

# Challenges for pro-poor benefit sharing schemes in implementation of REDD+ in Mexico

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# Outline

- The debate on benefit sharing in Mexico
- 9 basic challenges in the design of benefit sharing systems
- 3 alternative models for benefit sharing
- 6 criteria to assess benefit sharing models
- The criteria applied to the models



# The debate on REDD+ benefit sharing in Mexico

- Vision on REDD+ (2010)
- General Law on Sustainable Forest Development
- The CTC, GTs and ENAREDD+
- ER-PIN (IRE)
  - *standing carbon stock is the property of the owners of the forest land*
  - *the owners of the forest land (‘? including ‘posesionarios legales’?) have rights to the benefits from emission reductions*



# **9 basic challenges in the design of benefit sharing systems**



# 1. What is meant by 'benefits' in this debate?

While it is clear that there are various sets of benefits, including investments in up-front capacity building for communities and smallholders, and co-benefits that flow from implementation of REDD activities, the debate in Mexico focuses on ***how to distribute the financial compensation that would be received in exchange for reduced emissions or increased carbon removals*** (i.e. from results-based finance in Phase 3).

Note: 'Results based' implies results as measured against a ***national baseline*** (REL/RL)



## 2. What activities would qualify as 'REDD+ activities' and be eligible for these benefits?

Note: This has very important implications for **who** could potentially be eligible for benefits

- Activities within the forest (forest management, conservation)
- Activities outside the forest (changes in agricultural practice, better fuel technology)
- General policies which affect pressure on the forest in the long term or indirectly



### 3. The distinction between stock increments and reductions in emissions

- Reductions in emissions from deforestation and degradation are **counterfactual**. They are measured against baselines which predict what *would* have happened in the absence of REDD+ activities. Baselines usually constructed at a wider geographical scale, not for each parcel; they need to be nested.
- Increments in stock can be measured at the local level (for each parcel) and are **real**. Baseline would have to show that this growth is additional (could be based on qualitative assessment)

## 4. Uncertainty about how conservation will be rewarded

REDD+ includes 5 elements: reduced deforestation, reduced degradation, forest enhancement, sustainable management of forests, and ***conservation***

- The first four all involve changes in stock over time and will be rewarded internationally in terms of the *additional* changes in stock (\$X per ton of carbon dioxide per annum compared to baseline).
- Conservation by its very nature implies no change in carbon stocks. It is absolutely unclear how it will be valorised internationally, as it is not 'additional'.

