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Rewards for, Use of and shared investment in pro-poor Environmental Services (RUPES) in the Highlands

Grace Villamor (gracev@uni-bonn.de)
Centre for Development Research, Uni Bonn, Germany
and
Leimona Beria
World Agroforestry Centre (ICRAF), Indonesia

Outline

- P/RES: definition
- Framework in Asia and Africa
- Principles for **Efficiency** and **Fairness**
- Emerging paradigms based on the experiences
- Examples (e.g. Nepal – water/biodiversity and carbon stocks)

What is payments or rewards for environmental services?

“A payment for environmental services scheme is a **voluntary** transaction in which a **well defined environmental service (ES)** is bought by at least one **ES buyer** from a minimum of one **ES provider**, if and only if the provider ***continues to supply*** that service (conditionality)”

S. Wunder (2005)





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Pro-poor rewards for environmental services

Context

Asia and Africa network of learning sites

Realistic:

Assessment of impacts of Δ Land Use on Δ ES

Pro-poor:

Assessment of multiple dimensions of poverty

+ Mechanism → Outcome

Conditional:

performance-based contracts

Voluntary: process of negotiations

& Impact

- Per capita financial transfers remain small but with **tenurial security**
- Reduced conflict over resource access => **more options**; less poverty
- Co-investment in stewardship, rather than 'PES'

Effectiveness = when measured for impact on ES (Realistic, Conditional, Voluntary)

Efficiency = when effectiveness is expressed per unit of investment by ES buyers

Rewards for Environmental Services (RES) lessons, outcomes and impacts



ICRAF's 3 major networks of action research and learning sites on RES and climate change issues:



Pro poor Rewards for Environmental Services in Africa (2006 - 2011) covering 8 sites in 5 countries (Tanzania, Kenya, Guinea, Uganda & Malawi)



Rewards for, Use of and Shared Investment in Pro-poor Environmental Services schemes in Asia (2002-2012) covering 12 sites in 8 countries (China, Vietnam, Indonesia, Philippines, Nepal, India, plus Thailand and Cambodia - upcoming)



Global partnership devoted entirely to research on the tropical forest margins with 12 benchmark sites in the Amazon, Congo Basin and Southeast Asia

Future challenges:

Greater R & D efforts needed to:

- ❑ Reduce transaction costs of RES schemes
- ❑ Enhance efficiency of RES schemes and balance it with fairness for actors involved
- ❑ Review legal and policy frameworks that create enabling environment for RES to be scaled up and out

Four principles recognized within efficiency and fairness clusters

I. Realistic

(scoping - identifying problems, and ES)

-Gaps between perceptions of buyers and sellers

-
-measurable indicators

tangible and sustainable reduction or avoidance of human-induced threats to ES flows and associated stocks (and/or measurable recovery from past decline of ES) at relevant **spatial and **temporal scale**, relative to a non-intervention (“business-as-usual”) **baseline**.**

II. Voluntary

(analysing multistakeholders and power relationship)

engagement of both ES providers and beneficiaries in a negotiated scheme through free and informed choice at the individual level. (Pro-poor oriented scheme)

Four principles recognized within efficiency and fairness clusters

III. Conditional

(negotiation and implementation)

