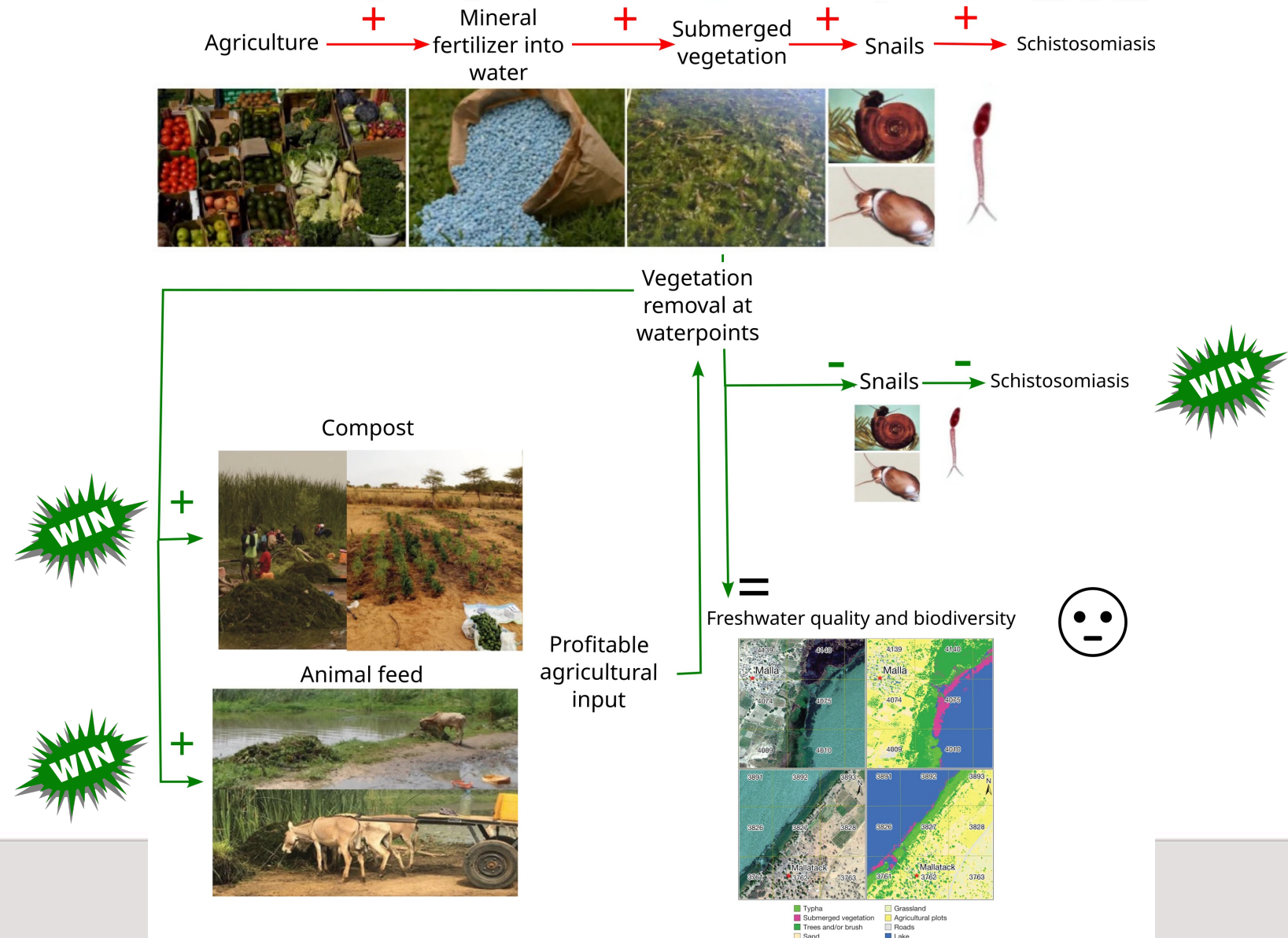
Exemple : irrigation et bilharzioses

Diana Dam

St Louis Richard-Toll, Sénégal



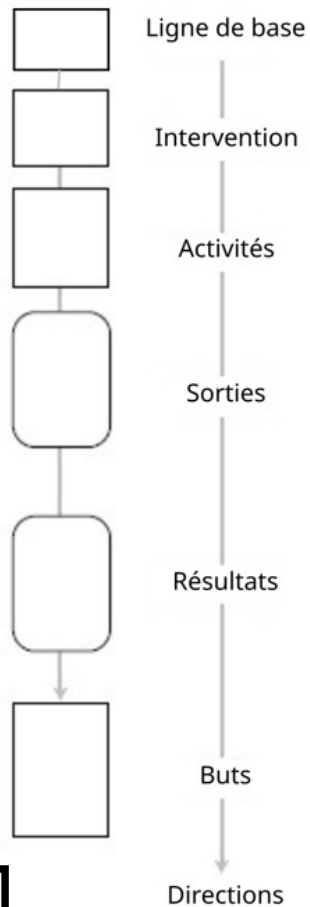
Rohr et al. A planetary health innovation for disease, food and water challenges in Africa. Nature. 2023 ; 619(7971) : 782-7.



Gérer des objectifs multiples

Diagrammes de la théorie du changement

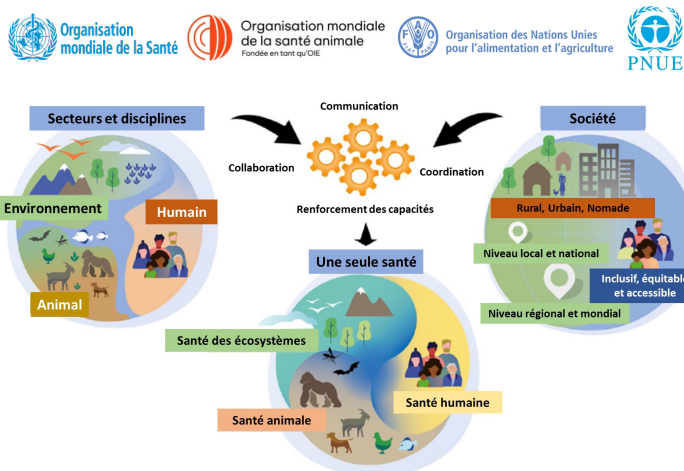
Classique



Hopkins et al., 2021. How to identify win–win interventions that benefit human health and conservation. *Nature Sustainability* 4, 298–304.



Entrée santé



Les Ministres

Nous souhaitons résolument que le COVARS inscrive son travail dans le contexte « Une seule santé » (« One Health »). A la suite de la pandémie COVID et à l'aune des risques plus larges désormais identifiés (environnementaux, alimentaires, climatiques...), son périmètre concernera en effet non seulement le risque infectieux chez l'homme et l'animal (dont les zoonoses possiblement transmissibles à l'homme), mais aussi les risques liés aux pollutions environnementales.

Nous vous remercions vivement de perspective d'anticipation des crises, l'exercice de votre mission.



François BRAUN

COVARS

Comité de veille et d'anticipation des risques sanitaires

Paris, le 14 octobre 2022

Box 5.4.14. Committee for Monitoring and Anticipating Health Risks in France

In France, at the end of the state of health emergency related to COVID-19 in July 2022, the government established the Committee for Monitoring and Anticipating Health Risks (COVARS) under the auspices of both the health ministry and the higher education and research ministry (Lefrançois et al., 2023). The main objectives are (1) to maintain an independent and transparent multidisciplinary scientific advisory committee in charge of providing the government with evidence-based recommendations on health risks; (2) to have an integrated approach to health and therefore include risks related to the environment, the biodiversity crisis and climate change beyond infectious diseases alone; and (3) to anticipate potential health crises in order to promote prevention and preparedness in a context where trade-offs with non-health related issues must be taken into account. COVARS' engagement letter clearly states that its work must be placed within the One Health conceptual framework.

The One Health approach was reflected in its multidisciplinary composition that includes 16 experts with field experience in human, animal and environmental health and three representatives of the civil society (patients' and citizens' associations).

The COVARS operates in close interaction with other ministries (agriculture, ecological transition, foreign affairs and overseas territories) under the Prime Minister Cabinet umbrella, and also with other agencies in the health and the environment fields (such as the French Biodiversity Office and non-governmental organizations). The COVARS recommendations are actively disseminated to the public through press conferences and websites.

