

# **Synthesis of lessons learned from a decade of biodiversity mainstreaming experience**

Kent H. Redford

September 2013



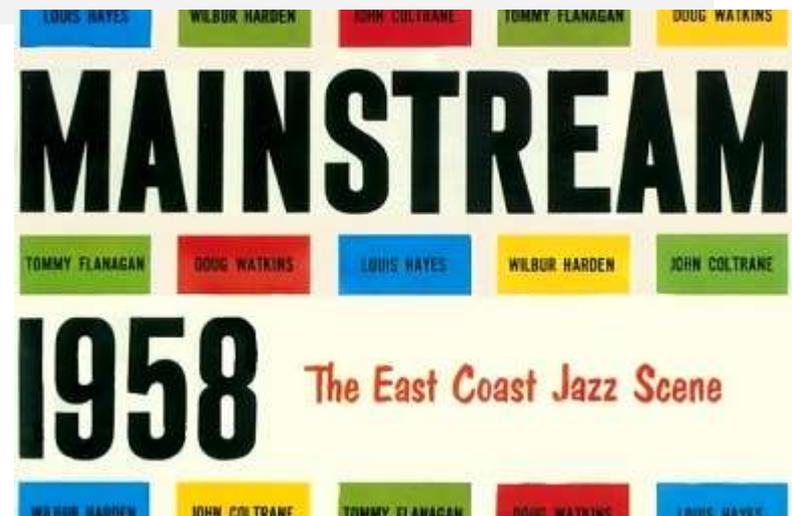
Mainstreaming (in popular usage) is found applying to many things:

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- Film
- Media
- Music
- Science
- Sociology
- Education
- Climate change
- Gender
- Human rights
- Hipsters
- Etc.

**MAINSTREAM**  
RENEWABLE  
POWER

**MAINSTREAM MEDIA**



# Mainstreaming

(in conservation/development):

The most important word in  
the world - known only to us  
(and a handful of our  
friends)



# Mainstreaming

(in conservation/development):

Most people in conservation  
have never heard of this word –  
but know of the practices it  
describes



Working Paper 20  
November 2005

2005



## Mainstreaming Biodiversity in Production Landscapes

Caroline Petersen  
Brian Huntley



Mainstreaming: “to internalize the goals of biodiversity conservation and the sustainable use of biological resources into economic sectors and development models, policies and programmes, and therefore into all human behaviour”

(Petersen and Huntley 2005)



*Seven years on ...*

Mainstreaming: a concept broadly used – but by a narrow range of constituencies

“the mainstreaming approach is still in its infancy in financial and production sectors, although enjoying wide support by conventions, agencies and institutions, such as the CBD, GEF, UNDP, UNEP, World Bank, IUCN, WWF, CI.”

*From Background and Context document*

*But still very important ...*



*Our core message is that there can be no separation between development and environment, as they are co-dependent. Healthy ecosystems are essential to secure human health, food, energy and water, and ultimately sustainable development. It is startling, however, that such ideas have yet to be fully mainstreamed and that their adoption continues to be hampered by tough barriers in the political decision-making process. This is where the GEF comes in as a champion of the global commons.*

Dr. Naoko Ishii GEF CEO and Chairperson. 2012. Time for Transformational Change. The Role of The GEF. Vision Statement.

# GEF Biodiversity Mainstreaming

- An analysis was done of mainstreaming projects that had been funded by GEF (3,4, and 5)
- A total of 327 biodiversity mainstreaming projects
- totaling US\$1,631,684,477 in GEF funding and US\$5,249,734,936 in co-financing.
- The median GEF funding per project was US\$3,586,364 with a median of US\$12,100,000 in co-financing

# GEF Biodiversity Mainstreaming

Not all possible mainstreaming projects are eligible for GEF support:

- GEF only provides funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits.
- The participating country is eligible
- the project is endorsed by the GEF operational focal point.
- Resources are available,
- The project is consistent with the recipient country's national biodiversity strategy and action plan,
- Global environmental benefits are identified, and
- The project aligns with GEF's biodiversity strategy.

