Implementing biodiversity compensation under the RSPO

3-4 February, 2015

DAY 1: Introductions and context

2:30-3:20 Objectives of session:

- To run through the reason for the workshop and the agenda
- To introduce participants to each-other
- To clarify terminology to be used
- To introduce key concepts

Contents:

- Purpose and context for workshop
- Tour de table of participants
- Explanation of agenda for the next two days
- Presentation of some key concepts and terminology on compensation/offsets that will crop up through the two days.
- Discussion of key principles, Q&A

3:20-3:45 Short exercise: Key Principles in practice

3:45: Coffee

RSPO workshop 21-22 March 2013 - Conclusions

- **Compensation required: Seperti katak di bawah tempurung**
- **Draft guidance** – good progress – some clarification/finalisation required
- There are **several options** for compensation mechanisms for RSPO members. Each brings its own advantages and disadvantages and requirements.
- RSPO can **use several implementation mechanisms**, best suited to different geographical, social and legal settings and operational conditions.
- **More thought needed on implementation options, and practical experience on the ground**
- **More thought on financial mechanisms such as trust funds.**

Agenda

DAY 1

2.30pm	Introduction to the course and people
2:45pm	Background: key concepts & principles. Q&A session and discussion
3:45pm	COFFEE BREAK
4:10pm	Practical issues: conservation gain & implementation options
4:45pm	Q&A session and discussion
5:00pm	Lessons learnt from global experience: key ingredients for compensation/ offset success

DAY 2

8:30am	Design of compensation projects: typical approach and steps; Q&A and discussion
10:30am	COFFEE BREAK
10:50am	Design of compensation projects: (continued): Finalising design ready for implementation.. Practical/Exercise about Compensation Management Plan
12:15	Q&A session and discussion
12:30	LUNCH
2:00	Implementation of compensation projects: Governance, Agreements, Management Plan, Financial arrangements
3:00	Practical/Exercise: Ready for implementation?
4:00	COFFEE BREAK
4:15	Q&A session and discussion, Wrap up
4:30	Close of meeting

Introducing the consultants

BBOP Business and Biodiversity Offsets Programme

FOREST TRENDS

- 10 years of international, multi-stakeholder agreement and experience

- Principles & Standard on NNL

- Methodologies
- Resource Papers
- Case studies
- Community of Practice

- Advisory services to **governments** on no net loss policy and systems.

- Advisory services to **companies** and industry associations on offset design, implementation, assessment.

RSPO Roundtable on Sustainable Palm Oil

- Specialised **training** (e.g. for governments, banks, Enviro Funds, companies, consultants etc.)

RSPO Compensation Life-Cycle

Compensation Plan Concept Note to Panel

Required Compensation budget or area established

Desired compensation described

Compensation options reviewed & Proposal developed

Compensation Plan finalised and implemented

Implementation reviewed

Work out Compensation Liability

Prepare ToR for Compensation Project, based on Criteria

Assess Compensation options, develop proposal

Compensation Management Plan & agreements in place; implementation starts

Evaluation, reporting, & adaptive management

Approval by Panel or CTF

RSPO grower submission

CTF Guidelines

RSPO grower

Sample ToR could be developed by RSPO

RSPO grower selects preferred option

Grower develops own proposal or reviews proposals by competent others

Criteria for assessment could be developed by

Approval by BCVWG-CP (after possible peer review)

RSPO grower submits plan

Competent partners may implement

Framework Compensation Management Plan could be

BHCVWG-CP reviews report to check delivery

Verifier (who?) Panel-appointed?

RSPO grower submits annual progress report

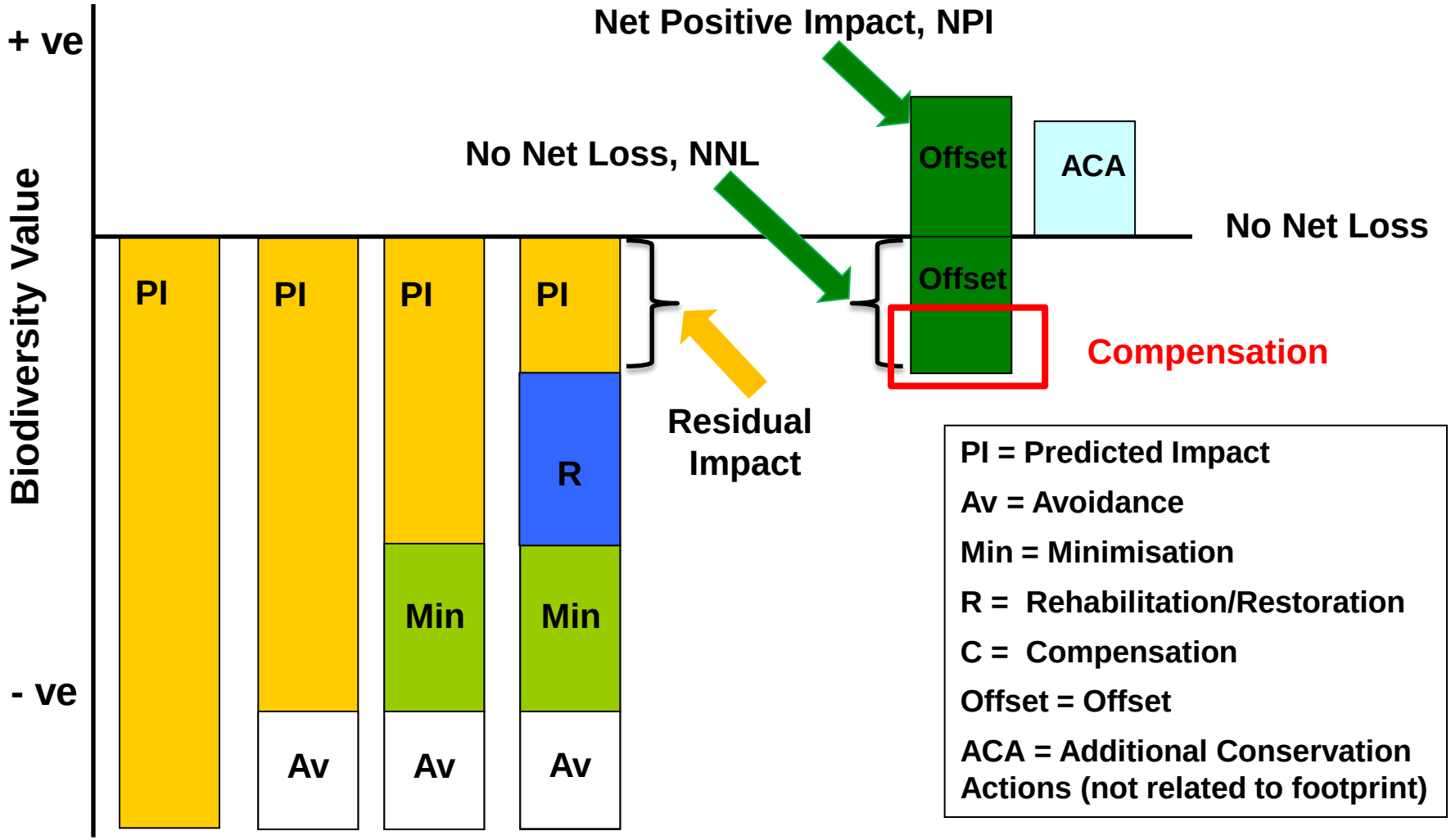
Criteria for assessment of performance (based on Management

Outline Compensation Management Plan and Logframe covers all these

Key concepts: 2:45-3:20

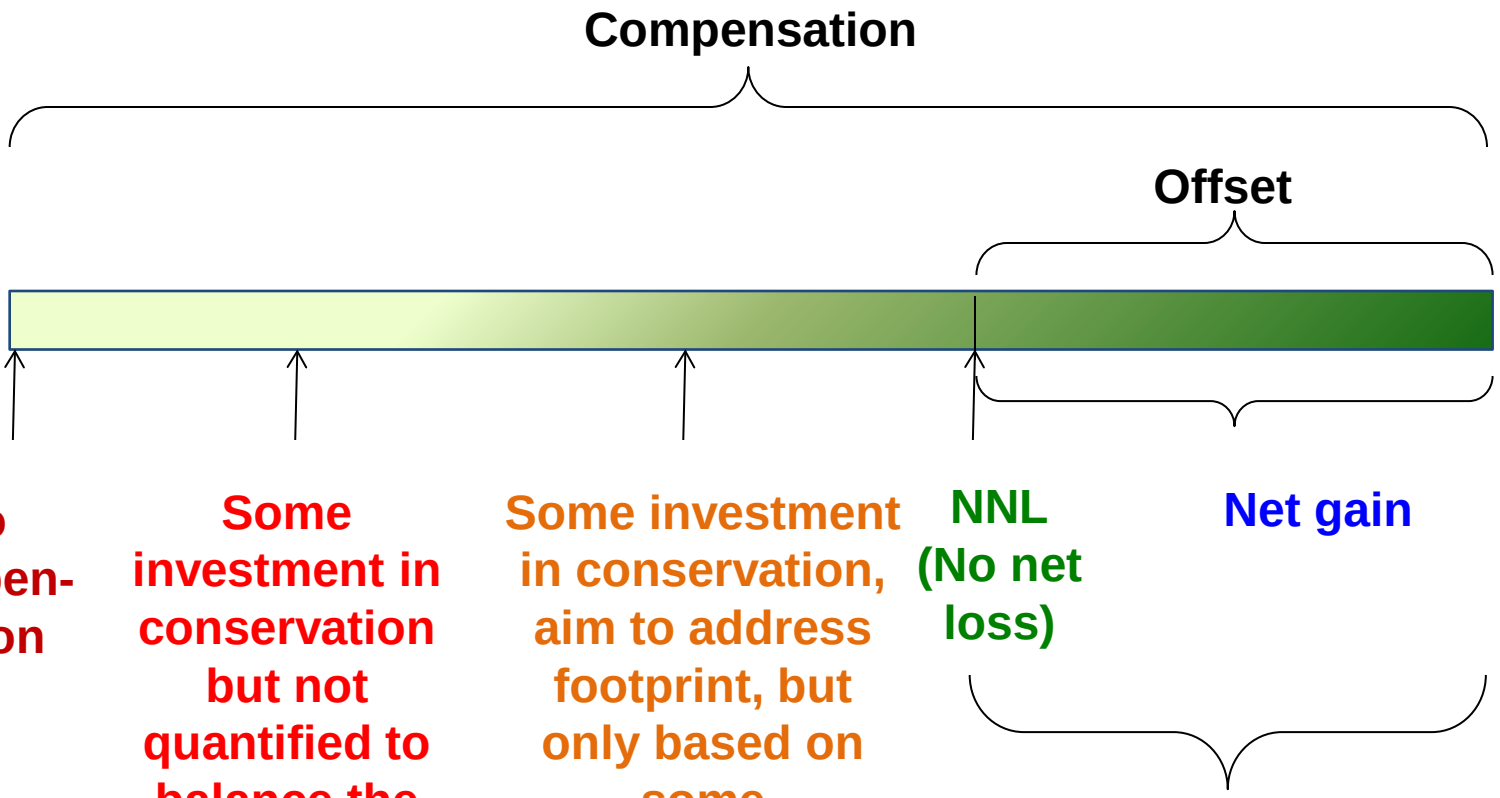
1. What is compensation, what are offsets and No Net Loss (NNL), how do they relate to other biodiversity management measures taken on-site (i.e. other steps in the mitigation hierarchy)?
2. Key principles for NNL & offsets: the Business and Biodiversity Offset Principles
3. Current state of play regarding NNL, offsets and compensation – for context on where RSPO Compensation requirements fit in.
4. Zooming in to the key principles required by the RSPO Compensation Guidance and defining/ interpreting what these mean:
   - Additional
   - Long-lasting
   - Equitable
   - Knowledge-based

The mitigation hierarchy, including biodiversity offsets



Adapted from Rio Tinto & Govt of Australia

Offsets vs. Compensation



Would satisfy 'No Net Loss' requirements and Standards, e.g. IFC Performance Standard 6 and the BBOP Standard on Biodiversity Offsets

The BBOP Definition of Biodiversity Offsets

Biodiversity offsets are measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts due to project development after appropriate avoidance, minimisation and restoration measures have been taken.

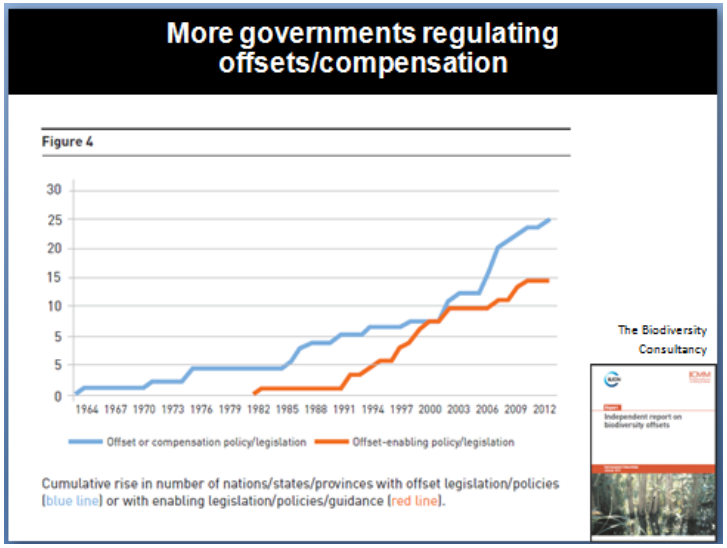
The goal of biodiversity offsets is to achieve no net loss or a net gain of biodiversity on the ground with respect to species composition, habitat structure, ecosystem function and people's use and cultural values associated with biodiversity.