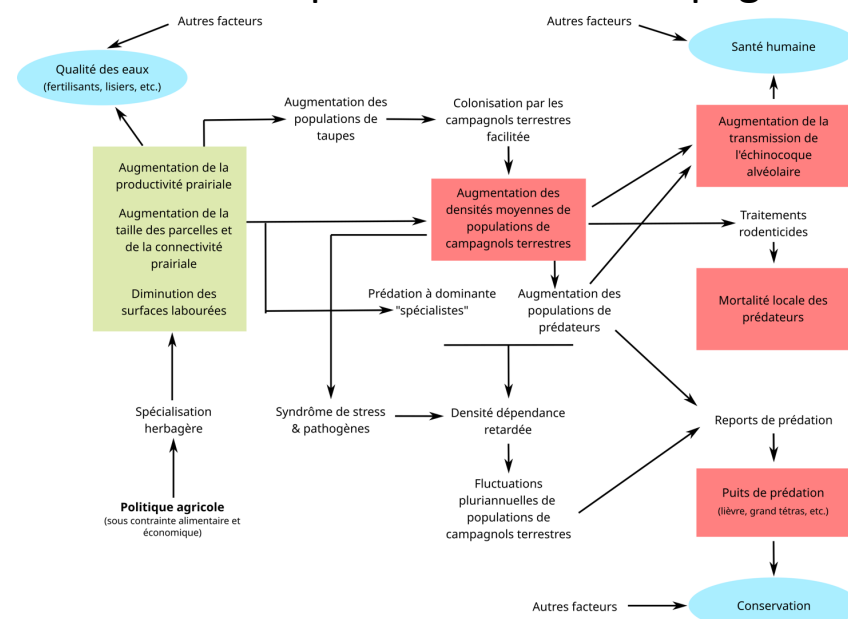


Institut One Health

Formation, Expertise, Décision

Entrée système alimentaire

Contrôle des pullulations de campagnols



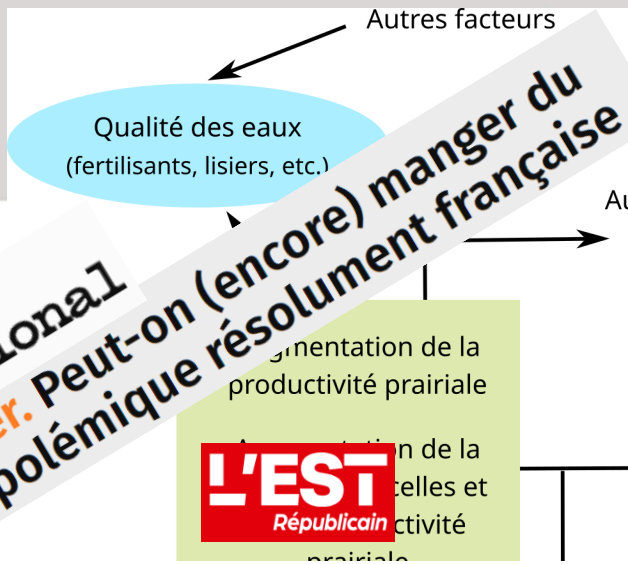
Careli

EN SAVOIR PLUS

1992 - 2008

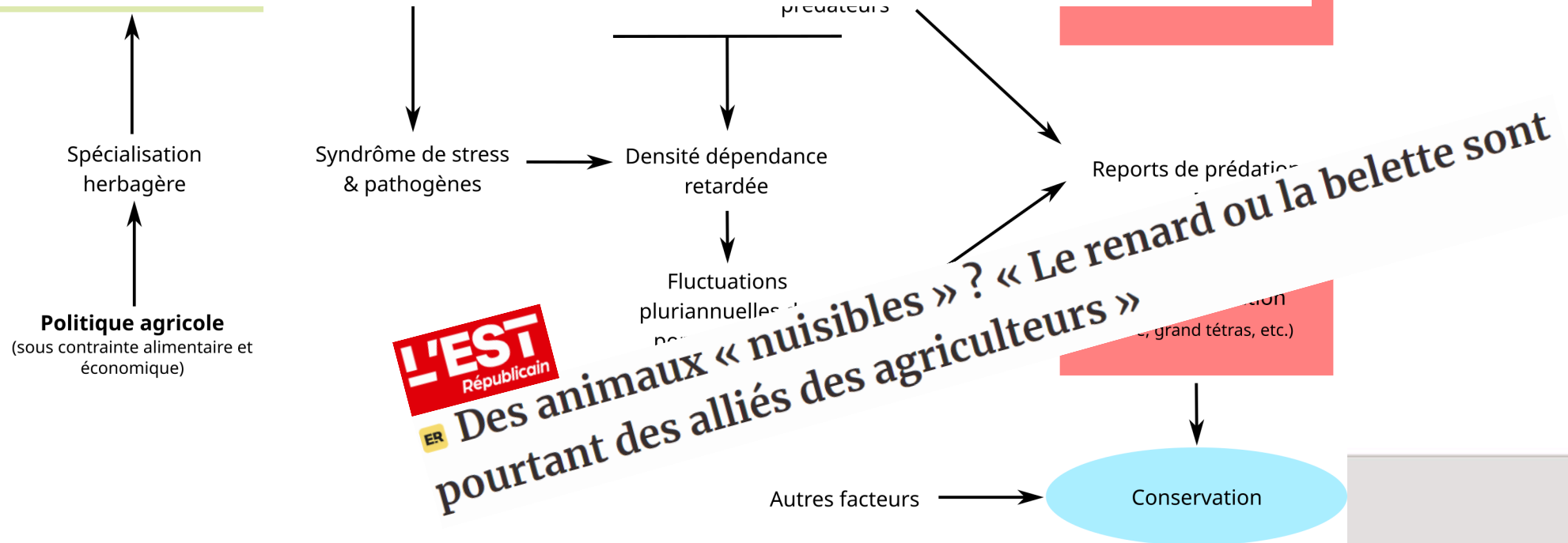
2019 -

Courrier international
Vu de l'étranger. Peut-on (encore) manger du comté ? Une polémique résolument française



