



## Social and Environmental Assessments, Indicators, Information, Monitoring, Reporting and Verification

### Session 10

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### WHY DO WE NEED INFORMATION?

- Improving design
- Due diligence & risk reduction
- Guiding investments
- Meeting requirements and documenting compliance
- Assessing performance
- Learning from experience



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## FOR WHAT DO WE NEED INFORMATION?

- Problem analysis, such as understanding drivers of deforestation and degradation
- Developing theories of change
- Safeguards information systems
- Standards and certification

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## WHERE CAN WE GET INFORMATION? DATA SOURCES

- Existing secondary data and/or data routinely collected (national surveys, censuses, forest inventories, etc.)
- Existing and new data gathered for social & environmental assessments and monitoring
  - e.g., Existing assessments done of tropical forestry and biodiversity
  - e.g., New data collected to understand drivers of deforestation

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## HOW CAN WE GET INFORMATION? METHODS AND APPROACHES

- Who will get the information? Researchers?  
Community members? Others?
- Does capacity exist for getting the information?  
Where do you need and want to build capacity?
- Are there key indicators to assess?
- What are the cost and time implications of different approaches?
- How will the data be analyzed? By whom?
- How will data and analysis be shared back with community members and other key stakeholders?
- How will the data and analysis be used?

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## INFORMATION PRINCIPLES

- Assessments and monitoring need to build on good baseline data
- Need to build on existing systems as much as possible, but gaps in spatial and temporal coverage
- Capacity and resources for gathering, analyzing data, and maintaining routine monitoring
- Efforts to develop data systems for multiple national and multilateral environmental agreement (MEA) requirements
- Need good methodology, building on sound science

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## LEARNING INITIATIVE ON SOCIAL ASSESSMENT FOR REDD+ (LISA-REDD)

- Considerable experience in assessing site-level forestry, conservation, and REDD+
- Limited experience on assessing social impacts of national-level REDD+ programs and limited guidance available on suitable methods
- LISA-REDD aims to address this need
  - Two workshops held (in 2011 and 2012)
  - Review of methods ongoing
  - Plan resource guide and piloting best practices

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## IMPACT ASSESSMENTS

- *Ex ante* assessments aim to improve project design, to avoid, minimize or mitigate negative impacts
- *Ex post* assessments done after completion of intervention, aim to look at intended and unintended impacts
- Ongoing or synchronous assessments are conducted while intervention is in progress
- For REDD+ priority for *ex ante*



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## TYPES OF SOCIAL ASSESSMENTS

- For REDD+ social assessments, a range of methodologies exists, which vary from quicker to lengthier & more scientifically rigorous, such as:
  - SESA
  - SBIA Manual developed for CCBA
  - PSIA
  - Quasi-experimental designs, i.e., the CIFOR global comparative REDD+ study

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## STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT (SESA)

- SESA required by FCPF (also accepted by UN-REDD)
- Methodology for assessment of safeguards for a program (not project), such as national REDD+ program
- Stakeholder engagement
- Linked to Environmental and Social Management Framework (ESMF)

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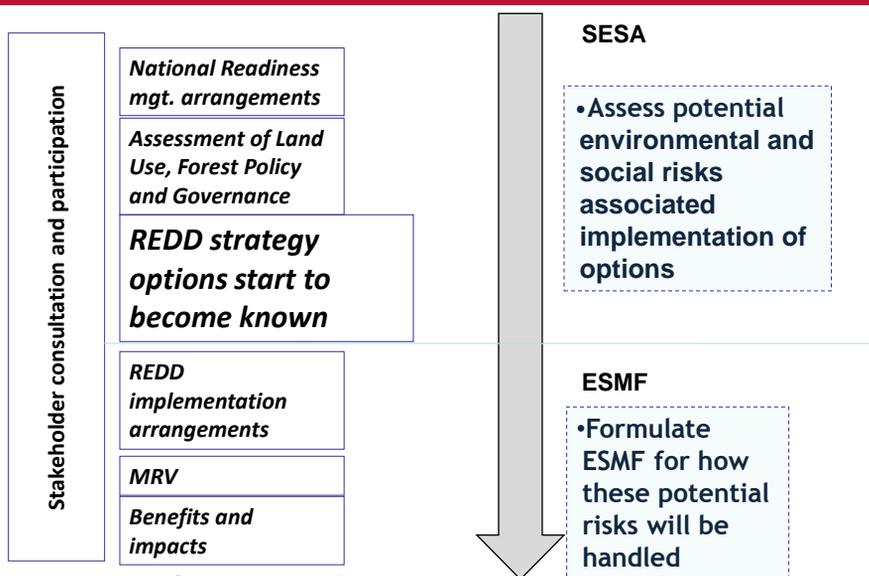
## ADDED VALUE OF SESA

