



Challenges to Performing ESIA and Implementing Projects in Liberia

International Association for Impact Assessment
Washington Branch
1818 H Street, NW, Washington DC
May 13, 2015



Acorn International, LLC
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earthtime 

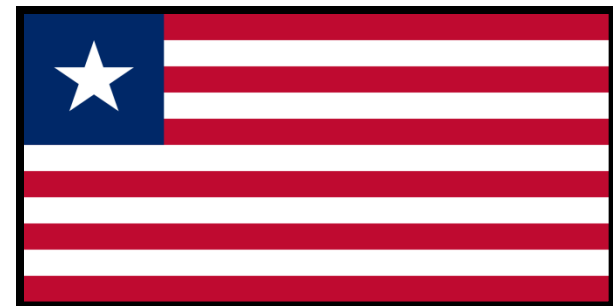
 **Acorn**
INTERNATIONAL
LOCAL CONTENT & GLOBAL ASSURANCE

Introductions

 <p>Acorn International Houston, Boston, San Francisco</p>	 <p>Earthtime Group Monrovia, Liberia</p>
<ul style="list-style-type: none"> • Environmental and social baseline and impact assessment • Non-technical Risk Assessment • Social performance • Due diligence • EHSS strategy • Capacity building/Training 	<ul style="list-style-type: none"> • Environmental and social baseline and impact assessment • Environmental Management • Due diligence • Health & Safety • Water Resources • GIS • Procurement • Project Management & Logistics
<h3>Our Projects Together</h3>	
<ul style="list-style-type: none"> • ESIA for Offshore Drilling in nine blocks for various clients (Anadarko, Chevron, European Hydrocarbons) • Environmental Regulatory Needs Assessment and Capacity Building Initiative with EPA • ESIA for shorebase to support offshore exploration activities • ESIA for two new heavy fuel oil electric power generating plants for World Bank • ESIA for heavy fuel oil pipeline • Liberia Municipal Water Project for USAID • Non-technical risk screenings, regulatory reviews addressing environmental, health, safety, security and social topics 	

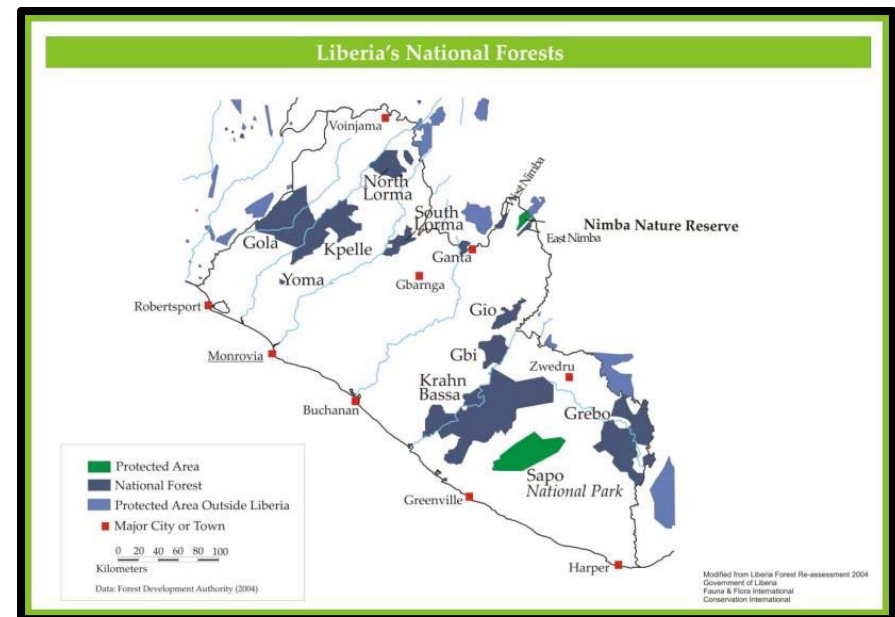
Overview

- Liberia Context
- Current ESIA Framework
- Challenges
 - Infrastructure
 - Lack of baseline data
 - Government capacity
 - Land tenure and property rights
 - Consultation
 - Corruption
 - Health & Safety
 - Local Content
- Case Studies
- Conclusions



Setting and Environmental Context

- 69,000 sq miles, 360 miles coastline
- Flat to rolling coastal plains, low mountains in northeast
- Hot/humid, dry winter, wet summer
- Six major rivers flowing northeast-southwest, two major lakes
- Eight wetlands, coastal, lacustrine and inland riverine
- Mangroves, lagoons, beaches
- National forests and reserves



Socioeconomic and Health Context (pre-Ebola)