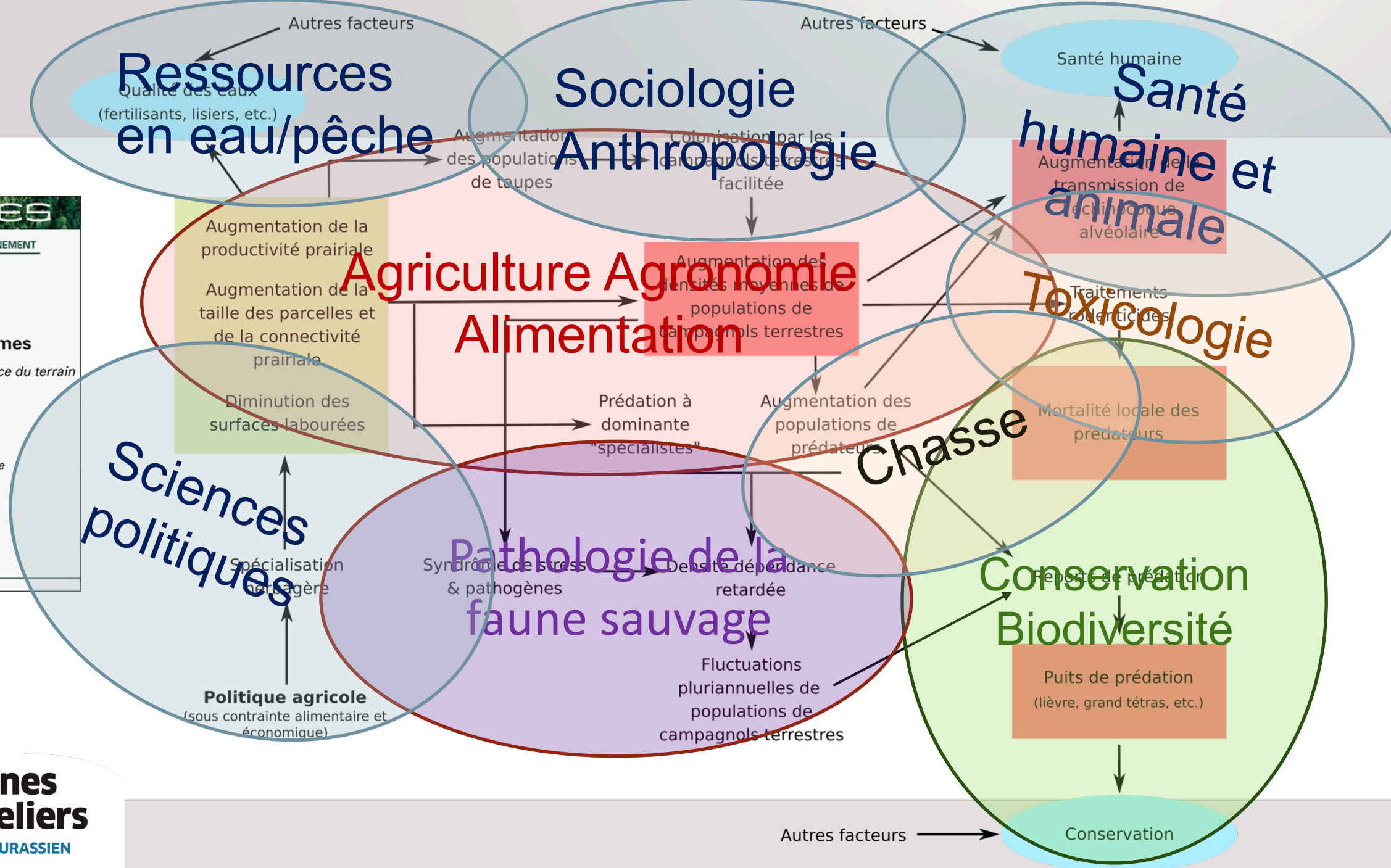
Les Fins

Les Fins : Campagnols et sangliers labourent aux Frenelots



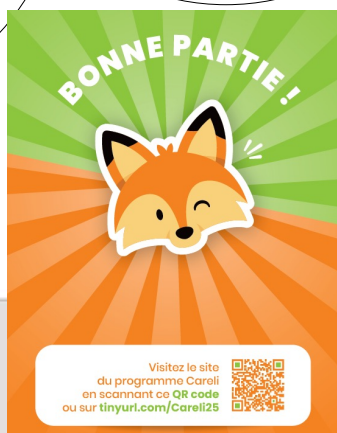
L'EST
 Républicain

Des animaux « nuisibles » ? « Le renard ou la belette sont pourtant des alliés des agriculteurs »





Faire boule de neige...



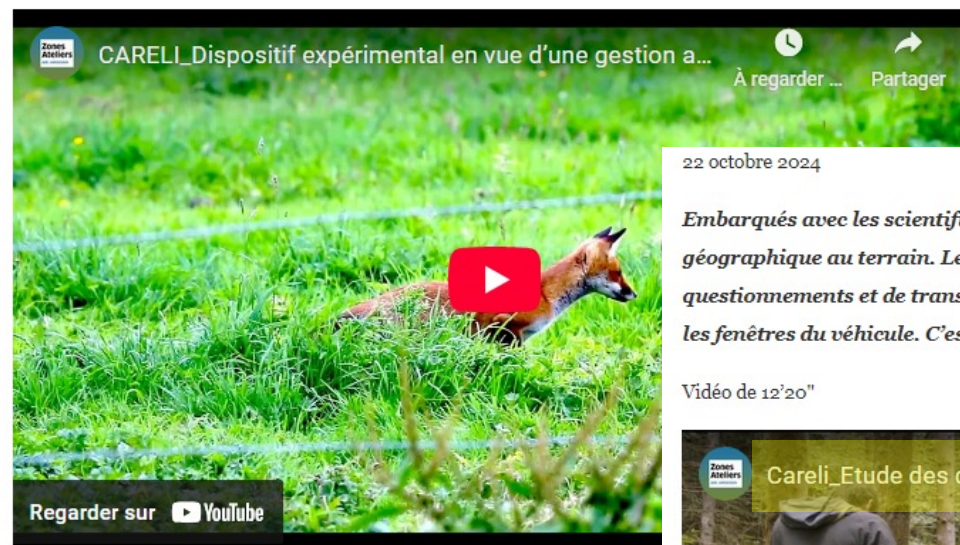
Visitez le site
du programme Careli
en scannant ce QR code
ou sur tinyurl.com/Careli25



28 septembre 2023

A travers les paysages du massif du Jura, les partenaires retracent l'épopée du consortium Careli au cœur des différents suivis. La question de la gestion adaptative y est évoquée.

Vidéo de 15'23"



22 octobre 2024

Embarqués avec les scientifiques et les techniciens, nous arpentons les territoires de la carte géographique au terrain. Le véhicule de FREDON devient un espace d'échange, de questionnements et de transmission. Les paysages cartographiés s'incarnent et défilent à travers les fenêtres du véhicule. C'est l'occasion de vivre de l'intérieur la science en train de se faire.