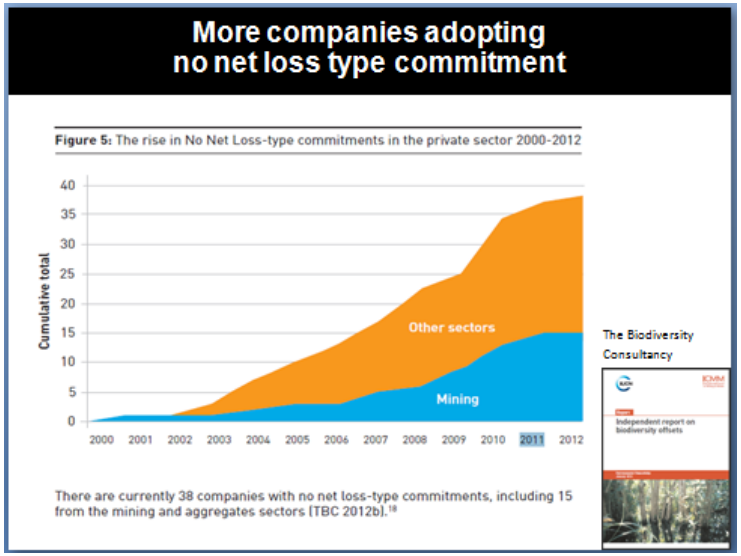
Developments with No Net Loss (NNL)

Major developments in the last few years:

- More Laws
- **More company commitments**
- Loan conditions
- Experiences and pilot projects
- Standards & improved Methodologies
- Broad recognition of the need for NNL approaches

…But considerable challenges to widespread and successful implementation.

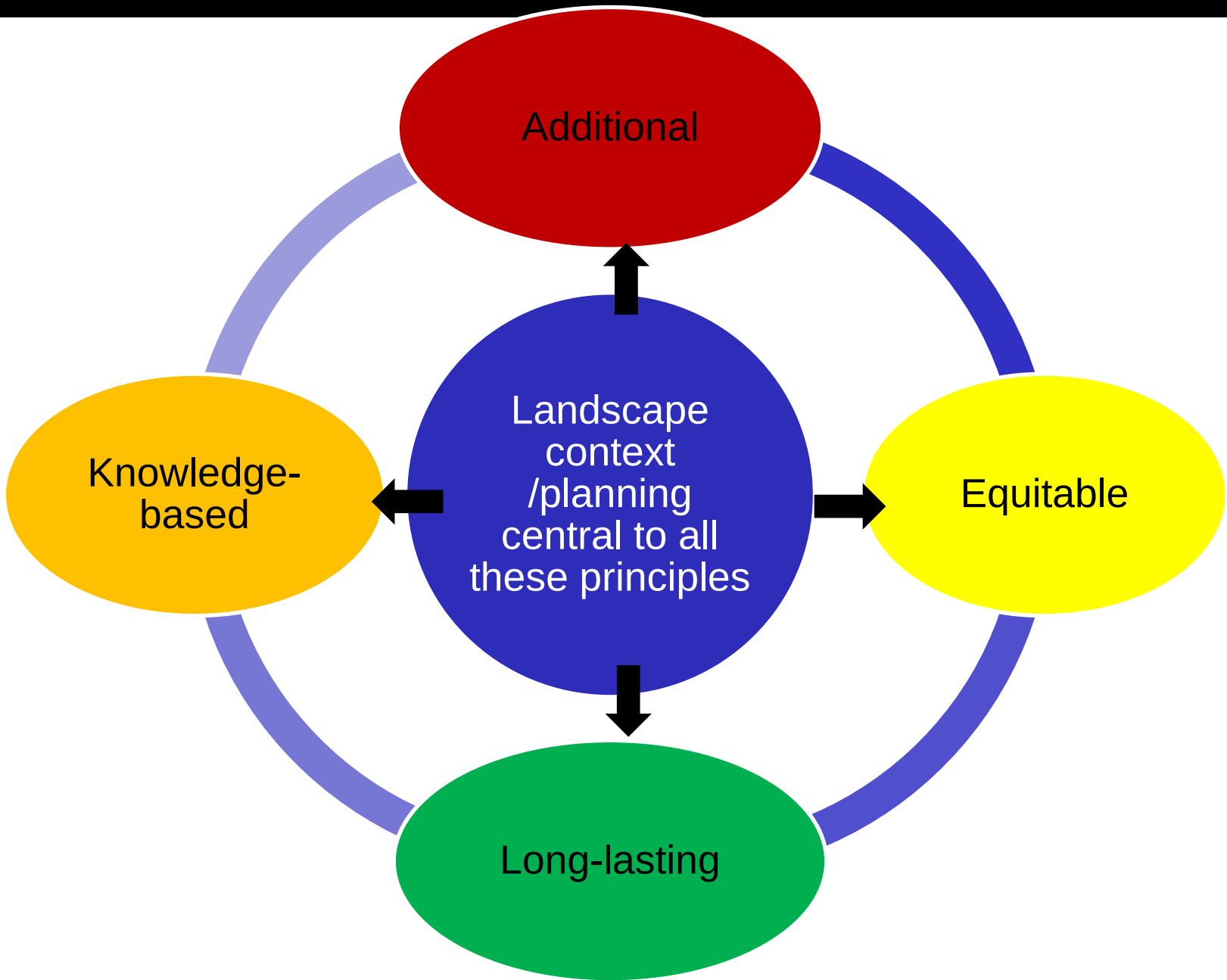




Principles for biodiversity offsets agreed by all the BBOP members

1. ***Adherence to the mitigation hierarchy***
2. ***Limits to what can be offset***
3. ***Landscape context***
4. ***No net loss***
5. ***Additional conservation outcomes***
6. ***Stakeholder participation***
7. ***Equity***
8. ***Long-term outcomes***
9. ***Transparency***
10. ***Science and traditional knowledge***

Landscape context matters!

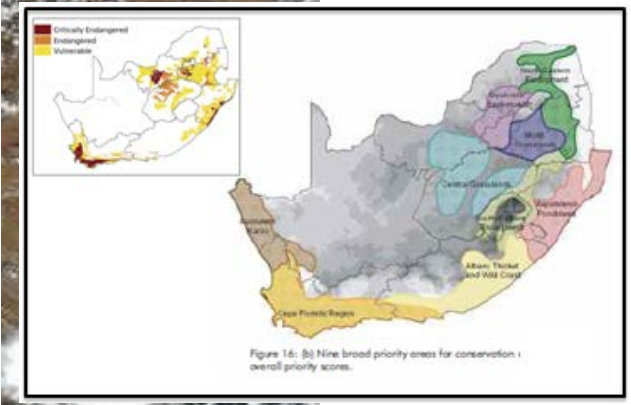


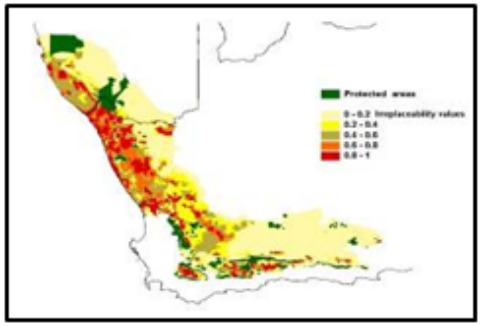
What is ‘landscape level planning’ (LLP)?

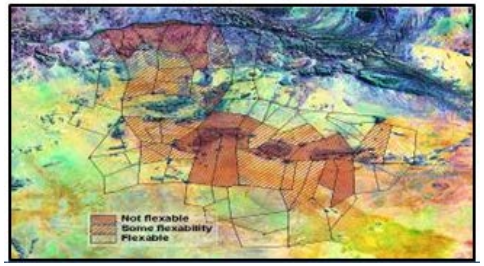
LLP is spatial planning done at a regional scale and using a systematic approach.

The aim: to balance and optimise ecological and socio-cultural needs with economic activities in a particular landscape.

- Integrates different types of information/ data
- Scale can vary (e.g. 1:50,000 - 1: 250,000)
- Biodiversity considerations are key part of it
- A variety of approaches, tools can be suitable.





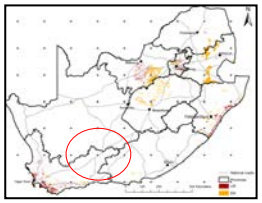


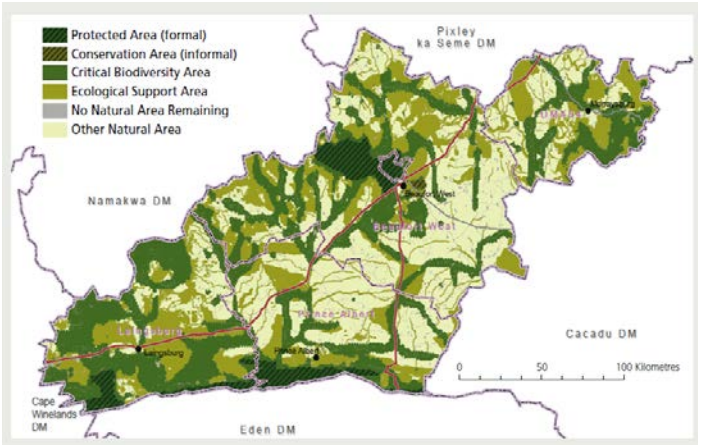
What is the relevance of LLP to compensation?

Planning in a landscape context is important because:

1. Helps understand the significance of predicted impacts and how to plan any development (e.g. where there is priority biodiversity (HCVs) and impacts should be avoided)

2. Helps with strategic selection of good sites for compensation:
   - location relative to the impacts
   - additional outcomes
   - targeting conservation priorities (important HCVs)
   - deciding best type of compensation (restoration, averted loss & protection)
   - avoiding land use conflicts
   - understanding risks, benefits & stakeholders





A. Skowno, 2009; Source: Biodiversity for Development, SANBI 2010.

Reminder: In addition to landscape planning, designing good compensation/offsets requires explicit calculation of losses and gains!

RSPO Compensation Procedures: 'Additional'

'Projects should be adequately resourced, have clearly defined goals, timeframes and responsibilities, and be designed to deliver outcomes that are:

Additional – **ADDING TO** conservation efforts already planned or executed by other parties and to any measures required anyway by legislation or provisions in the RSPO Standard'

i.e. activities **need to deliver more than the status quo**:

- E.g. on-plantation: how additional from 5.3?
- E.g. Protected Area partnership: how additional to existing government commitments and avoiding cost-shifting?

Demonstrating conservation gain is as important as ensuring companies do not profit from clearing without an assessment.

Additionality – what does it mean?

A core principle in RSPO and most other compensation systems!

Biodiversity compensation should achieve conservation outcomes above and beyond results that would have occurred if compensation had not taken place.

Why is additionality important?

Without additionality there is no real gain → If it's not possible to show that the activities have led to new, additional conservation outcomes due to the compensation, **then nothing has changed**.

If there is no additionality, the grower is paying for nothing. → This means we don't achieve any biodiversity goals, since we cannot show additional gains to balance the losses.

RSPO Compensation Procedures: 'Long lasting'

'Projects should be adequately resourced, have clearly defined goals, timeframes and responsibilities, and be designed to deliver outcomes that are:

'Long-lasting – through secure, long-term tenure agreements with authorities, land owners or lease-holders and with effective monitoring, review and evaluation of results that inform adaptive management'

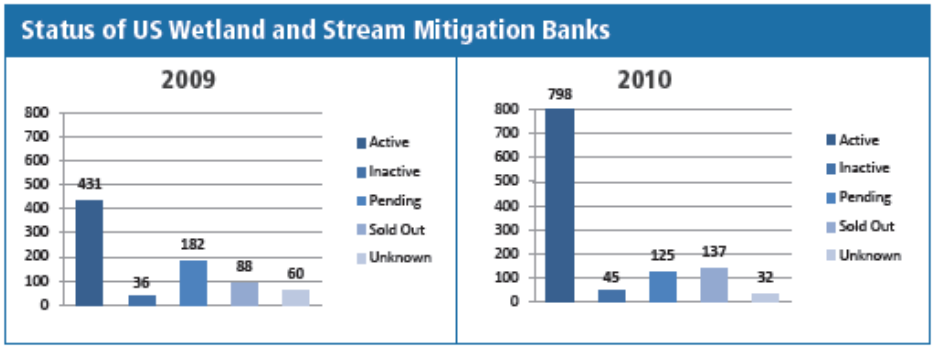
Key concepts: Long lasting

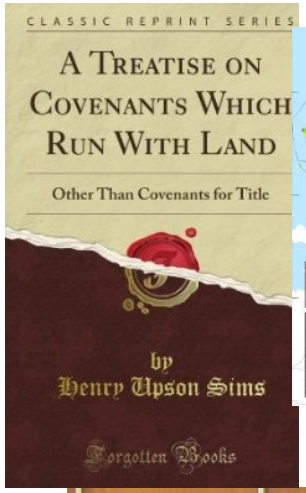
- Good practice is that compensation should last **at least as long as the impact** (ie the effect of the clearance being compensated) and preferably 'in perpetuity'.
- A Compensation Management Plan should therefore:
  - State how long the effects of the clearance being compensated are expected to last.
  - Commit to conservation actions that last at least this long.
  - Set out the tools and mechanisms used to ensure that the conservation measures will be implemented successfully over the long term.