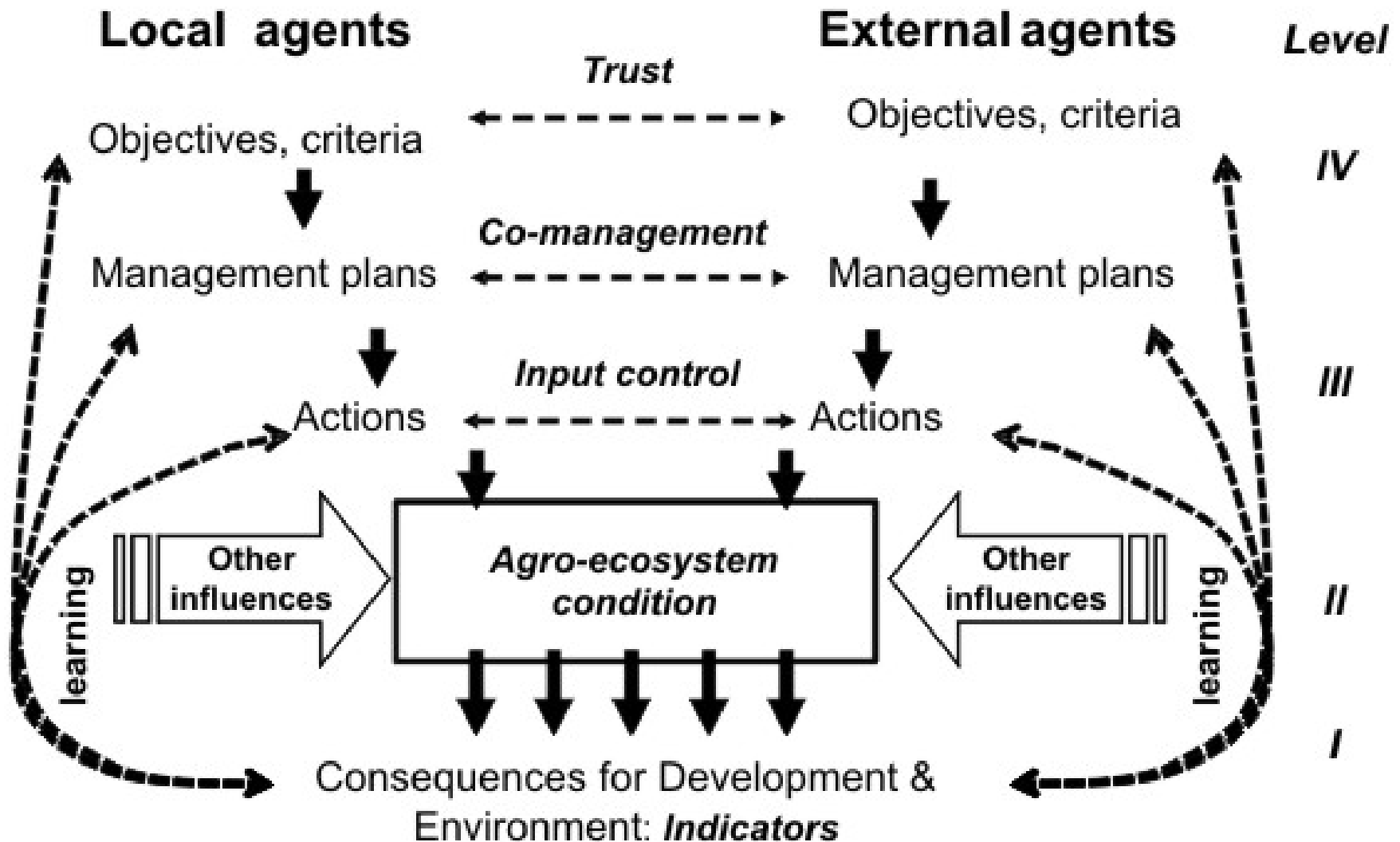
benefits received by ES providers depend on **performance** measures **agreed** in **contracts** between parties, with conditions **known** and **understood** by **all** relevant **stakeholders**.

IV. Pro-poor

(all stages)

access, process, decision making and outcomes of the schemes are **differentiated** by **wealth** and **gender** among ES providers and beneficiaries, and support a **positive bias towards poor stakeholders** in either group to comply with the **Millennium Development Goals** and as a step towards **long term sustainability**.

