

Valuing Nature's Blessings

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**Activar la economía local
enfrentando el cambio climático**

Mexico City, Mexico

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Why Valuation Matters?

“I believe that the great part of the miseries of mankind are brought upon them by false estimates they have made of the value of things.”

Benjamin Franklin

“Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted.”

William Bruce Cameron

Not the TEEB perspective on Valuation...

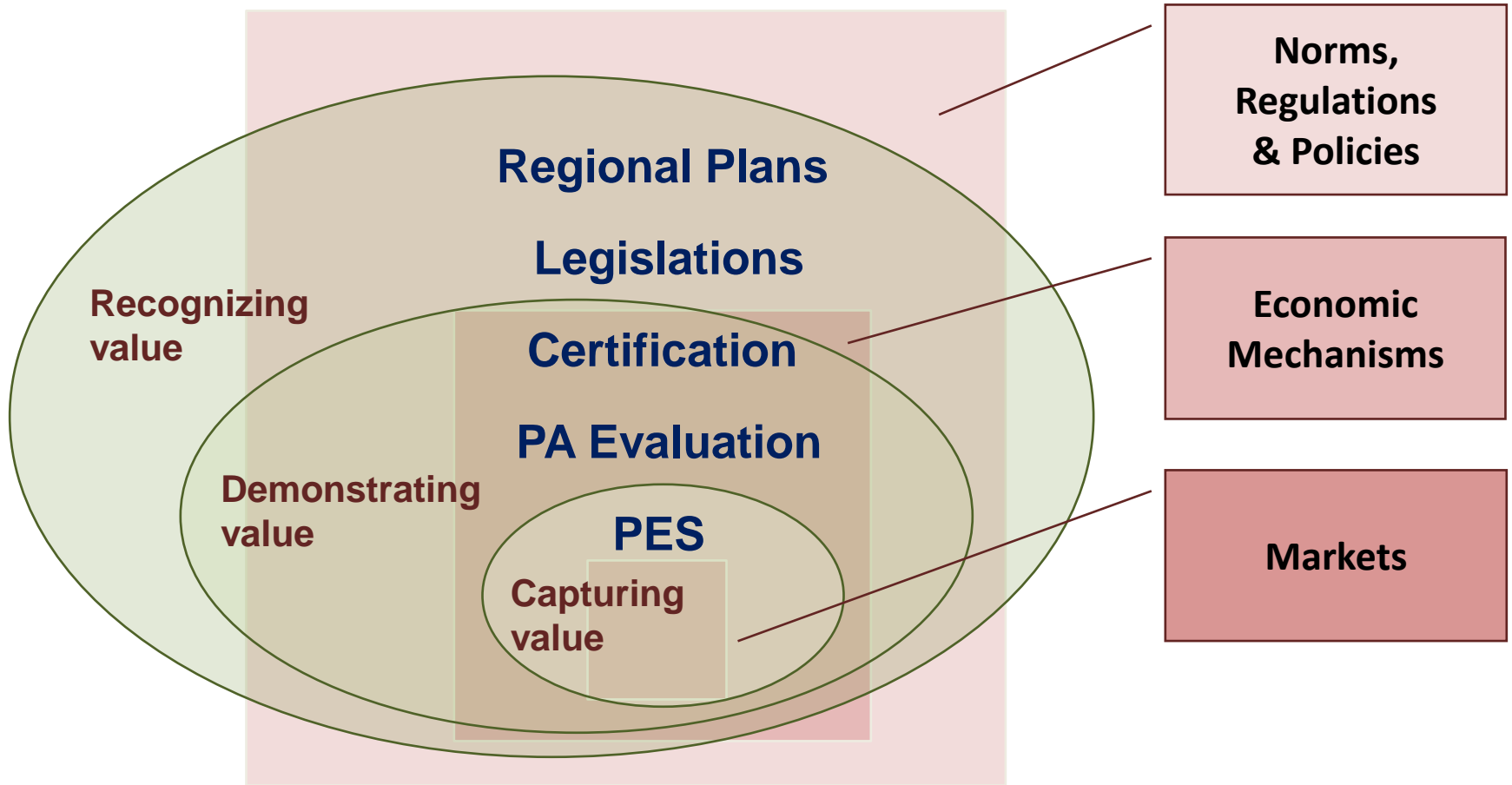


Valuation Vs. Pricing



- ❖ **Value (“valor”)** is the worth to you of what you receive.
 - “Valuation is a human institution” (TEEB)
- ❖ **Price (“precio”)** is what is paid for the value you receive
 - Markets provide prices for *private* goods and services, not *public* goods
 - Nature provides its valuable *public goods and services* for free, so there is *no price*!

