



**USAID**  
FROM THE AMERICAN PEOPLE



## FINAL REPORT

# USAID/ECAM REGIONAL ENVIRONMENTAL MANAGEMENT AND REGULATIONS WORKSHOP

July 9 – 13, 2012  
San Salvador, El Salvador

This publication was produced for review by the United States Agency for International Development. It was prepared by Sun Mountain International, under the Global Environmental Management Support (GEMS) Contract.

Contacts: Paul Schmidtke, USAID/ECAM REA, [pschmidtke@usaid.gov](mailto:pschmidtke@usaid.gov)  
Scott Solberg, Sun Mountain International, [ssolberg@smtn.org](mailto:ssolberg@smtn.org)

The views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

## Contents

List of Acronyms .....	2
Introduction .....	3
Objectives, Expectations and Conceptual Flowchart .....	4
<b>TECHNICAL SESSIONS .....</b>	<b>6</b>
Session 1: Transect Walk and Baseline Exercise .....	6
Session 2. Overview of USAID Environmental Processes.....	7
Session 3. The Initial Environmental Examination (IEE).....	8
Session 3b. Environmental Impacts and Categorization.....	10
Session 4. Environmental Mitigation and Monitoring .....	11
Session 5a. The Environmental Mitigation Plan and Report (EMPR).....	13
Session 5b. EMPR Primer Exercise .....	15
Session 6: Environmental Priorities in USAID Central America and Mexico Projects .....	16
Session 7: Environmental Assessments .....	18
Session 8. Pest Management PERSUAP Reports and Operational Field Guides .....	20
Session 11: USAID Sustainability/El Salvador.....	28
Session 12: Future Web-Based Reporting System: MONITOR.....	29
Session 13: USAID Biodiversity and Global Climate Change Code.....	30
Parking Lot Session:.....	33
Session 14: Bringing Curricula to Reality.....	35
<b>ANNEXES.....</b>	<b>37</b>
Agenda.....	37
Participant List.....	41
Workshop Photograph Collage .....	43
Workshop Evaluations.....	45
Carbon Free Workshop Certificate.....	47

## List of Acronyms

**AOR** – Agreement Officer’s Representative  
**BEO** – Bureau Environmental Officer  
**CE** – Categorical Exclusion  
**COR** – Contracting Officer’s Representative  
**DCHA** – USAID Bureau of Democracy, Conflict and Humanitarian Assistance  
**EA** – Environmental Assessment  
**EIA** – Environmental Impact Assessment  
**EMA** – Environmental Management Agency  
**EMP** – Environmental Monitoring Plan  
**EMPR** – Environmental Mitigation Plan & Report  
**EMR** – Environmental Mitigation Report  
**EPTR** – Environmental Procedures Training Manual  
**ESR** – Environmental Status Report  
**ESDM** – Environmental Sound Design and Management  
**ETD** – Environmental Threshold Decision  
**GIS** – Geographic Information System  
**IEE** – Initial Environmental Examination  
**IPs** – Implementing Partners  
**IPTT** – Indicator Performance Tracking Table  
**LAC** – USAID Bureau for Latin America and the Caribbean  
**M&E** – Monitoring and Evaluation  
**MEO** – Mission Environmental Officer  
**ND w/ cond.** – Negative Determination with Conditions  
**NGO** – Non-Governmental Organization  
**PD** – Positive Determination  
**PEA** – Programmatic Environmental Assessment  
**PERSUAP** – Pesticide Evaluation Report and Safer Use Action Plan  
**PVO** – Private Voluntary Organization  
**REA** – Regional Environmental Advisor  
**REA** – Rapid Environmental Assessment  
**REG 216** – USAID Regulation 216  
**RFP** – Request for Proposal  
**SMTN** – Sun Mountain International  
**USAID** – United States Agency for International Development

## Introduction

The USAID Environmental Management and Regulations Workshop Planning Team hereby presents the final report of the workshop carried out in San Salvador, El Salvador, the week of July 9 - 13<sup>th</sup> of 2012. This training initiative was financed by USAID LAC RSD Program with the organization and facilitation by Sun Mountain International and the Cadmus Group Inc. of the Global Environmental Management Strategy (GEMS) contract, in close collaboration with USAID Latin America and Caribbean Bureau and the USAID Central America and Mexico Regional Office.

The core components of this report consist of a summary of the principle information exchanged during the five day workshop, the workshop agenda and participant contact information. The report presents key technical notes from each presentation, which focused on environmental analysis, USAID Environmental Regulation 216 compliance, and recommended environmental considerations to incorporate into current and future development programs. A series of sessions also addressed the development of mitigation measures, monitoring and evaluation strategies, USAID biodiversity and global climate change codes, pest management, future web-based reporting system and USAID/El Salvador sustainability initiatives.

Over thirty five development professionals participated in the exchange of experiences and joint environmental analysis of case studies. The work carried out in both classroom and field-based small group sessions helped bring participants together and promote future collaboration possibilities. The real success of this capacity building initiative is measured not by the number of individuals trained, but rather the success of the participants in improving their own organization's internal environmental management processes, compliance measures, and increasing positive environmental impacts. The follow up actions identified during the workshop, and initial actions taken after the workshop, suggest novel and useful results will be generated from this workshop.

Like all Sun Mountain International coordinated training events since 2011, this capacity building initiative was planned and carried out considering carbon management strategies. The carbon footprint that could not be avoided was offset. Carbon credits were purchased to compensate for the emissions incurred by the training (materials, electricity, gasoline, jet fuel use, etc). Participants also assisted in reducing energy use, and recycling or reusing materials which would eventually become solid waste.

The Workshop Planning Team and Sun Mountain International greatly appreciate the participation and support of all presenters and participants. We especially thank Mark Stoughton and The Cadmus Group for sharing their extensive talents, experiences and significant help in the planning and implementation of the workshop. Our appreciation goes to all of the participating missions and organizations including: USAID/El Salvador, USAID/Guatemala, USAID/Nicaragua, Lutheran World Relief, Fundación Zoológica de El Salvador (FUNZEL), PYME, Earth Institute-Columbia University, Global Business Solutions Inc, Camp Dresser & McKee Inc. (CDM), FUNDEMAS, ESFE-AGAPE, CEPRODE, CARANA, CRS and Cámara de Comercio e Industrias. Without the valuable contributions and efforts from everyone involved, this workshop and the outcomes achieved would not have been possible.

**Victor Bullen**  
Bureau Environmental Officer  
for the Latin America and Caribbean  
**USAID**

**Paul Schmidtke**  
Regional Environmental Advisor  
for Central America and Mexico  
**USAID**

**Serena Espinosa**  
ECAM Workshop Coordinator  
**SMTN**

## ***Objectives, Expectations and Conceptual Flowchart***

### **Workshop Objectives**

This training initiative aims to support the USAID/ECAM region to more effectively design, implement, monitor and evaluate environmentally sound practices, in order to achieve more sustainable and competitive development programs.

To achieve this general goal, the workshop is designed to:

- Strengthen the capacity of participating USAID Staff and Partner Organizations to incorporate environmentally sound design and management (ESDM) practices into existing and upcoming development and relief program designs and budgets.
- Improve the ability of USAID staff and Partner Organizations to consistently apply and comply with USAID procedures, Regulation 216 and to generate high-quality environmental analysis.
- Enhance collaboration, networking, exchange of new strategies and technical solutions for development efforts among intra-regional USAID staff and Partner Organizations.

The workshop is based on case studies in the field and group work activities to achieve these objectives.

### **Participant Objectives and Expectations**

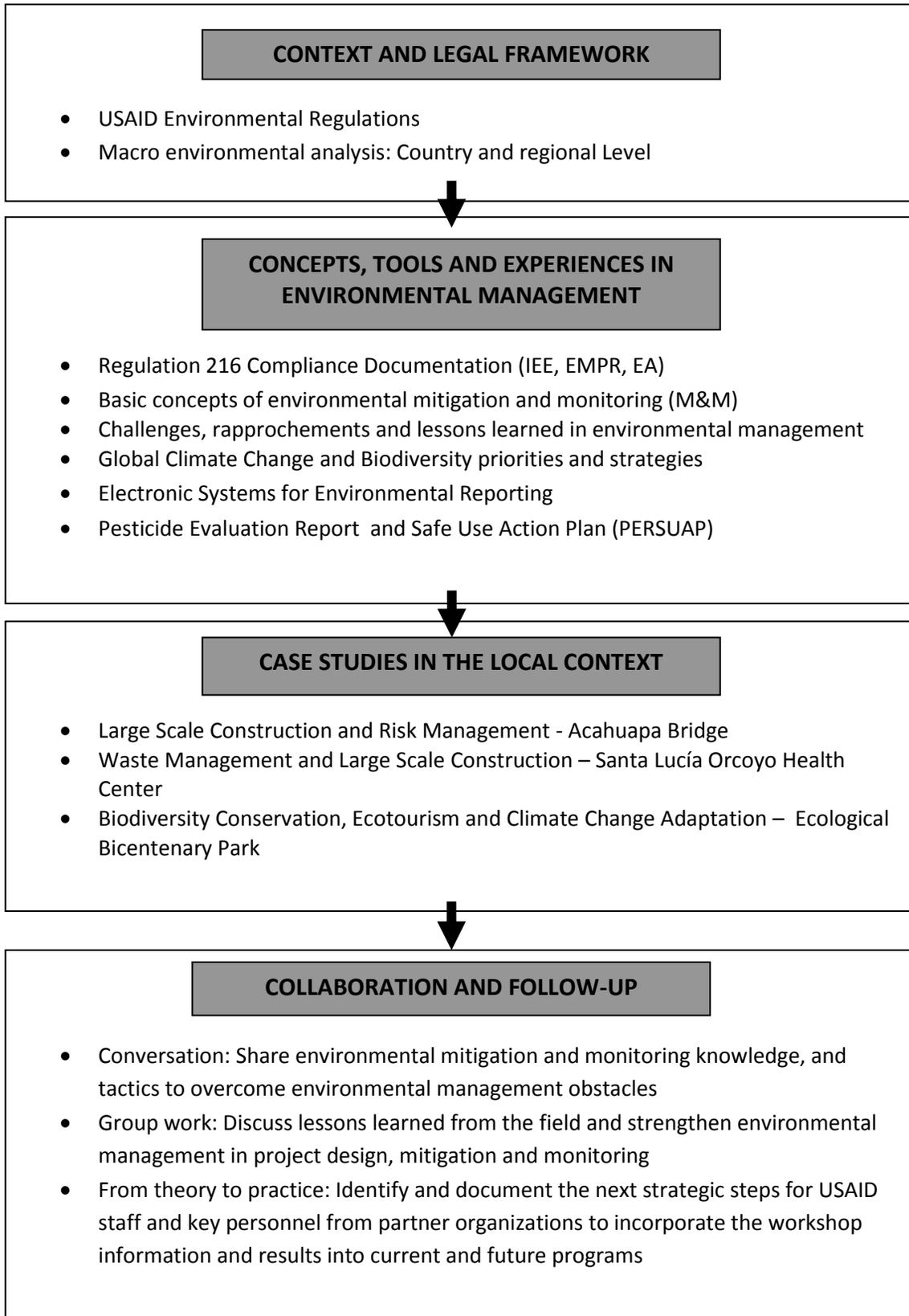
Participants' expectations of the workshop were identified through a plenary exercise. The following needs and expectations were highlighted:

- Increased collaboration between USAID and Partner Staff.
- Better familiarization and understanding with USAID's Environmental Regulation 216.
- Roles and Responsibilities within USAID Staff and resolving technical concerns and improve collaboration.
- Learn how are potential environmental impacts measured and recorded?
- How significant are significant in terms of environmental impacts? What do significant impacts require?
- How does Regulation 216 apply differently to grants and to long-term contracts?
- Discuss how to achieve environmental sound design.
- Learn how to better work with partners to ensure Regulation 216.
- Better understanding of USAID's environmental programs and policies in general.

