

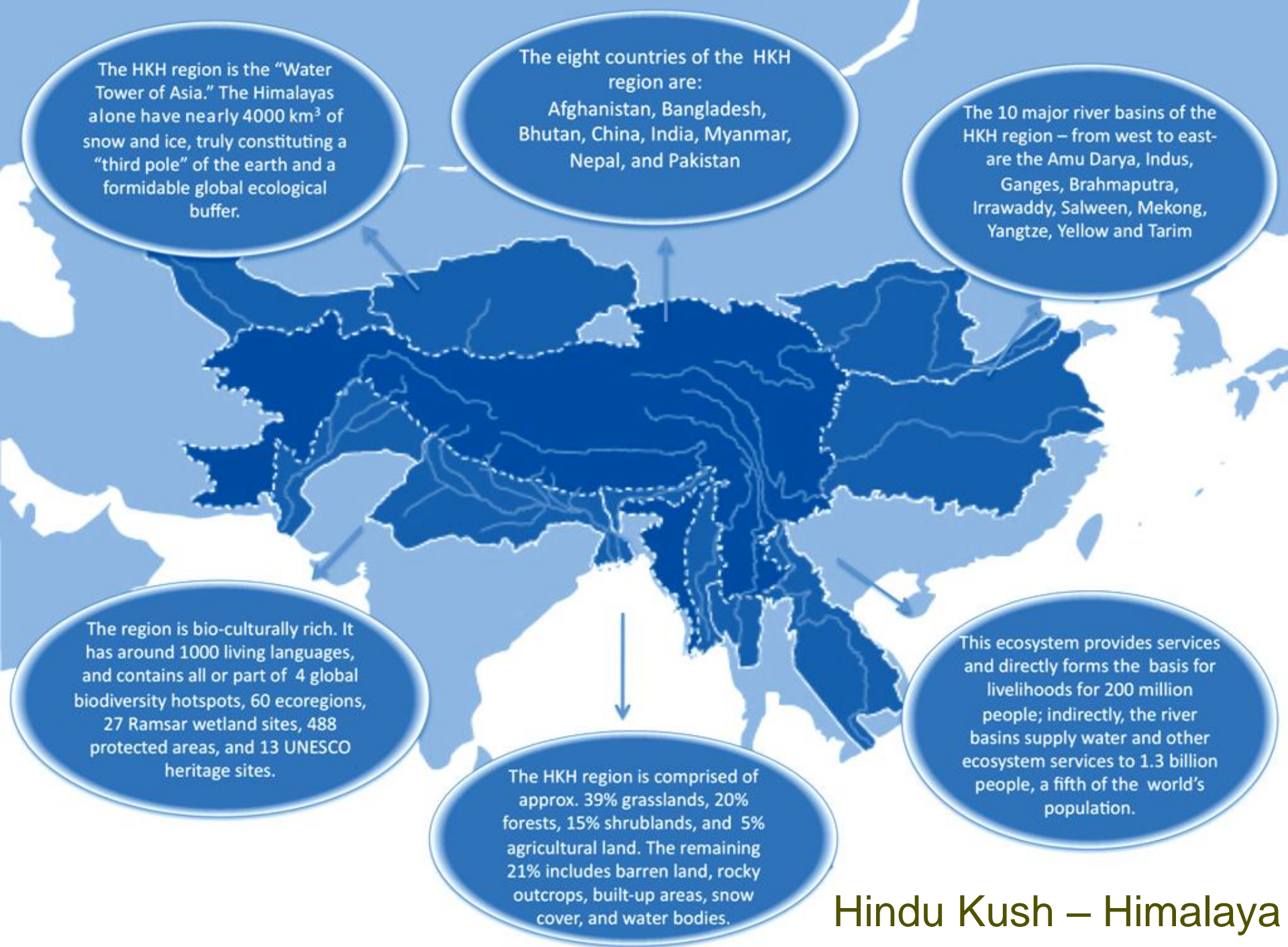
Opportunities for improving Ecosystem Services in the Hindu Kush Himalayas

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Bisht

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THREE DECADES
FOR MOUNTAINS AND PEOPLE



The HKH region is the “Water Tower of Asia.” The Himalayas alone have nearly 4000 km³ of snow and ice, truly constituting a “third pole” of the earth and a formidable global ecological buffer.

