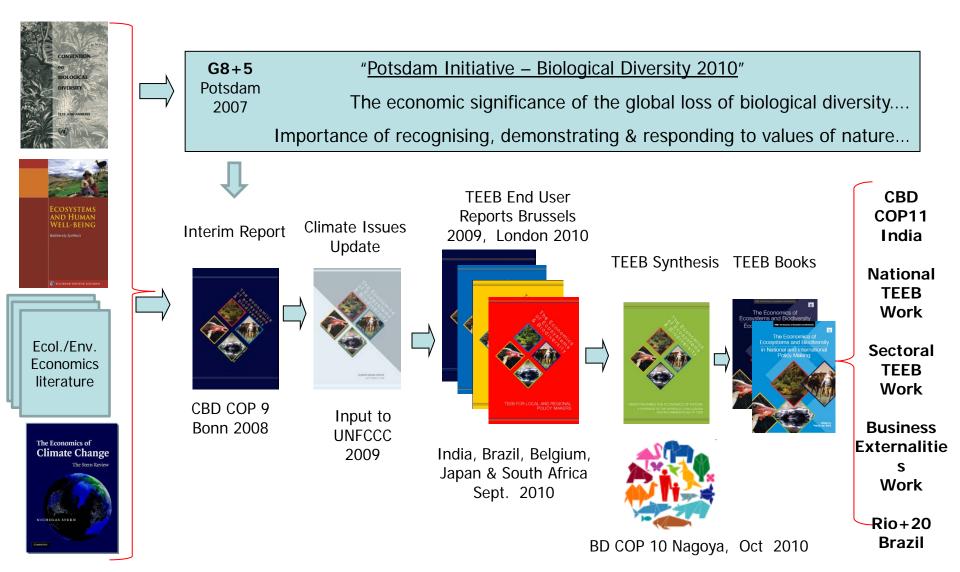
### TEEB (2008-2010) Genesis, Aims, and Progress





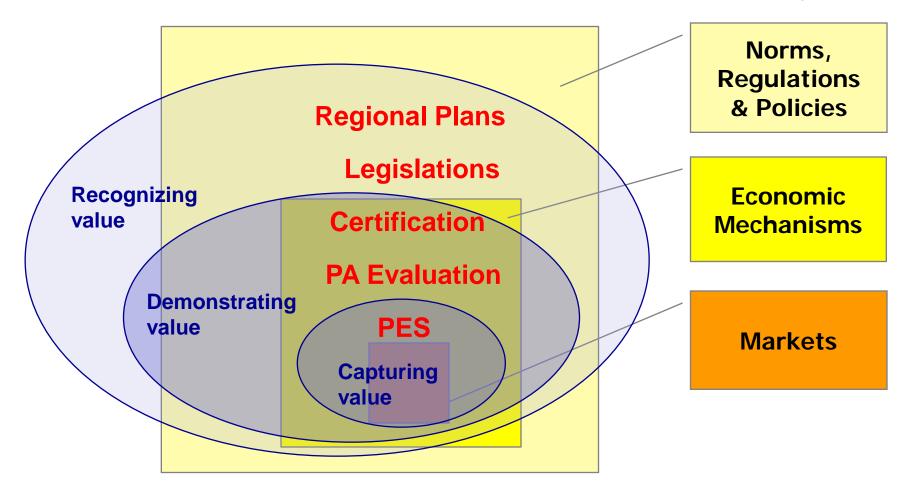
## **TEEB perspective on Valuation...**



#### Not the TEEB perspective on Valuation...



#### The TEEB perspective on Valuation







The importance of deliberation in valuing ecosystem services in developing countries – evidence from the Solomon Islands.









- Solomon Islands
  - Extremely high biocultural diversity
  - 85% of population lives on subsistence
  - Shifting cultivation, fishing, pigs
  - Kastom and Christianity



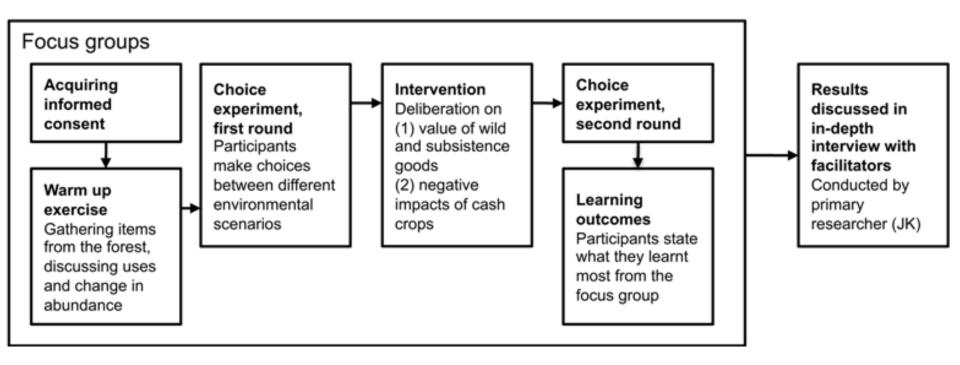


- Globalisation
  - Logging, mining
  - Cash crops: cocoa, copra, palm oil, teak
  - Social problems alcohol, prostitution
  - Loss of culture
  - Rapid population growth