Vidéo de 12'20"

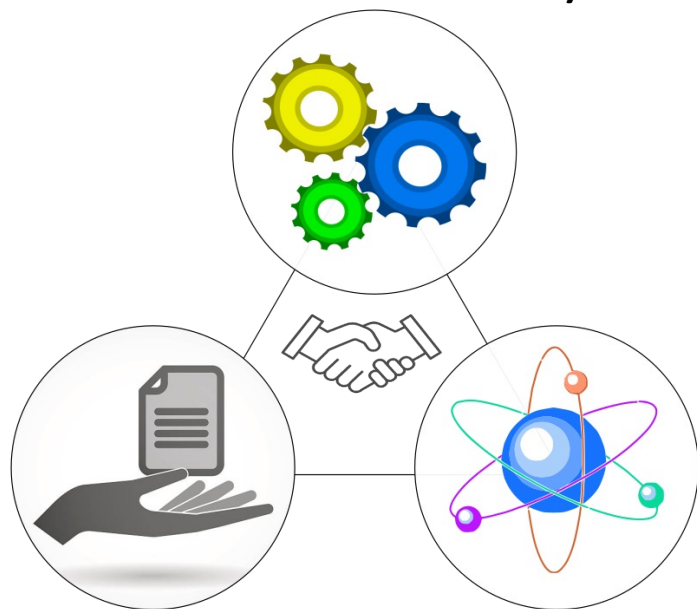


Démêler l'écheveau

Communautés se parlant et co-construisant le “bien commun”.



Parties-prenantes
(communautés
d'intérêts et d'actions)



Politiques et
administrations
(producteurs de règles
communes; arbitres du
bien commun)

Chercheurs
(travailleurs de la
preuve)
et autres porteurs
de connaissances

Secteur public

Recherche

- Université de Franche-Comté/CNRS
- INRA
- Centre hospitalier universitaire
- École nationale vétérinaire de Lyon

Administrations

- Direction régionale Agriculture et Forêt
- Conseil régional de Franche-Comté
- Direction régionale de l'Environnement
- Office national de la Chasse
- Conseils généraux

Organisations agricoles

- Fredon de Franche-Comté
- Exploitants
- Syndicats
- Chambres d'agriculture
- Mutualité sociale agricole

ONG

- Associations naturalistes
- Fédérations départementales des chasseurs



Giraudoux, P., 2022. Mutations agricoles et pullulations de rongeurs prairiaux, in: Giraudoux, P. (Ed.), Socio-écosystèmes. L'indiscipline comme exigence du terrain. ISTE - Sciences, Londres, pp. 23–72.

À chacune et chacun de jouer....