### **Intent of GEMS Workshops**

The Global Environmental Management Support (GEMS) Consortium Workshops are viewed as an exchange of learning for every participant, facilitator and everyone in the training room. This is why the events are called workshops rather than courses. It is more than a one way learning tract. Channel learning lessons from each workshop back to the environmental officers in Washington.

## Workshop Conceptual Flowchart



# TECHNICAL SESSIONS

## Session 1: Transect Walk and Baseline Exercise

Facilitators: Scott Solberg, SMTN; Mark Stoughton, The Cadmus Group Inc.; Malory Hendrickson, SMTN.

**Objective:** Improve the understanding of and experience in the field visit methodologies and identification of potential environmental impacts. Strengthen knowledge of baseline analysis and environmental impact identification, based on the Transect Walk.

### Ecological aspects of the Hotel Hilton Princess:

Limiting paper use including reuse and recycled

Implementing 97% energy saving light bulbs

Electrical energy is the aspect of the hotel that consumes the most energy

New air conditioning and chiller apparatus

Jacuzzi has solar heating mechanisms

Implement a filtered rainwater system for the cisterns

### Sector Groups and Observations on Baseline Situation and Identified Impacts

#### **1. Water Use**

Action: Waste Water Treatment. There is a lack of waste water treatment. Impacts are recharge to the aquifer / if water is going to a source that is far away, there may be diminished water quantity.

#### **2. Energy Use**

Action: Electricity used from the national grid, including air conditioning, lighting and elevators.

Economic systems impacted from increased maintenance cost due to high use, more energy use involves more greenhouse gases,

Action: Propane use: produce steam for hot water heating and in the kitchen.

#### **3. Procurement of Operating Supplies**

Action: Hotel policy and standards on environmental procurement exists and is approved since last Friday. Hotel is trying to make changes in lighting and energy. Products are procured from large companies that meet all hotel standards. The hotel is forced to first focus on economic impact and then ecologic impact.

#### **4. Waste Management**

Action: In the hotel's recycling program separation of paper, plastic, aluminum, glass (green and colored), and organic. Could reuse more of materials and supplies. Socio-economic activities created through the recycling system. If and when the hotel doubles in size, waste management will demand increased use of gas, larger impact on the landfill, and increased job opportunities.

### Group Activity Synthesis

If hotel were looking to expand or improve its ecologic footprint, there is a prioritized list of activities that would need to be considered. These identified actions include use of organic supplies, improved and more efficient electrical systems, consideration of volume of discharge in waste management, and better monitoring of suppliers in the procurement department. Perspective and behavior change will need to be a forefront priority.

## **Session 2. Overview of USAID Environmental Processes**

Presenter: Victor Bullen, USAID/LAC BEO.

**Objective:** Establish a basic knowledge of the legal basis for USAID environmental process, procedures, tools and resources and Environmental Sound Design and Management (ESDM).

### Key points:

- 1962. Rachel Carson's book "Silent Spring" makes all sectors of the US community concerned which led to U.S. Congress passing environmental laws, including the National Environmental Policy Act (NEPA) in 1970.
- In El Salvador, there exists an "Environmental Law" that is similar to the U.S. NEPA.
- NEPA serves as the advisory council to the President.
- USAID Resisted and did not want to incorporate the policy since they claimed that they do not do domestic
- Case occurred in which inappropriate use of the pesticide Malithion resulted in deaths in Pakistan. Once USAID settled out of court, the USAID Environmental Procedures 22 CFR 216 was developed.
- Foreign Assistance Act created additional sectors on more specific thematic areas in development programs.
- Automated Directive System, which is the official USAID policy handbook, incorporated Regulation 216.
- Regulation 216 optimizes economic and social development; it is a good tool for integration of cross-cutting themes in sustainable development. Additionally, it avoids future costs and setbacks (ex: accounting for drainage and irrigation issues up-front), prevents foreign relations incidents, and engenders public confidence in USAID.
- All USAID financed activities require environmental analysis prior to delegation of funds.
- Environmental components:
  - Biological: animals, plants, insects, forests, ecosystems, native species, biological diversity, forest cover
  - Natural/Physical: water and watersheds, soil, air
  - Social/Economic: people, livelihood and quality of life, culture, health, food security, recreation, vulnerable populations, gender
- Environmental mistakes are often made due to a few common design problems.
- Environmentally Sound Design and Management (ESDM) has 3 basic components
  - Be prevention oriented. This occurs across the project lifecycle including design, construction/implementation, operation (including handover), and decommissioning.
  - Apply best practices including a technically sound design, building beneficiary capacity and stakeholder commitment, design for the local social and policy context and adjust what we do as results come in. There are many resources

available on best practices.

- Be systematic, especially through an environmental analysis.
- Environmental analysis, including Regulation 216 documentation (IEEs, EMPRs, EAs) is a great way to make ESDM a reality.
- Websites to USAID Regulation 216 resources are available on the session powerpoint.

#### Session Questions/Comments:

Q1: Would USAID ever go so far as to suggest solid environmental techniques for development sectors, such as landfills?

A1: There are certain situations that are extremely complex and do not have a definitive right answer. USAID does have resources that suggest certain solutions or techniques to certain situations.

Comment: To find the Aquaculture and the Environment Resource (not currently available online), contact Harry Rea from the Bureau for Food Security [HRea@usaid.gov](mailto:HRea@usaid.gov).

### **Session 3. The Initial Environmental Examination (IEE)**

Presenters: Victor Bullen, USAID/LAC BEO; Paul Schmidtke, USAID/ECAM REA.

**Objective:** Increase comprehension of the concepts, procedures and environmental threshold decisions (ETD) for the Initial Environmental Examination (IEE). Understand the types of projects that require specific IEE Environmental Determinations and the roles and responsibilities within the IEE procedures.

#### Key points:

- Regulation 216 applies to all new or supplementary activities funded by USAID. Changes in existing activities imply new components, time extensions, additional financing, environmental impacts not previously foreseen.
- There are 4 Initial Environmental Examination (IEE) Environmental Threshold Decisions (ETDs).
  - Exemptions – officially declared by Administrator, such as in the case of an emergency.
  - Categorical Exclusion – no serious environmental impacts.
  - Negative Determination with Conditions – impacts identified that can be mitigated.
  - Positive Determination – Some sort of significant environmental impact from the project and an Environmental Assessment (EA) will be required.

\*See examples of each determination on the session's powerpoint and in Regulation 216 official document.

\*Negative means that the impacts are not significant. Positive determination means that the project potentially entails serious/significant environmental impacts.
- Who is responsible for writing IEEs? The A/CORs and USAID team, Implementing Partners and sometimes everyone. The Mission Environmental Officer is not responsible for writing IEEs, but rather advises the process and approves the documents.

#### Review of a good example of an IEE. Outstanding notes:

- Note all categories on the IEE cover page.
- It is very important that you are as specific as possible in session 1.3, Description of Activity. IEEs are completed prior to designation of funds and implementation. Therefore, more often

than not, the IEE gets amended numerous times as the partners go out into the field and further identify what they are actually going to do in the project.

Session Questions/Comments:

Q1: Does USAID strictly define “significant impacts”?

A1: No, it is subjective, but there are rules of thumb. For example for less than 100 hectares of irrigated land, additional analysis is not required; for over 100 hectares it is. Typically for a rural drinking water activity for 50-100 families, it would not be a significant impact. Once you get up to a population of 5,000, it would be a significant impact. If there is an adverse impact that is going to occur in this project that is permanent or that cannot be mitigated, it is significant. This includes clearing land, large-scale construction, etc.

Q2: If another USAID Agency implements a project abroad, do they need to comply with Regulation 216?

A2: Regulation 216 only applies to USAID. NEPA applies to the entire US Government, so if any other US Agency is going to implement a project, they have their own set of regulatory guidelines that would need to be applied. If it's USAID's money, USAID's Regulation 216 applies. Also, if USAID receives money from another agency to implement a project, Regulation 216 applies; if it goes through USAID books.

Comment: In El Salvador, 1 *manzana* = 1.47 hectares

Q3: What does capacity building mean, in the categorical exclusion determination category?

A3: Trainings or capacity building initiatives that do not have direct nor indirect impacts on the environment.

Q4: Is the IEE done for the activity level or for each project?

A4: In a perfect world, an IEE would be completed in each project. However, USAID completes Umbrella IEEs, which are broad and general according to development sectors. Since USAID knows more or less what the project will be working with, they can provide a general, broad IEE. If the partner who is awarded the funds is going to implement a project with unforeseen potential environmental impacts, an IEE amendment can and should be developed and submitted.

An IEE is required per development objective, via the umbrella IEEs (or at least this is the way that it plays out in the field). This allows them to designate funding, and a lot of amendment is involved as the project design is further developed.

Q5: How do you know when you need to amend an IEE?

A5: In the case that the project entails a time extension, new components, additional financing, and environmental impacts not previously foreseen.

Comment: The USAID Environmental Database is complete with public information. Therefore, if anyone is looking for a particular IEE, ETD, or other environmental compliance document, refer to the USAID website environmental database.

## Session 3b. Environmental Impacts and Categorization

Facilitator: Mark Stoughton, The Cadmus Group Inc.

**Objective:** Strengthen ability to classify intensity of environmental impacts and determination of environmental threshold decisions (ETD).

### Group Report Out:

#### **Scenario 1: Small-Scale Water and Sanitation Project**

##### **Group 1**

Environmental threshold decision: Negative determination with conditions assuming that the project is sufficiently small.

##### **Group 2:**

Environmental threshold decision: Negative determination with conditions for building and rehabilitating the project and Categorical Exclusion for the capacity building part of the project.

##### **Group 3:**

Environmental threshold decision: Negative determination with conditions for building and rehabilitating the project and Categorical Exclusion for the capacity building part of the project.

#### **Scenario 2: Large Scale Irrigation and Drainage Project**

##### **Group 1**

Environmental threshold decision: Positive Determination for the construction and rehabilitation of the irrigation canal, negative determination with Conditions for the capacity building part of the project. The ETD for the capacity building activity depends on what the project is building the capacity for; it should include environmental analysis through the working sessions.

##### **Group 2**

Environmental threshold decision: Positive Determination as it is a large scale irrigation project. The whole scenario would be a positive determination.

##### **Group 3:**

Environmental threshold decision: Positive Determination.

#### **Scenario 3: Small Clinics**

##### **Group 1**

Environmental threshold decision: It depends, the Small Scale Construction of clinics is a negative determination with conditions, because of its size, impacts can be mitigated, and the operation and maintenance should be a positive determination specifically because of medical waste. The capacity building part of the project should be a Categorical Exclusion.

**Group 2**

Environmental threshold decision: The scale of the project determinates the ETD. Group 2 made the assumption the project was of a small scale and decided under this condition the ETD should be a negative determination with conditions.

**Group 3:**

Environmental threshold decision: Group 3 determined that the ETD depends on the type of land where the project is being built. The ETD can be a positive determination if it is an area that is sensitive, if not it should be a negative determination with conditions.

## Comments:

- USAID: In most cases this scenario would be a negative determination with conditions, the exception would be if the project involves a large number of small clinics. The operation and maintenance part of the project will receive the same determination.
- USAID: Medical waste usually is a negative determination with conditions with certain exceptions. If it is the case where the waste disposal is a big enough of a problem it may require an Environmental Assessment. Clinics may also be using pesticides for control of vectors.

