



Co-benefits and indicators - Why track SD



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Outline



- Why track SD
- What to track
- Monetize co-benefits





Why quantify SD?



- NAMAs may result in, and are likely to be driven by, many important societal benefits other than GHG reduction.

social and economic development and poverty eradication are the first and overriding priorities of developing countries and that a low-emission development strategy is indispensable to sustainable development” (Source: 2/CP.15, paragraph 2)





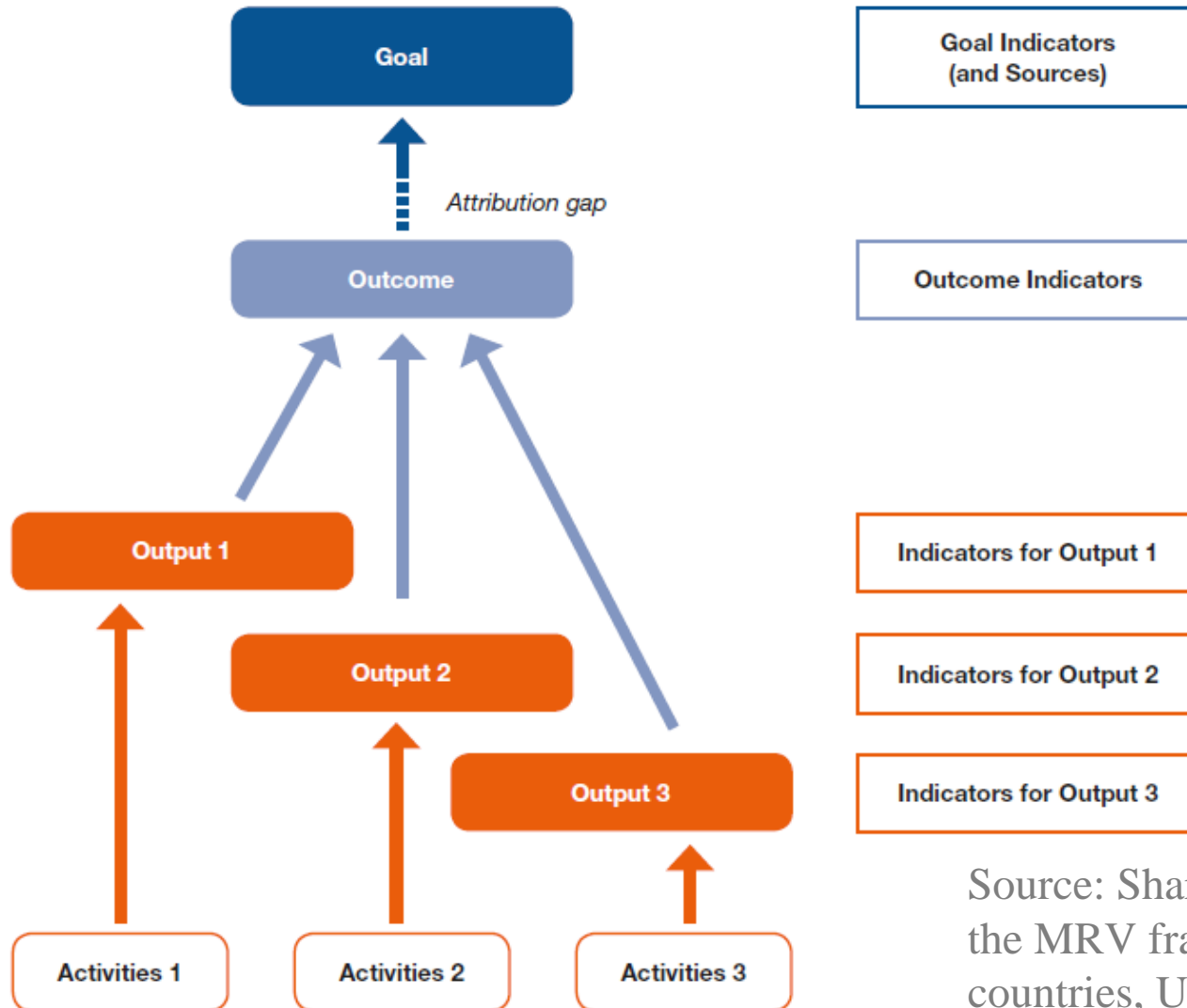
So why track SD?