- 4 million people, with 1.2 million in Monrovia
- 16 indigenous ethnic groups, comprising approximately 95% of the population
- 64% of population below poverty
- 25% of population with unimproved drinking water
- 83% with unimproved sanitation facilities
- Malaria, dengue fever and yellow fever
- Mining (iron ore, diamonds, gold)
- Agriculture (rubber, coffee, cocoa, rice, cassava, palm oil, sugarcane, bananas, sheep goats, timber)

Foreign Aid

- Heavy reliance on foreign assistance
- Over 15,000 UN military personnel authorized in 2003
 - Currently (March 2015) approximately 5,900
 - Plans to reduce to approximately 3,600 by September 2015
- Current Foreign Aid:
 - World Bank – 34 Active Projects – nearly \$500 million
 - USAID – 7 Active Projects – nearly \$400,000
 - MCC – Threshold Program - \$15 million
 - Fiscal year 2015 from US agencies \$132.5

Impact of Ebola

- 10,322 confirmed, probable and suspected EVD cases, and 4,608 deaths
- 2014 GDP growth estimate decrease from 5.9% in June to 2.2% in December 2014
- Decrease in imports/exports (rubber down 40% in 2014 relative to 2013)
- Lower investment demand
- Substantial loss of wage jobs and self-employment activities
- Widespread food insecurity



Environmental Framework

- Environmental Protection and Management Law of the Republic of Liberia
- National Environmental Policy
- Various environmental laws addressing forest conservation, public health, natural resources, wildlife and national parks
- International Environmental Conventions
- Key organizations involved in environmental management include:
 - Forestry Development Authority
 - Ministry of Lands, Mines and Energy
 - Ministry of Planning and Economic Affairs
 - Ministry of Justice
 - Ministry of Public Works
 - Ministry of Health and Social Welfare
 - Ministry of Commerce
 - Ministry of Agriculture

Challenges - Infrastructure

- Utilities
 - Electricity access rate is less than 2%, one of the lowest in the world
 - Limited access to water
- Waste management
 - One landfill facility in the entire country
 - Difficulties in dealing with hazardous waste
- Roads
 - Less than 7% of Liberia's 66,000 miles of roads are paved
 - Dirt roads can be impassable in rainy season
- Lack of laboratories, specialized equipment, business services

“For developing a project, the first [challenge] is probably the lack of infrastructure. Limited electricity, water, business services, and no adequate waste facilities.”
– Oil company representative

Challenges – Baseline Data

- Meteorological data
 - Outdated - most recent data is from 1980
- Ambient Air Quality
 - Absence of monitoring stations
 - No ambient air quality data
- Surface water data
 - Available data is scattered and what is available is not coherent
 - Accessibility to data is an issue
 - Lack of research and publications
- Lack of data on groundwater
- Lack of data on marine and terrestrial species

***“As to performing an ESIA in Liberia, one issue is probably the lack of sufficient data on the environment – onshore and offshore – to fully evaluate potential impacts“
– Oil company representative***

Challenges – Collection of Baseline/Monitoring Data

- Planning: lack of local and reliable technical capacity
- Equipment: Procurement of (proper) equipment
- Consultations: Obtaining access
- Installation and implementation:
 - Logistics
 - Site preparation
 - Weather unpredictability
 - Hazards and safety risks
 - Risk of theft
- Commissioning: data downloading, maintenance, calibration, safety and security of equipment

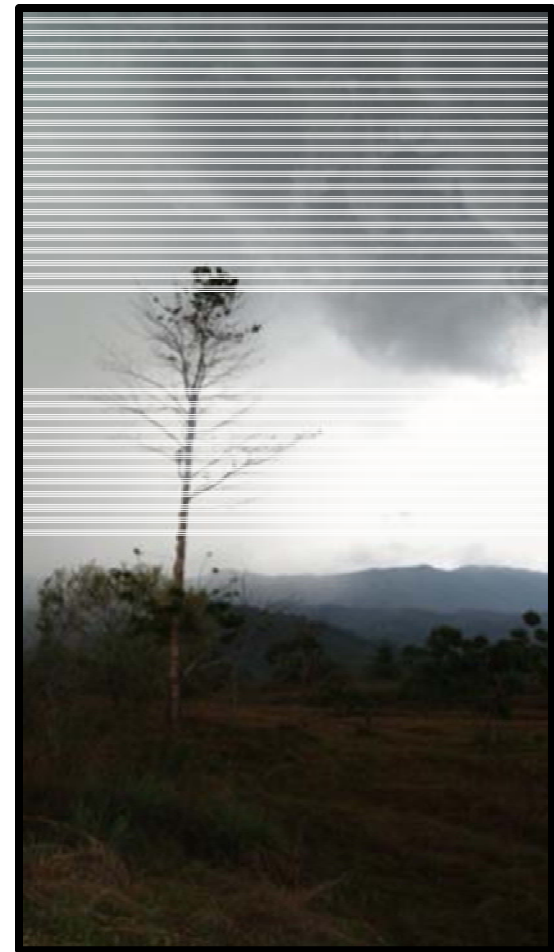
“We can always be certain that there has been an aggression on the environment due to the interaction of man and nature, but we cannot measure the extent of this aggression because we don’t really know what exactly was the status of that environment prior to the interaction. For comparison, quality baseline data is a must”
***– Hon. Anyaa Vohiri,
EPA Executive
Director***