Q1: To manage waste the risk is very low because there are many recommendations that can be done, right?

A1: If you can prove that the mitigation measures are enough yes, you can have a Negative determination with conditions. Mitigation measures should not only come from the LAC guidelines. Many concepts in the guidelines are not applicable or not thorough enough which is why the all the environmental analysis process has to be site and project specific and other resources should be taken in consideration.

Q2: Is there a preference in grouping activities in projects?

A2: It's an art to put together the IRs and activities. Be as parsimonious as you can without obscuring activities of the project.

Comment: It is key to do the environmental documentation for a project site specific.

**Session 4. Environmental Mitigation and Monitoring**

Presenter: Scott Solberg, SMTN.

**Objective:** Strengthen knowledge of environmental mitigation and monitoring, and the selection/development of environmental indicators.

Key points:

- Environmental Mitigation: Measures designed to reduce or eliminate undesired environmental impacts of a proposed action. Mitigation is a key part of the environmental analysis process. It is essential in order to achieve an environmental friendly design.
- If a project is designed to perfection will we need mitigation measures? In theory for a project to be perfect all the mitigation measures should already be incorporated. There is never a case

where they are all incorporated at the design state. There can be unexpected impacts that will need mitigation measures in the future.

- There are different places in a project life where you need to inject mitigation measures. The place where you will add this mitigation measures is important. Mitigation filters out greatest impacts at beginning of cycle if done properly at end only small impacts remain to be mitigated.
- During planning focus on macro issues. You always want to start with the greatest impacts, in road construction for example, siting is a key issue during the planning phase.
- Different mitigation measures act in different ways to reduce adverse impacts:
  - Prevention and control: Prevent an impact by: Changing technique; Changing the site; Specifying operating practices
  - Compensation: Offset adverse impacts in one area with improvements elsewhere
  - Remediation: Repair or restore the environment after damage is done
- Mitigation in Environmental Plans and Reports contain:
  - What and Why: What are the significant impacts that need to be mitigated? What are the proposed mitigation measures?
  - Who: Who carries out mitigation measures? Who manages or verifies?
  - When: At what stage in the project cycle is each measure implemented? Why
  - How: What is the budget? Who pays?
    - The EMPR allows modifications in the strategy or mitigation measures, when the monitoring indicates an unforeseen problem or unexpected result...*
- Adaptive management is important as there are many unforeseen problems.
- El Salvador Mission has many negative determinations with condition projects. You really have to demonstrate site specific what are you doing why and who. Focus on easy highly technical information that can be analyzed and monitored which is specific to what actually influences every project.
- Monitoring is a systematic measurement of key environmental indicators over time, within a particular geographic area, in order to determine the effects of project implementation short term and long term. As well as a systematic evaluation of the implementation of mitigation measures.
- If something goes wrong monitoring lets you know if you are actually achieving your goals. As well as if modifications should be done.
- Monitoring Process: Field monitoring should be carried out by more than one person, to receive the benefits of different perspectives of the group. Before going to the field, a clear monitoring methodology should be defined (key questions, indicators, etc.) Timing is also key; mitigation has to be completed in the appropriate amount of time, according to the standards.
- Monitoring is responding to a series of questions: Are we doing what we said we were going to do? How effective were our mitigation measures?
- Types of Indicators :
  - Support – Resources
  - Performance – Products produced
  - Effectiveness results – Immediate results
  - Impact– Long-term results
- Indicators have to be SMART
  - **S**pecific
  - **M**easurable
  - **A**chievable
  - **R**ealistic
  - **T**ime Limited

- In order to make mitigation and monitoring effective it has to be realistic, focused, funded, considered on time and considered at an early stage.
- Mitigation & Monitoring are a critical part of environmentally sound design: Mitigation minimizes adverse environmental impacts and Monitoring tells you if your mitigation measures are sufficient & effective.

#### Session Questions/Comments:

Q1: How important is it to go to the field?

A1: Very important, not always possible. Community monitoring is essential, interviews or pictures. Be creative and find ways to gather data.

Comment: Interdisciplinary teams are critical. Sector specific indicators are very important as well, do not settle with Standard indicators in EMPR, they don't mean anything if they don't have a thought process. They need to be specific and demonstrate that the monitoring will be project and site specific.

Q2: How do you reconcile between long term and short term.

A1: It depends on your mitigation measures. Decide in your project design what indicators and mitigation measures to include.

### **Session 5a. The Environmental Mitigation Plan and Report (EMPR)**

Presenters: Paul Schmidtke, USAID/ECAM REA; Malory Hendrickson, SMTN.

**Objective:** Build knowledge on the Environmental Mitigation Plan and Report (EMPR) procedures format, format and development with focus on narrative as well as mitigation and monitoring tables.

#### **Key Points:**

- The EMPR is an effective tool that has helped us manage the projects that are a Negative Determination with Conditions.
- After an Initial Environmental Examination (IEE) or a Request for Categorical proposes a "Determination" for an activity regarding its potential for environmental impact and the "Threshold Decision" by the Bureau Environmental Officer (BEO) finalizes the "Determination", the activity begins with Environmental Mitigation Plan and Report (EMPR), which "will avoid a significant effect on the environment" and describe the "means to mitigate adverse environmental impacts". Still, mitigation, monitoring and reporting continue through the life of the activity.
- The EMPR has 3 objectives:
  - Address areas of environmental impacts resulting from program implementation.
  - Develop a system to eliminate or mitigate negative environmental impacts (including socio-economic).
  - Strengthen community's awareness, preparedness and ability to protect and adapt to their natural resources.
- When is an EMPR Required?
  - Activities with a Negative Determination with Conditions- The condition is filling out the EMPR.

- The project has moderate environmental impacts than can be mitigated.
- Project with sub-grants component:
  - Sub-projects often not defined when project proposed & the IEE written.
  - Simplified environmental analysis for small-scale activities, implemented through sub-grants or sub-projects, under a larger project.
  - Often times when there is a sub grantee in the project it is very removed from the IEE which is why often times it doesn't even fit with the original.
- Attached to the RFP and/or Initial Agreements the IP will find the IEE and EMPR format.
- If IEE contains a negative determination with *conditions*, The Bureau Environmental Officer (BEO), Victor Bullen, grants *conditional* approval. It will need a draft EMPR completed by Potential Partners and submitted with proposal. Through this Environmental considerations are incorporated into the project planning and design and it requires that costs for mitigations be included in the proposed budget.
- Once the contract award is made, the winning contractor revises their draft EMPR during the first month based on their work plan. It is this revised EMPR that then is approved by the COR, MEO and REA.
- EMPR Framework (5 Components):
  - Coversheet First
  - Narrative- Background, Activity Description, Environmental Baseline, Evaluation of Impacts, and Mitigation Actions
  - Environmental Screening Form - Table 1
  - Identifying Potential Impacts and Associated Mitigation Measures - Table 2
  - Environmental Monitoring and Evaluation Tracking - Table 3
- To obtain baseline information for the narrative talk to staff in your organization who know the project, and know the sites. Obtain project documents and information. Remember that direct observation is key. Go to the site(s)! (Look up publicly available satellite imagery before you go.) Utilize other local talent and knowledge such as communities, government, and counterparts. There are also other resources: go online, GIS, data bases, but remember good local information is key.
- The USAID LAC Environmental Guidelines are also a key resource to learn about potential impacts and how they arise. It Covers 9 development sectors. Each section write-up identifies potential impacts & discusses how they arise. Impacts are matched to mitigation actions. The annotated bibliographies provide links to key additional resources.

### Session Questions/Comments

Q1: Should and EMPR be done by the partner for every activity in the project?

A1: It depends, if you are doing the same activity for many sites no, if you have sub-grantees that have no specifications from the prime contractor yes you need to do an EMPR.

## Session 5b. EMPR Primer Exercise

Facilitator: Malory Hendrickson, SMTN.

**Objective:** Improve and apply mitigation measures and indicator selection skills in a scenario-based small group exercise centered on the impacts identified during the Transect Walk.

### EMPR Primer Exercise Report Out

#### ***Waste Management Group***

Action Identified: Organic waste being disposed of into the San Salvador Public System

Potential Impact: Effects on the dump

Mitigation Measure: Begin a composting system; Comply with health standards for waste management – Approval and maintenance

Indicator: Volume of compost produced in a period of time

#### ***Energy Use Group***

Action: Installation and operation of the air conditioning system

Potential Impact: Air quality with indoor and atmospheric air quality

Mitigation Measure: Use environmentally non-ozone depleting refrigerator, prevent gas escape, and ensure proper filtration

Indicator: Number of technicians trained and competent in maintenance and utilization of equipment.

#### ***Water Use Group***

Action Identified: Laundry service

Potential Impact: Water use and depletion of aquifer

Mitigation Measure: Provide more energy efficient machines, place energy and water efficient cards in guest rooms

Indicators: Number of machines purchased and installed. Decline in water use (Percent of baseline water use) Water bill decline (Percent of baseline water bill).

#### ***Procurement Group I***

Activity: Use of chemicals in cleaning activities

Potential Impacts: Health impacts from chemical contamination in surface and ground water.

Mitigation Measures: Establish standard procurement to not buy highly toxic products and install a treatment plan

Indicators: Number of health impacts reported. Measurement of water quality.

#### ***Procurement Group II***

Activity: Purchasing of Coffee

Potential Impacts: Demand for local rather than imported coffee

Mitigation Measure: Set the target to purchase 100% organically certified coffee within 5 years. Increase in locally-purchased coffee.

Indicators: Percentage of coffee purchased per year that is 100% organically certified.

## Session 6: Environmental Priorities in USAID Central America and Mexico Projects

Panelists: Victor Bullen, USAID/LAC BEO; Paul Schmidtke, USAID/ECAM REA; Mary Rodriguez, USAID/El Salvador MEO.

**Objective:** Improve and apply mitigation measures and indicator selection skills in a scenario-based small group exercise centered on the impacts identified during the virtual field trip.

### 1. What are the greatest challenges in good environmental analysis for USAID's implementing partners? How do you think that USAID staff could facilitate the work of these partners and ensure that these shortcomings are adequately addressed?

USAID Answer: Helping partners get acquainted with Reg 216 requirements. Holding these types of workshops to improve collaboration and networking.

Q1: How do partners resolve the tension of balance between the environmental analysis compliance and the budget?

A1: What often times happens is that we get focused on outputs in USAID. We have a whole massive reporting system to measure the outputs. Implementing partners are graded on the outputs that they have. We need to further focus on the long term benefits of the program. The challenge is how do we take a step back from the constant reporting and rather look at the benefits and ensure that the project does not have undesired impacts elsewhere. We need to make this more an integrated piece of what we do.

Q2: We also have the political pressure from Washington and the Department of State, and sometimes there isn't enough time to do complete quality environmental analysis. How do we cope with this situation?

A2: In Haiti the State Department basically micro-manages every cent that passes through the country. It is hard to work in that kind of environment and be successful. To meet short time goals by sacrificing sustainable projects is often what happens. Push back and encourage that sustainability happens upfront. The MEO, REA and BEO can help support you in making a case to do it right. Sometimes they are able to speak directly to the State Department. The key is to work as a team.

A2: Budget is a big problem because IPs cannot recover costs to do something a little more thorough. Basically we just take everything out that we can without effecting performance, which is extremely unfortunate. It takes a lot of internal investment from smaller organizations to try to secure funding as it is. Competitive budget demands less environmental investments. We must triangulate and work together to support each other.

### 2. Looking forward over the next five years, what do you see being the most pressing regional priorities and how can USAID staff collaborate?

