



USAID
FROM THE AMERICAN PEOPLE




**Life-of-Project
Environmental Compliance
for
Environmentally Sound Design
and Management**



Session Objectives

- Define “environment”
- Give at least two examples of how the environment affects development needs & USAID programming, and how development affects the environment
- State the origins of and statutory/regulatory basis for USAID’s environmental procedures
- State the key compliance requirements established by the procedures over life-of-project
- State at least two reasons why USAID’s environmental compliance procedures are necessary



Environment – the Big Picture

What is Environment?

*Webster's defines it as "The **totality of circumstances** surrounding an organism or group of organisms, especially:*

- The complex of **physical, chemical, and biotic factors** (e.g. climate, soil, and living things) that affect and influence the growth, development, and survival of an organism or an ecological community
- The complex of **social and cultural conditions** affecting the nature of an individual or community.



Question:



What are some “big-picture” environmental trends affecting human health and livelihoods in Africa?

Population growth

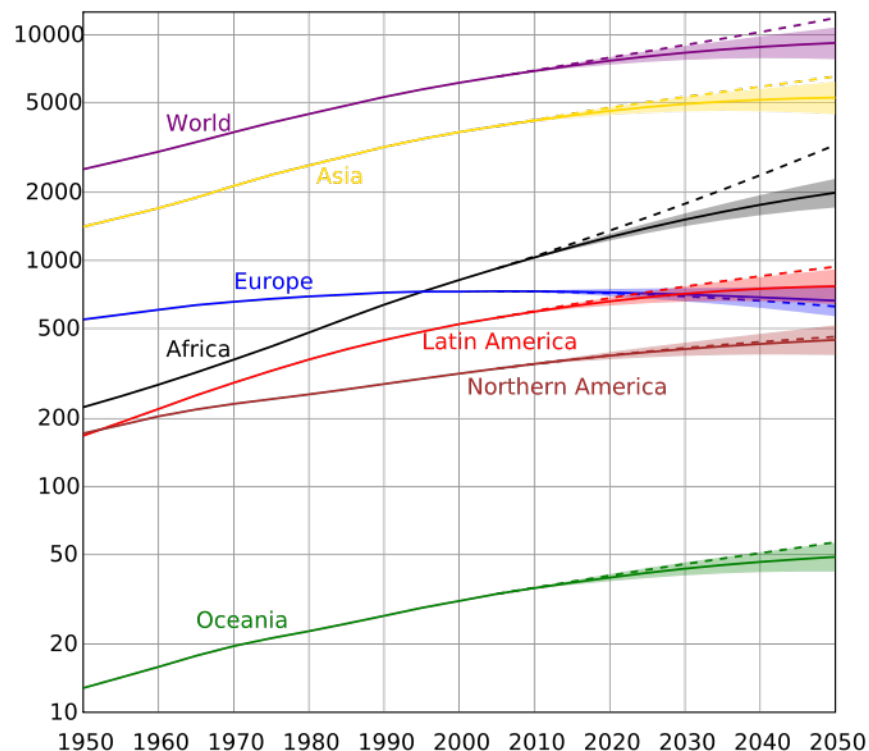
UN Population estimates:*

	Today	2050	% change
World	6.9bn	9.15bn	+32%
Africa	1.02 bn	2.19 bn	+114.7%
Asia	4.16bn	5.14bn	+23.6%
M. East	200 mn	372.9 mn	+86.3%
LAC**	590 mn	751 mn	+27.3%
Less-Developed Regions	5.7bn	7.9bn	+40%
LDCs	863mn	1.74bn	+102%

* All data: "medium variant" projection.

UN Population Division <http://esa.un.org/unpp>

**LAC: Latin America and the Caribbean



Increasing Population in developing areas

LEADS TO

Increased demands for water, land, fish & timber, energy, infrastructure & social services. Increased waste production.

Urbanization

UN Population estimates:*

	Urban pop as % of total		% change in total urban population
	Today	2050	
World	48.6%	69.6%	+89%
Africa	40.5%	56%	+198%
Asia	42.3 %	66.1%	+93%
M. East	79%	84%	+97.4%
LAC**	79.5%	86.3%	+38.2%
Less-Developed Regions	45.3%	67%	+107%
LDCs	29.4%	55.5%	+280%

* UN Population Division
<http://esa.un.org/unup/index.asp>

**LAC: Latin America and the Caribbean

Most urban growth in the next 25 years in developing countries

LEADS TO

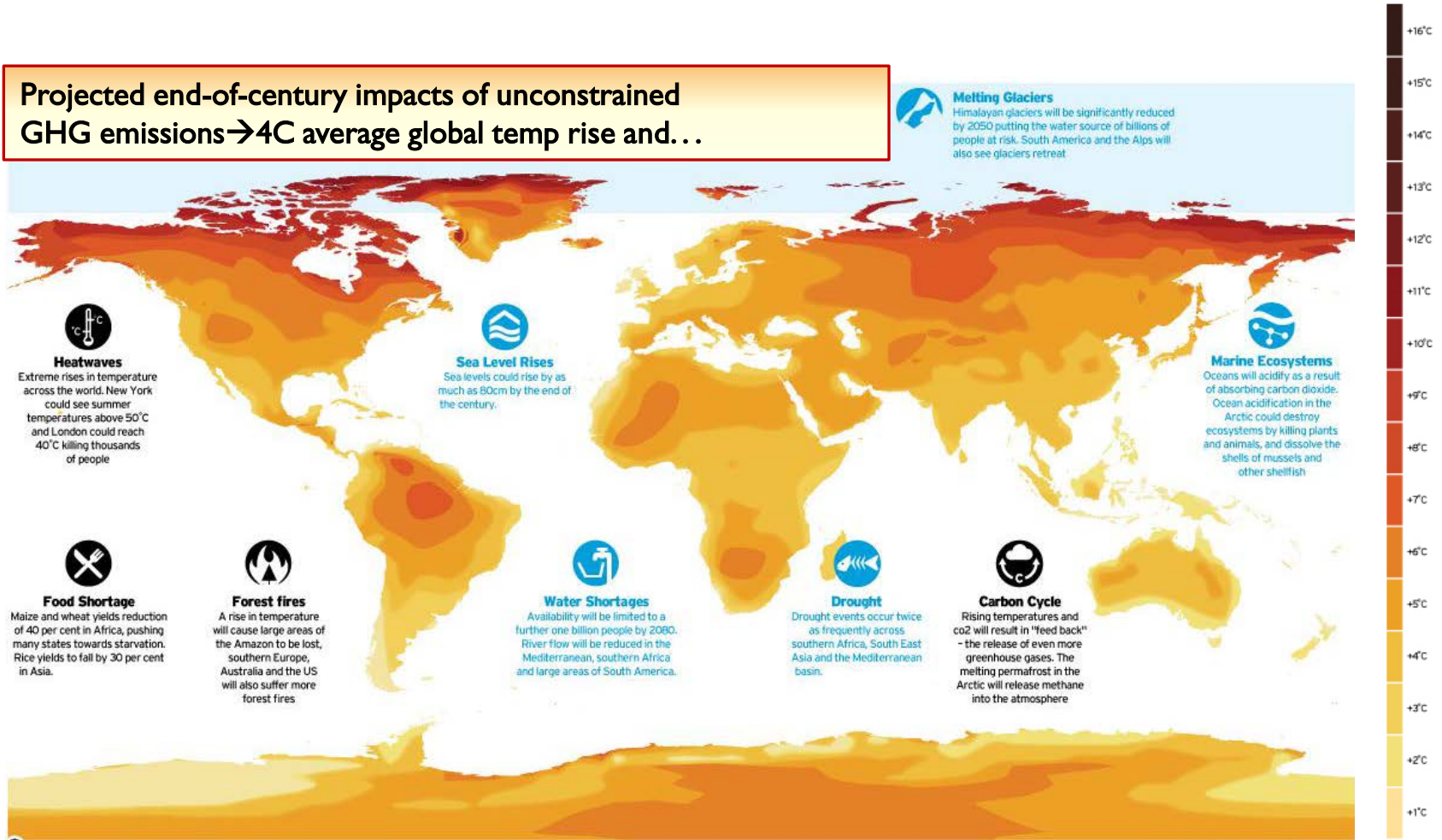
Increased urban environmental health hazards (given poor municipal sanitation, waste management capacity).