# GEF Biodiversity Mainstreaming

- “It is difficult to measure the outcomes of this investment” (*From Background and Context paper*)

The Background Paper works to collate what is known from the published literature and websites, while maintaining a focus on the GEF’s version of mainstreaming



The difficulty with trying to learn about the practice of mainstreaming

		<u>KNOWS</u>	
		Yes	No
<u>WRITES</u>	Yes	??	academics
	No	Funders & Implementers	--

# Mainstreaming by many names:

- Offsets
- The Equator Principles
- Natural Capital
- Green Economy
- Green Accounting
- Agri-environment schemes
- Building with Nature
- Raw material sustainable round-tables
- Certification schemes

Scientific and Technical Advisory Panel

An independent group of scientists which advises the Global Environment Facility



The Scientific and Technical Advisory Panel  
of the  
Global Environment Facility

Mainstreaming Biodiversity Workshop  
Cape Town, South Africa  
1-3 Oct 2013

Hosted by



# Key Messages

*From*

Mainstreaming  
biodiversity  
conservation: A  
framing paper for  
the Scientific and  
Technical Advisory  
Panel of the Global  
Environment Facility

## Key Message #1

With more than 80% of the earth's surface never likely to be managed within Protected Areas, biodiversity conservation interventions across such “non-protected” landscapes and seascapes are vital. Mainstreaming addresses this need.



## Key Message #2

Mainstreaming biodiversity enjoys priority at the highest levels of international policy (CBD) and conservation investment (GEF).



### Key Message #3

Between 2004 and 2014; GEF will have supported a total of 327 biodiversity mainstreaming projects, totaling US\$1,631,684,477 in GEF funding and US\$5,249,734,936 in co-financing.



## Key Message #4

Mainstreaming characteristics include:

- integration/internalization/inclusion of biodiversity goals in development models, policies and programs;
- modifying that into which it is integrated;
- simultaneously achieving positive biodiversity and development outcomes; and
- modifying human behavior to increase sustainability.



## Key Message #5 (a)

Various typologies are used for categorizing mainstreaming projects, including:

- incorporation of biodiversity and ecosystem service values and sustainability into accounting frameworks;
- policy and regulatory frameworks;
- production practices;
- financing mechanisms; and
- sustainable use.



## Key Message #5 (b)

Additional, less common, intervention opportunities for mainstreaming include:

- behavioral change,
- ecosystem restoration,
- ecosystem-based adaptation, and
- health.



## Key Message #6

GEF mainstreaming interventions are directed at biodiversity and include ecosystem services.

- relationship between these two terms is not straightforward
- the common assumption that ecosystem services programs conserve biodiversity, and that conserving biodiversity will secure ecosystem services.



## Key Message #7

There is a great deal more written about how and why mainstreaming should be done than about what has been learned from practice

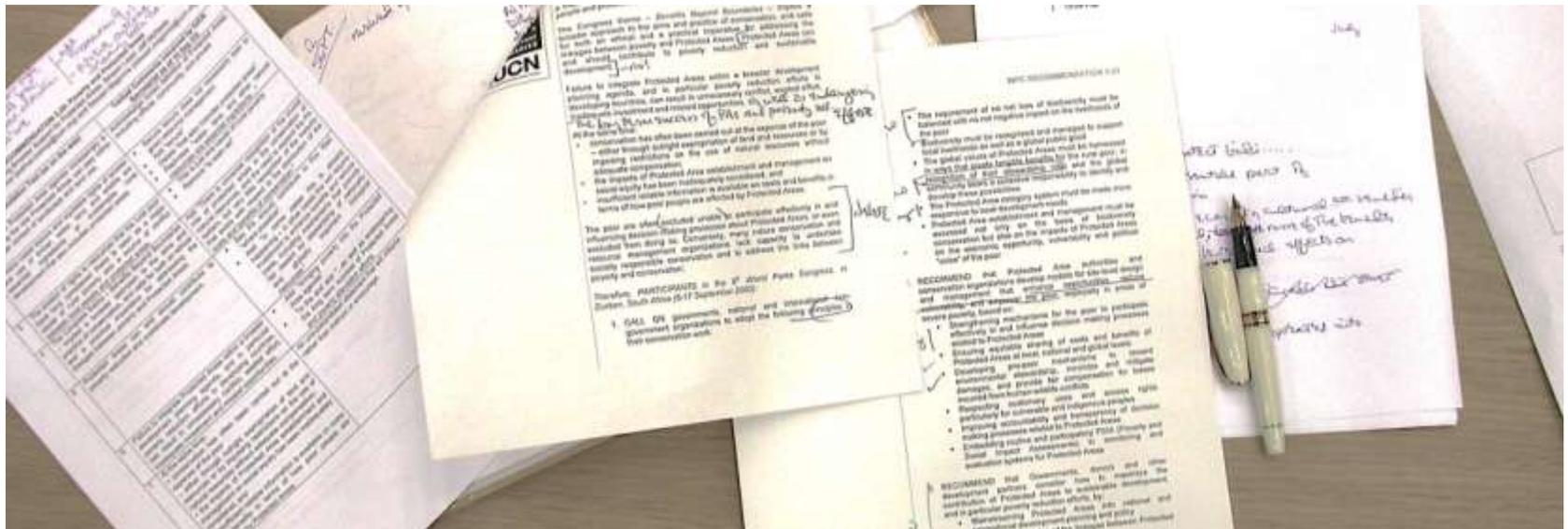
- very limited information available on what works and what doesn't
- however, detailed listings of the characteristics that underpin successful projects are emerging from reviews of case studies.