The TEEB perspective on Valuation



TEEB: Challenges and Responses

Challenges

Valuation of nature involves some degree of subjectivity

Values generally cannot be measured in the same units

Fear of adding economic uncertainty to ecological uncertainty

Concern that we are selling the rights of Mother Earth

Responses

TEEB advocates providing the best estimates of value for a given context, keeping in mind multi-dimensional and socio-cultural embeddedness of value .

TEEB emphasises communicating monetary values with diligence, clarifying which dimensions are covered, and communicating them as lower boundaries, not as 'true value'.

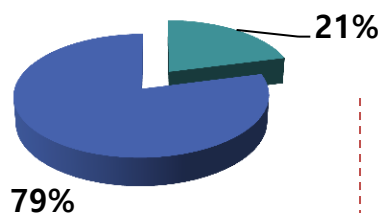
TEEB presents a range of discounting choices linked to different ethical standpoints, enabling end-users to make conscious choices.

TEEB communicates to decision-makers in the language of policy – economics.
It distinguishes between ascribing value to nature's services and putting a price on nature.

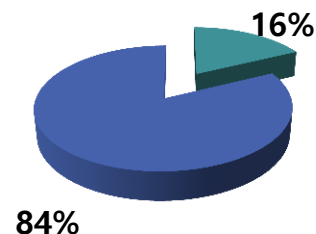
“GDP of the Poor”

**Agriculture, Forestry, Fisheries
as a % of conventional GDP**

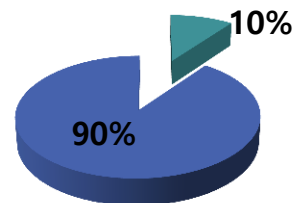
Indonesia



India



Brazil



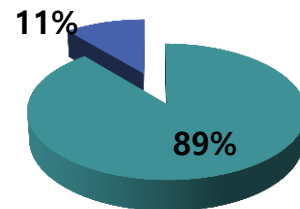
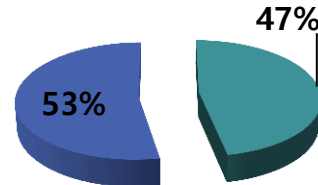
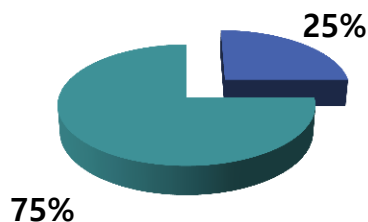
**“Ecosystem services
dependent” population**