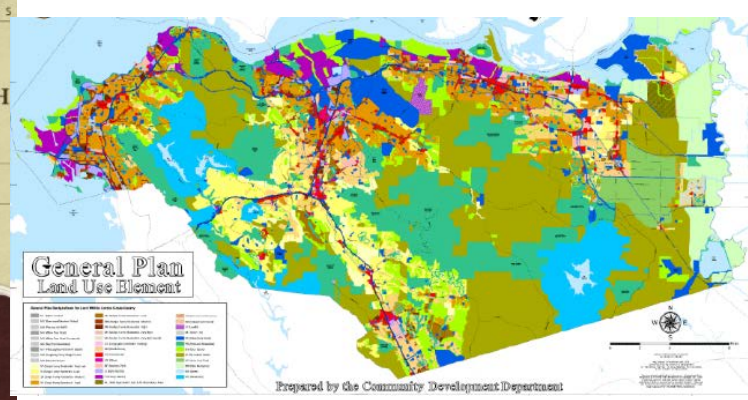
What are some of these?

Key concepts: Long lasting Mechanisms & tools

- **Compensation Management Plan**
- **Biobanks (or conservation banks)**
- **Contract**
- **Covenant/servitude**
- **Insurance**
- **Land-use designation**
- **Lease**
- **Performance bonds**
- **Trust fund**







RSPO Compensation Procedures: 'Equitable'

'Projects should be adequately resourced, have clearly defined goals, timeframes and responsibilities, and be designed to deliver outcomes that are:

Equitable – through engaging and involving affected stakeholders in project planning, decision-making and implementation, fair and balanced sharing of responsibilities and rewards, and through respect for legal and customary arrangements;'

Key concepts: Equitable

Any **people affected** by the clearing (which is to be compensated) are the people who should benefit from the compensation.

It would not be ‘fair’ if clearing of HCV on one side of the country were to be ‘compensated’ by a new protected area on the other side of the country. (The people affected by the project would not **benefit from the compensation**.)

So: how to ensure ‘equity’?

- Define stakeholders
- Ensure participation
- Consider the meaning of ‘equitable’

Key concepts: Equitable

Relevant stakeholders: "Those people, groups, or organisations who:

- have an **interest** in, or are **affected** or impacted by, the project or compensation, and
- who need to **participate** in the design and implementation of a project or offset for its success."

Stakeholder participation:

- Is **vital** for compensation to be successful and should be take place from an early stage in the compensation development process.
- Involves **active involvement in decision-making** of stakeholders, who influence and share control over the decisions and resources which affect them.
- A **transparent and participatory** process is the best way to ensure active participation so that that rights, responsibilities, risks and rewards (or costs and benefits) have been determined and agreed by the stakeholders as part of the design and implementation.

Key concepts: Equitable

- 'Equity' is a notoriously **difficult goal to define** and attain. There is no single right answer to what is equitable in a particular setting. Different individuals will hold a variety of views as to what is fair and equitable.

- **Evidence** that can show an outcome is fair and equitable includes:
  - The openness and rigour of the participatory processes and the roles, responsibilities and benefits of various stakeholders in the Compensation Management Plan.
  - There has been an estimation of the costs and benefits associated with the compensation, including roles and responsibilities for its implementation.
  - Best practice methods have been followed for stakeholder participation and for assessment of costs and benefits. See for instance : www.forest-trends.org/biodiversityoffsetprogram/guidelines/cbh.pdf and "Biodiversity Offsets and Stakeholder Participation" http://www.forest-trends.org/documents/files/doc_3082.pdf
  - Evidence that local stakeholders will at a minimum not be made worse off by the compensation activities and the losses being compensated.
  - Evidence that the level of compensation in the plan adequately addresses the negative effect of the clearance on their livelihoods and values.

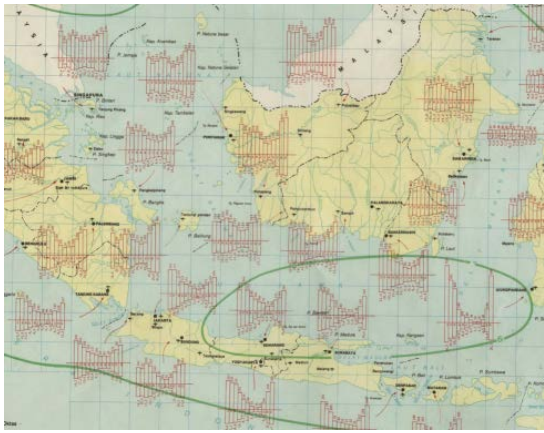
RSPO Compensation Procedures: 'Knowledge-based'

'Projects should be adequately resourced, have clearly defined goals, timeframes and responsibilities, and be designed to deliver outcomes that are:

Knowledge-based – based on sound scientific and/or traditional knowledge with results widely disseminated and communicated to stakeholders and partners in a transparent and timely manner. '

Knowledge-based: you need to show…

(a) scientific understanding and research, drawing on the work and knowledge of appropriate experts (e.g. ecologists, taxonomists, socio-economists) to demonstrate that:



- The **losses** caused by the clearance are as well understood and characterised as possible; and

- The **compensation activities are likely to succeed** in bringing about real conservation gains for habitats and species, based on:
  - sound **rationale** for targeting the relevant conservation outcomes
  - good understanding of the biodiversity **baselines** and **why** the proposed compensation activities will **benefit** the conservation status of these habitats and species,
  - **risks and uncertainties** involved,
  - **likelihood of success** of the conservation activities (ie probability of success or high/medium/low risk assessment) and

(b) effective involvement of stakeholders in offset design and implementation (see also ‘Equitable’ Principle)

Exercise/ Discussion
3:20-3:45

What questions would you ask to assess whether compensation projects will meet the key principles (additional, equitable, long-lasting and knowledge-based)?

→To help to assess the suitability of different types of projects!

→Let's discuss this … some ideas are listed in the next two slides.

Key questions: basis for selecting suitable options for all four criteria

1. Does the project aim for the right outcomes (for conservation and compensation)?

2. Is it feasible to deliver the right outcomes over the long term?

3. Does it make sense from a cost-benefit and time-efficiency perspective for the business?

Additional, long-lasting, equitable, knowledge-based

Key questions: basis for selecting suitable options for all four criteria

Does the project aim for the right outcomes (for conservation and compensation)?

- ✓ Can it provide enough compensation (in terms of ha protected/ restored)?
- ✓ Does it target valuable/priority biodiversity, HCVs?
- ✓ Does it add new conservation value (over and above what already exists, or is required anyway, eg by law, RSPO)?

Is it feasible to deliver the right outcomes over the long term?

- ✓ Can tenure over land and natural resources be legally secured over the long term?
- ✓ Are there any conflicting land rights already in place or planned? Can these be overcome?
- ✓ Evidence that stakeholders,incl. govt, communities, would be supportive & that the deal is fair for everyone?
- ✓ Are there good partners (with the right track record of expertise, capacity, experience) interested in collaboration?
- ✓ Are proposed outcomes realistic (landscape context/ threats) & measurable?

Key questions: basis for selecting suitable options for all four criteria

3. Does it make sense from a cost-benefit and time-efficiency perspective for the business?

- ✓ Can the project be set up and achieve results in a reasonable timeframe – is this possible to foresee?
- ✓ Is the number of stakeholders and organisations to be consulted in setting up the project manageable – and thus the transaction costs, time involved?
- ✓ Time and costs of monitoring reasonable?
- ✓ Compared with other options of delivering compensation, does the cost-benefit balance make sense?
- ✓ Is the project likely to have significant reputational benefits or might it harm the company's reputation?

Coffee
3:45-4:10

Day 1 Afternoon session (4:10 – 5:30)

We will cover:

4:10 – 4:25:

Conservation gain: what 'counts' as a gain?

- 'Case studies': Example projects for delivering compensation

4:25 – 5:10:

Where and by whom are compensation activities implemented?

- Strengths, weaknesses and essential ingredients of different options
- Short exercise

5:10 – 5:30:

Questions and answers and wrap-up

Delivering compensation: What counts as 'Gain'?

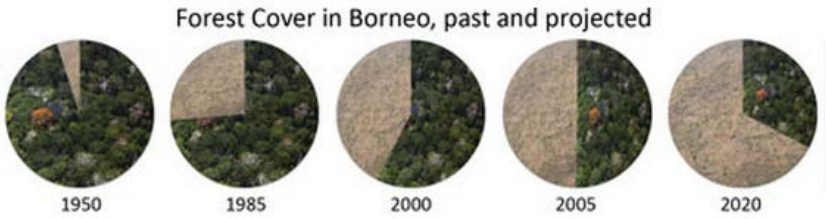
N.B. 'On-the-ground outcomes!

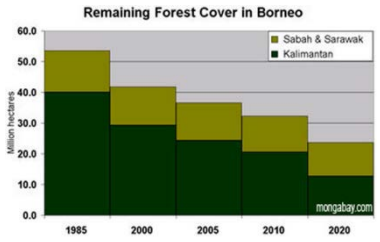
A. MANAGEMENT to improve biodiversity condition (e.g:)

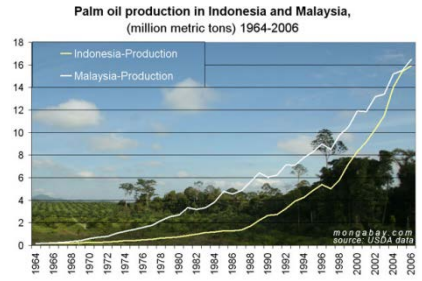
- Actions to restore and enhance biodiversity (e.g. replant of indigenous vegetation, remove invasive alien species)

B. PROTECTION/ AVERTED LOSS where biodiversity is threatened with loss and compensation / offsets stop this (e.g.:)

- Increase legal protection of areas (e.g. new area, expansion, better, additional outcomes in existing PAs)
- Reduce pressures from unsustainable/ illegal biodiversity use
- Create greater incentives for local people for conservation, sustainable livelihood options







Environmental outcomes not financial compensation

- Compensation is not simply a financial transfer, penalty, or an exercise in economic valuation

- Compensation involves identifying the residual losses of biodiversity and designing activities that will result in:
  - a gain of comparable type and amount of biodiversity, through
  - a budgeted action plan to undertake these activities over the long term.

i.e. ‘biodiversity for biodiversity’, not ‘money for biodiversity’.



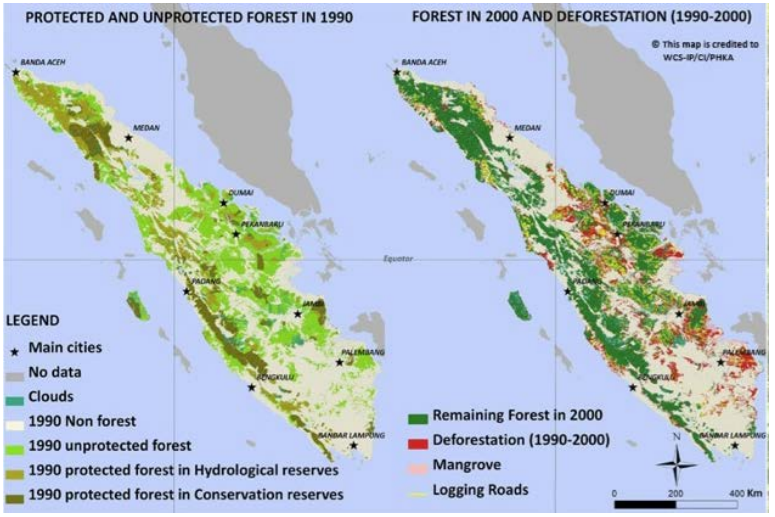

Examples of how to deliver ‘conservation gain’ for compensation?

1. Hutan Desa (Village Forest): Forest protection (avoided deforestation) and possibly restoration

2. Ekosistem restorasi: Restoration and forest protection

3. Conservation bank: Forest protection (avoided deforestation) and possibly restoration

N.B. These are just 3 examples that would align with prioritisation of RSPO compensation projects. (Another option, e.g. species-specific management)



Where and by whom is compensation implemented?

Review Implementation Options:

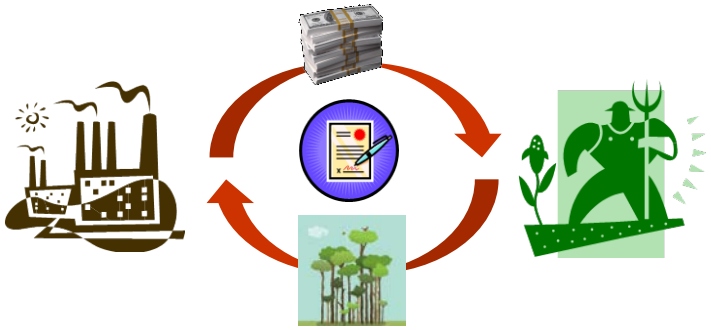
Strengths, Weaknesses, Requirements for success

Implementation of compensation

- On **developer's land**, protected in perpetuity
- New or upgraded **protected areas** (including community protected areas)
- **Contracts** with landholders (including payments for ecosystem services)

Partnership

Engage local communities



- Compensation Management Plan
- Legal arrangements
- Trust fund, or other long term financial mechanism
- Monitoring, evaluation, adaptive management

Options for Delivering compensation:

- On-plantation, by the company itself *N.B. There are situations (e.g. ER concession) where the company may be directly in control as well but off the plantation*

- In another area (not on own concession) and in partnership with other organisations, e.g. NGOs or villages/ communities [e.g. ekosistem restorasi, hutan desa could both fall under this]

- Conservation banking by a separate entity

Discussion/ exercise: What are the advantages (pros), disadvantages (cons) and requirements for success/ functioning in your view?

