



Environment & Social Progress in Sanamxay

Overall Summary Report

12 June 2020

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CONTENTS

- 1. Rescue & Relief Activities3**
 - 1.1 Search and Rescue.....3
 - 1.2 Shareholders Donations.....4
 - 1.3 Evacuation Camps and Emergency Works4
 - 1.4 Temporary Accommodations.....5

- 2. Compensation6**
 - 2.1 Fatalities.....6
 - 2.2 Orphans6
 - 2.3 7 Major Impacted Villages7
 - 2.4 13 Minor Impacted Villages7
 - 2.5 Business Sector9
 - 2.6 Public Infrastructure10
 - 2.7 Environment.....10
 - 2.8 Summary of Compensation Payments11

- 3. Rehabilitation12**
 - 3.1 Rehabilitation of Khokkong and Tha Ouan13
 - 3.2 Rehabilitation for Environment and Old Village areas.....13
 - 3.3 Permanent Villages15
 - 3.4 Public Infrastructure15
 - 3.5 Permanent Houses17
 - 3.6 Livelihood Restoration.....19
 - 3.7 Roads & Bridges19

- 4. Summary of Compensation and Rehabilitation20**
 - 4.1 Global Settlement.....20
 - 4.2 Overall Compensation and Master Plan Agreement.....20

Acronyms:

ATP	Attapeu
BNK	Bank account
CARD	Compensation registration form
DAFO	Department of Agriculture and Forestry Office
DEM	Department of Energy and Mines
DES	Department of Education
DLSW	Department of Labor and Social Welfare
DPWT	Department of Public Works and Transportation
FML	Family
GOL	Government of Lao PDR
HH	Household
OSA	Overseas Assistance
MEM	Ministry of Energy & Mines
MOA	Memorandum of Agreement between PNPC/SKEC and ATP on compensation and Master Plan amount
MPI	Ministry of Planning and Investment
PAD	People Affected by Disaster
PDMC	Provincial Disaster Management Committee
PNPC	Xe-Pian Xe-Namnoy Power Company Limited
PWT	Public Works and Transportation Department
SKEC	SK Engineering Company
TPL	Third Party Liability (insurance)
mUSD	million United States Dollars
USD	United States Dollars
VDC	Village Development Committee

Foreword:

Right after the onset of the Saddle Dam D Washout, the PNPC and its Shareholders established the following working groups to provide regular updates and insights, assist in expedient problem solving, coordinate with all Project Stakeholders and do all other tasks deemed necessary;

1. Technical Working Group

Composition:

- SKEC
- KOWEPO
- RATCH
- LHSE
- PNPC
- Lenders' Technical Adviser
- Lenders' Legal Adviser

2. Environment & Social Working Group

Composition:

- SKEC
- KOWEPO
- RATCH
- LHSE
- PNPC
- Lenders' Technical Adviser

3. Insurance Working Group

Composition:

- SKEC
- KOWEPO
- RATCH
- LHSE
- PNPC
- Lenders' Insurance Adviser
- Insurance Broker
- Insurance Loss Adjuster

The Government of Lao likewise immediately activated its National Disaster Committee who established a National Investigation Committee which engaged an Independent Panel of Experts to investigate the cause of the Incident and the Provincial Disaster Rehabilitation Committee to oversee the compensation, rehabilitation and restoration process. These government committees are composed and represented mostly by all the Lao government agencies.

1. RESCUE & RELIEF ACTIVITIES

1.1 SEARCH AND RESCUE

- PNPC mobilized a search and rescue team to coordinate with the Lao army, and, mobilized ambulances, medical staff and medical supplies to assist in Sanamxay.
- PNPC and its Shareholders donated equipment and materials for the search and rescue efforts and the speedy setting up of evacuation camps; including 25 boats, life jackets, tents, generators, blankets, clothes, food, water, etc.

- PNPC assisted in coordinating supply runs into Sanamxay.

Photos (clockwise): PNPC search and rescue team; SKEC ambulance; donation of emergency equipment; coordinating supply runs into Sanamxay.



1.2 SHAREHOLDERS DONATIONS

- The Shareholders donated over **11 million USD** to the GOL for the affected people in Sanamxay District, consisting of; 10 million USD from SKEC; 1 million USD from KOWEPO; 5 million THB from RATCH and 100 million LAK from LHSE.

Photo: Handover of donations by SKEC.



1.3 EVACUATION CAMPS AND EMERGENCY WORKS

- PNPC and its Shareholders supported GOL in the management and improvement of the evacuation camps including:
 - Improved sanitation facilities by installing water supply, toilets, showers, organized garbage collection, hired garbage truck, managed pest control, etc.