Urban population will grow more than 2X as fast as rural population for the foreseeable future

Global climate change

Projected end-of-century impacts of unconstrained GHG emissions → 4C average global temp rise and...



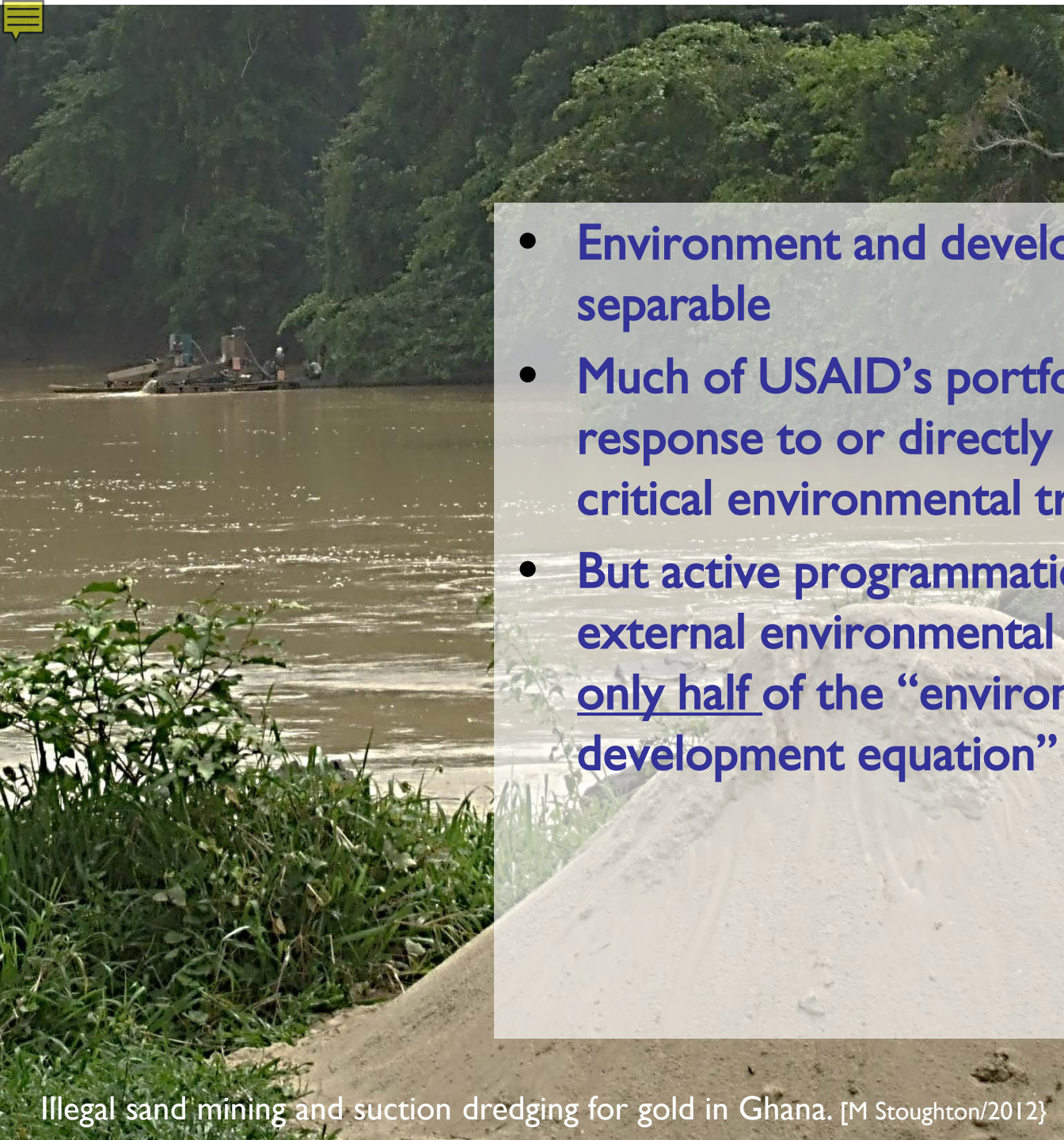
Question:

Relationship between Environment and Development



What examples can you give of development programs or projects that have been affected by the environment?

