Course title**: EIA for project environmental management: focus on infrastructure and mining (La Evaluación de Impacto Ambiental y su Función en la Gestión Medioambiental de Proyectos: énfasis en infraestructura y minería)**

Level: Intermediate

Prerequisites for participants: At least two years professional experience or having attended a course on fundamentals of impact assessment

Language of delivery: Spanish

Duration: 2 days

Maximum number of participants: Minimum 10; Maximum 42

Are participants required to bring anything to the course (e.g., laptop, other technology device, case study)? No

Course description:

The course is aimed at IA practitioners and academics interested in understanding the potential role of IA in project management, requiring a basic understanding of EIA. It starts by reviewing the state-of-the-art "environmental manager's toolbox" and the opportunities of integrating environmental planning and management and ensuring a smooth transition between the planning phase (and the planning team) and the implementation phase, comprising construction, operation and, where appropriate, decommissioning. Topics addressed include the preparation of environmental management plans, the components of effective follow-up and the role of follow-up tools, with an emphasis in environmental supervision of construction activities. Organizational learning opportunities for consultants, proponents and government agencies will be explored. Case studies of mining and civil works will be presented. Learning outcomes: understanding the role of environmental management plans in delivering effective mitigation; understanding the importance of building auditability in preparing such plans; enhancing awareness of the organizational learning opportunities embedded in EIA follow-up.

Detailed description of the course structure and content:

1st day		
9:00 a.m.	Welcome. Introduction: purpose and contents.	
9:30 a.m.	1. ESIA in the family of environmental planning and management tools. Integrative use of tools (LES)	An overview of the state-of-the-art "environmental manager's toolbox" summarizing the currently available Environmental management instruments; they are grouped in three categories: analytical, organizational and communicative tools. Interrelations and common features among them are showed and major international references (such as ISO standards and IFC Performance Standards) are mentioned. Project EIA is highlighted as a precursor of most modern tools.
10:15 a.m.	Break	
10:30 a.m.	2. An overview of environmental and social impacts of infrastructure construction (JDQ)	Discussion of environmental and social issues that arise during construction activities: noise, dust, traffic, sediments, codes of conduct during construction.

11:30 a.m.	3. Environmental management plans (LES)	Function of EMPs in EIA: translating EIA conclusions into a set of auditable commitments. Contents and structure of an EMP. Usefulness of integrating environmental planning and management: (i) meeting mitigation goals (effectiveness), (ii) cost reduction and resource optimization (efficiency). Auditability of mitigation and other management measures. Integration of EMPs into EIA documents.
12:30 p.m.	Lunch	
1:30 p.m.	4. Practical activity 1: Designing environmental management programs (LES)	Tow simple hypothetical cases (a civil engineering undertaking and a mine) will be presented. Participants will be asked to prepare a list of programs or actions that could make up an environmental management plan for one of the projects, having in mind their auditability, stating clear objectives and selecting appropriate indicators.
3:30 p.m.	Break	
4:00 p.m.	4. Practical activity 1: conclusion (LES)	Participants will undergo two rounds in this practical activity; after the first round, groups will make a brief presentation and incorporate comments from the instructors for the second round.
4:30 p.m.	5. Follow-up as part of the EIA process: functions. Tools for follow-up: focus on monitoring, supervision and performance evaluation (LES)	Functions of follow-up. Follow-up and project management. Tools and approaches for follow-up: - Monitoring: concept and functions. - Environmental supervision: definition and roles. - Environmental performance evaluation.

2nd day		
9:00 a.m.	Environmental supervision in construction activities (JDQ)	Models used internationally to guarantee compliance of environmental specifications during construction.
9:30 a.m.	7. Environmental supervision: case study (JDQ)	Environmental supervision of a large infrastructure project in China. Lessons learned.
10:15 a.m.	Break	
10:30 a.m.	8. Practical activity 2: designing an environmental supervision system for a large infrastructure project (JDQ)	Through specific pictures in slides, the participants will identify environmental and social problems at different construction sites and propose mitigation measures.
12:30 a.m.	Lunch	
1:30 p.m.	9. Workshop style session in which participants discuss ways to improve performance during construction, supervision, monitoring, reporting (JDQ)	
3:30 p.m.	Break	

4:00 p.m.	10. Learning opportunities from follow-up: project proponent, consultants, government agencies. (LES)	Fundamentals of organizational learning and knowledge management in the EIA process. Case studies from environmental agencies.
4:30 p.m.	11. Small group discussion: Do participants in the EIA process learn? How can learning be enabled to improve practices? Which is the role of follow-up and environmental management in organizational learning? (LES + JDQ)	In this group activity, participants will work in groups of 3 or 4 to provide answers to the three questions, based upon their personal experience and inspired by the short course. They will be asked to build a list of opportunities and threats for enabling learning into three major participants in most EIA systems: project proponents, environmental consultants and government agencies (especially agencies in charge of managing the EIA process).
5:00 p.m.	Wrap-up	

Description of the materials participants will receive prior to or during the course:
Participants will receive a CD containing:

1. Course outline, objectives
2. Copy of PowerPoint presentations
3. Practical activities: description and instructions
4. Summary of case studies presented
5. Annotated bibliography
6. List of supplementary material with respective URLs

Printed material will be available in support of practical activities.

Provisions for pre-conference and post-conference communication with participants:
Both trainers will attend the Conference.

Qualification of the Instructors

Luis Enrique Sánchez

Full Professor of Mining Engineering at the University of São Paulo (Brazil), Brazil, he obtained his Ph.D. on economics of natural resources from the Paris School of Mines (France) in 1989. He authored several research papers on topics related to environmental assessment and management, including the relationship of EIA and EMS, sustainability reporting, environmental management in highway construction and in mining. He also authored a textbook on EIA first published in 2006 in Portuguese (second edition 2013) and translated into Spanish.

Juan David Quintero

Civil and Environmental Engineer, with over 35 years of experience in risk assessment, mitigation and compensation of environmental and social impacts associated with development projects, especially road and hydroelectric projects around the world. Senior Environmental Specialist at the Word Bank up to 2010. Specialist in the application of regional, cumulative and strategic environmental assessments to hydroelectric programs. Expert in the design of environmental specifications for contractors and compliance systems during construction. Currently a Member of Panel of Experts for sensitive road and hydroelectric projects. Recent publications include “Good Dams-Bad Dams”, “Mainstreaming Conservation in Infrastructure Projects”, “Green Infrastructure in Tiger Range Countries: a Multi-Level Approach”, “Protecting Natural Habitats in Road Development” and “Biodiversity Offsets and Infrastructure”. Member of the Board of Directors (IAIA).