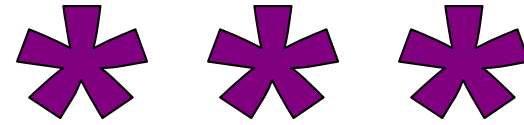
FOUR LEVEL OF 'CONDITIONALITY'



ES, ACTORS IN THE LANDSCAPE AND LIVELIHOOD ASSETS



RUPES-I synthesis



CES: Commoditized Environmental Services

- Direct interaction ES providers & beneficiaries
- Recurrent monetary payments: **supply and demand**
- **No** explicit poverty target
- **Actual** ES delivery & direct marketability:
- Conditionality Level I

COS: Compensating for Opportunities Skipped

- Paying for **accepting restrictions**
- Achievement of a **condition** of (agro)-ecosystem or **effort** (or restrictions in input use).
- Poverty target **added** with certain conditions
- Conditionality Level II/III

CIS: Co-Investment in (landscape) Stewardship

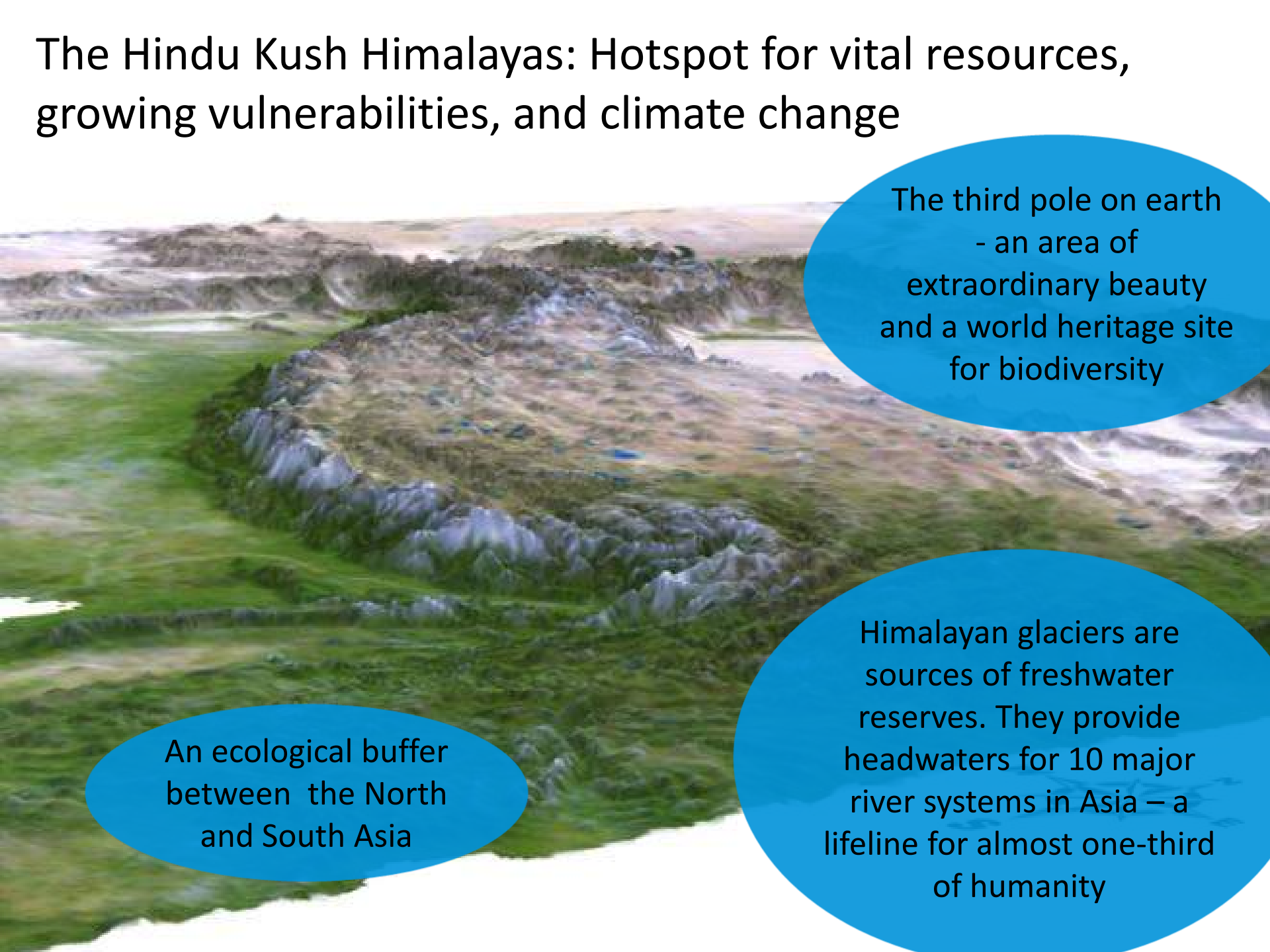
- **Entrust** the local resource management
- Full trust of **management plan & local monitoring** with high **social capital** level
- A **flexible** contract, broad sanctions and a monitoring requirement
- Conditionality Level IV