- Assesses the extent to which the REDD strategy addresses the existing institutional, policy, legal, regulatory and capacity gaps to manage the environmental and social priority issues in the context of REDD
- Helps select among indicative REDD strategy options based on identification of environmental and social risks of potential interventions/projects
- Links SESA to the World Banks safeguard policies
- Incentives exist for countries to undertake SESA and also for countries to engage with different interest groups beyond government

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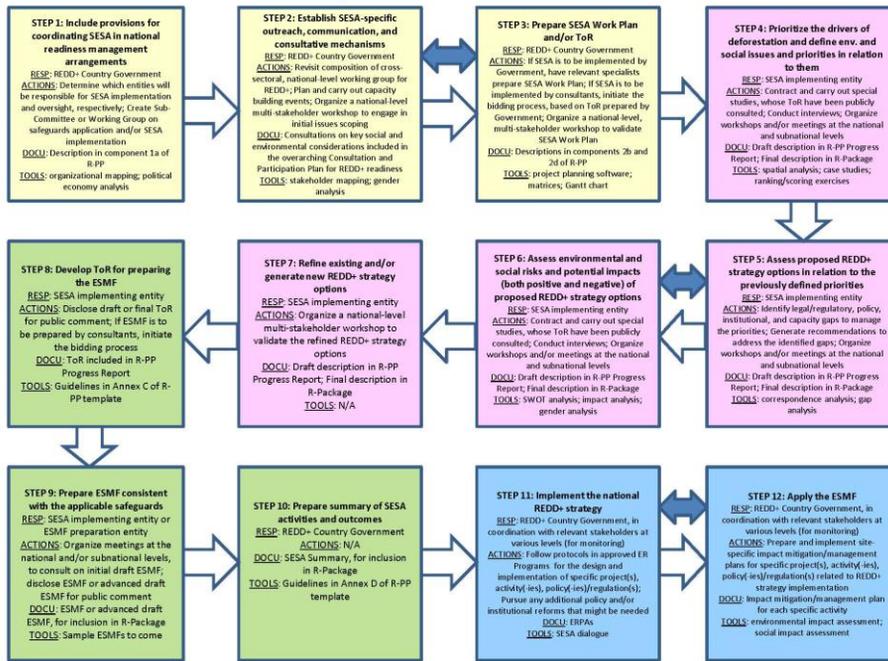


## TIMING OF SESA / ESMF



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### SESA/ESMF Process Flowchart

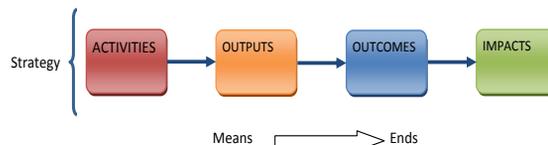


NOTE: The list of "TOOLS" provided for each step is not meant to be exhaustive.



