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ENVIRONMENTAL ISSUES AND ENVIRONMENTAL COMPLIANCE

**Presentation to USAID Infrastructure Course
December 20, 2007**



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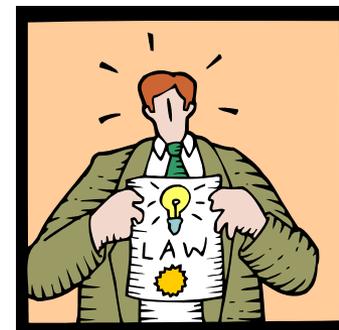


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Environmental Issues to Consider:

- **Environmentally Sound Design**
 - Critical to development
 - Essential for environmental protection
 - Crucial to project success (sustainability)

- **Compliance with legal requirements**
 - U.S. environmental impact assessment
 - Host country regulations



What is Environmentally Sound Design?

- **Design & implementation of activities so that:**
 - **Environmental damage is kept to a minimum**
 - **Environmental benefits are maximized to the extent practicable**



Design Issues and Potential for Environmental Failure: Water & Sanitation Activities

**Design
problem**

**Failure to test new water source, especially
groundwater, for natural & industrial
contaminants**

**Design and operation
problems**

**Creation of standing
water & other
disease reservoirs**

**Contamination of
ground or surface
waters**

**Failure to safeguard
water source from
runoff**

**Unsustainable
extraction rates**



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Some Common Design Mistakes

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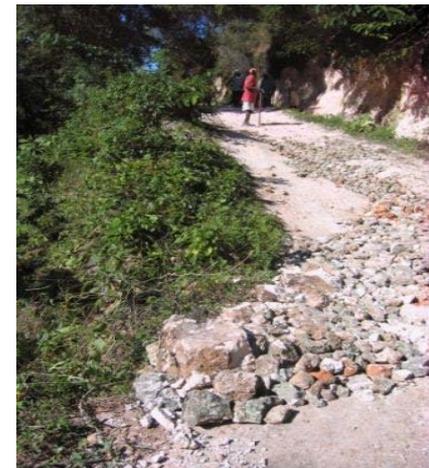
Failure to plan for the effects of increased scale

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Designing for average conditions

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Ignoring economic-environmental linkages





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Failure to plan for the effects of increased scale



The environmental effects of a small-scale road rehabilitation project may be minor



BUT if the project is successful, and many more people can access an area, other problems may arise...

Uncontrolled natural resource harvesting
Ad hoc dump sites



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Designing for average conditions



This schoolhouse is being rebuilt with plank walls and a split-bamboo roof.

Strong winds ripped the aluminum sheet roofing off the structure and toppled the walls.

In this area, one or two storms every 5 years typically have winds of this strength.

**Other “average conditions” to be careful of:
Rainfall, tides, water tables. . .**

Ignoring economic-environmental linkages

Household consumption depends on income.