99 million

352 million

20 million

**Ecosystem services as a %
of “GDP of the Poor”**



 **Ecosystem services**

GDP of the Poor in practice



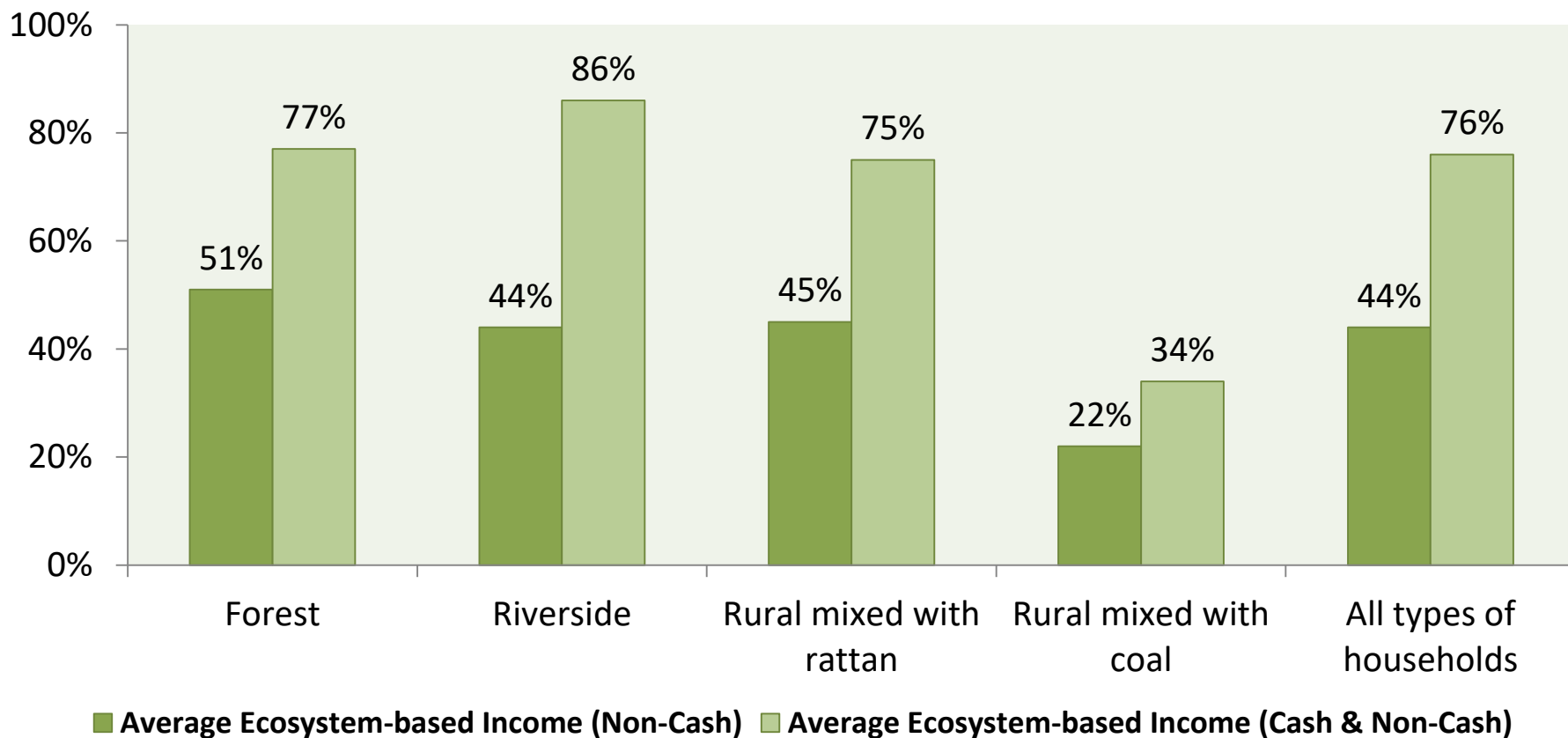
Rattan: A non-timber forest product

Measuring household income
Pulang Pisau, Central Kalimantan | Indonesia



GDP of the Poor in practice

Ecosystem Services Dependence in Central Kalimantan, Indonesia



Natural Capital Protocol (NCP)

Natural Capital Coalition (NCC), *earlier* TEEB for Business Coalition, in 2014 launched a 2-year project to prepare and test a global framework and guidelines for measuring and valuing environmental impacts (externalities) and dependencies.

Work-streams



Lot
1

Global natural capital valuation
framework (**'Protocol'**)

Lot
2

Sectoral valuation guidance for
Food & Beverage

Lot
3

Sectoral valuation guidance for
Apparels

Lot
4

'Protocol' Pilot Tests with
projects across many sectors

These work-streams were coordinated by two groups of experts led respectively by **WBCSD** and by **IUCN** and presented the "NCP" in July 2016

Some Uses of Valuation...

- **Managing business impacts and dependencies on Nature :** *measuring materiality to prioritize corporate responses to business impacts, business dependencies and societal impacts (“negative externalities”)*
- **Payments for Ecosystem Services (PES) :** *setting fair compensation for actions that generate public benefit at private cost (“positive externalities”)*
- **Terrestrial Carbon Mechanisms (Green Carbon):** *integrating carbon sequestration in forests and farms into nationally appropriate mitigation actions (NAMAs) & Paris targets (NDCs)*

Payment for Ecosystem Services (PES) in Mexico

Payment for Ecosystem Services (PES) is a mechanism to provide incentives to protect ecosystem services by compensating landowners or managers who adopt practices that help conserve ecosystems (TEEB, 2010).