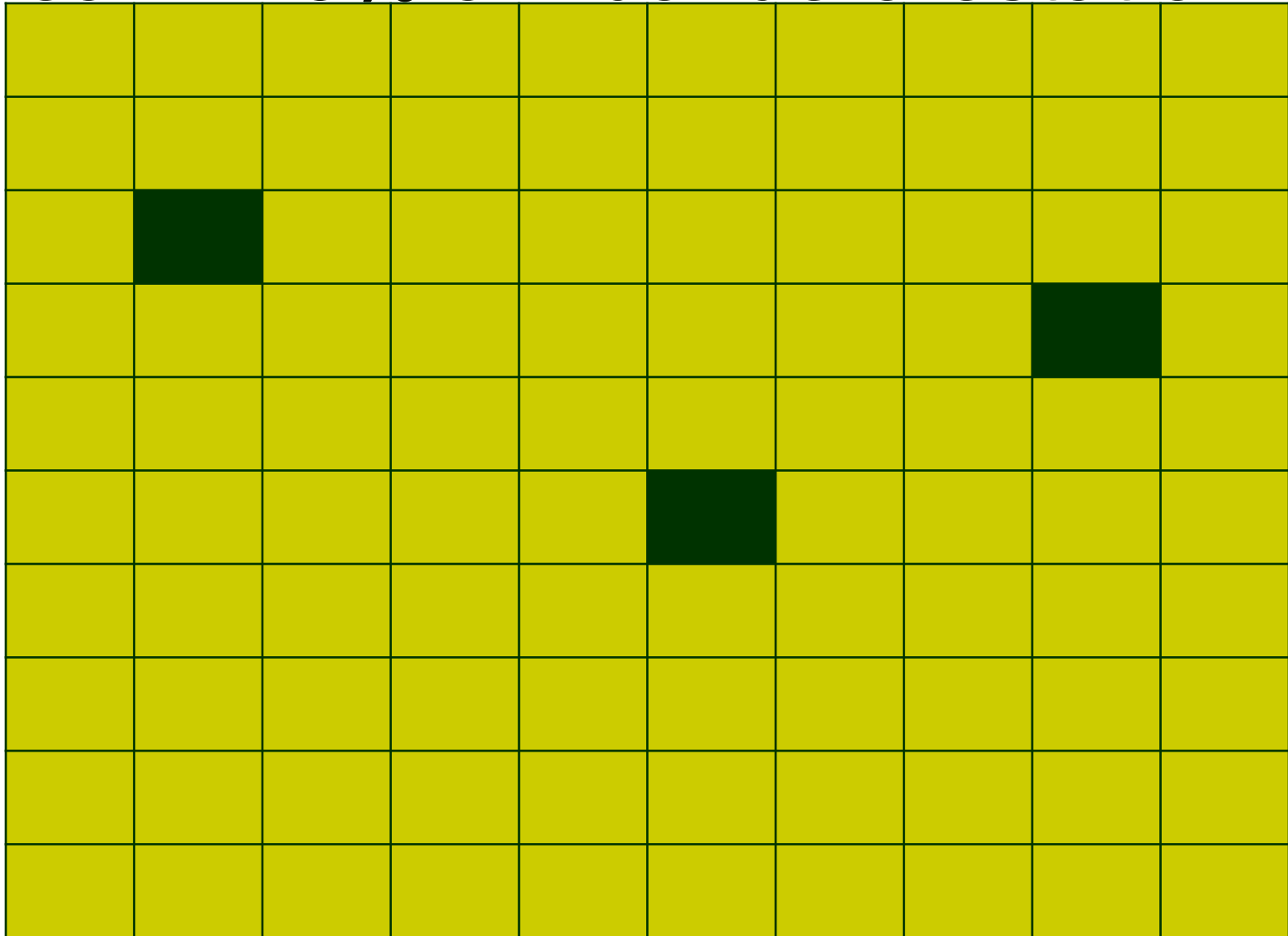




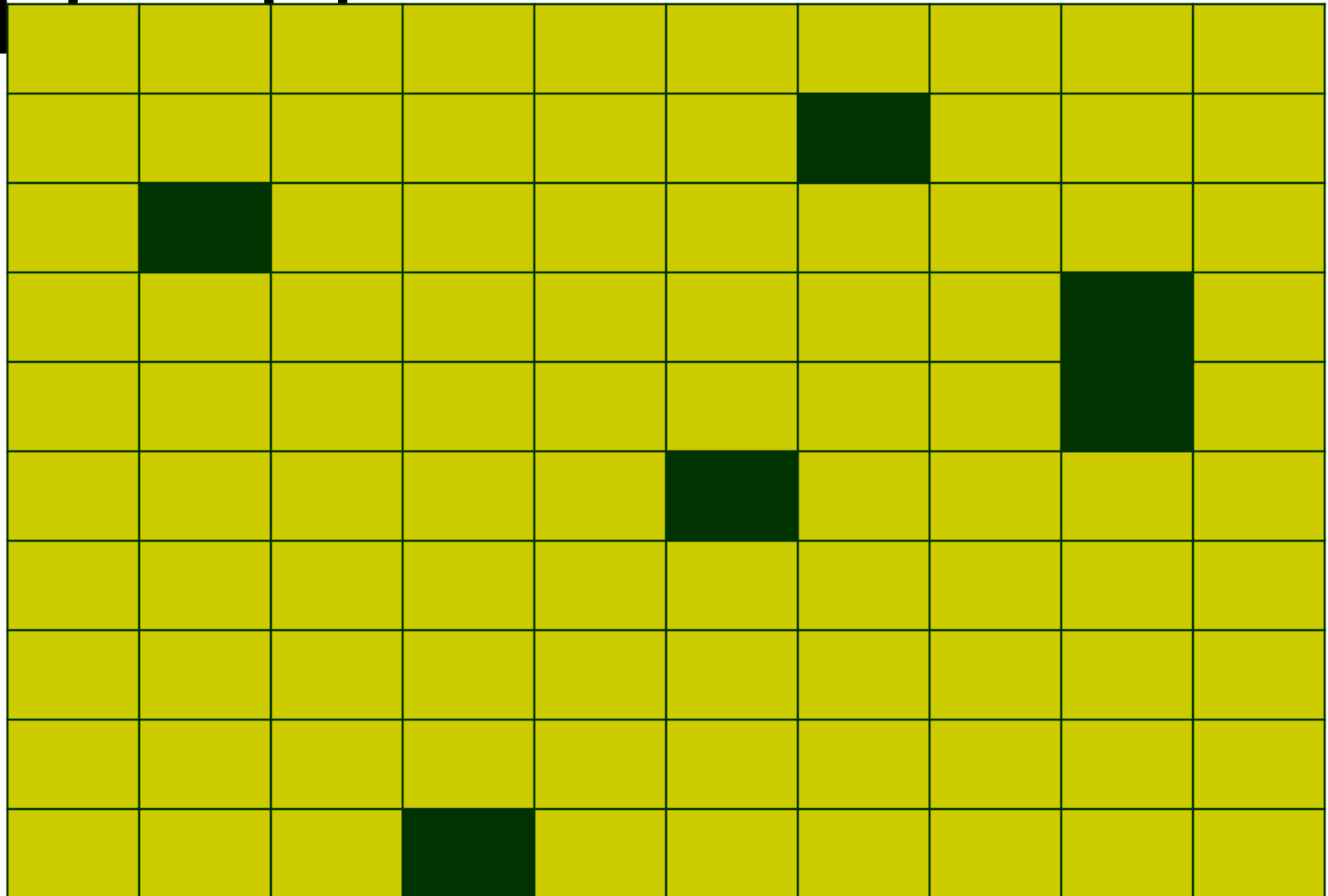
## 5. The problem of knowing who would have deforested in the absence of REDD+