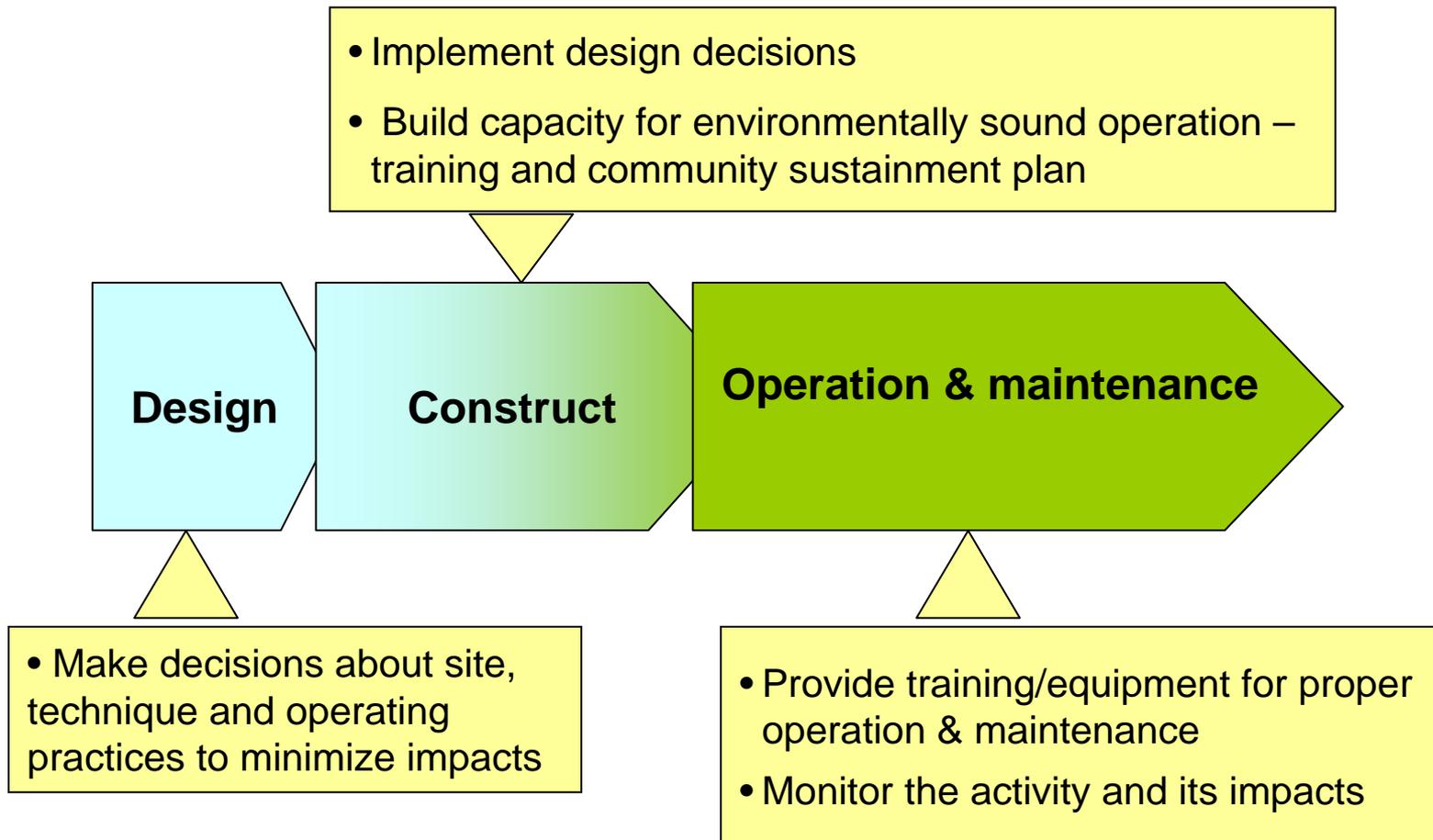
Success in raising income in a community may increase:

- demand for building materials (brick & timber)
- the number of livestock
- demand for water
- generation of waste, including disposable packaging

All can have significant adverse environmental impacts



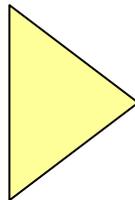
Environmental considerations are part of the entire project lifecycle





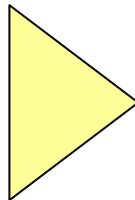
Planning and Design Considerations

Technical soundness



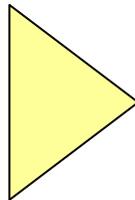
Design must be appropriate for local environmental conditions

Design for the policy & social context



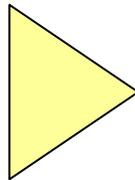
Activity must comply with national & local environmental laws and policies. Activities requiring use of natural resources (including land) must be compatible with local natural resources management.