- Mexico introduced PES with two initiatives of National Forestry Commission (CONAFOR)
 - The **Hydrological Ecosystem Services Program** (PSAH) in 2003, and
 - The **Program to Develop Ecosystem Services Markets from Carbon Sequestration and Biodiversity** (PSA-CABSA) in 2004.
- Between 2003 and 2011, CONAFOR implemented **5,085** projects covering an area of over 3 million hectares under PES programmes.
- Indigenous and local communities own **70 percent** of Mexico's forests (FAO, 2010). PES provides an opportunity of alternative livelihoods that are sustainable.

Nationally Determined Contributions (NDCs) in Mexico

Mexico's NDCs : Reduction in GHG and Short Lived Climate Pollutants

Unconditional – 25 %

Conditional – 40 %

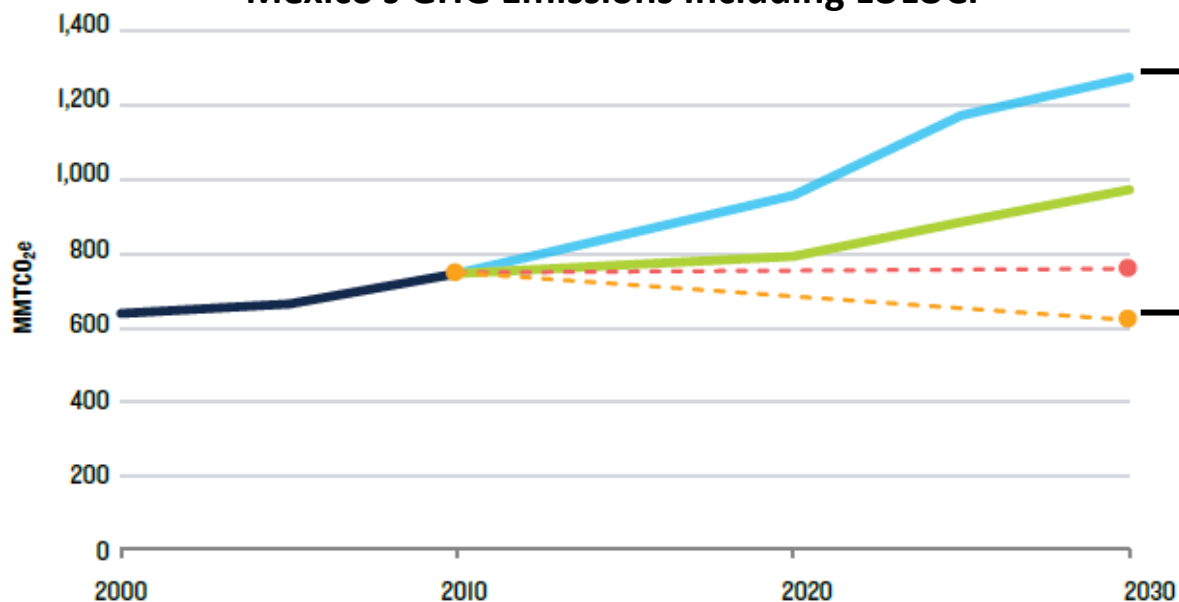
Base Year

2013

Target Year

2030

Mexico's GHG Emissions Including LULUCF



Source: Natural Resources Defense Council, based on Mexico's "National Climate Change Strategy" 10-20-40 Vision" and INDC submission to the UNFCCC.

— Historical Emissions
— National Climate Change Strategy BAU Emissions

— INDC BAU Emissions
- - - INDC Unconditional Targets
- - - INDC Conditional Targets

- *market & fiscal mechanisms needed for Mexico to reach its Paris climate goals*
- Mexico's 2018 "Certificados de Energía Limpia" (Clean Energy Certificates) a step in the right direction...
- to match demand & supply equitably & effectively, a robust **domestic carbon mechanism** is essential