## SOCIAL AND BIODIVERSITY IMPACT ASSESSMENT (SBIA) MANUAL

- Participatory approach that integrates project design and impact assessment through the development of a project theory of change (TOC)
  - Roadmap of how to get from activities to desired impacts – a project’s theory of how it will achieve its social objectives based on **cause and effect analysis**

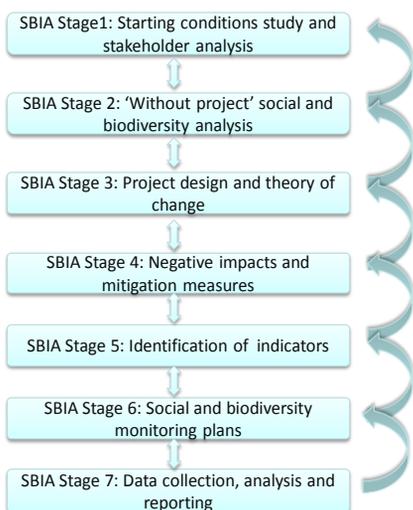


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## THEORY OF CHANGE (TOC) IN SBIA

### Seven SBIA Stages



### Benefits of TOC Approach

- *Ex ante* SIA via TOC helps strategic design, and synchronised SIA provides a powerful adaptive management tool
- Credible indicators and monitoring system: indicators tracking progress along causal chains from REDD+ strategies to outcomes to impacts
- Stakeholder ownership & transparency: compatible with rights-based approach & FPIC
- Complementarity & compatibility with PSIA, SESA, etc.

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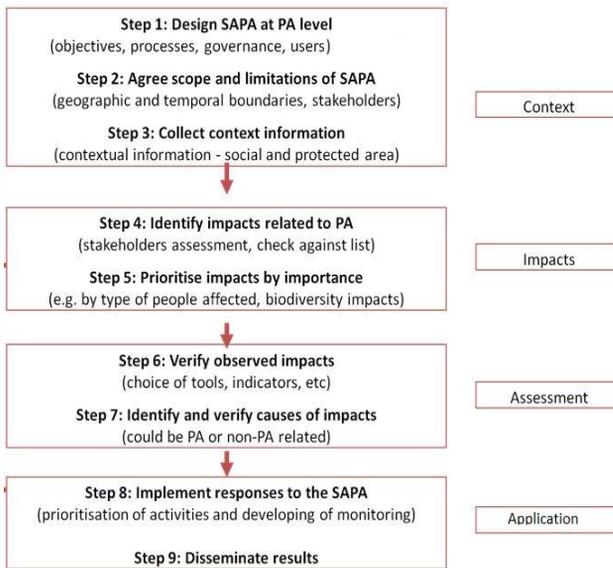
## SOCIAL ASSESSMENT OF PROTECTED AREAS INITIATIVE (SAPA)

- Aimed to address the lack of a standardized, objective approach by which to qualify and quantify social impacts of PAs
- **Defined Goal:**
  - *Identify/develop and evaluate a range of methodologies and tools for assessing the social impacts of protected areas that enable conservation policy and practice to better adhere to the globally accepted principle that protected areas should strive to contribute to poverty reduction at the local level, and at the very minimum must not contribute to or exacerbate poverty*
- **Conclusion** following review of 30 methods/tools
  - No one universally applicable methodology, but can define a **generic process** to identify and tailor one (or more) methodologies for a given context that meet acceptable standards of objectivity, participation, and transparency

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## SAPA PROCESS



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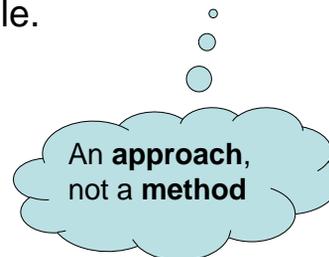


## POVERTY AND SOCIAL IMPACT ANALYSIS (PSIA)

- PSIA is an assessment of the distributional impact of specific policy reforms on the welfare of different stakeholder groups, with particular focus on the poor and vulnerable.