Challenges - Data Collection



Challenges – Weather

- Rainy season May - Oct



Estimated Timeframe to Implement Monitoring Program

Action	Estimated Timeframe	Requirements
Planning Monitoring Activities	2-3 months	Field visit, reconnaissance, community liaison officer (CLO)
Selecting Locations	1-2 months	Field surveys, CLO
Community Approval	2-3 months	Transparent communication with communities and local authorities, CLO
Selecting Monitoring Tools	3-6 months	Understanding of study area, experts in various environmental parameters, vendor engagement
Procurement and Importing	3-6 months	Competent professional and international vendors delivering exact specifications, competent local distributor with experience in local environment, installation, commissioning, maintenance and calibration of tools
Installation and Commissioning	1-2 months	Competent technical skills, availability of supporting infrastructure (fence, security)
Total process	1 -2 years	

Challenges – Government Capacity

- Lack of manpower at EPA and other ministries
- Limited capacity in addressing and reviewing ESIA, monitoring reports and EMPs
- Acute deficiency in social expertise (RAPs)
- Limited technical instruments and tools (e.g. laboratories) due to lack of funds, utilities
- Lack of integration of environmental considerations with planning
 - Country/policy planning level
 - Project level (EIA perceived to delay projects)

“Another [challenge] is the government’s ability to effectively evaluate an ESIA....also the lack of adequate regulatory regime. Some might think that is good but it leads to the next potential problem – corruption. I’m still concerned about the maritime agencies and ability to regularly get supplies into the country.”
– Oil company representative

Challenges – Land Tenure / Property Rights

- No land title – complicates resettlement and compensation programs
- Properties are not accurately demarcated, there are no means and bounds
- Land Rights Bill submitted to National Legislature for review and enactment in March 2015
 - Secure and protect land rights
 - Address government and public land, customary land & private land



Challenges - Consultation

- Community acceptance of the ESIA process:
 - Communities are not always receptive to projects
 - Common perception that consultation will lead to mapping of the area and extraction of gold/diamonds
- Local communities don't easily disclose locations of sacred site and traditional shrines
 - Potential for major challenges during implementation phase

Challenges - Corruption

- Liberia ranks:
 - 94 out of 175 on Corruptions Perception Index (Transparency International)
 - 29 out of 71 for Financial Secrecy
- Slows importation of goods, permits, program execution
- Political conflicts of interest (politicians making requests, lodging complaints, influencing project outcome)
- Recent examples in mining and oil and gas

Challenges – Health & Safety

- Limited emergency response capabilities
- Poor road conditions
- Poor health infrastructure
 - Most Ebola Treatment Units have been removed already
 - No noticeable ongoing investment in health infrastructure or improvements in healthcare sector post-Ebola
 - Hospitals are not yet equipped to handle new round of Ebola and are severely understaffed due to Ebola impact
- Lack of potable water and sanitation
- Lack of facilities outside of Monrovia

HES Early Assessment of Liberia for New Country Entry identified:

- 1. Poor medical facilities and lack of qualified professionals***
- 2. Lack of medical supplies and medicine***
- 3. Access to safe drinking water***
- 4. Road and vehicle safety***
- 5. Security***

– Jim Strong, Chevron; Atma S. Khalsa, Acorn International
SPE-156842-PP “New Country Entry: Effective Engagement of HES and Medical Professionals

Local Content

- Inadequate funding
- Lack of technical know-how and capacity
- Lack of technology and equipment
- Lack of local suppliers of goods and services
- National Investment Commission launched a local content policy initiative in 2014
 - Priority sectors – oil and gas, mining, agriculture, forestry and infrastructure
 - Incentives include local recruitment, technical and vocational training, purchase of local goods and services and infrastructure development

“Another issue for developing a project will be an adequately trained in-country workforce. You’ll have to do a lot of preparatory training in order to meet some level of local content expectations.”
– Oil company representative

HFO Facility, Bushrod Island, Monrovia – Project Overview

- Installation of two 10MW power plants fueled by Heavy Fuel Oil (HFO)
- Future operation with diesel
- Rehabilitation of existing tanks
- HFO/diesel to be trucked
- Funding by World Bank and the Japanese International Cooperation Agency