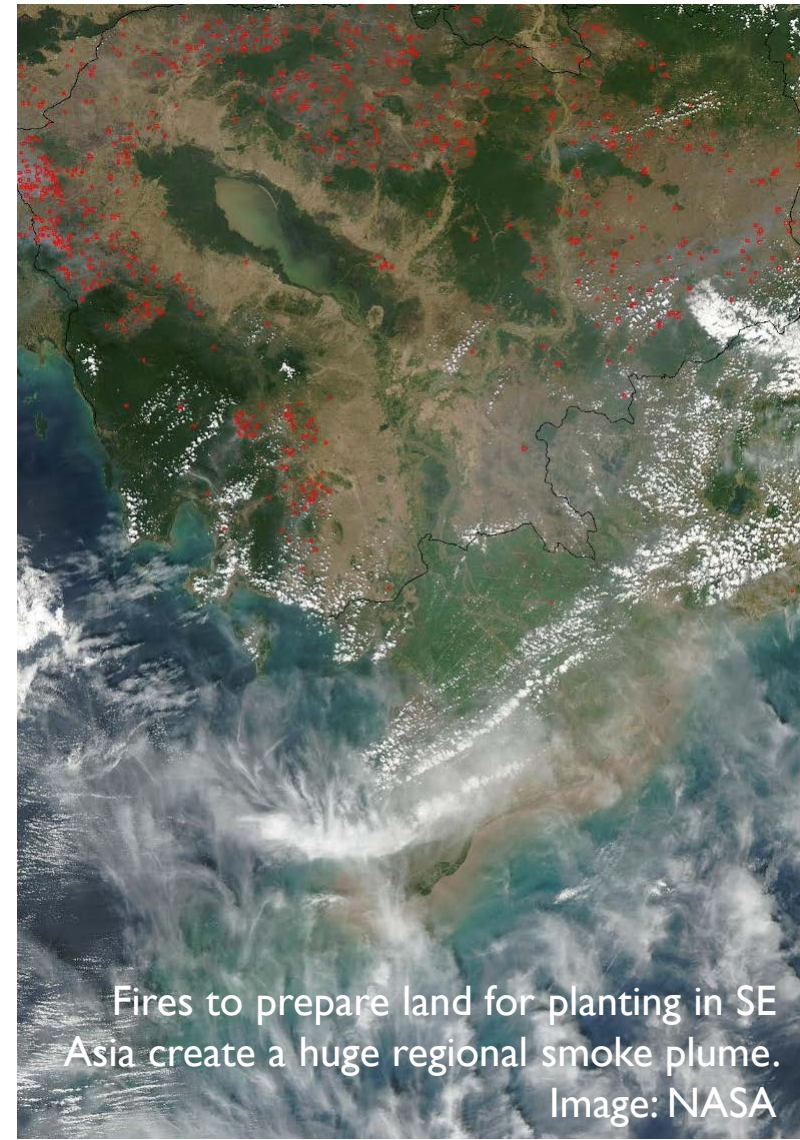
What examples can you give of where the environment has been affected by development programming?



- Environment and development are not separable
- Much of USAID's portfolio is a direct response to or directly affected by critical environmental trends
- But active programmatic responses to external environmental challenges are only half of the “environment and development equation” for USAID...

The other half of the “environment and development equation” for USAID...and our focus.

USAID has mandatory life-of-project environmental procedures to limit adverse impacts of USAID development activities on ecosystems, environmental resources and environmental quality—particularly as they affect human health and livelihoods.



Fires to prepare land for planting in SE Asia create a huge regional smoke plume.

Image: NASA

Origin & mandate of USAID's environmental procedures

An “environmental failure”

1974

In 1974, USAID provided highly concentrated Malathion to poorly trained field workers on an agricultural project in Pakistan

Working without protective equipment in the heat, the workers sprayed each other.

5 died.

1975

Sued by US NGOs for non-compliance with NEPA, USAID settled out of court, agreeing to develop environmental safeguard procedures.

1

First a court mandate

Then a mandate in law:

2

§117 of the FAA requires that USAID:

utilize an Environmental Impact Assessment (EIA) process to:

“fully take into account the impacts of [its] programs and projects upon the environment and natural resources”

of host countries prior to implementation.

Where are the procedures found?

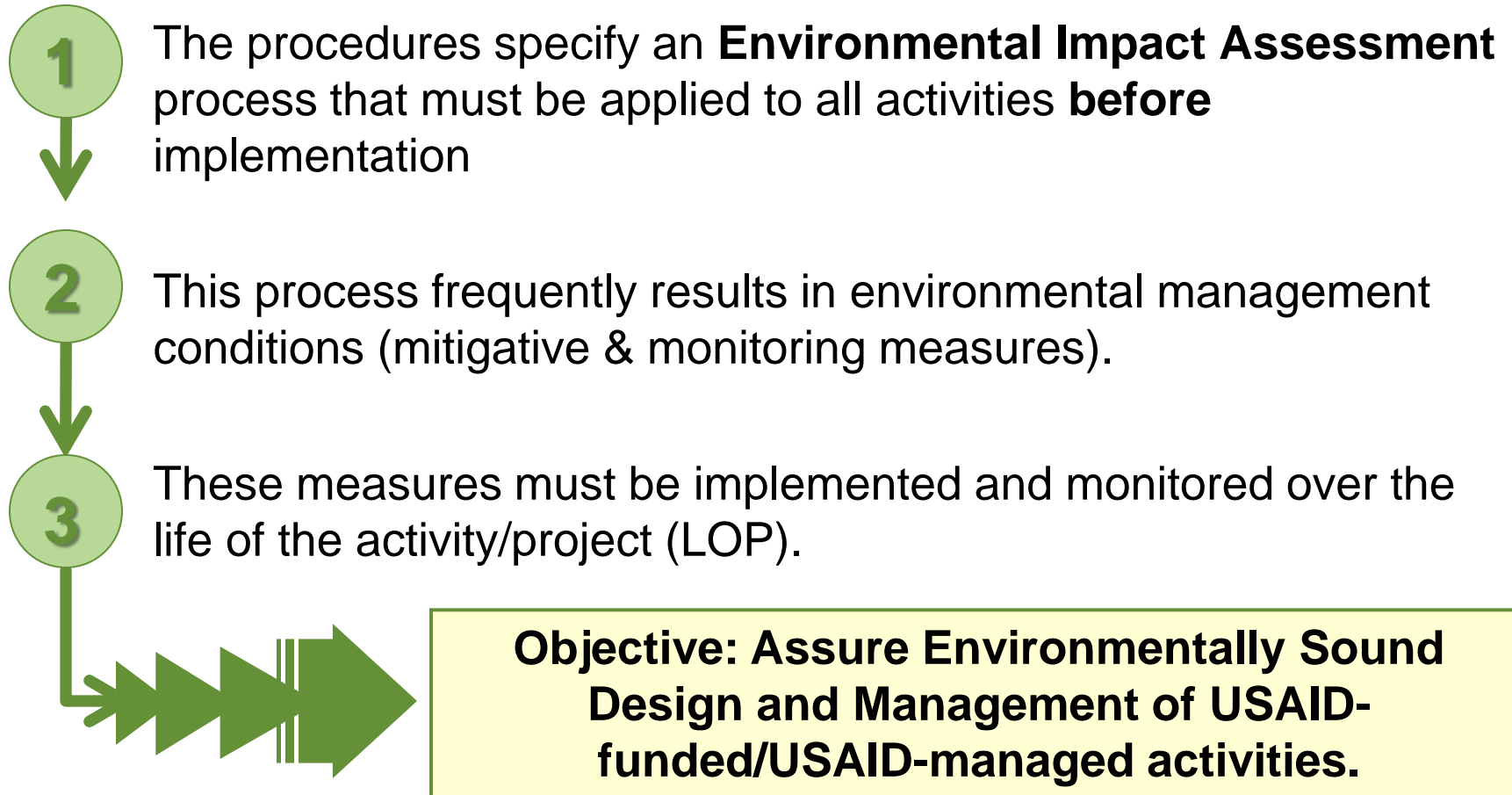
USAID's Environmental Procedures are the response to these mandates. They consist of:

