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The Role of Infrastructure in Rebuilding Liberia

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USAID/W/EGAT**

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Liberia: Key Statistics

- Capital: Monrovia
- Area: 111,369 sq. km.
- Population: 3.4 million
- GDP: \$631 million
- Real GDP growth rate: 7.8%
- Per capita GDP: \$186
- Literacy - 20%
- Life expectancy - 42.5 years
- Work force: Agriculture (70%); industry (15%); services (2%)
- Unemployment: 80% in the formal sector





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Liberia: Recent History

- 1989 - 2003: civil war under Charles Taylor
- 2003 - 2005: peace agreement; transitional government
- Nov 2005: democratic elections
- Jan 2006: President Ellen Johnson-Sirleaf inaugurated



USG/USAID involvement

- FY04: USAID began emergency assistance to address immediate, post-war needs (ie: helping IDPs, employment for ex-combatants)
- FY07: USG/USAID active in:
 - Peace & Security - military and police training
 - Democracy and governance - justice sector reform; civil society
 - Investing in People - health; education; social assistance
 - Economic Growth - infrastructure; agriculture; workforce; environment
- USG transitioning from emergency assistance to long-term development



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USG infrastructure programs in Liberia

- Fourteen years of civil war has left roads, ports, and electricity generation and distribution systems in shambles.
- A fundamental part of Liberia's economic recovery and growth is the rehabilitation and expansion of physical infrastructure and basic public services.
- USG infrastructure program objectives:
 - restore basic infrastructure
 - establish enabling environment for private sector
 - build public institutions
- The USG is active in three key sub-sectors:
 - energy
 - buildings
 - roads



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Pre-war energy infrastructure in Monrovia

- Generation: 178 MW total installed capacity
 - Hydro – 64MW
 - Slow Speed Diesel Engine – 40MW
 - Medium Speed Diesel Engine – 10MW
 - Gas Turbine – 64MW
- Transmission system: 460km @ 69kV
- Distribution network: 800km @ 12.5kV



Post-war challenges

- Generation, Distribution, Transmission = 0
- Weak and over-staffed ministry and state-owned electric utility
- GoL has no money to invest in rebuilding the power sector due to scarce resources and past debt obligations



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Positive aspects

- Presidential commitment to restore electricity to Monrovia and seek long-term PSP and investment
- Willing donors with funds available (EC and USAID)
- No culture of service without payment

The approach taken

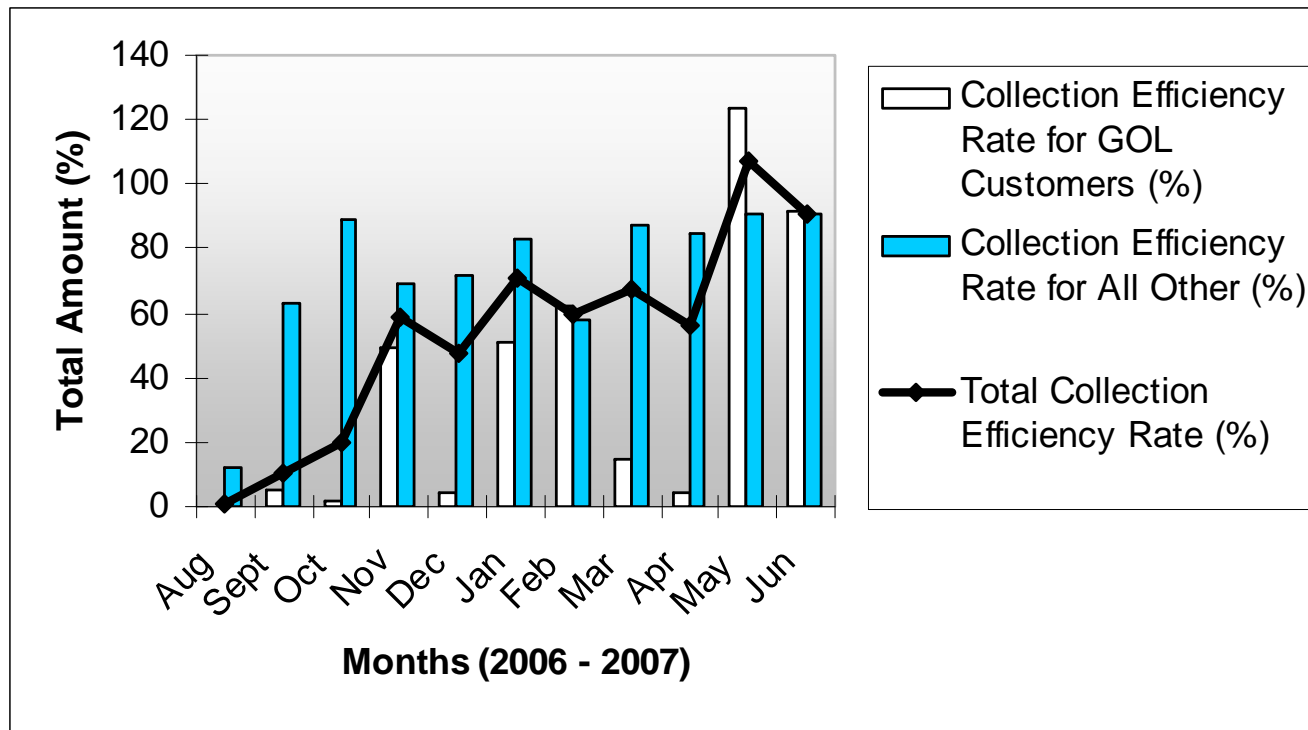
- Pool all available donor resources to implement short-, mid-, and long-term strategies in parallel
 - Short-term: Provide emergency power to Monrovia
 - Mid-term: Enter into a private concession to expand Monrovia's service coverage, develop a National Energy Strategy
 - Long-term: Implement the National Energy Strategy, build credible sector institutions
- ***Short-term actions must lay the foundation for sound and sustainable development of the sector***