Carbon Mechanisms: Some Important Questions

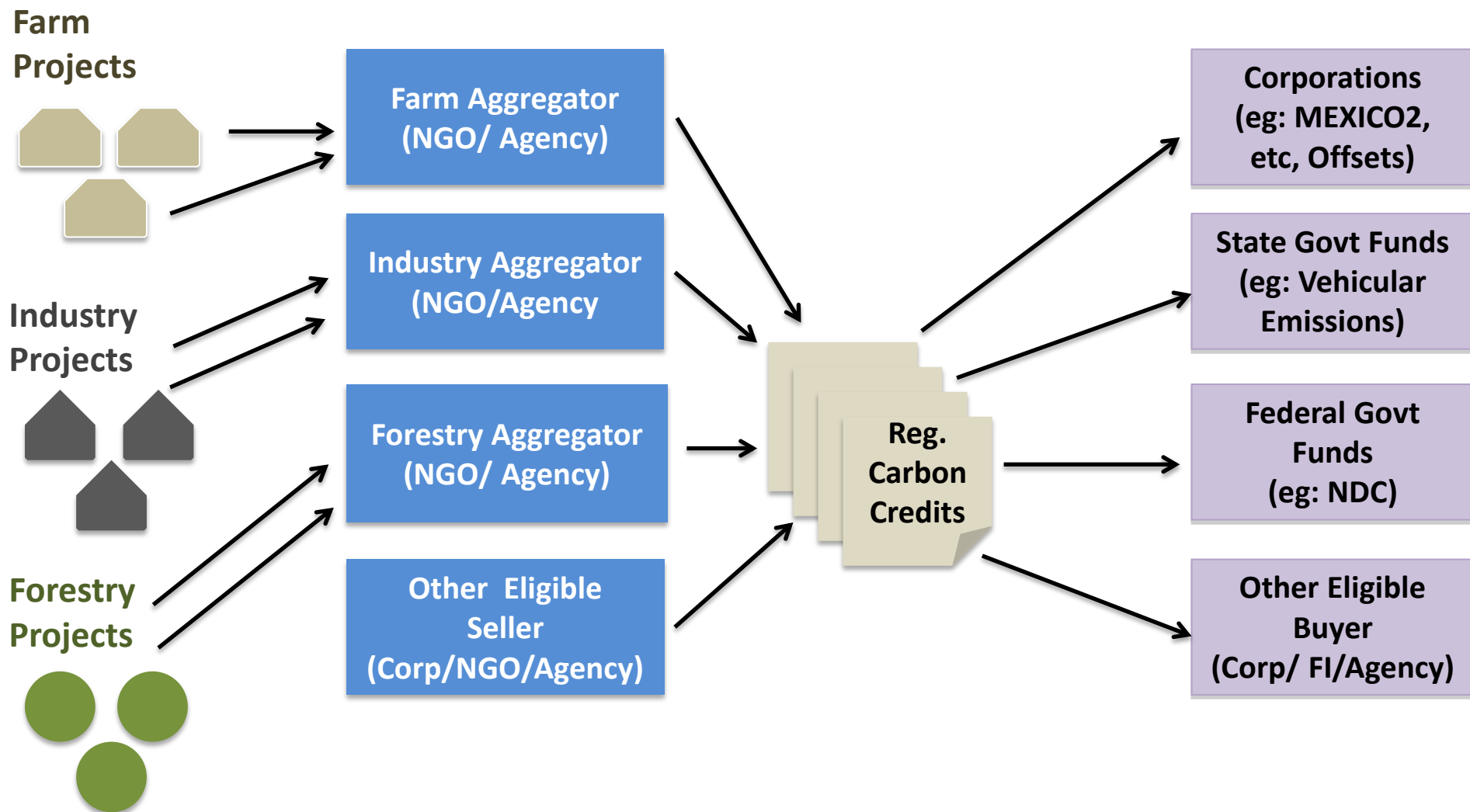
Ethics: Should climate change mitigation be seen as a corporate philanthropic option, emitting agents' responsibility, or governments' responsibility?

Quantities: What are appropriate annual **volumes** of emissions reductions vs BAU?

Prices: What are appropriate ranges for Carbon **prices**, to incentivize reductions, penalize third-party costs, provide fair compensation for mitigators?

- *Polluter Pays* Principle
- Corporate externalities are the biggest “free lunch” in human history
- Externalities of global primary production and processing sectors is USD 7.3 trillion costs (Trucost, 2013)
- Paris Agreement: INDCs will achieve only 50% of required CO_{2e} reductions to stay within 2°C target
- **Social Cost of Carbon / Shadow Price** estimates (/tonne CO_{2e})
 - Stern (2006): USD 85
 - UK: GBP 25 (SPC, 2007) to GBP 78 (2030)
 - US-EPA: USD 50 (2030; 3% Discount Rate)

Possible structure to achieve NDCs: *Domestic Carbon Mechanism?*



Thank You!

www.gistindia.org

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