### PSIA and REDD+

- **Policy** focus
- **Country, sector** or **issue** focus
- **Equity** focus
- Combines **analysis** with **process**
- Promotes **inclusive** policy making
- Can be done **before** (*ex ante*), **during** or **after** (*ex post*) reform



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## EXAMPLE: PSIA OF A REDD+ MITIGATION STRATEGY



Sources: World Bank, 2010d: 274; World Bank, 2003a: 9; Indonesia DPL P120313

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## QUASI EXPERIMENTAL DESIGNS

### CIFOR's Global Comparative Study on REDD

#### Non-equivalent comparison group design (Before-After Control-Intervention, BACI)

➤ Compare **control** and **intervention sites**

#### Attributing Causality at National Scale

- Consider that *ex ante* vs. *ex post* is a false dichotomy
  - There is no "after" for REDD+
- Think about creative ways to leverage existing longitudinal data sources: (LSMS; DHS; Census)
- Build in controls for as long as we can (we don't have the option to randomize)
- Large scope for addressing impact heterogeneity
  - Gender impacts; Ethnicity; Poverty status



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## WHAT IS THE DIFFERENCE BETWEEN SIS AND MRV ?

- Cancun agreements on Safeguard Information Systems (SIS), voluntary country-level reporting, with SBSTA to provide further guidance (not yet agreed) – *respecting national sovereignty*
  - Agrees also that developing country Parties undertaking the activities referred to in decision 1/CP.16, paragraph 70, **should** provide a summary of information on how all of the safeguards referred to in decision 1/CP.16, appendix I, are being addressed and respected throughout the implementation of the activities;
  - Decides that the summary of information referred to in paragraph 3 above **should** be provided periodically and be included in national communications, consistent with relevant decisions of the Conference of the Parties on guidelines on national communications from Parties not included in Annex I to the Convention, or communication channels agreed by the Conference of the Parties;
- Measurement, reporting and verification generally refers to emissions of carbon (C) and greenhouse gases (GhG) – *fulfilling international commitments*

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## Safeguard information system – Durban

*Agrees that systems for providing information on how the safeguards referred to in appendix I to decision 1/CP.16 are addressed and respected should, taking into account national circumstances and respective capabilities, and recognizing national sovereignty and legislation, and relevant international obligations and agreements, and respecting gender considerations:*

- (a) Be consistent with the guidance identified in decision 1/CP.16, appendix I, paragraph 1;
- (b) Provide transparent and consistent information that is accessible by all relevant stakeholders and updated on a regular basis;
- (c) Be transparent and flexible to allow for improvements over time;
- (d) Provide information on how all of the safeguards referred to in appendix I to decision 1/CP.16 are being addressed and respected;
- (e) Be country-driven and implemented at the national level;
- (f) Build upon existing systems, as appropriate;



## MONITORING, REPORTING & VERIFICATION SYSTEM

- **Measuring**
  - Accurate maps of current forest and other land uses
  - Estimation of Carbon in different areas
  - Estimation based on landscape or larger-scale sampling
  - Field validation: balance cost, precision, accuracy
- **Monitoring**
  - Remotely sensed data
  - Ground truthing & communities
- **Reporting**
  - National and international reporting structures
  - Use of technology to reduce transaction costs
- **Verification**



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23



## MEASURING AND MONITORING IN PRACTICE

- Ideally is based on a comprehensive forest inventory that helps provide information on forest resources and informs management decisions
- **Satellite imagery**
  - Low cost/hectare
  - Low Carbon stock accuracy
- **LIDAR, RADAR & other new technologies**
- **Cost-accuracy continuum**
- **Integration of field and remotely sensed data**
- **Forest and Carbon data must also be integrated into economic planning**



Multi-tier Monitoring

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24



## Linking information at different scales

- National
  - Reporting internationally
  - National strategy implementation
- State or Province
  - Rules and policies may differ sub-nationally
  - State and Province level often responsible for implementing national policy and may also collect and use safeguard information independently from national system
- Local project level
  - Data requirements may be significantly different
  - Capacity often a big challenge