Beneficiary commitment & capacity



Proper maintenance and operation requires involvement/commitment of local communities

Adaptive management



Adjust implementation based on results from the field; adapt the project in response to unanticipated adverse impacts



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➤ Environmentally Sound Design requires a systematic look at:

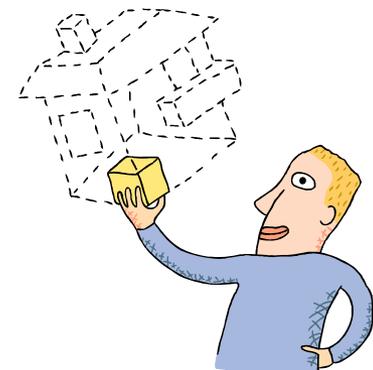


→ The possible adverse environmental impacts of an activity

→ Ways to reduce those impacts

➤ The best way to do it systematically?

→ Environmental Impact Assessment (EIA)



What is an Environmental Impact Assessment?

A formal process for identifying:

- Likely effects of activities or projects on the environment and on human health and welfare
- Measures to mitigate and monitor these impacts

Environment is broadly interpreted to include physical, biological, and social considerations





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Why Evaluate Environmental Impacts?

- **Reduce costs**
- **Propose alternatives**
- **Implement environmental mitigation when the activity begins**
- **Take balanced decisions**
- **Provide opportunities to learn**
- **Makes for a better project – sustainable & competitive**



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Steps to Evaluate Environmental Impacts

1. Evaluate baseline information
2. Determine activity/project components
3. Consider alternatives
4. Identify and predict impacts
5. Determine significance of impacts
6. Compare and evaluate alternatives
7. Consider options for mitigation & monitoring
8. Communicate





EIA for Infrastructure Projects

	USAID	DOD
Statutory and Regulatory Drivers	<ul style="list-style-type: none">• Foreign Assistance Act• 22 CFR 216 – Environmental Compliance Procedures	<ul style="list-style-type: none">• Executive Order 12114 – Environmental Effects Abroad of Major Federal Actions• DOD Directive 6050.7, Environmental Effects Abroad of Major Department of Defense Actions
Applicability	Applies to all actions involving USAID funding	Applies only to “major” actions with potential for significant harm

USAID ENVIRONMENTAL PROCEDURES

- **The Foreign Assistance Act (FAA) , Section 117, requires USAID to develop procedures that take environmental impacts fully into account in our projects.**
- **FAA Section 118 was added, requiring any program or project affecting tropical forests to take full account of environmental impacts**
- **FAA Section 119 includes parallel language applying to endangered species and biodiversity**
- **These obligations are implemented thru 22 CFR 216**



22 CFR 216 – SOME BASICS

What is 22 CFR 216?

- Title 22 of the Code of Federal Regulations, Part 216
- USAID's procedures to undertake Environmental Impact Assessment of programs we support

Who does 22 CFR 216 apply to?

- Every USAID Officer Who Has a Role in USAID Funded Projects
- Every Partner Who Seeks USAID Funds

What are the basic requirements of 22 CFR 216?

- Every program, project or activity, or amendment, must undergo an environmental impact assessment prior to obligation of funds
- Potential impacts must be considered and mitigative measures or design changes incorporated
- The process is documented in writing and available to the public



USAID Automated Directives System Chapter 204 – Environmental Procedures

- Describes roles, responsibilities and decision making authorities
- Describes procedures for complying with 22 CFR 216
 - Review and approval required before irretrievable commitment of resources
 - Mitigative measures to be incorporated into project design and implementation
 - Adaptive management during the life of the project
 - Address new or unforeseen environmental issues
 - Modify project as necessary
 - Document modifications thru formal amendments approved by the Bureau Environmental Officer



22 CFR 216 Is a Tool

- To ensure the environmental consequences of AID financed activities are identified and considered prior to a final decision to proceed
- To reduce costs
- To ensure appropriate environmental safeguards are adopted
- To provide opportunities to learn
- To make for a better project – sustainable and competitive