USAID Answer:

- Training and capacity building. Making sure training opportunities are offered is a high priority because there is such a high turnover. There is enough funding in the LAC Regional Budget to cover one training per year, and that is just not quite enough. GEMS is an option for these

trainings. Through the GEMS mechanisms, Missions can buy into it easily and meet their needs through the GEMS services. Cultural change and education. Some recommendations are to ensure sustainability of programs after funding ends, work as a team and with local communities and recognize the importance of trainings, use of the EMPR tool and work towards greater sustainability.

- Technical Assistance support and compliance is also particularly challenging. Getting the support that you need, especially in agriculture production and markets, tourism and infrastructure are the 3 largest areas for the region as a whole. There are probably many more that are mission specific. I think we can get support from GEMS for this as well. Providing training that is specific to targeted technical areas can also help. Partners cannot buy into GEMS directly since it is a USAID mechanism, but the Mission can do local training. Partners can seek Technical Assistance support
- Another challenge is environmental staffing, especially in light of recent LAC budget cuts.
- There was a needs survey completed several years ago in Survey Monkey and it is about time to complete another web-based needs assessment to compile answers about environmental compliance needs.

Q1: As USAID moves forward to work with more local governments, NGOs and PVOs, what are we doing to harmonize our requirements with their compliance requirements? How do we collaborate with them?

A1: We must consult with host country governments and build capacity of host country professionals. USAID has been working with the Inter-American Development Bank trying to make sure that our environmental compliance documents are shared and that we complement one another. There are misconceptions on the part of USAID staff on how to go about the environmental assessment process. When carrying out environmental analysis, this information would need to be shared and some building on processes would naturally occur. Procedures and requirements in host countries are typically very good. Occasionally they are not carried out. There is a challenge of translation since the host country may require the document in the native tongue and USAID require it in English.

A1: A very practical solution that was discovered in the El Salvador Mission is to complete a risk assessment with the government agencies and avoid duplication of efforts. It states in Regulation 216 that USAID needs to collaborate with and build capacity of the local governments.

Bilateral example: A sanitary landfill was being implemented to replace a dump in the Galapagos. The Spanish Aide Agency developed an environmental analysis and USAID was able to use that document for their needs as well. Translation was the only requirement. The Galapagos are a very delicate environment for biodiversity and it was very important to complete the documentation prior to beginning implementation of the project so it worked out very well and efficiently.

Q2: How is engineering sound design and management implemented into environmentally sound design and management? Engineering sustainability requires a lot of procedures and a heavy load of involvement from these professionals.

A2: Environmental compliance is 100% compatible with good engineering. It is ensured particularly at the EMPR and EA levels. USAID gets questions all the time is a project is earthquake-safe *enough* or flood-proof-safe *enough* and USAID does not have the answer to that, so we say that

if it meets the engineering standard of the country, it's enough. I would strongly recommend that if there is a question on an engineering design, that we get further expertise involved immediately on the ground for the project. Call on USAID engineers for design standards, etc.

**3. What do you find, among either USAID IPs or USAID staff, to be the most common misconception regarding USAID environmental compliance documentation? (To give you the opportunity to clear it up once and for all!)**

USAID Answer: USAID has a huge misconception of thinking that we can't say no. We say yes to a certain action, and then need to decide how to do what we said we are going to do in the most expedited, cost-effective way. At the end of the day it is a bad idea or a bad decision, do not do it.

Q1: Is there a frame work for comparing USAID compliance. Are there institutional priorities that IPs can look at to help us develop our environmental analysis documentation?

A1: At the Strategic Planning level of USAID there are Tropical Forest and Biodiversity analysis as a preparatory analysis for a particular county. It identifies the conservation priority needs for that country. Every country has one and it is updated about every 5 years. It also looks at the potential impacts of the USAID strategy on that area within the country.

A1: A key part of CAFTA was support to address environmental compliance needs in the country for staffing and imports and exports. I think that that program really helped strengthen the region as a whole and make the environmental documentation useful rather than just sitting on the shelf.

One final golden piece of advice for the audience:

PS: Ensure that whatever is left after the contract period ends, is sustainable. Involve and train the community.

MR: Do not underestimate the capacity of the local government to support our efforts.

VB: Make sure that your staff and stakeholders are trained up.

## **Session 7: Environmental Assessments**

Presenters: Paul Schmidtke, USAID/ECAM REA; Mark Stoughton, the Cadmus Group, Inc.

**Objective:** Improve the understanding of the procedures for Environmental Assessment (EA) development and implementation. Revision of types of EAs, including the Programmatic (PEA) and Rapid (REA) Environmental Assessments.

Key points:

- An EA is a detailed study of the reasonably foreseeable significant effects, both positive and adverse, of a proposed action on the environment of a foreign country or countries. An EIS is similar to EA, but with potential impacts on the US or global environment.  
Typically not done at USAID.
- An EA is needed when an IEE's preliminary assessment indicates that significant adverse impacts are possible (positive determination) or when EMPR's screening indicates an activity is high risk (it is still recommend to do a preliminary assessment!)
- Some typical "Positive Determination" activities are:
  - River basin development

- Large (>100 ha) irrigation or water management projects (including dams)
- Agriculture land leveling
- Drainage projects
- Large scale agricultural mechanization
- New land development
- Resettlement projects
- Construction of new roads
- Power plants, industrial plants
- Sewage and potable water projects
- Forest harvesting
- Construction of buildings over 1000sq m
- There are 3 types of USAID EAs
  - Environmental Assessment (EA)- Used to assess the environmental effects of a specific project or action
  - Programmatic Environmental Assessment (PEA) - Used to assess the environmental effects of a class of similar actions
  - Rapid Environmental Assessment (REA) - Used to assess, define and prioritize potential environmental impacts in disaster situations
- There are several steps in preparing an EA.
- The Scoping Statement is the first step and it determines the significant issues the EA will address. This includes but is not limited to: what is intended to be done, what is the desired future condition we are wishing to address, who are beneficiaries, what is the schedule and format of EA and expertise needed, what is the affected area that will be studied. This is not a scope of work for environmental assessment. Rather it is a pre-EA document to state the scoping.
- The BEO will review the Scoping Statement followed by the development of the Terms of Reference and the consultant assembling a team based on the TOR.
- Regulation 216 requires that the EA contains the following sections:
  - Summary with major conclusions, areas of controversy and issues that remain to be resolved.
  - Purpose that describes the development need or objective that the proposed action is intended to address
  - Affected environment that succinctly describes the environment and area(s) to be affected. Details the soils, type of environment, sensitive areas, etc. Longer does not mean better. Include the truly necessary information. This information can be gathered from secondary resources or may require additional on-the-ground research, which could take awhile.
  - Environmental consequences of the proposed action, no action, and any other alternative actions discussed in the EA.
  - Comparison of alternatives and presents the proposed action and the alternative actions that were also considered. Each of the alternatives are then compared.
  - List of preparers with names and qualifications
  - Annexes
- Note that when assessing impacts, too much information is as bad as not enough. Provide the most detailed analysis for the more significant impacts and summarize or reference for lesser impacts.
- Reg. 216 does not have language that emphasizes the importance of a detailed mitigation and monitoring plan. However, Mitigation and Monitoring Plans are essential to making the EA

effective. Remember, Mitigation and Monitoring plans assign responsibilities and establish schedules/time lines and reporting requirements.

Session Questions/Comments:

Q1: Can procurement go forward if an EA is required for the project?

A1: Yes, along with the implementation of any activities that are not a part of the positive determination. However, any activity that is covered in the EA cannot go forward until the EA is completed and approved.

Q2: Can the EA be part of the prime contractor SOW?

A2: There may be a conflict of interest; however an in-house team could also be organized.

Q3: What other contract mechanisms can be used?

A3: You can go to GEMS

Q4: What are typical costs and time requirements for EAs?

A4: The time would be between 3 person months up to a person year and could cost anywhere between 50,000 to 1 million. Probably no more than 1-2% of project cost.

Q5: Where does the money come from?

A5: 90% of the time it comes out of the project or sector team's budget. Sometimes the budget comes from the region when there are multiple operating units involved.

Q6: Are there model TORs for Scoping Statements, EAs?

A6: There is an USAID web-based environmental compliance searchable database that has quality examples of EAs, but no, there is not a general boilerplate to copy and paste.

Q7: Who does an EA?

A7: Most of the participants at the workshop would be on the management side of the EA process. However those who have a technical expertise/background could be on the technical side to carry out and complete the EA. If you work for the Federal Government, they would first do the EA and then hire a contractor to construct the bridge.

Comment: Request for elaboration on the community involvement. Stakeholder involvement needs to be completed up front through focus groups, key informant interviews, etc.

## **Session 8. Pest Management PERSUAP Reports and Operational Field Guides**

Presenters: Victor Bullen, USAID/LAC BEO; Scott Solberg, SMTN.

**Objective:** Become familiar with the PERSUAP format, technical content and procedures. Increase awareness of best practice on pesticide use and integrated pest management methods.

Key Notes:

- Pesticides are biological chemical or physical agents used to kill unwanted plants, animals or disease agents
- Pesticides derived from natural sources (like Pyrethrum) are still pesticides. USEPA has fact sheets for "Biopesticides".

- Use of pesticides typically include: In-field crop protection, spraying for mosquito and other disease vector control, dosing of lakes, ponds & lagoons to control disease vectors, household insect and structural pest control, stored product protection (seeds, food aid crops, etc.), insecticide treated bed nets, treatment of export crops, fumigation of timber, outbreak pest control – locusts, rodents, etc, livestock tick control-dipping, spraying, pouring and other uses.
- A PERSUAP will be needed if “Pesticide procurement or use” is part of a proposed activity. Procurement includes: Direct purchase of pesticides; Payment in kind, donations, provision of free samples and other forms of subsidies; Provision of credit to borrowers; Guarantee of credit to banks or other credit providers.
- Use includes: sale; handling, transport storage; mixing, loading, application; disposal, provision of fuel to transport pesticides, Technical assistance in pesticide management, including training.
- Fertilizers are often lumped with pesticides under the generic heading of “agrochemicals” but the Pesticide Procedures do *not* apply to: Use of synthetic or organic fertilizers. Still, the EMPR can specify and identify good fertilizer use and soil fertility practices.
- USAID Pesticide Procedures, 216.3(b), apply the principles of Integrated Pest Management (IPM) to every activity that involves or influences pesticide purchase or use.
- IPM: an ecologically-based pest management approach which prioritizes: The health of crops and their ecological system; monitoring, degrees of intervention, reduced risk and low toxicity controls such as biological and botanical controls; actions required when pests reach economically-damaging levels.
- IPM favors least toxic controls which are typically culture techniques for example intercropping with plants that repel insects, crop rotation. Promotes Safety for farmers and their families, is safe for the ecosystem, reduces the use of pesticides and saves the farmer money in costs of production. The more selective the control the fewer non-target impacts.
- PERSUAP: the terminology was developed by the Africa Bureau. PERSUAP is triggered by an IEE determination and has two major parts that meet 216.3(b) Pesticide Procedures:
  - PER (Pesticide Evaluation Report): Response to the Pesticide Procedures requirements
  - SUAP (Safer Use Action Plan): Identifies actions and actors for mitigation & monitoring, including compliance with host country & private procedures.
- The Pesticide Evaluation Report (PER) includes 12 factors that must be described:
  - US EPA registration status. Must be for the same or similar use.
  - Basis for selection of the pesticide. Often times looking at costs availability and toxicity.
  - Extent to which the proposed pesticide use is part of an IPM plan. Needs a crop by crop IPM plan. It has to be crop specific. For health activities it would be for vectors
  - Pesticide availability and it’s method(s) of application
  - Toxic hazards
  - Effectiveness of the requested pesticide for the proposed use
  - Compatibility of the pesticide with the local ecosystems
  - Environmental conditions under which the pesticide is to be used
  - Availability and effectiveness of other pesticides or non-toxic controls
  - Host country ability to regulate the requested pesticide
  - Provisions made for training of users and applicators
  - Provision made for monitoring the use and effectiveness of the pesticide. Pests may become resistant to a pesticide which is why monitoring is key.