The eight countries of the HKH region are:
Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan

The 10 major river basins of the HKH region – from west to east – are the Amu Darya, Indus, Ganges, Brahmaputra, Irrawaddy, Salween, Mekong, Yangtze, Yellow and Tarim

The region is bio-culturally rich. It has around 1000 living languages, and contains all or part of 4 global biodiversity hotspots, 60 ecoregions, 27 Ramsar wetland sites, 488 protected areas, and 13 UNESCO heritage sites.

The HKH region is comprised of approx. 39% grasslands, 20% forests, 15% shrublands, and 5% agricultural land. The remaining 21% includes barren land, rocky outcrops, built-up areas, snow cover, and water bodies.

This ecosystem provides services and directly forms the basis for livelihoods for 200 million people; indirectly, the river basins supply water and other ecosystem services to 1.3 billion people, a fifth of the world’s population.

Hindu Kush – Himalaya

Threats and challenges

Climate change

Temperature

Glacier shrinking

Poverty

Out-migration

Environmental degradation

Increased natural disasters

Change Offers New Opportunities

- Climate change and disasters have opened the doors to regional cooperation
- Growing market for niche and high valued products (mtn tourism)
- Mountains provide habitat refuge
- Remittances – source of sustainable development finance?

What are the opportunities for Business?

Water-An essential resource

- Climate change will create risks for businesses
- Private sector can contribute towards improving productivity of water

Sustained Ecosystem Services

- Ecosystem-based adaptation as a measure to meet the twin objectives of UNFCCC (adaptation & mitigation)
- Incentive-based mechanism (PES and REDD+)
- Sound economic valuation of ecosystem services

What are the opportunities for Business?

Livelihood Prospects-Poor Communities

- Interventions for sustainable livelihood
 - Mtn tourism, agribusiness, herbal plants, and other NTFPs
 - Climate resilient development planning

Technological Innovation

- Better access to market information
- Increasing water productivity
- Value addition of mountain niche products
- Technology transfer and R & D

However Mountains are not attracting investment!!

Livelihood Options

- Communities Adaptation to Climate Change
- Value Chain Approach
- Link producers to markets

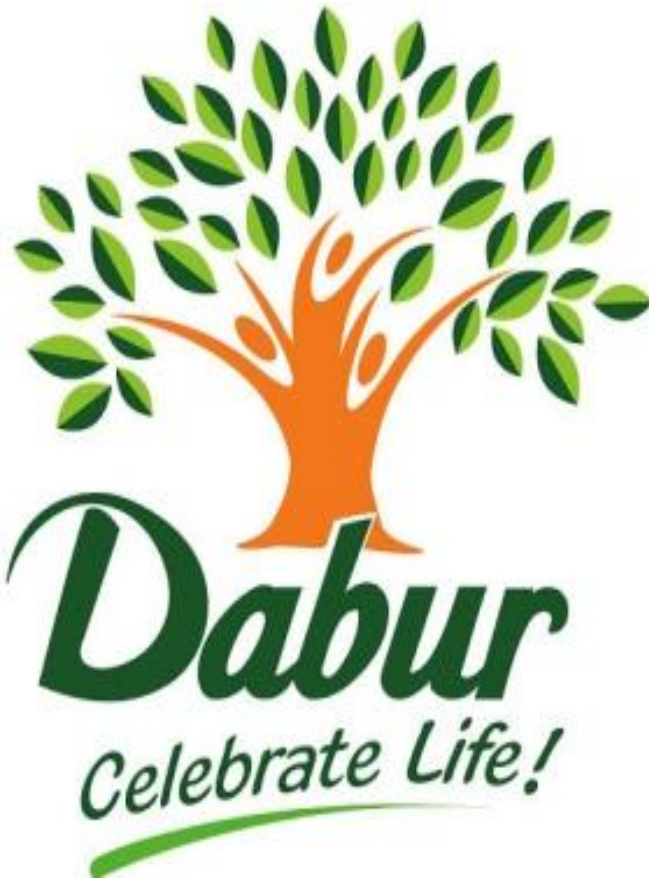


Sustained Ecosystem Services

Medicinal
Plants

REDD++

Beekeeping





- Mobile cum web based platform
- Communication database
- Information through mobile phones