- **Federal regulations:**
22 CFR 216 ("Reg. 216") and
- **Mandatory Agency Policies** as set out in USAID's Automated Directives System (ADS), (especially--but not only--201.3.11, 202.3.6, 204 & 303)

Compliance with the procedures is mandatory. With limited exceptions for disaster assistance, they apply to every program, project, activity, and amendment supported with USAID funds.



What do the procedures require? (the big picture)



What do the procedures require? (a little more detail)

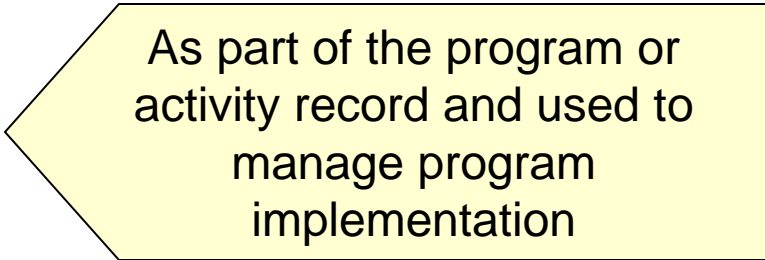
1. Environmental considerations must be taken into account in activity planning.
2. No activities implemented without **approved Reg. 216 environmental documentation.**
3. Any resulting environmental mitigation and monitoring conditions are:
 1. Written into award instruments.
 2. Carried out by the implementing partner, and this implementation is monitored

The output of the EIA process specified by 22 CFR 216*

USAID monitors via field inspections and review of routine project reports submitted by IPs. To make this possible, project reporting by IPs must provide an auditable record of environmental compliance.

What do the procedures require? (cont'd)

4. Environmental compliance is assessed annually as part of formal Mission (operating unit) reporting.
5. Environmental compliance documentation is maintained by the Mission & each sector team



As part of the program or activity record and used to manage program implementation

In contrast to gender and general sustainability assessment, pre-implementation environmental review is required by law and regulation, not just Agency policy.

Overview: Roles & Responsibilities

USAID

Assures Reg. 216 documentation in place.

Establishes/approves environmental mitigation & monitoring conditions.

Oversees compliance with these conditions, a core part of AOR/COR responsibilities.

Implementing Partners

Implement environmental management conditions established in Reg. 216 documentation.

Report on implementation to USAID.

Why be so formal?

Don't we know enough about development that we will “get things right” without a formal environmental review/compliance process?

And why worry in the case of smaller-scale activities anyway?

Getting things right isn't so easy,
even when the issues are clear...

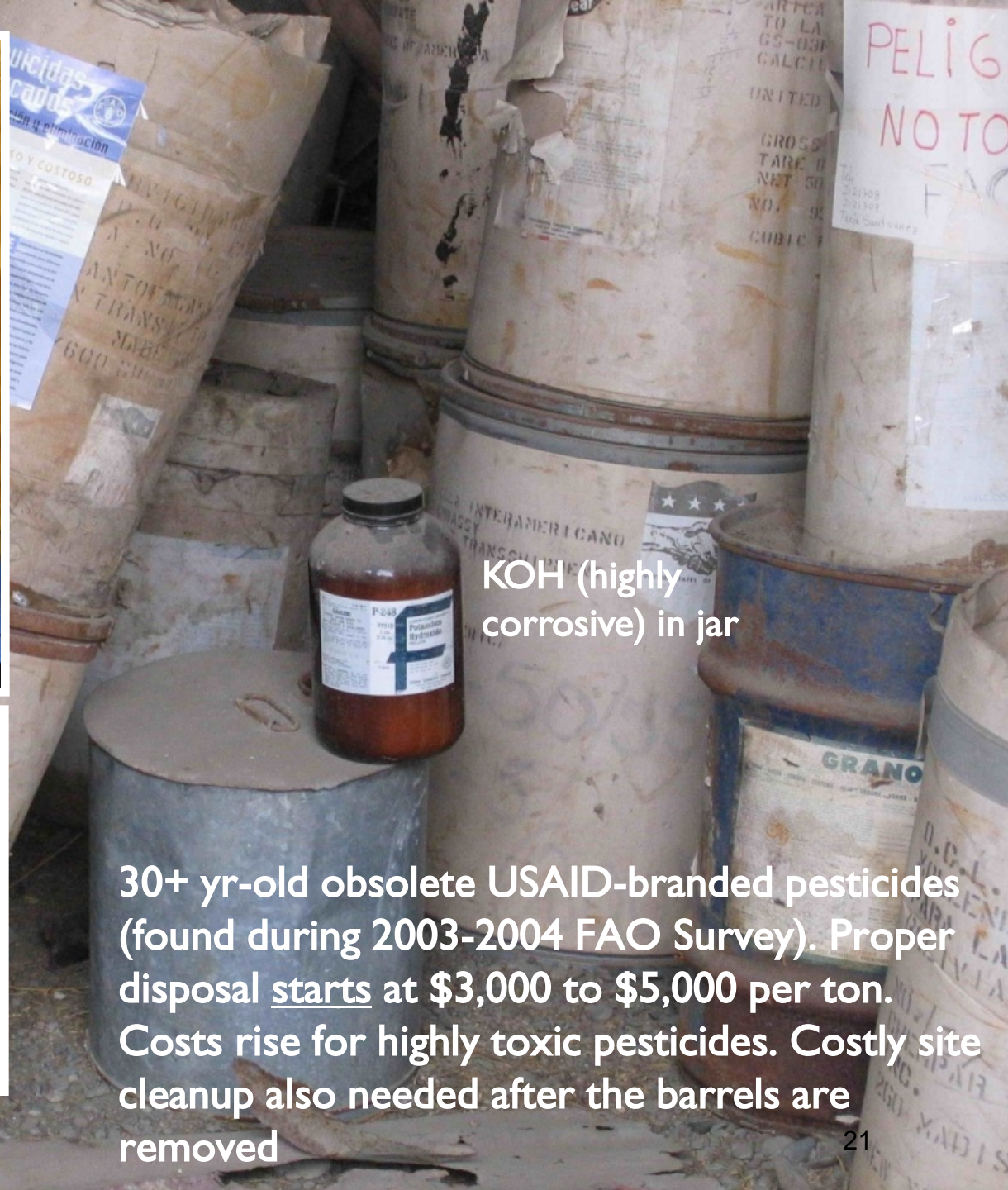


June 2011. An open pile of mixed medwaste behind Juba hospital drains to on-site agricultural fields behind the mortuary. (Note: photo taken AFTER conclusion of USAID assistance)



June 2011. Open-air abattoir with uncontrolled effluent & waste disposal features a USAID-branded gate. NOTE: Photo taken AFTER conclusion of USAID assistance.)





