Session: Suitable Biodiversity and Ecosystem Services Indicators ("BES metrics") (I)

Safeguard Handbook on Ecosystems

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Agenda

1) JICA’s Environmental Guideline
2) JICA’s Safeguard Handbook on Ecosystems
3) Conclusions
Environmental Guideline

• **Projects must not involve significant conversion or significant degradation of critical natural habitats and critical forests.**

• **Projects must, in principle, be undertaken outside of protected areas.**

*effective since July 2010*
- Loan Aid
- Grant Aid
- Technical Cooperation Projects
- Technical Cooperation for Development Planning (M/P)
Past Environmental Issues

- Hydropower station in national park
- Bridge near a potential nature sanctuary
- Geothermal Plant near a protected area

Impact distribution:
- Impacts on local community: 48%
- Pollution (total): 25%
- Natural habitat: 13%
**Problem**
How do we identify/review prospective impacts to critical natural habitats?

How do we evaluate the effectiveness of mitigation measures? e.g. offset, set-asides, restoration, etc.

**Solution**
- A realistic and feasible yardstick for planning ecological assessments during project cycle.
- A step-by-step procedure to make sure that proposed projects will not cause ‘irreversible damage’ to the natural habitat when implemented.

Japan International Cooperation Agency
Safeguard Handbook on Ecosystems

• Aims to provide a decision-making framework for JICA staff involved in projects associated with Natural Habitat settings.

Handbook Contents

1. Importance of Ecological Considerations
2. Strategic Environmental Assessment (SEA)
3. Screening
4. Scoping and Preparation of TOR for an EIA
5. Reviewing the EIA Report and other Related Documents
6. Mitigation Measures for Natural Habitats
7. Environmental Management Plan (EMP) and Monitoring Plan
8. Stakeholder Participation
9. Engaging Experts and Intellectuals on Ecosystems
1. Importance of an Adaptive Management and Precautionary Approach

![Diagram showing the importance of an adaptive management and precautionary approach]

- **Information Sharing**
- **Planning & Consensus**
- **Monitoring**
- **Evaluation**
- **Adaptive Management**

- **No impact** → **No mitigation measures required**
- **Unknown** → **Precautionary measures** → **Monitoring & Adaptive Management**
- **Potential impacts** → **Mitigation measures to potential impacts** → **Monitoring & Adaptive Management**
2. Risks of Not Conducting a Proper SEA or Screening

- Project termination or delay
- Difficulty planning mitigation measures
- Secondary and cumulative negative impacts
- Reputational risk

Case Study: Hydroelectric Power Plant Project

**Problem:** Project site was a protected area where power generation activities were permitted.

**Result:** Project could have been implemented legally with an approved EIA, but was terminated due to environmental concerns.
3. Key Points on Reviewing EIA Reports

• Include all potentially impacted items
  Ancillary facilities, area of influence

• Check consistency throughout the document
  Potential impacts → Impact prediction → Mitigation measures → Monitoring

• Do not underestimate impacts
4. Key Points on Reviewing Mitigation Measures

- **Precautionary approach**
  Include mitigation measures even for items with unknown impacts

- **Must be effective, feasible, and realistic**
  Technology, cost, resource, etc.

- **Compensation (offset) measures are a final means**

**Case Study: Dam Project**

**Problem:** Significant amount of fish were killed due to ineffective elevator operation.

**Lesson learned:** Despite an appropriate design, effectiveness may not be achieved due to operating and supervising system problems.
5. Key Points on Reviewing ESMP and Monitoring Plan

- **Engage experts**
  Assist monitoring methods and analysis of monitoring results

- **Institutional management**
  Ability to solve unexpected problems or impacts

- **Budget is sufficient**

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**Case Study: Hydropower Project**

**Problem:** Offset plan was not realized due to unclear ownership for implementation.

**Lesson learned:** A long-term funding mechanism securing an appropriate budget and commitment from the responsible agency should be included in a project plan.
6. Importance of Stakeholder Participation

- **Stakeholder diversity**
  Project site, national level, international level

- **Sphere of impact**
  Upstream/downstream, seasonal stakeholders

- **Conduct stakeholder meetings**
  For implementing mitigation measures (particularly compensation and offset measures) and monitoring
Conclusion

• **Better supervision / Training**
  Handbook has been tailor-made for JICA staff, but can be widely used as reference for supervising assessments, conducting appraisals, and monitoring supervision of development projects.

• **Forward looking**
  JICA will incorporate insights from the Handbook during the JICA ES Guideline revision in 2020.

• **On-going feedback**
  JICA welcomes comments for improvements in the Handbook.
Thank you for your attention!!

For comments/questions please contact: Imanaka.Yukiko@jica.go.jp

This presentation is based on research put together by Ms. Shimako Takahashi (Senior Safeguard Officer, Credit Risk Analysis & Environmental Review Department, Japan International Cooperation Agency)