Environmental impact assessment is not just a legal requirement but an essential and basic tool for designing sustainable activities



Some REG 216 Terminology

Categorical Exclusion – An activity, such as training or conducting a survey, that does not affect the environment

Initial Environmental Examination (IEE) – A review of the reasonably foreseeable effects of a proposed action on the environment. Its function is to provide the factual basis for a Threshold Decision as to whether an Environmental Assessment is required

Environmental Assessment (EA) – A detailed study of the reasonably foreseeable *significant* effects, both beneficial and adverse, of a proposed action on the environment of a foreign country or countries (similar to an Environmental Impact Statement but for foreign countries)

Threshold Decision – A formal Agency decision which determines, based on an IEE, whether a proposed action is a major action significantly affecting the environment. Threshold decisions can be:

- Negative – no significant adverse effect
- Negative with Conditions – no significant adverse effect provided specific conditions are complied with
- Positive – there will be significant impacts. An EA must be prepared.



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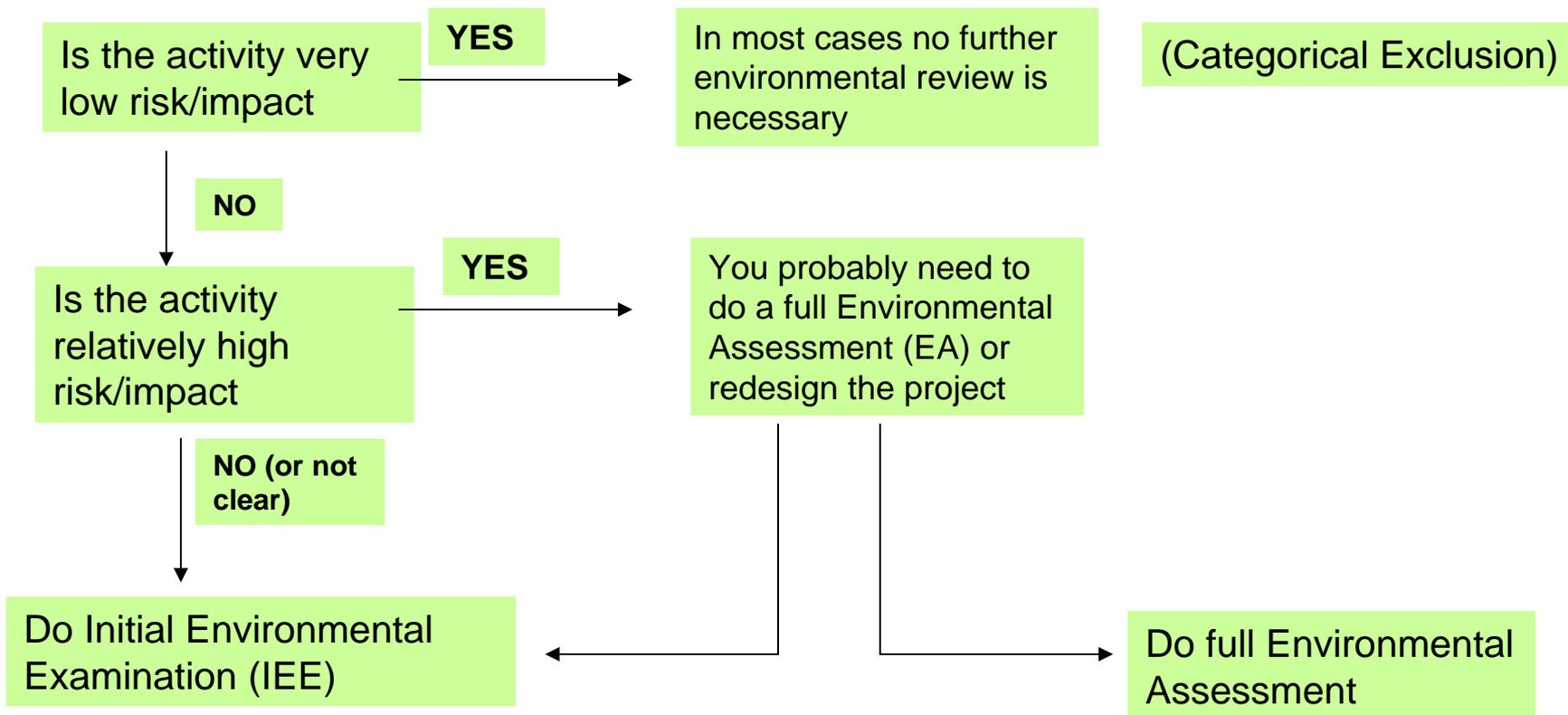
Steps to Evaluate Environmental Impacts