KOH (highly corrosive) in jar

30+ yr-old obsolete USAID-branded pesticides (found during 2003-2004 FAO Survey). Proper disposal starts at \$3,000 to \$5,000 per ton. Costs rise for highly toxic pesticides. Costly site cleanup also needed after the barrels are removed

Getting things right is even harder when cause and effect are complicated

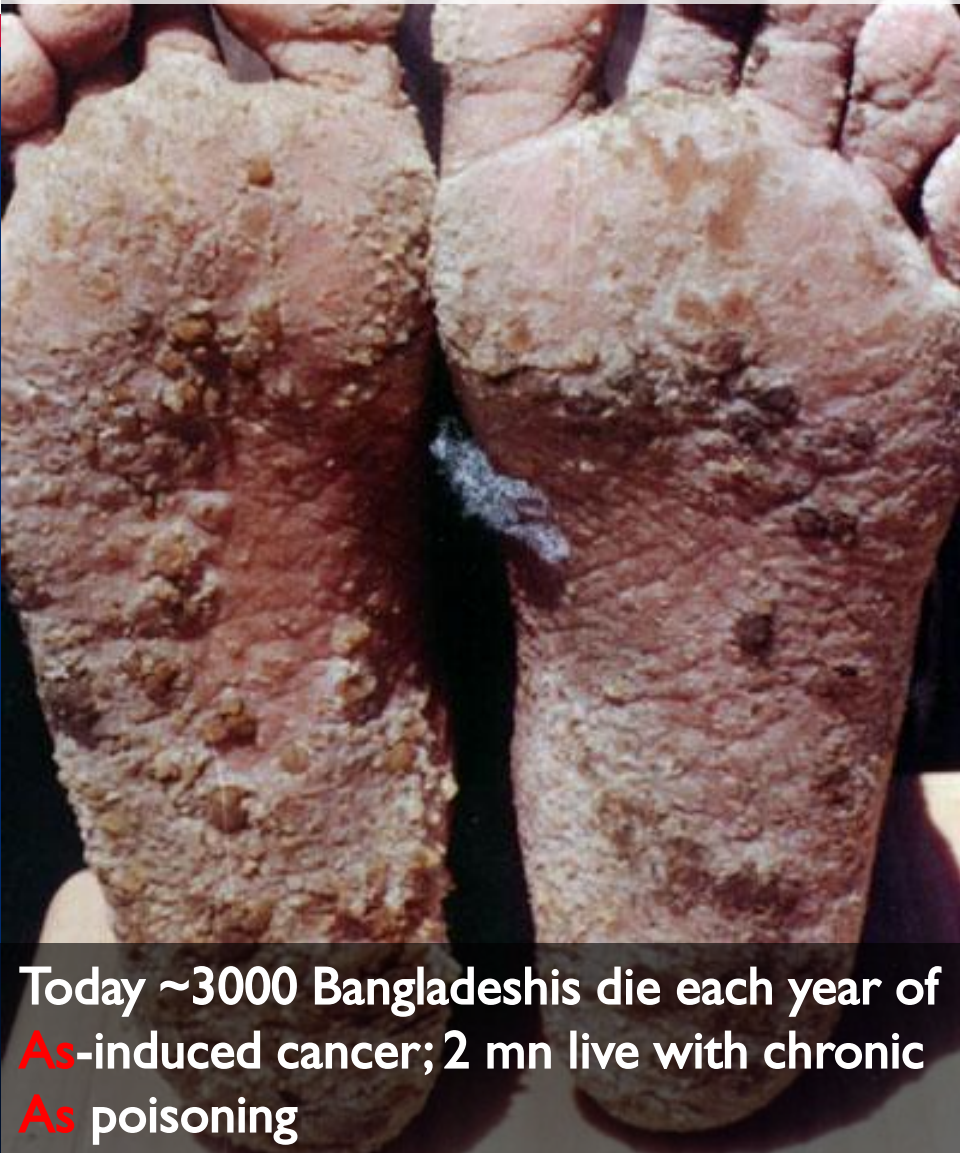


Photo: UNESCO-IHE

Ponds excavated for fill to build-up ground level in villages for flood protection

Ponds provided a source of organic carbon which settles to bottom of pond, seeps underground and is metabolized by microbes

Created conditions for mass arsenic poisoning when villages switched from surface water to “cleaner” tube wells.

creates chemical conditions that cause naturally occurring arsenic to dissolve out of the sediments and soils and move into groundwater

Today ~3000 Bangladeshis die each year of **As**-induced cancer; 2 mn live with chronic **As** poisoning

And in environment and development, things are often complicated ...

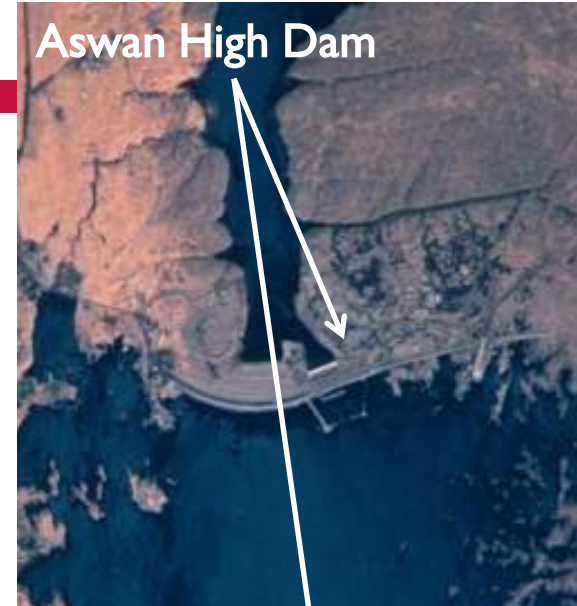
1960 – 1970: Aswan High Dam is built for year-round irrigation; annual Nile floods stop. Salt is no longer washed from soils