## Key Message #8

There is little evidence that the mainstreaming projects funded through GEF have produced peer-reviewed articles written either by the project implementers or by others.

- Project implementers – very often the real ‘champions’ of such projects – appear not to be writers.



## Key Message #9

Billions of dollars have been spent on mainstreaming biodiversity outcomes but there is very little robust, credible evidence on the efficacy of these actions.



## Key Message #10

In practice most apparent win-win programs appear to involve trade-offs between desired conservation outcomes and desired social outcomes

- Because these trade-offs were not expected and therefore not negotiated for, the results can be disappointment and blame.



## Key Message #11

The conclusion reached by those who assess the efficacy of PES approaches is that very little can be concluded about their effectiveness due to:

- a heterogeneity of methods, and
- lack of clear experimental design and data collection.



## Key Message #12

To learn from project implementation, greater care needs to be brought to the design, implementation, and assessment of mainstreaming projects.



## Key Message #13

A program of research is needed to:

- measure how program impacts vary by socio-political and bio-physical context,
- to track economic and environmental impacts jointly,
- to identify spatial spillover to untargeted areas, and
- to use theories of change to characterize causal mechanisms that can guide the collection of data and the interpretation of results.



## Key Message #14

However, mainstreaming is not a controlled experiment but rather a social experiment in changing the value structures of institutions and individuals with vital consequences for the natural world and the humans who rely on it. As such it may not prove amenable to rigorous tests but it certainly is a field deserving of more systematic inquiry.



Key Message #15

Mainstreaming is more of an art than a science.



## Effective Mainstreaming Principles (GEF 2005)

- Awareness and political will from the highest levels, providing support for implementation
- Strong leadership, dialogue, and cooperation at all levels
- Mutual supportiveness and respect between biodiversity and development
- A strong focus on economic sectors, supported by cross-sectoral approaches, securing sector-based biodiversity conservation
- Analysis and understanding of the changing motivations and opportunities of each sector, including the effects of globalisation
- Identification and prioritization of entry points and the development of sector-specific tools and interventions (such as international codes of conduct or standards)
- Awareness within sectors of the relevance of biodiversity conservation and the capacity needed for implementation
- A coherent set of economic and regulatory tools and incentives that promote and reward integration and added value, while discouraging inappropriate behaviours
- Sustained behavioural change within individuals, institutions, and society, and in both public and private domains
- Measurable behavioural outcomes and biodiversity gains.

The importance  
of getting  
mainstreaming  
right –  
accepted - and  
used!