Response option		🦋	💧	🌾	❤️	🌡️	Response option		🦋	💧	🌾	❤️	🌡️
Conserve ecosystems	B01 Area-based conservation	●	●	●	●	●	Integrate planning and governance	B09 Integrated landscape and seascape approaches	●	●	●	●	●
	F01 Halt conversion of intact ecosystems	●	●	●	●	●		B12 Land and sea planning	●	●	●	●	●
	H10 Forest conservation for health	●	●	●	●	●		W02 Integrated water infrastructure	●	●	●	●	●
Restore ecosystems	B05 Forest landscape restoration	●	●	●	●	●	Manage risk	W08 Transboundary water cooperation	●	●	●	NE	●
	B06 Restoration of coastal and marine systems	●	●	●	●	IC/NE		W09 Groundwater governance	●	●	●	●	●
	B07 Restoration of inland water systems	●	●	●	●	●		W13 Water-sensitive urban infrastructure	—	●	●	●	●
	B08 Rewilding	●	●	●	●	●		W15 Community water management	●	●	●	●	●
	F02 Restore soil health	●	●	●	●	●		F12 City region food systems	—	●	●	●	●
Manage ecosystem functions	H08 Mangrove conservation and restoration for health	●	●	●	●	●	Ensure rights and equity	H12 Integrated watershed-health interventions	●	●	●	●	●
	C04 Wetland conservation and restoration	●	●	●	●	—		B02 Urban nature-based solutions*	●	●	●	●	●
	C13 Restoration of blue carbon ecosystems	●	●	●	●	●		B04 Ecosystem-based adaptation in rural landscapes	●	●	●	●	●
	B03 Agroecology*	●	●	●	●	●		W03 Dam operation	—	●	●	●	●
	C11 Sustainable inland fisheries	●	●	●	●	●		H03 Net-zero sustainable healthcare	●	●	●	●	●
Consume sustainably	W11 Manage alien species	●	●	●	●	●	Align financing	H09 Urban green infrastructure	●	●	●	●	●
	F04 Ecological intensification - croplands	●	●	●	●	●		H11 Biodiversity management for zoonoses	●	●	●	●	●
	F05 Ecological intensification - rangelands	●	●	●	●	●		H13 Health impact assessments	●	●	●	●	●
	F06 Ecological intensification - aquatic foods	●	●	●	●	●		H14 The One Health approach	●	●	●	●	●
	C01 Increase soil organic carbon	●	●	●	●	●		C09 Multi-hazard early warning systems	●	●	●	●	●
Reduce pollution	C03 Integrated multi-trophic aquaculture	—	—	●	●	●	Others	B10 Rights-based approaches	●	●	●	●	●
	C12 Forest-based practices to address climate change	●	●	●	●	●		W01 Inclusive water education	IC	IC	●	●	IC
	W04 Efficient water use in agriculture	●	●	●	●	●		W06 Inclusive water management	●	●	NE	NE	NE
	F10 Reduce food loss and waste	●	●	●	●	●		W07 Rights of nature	IC	●	IC	●	IC
	F11 Sustainable healthy diets*	●	—	●	●	●		W14 Address gendered burdens of water collection	NE	●	●	●	●
Ensure rights and equity	G15 Sustainable use of medicinal plants	●	●	●	●	●	Nexus elements	F14 Foster gender transformative approaches	●	●	●	●	●
	H04 Reduce meat overconsumption	●	—	●	●	●		F15 Indigenous food systems	●	●	●	●	●
	C05 Offshore wind power	●	●	●	●	●		F16 Access to natural resources and land	●	●	●	●	●
	C06 Solar photovoltaics on land	●	●	●	●	●		H01 Universal health coverage	IC/NE	●	●	●	●
	C07 Circular bioeconomy	●	●	●	●	●		H02 Intercultural health services	IC/NE	NE	●	●	NE
Reduce pollution	W12 Manage wastewater	●	●	●	●	●	Align financing	B13 Natural capital accounting	●	●	—	●	●
	F07 Reduce nutrient pollution	●	●	●	●	—		W10 Finance for water infrastructure	—	●	●	●	—
	F08 Reduce pesticide pollution	●	●	●	●	—		F13 Repurpose public spending	●	●	●	●	●
	F09 Reduce plastic pollution	IC	●	●	●	●		C10 Global cooperation for finance and technology	●	●	●	●	●
	H07 Pollution prevention	●	●	●	●	●		B11 Multilateral environmental agreements	●	●	●	●	●
Ensure rights and equity	C02 Sustainable intensification*	●	●	●	●	●	Others	B14 Reconnecting people with nature	●	●	●	●	●
	F03 Reduce short-lived climate pollutants	—	NE	●	●	●		H05 Nature on prescription	—	—	●	●	●
	C08 Reduce short-lived climate pollutants	—	NE	●	●	●		H15 Integrated health education	●	●	●	●	●
	W05 Sustainable inland fisheries	●	●	●	●	●							
	F01 Halt conversion of intact ecosystems	●	●	●	●	●							

Average impact score

Positive impact: ● ≥ 2.5, ● ≥ 1.5 and < 2.5, ● > 0 and < 1.5

Negative impact: ● ≤ -2.5, ● ≤ -1.5 and > -2.5, ● < 0 and > -1.5

— No impact, IC Inconclusive, NE No evidence

Nexus elements

🦋 Biodiversity, 💧 Water, 🌾 Food, ❤️ Health, 🌡️ Climate change

Merci pour votre
attention !

Discussion ouverte !
(Qu'est ce qu'on fait avec ça 😊 ?)

D'après Joachim Patinier, vers 1530 (revisité), Charon traversant le Styx

Medical Mycology 2021

One year later: The effect of changing azole-treated bulbs for organic tulips bulbs in hospital environment on the azole-resistant *Aspergillus fumigatus* rate

Steffi Rocchi^{1,2,*}, Chloé Godeau², Emeline Scherer^{1,2}, Gabriel Reboux ^{1,2} and Laurence Millon^{1,2}



Exposition de patients immunodéprimés

Pollution de l'air par des souches antibiorésistantes

Plantation au CHU Jean-Minjoz

Culture intensive de tulipes en Hollande

Nexus elements



Biodiversity



Water



Food



Health



Climate change