On-plantation, company implementation

Pros	• Security of tenure • Compensation activities within control of company • Responsibility for delivery clear • Opportunity further to integrate conservation thinking and practice into company Business As Usual and SOPs
Cons	• Additionality generally a concern (given existing RSPO PCI) • Limited capacity within company to undertake conservation work (not core business) • Limited conservation value of selected activities, particularly landscape-level ecological benefits (fragmented outcomes)
Needs	• Availability of enough land/opportunity to provide adequate additional compensation • Transparent system for M&E of outcomes since no partners directly involved • Ensure that social implications are clearly and well addressed

Partnerships established by the company

Pros	• Working with partners who have capacity, experience, whose core business it is to deliver conservation outcomes & who have/ can obtain requisite tenure rights over land & resources • Compensation can contribute significantly to conservation priorities, landscape level ecological benefits • Opportunity to identify and assure additional outcomes • Potential for transparency / reputational risk management likely greater due to partners' involvement
Cons	• May be difficult to find/ select/ retain the right partner/s for long-term collaboration • Company not directly in control, so good oversight systems and sound agreements needed
Needs	• Need to choose partners wisely (i.e. need to have requisite knowledge, capacity, networks to work effectively) • Establish clear performance-related agreements, responsibilities, liabilities and clear & fair funding arrangements • Effective system of M&E

Partnerships with Communities (e.g. Villages): additional considerations

Pros	• Community involvement and ownership of the process results in the most sustainable outcomes: livelihood and poverty alleviation benefits as well as conservation outcomes. • Benefit of long-term local presence in terms of knowledge, on-the-ground monitoring, etc. • Some villages, communities already keen to pursue such partnerships but need assistance.
Cons	• Long-term prior relationship may be needed (trust) • Communities need motivation & support to organise equitably & democratically – social dimension can be v complex. • May foment conflict between different groups (eg increasing social divisiveness & conflict). • Conservation outcomes in agro-forestry mosaic may be limited. • Long term agreements difficult to enforce, business case?
Needs	• Refined, specific and not oversimple approach needed (eg recognising diversity or roles and power relations in communities) • Involve neutral third party to manage and avert conflicts.

Biobanking

Pros	• Conservation outcomes managed for long term • Working with organization that has conservation expertise • Additionality • Baseline biodiversity assessments done, M&E protocols & other arrangements and rights in place.
Cons	• Options not yet in place (very limited) and time-consuming to establish • Weak business case for creating biobanks. • Outsourcing conservation doesn't improve company's SOP or company culture = business as usual going forward. • Constraints on proxmity for compensation and not crossing borders could limit the size and accessibility of biobanks.
Needs	• Payment schedule need to be agreed. • National policy framework(s) supportive of biobanking-type instrument and aligned with national conservation objectives. • Biobank fund would need to cover initial restoration and endowment for long term management activities. • RSPO certification of biobank management (?).

Pros & cons compared...

	On-plantation	Partnerships (off-plantation)	Biobanking
Pro	• Security of tenure & company in control • Clear responsibilities • Opportunity for conservation to be better integrated into grower company's culture	• Long-term, additional conservation outcomes • Potential for significant ecological & social benefits • Work done by experienced entity • Partnerships good for tranparency, risk mngmnt	• Long-term, additional conservation outcomes • Work done by entity with the right expertise • Land tenure, baseline data & implementation systems in place
Con	• Conservation outcomes v limited (esp at landscape-scale) • Lack of additionality • Company has limited conservation experience, expertise	• May be difficult to find and keep good partner/s (long-term collaboration) • Company not directly in control – sound agreements & oversight essential	• No/few options exist • Biobanks time-consuming, complex to establish, weak business case • Grower company's SOP/ culture may not improve • Spatial constraints for placing suitable biobank

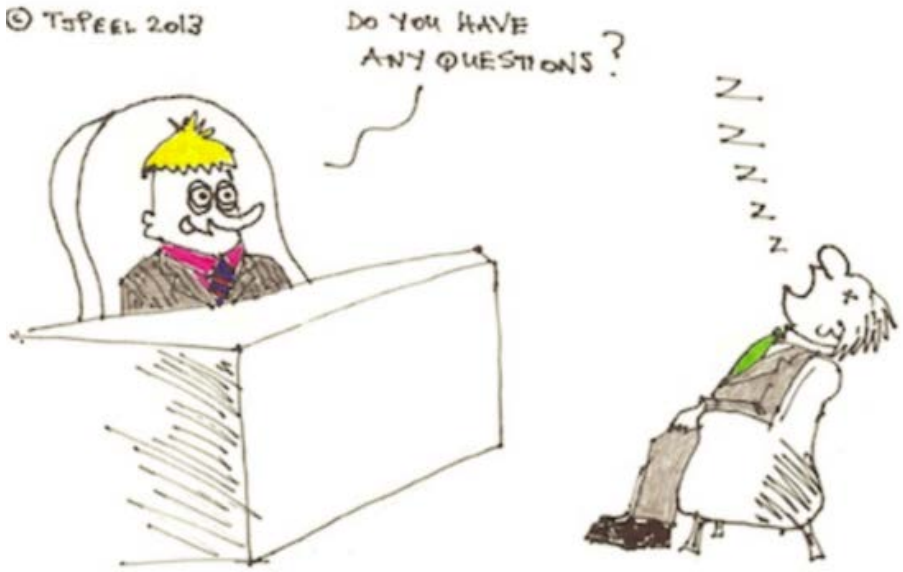
Requirements compared...

	On-plantation	Partnerships	Biobanking
Need	• Enough opportunity to provide adequate additional compensation • Transparent system for M&E of outcomes since no partners directly involved • Ensure that social implications are clearly and well addressed	• Need to choose partners wisely (i.e. need to have requisite knowledge, capacity, networks to work effectively) • Clear performance-related agreements, responsibilities, liabilities & fair funding arrangements • Effective M&E system	• Payment schedule must to be agreed. • National policy supportive of biobanking-type instrument and aligned with national conservation objectives. • Biobank fund would need to cover initial restoration and endowment for long term management activities. • RSPO certification of biobank management (?).

Q&A, Discussion & Wrap-up
4:45-5:30

Do you have any questions on the issues raised today:

- Definitions?
- Implementation options?
- Example cases?



Lessons learned: offsets succeed when….

- measures are in place to improve the application of the **mitigation hierarchy**, and not simply to plan offsets (the last step);
- **clear**, consistent **guidance** is available, for certainty and to avoid delays;
- there are clear roles for national, state and local **government** and good coordination between government departments;
- **performance** monitoring and enforcement is ensured through good governance and adequate budgetary provision;
- clear **principles** and standards are in place;
- **legal and financial instruments** needed to secure long-term implementation are available;
- **proportionate** approaches are planned, with more streamlined procedures and simpler baseline studies and metrics for less significant impacts on biodiversity, and full assessments and metrics for more significant impacts;
- there is a **realistic roadmap** to develop the NNL/NG system and improve it over a few years;
- **preparation for implementation** (including lining up supply of offsets) takes place during the policy development phase;
- good **baseline** data, mapping and **landscape level planning** are available;
- **methods** that don't deliver NNL/NG (e.g. poor metrics) are avoided;
- several **options for implementation** are possible, provided the same standards are met; perverse incentives are removed; and
- **assistance** is offered to parties such as developers and offset providers who need to find each other.

Day 2

Implementing biodiversity compensation under the RSPO

4 February, 2015

Agenda

DAY 2

8:30am	Design of compensation projects: typical approach and steps; Q&A and discussion
10:30	COFFEE BREAK
10:50	Design of compensation projects: (continued): Finalising design ready for implementation.. Practical/Exercise about Compensation Management Plan
12:15	Q&A session and discussion
12:30	LUNCH
2:00pm	Implementation of compensation projects: Governance, Agreements, Management Plan, Financial arrangements
3:00	Practical/Exercise: Ready for implementation?
4:00	COFFEE BREAK
4:15	Q&A session and discussion, Wrap up
4:30	Close of meeting




What did we cover yesterday?

-Key concepts relating to offsets and compensation

- Key principles (RSPO):

Additional, Equitable, Long-lasting, Knowledge-based

- How to deliver conservation gains?

- Implementation options: where and with whom to work

Additionality – what does it mean?

A core principle in RSPO and most other compensation systems!

Biodiversity compensation should achieve conservation outcomes above and beyond results that would have occurred if compensation had not taken place.

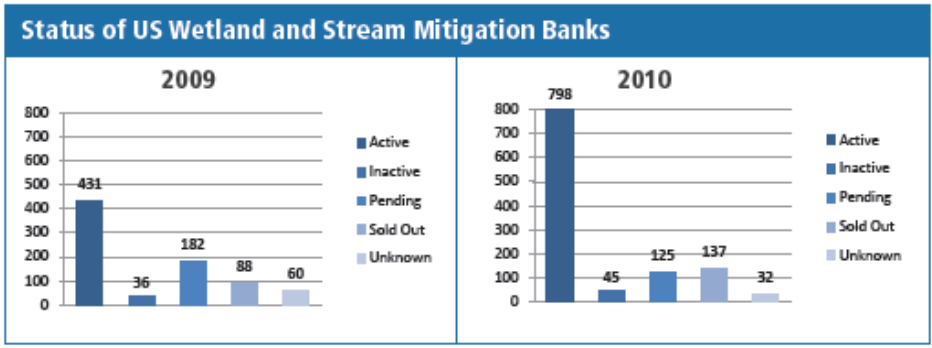
Why is additionality important?

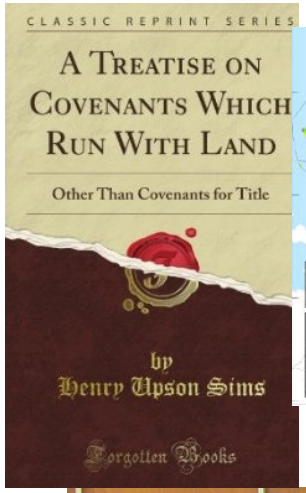
Without additionality there is no real gain → If it's not possible to show that the activities have led to new, additional conservation outcomes due to the compensation, **then nothing has changed**.

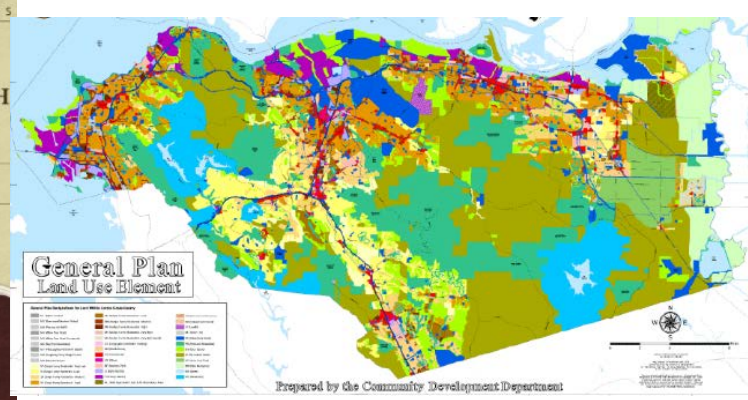
If there is no additionality, the grower is paying for nothing. → This means we don't achieve any biodiversity goals, since we cannot show additional gains to balance the losses.

Key concepts: Long lasting Mechanisms & tools

- **Compensation Management Plan**
- **Biobanks (or conservation banks)**
- **Contract**
- **Covenant/servitude**
- **Insurance**
- **Land-use designation**
- **Lease**
- **Performance bonds**
- **Trust fund**







Key concepts: Equitable

Any **people affected** by the clearing (which is to be compensated) are the people who should benefit from the compensation.

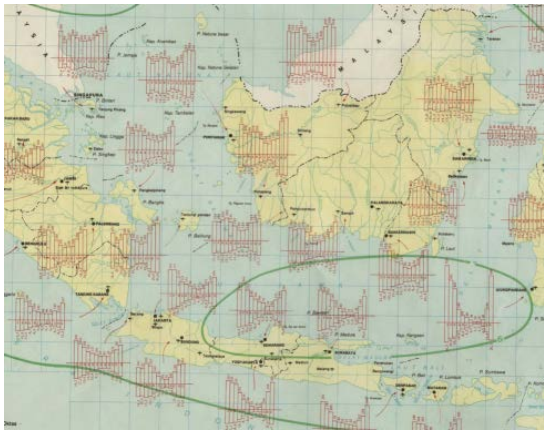
It would not be ‘fair’ if clearing of HCV on one side of the country were to be ‘compensated’ by a new protected area on the other side of the country. (The people affected by the project would not **benefit from the compensation**.)

So: how to ensure ‘equity’?

- Define stakeholders
- Ensure participation
- Consider the meaning of ‘equitable’

Knowledge-based: you need to show…

(a) scientific understanding and research, drawing on the work and knowledge of appropriate experts (e.g. ecologists, taxonomists, socio-economists) to demonstrate that:



- The **losses** caused by the clearance are as well understood and characterised as possible; and

- The **compensation activities are likely to succeed** in bringing about real conservation gains for habitats and species, based on:
  - sound **rationale** for targeting the relevant conservation outcomes
  - good understanding of the biodiversity **baselines** and **why** the proposed compensation activities will **benefit** the conservation status of these habitats and species,
  - **risks and uncertainties** involved,
  - **likelihood of success** of the conservation activities (ie probability of success or high/medium/low risk assessment) and

(b) effective involvement of stakeholders in offset design and implementation (see also ‘Equitable’ Principle)

Typical steps: design and implementation

Design (short term)

In consultation with CP

Prepare Compensation Proposal:

- Orientation & planning, incl. how stakeholder involvement is to be addressed
- Apply mitigation hierarchy;
- Quantify Compensation liability acc. to Compensation Guidance;
- Review implementation options (sites, partners, etc.) and select most suitable one (NB: key criteria);
- Draft Compensation proposal (final)

Design final project: prepare **Compensation Management Plan, including draft agreements**

Implemen-tation (long term)

Finalise agreements and implement MP:

- Operations and management;
- Financing;
- Monitoring and evaluation.