- Efficiency of policy
- Efficiency of investments
- Efficiency of support
- Progression of development strategies
- Legitimize policy choices

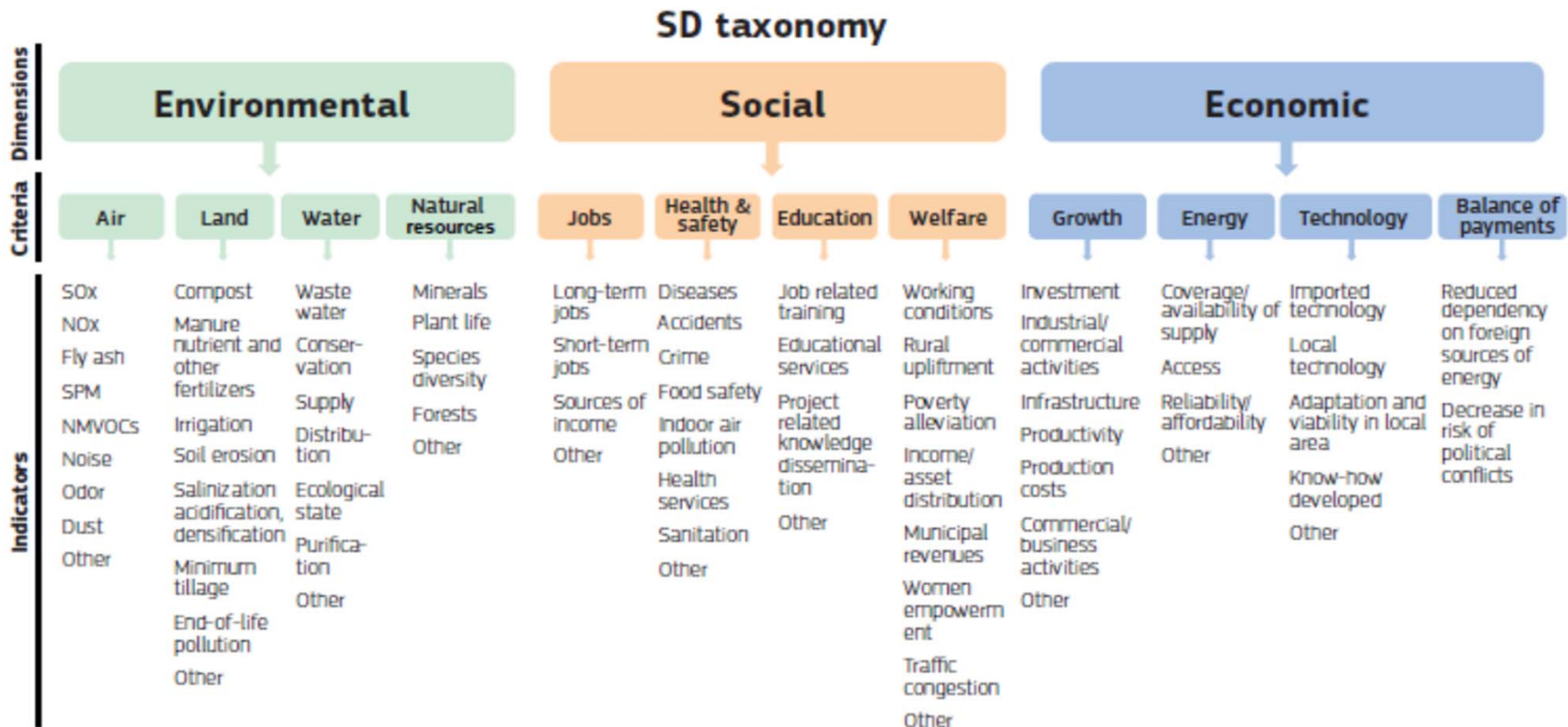


Indicators



Source: Sharma, 2014: Understanding the MRV framework for developing countries, UNEP DTU Partnership

Co-benefits



Source: Approved at CDM EB70:

https://www.research.net/s/SD_tool_vers7



How to track indicators?

Depends on the activities.

Relevant stakeholders to involve can usually be identified by analysing the value chain.

Look to existing public systems (surveys, statistical institutes, Sectoral data etc.)





Colombia Waste NAMA



Potential secondary MRV indicators to measure sustainable development can be divided in the following:

Environmental

- Rates of recycling in the formal and informal sectors, measured at the new facilities, at individual project level and as overall rate
- Amount of compost and/or Refuse derived fuel produced and coal/fertilizer displaced by their use
- Amount of leachate produced

Economic

- Savings from using refuse derived fuel, compost, and recyclables in productive processes
- Revenues from sale of Refuse derived fuel, compost and recyclables
- Reduction in transportation costs of waste to distant landfills
- Extension of landfill life
- Savings for less leachate treatment
- Value of products sold based on recycled materials

Social

- Number of jobs created by the new facilities or other indirect jobs from handling the three commodities produced (recyclables, compost, Refuse derived fuel),
- Number of informal waste pickers hired in the MBT facilities or formalized in other alternative treatment programs or technologies,
- Decreased health effects to population living near landfills or dump sites (to be measured over the time as part of the overall NAMA MRV strategy)