#### **Deliberative choice experiment**



18 communities46 focus groups447 people

# Pelloerative / participatory methods



## Deliberative / Participatory action research

 People should be empowered to analyse their own reality

- Outsiders act as facilitators, not experts
- Learning should be experiential and not top-down





#### **Example choice task**

	Program A	Program B	Program C
Gue		• •	
(Calamus sp)	•		•
		• •	
Water quality	• •		
		•	•
	• •		
Food gardens	•	•••	•
Cocoa gardens	•••	•	•••
Cost	SBD \$500	SBD \$300	SBD \$0

Modal income: US \$220 = SBD \$3300

#### **Results – first choice experiment**

	Baseline	Improvement	
Gue ( <i>Calamus sp)</i>	4 hr walk	15 min walk	US \$11
Water quality	High 3 months yr <sup>-1</sup>	High all year	US \$33
Gardens	One food garden Three cocoa gardens	Three food gardens One cocoa garden	US \$29

Modal income: US \$220 All figures per household per annum US \$73 (SBD \$1095)

#### Second choice experiment

- Refusal to trade-off environmental attributes against cost
- Willing to pay entire income towards maintaining environment
- Deliberation and social learning had a major impact on outcomes





#### **Methodological challenges**

- Low levels of literacy, education and language
  - Creates barriers to valuing complex environmental goods
  - Makes it difficult to utilise traditional survey techniques such as questionnaires and interviews.
  - More deliberative and participatory approaches to data collection may overcome these issues.

#### • Informal or subsistence economies

- People may have little or no experience of dealing with money.
- People find it difficult to place a monetary value on complex and unfamiliar environmental goods / services.
- Valuation methods have been developed in developed countries
  - Are the current best-practice guidelines appropriate for applications in developing countries?



#### **Practical challenges**

- Extreme environmental conditions
  - Affect the researcher's ability to access areas or effectively undertake research.
- Lack of local research capacity to design, administer and analyse research projects
  - Involvement of local people is considered essential within the research process to ensure that local nuances / values are accounted for.
- Sometimes easier to administer valuation studies in developing countries
  - Response rates are typically higher
  - Respondents are receptive to listening and considering questions posed
  - Interviewers are relatively inexpensive (allowing larger sample sizes).



### **Policy challenges**

- Lack of local research capacity
  - Lack of awareness of valuation methods and of the importance of biodiversity to people.
- Lack of empirical valuation studies in developing countries
  - Little evidence to illustrate the importance of biodiversity to people.
  - Makes future value transfer difficult.
- Existing research is often extractive
  - Often little engagement with local communities, researchers or decision makers.
  - Research therefore has very little impact on the welfare of local people.



#### **Conclusions: Best practice guidance**

- The way people in developing countries think about the natural environment is different to those in developed countries.
  - They have much closer ties to their natural environment.
  - Their knowledge is often implicit and / or experiential knowledge
  - Low levels of literacy and education mean that most people will have little or no scientific understanding of their natural environment.
  - The above means that people from developing countries may have difficulty in expressing their value for natural resources.
- Given the above, standard approaches to valuation are unlikely to effectively reveal the preferences of people in developing countries.
- Valuation may be more effective if:
  - Local researchers are used throughout the research process
  - Deliberative, participative and action research approaches are incorporated into the valuation methods.



#### References

- Christie, M., Fazey, I., Cooper, R., Hyde, T., Deri, A., Hughes, L., Bush, G., Brander, L., Nahman, A., de Lange, W. and Reyers, B. (2008). *An Evaluation of Economic and Non-economic Techniques for Assessing the Importance of Biodiversity to People in Developing Countries.* Defra: London.
- Christie, M., Fazey, I., and Hyde T (2010). *Economic Valuation of the Benefits of the UK Biodiversity Action Plan*. Defra: London
- Kenter J, Hyde T, Christie M and Fazey I (2011 In press). The importance of deliberation in valuing ecosystem services in developing countries evidence from the Solomon Islands. *Global Environmental Change Human and Policy Dimensions.*
- Fazey, I, Kesby, M, Evely, A, Latham, I, Wagatora, D, Hagasua, J-E, Reed, M, S, Christie, M (2010). A three-tiered approach to participatory vulnerability assessment in the Solomon Islands. *Global Environmental Change.* 20, 713-728., doi:10.1016/j.gloenvcha.2010.04.011