- Reductions in deforestation are measured against a baseline which is usually at national or regional level
- This essentially expresses the probability that any one parcel will undergo deforestation in a given period
- Afterwards, it is not possible to determine which of the many parcels which have not been deforested *would in fact have been* in the absence of REDD+

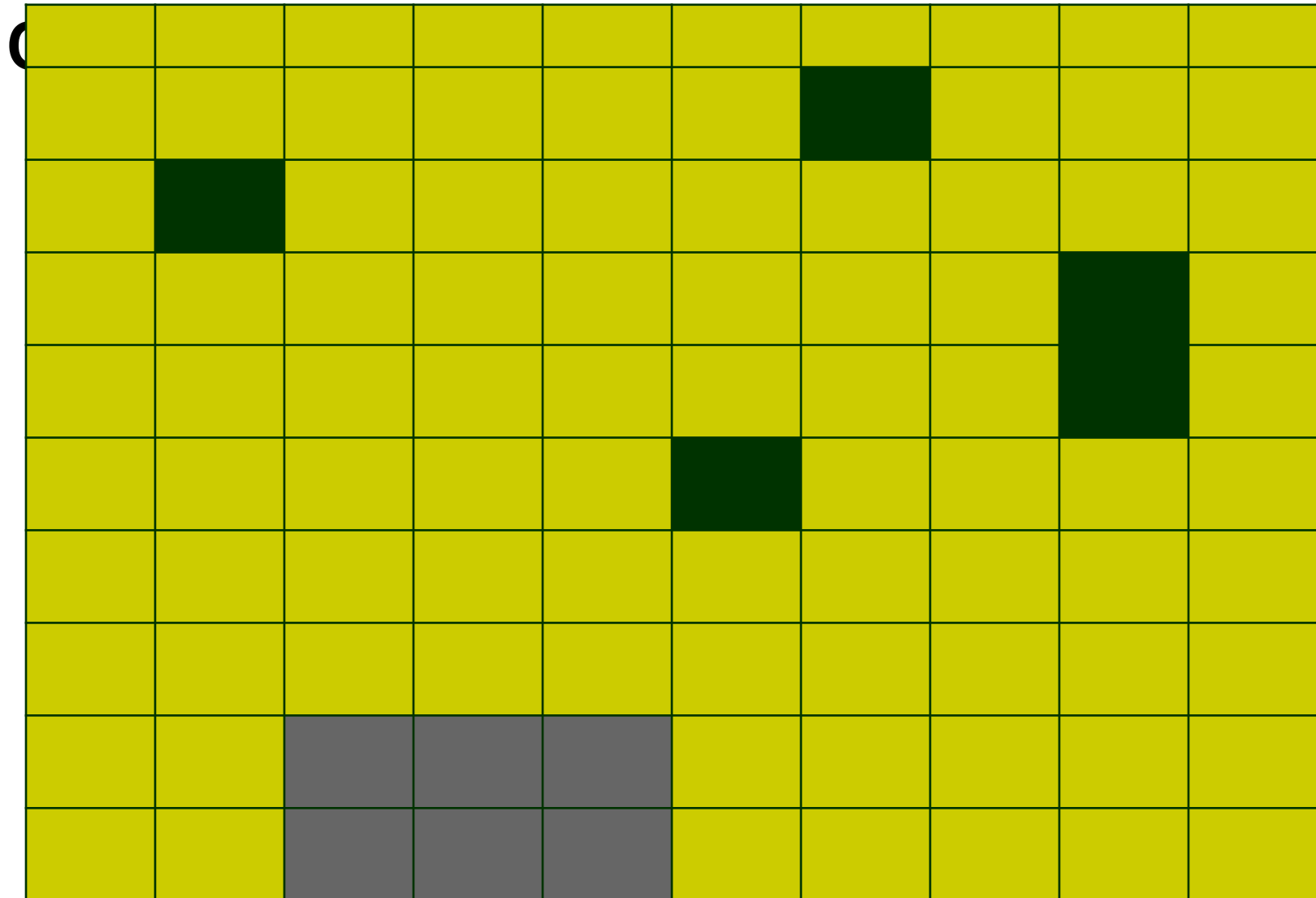
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definições



Year 3 (with REDD) = 2%





In other words: we have financial  
compensation equivalent to carbon from one  
parcel saved from deforestation

BUT

how do we know who deserves the reward?