HFO Facility, Bushrod Island, Monrovia – Site Location



HFO Facility, Bushrod Island, Monrovia – Site Conditions



HFO Facility, Bushrod Island, Monrovia – Drilling



HFO Facility, Bushrod Island, Monrovia – Pipelines and Ditches



HFO Facility, Bushrod Island, Monrovia – Challenges

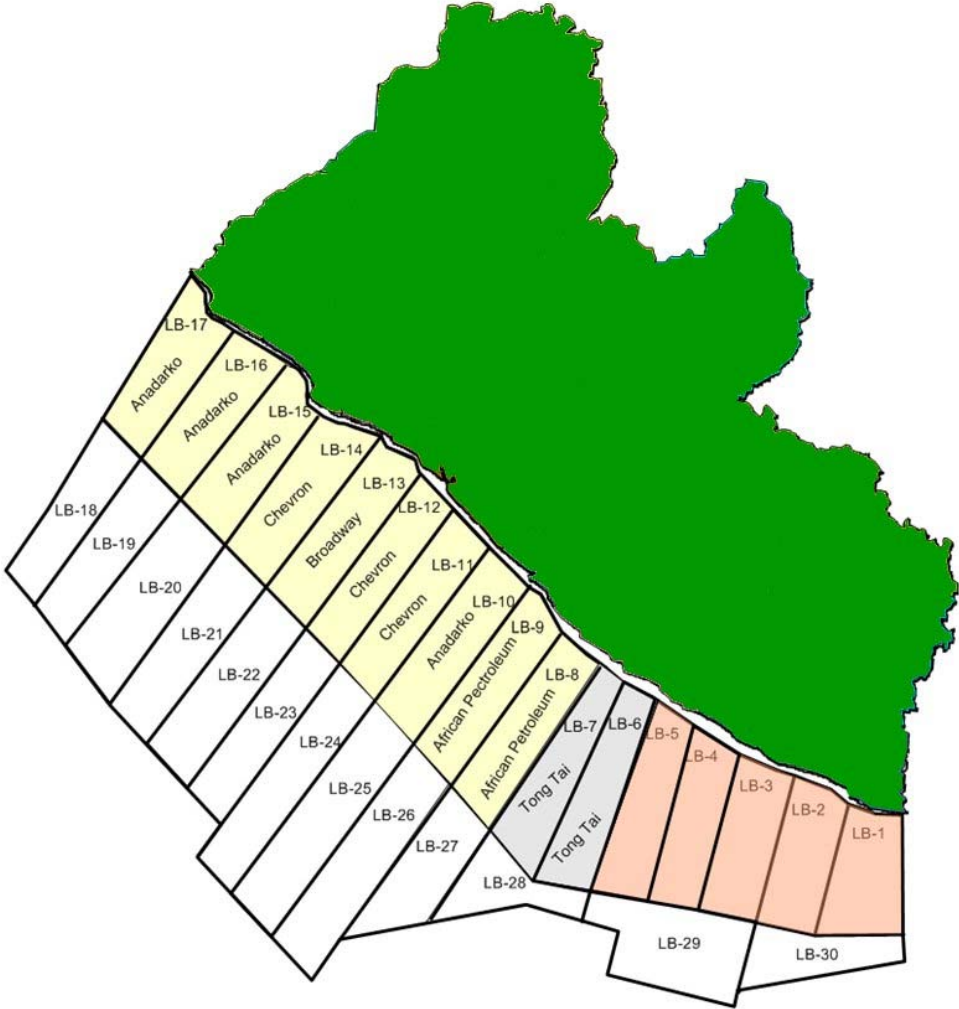
- Capacity of Liberia Electric Corporation
 - EIA Support
 - Monitoring
- Sampling
 - Equipment and contracting
 - Health and safety
 - Sample analysis
 - Schedule
- No facility to handle impacted soils, solution is to leave in-place

Offshore Exploration Projects

- Combined challenges for ESIA's for exploration in nine different blocks (four different operators)
- Mobilization/demobilization, drilling
- Onshore support, shorebase/port



Offshore Exploration Projects - Map



Offshore Exploration Projects - Challenges

- Lack of baseline data for marine species
 - Special study to extract from regional data
- Offshore baseline sampling program
- EPA Capacity
 - Limited capacity for offshore exploration
 - Delays
 - Capacity building workshop

Conclusions

- ESIA's and development and implementation of projects face many challenges in Liberia
- Effects from Ebola will exacerbate the challenges that existed before the outbreak
- ESIA's and project planning should be started as early as possible and schedules incorporate extra time



Thank you!



Questions?

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