## U.S. AGENCIES SUPPORTING MRV

- USG agencies
  - SilvaCarbon (program to coordinate USG agencies working on forest carbon measurement)
  - Enhance global capacity to understand forest carbon
    - ✓ Partner with countries on methodologies and practices
    - ✓ Coordinate USG assets on data, analyses, technology
- USFS ongoing or recent support in many countries
  - ✓ Bangladesh: Sundarbans mangroves
  - ✓ Brazil: inventory design & MRV system
  - ✓ Indonesia: peat lands and mangroves
- NASA – SERVIR
  - ✓ Mapping and data integration
  - ✓ Capacity building with partner organizations in regional hubs





## HOW TO LINK ENVIRONMENTAL INFORMATION WITH MRV?

- MRV is measuring data on forests
- Need to be consistent with GHG reporting on land use.
- What else could be measured at the same time, to get environmental and biodiversity information on the condition of forests?
- Safeguard information systems should ideally be connected to systems used for taking management decisions.
- Can MRV be expanded to encompass monitoring and reporting of environmental (and social) conditions?

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27



## EXAMPLE OF METHODS: ENVIRONMENTAL IMPACT ASSESSMENT

- **Environmental impact assessment (EIA)** is an assessment of the possible positive or negative impact that a proposed project may have on the environment, together consisting of the [environmental](#), social and economic aspects.
- EIAs can provide information to improve design, to minimize or mitigate negative impacts. Broadening the scope of an EIA from a project site to a landscape analysis can be used to look more comprehensively at the system, and for example, suggest better ways to benefit species that are threatened.
- The 1969 US National Environmental Protection Act (NEPA) requiring EIAs. USAID must conduct environmental reviews of projects, starting with an initial Environmental Examination (IEE) and if needed, an Environmental Assessment (EA).
- Later many other countries developed EIA requirements, especially for large infrastructure projects.
- In USAID context covered by reg. 216

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## EXAMPLE OF METHODS: RAPID BIODIVERSITY ASSESSMENT

- Quick assessment of biodiversity (not long-term scientific study), aims to identify species present in an area, quick baseline
- Example: Conservation International's Rapid Assessment Program (RAP)'s time table is:
  - Field survey of 4-6 weeks, with 5-7 days surveying per site; Preliminary report published within 2 months of field survey; Final report (with species lists) published about one year after field survey.
  - To date, CI has done 63 of these RAPs.

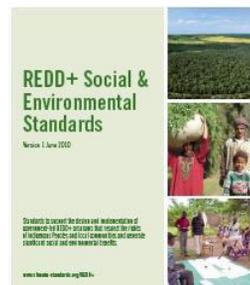
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## ENVIRONMENT AND BIODIVERSITY: WIDE RANGE OF GUIDANCE

Some of the best known include:

- Principles and Criteria (UN-REDD)
- Climate, Community and Biodiversity Standards (CCBS)
- REDD+ Social and Environmental Standards (REDD+ SES)
- Convention on Biological Diversity (CBD)





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## MORE ENVIRONMENTAL & BIODIVERSITY INDICATORS AND METHODS

- **Convention on Biological Diversity**
- **Aichi Targets**
- **Guidelines by World Conservation Monitoring Center**
- **UNCCD**
- **FAO's Forest Resource Assessment**
- **CIFOR forest biodiversity indicators**
- **International Indigenous Forum on Biodiversity**
- **Biocultural Protocol**
- **Biotrade Initiatives**

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## WHO WILL MONITOR?

- **Development of baselines and monitoring of C and GhG emissions has been largely done by experts**
- **Growing interest in community-based monitoring, which can be very effective (& cost-effective) if good training and support**
- **Need to ensure social diversity and inclusiveness in monitoring, i.e., involve range of stakeholders in monitoring**

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## COMMUNITY MONITORING

- Need to have clarity on goals of community monitoring
- To date, community-based monitoring has often focused on measurements of C
- Data sometimes sent off for analysis
- Need to build capacity for local analysis and use of data
- Look at expanding monitoring to cover social and environmental safeguards

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## HOW TO KEEP IT SIMPLE?

- Many different indicators, approaches and information needs
- What is realistic and feasible?
- Need outside support to build systems: but how can countries sustain them?
- How to agree on most essential information needed?

.....*Our challenge going forward....*

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