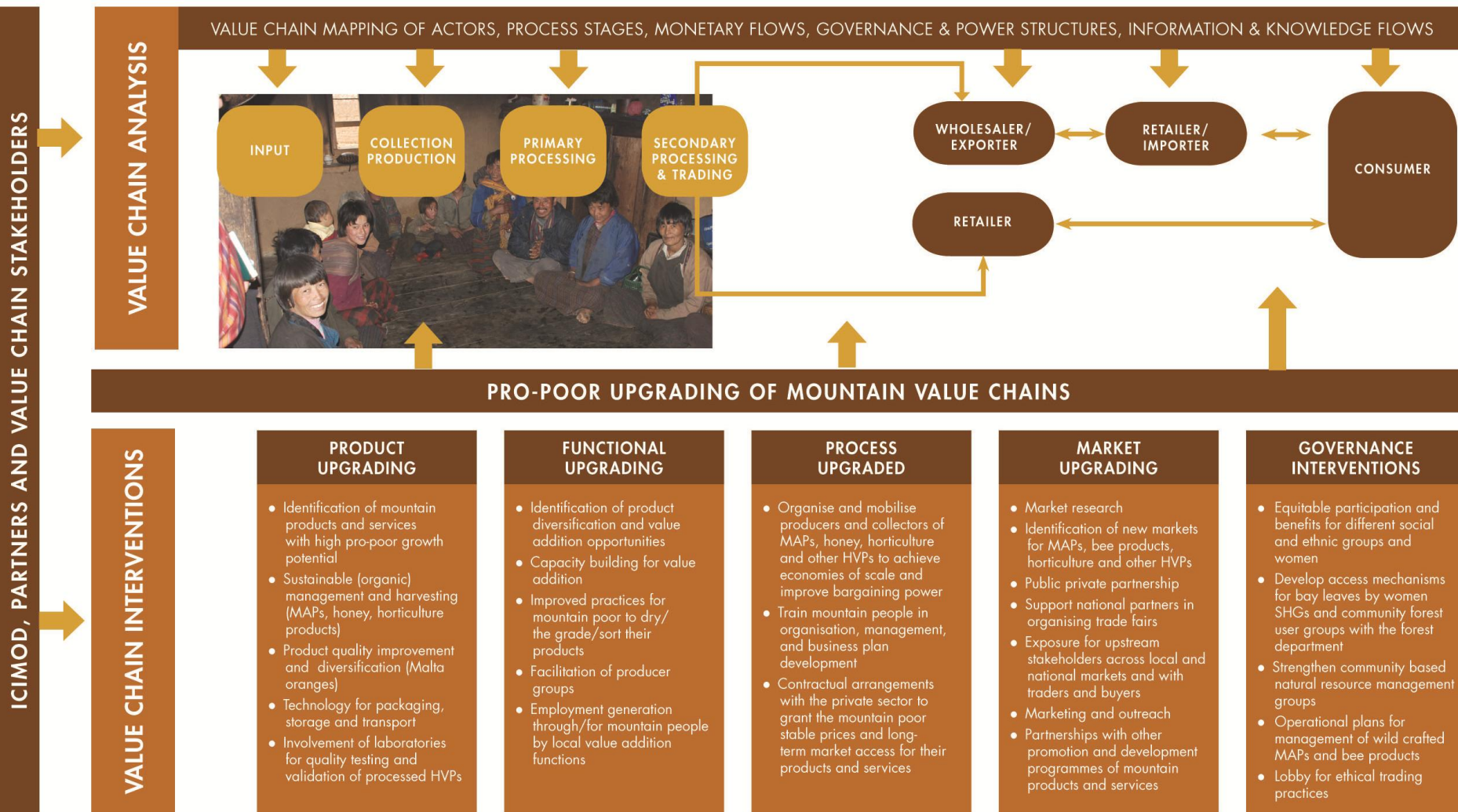


THOMSON REUTERS



Reuters Market Light

HVP Value Chains and upgrading strategies

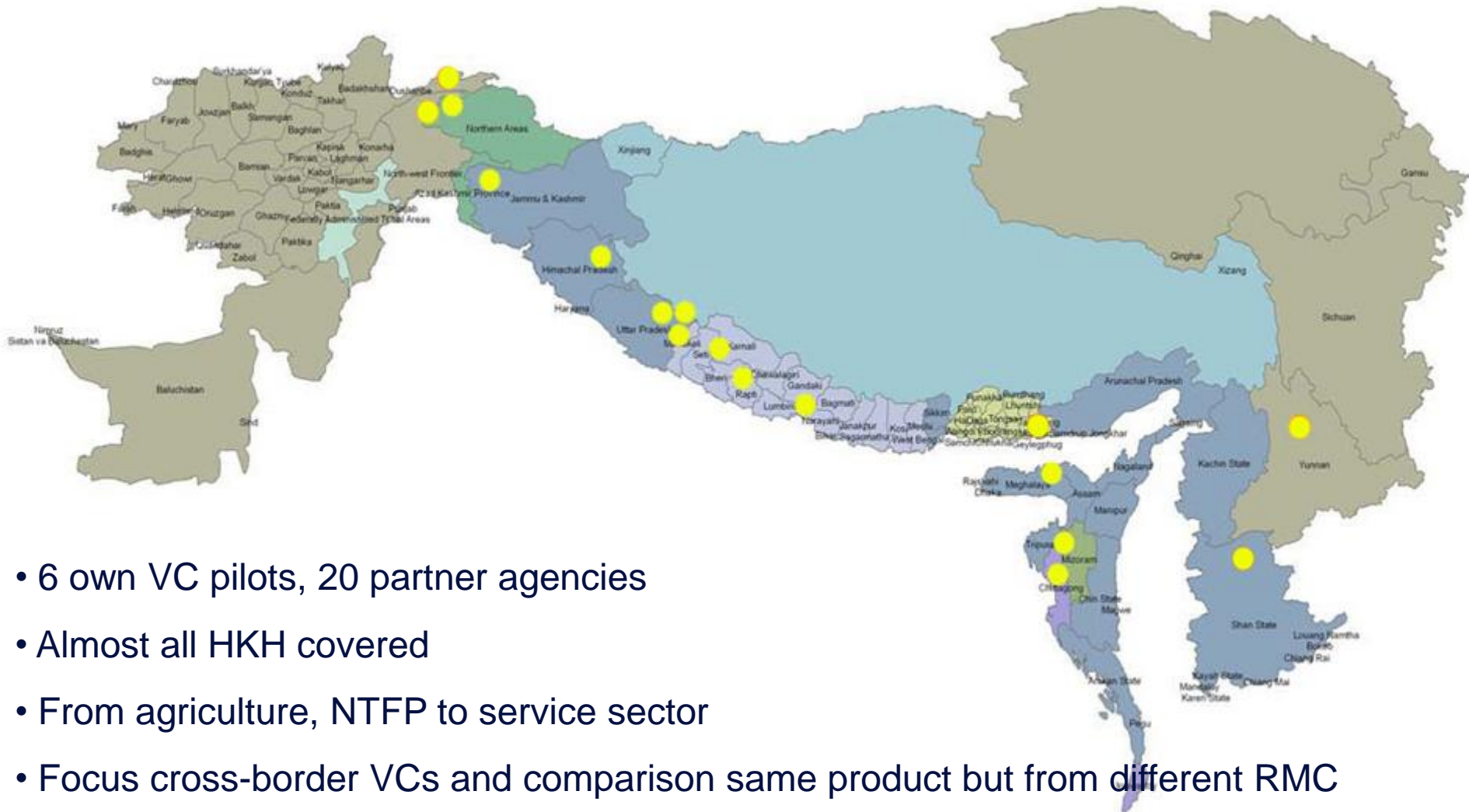


Mountain Value Chains

- Diversity of high value products - NTFP/MAPs Value Chains (Bay Leaves, Honey, soap nuts); Agro Value Chains (Fruits, Mushroom, Spices); Service Value Chains (Tourism)
- Poor, unorganised producers lack bargaining power.
- Unsustainable, inequitable and captive value chains.
- Lack of information, skills and services.
- Weak value chain coordination, institutional and policy support.



ICIMOD's regional VC pilots



Successful Community Forestry under conducive policy environment



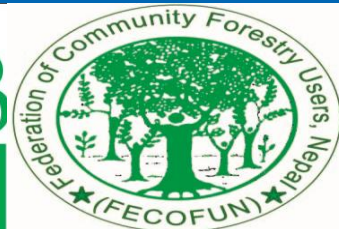
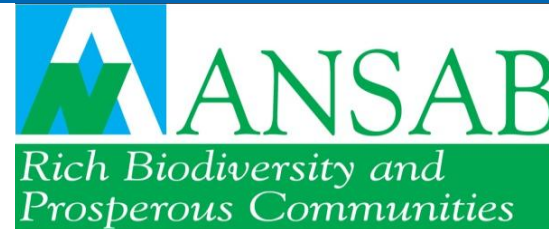
1978