Design: Steps towards choosing the most suitable option/s

Deciding on good options for delivering the compensation is a challenge!

How best to go about it?

1. Orientation and Planning:

- Work out losses and compensation requirements
- Review options for implementation against high-level criteria and decide on a desired model or shortlist of options
- Consider how to address stakeholder involvement

2. Determine options and select most suitable one

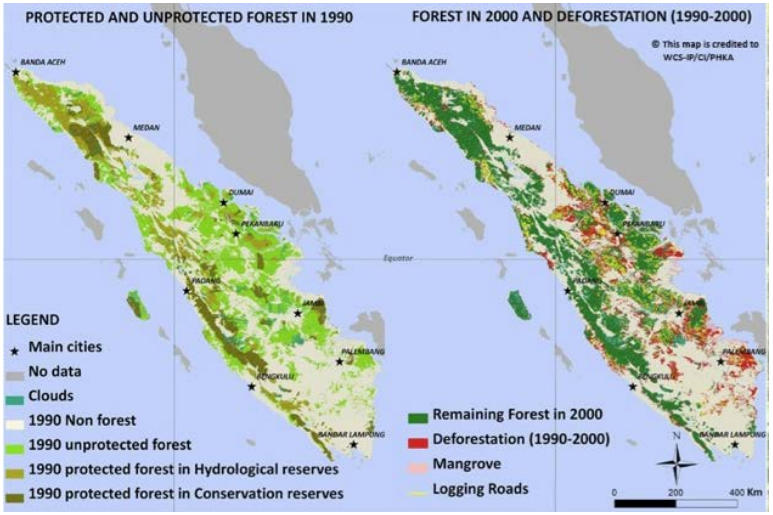
- Prepare ToR for work – e.g. to tender out and/or approach potential partners directly
- Review potential options against more detailed criteria
- Select most suitable option and prepare compensation proposal

Three examples – how to deliver conservation gains (based on real projects):

1. Hutan desa – Forest protection and management (avoided deforestation) along with other land uses in a mosaic.

2. Ekosistem restorasi – Forest restoration and/or protection and management, with other land uses in a mosaic.

3. Conservation banking (Biobanking) – Forest protection and management, could also involve restoration.



Example 1:
Hutan desa model

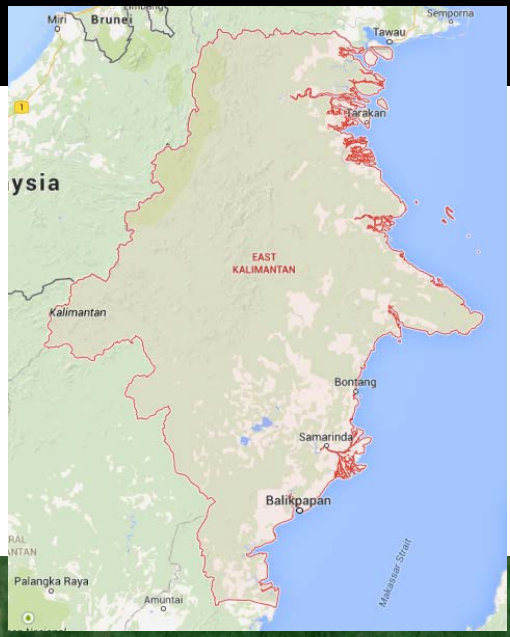
- **Location**: Jambi Province, Sumatra, Indonesia
- **Size & context**: 5600 ha (potential for expansion) next to a National Park and surrounded by commercial concessions (forestry, oil palm etc.)
- **Type of biodiversity & land cover**: Mosaic of lowland rainforest (habitat for many threatened and other species), small-scale agriculture (rubber, coffee), 10 villages.
- Biodiversity **priority area?** Yes, recognised as part of an international biodiversity hotspot, and a local/provincial conservation priority
- **Threats** to the forest: Significant pressure on forest due to migrants, illegal logging, unsustainable use of natural resources.

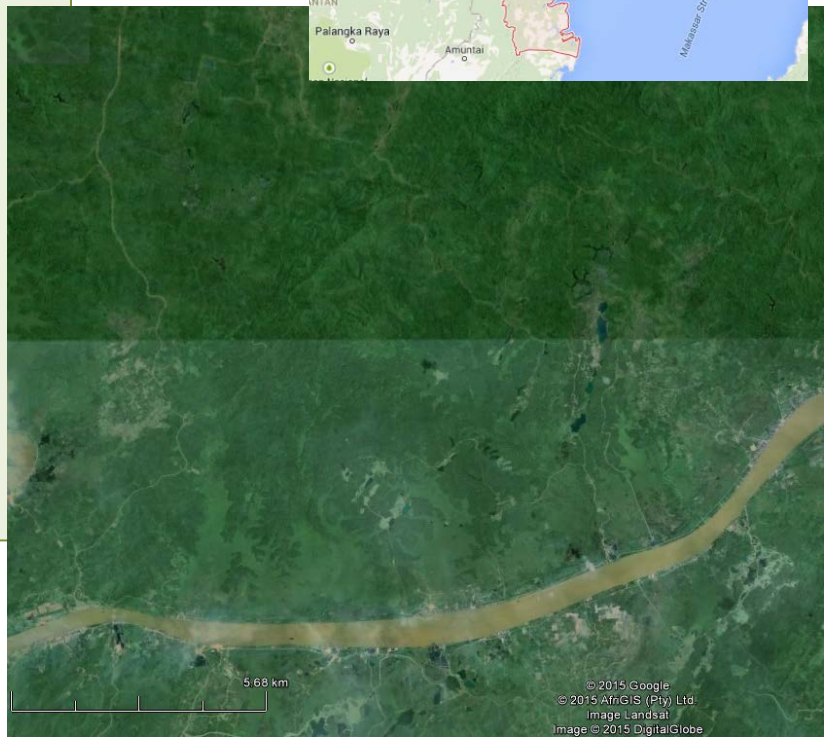
What is the proposed project? What changes are suggested as part of compensation?

	Current situation	Proposal for future situation as part of compensation project
Owner-ship / tenure	State land **administered by Forestry Department**, but part of village's administration area.	State land **with tenure awarded to villages under 'hutan desa' permit** (35 yrs renewable) for delimited area. Forestry Dept plays oversight role.
Land use	Mosaic of **agroforestry** (village-based communities cultivating rice, rubber and gathering food, timber etc. from the watershed's orests); **80% of area protected forest (**hutan lindung).	Mosaic, as before, with revised zoning that designates small-scale agriculture, areas of forest conservation with ltd use rights. Forest protected & managed under an agreed MP.
Legal zoning/ desig-nation	**Hutan lindung, hutan produksi & hutan produksi terbatas** (production & ltd production forest) mosaic.	Hutan desa (village forest): areas set aside for conservation, others zoned for agroforestry uses etc.
Land manage-ment	Forestry Department (officially) and villagers in effect	**Villages become designated managers of land and natural resources**, acc. to agred Forest MP and monitored by the Forestry Dept.

Example 2:
Ekosistem restorasi model

- **Location**: Central Kalimantan, Indonesia
- **Size of area**: 11,200 ha
- **Type of biodiversity / land cover**: mosaic of forest and small-scale agriculture, villages, adjacent to oil palm concessions and a Protected Area, a large part of the area is degraded forest – kawasan hutan that has been identified for restoration purposes.
- Biodiversity **priority area?**: Local & regional conservation priority
- **Threats** to the forest: full conversion for commercial agriculture, forestry.



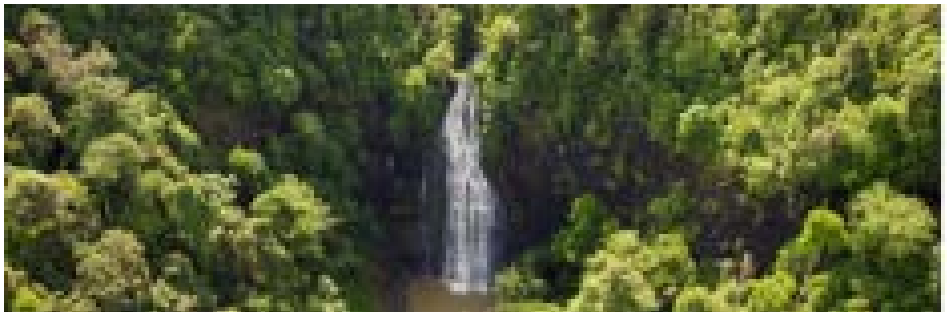


What is the proposed project?

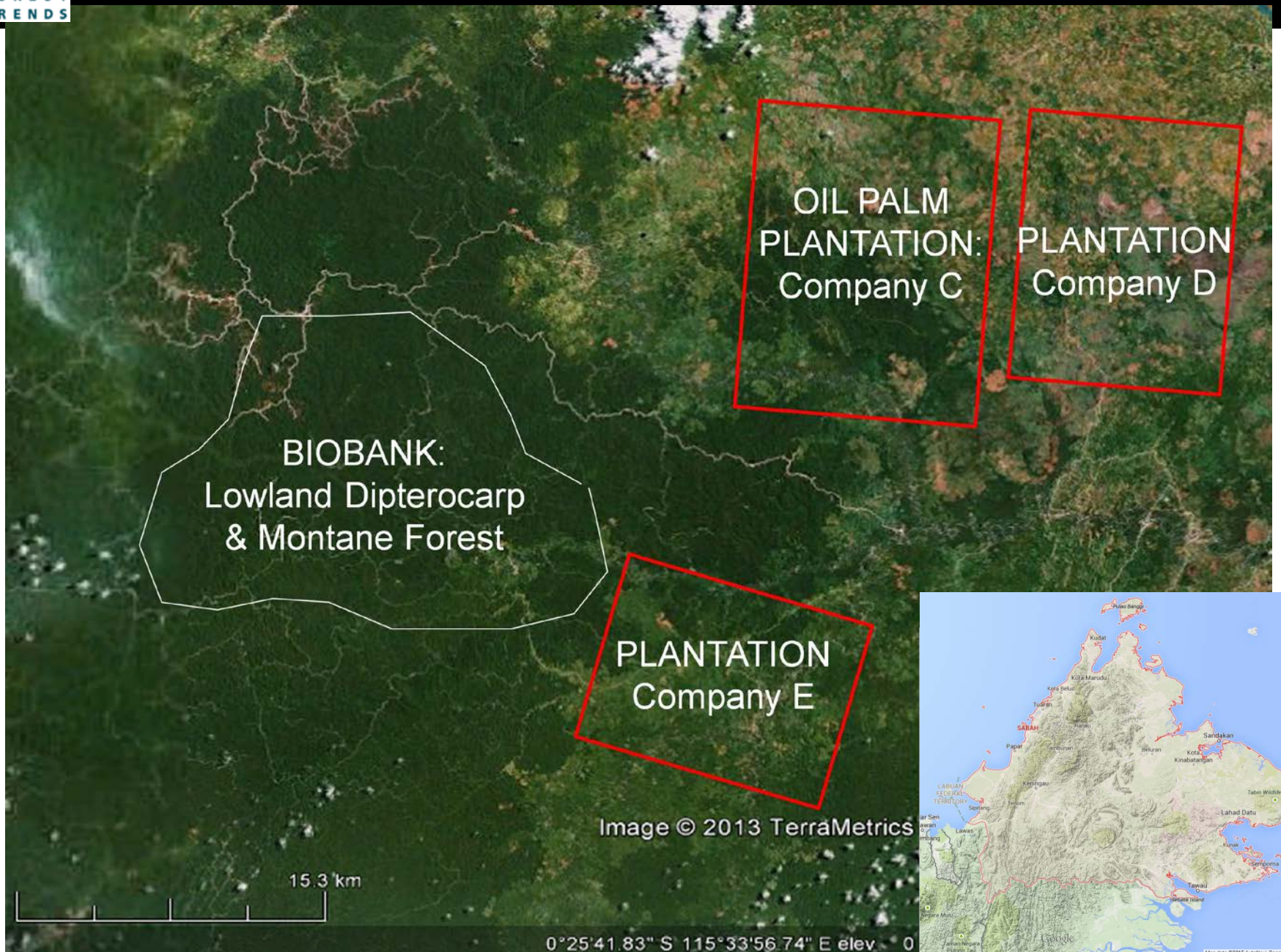
	Current situation	Proposal for future situation as part of compensation project
Ownership / tenure	State land administered by Forestry Department.	State land **with rights awarded to a company under ekosistem restorasi license (60 years).** Forestry Department plays oversight role.
Land use	**Mosaic of different types of land uses**, small-scale and commercial agriculture, **predominantly areas of degraded forest**, some intact high quality forest.	Mosaic of land uses, as before, but according **to designated zones of forest conservation, areas for restoration, areas for commercial production** (NB: financial return needs to be demonstrated) managed under an agreed MP.
Legal zoning/ designation	**Kawasan hutan** (except hutan lindung) that has been demarcated for restoration	**Ekosistem restorasi** concession.
Land mngemnt	**Forestry Department**	**Company / private entity** becomes designated manager, acc. to agreed MP and monitored by the Forestry Dept.

