ESIA AND CIA

Cumulative Impact Assessment Workshop
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EIA: Environmental Impact Assessment

ESIA: Environmental and Social Impact Assessment

CIA: Cumulative Impact Assessment

CUMULATIVE IMPACTS

Cumulative impacts are those that result from the successive, incremental, and/or combined effects of an action, project, or activity (collectively referred to in this document as “developments”) when added to other existing, planned, and/or reasonably anticipated future ones.

For practical reasons, the identification and management of cumulative impacts are limited to those effects generally recognized as important on the basis of scientific concerns and/or concerns of affected communities.

ESIA AND CIA ARE RELATED - CIA CAN BE PART OF ESIA

TABLE 1. TOOLS FOR ENVIRONMENTAL AND SOCIAL RISK ASSESSMENT AND MANAGEMENT

Environmental and Social Impacts Assessment (ESIA)	• Applies to the potential impacts of a particular development proposal • Done in the context of a well-defined development proposal for which the construction and operational details of the development alternatives are known • May include an assessment of the project's contribution to a well-known accumulated impact and propose standard mitigation measures (e.g., greenhouse gas emissions, airshed pollution, depletion of wild fish stocks)
Strategic Environmental Assessment (SEA)[21]	• Relates to potential impacts of governmentwide or sectorwide policies, plans, or programs • Anticipates how instruments such as policies that are not specifically tied to a particular physical development may result in a variety of impacts at different times and places
Regional or Sectoral Impact Assessment	• Assesses the impacts of the potential developmental future of a geographic region or of an overall sector or industry (sometimes referred to as regional or sectoral SEA)
Cumulative Impact Assessment and Management (CIA)	• Assesses the ecological and social impacts that determine the status of environmental components and affected communities (VECs) • Requires consideration of past, present, and future projects and natural drivers that affect them • Assessment reflects the geographical and temporal context in which the effects are aggregating and interacting (e.g., airshed, river catchment, town, landscape)

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WHEN SHOULD A CIA BE DONE?

- Whenever there is concern that a project or activity may contribute to cumulative impacts on one or more Valued Environmental/Social Components (VECs).

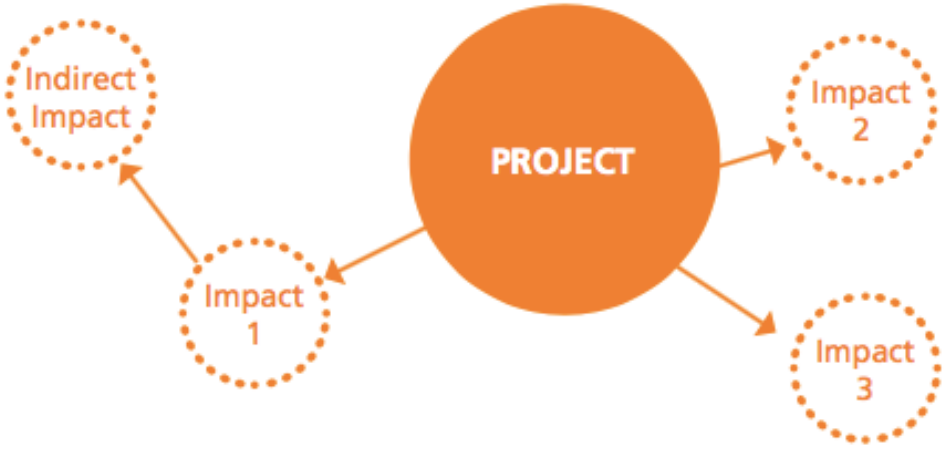
- This concern may be preexisting or a consequence of the potential cumulative impacts of the development and other projects or actions, human activities, or exogenous factors (e.g., natural drivers).

- Whenever a given development is expected to have significant or irreversible impacts on the future condition of one or more VECs that also are, or will be, affected by other developments.

- The other developments may already exist, be reasonably predictable, or be a mix of existing and reasonably anticipated developments. In circumstances where a series of developments of the same type is occurring, or being planned, the need for CIA is high.