**'Real' ES,
recurrent**

**Proxies,
recurrent**

**Plans/ACM,
investment**

The Hindu Kush Himalayas: Hotspot for vital resources, growing vulnerabilities, and climate change



The third pole on earth
- an area of
extraordinary beauty
and a world heritage site
for biodiversity

An ecological buffer
between the North
and South Asia

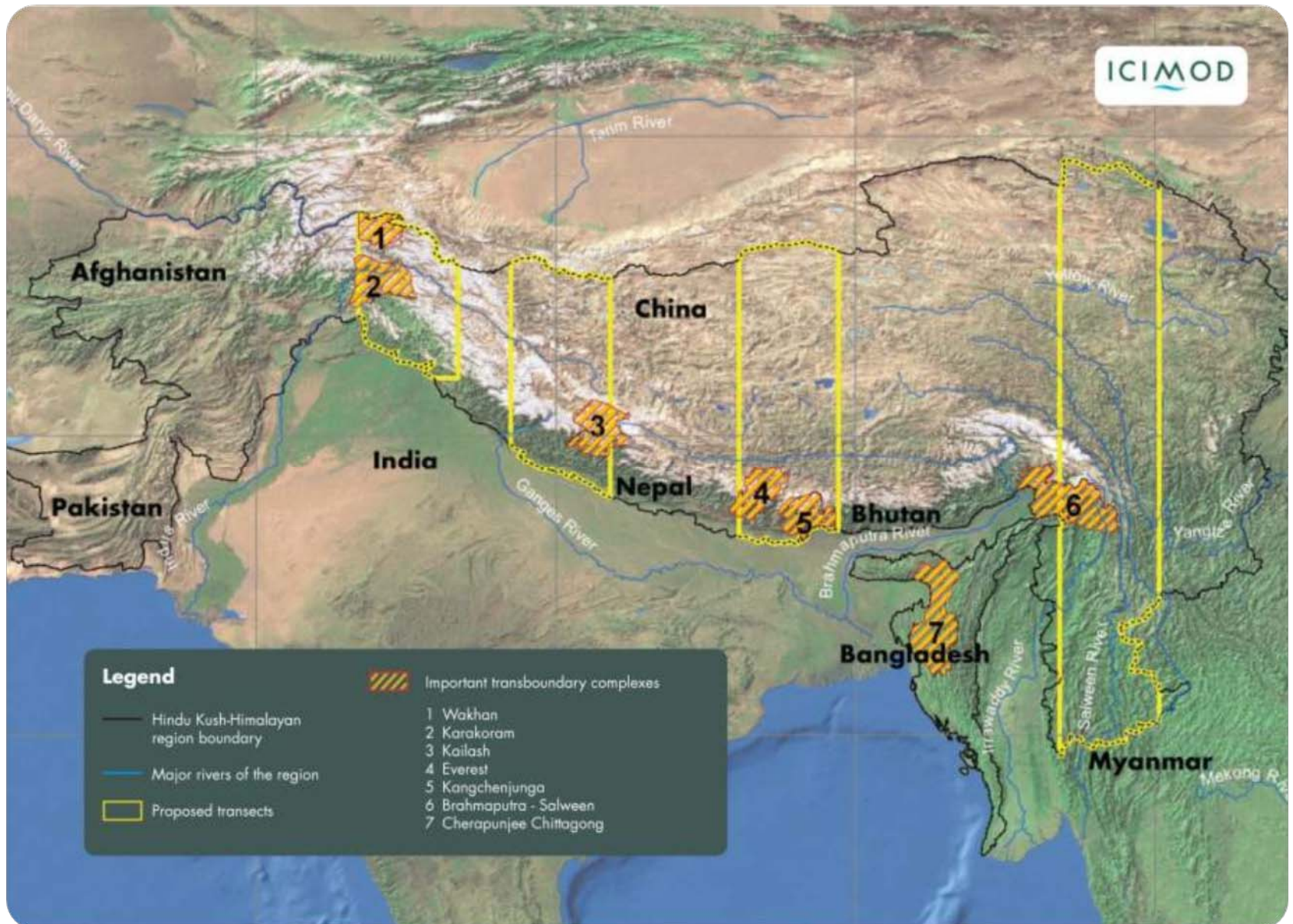
Himalayan glaciers are
sources of freshwater
reserves. They provide
headwaters for 10 major
river systems in Asia – a
lifeline for almost one-third
of humanity