- PNPC/SKEC agreed through the funding of the Compensation and Master Plan a fund of **3.6 million USD** for emergency works to repair roads to and within Sanamxay.

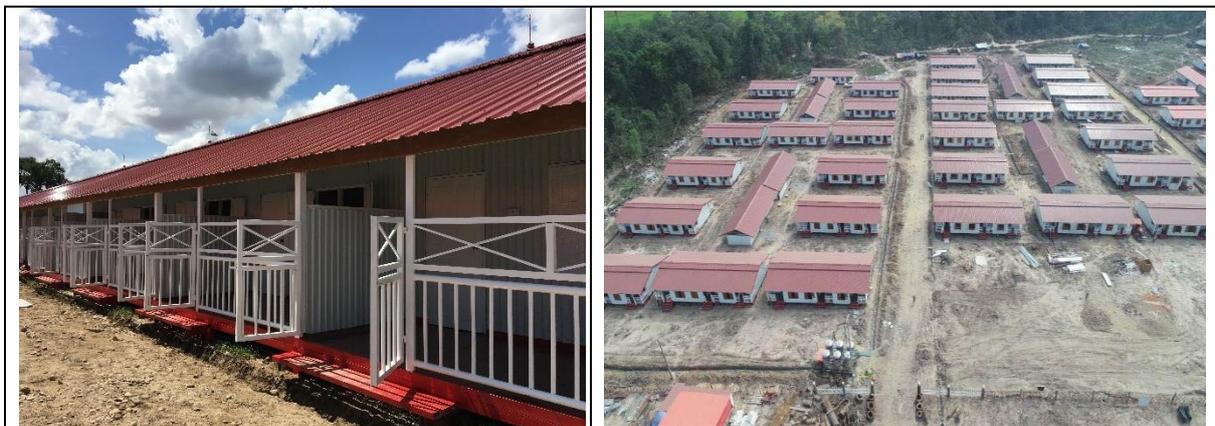
Photos: Installation of toilets (left) and water supply (right) in the evacuation camps.



1.4 TEMPORARY ACCOMMODATIONS

- SKEC either directly constructed or provided funding for five temporary accommodation camps to house the affected people.
- Temporary accommodations were designed and constructed with water supply, electricity supply, toilets, shower blocks, septic system, and stormwater drainage.
- Temporary accommodation #1 was constructed by SKEC at the cost of **0.7 million USD** and handed over on 5 September 2018.
- Temporary accommodation #2 was constructed by SKEC at the cost of **1.8 million USD** and handed over on 30 October 2018.
- SKEC provided funding of **3.4 million USD** for the purchase of modular houses as temporary accommodations #3 to #5. Modular houses were completed in March 2019.
- There is a funding of **3.1 million USD** through the agreed Master Plan to manage the temporary accommodation including relief rice allowances, relief cash allowances, electricity supply, maintenance of water supply, waste and waste water management, etc.

Photos (clockwise): temporary accommodations; aerial view of temporary accommodation #2; aerial view of temporary accommodation #5; garbage collection; water supply; modular house/s.





2. COMPENSATION

Prime Ministers Decision established a Provincial Disaster Management Committee (PDMC) to conduct impact assessment on the compensation of claims for losses and damages.

PNPC contracted an experienced independent Claims Loss Adjustor to assist in reviewing/assessing several claim categories.

PDMC and PNPC have been working closely together to conduct the impact assessment. Compensation payments follow a GOL agreed procedure that engages the claimant/s in the process; (i) interview claimant/s & assess claim/s; (ii) consultation on compensation amount; (iii) approval of compensation amount; (iv) compensation payment to bank accounts; (v) handover ceremony; and (vi) compensation receipt form and Release of Liability.

PNPC/SKEC have signed an agreement with the Provincial Disaster Management Committee for a total Compensation cost of **475 billion KIP** (which is equivalent to **55.9 million USD** at an exchange rate of 8,500 KIP/USD).

2.1 FATALITIES

- The official and final number of dead and missing publicly announced by the Deputy Prime Minister was 71. Corresponding death certificates were issued for each fatality.
- Compensation payment for the fatalities was based on USD10,000 per deceased. PNPC completed total compensation payment of **710,000 USD** in June 2019.

2.2 ORPHANS

- The final number of orphaned was 28. These are children who lost either one of their parents, and among them are 3 orphans who lost both parents.

- Compensation payment was based on Lao Law of 1,100,000 kip per month until the child reaches 18 years old. PNPC completed total compensation payment of **293,000 USD** in June 2019.