Farmers apply more water to crops, causing the water table to rise

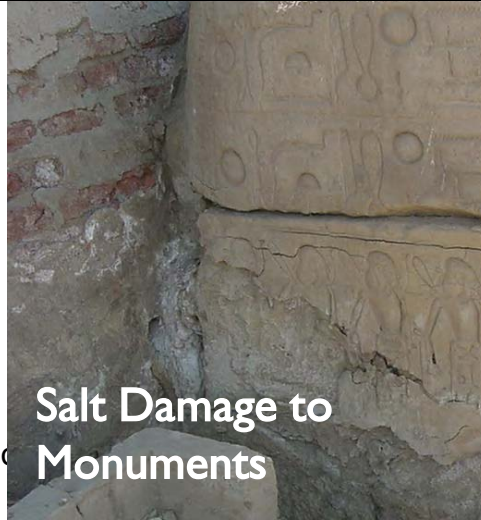
Significant damage to two industries essential to the Egyptian economy

Waterlogging and salination have adverse affects on agriculture and monuments

Aswan High Dam

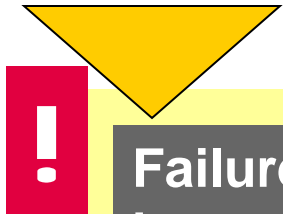


Salt Damage to Crops



Salt Damage to Monuments

Bottom line: in development, there are numerous pathways for environmental failure



Failure to implement the most basic good housekeeping practices (first examples)

Failure to understand system complexity (as we just saw)

And many others, e.g.:

- Designing for average conditions, not expected variability
- Failure to plan for the effects of increased scale

Designing for average conditions, not expected variability

Global change will affect
both average conditions &
expected variability



This schoolhouse is being **rebuilt** in makeshift fashion with plank walls & split-bamboo roof.

Why? Strong winds ripped the aluminum sheet roofing off the donor-funded “permanent” structure and toppled the landcrete 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. . **What else?**

Failure to plan for the effects of increased scale



(Or, failure to plan for success!)

The environmental effects of a small-scale animal husbandry project may be minor

BUT if the project is successful, and many more individuals begin to hold larger numbers of animals, serious problems may arise. . .

Health hazards from animal waste. . .

Fodder shortages (may lead to overgrazing and erosion and/or land conflicts)

Finally, small-scale is not small impact!

- **Myth:**
“*Environmental impacts of small-scale activities are negligible*”
- **Reality:**
Impacts of a single poorly designed/implemented small-scale activity may be small in absolute terms
 - But local impacts to people and communities can be very significant
 - If small-scale activities are numerous, together they can have significant cumulative impacts.



Potable water supply near hospital morgue



Total failure of latrines to contain pathogens

The bottom line: yes, we do need a formal, systematic environmental compliance process!



USAID's environmental procedures are a life-of-project process for

- Avoiding environmental failures
- Maximizing environmental benefits

In short,
for achieving
**environmentally sound
design & management
(ESDM)**

**Now:
a closer look at
environmental compliance
during **project implementation****

Environmental Compliance Process Overview

Environmental considerations integrated in early project design



Pre-implementation EIA process (22 CFR 216)




Results in Reg 216 documentation

Request for Categorical Exclusion, Initial Environmental Examination (IEE), Environmental Assessment (EA)

must be approved by Mission Director, Bureau Environmental Officer



Implementing Partner (IP) Compliance with IEE/EA conditions required by contracts, agreements



IP implements these conditions & remains within the scope of approved Reg 216 documentation

AOR/COR monitors compliance & **modifies or ends activities NOT in compliance**

Environmental Compliance in Project Implementation =

1 IP implements IEE/EA conditions & remains within the scope of approved Reg 216 documentation

2 AOR/COR monitors compliance & **modifies or ends activities NOT in compliance**

Compliance requires that:

1. **Contracts and awards require compliance with IEE/EA conditions**
2. **Environmental Mitigation and Monitoring Plan (EMMP) exists**
3. **EMMP is integrated in workplans & budgets**
4. **IP reports on environmental compliance as a normal part of project performance reporting**
5. **Environmental compliance is evaluated in USAID field visits.**

Let's look at each in turn

1. Contracts and awards require compliance with IEE/EA conditions

ADS Requires. . .

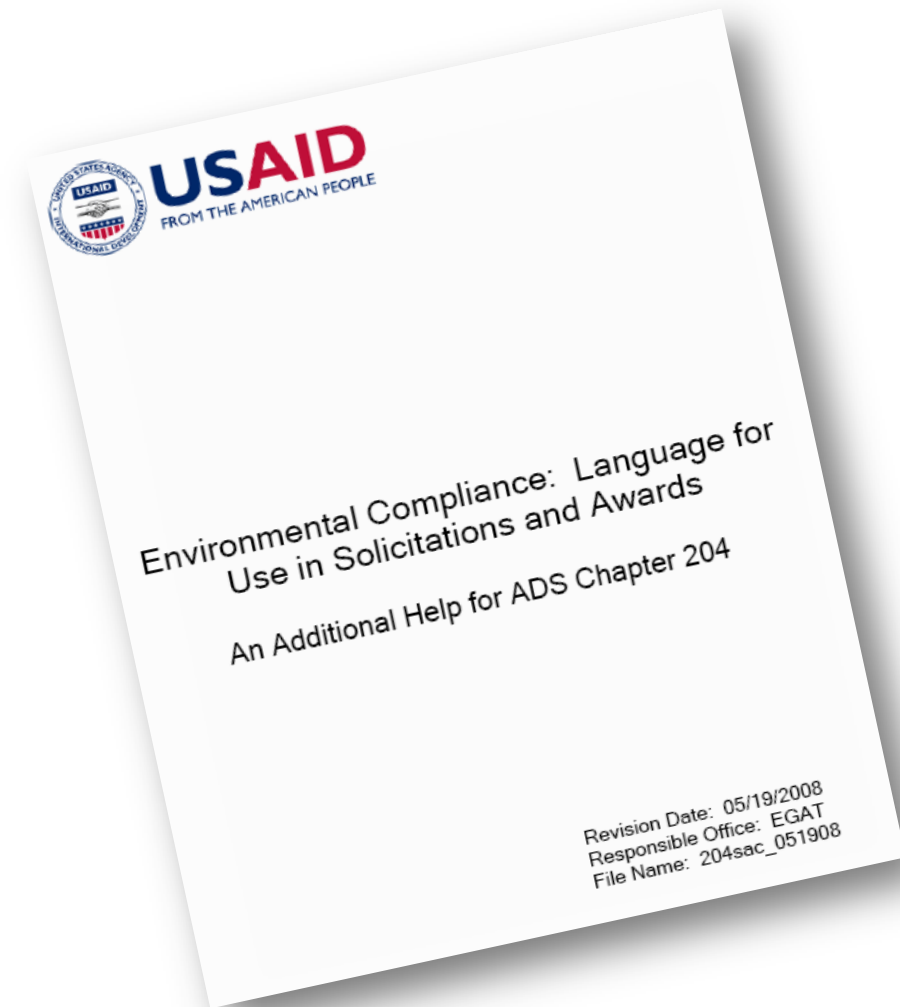
“Incorporating environmental factors and mitigative measures identified in IEEs, EAs, and EISs, as appropriate, in the design and the implementation instruments for programs, projects, activities or amendments.”