ESIA

FIGURE 3. ESIA: PROJECT-CENTERED PERSPECTIVE



An ESIA describes the setting, impacts and mitigation actions for a SPECIFIC PROJECT

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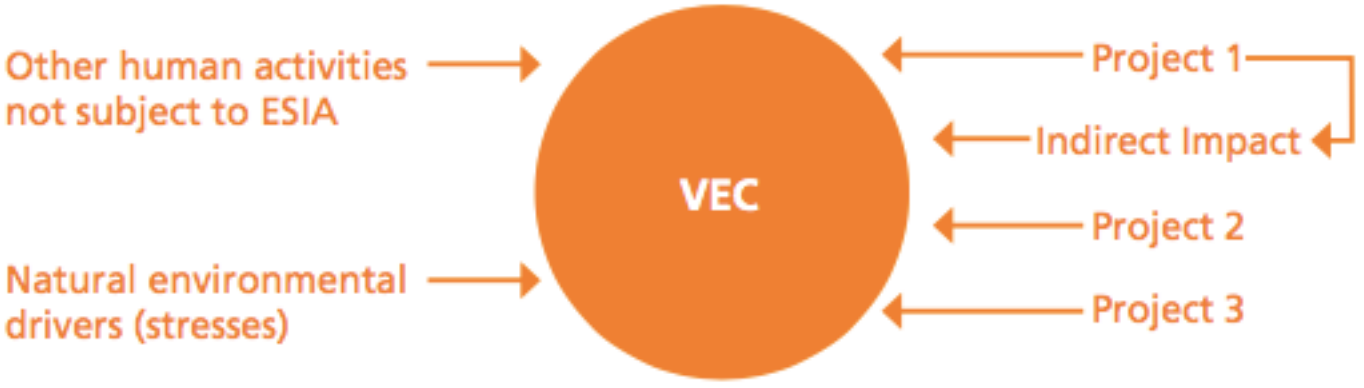
CIA

FIGURE 4. CIA: VEC-CENTERED PERSPECTIVE



CIA focuses on the valued environmental and social components (VECs) of the broader area, assessing how the VECs will be impacted under scenarios with current, planned and future development projects as well as other stressors. A wide range of VECs are assessed.

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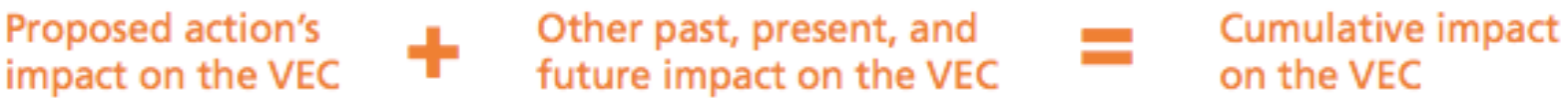
CIA KEY COMPONENTS

A cumulative impact includes two key components:

- The anticipated future condition, which is the total effect of the other existing, and predictable future developments and external natural environmental and social drivers, and

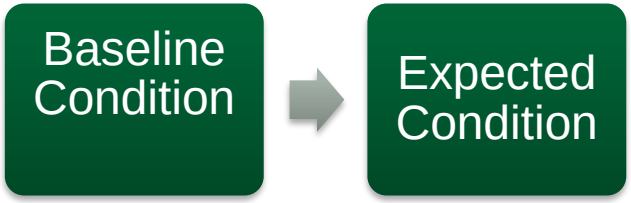
- The contribution of the development under evaluation to the cumulative impacts.

FIGURE 5. CIA: VEC-CENTERED PERSPECTIVE

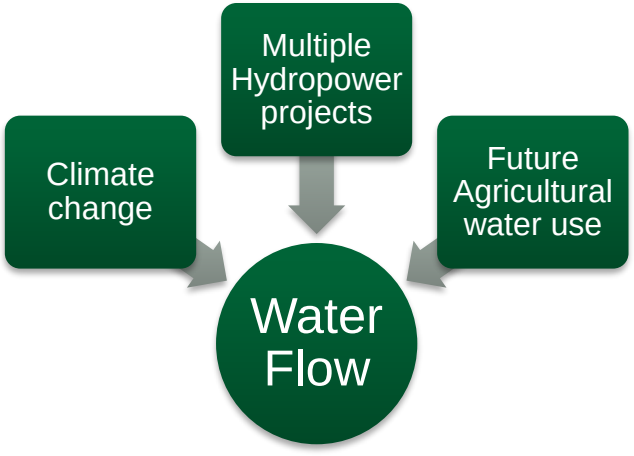


CIA IS FUTURES ORIENTED

The impact of the project is not assessed as the difference between the expected future condition of VECs and that of a past baseline condition.