## *The EU Biofuel Policy and Palm Oil: Cutting subsidies or cutting rainforest?*

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*Ivetta Gerasimchuk  
Peng Yam Koh*

*September 2013*

According to Oil World data, the EU biofuels industry has increased its use of palm oil as biodiesel feedstock by 365 per cent over 2006–2012

# Mainstreaming – called that or not – is happening

Stock Charts

HOME WATCHLIST PORTFOLIO 114 SUMMARY INDICES SECTORS MOVERS RATES FUTURES JOBS

## WALL STREET SELECT

Quote/Search

[Symbol Lookup](#)

Wednesday, September 11th 2013 2:24pm ET - U.S. markets close in 1 hour and 36 minutes

Nasdaq	3722.87	NYSE	9639.57	AMEX	2343.52	S&P 500	1686.38	Oil	107.23
↓ -6.15	-0.16%	↑ +18.86	+0.20%	↑ +5.01	+0.21%	↑ +2.39	+0.14%	↓ -1.71	-1.57%

September 10, 2013 at 10:31 AM EDT

### Amazonian People and Cosmetics Giant Work to Save Endangered Rainforest and Slow Climate Change

Brazil's Paiter Suruí indigenous people today announced the formation of a groundbreaking partnership with Natura Cosméticos designed to slow climate change by saving endangered rainforest and sequestering carbon in trees. In so

MINI-REVIEW

## Why bartering biodiversity fails

Susan Walker<sup>1</sup>, Ann L. Brower<sup>2</sup>, R.T. Theo Stephens<sup>3</sup>, & William G. Lee<sup>1</sup>

VS

MINI REVIEW

## When payments for environmental services will work for conservation

Sven Wunder

BUT .....



Department  
for Environment  
Food & Rural Affairs

[www.gov.uk/defra](http://www.gov.uk/defra)

## Biodiversity offsetting in England

Green paper

September 2013

&

Standard on Biodiversity Offsets



**BBOP**  
Business and Biodiversity  
Offsets Programme

## Coastal Habitats Defend U.S. Communities

A new study by scientists at the Natural Capital Project and The Nature Conservancy investigates the role of coastal habitats in protecting U.S. residents and their property from extreme weather events and eroding coastlines.

Published in this issue of *Nature Climate Change*, "Coastal habitats shield people and property from sea-level rise and storms," is the first comprehensive analysis of where ecosystems | defense against coastal storms and climate-induced sea level rise U.S. coastline.



SUPPORT FOR GREEN POLICIES  
RISES AFTER HURRICANE SANDY

September 24, 2013 | Conservation This Week | 0 Comments

## G20 Leaders Declaration (2013):

“Breaking Down the Silos” the post-MDGs consultation report include four principles in the post-2015 agenda including:

- integrated development that advances economic, environmental and social sustainable development and ensures environmental sustainability and poverty eradication.

<http://post2015.iisd.org/news/post-2015-environmental-sustainability-report-calls-for-integrated-approaches/>

# Biodiversity for Cities and Slums



UNEP



Convention on  
Biological Diversity

**UN HABITAT**

**I.C.L.E.I**  
Local  
Governments  
for Sustainability



UNITED NATIONS  
UNIVERSITY

**UNU-IAS**  
Institute of Advanced Studies

## Ecosystems and Urban Poverty Reduction

Nowhere is the demand for ecosystem services greater than in cities, due to the large and increasing number of people now

urban populations living in slums has decreased from 39 to 32 per cent between 2000 and 2010, the absolute number of slum



# Conserving Biodiversity on Military Lands

## The Commander's Guide

[WWW.DODBIODIVERSITY.ORG](http://WWW.DODBIODIVERSITY.ORG)

<http://www.natureserve.org/publications/commandersGuide.pdf>

# Biodiversity and Ecosystem Services: Brazilian business experiences



**CEBDS**  
Brazilian Business Council  
for Sustainable Development





Department  
for Environment  
Food & Rural Affairs

[www.gov.uk/defra](http://www.gov.uk/defra)

# **Biodiversity offsetting in England**

## **Green paper**

### **September 2013**

Biodiversity  
Offsets



# The National Biodiversity Strategies and Action Plans process .....

## **BIODIVERSITY MAINSTREAMING**

Integrating biodiversity, development and poverty reduction

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### **A State of Knowledge Review**

Forthcoming in 2013 as an output of the *NBSAPS 2.0* project

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<http://www.unep-wcmc.org/medialibrary/2013/06/13/3f4205fe/Biodiversity%20and%20Development%20Mainstreaming%20-%20A%20State%20of%20Knowledge%20Review.pdf>