## 6. The difficulties of measuring reductions in degradation


- Reductions in degradation, like deforestation, require a baseline (business as usual trend line)
- Most countries (including Mexico) do not have sufficient historical data from forest inventories to construct such baselines
- Deforestation baselines are based on area changes established from remote sensing: degradation refers to losses in forest density within forest, which cannot be observed with an accuracy from remote sensing
- Hence it may be very difficult to make credible claims for reduced degradation; moreover challenge 5 applies.



## **7. Payment models: input- versus output- based**

- Output-based models pay on the basis of the achievement (per ton of carbon saved)
- Input-based models pay on the basis of effort or work or sacrifice made (usually a fixed amount per hectare, conditional on the agreed activities having been carried out)
- Almost all PES schemes pay on an input basis even though they claim that they are 'purchasing the environmental services delivered'



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- Under REDD++ countries will be rewarded on an output basis: but should individual participants within countries be rewarded on this basis too?
  - Output-based reward systems imply much higher transaction costs of monitoring and reporting at the local level
  - They are often perceived as 'unfair' because some participants can gain much more than others
  - For example a village which has protected its forest in the past and has a low deforestation rate can potentially never earn as much as a village which has had high deforestation in the past.




## 8. Difficulties of directing benefits to the poor and to women

- Most deforestation and much degradation is carried out by richer members of communities (poorer members are labourers with no land or cattle)
- Between 30-50% of rural families are not ejidatarios or comuneros (i.e. do not have rights to benefits from common property). They may be allowed to gather firewood or graze their cow in the forest, but do not receive financial benefits from community timber resources.
- Women are rarely directly involved in deforestation and less than 30% of ejidatarios or comuneros are women.

## 9. Payment comes in at the top

- Rewards for carbon savings have to be calculated at national level against a national baseline (REL/RL)
- If some areas have lost carbon relative to the baseline, there will be less money for the areas that have gained carbon
- Hence is it likely that the benefits will have to be distributed from top down
- According to the ENAREDD+, these funds will *not* be used to substitute for existing funds for forest management/PES.
- According to ENAREDD they may be used for additional support to forest management/conservation; they may not necessarily be distributed in the form of cash payments
- There is need for a vertical (nested) and then a horizontal distribution system



**We suggest that in practice  
there are 3 possible  
distribution models**



# 1. 'Each for himself' - benefits related to individual performance as far as possible

- In the case of Mexico, communities/ejidos and smallholders = individuals
- Benefits only to those who own the forests
- Attempt to assess reductions in deforestation and degradation(*difficult!*), as well as forest enhancement, for each individual parcel
- Carbon savings measured locally and reported to national central database, buffers system to allow for losses elsewhere
- Ex-post receipt of benefits; probably in cash



## 2. 'All aboard' - maximum participation

- Any forest owners, plus others who may be able to reduce pressure on forests, register their REDD+ activities centrally in advance
- A fixed annual rate per hectare is paid in advance for selected forest activities (as in PES) and a fixed sum for other selected activities outside the forest (e.g. distribution of improved stoves)
- Continuation in second year conditional on compliance with agreed conditions in first year
- All carbon credits belong to government , which sells them interationally and uses the funds to pay for the annual advances
- Payment to participants may be in cash or in kind or in services



### 3. 'Two can tango' a bit of both


- Increases in forest stock on the individual forest parcel considered to be property of the owner, and can be sold independently (through a national broker or the VCM)
- Reductions in deforestation and degradation calculated by government at regional/national level and resulting credits used to fund a system like 2



# **6 criteria for evaluating the models**

(here we do not try to suggest which criteria should be the most important or should get the most weight)



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- Environmental effectiveness: maximising the carbon savings
  - Economic efficiency: at lowest cost per ton of carbon
  - Political legitimacy: system is acceptable to people and considered 'fair' - also transparent
  - Equity and gender equality: this can be interpreted in different ways (merit, rights, need). Note: forests and other resources are not equitably distributed in any case
  - Pro-poor potential: systems that are able to reach out and include poorer and marginalised people
  - Technical feasibility: data needed and transaction costs involved

# Comparison of models (grading out of 5 stars)

	1 Each for himself	2. All aboard	3 Two can tango
Environmental effectiveness	****	**	***
Economic efficiency	*****	*	***
Political legitimacy	*	****	*****
Equity (depends how you define equity)	?	?	?
Pro-poor potential	*	**	**
Technical feasibility	*	****	****



# Thank you for your attention

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