Rapid Environmental Impact Assessment – Haiti 2010 Earthquake

Sun Mountain Intl./CHF for USAID Haiti
• 7 magnitude earthquake west of Port au Prince
• 230,000 deaths
• 3 million affected; 1.3 million displaced
• Extensive but random pattern of damage
• Damage to government and international assistance capacities
The Haiti USAID REA

- Initiated by USAID
- Used Rapid Environmental Impact Assessment in Disasters (REA) methodology
- Provide a rapid assessment and report
- Provide input into further assessments
- Provide advice as requested
The Assessment

- Began on 16 February; Initial report on 1 March
- 9 person Haitian/Expat team
- Community-level assessment: 66 interviews
- Organization-level assessment: Meetings, ½ day workshop, briefings
- Synthesis and reporting
Coordination

The scale and scope of the earthquake impacts and assistance far exceed existing coordination mechanisms, leading to general inefficiencies and a lack of focus on environmental issues.

Recommendation...

A single, clear, properly resourced coordinating structure for environmental issues should be established.
Sanitation and Waste

• Sanitation poor
• Sewage is not properly managed.
• Waste disposal anarchistic.
• Proposed waste management solutions, particularly for sewage, could contribute to environmental damage
Sanitation and Water

- Increase # of toilets and ensure proper operation
- Monitor waste generation and sanitation and adjust scale and scope of operations as conditions change
- Do not use chemical toilets or chemical additives
- Develop long term solution and short term implementation plan for sewage and solid waste disposal
- Single WASH-Health Cluster vector control plan based on integrated pest management best practice
Geophysical and Hydro-Meteorological Hazards Monitoring

• Geological/hydro-meteorological hazards will be more dangerous.
• Events will affect people who lack basic shelter and are in more hazardous locations.
• Threat of seasonal precipitation/flooding should be not be underestimated.
Geophysical and Hydro-Meteorological Hazards Monitoring

- Geophysical and hydro-meteorological hazards should be (re)essed and risk assessments and mapping developed for flooding and landslides in the earthquake-affected areas and specifically for existing and new shelter sites.

- Shelter site specific warning and evacuation plans in the earthquake-affected areas should be developed for new and existing rural and urban sites.
Livelihoods and Food Security

Livelihoods/food security are in flux. Food markets are unstable. Disaster survivors may turn to livelihood/food security options with are unsafe or with negative environmental impacts.

Recommendations

- Assess livelihood strategies and support environmentally-positive livelihood strategies
- Livelihood/food security projects should mitigate negative impacts on the environment
- Monitor food supply/nutrition to identify if worsening conditions leading to increased natural resource demands
- Expand shelter site level food production
- Provide fuel access to improve food intake
Shelter and Shelter Sites

• Most shelter sites did not meet minimum standards in the areas of sanitation, space, shelter, safety, or fire safety.
• Ad hoc shelter sites are being established in ecologically fragile areas, near wetlands, with limited resources for construction.
• Squatting has increased
• Transitional shelter plans will require upwards of 20,000 tons of wood.
Shelter and Shelter Sites

- Subject all shelter sites to an environmental impact review and management plan
- Establish fire management plans.
- Provide lighting from rechargeable battery lights or from main electrical supplies
- No emergency/transition shelter use during a hurricane or severe weather
- Wood for transitional shelters should come from sustainable forests and be provided with other shelter materials
- No need for chemical treatment of wood provided for transitional shelters
- Implement a plan to rebuilding housing and infrastructure to forestall reoccupation of high hazard hillsides and of new, environmentally fragile, sites
Debris Management

- 20 to 75 million cubic yards of debris need to be managed to avoid damage to the environment, livelihoods and recovery efforts.
- Debris disposal has been anarchistic.
- A proper management process beginning established.
- Effort has received an environmental review, but further monitoring and reviews are needed as operations expand.
Debris Management

- Debris operations need to meet appropriate environmental standards, and include sustainable re-use or recycling of materials in the debris stream.
- Local-level debris clearance operations need to meet acceptable worker safety and environmental impact criteria and incorporate standardized impact mitigation plans and procedures.
- Debris removal/processing needs to be vertically coordinated and laterally integrated to minimize competitive operational plans and procedures and operational confusion.
Results

- Rapid Assessment; broad overview, snapshot in time
- Critical issues: some old, some new, some missed
- EA not mainstream in humanitarian response (but is in military response)
- Obligatory follow-through but weak capacity
- Poor planning
- Capacity to manage environmental aspects of recovery uncertain
Questions?

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