BEST-PRACTICE NOTE
ON BIODIVERSITY BASELINE SURVEYS
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Nature can’t be rushed.

This Best-Practice Note is intended to support project developers and financial institutions to better understand biodiversity baseline survey timelines and best practices for the purpose of minimizing risk of delay and added costs during finance opportunities that fall within the scope of the Equator Principles.

Delays occur when baseline survey data is inadequate, resulting in extra time needed to fill data gaps. Inadequate baseline studies can also result in delays in approval processes or complaints from stakeholders. Unexpected costs may arise if new risks and impacts are identified which require management activities and mitigation measures that were not initially anticipated. Any temporary loss of production can also lead to compounding costs.

These risks can be largely eliminated by identifying biodiversity risks and impacts at an early stage of project planning and financing, by following international standards and best practices related to biodiversity baselines, and by allowing suitable time for data collection.

BIODIVERSITY BASELINE TIMELINES

Expect baseline surveys and reporting to take more than a year.

Baseline field surveys must be done in the project planning phase and cannot be an afterthought or commence at the last minute. Rather, surveys must be performed over multiple seasons and throughout suitable periods of the year. Timing depends on biological and environmental factors such as:

– Variation in species distribution due to seasonal changes (e.g., temperature or precipitation);
– Reproduction cycle of the organisms of interest;
– Migration periods for birds and other animals; and
– Growth and flowering periods of plants.

KEY TAKEAWAYS

Robust biodiversity baseline studies undertaken over multiple seasons minimizes delay in financing and unexpected project costs, and assists in a smooth financial transaction.

Biodiversity is linked to overall project sustainability and has influence on both human rights and climate-related issues.

Applying international industry best practice in biodiversity baseline studies will increase the project’s recognition as a good neighbour and support the social license to operate.
Following the completion of biodiversity baseline surveys, further time will be needed for impact assessment reporting and the identification of mitigation measures. The graphic below illustrates example timeframes for completing this work. Additionally, the CSBI Project Timeline Tool (http://www.csbi.org.uk/our-work/timeline-tool/) is a valuable resource for translating biodiversity baseline survey timelines into the context of financing projects and planning timelines.

**BASELINE DATA COLLECTION TIMING FACTORS**

- Temperate climate = 4 seasons (Winter, Spring, Summer, Autumn)
- Subtropical climate = 2 seasons (Wet season, Dry season)
- Variations in flora and fauna during the seasonal cycle
- Migration (Spring/Autumn, Wet/Dry)

*It takes time, 1 year minimum*

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GUIDING PRINCIPLES FOR BIODIVERSITY BASELINE STUDIES

*Baseline studies must consider all relevant biodiversity attributes and ecosystem services.*

Baseline studies should be comprised of a combination of literature review, stakeholder engagement and consultation, field surveys, and other relevant assessments as applicable. For sites with potentially significant impacts on biodiversity and ecosystem services, baseline field surveys should be conducted over multiple seasons and by competent professionals with relevant expertise. Field surveys and assessments should be recent and reflect the current status of the survey area. Local and regional study areas should be identified to ensure the data captures the direct project footprint, including related and associated facilities, as well as the project’s area of influence and potential cumulative impacts.

**Important elements to consider during field survey planning include:**

- Engage experienced biodiversity experts with knowledge of biodiversity in the region in question.
- Prioritize the use of appropriate methodology that follows international good practice and standards whenever available and applicable.
- Ensure that all topics outlined by relevant international standards (IFC, EBRD, etc.) are addressed.
- Incorporate buffer areas into survey plans to allow for changes in project layout at a later stage.
- Involve external organisations with species and regional expertise and consider partnerships with relevant NGOs.
- Allow relevant national authorities to be involved in the process.
- Engage with relevant stakeholders, such as local communities and indigenous people, to gain valuable local knowledge on biodiversity and ecosystem services.

**KEY IMPACTS DIFFER BY PROJECT TYPE**

It is not a simple task to identify and assess potential impacts. Examples of differing impacts include:

- **Wind:** barrier-effects, bird and bat collisions.
- **Solar:** habitat loss, displacement.
- **Roads:** habitat fragmentation; creation of barriers.
- **Mines:** large-scale habitat loss; ground and aquatic environment contamination.
- **Residential developments:** urban growth-related cumulative effects.
- **Farming:** aerial and ground spread of nutrients and toxins.

The early involvement of biodiversity experts is necessary to identify the key impacts relevant to each project.

*Recent field surveys are a necessity. Suitable baseline studies will contain a combination of data, and on projects with potential significant impacts on biodiversity, site-specific field surveys should follow best international industry practice.*
EXISTING DATA CONSIDERATIONS

Remove uncertainty to avoid delay.

Priority should be given to the identification of data gaps as early in the planning process as possible, such that these gaps can be sufficiently closed without causing delays. Some existing baseline data is often available to support the early identification of potential project impacts through preliminary desktop exercises. While desktop data sources are available, existing data is often inadequate and will not allow for suitable site-specific assessment of impact. Existing data and literature is usually not enough to follow good practice and be aligned with international standards.

Limitations with the use of existing data sources include:

- The data is often of a general nature and covers a broad area that is not site specific.
- Important information about population densities, flight activity and occurrences during migration are often not available.
- Data gaps are often large, especially in less developed and lower income countries.
- Existing data may be outdated, legacy data.
- Methodologies for data collection may be outdated or unknown.
- Country-level data, such as national EIAs, may be insufficient relative to international performance standards or requirements referenced by Lenders (e.g., IFC Performance Standards and EBRD Performance Requirements).

PROPER BIODIVERSITY BASELINE STUDIES WILL DECREASE COSTS AND RISKS

The completion of robust, multi-seasonal surveys will remove uncertainties about potential project impacts and will help avoid financing delays and unexpected costs. Biodiversity baseline studies that are following good international industry practice will assist project developers in finding relevant and project specific mitigation measures. The sooner baseline data is collected and analysed, the sooner projects can move from planning to implementation and mitigation of impacts through application of The Mitigation Hierarchy.

By following these Best Practices on biodiversity baseline survey timelines, the risk of project delays and added costs will be minimized, resulting in a simpler and smoother finance opportunity for all parties involved.

Biodiversity data-sharing is encouraged by EPFIs through the Global Biodiversity Information Facility (GBIF). Sharing data from baseline studies that follow good international industry practice can also benefit the project by being more transparent and getting goodwill from local communities and scientific researchers.

THE MITIGATION HIERARCHY

Suitable baseline studies and dialogue between project developers and biodiversity specialists assists in application of the mitigation hierarchy, which can lead to cost savings:

- AVOID
- MINIMIZE
- RESTORE
- OFFSET

Visit The Biodiversity Consultancy Mitigation Hierarchy to learn more.