It is assessed as the difference between the estimated future condition of VECs in the context of the stresses imposed by all other sources (projects and natural environmental drivers) and the estimated VEC condition in the context of the future baseline plus the development under evaluation.



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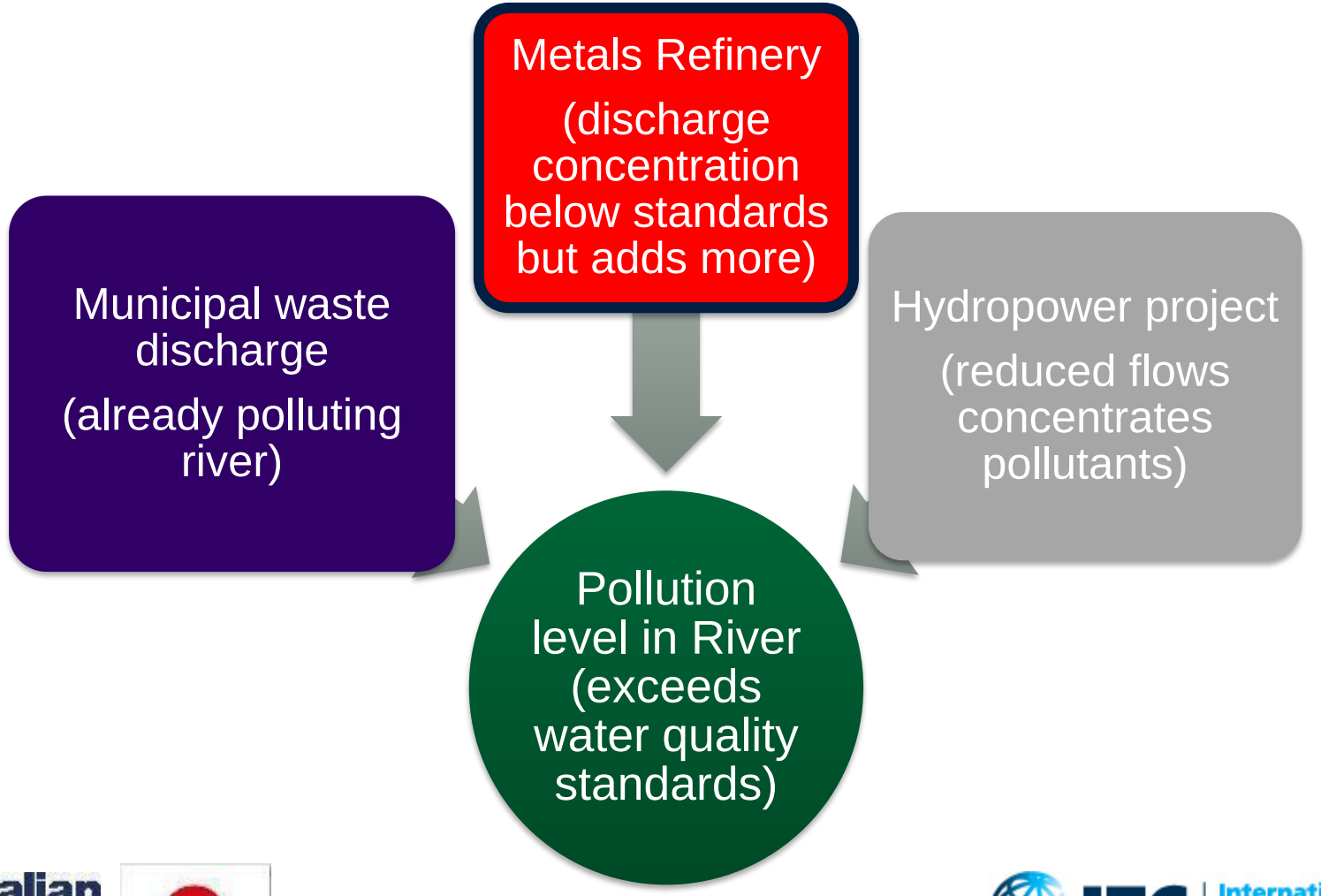
CIA POLLUTION EXAMPLE