(204.3.4(a)(6))

- **Critical to IP compliance with IEE/EA conditions**
- **BUT: historically, problems in implementation:**
 - Many USAID procurement instruments have NOT adequately addressed environmental compliance
 - Lack of guidance required A/CORs, COs to repeatedly “reinvent the wheel”
 - Partners/contractors fail to budget for environmental requirements

The solution. . .

Environmental Compliance: Language for Use in Solicitations and Awards (ECL)



**Step-by-step guidance
and boilerplate language**

- **For RFAs/ RFPs/
agreements/ grants/
contracts**
- **Optional, not required**
- **ADS Help Document**
- **Approved by General
Counsel**

**Available from
[www.usaid.gov/policy/
ads/200/204sac.pdf](http://www.usaid.gov/policy/ads/200/204sac.pdf)**

The Environmental Compliance Language tool generates. . .

Best practice solicitation language



Requiring that:
Proposals address qualifications and proposed approaches to compliance/ ESDM for environmentally complex activities.

Best practice award language



Requiring that:
IP verifies current & planned activities annually against the scope of the RCE/IEE/EA.

The necessary mechanisms and budget for IP implementation of IEE/EA conditions are in place.

To assure that projects do not “creep” out of compliance as activities are modified and added over their life.

Specifically:

1. Complete **EMMP** exists or is developed.
2. Workplans & budgets integrate the EMMP
3. Project reporting tracks EMMP implementation

The ECL strengthens Environmentally Sound Design & Management, and. . .

Provides cost & efficiency benefits to both Mission Staff & Implementing Partners

USAID Staff

Avoids the effort, costs and loss of good will that come from imposing “corrective compliance” measures on IPs after implementation has started.

Reduces USAID cost and effort of env compliance verification/oversight by assuring that IPs integrate environmental compliance reporting into routine project performance reporting.

Implementing Partners

Provides clarity regarding environmental compliance responsibilities

Prevents “unfunded mandates”—USAID requirements to implement M&M after implementation has started & without additional budget.

2. Environmental Mitigation and Monitoring Plan (EMMP) exists

An EMMP:

- (If needed) TRANSLATES IEE conditions into specific mitigation measures to implement IEE/EA conditions
- SETS OUT indicators/criteria for monitoring implementation & effectiveness of mitigation
- ESTABLISHES Timing & responsible parties
- Usually in table form. Formats are usually flexible.

**40+ yrs of EIA
experience
worldwide tells
us: NO EMMP =
No
implementation**

EMMPs: Simple in concept

Basic EMMP Template

(To use, fill in text in **green highlight**. Delete explanatory comments in **yellow highlight**.)

EMMP for Project **XXX**

Person Responsible for Overseeing EMMP:

[name, contact information]

Activity 1: [name of activity] [briefly describe activity & summarize potential adverse environmental impacts—from IEE]			
IEE or EA Condition (reproduced from the IEE or EA)	Mitigation Specific actions to be taken to comply with the condition. (if an IEE or EA condition is already specific to the project/ activity and implementation actions self-evident, this "translation step" can be omitted)	Monitoring How will the project verify that the mitigation action is being implemented and is both effective and sufficient?	Timing and Responsible Parties Who is responsible for mitigation, monitoring, reporting? Timing/frequency of these actions
	A single IEE/EA condition may require multiple action to implement—add rows as necessary		

[add rows for additional conditions]

[repeat table for additional activities]

What does “translate IEE conditions into specific mitigation measures” mean?

- ❖ IEE conditions are often written very generally
- ❖ Implementing these conditions requires first translating them into specific mitigation actions

How should an IP do this?

For example:

“wells shall be sited to minimize the possibility of contamination.”

Or even more generally:

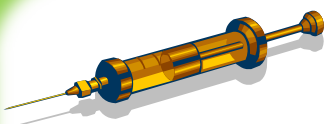
“wells shall be sited consistent with good practices.”





Let's practice

In small groups, take 15 minutes to begin to “translate” these IEE conditions into specific, implementable, monitorable mitigation actions. Bullet out results. Make any assumptions needed regarding the project context.



Health Services Capacity & Policy

“Capacity-building and policy development support to public health delivery & management systems must involve all practicable efforts to assure that these systems address and support proper waste management (including handling, labeling, treatment, storage, transport and disposal of medical waste).



Direct Financial or Technical Assistance to Agroprocessing Enterprises

“Existing enterprises/facilities receiving direct USAID support will be reviewed to identify any significant environmental management deficiencies and these deficiencies promptly corrected.”



Question:

***How are
EMMPs
required &
approved?***



EMMPs are not required by 22 CFR 216, but they are required by almost all newer IEEs in Africa.

Requirement implemented by any of three mechanisms:

1. Technical direction from C/AOR
2. Required by contract/agreement

Generally approved by: COR/AOR

EMMP formats are not rigid

More sophisticated EMMP formats can include:

1. **Budgeting information**---how much will a mitigation or monitoring measure cost? What is the LOE involved?
2. **A Monitoring Log** section—where mitigation implementation information/the results of monitoring
3. **Etc.**



Review DRAFT: 22 July 2016

Download this factsheet at:
www.encapafrika.org/factsheet.htm
(for mitigation and monitoring topics)

For more information, email the ENCAP core team at encapafrika@colsongroup.com

ENCAP FACTSHEET ENVIRONMENTAL MITIGATION & MONITORING PLANS (EMMPs)

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(M&E) Officers, and consultants who may be engaged to develop EMMPs for USAID projects in Africa.

2. WHAT IS AN EMMP?

An EMMP is a document that sets out:

1. Mitigation actions. The EMMP specifies the actions that will be taken to satisfy the IEE or EA conditions.
2. Monitoring actions. The EMMP sets out the indicators or criteria that will be used to monitor (1) whether the mitigation actions have been implemented, and (2) whether they are effective and sufficient.
3. Responsibility and schedule for mitigation, monitoring, and reporting. The EMMP specifies the parties responsible for these actions and the schedule for these tasks.

1. INTRODUCTION

Environmental Mitigation and Monitoring Plans (EMMPs) are now required for most USAID-funded projects in Africa.