2005

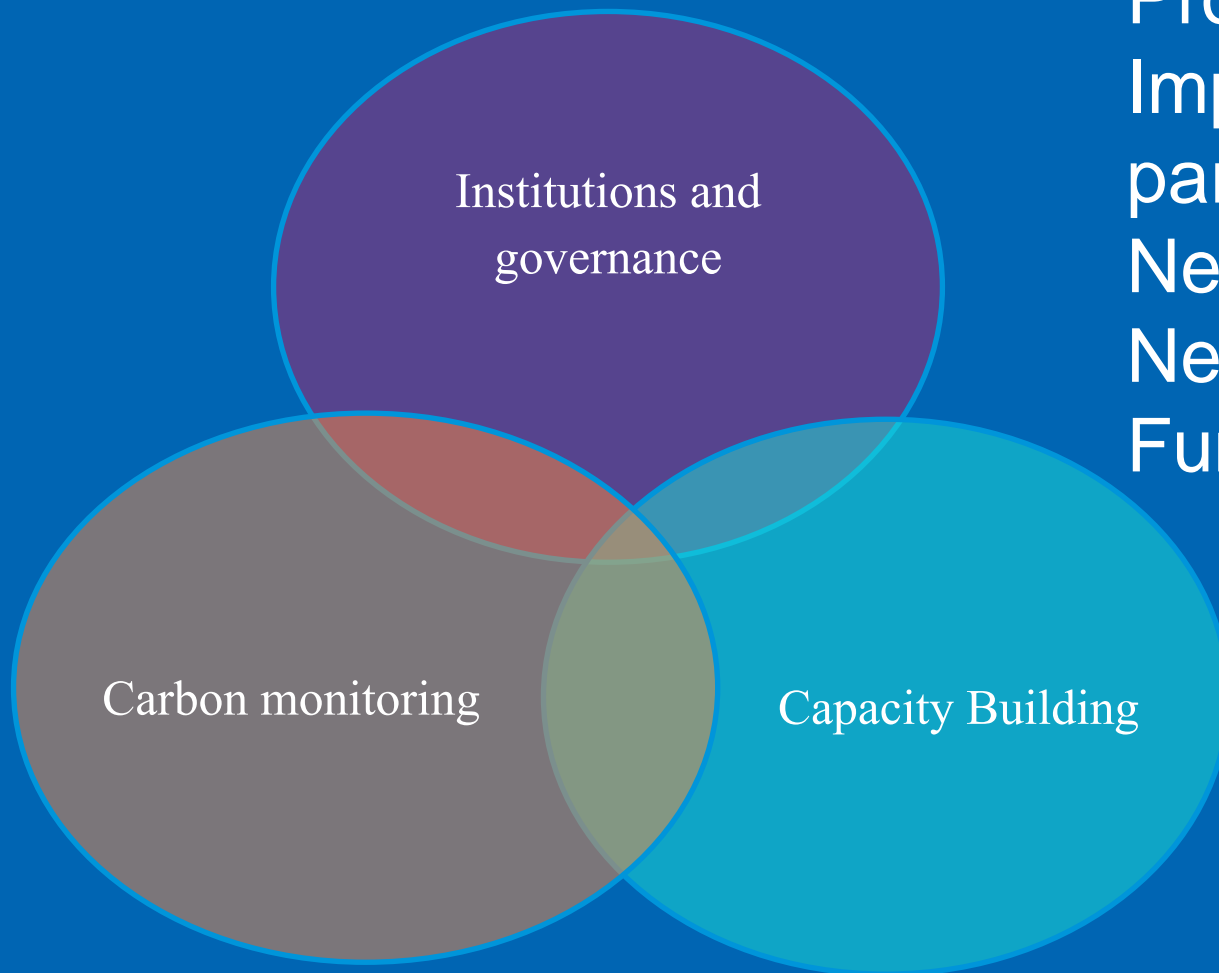
Namdu, Nepal

Piloting REDD+ Payment System through seed grant distribution in Community Forestry in Nepal