- Determine activity/project components
- Evaluate baseline information
- Consider alternatives
- Identify and predict impacts
- Determine significance of impacts
- Compare and evaluate alternatives
- Consider options for mitigation and monitoring
- Communicate

Sound familiar? It's environmentally sound design!



The Environmental Screening Process



Note 22 CFR 216 allows proceeding directly to a full EA for certain high risk classes of activities — those normally having a “significant adverse effect on the environment”



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Projects which Automatically Require an Environmental Assessment

- **Development of watersheds**
- **Irrigation or water management projects (including dams)**
- **Leveling of land for agriculture**
- **Drainage projects**
- **Construction or improvement of roads**
- **Sewage and potable water projects (not small-scale)**
- **Power plants and other industrial plants**

What is an IEE and How Do You Prepare One?

- Review of the *reasonably foreseeable effects* of a proposed action on the environment
- Useful design tool for improving the long-term success of development interventions
- Helps to identify design modifications and ways to avoid or reduce potential impacts
- Also must identify the mitigation and monitoring actions needed
- Provides information and analysis sufficient to reach one of four conclusions (or *threshold decisions*) regarding the overall environmental effects of the project
- For each activity addressed by the IEE, preparers *recommend* one of these threshold decisions to USAID. USAID can accept or reject this determination.
 - **Negative** – no significant adverse effect
 - **Negative with Conditions** – no significant adverse effect provided specific conditions are complied with
 - **Positive** – there will be significant impacts – an EA must be prepared



IEE Basic Outline

1. Background and Description of Activities
 - Purpose and Scope of IEE
 - Background
 - Applicable local environmental regulations
 - Baseline information
 - Description of Proposed Activities
2. Environmental Aspects of Project Activities and Evaluation of Environmental Impact Potential
 - Locations affected
 - Predicted environmental impacts
 - Mitigation and monitoring system for activities with impacts
3. Recommended Determinations and Mitigations
 - Reference Reg 216 section as appropriate
 - Recommended Threshold Determinations & Conditions (includes justification of categorical exclusions identified during screening)
 - Mitigation, Monitoring and Evaluation procedures
 - Positive Determination requires subsequent plans for Scoping Statement to identify significant impacts and Environmental Assessment before activity can begin



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References & Useful Information

- **USAID Environmental Compliance and related links**
http://www.usaid.gov/our_work/environment/compliance/index.html
- **22 CFR 216 Environmental Compliance Procedures**
http://www.usaid.gov/our_work/environment/compliance/reg216.pdf
- **Automated Directives System Series 200 (with link to Chapter 204)**
<http://www.usaid.gov/policy/ads/200/>
- **Foreign Assistance Act, Part I, Section 117 - Environment and Natural Resources and related links**
http://www.usaid.gov/our_work/environment/compliance/faa_section_117.htm
- **IEE Assistant for help in preparing environmental documentation**
<http://www.encapafrika.org/assistant.htm>
- **Environmental Guidelines for Small Scale Activities in Africa**
<http://www.encapafrika.org/egssaa.htm>
- **Environmental Guidelines for Small Scale Activity in Asia Near East**
http://www.usaid.gov/our_work/environment/compliance/ane/ane_guidelines.htm