**SUAP -Safe Use Action Plan**

- Monitoring plan and reporting,
  - Training and development and distribution of appropriate information education and communication, this is a huge challenge as not always the labels have the same language as the one spoken in host county, establish pesticide quality standards and control procedures, what happens when pesticides become obsolete? This has to be part of the monitoring plan
- 
- The PERSUAP requires you to consider and address a number of mitigation and monitoring measures proactively
  - Provides opportunities to minimize exposure are along the process. Before, during and after.
  - Suggests additional recommendations and best practices: Minimize exposure risks, minimize product toxicity, use personal protective equipment (PPE) as required by pesticide label.
  - Enforces restricted entry level intervals REI and pre harvest intervals PHI as specified by the EPA.
  - Provides dosage rates, the label is a legal document that has to be followed
  - Opportunities to minimize exposure exist before, during and after pesticide use: Consider transport, packaging & storage practices; choice of formulation and equipment, use of buffer zones, waiting periods, clean/bathing, storage & disposal practices.
  - US pesticide labels are legal documents containing language, regulated by the EPA on product use and safety.

**Resources:**

- Pesticide Action Network Database. EPA Pesticide Registration Status Database. The bio-pesticide part is particularly useful. Find USAID PERSUAPs in USAID data base. PERSUAP preparation guidance at the ENCAP Africa website.
- Consult with MEO or REA about what may have been done before

**Questions and Comments:**

Comment: We need to promote organic approaches as in the end it is cheaper not to use pesticides, usually this program still need to do an analysis of the bio-pesticides that are being used.

Q1: Should Food For Peace (FFP) programs do PERSUAPS?

A1: The food storage activity will have the proper guidance through an assessment. If the small farms are using pesticides you still need to do the evaluations

## Session 9: Case Study Results

**Objective:** Through guided field visits participants will be able to apply and strengthen the practical application of the environmental analysis tools that have been introduced during the first two days of the workshop, specifically the EMPR. This session also builds familiarity with the *LAC Environmental Guidelines* as they are used as key resource to complete the EMPR.

### Bicentenary Park Group

- Key Baseline Information: 3,000 visitors per week. Unclear how revenue is designated to and through the park administration. The total area of the park is 98 hectares.
- Potential adverse environmental impacts identified:
  - Construction of the museum building
  - Construction and rehabilitation of the road
  - Extraction of forest products (including eucalyptus)
  - Action will be in a protected area
  - Impact forest and wildlife
  - Clearing of forest cover
  - Waste management, create objectionable odor (esp. if processing coffee on site)
- Actions addressed for exercise
  - Construction of museum building and road and coffee drying patio leads to potential impact of unsuitable building design for natural setting. Mitigation measure: Site specific design for building to meet green building standards.
  - Operations and maintenance of coffee harvest and production has a potential impact of visitor and staff solid waste and wastewater disposal on site and contamination of soils. Mitigation measure recommended: solid waste will be treated by municipal facility or composted on site to Rainforest Alliance standards.
- Coffee production can cause objectionable odor has potential adverse impact of degrading air quality for surrounding community. Mitigation measure recommended: Processing on site for demonstration only with odor impact not extended beyond 100m.
- See group presentation and EMPR documentation for additional information on Table 3.
- Conclusions and recommendations.
  - Negative determination with conditions

### Feedback/critique from audience:

- Very good analysis, especially incorporating additional standards such as LEED and Rainforest Alliance.
- The coffee processing could be completed fully at the site without creating objectionable odors. Liquids can be treated in a bio-digester which is completely sealed. The methane produced can be used for energy on the premises for cooking, drying coffee beans, etc.
- There are additional options or alternatives for coffee production in the park.

### Acahuapa Bridge Construction Group

- Key Baseline Information: 2 existing spans of the old bridges that have been affected by Tropical Storm Ida. A new bridge is being contemplated. There are currently 6,000 vehicles transiting across the bridge per day. The storm also caused damage to the surrounding communities. Additionally, with the affected bridges, the community's access routes have been hindered. GOES has built retaining walls upstream and has repaired one damaged bridge and

one remains a temporary bridge. River currently being used for bathing and laundry of community members both upstream and downstream.

- Potential Impacts Identified (during construction stage perhaps 6 months to 1 year, and particularly with the use of heavy equipment):
  - Contamination of ground, surface water and aquatic life when hydraulic oil, motor oil or other harmful mechanical fluids are spilled or dumped. This potential impact could be mitigated by following heavy equipment standards, carrying out frequent visual checks on hoses and machinery. Recycling of used oil.
  - Decreased pedestrians and motorist safety. Impact would be mitigated by pedestrian signage, training and equipment for construction workers.
- See group presentation and EMPR documentation for additional information on Table 3.
- The group divided into 3 groups: Social, Eco-biological and Engineering.
- Conclusions and recommendations:
  - Positive Determination, more analysis required.
  - Consider gender impacts during design phase.
  - 200 year old bridge has historical significance. More analysis and consideration needs to be carried out to decide if the bridge should be repaired or demolished?

#### Feedback/critique from audience:

- Very good and interesting presentation. What did the community members think of the construction?
  - Most individuals interviewed were highly in favor of the bridge construction. All females interviewed were concerned on the security/safety issues of the old 200 year old bridge. It is still a threat to community members in the case that it may collapse. Also it is a very dark and dangerous bridge at night when people are crossing.
  - The community has formed a Risk Reduction Brigade who is contemplating carrying out an Early Warning System for flooding and large threats to the community.
- Does the project incorporate some kind of pedestrian walkway?
  - Absolutely so. The project as it is now is still considering how to best do this, but there are some options that have been considered, such as using the old bridge as a pedestrian walkway and incorporating sidewalks on the new bridge. A feasibility assessment would need to be completed to see what pedestrians would most likely use.
- Why did the group determine this group as a high-risk?
  - Since there were such a high number of medium-level risk adverse impacts marked on the EMPR Screening Form, the group considered this project to cumulatively be a high risk project, which would bump it into the positive determination category. Naturally a bridge construction inherently has a high level of risk. Another condition that pushes it into a Positive Determination is because it is new construction. If the project were just rehabilitation to the old bridges, it just as well would be a Negative Determination with Conditions project.
- There usually are a lot of permits that are required in new construction. What did the group discuss regarding aquatic life?
  - The oil spill issue was identified as the key threat to aquatic life, along with sedimentation and other additional risks.
  - There was significant discussion on permits between the US and El Salvador. The baseline was also taken into account, in which the water is at an extremely low quality right now, including sewage discharge up and downstream from the bridge

construction. According to the government, they will be constructing a canal infrastructure downstream, which will also greatly affect the water quality.

### **Reconstruction of Santa Lucia de Orcoyo Medical Unit Group**

- Key Baseline Information: A medical clinic in Santa Lucia was severely damaged by Hurricane Ida, particularly from flooding.
- Clinic constructed in 1972 and remodeled in 1995. Its infrastructure as well as electric and water systems are deteriorated because of environmental events (flooding). The building now is one level below the street and floods easily. The clinic was flooded and severely damaged during Hurricane Ida in 2009.
- Impacts: Waste generated by the demolition of former damaged facilities and construction of new facilities, pesticide use for disease vector control, use of engine oil from an emergency generator, clearing of forest for new construction, the new clinic will be double the size of the old clinic so shade will be cleared, exposure of neighbors to flooding, generation of airborne gases, liquids or solid waste, disposal of hazardous medical waste.
- Activities: Demolition and construction.
- Impact: Dust, solid waste, noise, asbestos contamination.
- Mitigation Measures:
  - Use of Personal Protection Equipment
  - Ensure proper disposal of solid waste materials
  - Ensure working hours are respected. No working early morning or late at night.
  - Proper disposal of asbestos
  
- Activities: Clearing of the forest cover.
- Impact: Increase water runoff and increase in local environment temperature.
- Mitigation Measures:
  - Construction of proper drainage system.
  - Incorporate in design good ventilation system.
  - Plant and maintain trees and verify if can preserve some of existing vegetation and trees.
- Conclusions and Recommendations:
  - Implementation of the mitigation measures recommended in EMPR.
  - The project is a negative determination with conditions.

### **Feedback/critique from audience:**

Recommendations: Do not use words for indicators that are not defined such as "proper". It is a common issue in the EMPRs to use words with no definitions. Find a specialist, a standard or actually describe what "proper" means so it can actually be monitored according to that definition.

Q1: What is the sq meter footage of the building?

A1: It is around 580.00 Mt Squared

Q2: What happens with the septic tank?

A2: They are taking the waste out periodically, about twice a year.

Comment: It is important to verify the contractor reports and following up on those reports.

Q3: What happens to the medicine that is expired?

A3: They have a very good inventory in the pharmacy. One month before it is expired they use all the medications that have to be used. There is basically no expired medicine. If there is, it goes to the Health Ministry with the rest of the medical waste.

Q4: what happens with the solid and medical waste after it is picked up from the facility?

A4: Not very clear, the people working at the clinic do not know this.

Comment: Oftentimes, operations and maintenance are not considered in the design. It is important to put in systems to reduce energy consumption on the building, ventilation or trees. It is important for example to consider the height of walls.

Q5: have you considered if the site is actually proper for rebuilding the clinic?

A5: The site is close to most of the communities that need the clinic. Although the level of the site is below the road level with mitigation the site will be fine. It is also next to a school and they have been able to manage to get security there.

#### Session Questions/Comments:

Q1: The question of how will the construction affect people downstream is not in the EMPR nor is the historical and culture value of a site. It has to be considered in the impact in the community.

A1: As you use table 1 of the EMPR don't feel that you have to limit yourself to the questions in the screening form, add any site specific questions that are needed.

Q 2: Why is gender analysis in the screening form?

A2: The gender section can lead to confusion; culture is not included in this question. Gender questions can be subjective. It was hard to include gender into the process so gender was included in the environmental analysis process which is why it is on this form. Remember that Gender includes all vulnerable populations, not only women.

LAC guidelines do not include guidelines for gender. The UNDP resource, *Gender and Public Work* is a good reference for this subject.

Comment: There has to be a very particular effort on the implementers on the analysis of the specific impacts and mitigation measures for a site. The analysis of impact prioritization is key.

Comment: There are some redundancies in the screening form that need to be taken care off.

## Session 10: Recommended Best Practice for the EMPR Development and Application, Monitoring and Evaluation.

Facilitators: Malory Hendrickson, SMTN; Mark Stoughton, The Cadmus Group Inc.

**Objective:** The objective of this session is to improve understanding of the EMPR procedures and technical content, to resolve any unclear issue participants might have and to challenge them through a group dynamic to ensure that the EMPR material was effectively conveyed.

Q1. How does USAID penalize for not complying with Reg 216?

A1: USAID doesn't have a penalty system for non compliance with the EMPR. The contractor puts together a project report that goes into analysis. Each contractor has an individual report card that leads USAID to take decisions on whether or not that contractor should receive another grant. Historically there has not been much follow through regarding non compliance. It is always more successful when the contractor puts in compliance into the project budget. There are ways that USAID can require the EMPR before releasing of funds. There have been a couple of projects which have been stopped because an EMPR has not been completed. But not many examples.

Q2: Where does the EMPR fit into the USAID Reg 216 Flow chart?

A1: In the pink boxes at the bottom of the chart where it says "Activity begins. Environmental conditions, (mitigation), monitoring, and evaluation required".