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Emergency Power Program:

- 1) 2 MW diesel, 424 customers, 20 km street lights
- 2) revenue covers fuel and maintenance
- 3) Phase 2: additional 8 MW of diesel, T&D build-out





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USG energy programs in Liberia: Impact/lessons learned

- **Payment for services / cost-recovery:**
 - Limit initial customers to key government facilities, community centers, and businesses (no residences)
 - Those who don't pay get cut off, including government facilities.
 - Post conflict consumers can pay
 - Constant vigilance needed to prevent theft

- **Electricity supports stabilization**
 - Government gains credibility through delivery of a public service

- **Revenue collection attracts private sector interest**
 - 8 private sector firms responded to IFC expression of interest .
primary draw was success of EPP in collecting revenues.



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Liberia Energy Sector: next steps?

For Discussion: How would you advise Mission/GOL to proceed:

1) national energy policy (USAID support)

2) Private sector investment:

- IFC: 12 – 20 year vertically integrated concession
public sector financing for transmission and distribution
- Management contract for LEC with IPP's. Who signs PPA?
- Anchor customer (mining) focused tender for generation (BOO) and transmission (BOT), management contract for LEC, establish distribution companies



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USG buildings and roads program: Approach Taken

- **The Liberia Community Infrastructure Project (LCIP):**
 - Initiated in FY04
 - Designed with community infrastructure projects in mind
 - Political imperatives expanded focus to include large public works projects (roads, bridges, capitol building, etc)
- **Multiple, complementary and evolving program goals:**
 - public service jobs creation for post-conflict stabilization and income generation
 - Workforce skills development (all Liberian firms utilized for implementation)
 - Infrastructure rehabilitation



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USG buildings program in Liberia

- LCIP renovated buildings include:
 - Key government buildings
 - Capitol building (375 employed in 6/07)
 - Ministry of Public Works complex (298 employed in 9/07)
 - Administration Buildings for 5 counties
 - National Election Commission (NEC)
 - Tubman National Institute for Medical Arts (TNIMA)
 - Education facilities:
 - high school (108 employed)
 - 2 Rural Teacher Training Institutes
 - University of Liberia Fendall Campus





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BEFORE



Girls Dormitory

AFTER



High School renovated under LCIP

- Funding: \$369,000
- Employment: 108 people



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USG roads program in Liberia

- LCIP activities include:
 - 280 km of roads rehabilitated
 - Repair/renovation of drainage structures for 2 main highways
 - Other community road and bridge projects





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USG Buildings and Roads programs: lessons learned

Implementation:

- many projects driven by political imperative
- implementing partner had no in-house engineering capacity initially
- USAID had no engineering oversight – surge capacity needed

Engineering:

- structures built to pre-war specs, no consideration of post war role
- No in-country materials testing capacity
- designs critical
- labor intensive sound engineering projects are feasible
- integrated development projects needed





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Thank You.

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