2.3 7 MAJOR IMPACTED VILLAGES

- PNPC has completed compensation payment of 50% of initial claim amounts to each household, as per request of claimants, while claims were being verified and assessed. Compensation payment in the total amount of **5.7 million USD** was completed in July 2019.
- Compensation payment for the final settlement amount is under process. Claims have been assessed by GOL/PNPC and consultation meetings conducted in each of the 7 major impacted villages to explain the compensation amount.
- Compensation payment for the final settlement amount are expected to be remitted to HH bank accounts in July 2020.

Photos: Handover Ceremony for 50% Compensation Payments to 7 Major Impacted Villages.



2.4 13 MINOR IMPACTED VILLAGES

- PNPC has completed consultation and MOM agreement on final settlement amounts. Compensation payment of **3.4 million USD** for 13 out of 13 minor impacted villages.
- PNPC has completed payment of the agreed final settlement amount in 11 out of 13 minor impacted villages (889 HHs) with a total compensation payment amount of **2.0 million USD** in May 2020 after consultation and MOM on final settlement amount.
- PNPC is in the progress of making the compensation payment for the remaining 2 out of 13 (381 HHs) minor impacted villages. Compensation payment handover of **1.4 million USD** will be completed in June 2020.

Photos: Consultations with HHs to explain and agree on compensation amounts.



Photos: Handover Ceremony of Compensation Payments to 13 Minor Impacted Villages.





2.6 PUBLIC INFRASTRUCTURE

- PNPC/SKEC signed an agreement with the PDMC on the final settlement amount of **8.7 million USD** for Public Infrastructure compensation (roads, schools, etc.).
- Conducted a handover ceremony for the compensation payment of **0.39 million USD** to three (3) telecommunications companies.
- The remaining compensation payments for Public Infrastructure will be made in-line with the GOL/PNPC payment schedule to reflect progress of the construction for Public Infrastructure in the new permanent villages.

Photos: Handover ceremony of compensation payments to the telecommunications companies.



2.7 ENVIRONMENT

- PNPC and GOL reached a final settlement agreement on the compensation for the Environmental claim with a total of **9.8 million USD**, as follows:
 - **2.3 million USD** to repair damages to agricultural lands.

- **3.0 million USD** to repair damage to rivers/streams.
- **4.5 million USD** for damages to the forest and reforestation works.
- GOL and PNPC agreed that the compensation payment for agricultural lands and river/streams (*i.e. total 5.3 million USD*) will be included in the first payment after MPI approval. This compensation payment is expected to be made in July 2020.

2.8 SUMMARY OF COMPENSATION PAYMENTS

- PNPC/SKEC signed an agreement with the Provincial Disaster Management Committee for the total Compensation cost of **55.9 million USD**.
- PNPC has completed compensation payments of **21 million USD** out of the agreed final settlement amount of **55.9 million USD**. That is around 40% of compensation payments have already been made and settled.
- With each compensation payment and final settlement, PNPC is receiving a Release of Liability from each claimant.
- PNPC expects to pay the remaining compensation for individual households before the end of July 2020.
- PNPC expects to pay the remaining compensation for activities linked to rehabilitation and construction of new villages (*i.e. Public Infrastructure and Environment*) before the end of December 2020 and in-line with construction schedule.

Table 1: Summary of Compensation Payments.

Division		Final Amount (mUSD)
Compensation	1. Deceased & Orphans	1.0
	2_1. Family Section_ House	11.5
	2_2. Family Section_ Others	13.7
	1) 7 Village	10.3
	2) 13 Village	3.4
	3. Business	11.2
	4. Infrastructure	8.7
	5. Environment	9.8
	1) Agricultural land (Mud cleaning)	2.3
	2) Forest	4.5
	3) River & Pond	3.0
	Sum	55.9

3. REHABILITATION

Pursuant to the Law on Disaster Management, the Prime Ministers Decision established a Provincial Disaster Management Committee (PDMC) to develop and implement the post disaster rehabilitation plan (i.e. “Master Plan”). PNPC/SKEC have worked closely with each provincial department to agree on the rehabilitation activities and their costs.

PNPC/SKEC have signed an agreement with the Provincial Disaster Management Committee for total Master Plan of **521 billion KIP** (which is equivalent to **61.4 million USD** at exchange rate of 8,500 KIP/USD). Out of the total, **19.8 million USD** will be funded by insurance proceeds from the claim and **41.6 million USD** will be funded by SKEC shareholder loan agreement. The Master Plan will be implemented by PDMC and subject to auditing by GOL.

Table 2: Summary of Master Plan.