Q3: Why are targets not set on the EMPR?

A3: The reporting back to the congress is based on outputs and outcomes. Environmental mitigation is not reported directly. Compliance ends up being more of a process than of a result. Compliance reporting on an annual basis is done to the environmental quality report also through the PPR annual document of USAID which ends up summarized and going to the congress. This question comes up in trainings with M&E specialists. The indicators used to track performance are different than the environmental indicators.

Q4: Is there logic process for water monitoring? In the CHF Nicaragua EMPR for example?

A4: Periodic testing should become a common monitoring tool, in that case of Nicaragua they have asked CHF to show what they are doing and that it is in accordance with the ministry standards. USIAD does a good job stating that projects need a good plan for operation and maintenance. At the end of the day this does not happen. Because of time and other challenges USAID often becomes diligent to those things. It is hard to manage water monitoring agency wide, USIAD doesn't have drinking water standards, it hasn't been developed yet. USAID does many drinking water projects through FFP and others. There is very basic testing done. The partner is responsible of assuring that there is a operating and maintenance plan.

Q5 How can the environmental assessment change if we consider different alternatives for each project? How do you deal with a different approach?

A5: Technical offices usually will be developing in a not very interdisciplinary way the planning process of their project. This is why partners should work closely with the missions to do this process ahead of time. What often happens is that there are already plans, designs, agreements and expenditures before thinking of alternatives. If the alternative analysis is not done ahead of time you are trapped with a project that could have better alternatives. The EA should be part of the design not later on in the process when decisions have already been made.

Q6 How can you include in lessons learned of another activity in the EMPR in the planning phase?

A6 You can do a new environmental assessment to follow on the previews activity. Working sessions work really well when you need to incorporate lesson learned in a second phase of a project. In long activities, multiyear programs often have the opportunity to make changes to the EMPR.

## **Session 11: USAID Sustainability/El Salvador**

Presenter: Andrea Stone, USAID/El Salvador.

**Objective:** Gain familiarity with USAID/El Salvador sustainability efforts, and discuss basic recommendations in the purpose of becoming more sustainable.

### Key Notes:

- San Salvador joined the Western Hemisphere Affairs (WHA) League of green embassies in 2011.
- It involves the embassy as well as the host country.
- Installed solar water heaters, installed in 4 buildings.
- Energy efficient measures motion sensor lighting low energy light bulbs.
- The recycling initiative. Unfortunately not all materials can be recycled, such as glass. They are working with a local community that purchases the materials recycled by weight.
- Housing pool residences that include on-demand water heaters, low-energy lighting and appliances that are EPA-approved ENERGYSTAR. The embassy knows how much each staff member/resident is spending on their energy bill.
- Motor pool, still driving SUVs. There are policies for the drivers, such as no idling, and there are several hybrid cars in the embassy fleet of vehicles.
- Green team works with facilities and grounds maintenance crew to increase foliage around the embassy (including edible gardens), non-potable water for irrigation, maintaining a green house on site, salvage 6,000 pounds of copper.
- In discussions to incorporate compost on-site, which could also be a source of revenue.
- Earth Day Events 2012 included: cafeteria green team displays, recycled art contest for kids, environmentalist movie night for kids, green home improvement displays, happy hour at a volcano grill, beach-side clean up with local schools.
- Sales of coffee mugs to diminish disposable coffee mugs from the embassy café.
- Other activities that have been done in the past: tree plantings and turtle release.

### Participant Questions/Comments:

- The Green Teams and Sustainability Teams grew out of an executive order from the President. In Bolivia, they did a clean energy audit reviewing processes that are involved with the Embassy. The Bolivian Embassy saved \$10,000 just in finding a more efficient, green printing ink.
- Dennis Durbin (BEO of Management Office Bureau) is the key contact for the Sustainability Strategy and efforts in Embassies abroad.

### Participant Recommendations on Sustainability:

- Mission limit the amount of personnel travels in order to bring down carbon emissions from travel. LAC bureau is pushing forward more use of BTC video conferencing.
- Use more land transportation as opposed to flights, again to reduce costs and emissions.

- Write carbon offsets into proposals and budgets.
- Put forth effort to use more electronic documents and networking; paperless practices.
- Encourage more efficient paper use: re-use other side, double print, recycle, etc.
- Recycle or safely dispose of electronic devices, such as computers, batteries, ink cartridges, etc.
- Use recycling reciprocals with sufficient signage for paper, glass, aluminum, organics, etc.
- Light-efficient practices: turn-off lights, energy efficient lighting.
- Collaborating on Mission's green practices. Sharing ideas with partners, other missions, and providers of services.
- Education of consumers – if the organization is unable to install motion sensors on faucets, at least put up signs encouraging limited water use.
- Alternative energy sources, like solar
- Remember, the 1<sup>st</sup> of the 3 Rs, is reduce, then re-use and only after that, recycle.
- Write and budget carbon offsets for travel into proposal documents.

## **Session 12: Future Web-Based Reporting System: MONITOR**

Presenter: Victor Bullen, USAID/LAC BEO.

**Objective:** Receive a preview of what is being developed for future electronic environmental reporting in the LAC Region. Obtain feedback from USAID Regional Staff on their preferences and recommendations for the future web-based platform for environmental compliance.

### Key Notes:

- A web-based environmental compliance system will replace the EMPR paper system.
- Preview electronic environmental reporting systems have been developed in the LAC Region. MONITOR is one of them and was piloted about a year ago in the Colombia Mission, after a precursor trial system called SIGA (Sistema de Información de Gestión Ambiental).
- This initiative will allow paperless performance reporting and monitoring.
- Will be used by CORs/AORs/MEO/DMEOs and Program Officers.
- MONITOR also suggests environmental decisions according to the ETD of the activity.
- For all activities that require Environmental Review, from receiving a Negative Determination with Conditions, it will automatically generate the draft Environmental Management Plan and facilitate monitoring tasks.
- Through the system, a user can easily look at any of the agency's priorities, look at particular geographic areas (includes GIS mapping system) or specific thematic sectors.
- Navigation scheme of the MONITOR System shown on session presentation. Includes: Environmental, Monitoring and additional modules.
- Next Steps within the region: develop a tri-lingual system (English, Spanish and French) that will be accessible and utilized across the region. Implementing partner-driven and partner-friendly.
- USAID has a draft SOW already written and will be improving it and beginning the final draft within the next few weeks.

### What would workshop participants (partners and USAID staff) like to see in this upcoming system?

- Incorporate IEE development and approval system, along with ETD tracker and approval.
- Review and refine the Screening Checklist/EMPR Table 1.
- Allow for revisions online.
- COR/AOR access use for mitigation and evaluation of performance indicators.

- Lower level geographic access (city, county, canton, etc.)
- Allow for online approvals: IP → C/AOR → MEO → REA → BEO. Email when signed by each.
- Feature to use electronic signature.
- Coordinate with the A/COR prior to field visits in order to align and cover all tasks while in the field.
- Upload and track indicators. Set electronic reporting to a more project-appropriate timeframe.
- Be aware of other tools and make it compatible with other USAID frameworks (AIDTracker and Google Earth were mentioned). Contact for AIDTracker – David Santiago M/CIO (Washington DC)
- Make it smart-phone friendly so that it is more accessible in the field, or use the technology for indicator monitoring (Episurveyor, frontline). Ability to upload information directly in the field and diminish reporting time back in the office.
- Features to include other indicators for the system to include other project specific indicators, like performance tracking.
- Include dates on all documents to ensure that the IEE is up to date and that follow-up actions are noted on the systems calendar and alert /notification system.
- Directory for partners with roles and responsibilities feature.
- Perhaps integrate with social media, such as Facebook, Twitter, etc.
- Integrate project identifiers and other USG databases (FFAATA, etc.).
- Review status of the EMPR, what has been done and what is pending.
- Notifications for errors before submission and ability to review document before final submission.
- Search function to find similar actions/projects/cases.
- Database of quality potential environmental indicators.
- Make the format with graphics, statistics and with a basic understanding.
- Include contract number on all documentation.
- Pilot stage – workshop for live input from users prior to launching.

### **Session 13: USAID Biodiversity and Global Climate Change Code**

Facilitators: Victor Bullen, USAID/LAC BEO; Paul Schmidtke, USAID/ECAM REA.

**Objective:** Acquaint participants with the USAID Biodiversity Code and Global Climate Change and its integration into development programs in the region.

#### **Global Climate Change Code**

##### Key Notes:

- Global Climate Change and Biodiversity are two main priorities in the environmental budget.
- Climate Change is happening, and is creating greater variability in climate schemes, more extreme climates, change in frequency and the extremity of climate has different impacts in the environment. It has affected water resources, forestry, agriculture, ecosystems, costal systems, public health and more.
- The United States Government has made Global Climate Change a priority. It is one of USAID's top three priorities along with Feed the Future and Global Health.
- USAID's Strategy: Incorporate climate change considerations into development projects to provide climate benefits while meeting development objectives.

- Overall Goal: Assist countries to develop in ways that reduce emissions while building resilience to climate change impacts.
- Global Climate Change in USAID is divided into 3 pillars:
  - Clean energy, adaptation, sustainable landscapes.
- USAID wants to address climate change by reducing GHG emissions through mitigation strategies like clean energy and sustainable landscapes. For climate change impacts adaptation strategies will reduce vulnerability to climate change impacts and reduce losses.

#### Adaptation

- In Central America USAID is mainly addressing adaptation. Water scarcity, excessive water etc.
- Three categories to define adaptation work,
  - Science and analysis for decision making: Investments in scientific capacity, and collect climate information and predictions.
  - Governance fro climate resilience: Investments in capacity to use climate information and analysis in decision making Effective governmental coordination and response. Improved public communication, education and participation.
  - Implementation of adaptation solutions: Support for adaptation strategies and areas like water, agriculture, disaster risk management, infrastructure, health, natural resource management.

#### Clean Energy

- Reduce the production of GHG with renewable energy.
- Supporting renewable energy deployment.
- End-use (demand side) energy efficiency programs.
- Financing for end-use energy efficiency and/or renewable energy technologies.
- Supporting development of more energy efficient machinery, incentives to invest.

#### Sustainable Landscapes

- Preserve forests through Reduced Emissions from Deforestation and Forest Degradation (REDD+). Forest restoration, rehabilitation, sustainable management and enhancement of forest carbon stocks.
- Forests, wetlands, grasslands, and agricultural lands store huge amounts of carbon.
- Landscapes are considered to be carbon “sinks” or “sources”.
- Through deforestation the planet is reducing every year carbon stocks. The amount that can be saved can be sold in the carbon market. The companies that produce GHG can offset their emissions by protecting the forest. There is still not a Cap and Trade System properly in place internationally. USAID still continues to promote these markets.
- USAID now focus is to continue support of entities that are doing forest protection and management.
- Climate Change is a cross cutting issue that needs to be addressed in every sector. It is not a specific program. It is USAID policy to add Climate Change as a cross cutting issue. Climate change affects all development sectors. Climate change needs to be “mainstreamed” or integrated in the design and implementation of all USAID programs.
- Climate change represents a potentially significant constraining factor that needs to be considered in project design, long term sustainability, and impact assessment.
- Example of actions in small scale projects: Reduce GHG emissions, Reduce climate vulnerability in the local area, increase sequestration.

### Session Questions/Comments

Q1: Is USAID doing this kind of analysis in the IDA project?

A1: The environmental analysis should have been done during the design stage. The EA still needs to be done and it should include Climate Change in the planning. As many other projects it is stuck in the point where it is hard to think about alternatives. Hopefully the EA will address that. You cannot depend on Table 1 of the EMPR, you have to truly analyze what impacts can result, there are no substitutes to observation. For example it is important to look at alternatives to mainstream electricity, try to make projects more resilient to Climate Change.