Specifically, EMMPs are required when the Reg. 216 documentation governing the project is either an IEE or an EA that imposes conditions on at least one project activity. (See box at right if these terms are unfamiliar.)

Responsibility for developing the EMMP usually lies with the implementing partner (IP), though it may be assigned to the C/AOTR. In either case, the responsible party can develop the EMMP directly, or engage a consultant. (The C/AOTR could also seek assistance from the Mission Environmental Officer (MEO).)

This factsheet describes the EMMP concept and its role in life-of-project environmental compliance for USAID-funded activities. It provides practical guidance and examples to inform EMMP development. It is intended for IPs, A/COTRs, MEOs, Monitoring and Evaluation

USAID's Environmental Procedures

USAID's mandatory environmental procedures apply to all USAID-funded and USAID-managed activities. They consist of 22 CFR 216 ("Reg. 216") and related mandatory provisions of USAID's Automated Directives System (ADS)—especially, but not only, ADS 2013.12.2b and 204.

In summary, these procedures mandate (1) a pre-implementation environmental impact assessment (EIA) process, and (2) implementing and reporting on any environmental conditions (required mitigation measures) that result from this review.

The pre-implementation environmental review is documented in a Request for Categorical Exclusion (RCE), Initial Environmental Examination (IEE) or an Environmental Assessment (EA). Each of these Reg. 216 documents must be approved by both the Mission Director and Bureau Environmental Officer (BEO). Most IEEs and all EAs impose conditions on some or all of the activities they cover.

For more information see ENCAP's [USAID Environmental Procedures Briefing for Mission Staff](#)

This factsheet was prepared by The Codrus Group, Inc. for International Resources Group (IRG) under USAID Africa Bureau's Environmental Compliance and Management Support (ENCAP) Program, Contract Number EPA-004-03-00013-00, Task Order No. 11. It is currently under review by the Africa Bureau Environmental Officer and USAID's Africa-based Regional Environmental Advisor. It is not a statement of agency policy, and its contents do not necessarily reflect the views of USAID or the United States Government.

See the EMMP Factsheet for info & how-to guidance

3. EMMP is integrated in workplans & budgets



EMMPs are only as good as their implementation.

Implementation requires funds
→ must be provided for in project budget

Implementation requires planning
→ can't be left out of the workplan.

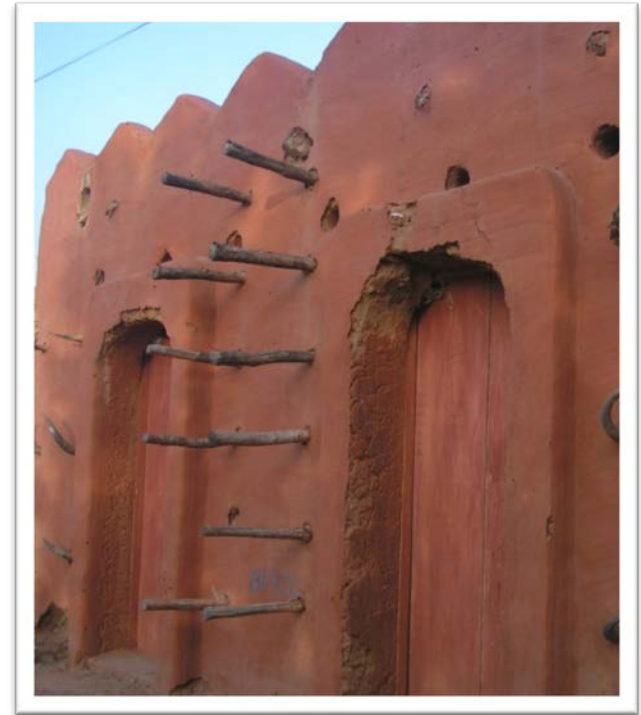


4. IP reports on environmental compliance as a normal part of project performance reporting

For simpler projects,

If the EMMP contains a “monitoring record” section, the EMMP with current monitoring results can simply be appended to the quarterly report.

For large projects with complicated EMMPs, a text summary/short analysis of EMMP implementation is needed.





5. Environmental compliance is evaluated in USAID field visits.

AORs, CORs and M&E specialists must use field visits to field-check compliance

Standard field visit report forms should have an environmental compliance section



Field inspection. . .

shows waste is segregated at point A, but not incinerated at point B.



5. Environmental compliance is evaluated in USAID field visits.

Not an environmental specialist? Take along a **Visual Field Guide.**

www.encapafrika.org/egssaa.htm



Version: 1 December 2009
download at www.encapafrika.org/sectors/watson.htm
comments and corrections to encapinfo@cadmusgroup.com

ENCAP Visual Field Guide: WATER SUPPLY

for quick identification of serious environmental concerns in small-scale water supply activities

About the ENCAP Visual Field Guide Series

ENCAP Visual Field Guides are intended for use during field visits by USAID and Implementing Partner staff who are not environmental specialists.

They are intended to ensure that the most common serious environmental deficits in activity design and management are quickly and easily identified for corrective action.

Note that an activity may be subject to environmental design and management conditions specified in its Environmental Assessment or Initial Environmental Examination but not captured in this document.

The field guides complement the more detailed guidance found in USAID's *Environmental Guidelines for Small Scale Activities in Africa*.

Consult the *Guidelines* for guidance regarding remedies, mitigation and corrective actions.

The *Guidelines* are available at www.encapafrika.org/egssaa.htm.

Disclaimer: This field guide was prepared by The Cadmus Group, Inc. for International Resources Group, Ltd. (IRG) under USAID Africa Bureau's Environmental Compliance and Management Support (ENCAP) Program, Contract Number EPP-1-00-03-00013-00, Task Order No. 11. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

PROBLEMS. A "YES" answer to any of the following indicates an environmental deficit in activity design or management. For USAID-funded activities, corrective action will be required. Notify the Chief of Party and the USAID Project Manager.

1. Is a tank or well supplying water for domestic use uncovered?

YES



Issue: Easily results in contamination of water with pathogens. Can provide breeding habitat for disease vectors, including mosquitoes.

(Photo depicts uncovered well.)

NO

2. Is there stagnant water around the water supply point?

YES



Issue: May provide habitat for disease vectors and attract livestock (see below).

There is a high likelihood that stagnant water around a shallow well will contaminate water in the well.

NO

3. Do livestock share the water supply point?

YES



Issue: Easily results in contamination of water with livestock feces & body fluids.

May attract disease vectors (particularly flies) which are themselves a source of contamination.

NO

4. Is there soil erosion in the vicinity of the water supply point?

YES



Issue: Usually reduces the service period of the supply point by undercutting concrete aprons, well covers, and pump footings.

Often leads to stagnant water around the supply point (see question 2, above).

NO