Example 3
‘Biobanking’

- **Location**: Sabah, Malaysia
- **Size of area**: 32,000 ha
- **Type of biodiversity / land cover**: large block of lowland dipterocarp forest, surrounded by villages, oil palm concessions and other commercial cultivation.
- Biodiversity **priority area for conservation**: identified at international and national level.
- **Threats** to the forest: full conversion to oil palm concessions.



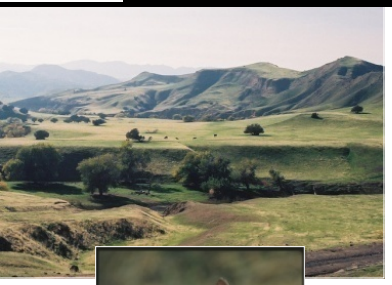
Biobank


OIL PALM PLANTATION: Company C
PLANTATION Company D
BIOBANK: Lowland Dipterocarp & Montane Forest
PLANTATION Company E
Image © 2013 TerraMetrics
15.3 km
0°25'41.83" S 115°33'56.74" E elev 0

What is the proposed project?

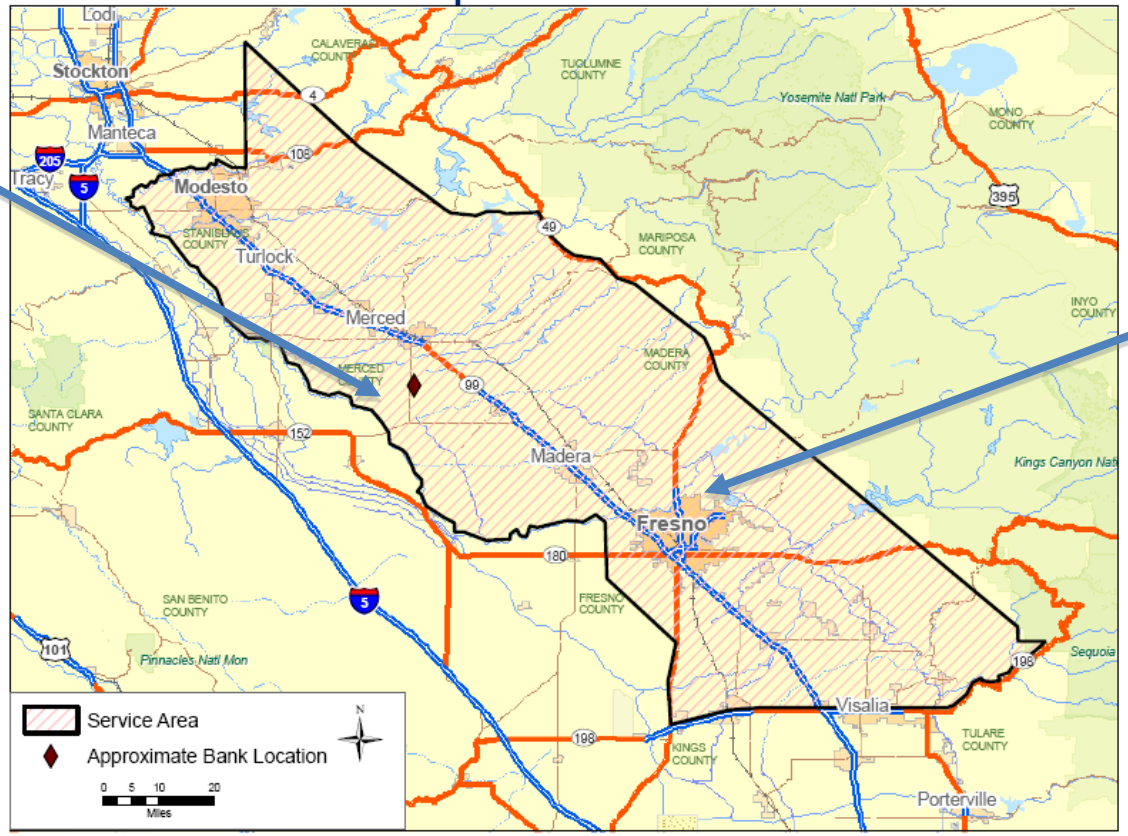
	Current situation	Proposal for future situation
Ownership / tenure	Forest reserve (govt land) administered by Forestry Department under a 100 yr forestry concession.	Forest reserve (govt land) with conservation management **rights awarded by concession holder to company under 50 year (renewable) lease** approved by Forestry Department.
Land use	Block of intact, previously logged forest of varying quality (most HCV, some degraded), surrounded by commercial concessions & settlements, illegal hunting.	Improved forest management & protection of intact forest in designated reserve (avoided deforestation), plus restoration/ rehabilitation of degraded areas. Change in use rights from production to conservation acc. to agreed Conservation Management Plan (CMP).
Legal zoning/ desig-nation	Production forest reserve with logging rights & potential for conversion to commercial plantations / agriculture.	Re-gazettement as Protection forest reserve, with permanent, strict biodiversity protection.
Land manage-ment	**Logging contractor, with oversight by Forestry Department**	**Public-private partnership: A company is** designated manager, acc. to agreed MP, monitored by Steering Committee formed by Forestry Dept., Investor (company) & others.

Example of a US Conservation Bank



- 333 acres
- Banking agreement with authorities (USFWS)
- Management plan
- Endowment fund
- Cons easement
- $65,000 credits

Vieira-Sandy Mush Road Conservation Bank
San Joaquin kitfox Service Area



- Impact 7 acres of kit fox habitat
- Incidental take permit from authorities-FWS
- Developer buys 7 credits to satisfy permit requirement

Ecosystem Marketplace

Design: Choosing the most suitable option/s

Exercise & discussion (10:00-10:30):

Thinking through the steps just outlined, and applying the questions and criteria for success (discussed yesterday):

- How would you evaluate the example case studies 1:hutan desa and 2:ekosistem restorasi?

- Do they meet the criteria?

- Which one would you choose and why?

Reminder - key questions on criteria for success

Does the project aim for the right outcomes (conservation & compensation)?

- ✓ Can it provide enough compensation (ha protected/ restored)?
- ✓ Does it target priority biodiversity, HVCs?
- ✓ Does it add new (additional) conservation value?

Is it feasible to deliver the right outcomes over the long term?

- ✓ Can long-term tenure over land and natural resources be legally secured?
- ✓ Are there any conflicting land rights already in place or planned?
- ✓ Evidence that stakeholders,incl. govt, communities, would be supportive & that the deal is fair for everyone?
- ✓ Are there good partners interested in collaboration?
- ✓ Are proposed outcomes realistic (landscape context/ threats) & measurable?

Reminder - key questions on criteria for success

Does it make sense from a cost-benefit and time-efficiency perspective for the business?

- ✓ Can the project be set up and achieve results in a reasonable timeframe?
- ✓ Is the number of stakeholders and organisations to be consulted manageable – and thus transaction costs, time involved?
- ✓ Time and costs of monitoring reasonable?
- ✓ Compared with other options of delivering compensation, does the cost-benefit balance make sense?
- ✓ Is the project likely to have significant reputational benefits or might it harm the company's reputation?

Q&A

Do you have any questions
?

Day 2: Coffee Break: 10.30 am

RSPO Compensation Life-Cycle

Compensation Plan Concept Note to Panel

Required Compensation budget or area established

Desired compensation described

Compensation options reviewed & Proposal developed

Compensation Plan finalised and implemented

Implementation reviewed

Work out Compensation Liability

Prepare ToR for Compensation Project, based on Criteria

Assess Compensation options, develop proposal

Compensation Management Plan & agreements in place; implementation starts

Evaluation, reporting, & adaptive management

Approval by Panel or CTF

RSPO grower submission

CTF Guidelines

RSPO grower

Sample ToR could be developed by RSPO

RSPO grower selects preferred option

Grower develops own proposal or reviews proposals by competent others

Criteria for assessment could be developed by

Approval by BCVWG-CP (after possible peer review)

RSPO grower submits plan

Competent partners may implement

Framework Compensation Management Plan could be

BHCVWG-CP reviews report to check delivery

Verifier (who?) Panel-appointed?

RSPO grower submits annual progress report

Criteria for assessment of performance (based on Management

Outline Compensation Management Plan and Logframe covers all these

Design: Once a project has been selected

Outline of the steps involved (depends on option chosen, but generic steps would be):

- Drafting a Compensation Proposal then **Management Plan**

(*outline set out on next slide*)

-Agreeing **governance structures** and finalising **agreements** with partners, others

- Finalising **financial arrangements**

-Drawing up detailed **ecological management plan**

- NB: Consultation with stakeholders critical throughout

Remediation & Compensation Management Plan – Draft outline

Introduction

- Identification of company and management units
- Summary of total liability for the individual management unit (social and environmental liability)

Executive summary of proposed activities
(Changes in SOP, Remediation Management Plan, Compensation Management Plan)

- Within or outside management units,
- Habitat management (including set-aside) and/or restoration,
- Other conservation investments
- Rationale for the choice made
- Explanation of how and why the compensation activities are additional, long-lasting, equitable and knowledge-based
- Summary of implementation arrangements: Allocated financial and human resources, contracts

Logical framework ('logframe')

Goals, indicators, baselines, milestones, means of verification, assumptions , risks, uncertainties

Accompanying documents

- Detailed Ecological Management Plan
- Agreements (eg with communities or NGOs undertaking conservation work)
- Budget
- Trust Fund or other financial arrangements
- Gantt chart

Logframe to pull the elements together

Project summary	Measurable Indicators (and associated baselines and milestones)	Means of verification	Important Assumptions
Goal: To attain full certification in all operating units by complying with RSPO Remediation & Compensation Procedures related to Land Clearance without Prior HCV Assessment plan by implementing a set of activities to rectify and compensate for land clearance			
Sub-Goal: Biodiversity conserved and sustainably managed for the long term as compensation and communities compensated	• Updated SOPs • Improved conservation management within and outside management unit • Compensation to Communities for loss of HCV4-6	• Independent verification of revised SOPs, Remediation and Compensation Management Plans. • Aerial and ground surveys • Surveys and interviews	
Purpose: Remediation & Compensation • New SOPs • Remediation • Compensation (incl. communities)	• SOP changed • Remediation Management Plan • Compensation Management Plan for HCV1-3 and HCV4-6 in place by [insert reasonable date].	• SOP reviewed • Remediation and Compensation Management Plans reviewed	• RSPO Guidance exists • [Insert other assumptions]
Outputs (add or delete rows if needed)			
Output 1: SOP amended	1.a. [Describe a change in SOP and by when it will be in operation.] 1.b. [Describe a change in SOP and by when it will be in operation.] 1.c. [Describe a change in SOP and by when it will be in operation.]	• Implementation reviewed	[Insert assumptions]
Output 2: Remediation	2.a. [Describe outcome of remediation activity and by when it will be in operation – e.g. in riparian areas] etc	• Remediation Management Plan reviewed	[Insert assumptions]
Output 3: Compensation identified & implemented (for HCV1-3 and HCV4-6)	3.a. [Describe outcome of compensation activity and by when it will be in operation] etc	• Compensation Management Plan reviewed	[Insert assumptions]

For each activity in the logframe:

Project summary for ACTIVITY 1a:					
Details of Activity	**Planned outcome & rationale for choice of activity:**	**Roles and Responsibilities and Implementation Arrangements**	**Timeline and Milestones**	**Indicators**	**Budget**
• Describe activity & location. • State whether within or outside management units. • Habitat management and/or restoration? • Other? • Include rationale for the choice made. • Include ref. to attached maps.]	• Desired result of this activity • Rationale for selecting this activity.	• Which organisation(s) will undertake the work. • Supporting evidence. • Refer to an attached Ecological Management Plan. • Arrangements in place for implementation, with supporting evidence. • Refer to attached Agreements, Trust Fund documents, etc.	• Duration of activities • Key milestones. • Refer to attached Gantt chart.	• Perf-ormance indicator • Monitoring activities.	• Budget. • Refer to attached detailed budget.

Exercise
11:45-12:15

Practical/Exercise:
Compensation
Management Plan

Compensation Management Plan – Exercise 1

- Q1 : What would be the contents of a good Compensation Management Plan ?
  - Comments on draft outline presented

- Q2 : What is the process within RSPO for evaluating proposed Compensation Management Plans?
  - Who evaluates proposed Compensation Management Plans, based on what Guidelines?
  - What is the role of the Grower? The Grower's consultants? RSPO Secretariat? Compensation Panel?

Latihan 1:
Membuat Rencana Pengelolaan

P1 : Seperti apakah isi dari Rencana Pengelolaan Kompensasi yang baik?

- **Ditampilkannya komentar dari draf kerangka**

P2 : Bagaimanakah proses di RSPO dalam mengevaluasi Rencana Pengelolaan Kompensasi yang diusulkan?

- **Siapa yang mengevaluasi Rencana Pengelolaan Kompensasi yang diajukan, berdasarkan panduan apa?**
- **Apa peran pekebun? Konsultan pekebun? Sekretariat RSPO? Panel kompensasi?**

Q&A & Discussion
12:15-12:30

DAY 2
Lunch
12:30-2:00

Implementing Compensation Projects 2:00-3:00

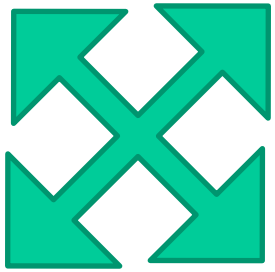
Key aspects of implementation:

- Governance structures and processes for oversight
- Preparing agreements and other legal instruments with stakeholders (eg contracts, easements, granting land to protected areas etc)
- Preparing a Management Plan and associated budget
- Putting in place financial arrangements (eg trust funds)
- Monitoring and evaluation, reporting and adaptive management

Who are the main stakeholders during compensation implementation?