Comment: The argument that was put by experts 20 years ago was that climate change is has to be seen as insurance. Now there is no doubt that is happening, now the question is how far will it go. Climate change is going to happen there is not enough sequestration potential to stop it so adaptation is key. It is important to include climate change adaptation to projects for them to be sustainable.

### **Biodiversity**

#### Key Notes:

- Biodiversity is the degree of variation of life forms within a given species, ecosystem, biome, or the entire plant. It is the variety of life on earth at different levels, species ecosystems are influenced by geological formations. It is also in part a function of climate. The Andes for example are so biological rich because the geography isolates species from evolving. In terrestrial habitats, tropical regions are typically rich whereas Polar Regions support fewer species.
- WWF and Conservation International have systems of prioritization of hotspots.
- CAM Region: Central America is part of the Mesoamerican Biodiversity Hotspot, which extends from northern Guatemala through central Panama. This hotspot also includes a near shore and offshore islands which are important due to the presence of endemic species and as nesting areas for seabirds.
- For Biodiversity CAM is supporting the MAREA project (Management of Aquatic Resources and Economic Alternatives) USAID has a long history of conservation in the region, great for regional initiatives not only for country initiatives.
- There is a close relationship between biodiversity and economic growth, sustainable harvest of timber, wild life harvest or ecotourism.
- Endangered species and logging operations for example need an immediate EA. There are specific guidelines on how to treat biodiversity. All USAID missions are required to carry out periodic reviews of the country in terms of conservation, sustainable use of tropical forests and biodiversity. Specifically, the Foreign Assistance Act requires that all the environmental plans of each Country include: An analysis of the actions necessary in that country to achieve conservation and sustainable management of tropical forests (FAA 118), and conserve biodiversity (FAA 119) and the measurement of how current or proposed actions will meet the needs of USAID.
- FAA118 and 119 states that there needs to be a country analysis before a country strategy. They are good resources.
- The address of the funds is guided by the Biodiversity Codes of USAID which guides the Agency to determine which programs may be taken into account for the funds that are allocated to biodiversity projects.

- USAID handles 4 criteria of the Biodiversity Code for allocation of funds: The program must have an objective explicitly related to biodiversity conservation; Biodiversity must be preserved in areas of biological significance, Identified activities should be based on threats analysis; Projects must monitor appropriate indicators related to biodiversity conservation.
- Generally, USAID Biodiversity programs deals with: Developing of local, national and regional skills to manage and conserve biodiversity, including the ability to identify and address critical threats of the sustainable use of forests and coastal resources; Promoting greater public awareness of conservation issues; Developing and implementing revenue generating models that are compatible with biodiversity conservation.
- The earmark for LAC is focused on the Amazon Basin. The E3 bureau has an office of tropical forest and biodiversity and has come up with the code for the biodiversity earmark that includes the 4 criteria.
- Cynthia Gill's, the Biodiversity & Forestry Team Leader of USIAD's central technical bureau, office has been developing this biodiversity analysis. Cynthia Gill oversees the annual report PPR and then this is reported to congress. Bruce Bayle biodiversity advisor for LAC.

#### Session Questions/ Comments

Q1: How long are biodiversity projects?

A1: For conservation projects you need a long term activity, there are dual programs such as higher education programs that have education component as well.

Q2: When it is a project that has many objectives does it get Biodiversity funding?

A2: This type of funding is not extra funding so if it doesn't specifically meet the criteria it will not receive biodiversity funding.

Q3: How do you synchronize earmarks?

A3: You can have overlapping earmark definitions. As long as the project accounts for all 4 objectives in the code you can be eligible to biodiversity funding.

Q4: Is the FUNZEL project fully Biodiversity?

A4: A large part of the project is economic growth as well; the project is flexible enough that it can be reported under conservation, economic growth and education.

### **Parking Lot Session:**

**Objective:** Address unresolved questions or issues and summarize information presented throughout the training.

- Base Camp introduction
- Carbon neutral event
- Tour through the participant flash drive

- The group is interested in using BaseCamp and sharing of documents.
- Like all Sun Mountain International training events since 2011, this workshop was planned and carried out considering carbon management strategies. The carbon footprint that could not be avoided was offset. Carbon credits were purchased to compensate for the emissions incurred by the training (materials, electricity, gasoline, jet fuel use, etc). Sun Mountain uses Carbon

Fund to ensure that it is a Carbon Neutral Event. We are and the participants chose Renewable Energy for the area of the donation. Not many participants have seen this in other training events.

- The Helpful Hints document is very useful and participants are encouraged to look at it attentively. They are also reminded to review the flow chart and the booklet.
- The flow chart will be updated to include the flowchart.
- The GEMS website is in development and will be going live in a few weeks and it will have good resources as well as guidelines.
- For gender issues: E3 Women in Development Office, Kathy Blakley, might have resources.
- Each mission is going through a strategy development process; the missions will be conducting country specific gender analysis which will become a great resource.
- Myron Burkholder has an evaluation of a biodigester project in Guatemala for different types of waste. He will share it on base camp.
- RM Portal (Natural Resource Management and Development Portal) is a great resource for environmental work and it is free. <http://www.rmportal.net/>
- PERSUAPs: Two sections, PER and SUAP.
  - PER: registration status, basis of selection extent to which it is part of an IPM plan, methods of application, toxicological hazards, effectiveness for proposed use, compatibility with local ecosystems, environmental conditions under which the pesticide is to be used, availability and effectiveness of alternatives, host country legal framework, provisions for training, methodology of monitoring.
  - SUAP: Training, Use of PPE, storage, cleaning, reuse of pesticide containers, it also includes a table for monitoring key methods of application.
- The PERSUAP also includes the IPM plan, a key component is monitoring on an IPM plan. It lists other control options like mechanical or biological control. It is the guide for extension agents and help them how to train farmers to monitor.

### Session Questions/Comments

Q1: Is the PERSUAP successfully implemented on the ground?

A1: One of the main problems is that it is highly technical for extensionists and farmers. It has to be presented in a more user friendly way. Having the IPM synthesized can be key, not all farmers and extensionists are growing all crops. In Colombia there is a good example of the PERSUAP actually being implemented. Sometimes the document is not even translated into local language.

Q2: What is USAID looking for in the PERSUAP?

A2: The registration has to be for the same pesticide or one of similar use in the EPA. Make sure that the information is up to date. Crop by crop IPM plan for the program. Pesticides are sometimes recommended but they should be the last resource on IPM.

Q3: What happens with projects with use or procurement of Restricted Use Pesticides (RUPs)?

A3: If a project is using a RUP you have to do an environmental assessment for the use. Generally it won't be accepted, only in certain circumstances such as no availability of an alternative.

Q4: Do we need to comply with REG216 if an activity is multifunded?

A4: USAID regulations apply even if USAID is a minor donor. There are very few cases in which the activities are totally isolated. Often times we try not to comply because of the extra work or when we actually comply, we do not monitor. We have to take environmental regulations all the way

through the project. There are all kinds of examples in which projects have funding from many sources. If USAID is involved they should. We are reporting back to the congress a project as a partner. The process should go through the project in which USAID is involved.

Q5: What is a PEA? REA?

A5: USAID does PEAs to create a "recipe" for a project that is going to be implemented at a programmatic level. If the project is doing anything that is not in the PEA you need to do a separate analysis. For example if USAID wants to build a 1000 latrines a PEA would be needed, a programmatic approach would be sufficient as long as you use the same "recipe" for all latrines. The REA is the Rapid Environmental Assessment and it is used specifically almost entirely for disaster response. It addresses the mitigation measures that should be quickly adapted. There is a methodology developed by the Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA) for REAs.

## Session 14: Bringing Curricula to Reality

Facilitator: Mark Stoughton, Cadmus Group Inc; Scott Solberg, SMTN.

**Objective:** Identify lessons learned and practical actions that can be operationalized in future planning.

- Working groups were divided by: Implementing Partners, M&E and Program Office and USAID technical staff.
- Each working group discussed the following guiding questions:
  - Where are the gaps against the ideal processes that were presented in the workshop?
  - How can we bring this to our projects, organizations and countries?
  - Identify 4 actions that you feel you can take individually and as a group?

### M&E and Program Office Sub-group

- Clarify how and when we integrate environmental lessons learned.
- Detail how it is paid for.
- Further coordinate needs of stakeholders and beneficiaries with other project, national and additional needs.
- Improve enforcement of Regulation 216, especially the "who and how" questions.

### USAID Technical Staff Sub-group

- Promote improved interaction among offices, and different lines of disciplines, in environmental compliance.
- Align Regulation 216 with the local host country systems, especially Ministry of Environment. Utilize the staffing and potential talents of host countries while also building up capacity.
- Workshop participants should step up to be spokespersons in their organization, offices and agency.

### Implementing Partners Sub-group

- Somehow facilitate the necessary monitoring of leverage partners.
- Facilitate the process of having effective management plans prior to funding.

- Discuss how to deal with multiple donors.
- Push for more lead time on solicitations.
- Clarify grey areas for cooperate agreements

# ANNEXES

## Agenda

USAID/ECAM REGIONAL ENVIRONMENTAL MANAGEMENT AND REGULATIONS WORKSHOP  
San Salvador, El Salvador  
July 9-13, 2012

### Training Objectives:

1. Strengthen the capacity of participating USAID Staff and Partner Organizations to incorporate environmentally sound design and management (ESDM) practices into existing and upcoming development and relief program designs and budgets.
2. Improve the ability of USAID staff and Partner Organizations to consistently apply and comply with USAID procedures, Regulation 216 and to generate high-quality environmental analysis.
3. Enhance collaboration, networking, exchange of new strategies and technical solutions for development efforts among intra-regional USAID staff and Partner Organizations.

### Key Activities:

- Day 1. Overview of environmental analysis and USAID environmental processes and procedures.
- Day 2. Practice the development of the EMPR tool and prepare for its practical application in the field.
- Day 3. Carry out project field visits and compile results into the EMPR format.
- Day 4. Present case study conclusions and special topic sessions, including Pesticide Management, GCC, Biodiversity and web-based environmental management reporting.
- Day 5. Address any unresolved issues and develop ideas on how to operationalize lessons learned from the workshop.