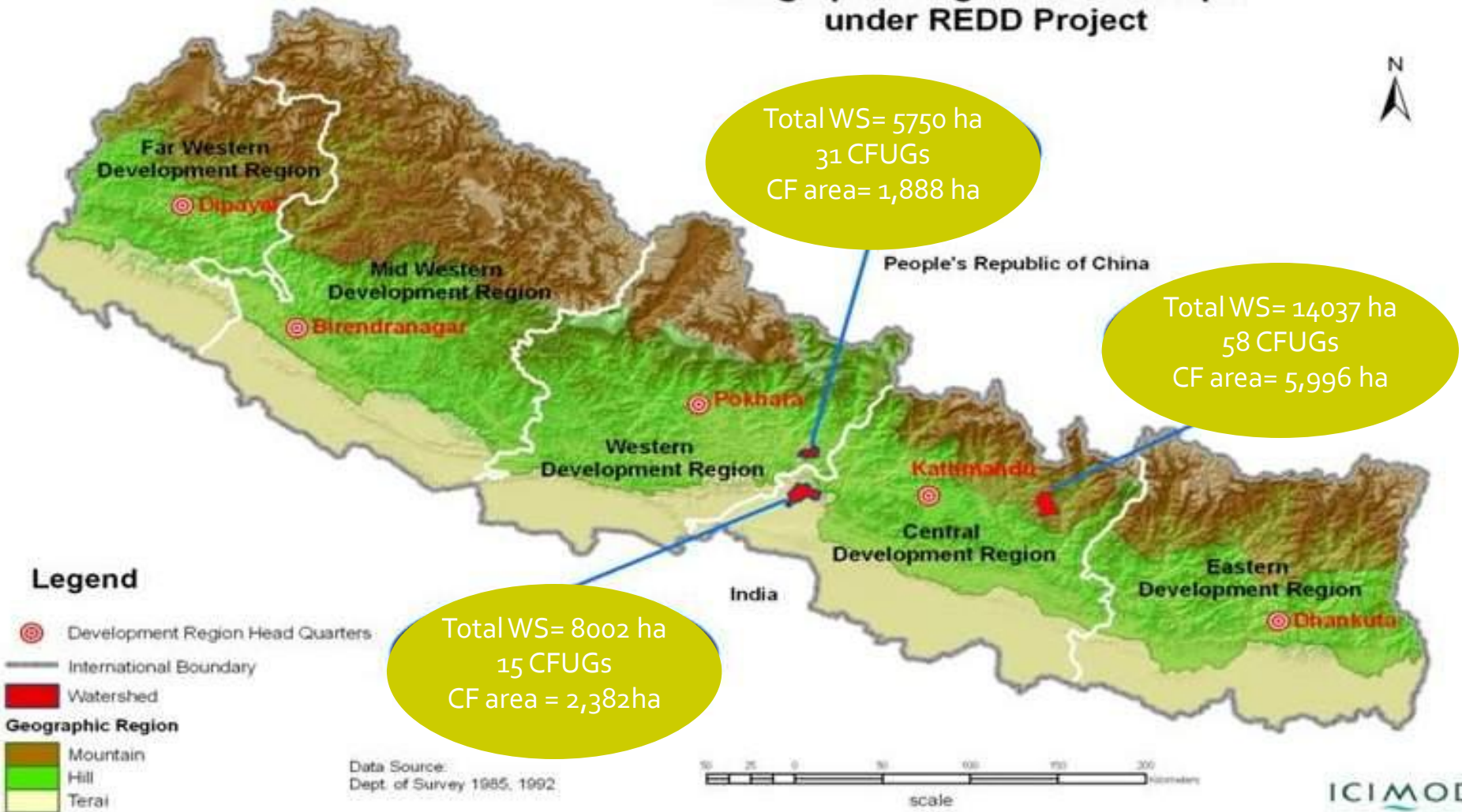
June 2009 – May 2013





Project lead : ICIMOD
Implementing
partners: ANSAB,
Nepal and FECOFUN,
Nepal
Funding: CFI Norad

Watersheds in Geographic Region wise of Nepal under REDD Project



Forests and project area in three watersheds

Watershed (District)	Watershed [ha]	Forest in watershed [ha]	Total Community Forest [ha]	Forest area [ha]	
				Dense	Sparse
Charnawati (Dolakha)	14,037	7,492	5,996	3,899	2,097
Kayarkhola (Chitwan)	8,002	5,821	2,381	1,902	479
Ludikhola (Gorkha)	5,750	4,869	1,888	1,634.	252
Total	27,789	18,182	10,266	7,437	2,829

Socio-demography data

Watershed (District)	CFUGs	CFUG Households	Population	Major ethnic groups
Charnawati (Dolakha)	58	7870	42609	Tamang, Chhetri, Brahmin, Thami, Dalit
Kayarkhola (Chitwan)	16	4146	23223	Chepang, Tamang
Ludikhola (Gorkha)	31	4110	23685	Magar, Gurung, Tamang, Dalit, few Brahmin and Chhetri
Total	105	16144	89517	