Key Stakeholders

- Government
- Developer
- NGOs
- Community Groups or Associations
- Investors/lenders
- RSPO CTF



Broad Roles

- Direction / oversight / management
- Field-level activities (implementation)
- Monitoring & Evaluation
- Financing
- Enforcement

⟶ Different stakeholders can play a number of roles, depending on circumstances

Governance structures

Oversight: The Grower should clarify which organisation or group will be responsible for ensuring that implementation of the compensation is on track. This could be:

- Grower's staff
- Consultant
- NGO
- Community
- Government agency (eg protected area)
- **Perhaps best: A combination of the above (like a steering committee)**

- **What would work for RSPO compensation? Discuss.**
- Note: This rests on the monitoring and evaluation framework.

Management

Management: The Grower should clarify which organisation(s) or group(s) will actually implement the conservation activities on the ground. This could be:

- Grower's staff
- Community
- Government agency (eg protected area)
- Biobank
- Private contractor for ecosystem restoration
- ….Or a combination

Monitoring and evaluation

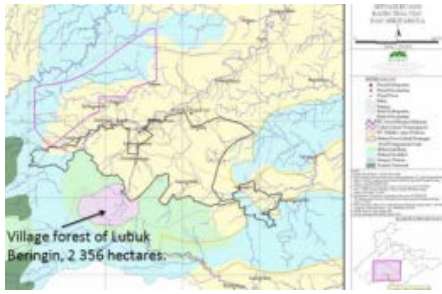
M&E: The Grower should clarify which organisation(s) or group(s) will implement the conservation activities on the ground. This could be:

- Grower's staff
- Consultant, NGO or other third party
- Independent third party verifier
- RSPO – CTF – Panel?

…Or a combination with a Steering Committee

Preparing agreements

Depending on the decision as to which organisation(s) are to undertake the conservation actions and which organisation(s) are to have governance and monitoring and evaluation roles, one or more agreements or legal designations may be needed, such as:



- Performance-based management agreement to undertake the conservation activities between organisation(s) responsible for oversight (eg grower) and organisation(s) responsible for management (eg NGO)
- Land-use designation by government authorities (eg local authority, protected area board or Forestry or Agriculture Department)
- Covenant or easement on land
- Monitoring and verification contracts

Preparing the budget

Establish the budget for the conservation activities (project into the future for duration of compensation) and how it will be managed.

NB this covers initial establishment and long-term management of the compensation.

- List the conservation activities as well as what is needed for them to happen (eg training).
- Work out the costs (set-up costs to secure the area for conservation purposes, staff time, contractors, equipment, materials, travel, training, meetings, etc).
- Check these costs cover the activities on the ground as well as the costs of oversight, monitoring and evaluation, reporting etc.
- Check these costs cover the duration of the activities, from planning through implementation of many years.

Making the investment

Set funds aside to implement the budget.

Issues to consider include:

- Initial start-up costs.
- Trust fund or other mechanism for long term financial management.

BBOP Business and Biodiversity Offsets Programme — Options for Conservation Funds

Conservation trust funds are established in more than 50 developing countries

Work with existing institutions (for example, conservation trust funds that are already established)

or

Create a new trust fund to manage compensation funds or payments for ecosystem services

or

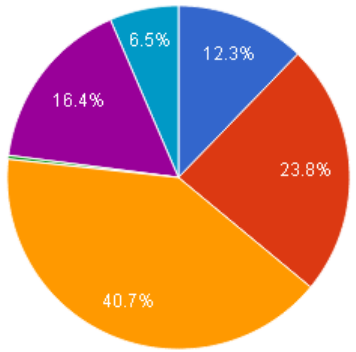
Develop a combination of new and existing institutions and mechanisms

Allocating and managing the budget

Allocate the budget to the organisations that will carry out the specific activities (management, oversight, monitoring etc)

Check that staff, consultants and partners are responsible for performance, and there are associated periodic payments:

- Staff have key performance indicators for delivery and are responsible for reporting against budgets
- Consultants/partners are paid periodically (eg annually) based on performance against agreed milestones/indicators for the Management Plan



Worked example, with scenarios, for defining the budget of a biodiversity offset (Steps 1 and 2 of 3)

Step 1. Establish the cost of implementing the offset by creating a budget

Offset Budget

The project budget represents all costs of activities and programs to ensure successful offset implementation.

	Budget Line	Amount
1	Management	125,000
2	Community Investments	200,000
3	Research and Scientific Meetings	50,000
4	Monitoring and Evaluation	28,125
5	Admnistration (22.5%)	90,703
	Total Fund Required	493,828

In this example, monitoring and evaluaton costs are assumed to be 7.5% of all progam costs (lines 1 through 3). Administrative costs represent 22.5% of all costs including M&E (lines 1 through 4). Percentages figures or actual numbers can be used to make the budget calculations

Step 2. Calculate the size of the Trust Fund required to meet annual needs and Determine if a Trust can be fully capitalized

Determine the Amount of Money Required to cover costs each year	493,828
Determine spending rule	5%
Size of Trust Fund needed	9,876,563
Amount Available	8,000,000
Money available to cover costs annually (assume 5% spending rule)	400,000
Annual Projected Deficit	93,828
Net return needed to meet annual costs	6.2%

In step 2 the annual budget amount is used to determine the size of the endowment needed.

First, divide the total annual budget byannual percenteage of net income that the Fund expects to spend (net income is total earnings precentage less an brokerage fees and/or taxes). This is call the spending rule. In this example the spending rule is 5%. If the Fund enjoys a net return greater than 5% the Fund can reinvest and save for a rainy day, if less than 5% it will need to draw on its capital. The norm is for funds to set a relatively conservative spending rule to protect capital.

Monitoring, evaluation, adaptation, enforcement

Monitoring and Evaluation

- Independent monitoring on the ground.
- Against detailed contents of the Compensation Management Plan Agreements between OP company and RSPO to develop and implement the Compensation Management Plan
- Government authorities
- Independent scientific committee? And/or
- Representatives from universities, NGOs, certifiers, etc

RSPO Comp. Panel?

Adaptive Management

- Sufficient budget and oversight to change the Comp. Mgmnt Plan, as needed, if desired compensation outcomes are not achieved as anticipated.

RSPO Comp. Panel?

Enforcement

- Government enforcement of protected areas, planning law, mitigation, …
- Agreements between OP company and RSPO to develop and implement the Comp. Mgmnt Plan
- Agreements (as necessary) between OP company and those **implementing** the conservation, eg: NGOs, communities (PES), biobanks, protected area management authorities.

Exercise
3:00-4:00

Practical/Exercise:

Establishing implementation measures, monitoring them, managing

Compensation Management Plan – Exercise 2

- Q1: Does the logframe capture what an assessor would need to know in order to evaluate the quality of compensation activities?
- Q2: What additional material might need to be provided by RSPO in terms of guidance?
- Q3: What other evidence would need to accompany the logframe (eg agreements, ecological management plan, trust fund details, etc)?
- Q4: Who would verify the implementation of the SOPs, Remediation and Compensation Management Plans?
  - Who evaluates proposed Remediation and Compensation Management Plans, based on what Guidelines?
  - What is the role of the Grower? The Grower's consultants? RSPO Secretariat? Compensation Panel?

Latihan 2: Monitoring & Evaluasi Kompensasi

P1: Apakah kerangka pikir mencakup hal-hal yang diperlukan oleh seorang penilai untuk mengevaluasi kualitas kegiatan kompensasi?

P2: Bahan tambahan apa yang mungkin perlu disediakan oleh RSPO dalam hal panduan?

P3: Bukti lain apa yang dibutuhkan untuk melengkapi kerangka pikir (contohnya perjanjian, rencana pengelolaan ekologi, rincian dana perwalian, dll.?

P4: Siapa yang akan memverifikasi implementasi SOP, Rencana Pengelolaan Kompensasi dan Remediasi?

- **Siapa yang mengevaluasi Rencana Kompensasi dan Remediasi yang diajukan, berdasarkan panduan apa?**
- **Apa peran pekebun? Konsultan pekebun? Sekretariat RSPO? Panel kompensasi?**

Coffee
4:00-4:15

Discussion, wrap-up
4:15-4:30

Q&A session and discussion, Wrap up




Taking stock

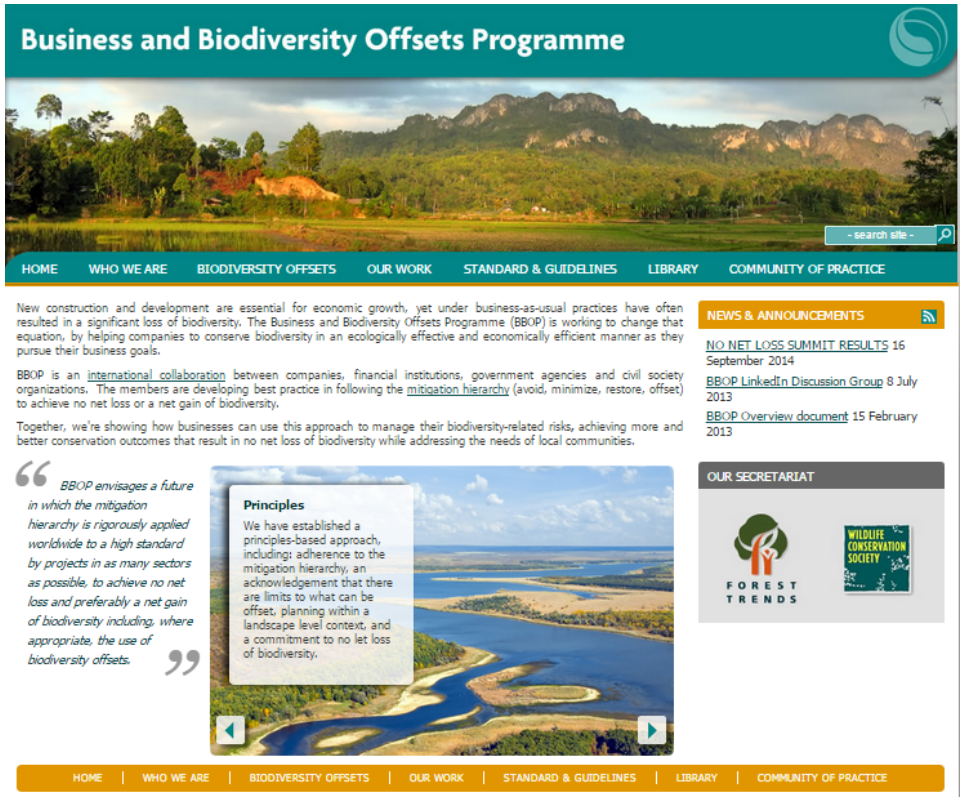
DAY 1

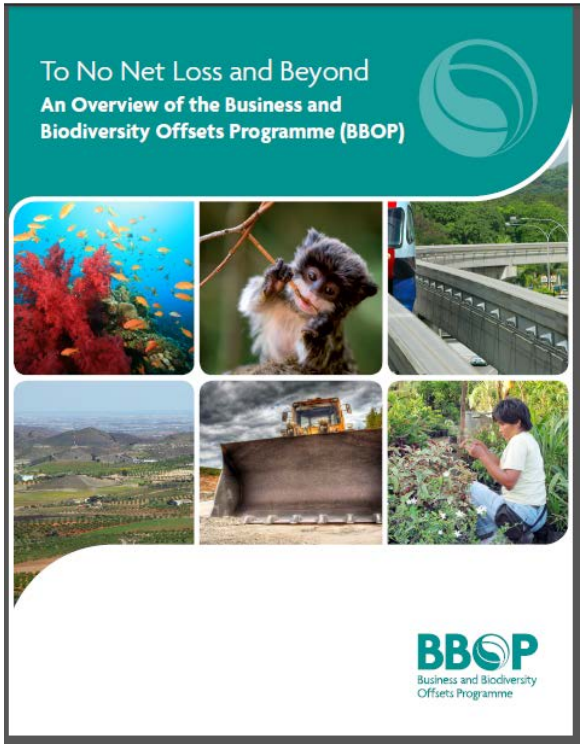
Background: key concepts & principles.
Practical issues: conservation gain & implementation options
Lessons learnt from global experience: key ingredients for compensation success

DAY 2

Design of compensation projects: typical approach and steps
Design of compensation projects: finalising design ready for implementation.
Compensation Management Plan
Implementation of compensation projects: Governance, Agreements, Management Plan, Financial arrangements
Ready for implementation?