Day/Time	Module	Objective/Content Summary	Presenter/Facilitator
<b>Day I</b> Monday	Overview of environmental analysis and USAID environmental processes and procedures.		
8:00-8:30	Participant Arrival and Registration		
8:30-8:40	Welcome and Opening Statements	Highlight the value of workshop content and expected results.	Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/ECAM REA
8:40-9:00	Opening Words		Bill Elderbaum USAID/EI Salvador Mission Director
9:00-9:40	Workshop Objectives, Logistics and Participant Introductions	Articulate workshop plans, objectives, goals, and participants' introductions and expectations. Review the agenda and logistics,	Scott Solberg, SMTN Mark Stoughton, Cadmus Group Inc
9:40-10:30	<b>Session I:</b> Transect Walk <i>Field visit</i>	Improve the understanding of and experience in field visit methodologies and identification of potential environmental impacts.	<i>Facilitator:</i> Scott Solberg, SMTN Malory Hendrickson, SMTN
10:30-10:50	Coffee Break		
10:50-11:30	<b>Session Ib:</b> Baseline Exercise <i>Group Work</i>	Strengthen knowledge of baseline analysis and environmental impact identification, based on the Transect Walk.	Malory Hendrickson, SMTN
11:30-12:00	"Environmental Considerations:	Achieve a common understanding of	Mark Stoughton, Cadmus Group

	Toward a Sustainable Future” <i>Video and discussion</i>	“environment” and the importance of environmental considerations in development programming.	Inc
12:00-13:00	<b>Session 2:</b> Overview of USAID Environmental Processes <i>Technical presentation and dialog</i>	Establish a basic knowledge of the legal basis for USAID environmental processes, procedures, tools and resources	Victor Bullen, USAID/LAC BEO
13:00-14:00	Lunch		
14:00-15:00	<b>Session 3a:</b> The Initial Environmental Evaluation (IEE) <i>Technical presentation and practical exercise</i>	Build comprehension of the concepts, procedures and environmental threshold decisions (ETD) for the Initial Environmental Evaluation (IEE). Understand the types of projects that require specific IEE Environmental Determinations and the roles and responsibilities within the IEE procedures.	Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/ECAM REA
15:00-15:30	<b>Session 3b:</b> Environmental Impacts and Categorization <i>Practical Exercise</i>	Strengthen ability to classify intensity of environmental impacts and determine threshold categorization.	Mark Stoughton, Cadmus Group Inc
15:30-15:50	Coffee Break		
15:50-16:30	<b>Session 4:</b> Introduction to Environmental Mitigation and Monitoring <i>Technical presentation and dialog</i>	Strengthen knowledge of environmental mitigation and monitoring, and the selection/development of environmental indicators.	Scott Solberg, SMTN
16:30-17:15	Field Visit Site Selection	Gain a general awareness of the case study projects that will be visited in the field on day 3. Divide participants into groups according to their thematic interests. Distribute field guides.	<i>Facilitator:</i> Serena Espinosa, SMTN  Alejandro Maceda, USAID/ EI Salvador
17:15-17:30	Evaluations and Announcements		
<b>Day 2</b> Tuesday	Practice the development of the EMPR tool and prepare for its practical application in the field.		
8:30-9:30	<b>Session 5a:</b> The Environmental Mitigation Plan and Report (EMPR) <i>Technical presentation and dialog</i>	Build knowledge on the Environmental Mitigation Plan and Report (EMPR) procedures, format and development.	Paul Schmidtke, USAID/ECAM REA  Malory Hendrickson, SMTN
9:30-10:00	<b>Session 5b:</b> EMPR Primer Exercise <i>Group work and Presentation</i>	Improve and apply mitigation measures and indicator selection skills in a scenario-based small group exercise centered on the impacts identified during Virtual Field Trip.	Malory Hendrickson, SMTN
10:00-11:00	<b>Session 6:</b> Environmental Priorities in USAID Central America and Mexico Projects <i>Panel discussion</i>	Comprehend the perspective of the participating organizations on the importance of environmental considerations, regional priorities, and synergetic efforts in the context of Central America and Mexico.	Panelists: Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/ECAM REA Mary Rodriguez, USAID/EI Salvador MEO
11:00-11:20	Coffee Break		
11:20-12:10	<b>Session 7:</b> Environmental Assessments <i>Technical presentation and dialog</i>	Improve understanding of the procedures for EA development and implementation. Revision of types of	Paul Schmidtke, USAID/ECAM REA Mark Stoughton, Cadmus Group Inc

		EAs, including the Programmatic and Rapid Environmental Assessments.	
12:10-13:00	<b>Session 8:</b> Pest Management PERSUAP Reports and Operational Field Guides <i>Technical presentation and dialog</i>	Become familiar with the PERSUAP format, technical content and procedures. Increase awareness of best practice on pesticide use and integrated pest management methods.	Victor Bullen, USAID/LAC BEO
13:00-14:30	Lunch		
14:30-15:30	<b>Session 9a:</b> Case Study Briefings <i>Small groups</i>	Build basic familiarity with respective case study projects and advance preparation for field visits.	Guides: Alejandro Maceda, USAID/EI Salvador Mary Rodríguez, USAID/EI Salvador MEO Marta Lilian Quezada, Salva Natura
15:30-17:15 <i>(includes coffee break)</i>	<b>Session 9b:</b> Working Group Preparation: Familiarization of Field Tools <i>Working groups</i>	Review the current environmental management plan for the project to be visited. Analyze the five components of the EMPR and document what one will need to observe in the field.	Working Groups
17:15-17:30	Evaluations and Announcements		
<b>Day 3</b> Wednesday	Carry out project field visits and compile results into the EMPR format.		
8:30-14:00 <i>(lunch in the field)</i>	<b>Session 9c:</b> Field Visits: Experiential Practice Using the EMPR <i>Field visits</i> Technical Areas: 1. Large Scale Construction and Risk Management - Acahuapa Bridge 2. Waste Management and Large Scale Construction – Santa Lucía Orcoyo Health Center 3. Biodiversity Conservation, Ecotourism and Climate Change Adaptation – Parque Ecológico Bicentenario	Build and apply the core Environmental Analysis skills briefed in day 1 and day 2 via a field visit and follow-up group work to (1) synthesize field observations, and (2) identify possible mitigation measure for issues of concern, with reference to the LAC Environmental Guidelines.	Guides: Alejandro Maceda, USAID/EI Salvador Mary Rodríguez, USAID/EI Salvador MEO Marta Lilian Quezada, Salva Natura
14:00-17:15 <i>(includes 15:30 coffee break)</i>	<b>Session 9d:</b> Elaboration of Presentation on Field Visit Findings <i>Working groups</i>	Advance discussions and compilation of field visit results into an EMPR format and a group presentation. Conclude with suggestions for improving environmental field tools.	Working Groups
17:15-17:30	Evaluations and Announcements		
<b>Day 4</b> Thursday	Present case study conclusions and special topic sessions, including Pesticide Management, GCC, Biodiversity and web-based environmental reporting.		
8:30-10:30	<b>Session 9e:</b> Case Study Conclusions <i>Group presentations in plenary</i>	Articulate field visit findings, analysis, and EMPR development.	Working groups
10:30-10:50	Coffee break		

10:50-12:00	<b>Session 10:</b> Recommended Best Practice for EMPR Development and Application/Monitoring and Evaluation <i>Game with question and answer session</i>	Improve understanding of the EMPR procedures and technical content.	Malory Hendrickson, SMTN  Mark Stoughton, Cadmus Group Inc
12:00-13:00	<b>Session 11:</b> USAID Sustainability - El Salvador	Gain familiarity with USAID's sustainability efforts. improve understanding of the agency's footprint, and discuss basic recommendations in the purpose of becoming more sustainable .	Andrea Stone, USAID/El Salvador Environment Officer
13:00-14:00	Lunch		
14:00-15:00	<b>Session 12:</b> Future Web-Based Reporting System: MONITOR <i>Technical presentation and dialog</i>	Receive a preview of what is being developed for future electronic environmental reporting in the LAC Region.	Paul Schmidtke, USAID/ECAM REA Malory Hendrickson, SMTN
15:00-16:30	<b>Session 13:</b> USAID Biodiversity and Global Climate Change Code <i>Technical presentation and dialog</i>	Acquaint participants with the USAID Biodiversity Code and Global Climate Change and its integration into development programs in the region.	Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/LAC REA
16:30-16:45	Evaluations and Announcements		
16:45	Evening Event		
<b>Day 5</b> Friday	Address any unresolved issues and identify practical actions that can be incorporated into future planning.		
8:30-9:30	Parking Lot Session	Address unresolved questions or issues and summarize information presented throughout the training. <ul style="list-style-type: none"> <li>• Base Camp introduction</li> <li>• Carbon neutral event</li> <li>• Participant USB Memory Tour</li> </ul>	Mark Stoughton, Cadmus Group Inc
9:30 – 10:30	<b>Session 14:</b> Bringing Curricula to Reality <i>Plenary discussion</i>	Identify lessons learned and practical actions that can be operationalized in future planning.	Scott Solberg, SMTN
10:30-10:45	Evaluations		
10:45-	Closing Ceremony	Conclude workshop and distribute diplomas.	Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/ECAM REA Mary Rodriguez, USAID/El Salvador MEO

### Workshop Photograph Collage





## Workshop Evaluations

At the end of every day participants completed daily evaluations and the last day of the workshop they completed an overall evaluation to rate the quality of the workshop in a scale of 1 to 5. These evaluations allow participants to share their suggestions and facilitators and presenters to incorporate them day by day as well as in future trainings.

Session	Presenter	Presentation Content Quality	Usefulness for your organization
Session 1: Transect Walk and Baseline Exercise	Scott Solberg, SMTN Malory Hendrickson, SMTN	4.40	4.35
Session 2: Overview of USAID Environmental Processes	Victor Bullen, USAID/LAC BEO	4.64	4.74
Session 3a: The Initial Environmental Examination (IEE)	Victor Bullen, USAID/LAC BEO	4.76	4.83
Session 3b: Environmental Impacts and Categorization	Mark Stoughton, Cadmus Group Inc	4.76	4.83
Session 4: Introduction to Environmental Mitigation and Monitoring	Scott Solberg, SMTN	4.68	4.74
Session 5a: The Environmental Mitigation Plan and Report (EMPR)	Paul Schmidtke, USAID/ECAM REA	4.68	4.79
Session 5b: EMPR Primer Exercise	Malory Hendrickson, SMTN	4.47	4.84
Session 6: Environmental Priorities in USAID Central America and Mexico Projects	Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/ECAM REA	4.37	4.42
Session 7: Environmental Assessments	Paul Schmidtke, USAID/ECAM REA	4.68	4.68
Session 8: Pest Management PERSUAP Reports and Operational Field Guides	Victor Bullen, USAID/LAC BEO	4.53	4.42
Session 9a: Case Study Briefings	Alejandro Maceda, USAID/EI Salvador Mary Rodríguez, USAID/EI Salvador MEO Marta Lilian Quezada, Salva Natura	4.63	4.58
Session 9b: Working Group Preparation: Familiarization of Field Tools	Working Groups	4.58	4.68
Session 9c: Field Visits: Experiential Practice Using the EMPR	Alejandro Maceda, USAID/EI Salvador Mary Rodríguez, USAID/EI	4.60	4.67

	Salvador MEO Marta Lilian Quezada, Salva Natura		
Session 9d: Completion of EMPR and Elaboration of Group Presentation	Working groups	4.67	4.87
Session 9e: Case Study Conclusions	Working Groups	4.80	4.75
Session 10: Recommended Best Practice for EMPR Development and Application/Monitoring and Evaluation	Serena Espinosa, SMTN	4.40	4.60
Session 11: USAID Sustainability	Andrea Stone, USAID/El Salvador Environment Officer	4.60	4.65
Session 12: Future Web-Based Reporting System: MONITOR	Paul Schmidtke, USAID/ECAM REA Malory Hendrickson, SMTN	4.35	4.30
Session 13: USAID Biodiversity and Global Climate Change Code	Victor Bullen, USAID/LAC BEO Paul Schmidtke, USAID/ECAM REA	4.60	4.75
Session 14: Bringing Curricula to Reality	Scott Solberg, SMTN	N/A	N/A

# Carbon Free Workshop Certificate



**Carbonfund.org**  
REDUCE WHAT YOU CAN OFFSET WHAT YOU CAN'T™

## carbon offset certificate

*presented to*

### Sun Mountain International

*for reducing*

### 29.82 Tonnes of CO2 Emissions

Global warming is real and we all need to be part of the solution. This donation to the Carbonfund.org Foundation is helping fight global warming today by supporting carbon reduction projects worldwide, including renewable energy, methane destruction, energy efficiency and forestry. Thank you.

Jul 13, 2012  
date



*Eric Carlson*  
Eric M. Carlson  
President

The Carbonfund.org Foundation is a 501(c)(3) nonprofit carbon reduction and climate solutions organization empowering individuals and businesses to help end global warming.