Monitoring payments  
for watershed services  
schemes in developing  
countries



# **Putting Green Growth at the Heart of Development**

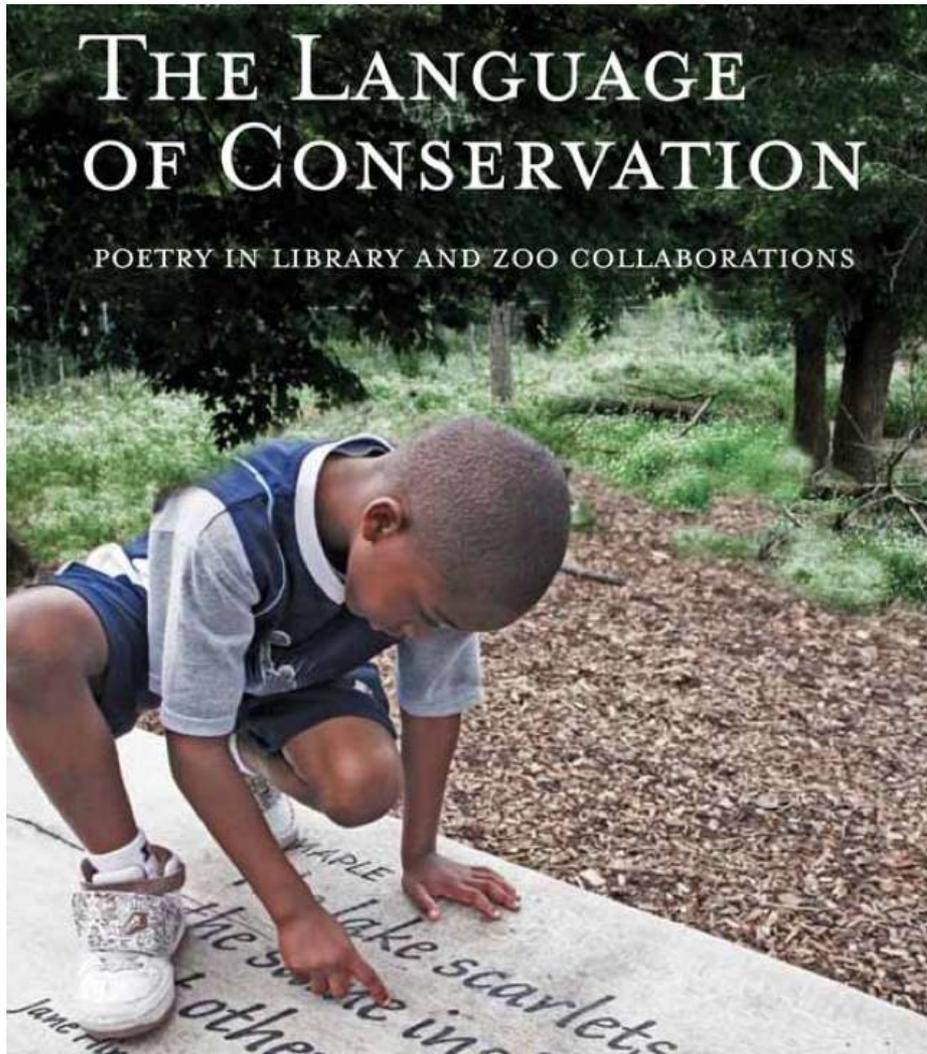
## Summary for Policymakers

[http://www.oecd.org/dac/environment-development/Putting%20Green%20Growth%20at%20the%20Heart%20of%20Development\\_Summary%20For%20Policymakers.pdf](http://www.oecd.org/dac/environment-development/Putting%20Green%20Growth%20at%20the%20Heart%20of%20Development_Summary%20For%20Policymakers.pdf)