Thank you – source of info:



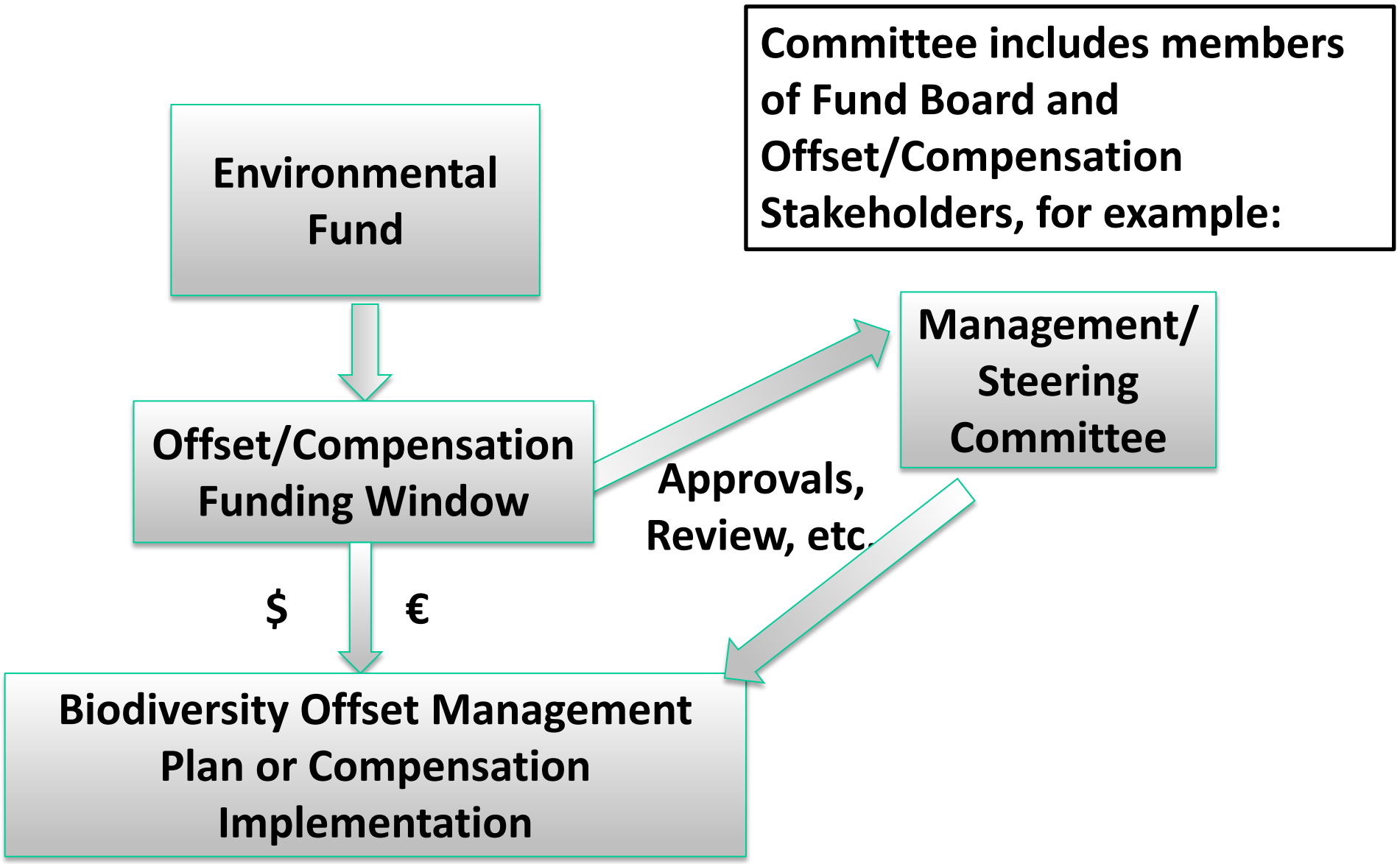


See www.forest–trends.org/biodiversityoffsetprogram/

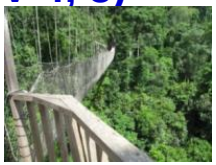
or contact: bbop@forest-trends.org

SPARE SLIDES

Fund Management



Key biodiversity components matrix

Biodiversity Component	Intrinsic Values (Vulnerability, irreplaceability)	Use Values	Cultural Values
Species 	Threatened species; restricted range and/or endemic species; congregatory species **(e.g. HCV 1)**	Species providing fuel, fiber, food, medicines, etc. **(e.g. HCV 5)** 	Totem species **(e.g. HCV 6)**
Habitats/ Communities/ Assemblages	Rare or threatened habitat types; exemplary habitats **(e.g. HCV 3)**	Recreational sites **(e.g. HCV 4, 5)** 	Sacred sites (e.g. sacred groves, burial grounds); sites of aesthetic importance **(e.g. HCV 6)**
Whole Landscapes / Ecosystems/ Processes 	Climate regulation; seed dispersal; pollination **(e.g. HCV 2)**	Air and water quality regulation; soil fertility; pollination **(e.g. HCV 4, 5)**	E.g. Landscape-scale sacred sites (**e.g. HCV 6)**

Metrics

How are loss and gain of biodiversity measured?

Biophysical metrics with economic valuation top-up in some circumstances

Key biodiversity components matrix

Biodiversity Component	Intrinsic Values (Vulnerability, irreplaceability)	Use Values	Cultural Values
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Whole Landscapes / Ecosystems	Climate regulation; seed dispersal; pollination	Air and water quality regulation; soil fertility; pollination	E.g. Landscape-scale sacred sites

Biophysical

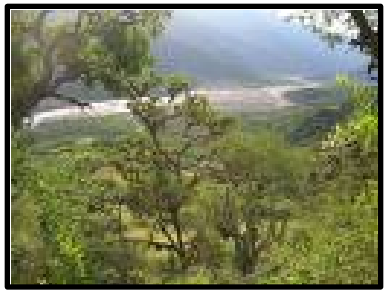
(Sometimes) Economic valuation

Thresholds

Severity of impact on biodiversity

High

Impacts too severe to be offset



What is the threshold?

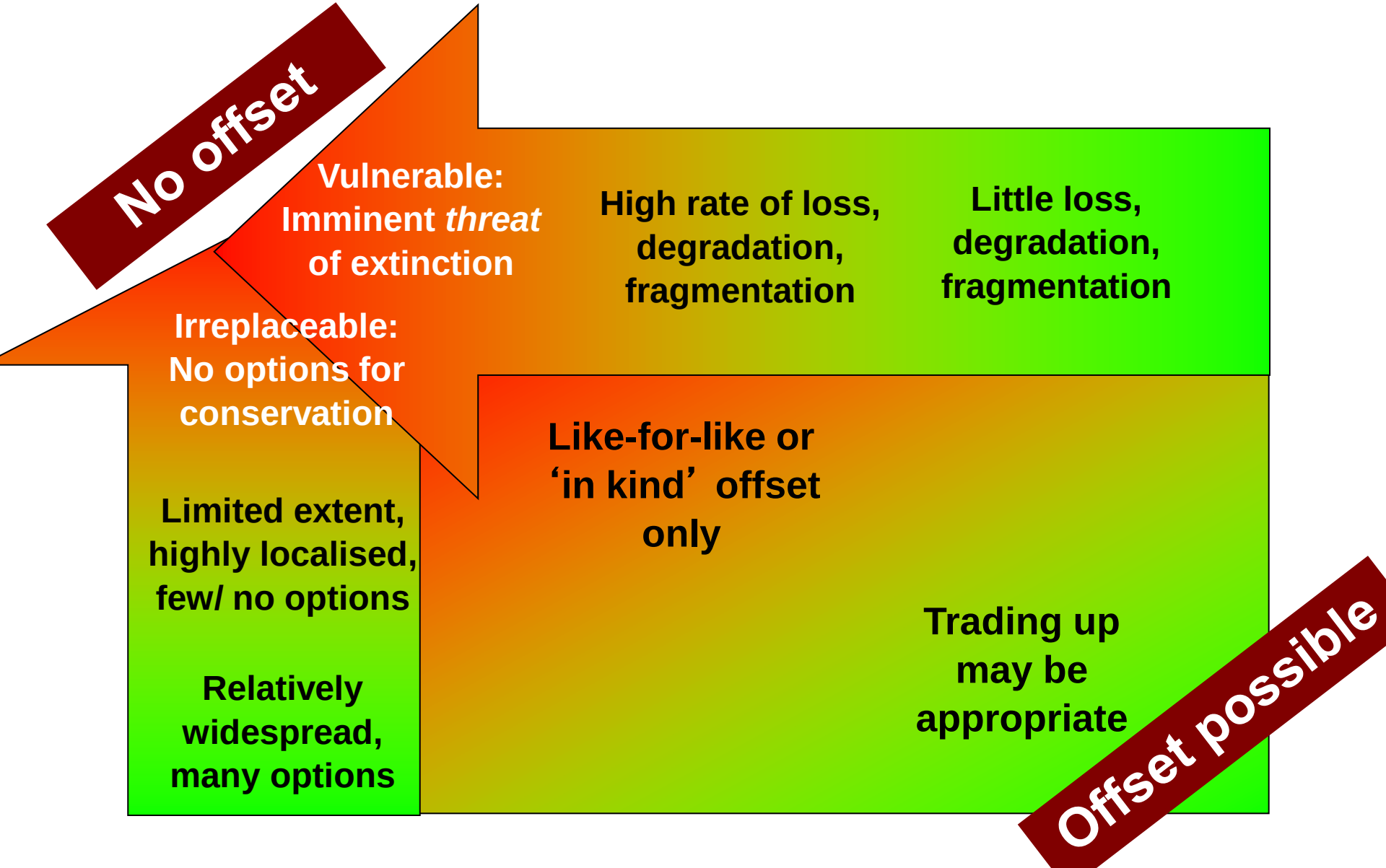
Impacts can and should be offset

Low

Impacts too small to be worth offsetting

What is the threshold?

Some impacts cannot be offset

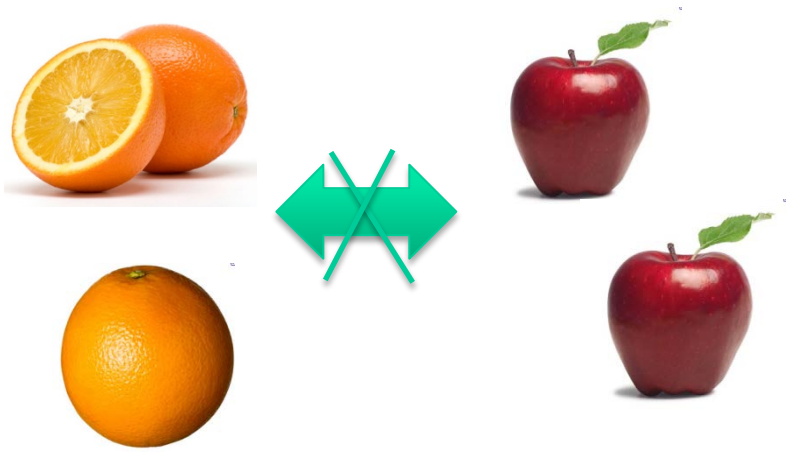


Assessing No Net Loss/Net Gain

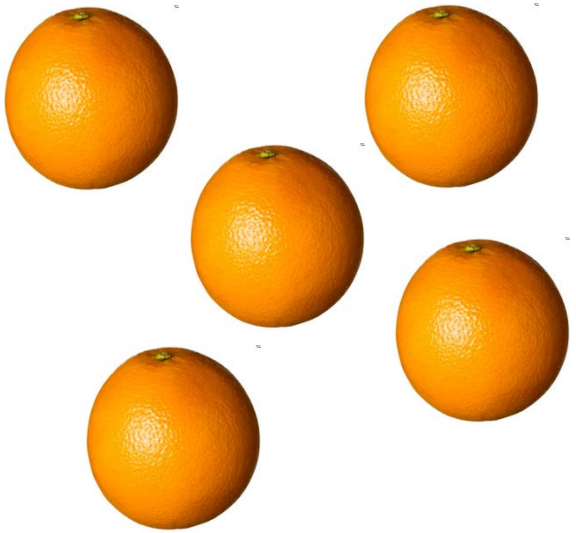
No Net Loss/Net gain in biodiversity

(1) + **(2)**

Equivalence/Like for Like (What?)



Net balance (How much?)



Loss-Gain calculations
Using area x condition

Compensation **area**[1] x
(**Condition**[2] post-compensation **–**
Condition pre-compensation)

needs to =

Impact **area**[1] x
(**Condition**[2] pre-impact **–** Condition post-impact)

[1] *Area can be scaled to better represent its relationship with biodiversity, e.g. by using the species-area exponent 'z'. This ranges from ~0.1 for ecosystems with low turnover to ~0.4 for diverse island archipelagos with high environmental and bio-geographic turnover.*

[2] *Condition can be measured in various ways, depending on the context and what is being measured (e.g. condition of vegetation, a particular species, etc.), and it is usually assessed relative to a benchmark (reference state). Condition may also need to be scaled, as a change at the high and low end of the spectrum is not necessarily equivalent.*

How to measure compensation

Even within ‘like for like’, not all hectares are equal!

➔ **Area alone is not a good measure of ‘amount’ of biodiversity**

Condition is a key issue in compensation

It is not appropriate to exchange
loss of area in good condition (eg HCVs). . .

. . . with compensation of a similar area in low condition
(eg non-HCVs).

… unless extremely high confidence of successful restoration outcomes & compensation over a much bigger area than the area lost.

Products and tools available

BBOP Standard on Biodiversity Offsets and associated material

Overview**

BBOP Standard on Biodiversity Offsets

Principles Criteria*
Indicators*

Guidance Notes*

Glossary**

Supporting Information:

Handbooks:

- Offset Design Handbook
- Cost Benefit Handbook
- Offset Implementation Handbook

Key Topics/Resource Papers:

- No Net Loss & Loss-Gain* Calculations
- Non-offsetable impacts *
- Biodiversity offsets and impact assessment
- Biodiversity offsets and stakeholder participation
- Case studies

Audiences:

Decision-Makers

Assessment

Technical Experts (offset designers, implementers, assurers) and Communities

Practical, 'how to' guidance