Division		Final Amount (mUSD)
Master Plan	1_1. DPWT_ House	13.0
	1_2. DPWT_ Others	7.9
	2. DAFO	6.9
	3. DES	0.4
	4. DLSW	8.8
	5. DEM	4.3
	6. Health	0.3
	Sum	41.6
Total ✂ Exchange Rate : 8,500 LAK/USD		97.5

3.1 REHABILITATION OF KHOKKONG AND THA OUAN

The houses in the villages of Ban Khokkong and Tha Ouan were impacted by mud deposits but no structural damages. SKEC mobilized equipment and labor to clean the houses to allow evacuees to return to their houses/villages.

- Cleaning of Khokkong and Tha Ouan was completed and all HHs returned home.
- Post-cleaning inspection was conducted by GOL, PNPC/SKEC, village authorities and villagers themselves.

Photos: Example of house prior to cleaning (left) and after cleaning (right) the mud deposits.



3.2 REHABILITATION FOR ENVIRONMENT AND OLD VILLAGE AREAS

PNPC and GOL agreed on **9.8 million USD** to compensate for Environmental damages.

- Prior to wet season 2019, SKEC mobilized equipment (i.e. tractors) and labor to start removal of mud deposits in the fields to allow villagers to grow rice.
- Prior to wet season 2020, GOL have mobilized 16 contractors to clear mud deposits from streams/rivers, village urban areas, and rice fields.

- Removal of mud deposits and levelling in villages and rice fields.
- Cleared mud and dead trees from streams to allow natural flow.
- Large trees processed for timber, small non-commercial trees stockpiled for burning.
- Cleared mud was used to backfill a depression eroded by the wash-out.
- Removal of mud deposits in the villages and rivers/streams completed.
- Rehabilitation of fields is expected to be completed before rice planting season.
- GOL allocated **1.8 million USD** for future reforestation activities to help replace forest lost during the wash-out.

Photos (clockwise): clearing mud deposits from (i) streams; (ii) Thasengchanh; (iii) Hinlath and (iv) rice fields.



3.3 PERMANENT VILLAGES

PDMC policy is to construct four new villages to accommodate five major impacted villages:

- The new permanent village areas were surveyed and village layouts designed.
- UXO clearing and land clearing has been 100% completed.
- **2.8 million USD** to construct internal roads which are completed in 3 out of 4 villages.
- To provide secure tenure for households, the GOL have divided 958 home plots in the new villages and issued official land ownership certificates for 538 home plots. Issuance of land certificates is still ongoing

Table 3: Progress of UXO and land clearing for villages and new agricultural lands.

No	Location	Area (ha)	Villages for	Land clearing		UXO clearing	
				Company by	Progress	Company by	Progress
1	Dong Bak	120	Main/Thahin	Heungmixay Co.Ltd	100%	UXO LAO	100%
2	Done Bok	60	Tasengchanh	Bounthavonezup & Southipasong Co.,Ltd	100%	NPA	100%
3	Tamoryot	70	Hinlath	Phameung Co.,Ltd	100%	UXO LAO	100%
4	Pindong	56	Samoung-tai	Douangdy Co.,Ltd	100%	UXO LAO	100%
①	Hinlath zone	510.13	New Agricultural land	11 companies	90%	UXO UNEOD	100%
②	Tasengchanh zone	138.95	New Agricultural land	4 companies	96%	UXO UNEOD	100%
③	Samoung-tai zone	468.09	New Agricultural land	6 companies	100%	Phanveela UXO	100%
④	Dong Bak zone	632.83	New Agricultural land	26 companies	100%	UXO UNEOD	100%

Photos: Aerial view of the new Ban Mai/Thahin village (left) and UXO clearing of village area (right).



3.4 PUBLIC INFRASTRUCTURE

PNPC/SKEC agreed to fund the following Public Infrastructure through the funding of the Compensation and Master Plan:

- **1.5 million** for construction and equipping kindergarten schools; primary schools and one secondary school – almost completed.
- **0.35 million USD** health center and doctors' accommodation and extension of an existing health center completed.
- **1.2 million USD** to construct a new temple to reflect their religious beliefs - pending.

- **2.6 million USD** to install water supply and water distribution systems each of the new villages – to commence in June 2010
- **0.7 million USD** to install electricity supply and facilities to the public buildings – ongoing.
- **0.4 million USD** to construct a market and bus station for better access – pending.
- **0.5 million USD** to construct a village halls to hold consultation – completed.
- **0.4 million USD** for a warehouse in each village for donation distribution and storage of materials for village rehabilitation – completed.
- **0.3 million USD** for a garbage incinerator for sanitation in the new villages - pending

Photos (clockwise): kindergarten school; primary school; secondary school; new school in use; health center; doctors' accommodations; village hall and warehouse.