P/RES in the context of HKH

- Most mountain communities depend on agriculture and forest resources
- Increasing human and livestock population
- Agriculture land-use intensification - forest, rangeland wetland degradation
- Himalayas as water tower, biodiversity resource
- Landslides & floods - local, national and international scales
- Indigenous communities
- Governance weak; political instability
- affect delivery of ecosystem services (watershed, biodiversity, carbon, tourism, culture)
- Value of ecosystem services - ???



Transects and landscape approach



Valuation of water services: SNNP – Sundarijal catchment (15.76 km²)

- **12.55 billion liters of water (2008/09) from the Sundarijal sub catchment (30-40 ML per day)**
- **Market price approach**
- **Surplus value: revenue-cost = service value**
- **Hydropower + drinking water: Rs 25,000-78,000/ha/yr**

	Water consumption	Value of water service (based on wholesale market)	Value of water service (based on retail price)	Value of water service	Value of water service/ha of the watershed
	million m ³	Rs million	Rs million	Rs/m ³	Rs/ha
Hydropower	6.00	6.86	13.23	2.21	8,397.33
Drinking water	12.55		85.49	6.81	54,248.00
Total value of water service	18.55		98.72	9.02	62,645.33

1 US\$ = Rs 71

Communities can also play a positive role
when there is a conducive policy
environment



1978]

Namdu, Nepal

2005]

P/RES in community forestry

Local agreements on PES for water supply



REDD+ demonstration



P/RES in the region

- a policy shift in recognition of PES among HKH countries – ICIMOD supporting national initiatives,
e.g.
 - Policy on royalty in the hydropower sector in HKH countries
 - Policy on watershed protection through government finance
 - Policy on carbon trading under the climate accords

PAYMENT OR CO-INVESTMENT FOR ES?

- ❏ A strict interpretation of realistic, conditional and voluntary PES (paradigm CES or commoditized ES) appeared problematic in most sites and situations.
- ❏ Monetary incentives may be counterproductive for public pro-social activities
 - undermine existing norms
 - not sufficient and/or durable enough to offset this loss of intrinsic motivation.
- ❏ PES schemes may need to address a livelihoods approach that considers the five capital types (human, social, physical, financial and natural) in their interactions across scales.
- ❏ Replacing the “payment” concept by “co-investment” language is an effort to appeal to both social and financial concepts.



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Thank you

For further information:

www.rupes/worldagroforestry.org

Contact: gracev@uni-bonn.de; l.beria@cgiar.org