Private  
Protected  
Areas

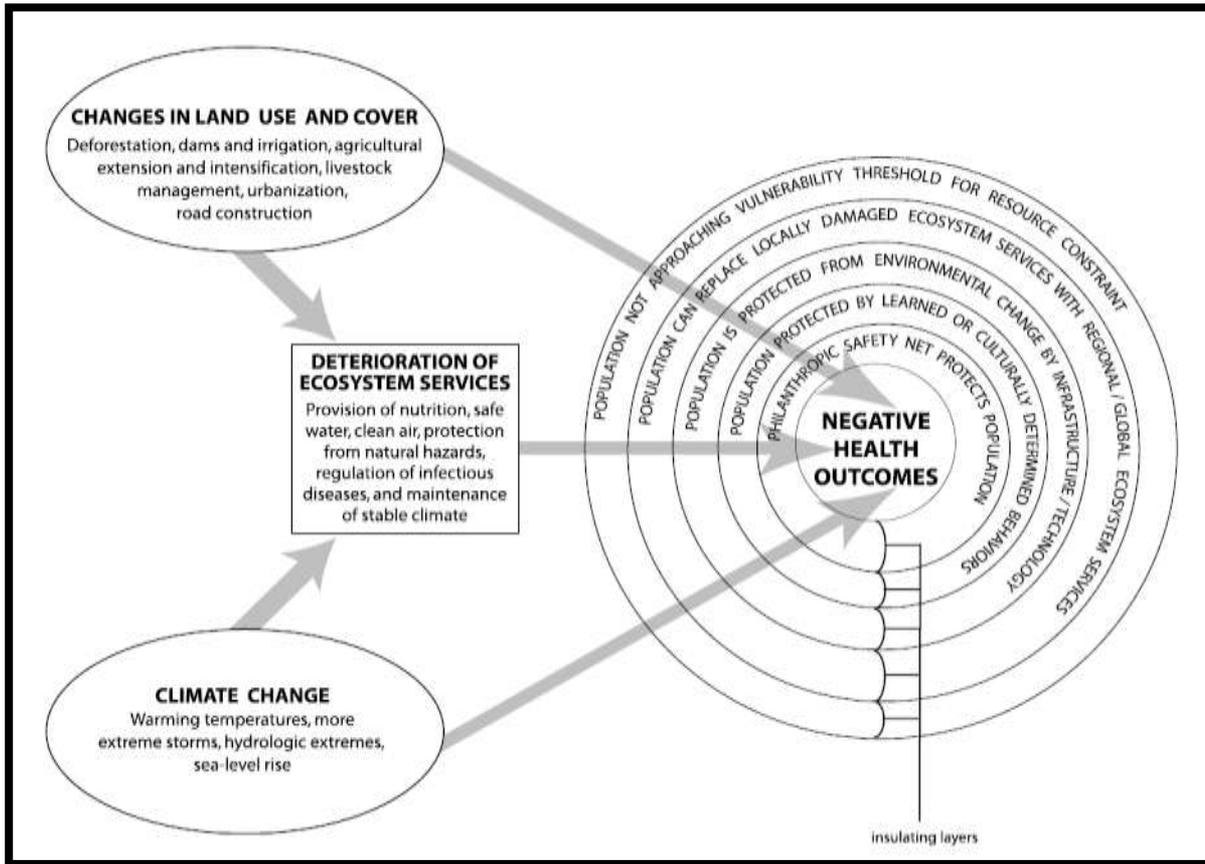
# ... and changing human behavior/attitudes – Mainstreaming poetry ...



- up to 90% of visitors to participating zoos read the poems displayed there
- half of them drew explicit connections between the poems and the conservation mission of the zoo.

# A major frontier: Mainstreaming biodiversity into public health – perils and benefits

Myers and Patz 2009



... forest air breathing, urban parks and human well-being

## Concern I: Mainstreaming is based on a duality:

1. Biodiversity conservation-directed work, (e.g. protected areas and species conservation); and
2. Other economically important activities that affect biodiversity but are not directed at is conservation (e.g. fisheries, forestry)

But does this duality still hold?



Concern II: Mainstreaming is predicated on making biodiversity pay its own way – where what counts is only that which is valued in the marketplace.



Image courtesy SNRedford

## Concern III

What exactly is being mainstreamed?:

- Conservation
- Environment
- Biodiversity



**Mainstreaming Conservation  
in Infrastructure Projects**

Case Studies from Latin America

**BIODIVERSITY  
MAINSTREAMING**

Concern IV: “Mainstreaming” is not mainstreaming .... if we are serious about altering the behavior of the practice so as to conserve biodiversity.

