Nam Theun 2 (NT2) Hydropower in Lao PDR: Lessons Learned from a Unique Resettlement Project

Pierre Guedant (NTPC, Laos)
Vatsana Pravongue (NTPC, Laos)
Fabien Nathan (EDF – CIH, Le Bourget-du-Lac, France)
Contents

1. Background
2. NT 2 impact mitigation strategy
3. Overview of E&S programs
4. What have we achieved
5. What have we learned?
6. Moving forward
BACKGROUND

Cross-Border project

Trans-Basin Project
Project dams the Nam Theun River and diverts water to the Xe Bangfai River

Key dates
2003: Signature of PPA
2008: Reservoir Impoundment
2010: Commercial Operation Date
2035: End of concession
BACKGROUND

Main social impacts

- **48 900 ha lake**, 40% of Nakai plateau
- Resettlement **6300 indig. people** (1310 HH) in 16 villages;
- Impacts on livelihoods and **lifestyle**
- > **100.000 pers. affected** on DS area
- Vast construction area => impacts on lands for ~2.500 HH
- Peak of **8200 workers** in isolated area
NT2 IMPACTS MITIGATION STRATEGY

~10 yrs development, series of E&S studies and plans

- ESIA, HIA, EAMP, SEMFOP, RAPs, PHAP;
- **SDP** combines RAP and indigenous plan to provide integrated vision of plateau dev.
- Complete **SDP for downstream** areas;
- RAPs for construction areas;
- Social management split in **several programs** to apply plans: Nakai, DSP, PL, PCR, SERF, WMPA + environmental management

**Crucial world-class innovation**: complete E&S strategy rendered mandatory in CA. Key to E&S risk mitigation.
OVERVIEW OF E&S PROGRAMS

Nakai Program
• > 12 years livelihood support; compensation; infrastructure; health, PLUP, Community dev.(VDP, CLWP, Happy Nakai…)
• 2003 - RIP closure (foreseen end of 2017).

Downstream Program
• World Première as DS impacts tended to be neglected in HPP. Livelihood support, cash, VIRF, WASH, etc. 2005-2013.

Project Lands Program
• Mitigation construction impacts. Livelihood, cash, replacement of infrastructure, etc. 2005-2011.

Camp Followers Program
• Avoid boom town effect and social disarticulation during construction. HIV/AIDs, hygiene, regulations, etc.
Health Program

• Regional reach. Health monitoring; Infrastructure development, provision of equipment, awareness and training, etc. 2005-2013.

Social and Environmental Remediation Fund (SERF)

• Maintenance of structures built by NT2: boreholes, fences, etc.
• 3-400 K$ per year during entire concession period.
• Managed by Local Authorities, with participation of village heads.

Environmental Programs

• WMPA: 1.3 M$/year for Watershed protection during entire concession period. Managed by Local Authorities
• Environmental programs during construction
• Follow-up water quality and fish catch reservoir and DS: ongoing
WHAT DID WE ACHIEVE?
1,330 houses
2 health centres
120km of access roads
32 schools
10 years of livelihood support
>$800,000 in Village Development Funds
>176 community-based organizations
Women have 36.8% of seats on village committees
WHAT RESULTED?
EDUCATION

16 PRIMARY SCHOOLS
16 NURSERY SCHOOLS

built & equipped

OVER 4,000 CHILDREN on Nakai are now going to school

SCHOOL ENROLLMENT among children 5-9 years old

90% POST-resettlement
31% PRE-resettlement
97.7% of people are using MALARIA BED NETS

90% Immunization rates among children under 5 years old in the resettled populations.

2 Health centers built & equipped

93.4% POST-resettlement

32% PRE-resettlement
NUTRITION

Children under 5 years

Stunting Levels
- 2008: 43.1%
- 2010: 40%
- 2013: 34.2%

Underweight Levels
- 2008: 27.6%
- 2010: 24.5%
- 2013: 18.3%

Source: NTPC Final Health Survey Report 2013
REDUCED CHILD MORTALITY

2008 to 2014

105 /1000 live births

46/1000

Source: NTPC Routine Public Health Monitoring
ERADICATE EXTREME POVERTY

After resettlement, 97%* of affected communities achieved the Household Income Target. Average consumption levels 3 x higher than the poverty line

*The remaining villagers under the target (3%) are being directly supported by the social safety net program

Source: NTPC LSMS 7, QSEM 7,8,9,10, Village Income Target survey 2014
HOWEVER...

- Long term livelihood sustainability
- Ethnic groups
- Poor and Vulnerable
- Forestry
- Local stakeholders’ capacity
WHAT HAVE WE LEARNED?
Lesson #1

Real people need real time
Solution #1

Human-centered approach that fosters ownership

- Mentoring and coaching
- Encourage volunteerism to build up social cohesion
- Foster social entrepreneurship
M&E complexity hinders implementation

Lesson #2
Find the common ground. Speak with one voice.

- Agree on common M&E tools
- Stakeholders visit simultaneously
- Joint auditing group

Consolidated requests and reporting
Lesson #3

The CA should be SMART(er)
Solution #3

Adaptive Management

A structured, iterative process of robust decision making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring.

- Unified monitoring body
- Mandatory AM structure
Timeline

- Project Lands
- Downstream Program
- Public Health Program
- Resettlement Program (Nakai)
- Biodiversity (WMPA and Elephants)
- Water Quality / Infrastructure maintenance (SERF)
- Construction

Timeline:
- 2002: Financial Closure
- 2003: Concession Agreement
- 2005: Commercial Operation Date
- 2017: Targeted RIP Closure
- 2035: End of the CA
Moving Forward

• Joint Working Group
  - Members: GOL (Central Govt - DEB and MAF advisors-, RMU, District), WB, ADB, AFD, NTPC
  - Objective: common work to clarify what needs to be done to close the RIP in accordance with the CA.

• Clarification
  - Clarify the CA re “sustainability” and hence to quantify what sustainable basis is in terms of output/targets.

• Identification of actions listed into a Comprehensive Action Plan (CAP)
FIND OUT MORE
http://www.namtheun2.com

CONTACT US
pierre.guedant@namtheun2.com
vatsana.pravongue@namtheun2.com
fabien.nathan@edf.com