3.5 PERMANENT HOUSES

- PNPC/SKEC agreed with the PDMC to fund **24.5 million USD** for the construction of 700 new permanent houses as part of the Master Plan.
- The GOL developed four house design types based on the house designs in the old village. The new house designs and sizes are better than the baseline conditions.
- In total, 811 new permanent houses will be constructed:
 - 700 funded by PNPC/SKEC;
 - 45 funded by Government of Thailand (85% progress);
 - 66 funded by Japan-Lao/UN-Habitat (35% progress).
- PDMC have entered into a contract with a company to construct the new 700 houses funded through the Master Plan:
 - The construction company is currently mobilizing to the site.
 - Construction is scheduled to commence in June 2020 and take 20 months to complete.
- The amount includes **2.1 million USD** for the installation of electricity supply and electricity facilities in the houses.

Table 4: Progress in the construction of new permanent houses.

Description	Donation		PNPC/SKEC	Total P-House (Houses)
	*GOT	Japan-Lao / UNHABIT		
Plan Houses	45	66	700	811
Completed	38.12	22.58	-	60.70
Progress	84.7%	34.2%	0%	7.5%

*GOT : Government of Thailand (Increased 36 to 45)

Photos: Comparison between wooden houses in the old villages and new house designs for the new villages.



Photos: Newly constructed permanent houses in the new villages and traditional house blessing.





3.6 LIVELIHOOD RESTORATION

PNPC/SKEC agreed to the funding of the following livelihood restoration activities through the Master Plan:

- **6.9 million USD** for the rehabilitation and improvement of the irrigation systems. Contractor is currently mobilizing to site and construction expected to commence in June 2020.
- **3.4 million USD** for land clearing of over 2,100 ha for new agricultural lands. Completed.
- **4.9 million USD** for UXO clearing of over 2,100 ha of new agricultural lands. Completed.
- **2.3 million USD** for the rehabilitation of existing rice fields with mud deposits. Rehabilitation works are ongoing and expected to be completed before wet season 2020.
- **70,000 USD** for construction of an agricultural demonstration center for livelihood development.
- In addition to PNPC funding of livelihood activities through the Master Plan, KOICA agreed to an **11 million USD** funding support for health, education and livelihood activities in Sanamxay.

3.7 ROADS & BRIDGES

Construction of eleven (11) new bridges after one bridge washed away with the surge and several old wooden bridges have limited capacity on Road 18A.

- 10 out of 11 bridges have been completed (4 under SKEC funding).

Photos: Photographs of 2 new bridges funded by SKEC.



4. SUMMARY OF COMPENSATION AND REHABILITATION

4.1 GLOBAL SETTLEMENT

- In November 2019, the Insurers transferred the global settlement amount of USD 49,954,000 into the PNPC bank account which is controlled by Lenders.

4.2 OVERAL COMPENSATION AND MASTER PLAN AGREEMENT

- On 10 April 2020, ATP GOL and PNPC/SKEC signed the MOM on the Agreement (MOA) on the amounts for Compensation and Master Plan:
 - Final settlement amount is **828 billion KIP** (*equivalent to 97.5 million USD*).
 - The signing ceremony was conducted with Provincial Governor, Vice Provincial Governor, PNPC COO and SKEC Project Director.
 - Each of the Provincial Departments (i.e. PWT, DAFO, etc.) counter-signed their final settlement amounts.
- ATP GOL and PNPC/SKEC are now negotiating the payment schedule.
 - PNPC/SKEC and ATP GOL have agreed in-principle which work items to be included in the first payment after MOA signing
 - Payment to be made after MPI endorsement of the MOA

Table 5: Overall final settlement for Compensation and Master Plan (million USD).

Division		Final Amount (mUSD)
Compensation	1. Deceased & Orphans	1.0
	2_1. Family Section_ House	11.5
	2_2. Family Section_ Others	13.7
	1) 7 Village	10.3
	2) 13 Village	3.4
	3. Business	11.2
	4. Infrastructure	8.7
	5. Environment	9.8
	1) Agricultural land (Mud cleaning)	2.3
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	2. DAFO	6.9
	3. DES	0.4
	4. DLSW	8.8
	5. DEM	4.3
	6. Health	0.3
	Sum	41.6
Total		97.5
✘ Exchange Rate : 8,500 LAK/USD		

Photo: Signing ceremony for the final settlement amount for Compensation and Master Plan.