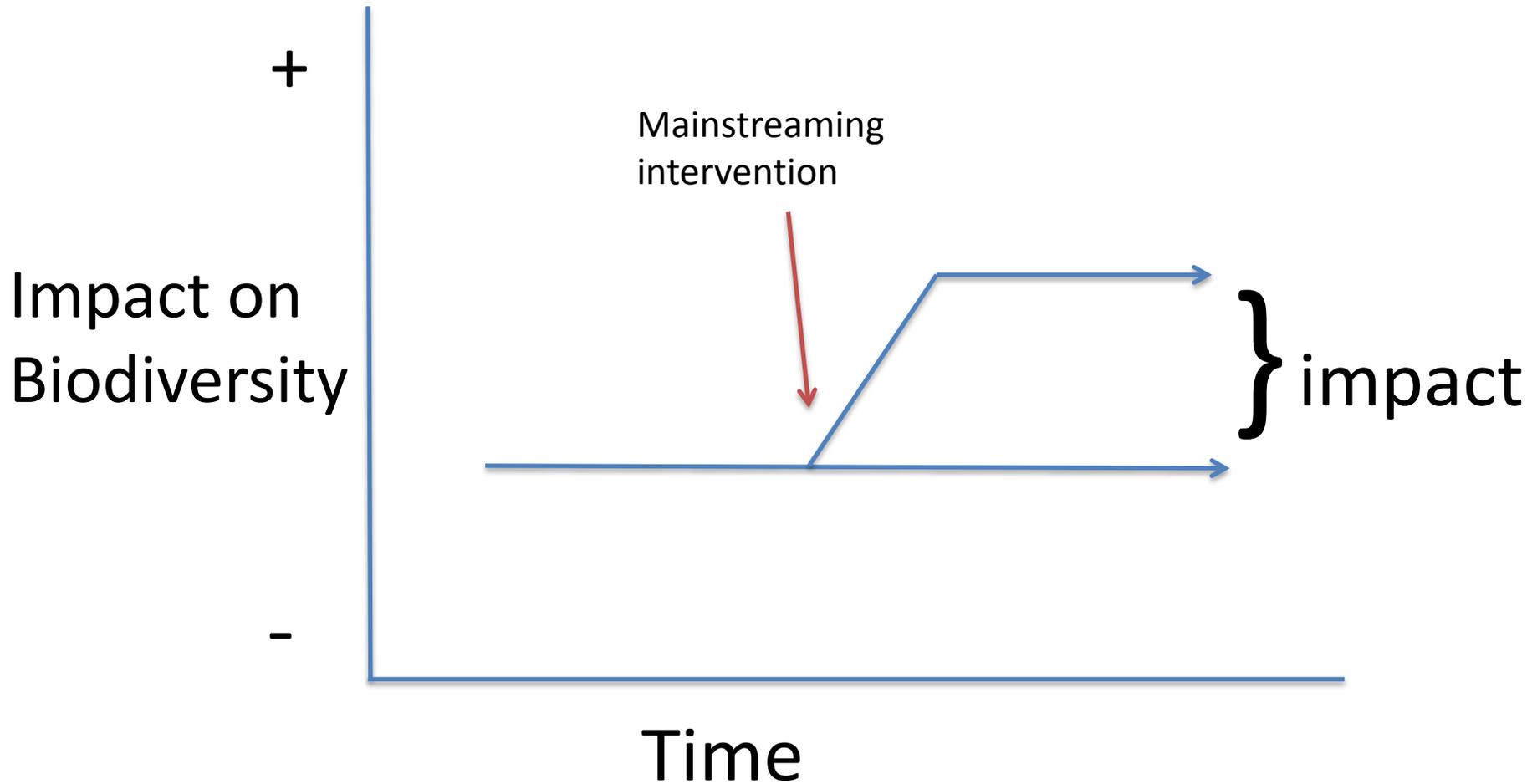
- Perhaps we should rename the practice: *‘transmutation’* ....



## Concern V:

- Many believe intuitively that mainstreaming has worked
- But we are not in a position to demonstrate whether a \$billion investment has worked or not.
- How would we assess the effectiveness of mainstreaming as a biodiversity conservation tool? ....

# Concern V .... A proposal



## Concern VI: Mainstreaming is a boundary concept:

-living at the far edge of the protected area movement

- and the near edge of the movement to internalize economic costs

Boundaries are notably unstable, e.g....

- Climate change
- Political upheaval
- Synthetic biology

Assessing effectiveness of  
mainstreaming -- Listen  
carefully to the impala ...





# Biodiversity Mainstreaming and the future:

1. The duality (protected areas vs economic activities)