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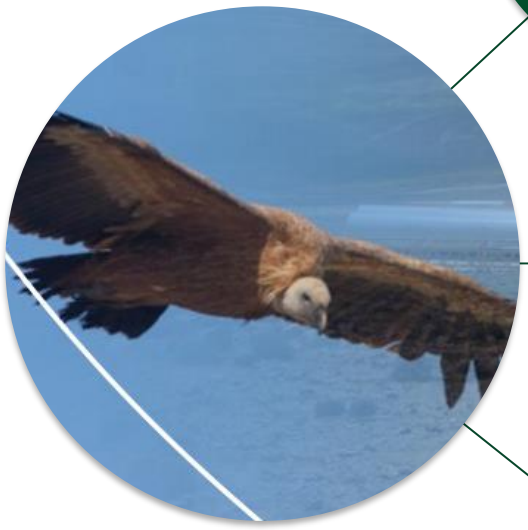
CIA WILDLIFE EXAMPLE – OVERLAPPING LAND USES



Hydropower project

- Reservoir floods bird habitat

Agriculture

- Clears habitat
- Pesticides

Transmission Line

- Clears habitat
- Potential bird collisions

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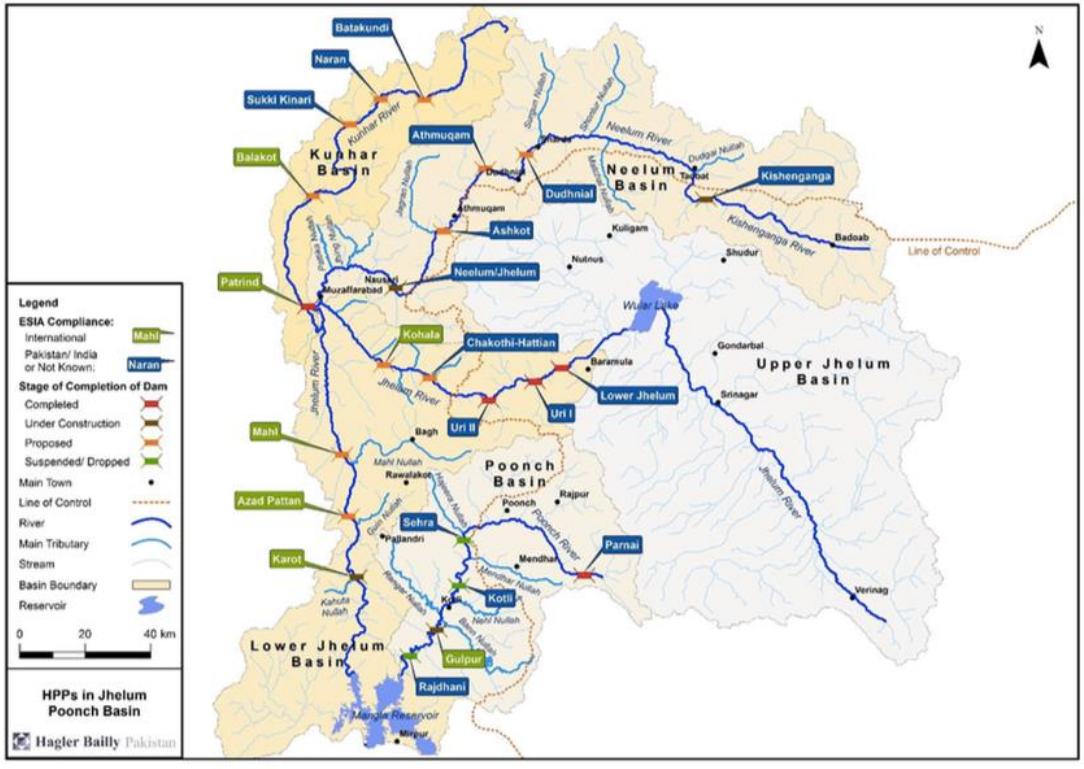
CIA HYDROPOWER EXAMPLE



- 37 hydroelectric projects (2 existing, 9 under construction, and 26 proposed) in a single river basin.
- No national regulatory requirement for CIA.
- Two HPPs worked with IFC to develop a collaborative CIA and coordinated impact monitoring program.
- Workshop held to engage other stakeholders and develop basin management planning.

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WHO SHOULD BE INVOLVED IN A CIA?

Everyone!

Cumulative impacts can affect Hydropower project success and efficiency as well as local communities, environment, and other development projects

Private Sector Hydropower Developers cannot do it alone

Need broad support and data from government,NGOs, other Hydropower project, other industry, communities, etc.

QUESTIONS?

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