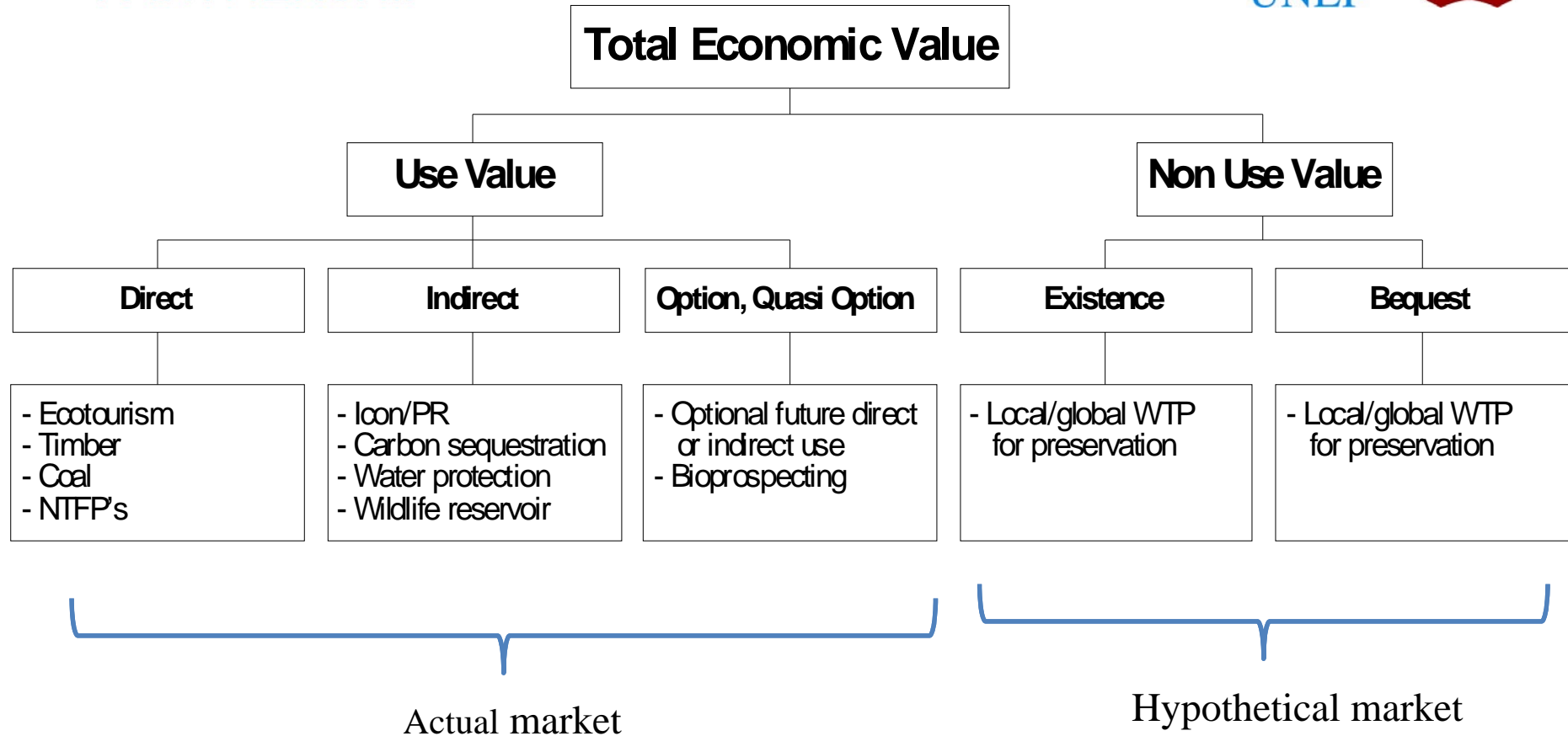
Monetize SD



South Pole – monetizing approach to waste sector NAMAs

- Mitigation actions are driven by sustainable development benefits that need to be monetized:
- Identify who is willing to pay for the SD co-benefits
- Determine the willingness to pay per unit of created co-benefit
- Facilitate a transaction of this willingness to pay to the producer of the co-benefits

“Willingness to pay” for co-benefits is determined as the existing spending within the current public budget or if privately generated through private spending.





Firewood Saving Cookstoves SD benefits in China



Environmental

Social

Economical

Forest ecosystem conservation
Indicator: reduced deforestation
Proxy: Hectars of forest area
Monetary proxy: Ecosystem service values (DeGroot et al 2012)
or
Value of the wood. Market value of average wood products that come out of the forest might be used or non-market value would be another option as well.

1- Enhanced livelihoods
Indicator: Time savings per household
Proxy: Amount of reduced spending time of firewood collection
fatebak1
Monetary proxy: Value of minimum wage for buying, china, corrected using Purchasing Power Parity (PPP).

2- Improved health
Indicator created based on linear relationship between indoor air quality and death rate
Proxy: Difference in indoor air quality PM2.5 ($\mu\text{g}/\text{m}^3$) (Percentage improvement in death rate calculated by applying PM2.5 changes to index)
Monetary proxy : Statistical Value of a Life Year

Balance of payment:
Indicator : the stove can save as much as 50-70% in firewood use (the local official energy department).
Proxy: Amount of reduction in fire food consumption
Monetary proxy: Price of firewood in the market.

fatebak1

Fatemeh Bakhtiari 23-04-2015

the minimum wage was then normalised into international dollar using the Geary Khamis Purchasing Power Parity (PPP) system, taking into account differences in standard of living. Therefore the value of outcomes was to some degree equalised across countries with disparate standards of living.

Fatemeh Bakhtiari, 23-04-2015