Project activities



Forest carbon measurement

Alternative energy



Awareness raising



Piloting Forest Carbon Fund



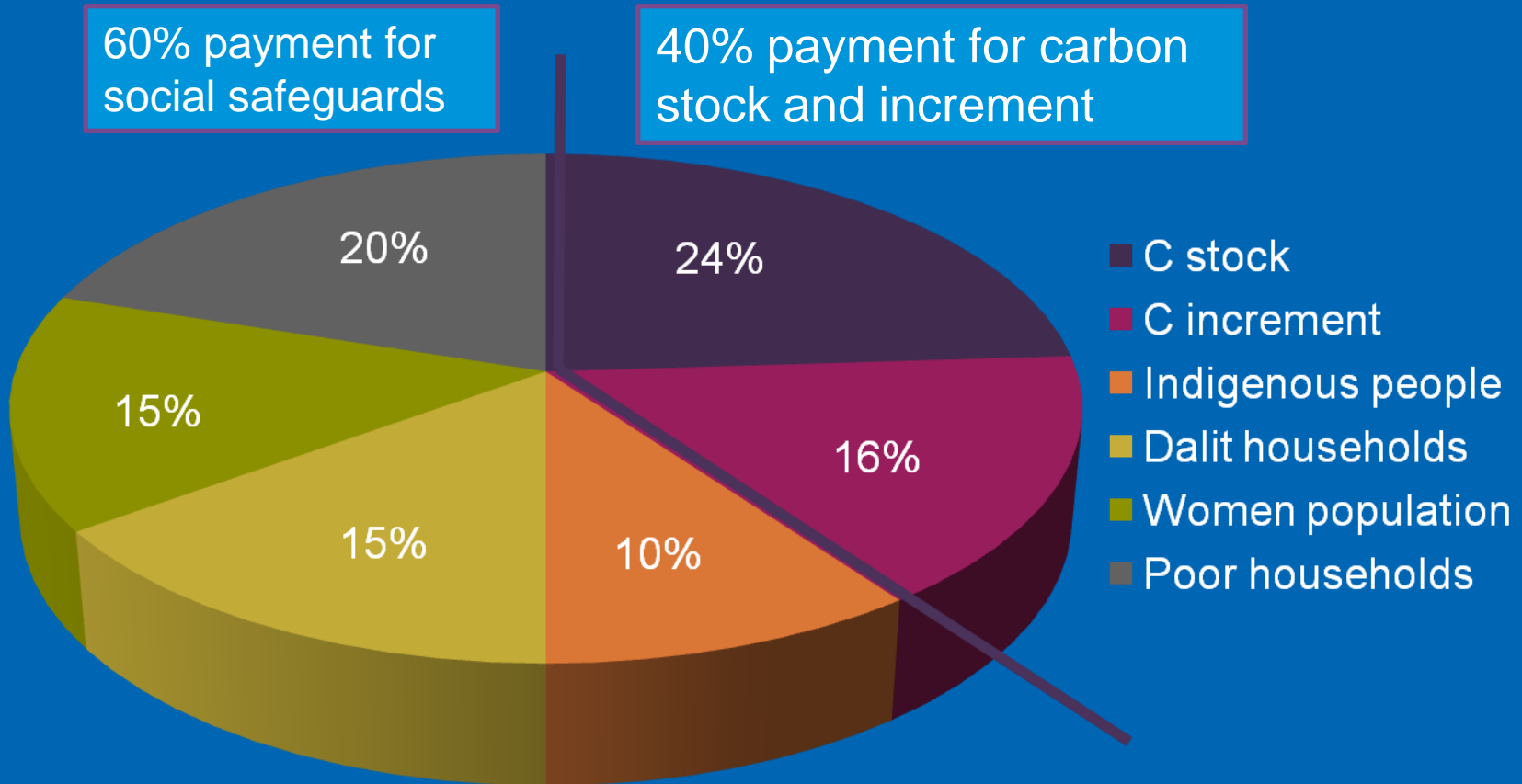
Stakeholder engagement



Watershed	Area (ha)	Range (ha)	Average carbon tonnes/ha		
			2010	2011	2012
Charnawati	5996	1.5-819.4	207	209	212
Kayarkhola	2382	34.5-329.2	288	290	291
Ludikhola	1888	5.2-270.7	209	214	217
Total	10266		226	229	231
Increase				2.62	2.68

Source: REDD+ project,
2012

REDD+ payment basis



In 2012, additional USD 100 per CFUG was given to reduce disparity between groups.

Payments in 3 watersheds	
Charnawati	\$ 7.4/ha
Kayarkhola	\$ 10.4/ha
Ludikhola	\$ 13.8/ha

How was REDD money used?

Expenses activities	Expenditure Status in %			
	Dolakha Gorkha	Chitwan	Average	
1. Livelihood improvement activities	53.8	50.3	48.5	50.9
2. Capacity building (awareness, workshop)	9.7	9.4	8.3	9.1
3. Forest carbon monitoring (training LRPs for forest inventory)	7.2	4.3	27.7	13.1
4. Alternative energy schemes	11.9	15.0	13.5	13.5
5. Others (Forest mgmnt activities + enrichment plantation)	17.4	21.0	1.9	13.4
	100.0	100.0	100.0	100.0
Co-financed by CFUGs (% in total invested amount)	43.9	2.3	69.9	49.2

Renew efforts to ensure that mountain issues are prioritized within development agendas and processes dealing with poverty reduction, food security, climate change, green economy and other issues critical to sustainable development in mountain areas;

Thank you

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