



## **Planned Lao Bauxite Mine and Refinery Raises Serious Human Rights and Ecological Questions**

July 2020

### **Overview**

*On the Bolaven Plateau of Champasak Province in southern Laos, increasing expansion of agribusiness and hydropower schemes over recent decades has led to the dispossession of communities and loss of land relied upon as a critical source of sustenance by local peoples. It is here that Thai and Chinese business actors appear to be investing in the establishment of bauxite ore extraction operations. Although cabinet ministers of the Lao Government issued an advisory statement in mid-2019 suggesting mining should be restricted in this area,<sup>1</sup> as of mid-2020, it appears that this particular bauxite project may be delayed – but not subject to cancellation. As the following briefing note indicates, if these initial plans to extract and export ore from the Bolaven Plateau move forward, at stake would be both the social and economic well-being of people as well as the health of surrounding ecologies.*

### **Project Location**

The main mining project proposed on the Plateau is associated with the Sino-Lao Aluminum Company (SLACO), a joint Thai-Chinese-Lao venture that has a fifty-year concession to explore and extract bauxite ore before refining it into alumina for export.<sup>2</sup> The concession spans an area of 135km<sup>2</sup>, located in close proximity to the Dong Hua Sao and Xe Pian National Protected Areas. Surrounding watersheds feed into the transboundary Sekong River; forming part of the “3-S River” system (Sekong, Sesan and Srepok) that flows southwards into Cambodia. The planned site is also directly adjacent to an operating hydropower project where the collapse of a structurally unstable section of the dam in 2018 caused the deaths of over 70 people and the displacement of thousands living in villages downstream (who have remained housed in temporary camps since the incident).<sup>3</sup> In contrast, although some sections of SLACO’s initial hauling roads were also affected by the structural collapse, all necessary repairs were promptly

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<sup>1</sup> Asia News Network, “Vientiane Times: Laos to preserve Bolaven Plateau as green development zone” (23 Aug 2019): <[annx.asianews.network/content/laos-preserve-bolaven-plateau-green-development-zone-102508](http://annx.asianews.network/content/laos-preserve-bolaven-plateau-green-development-zone-102508)>.

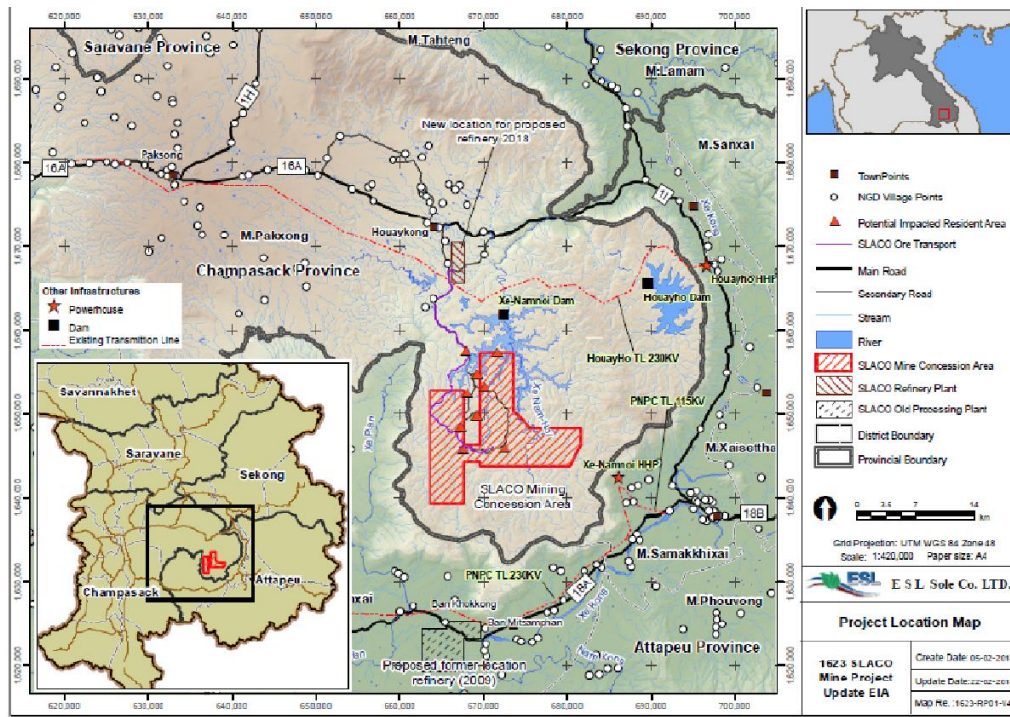
<sup>2</sup> SLACO, “Company Profile” (2020): <http://en.slacolaos.com/company-profile>>.

<sup>3</sup> ESL Sole Ltd., “SLACO Bauxite Mining Project ESIA: Chapter 1,” p. 1- 7 (2018): <[slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](http://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>. See also: International Rivers, Inclusive Development International and Mekong Watch, Press Release: 2 Years after Lao Dam Collapse, Call for Persists (23 July 2020): <[www.internationalrivers.org/resources/press-release-two-years-after-lao-dam-collapse-call-for-justice-persists-20617](http://www.internationalrivers.org/resources/press-release-two-years-after-lao-dam-collapse-call-for-justice-persists-20617)>.

made.<sup>4</sup> Meanwhile, as of mid-2020, no evidence-based verification is publicly available to ascertain the current status of the dam’s structural stability.

As a result, the social and ecological risks of bauxite mining here extend across the border, into Cambodia, most particularly if there were to be water-borne leaching from the open pit mine or toxic tailings ponds and/or widespread airborne contamination from mineral processing.

### Location of SLACO Mining Concession and Refinery Area<sup>5</sup>



### Main Project Proponents and Known Financiers

SLACO is a joint Thai-Chinese-Lao venture formed in 2007. According to the company’s website, updated as of 2020, it is composed of the Bangkok-based Italian Thai Development (ITD) with a 34% share, the Chinese-Thai investor Ruoychai International Investment Group/Reignwood International Group with a 33% share (acting as the holder of the project’s business license), and Lao Services Incorporated (LSI)<sup>6</sup> holding the remaining shares. LSI has legal ownership of the land concession tenement and is majority owned by the Aluminum Corporation of China

<sup>4</sup> SLACO, “News: The Road to SLACO’s Bauxite Mine,”(Nov. 2018): <[en.slacolaos.com/the-road-to-slacos-bauxite-mine/](http://en.slacolaos.com/the-road-to-slacos-bauxite-mine/)>.

<sup>5</sup> ESL Sole Ltd., “SLACO Bauxite Mining Project ESIA: Chapter 1” (2018): <[https://slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](https://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>.p. 1-7.

<sup>6</sup> SLACO, “Company Profile” (2020): <http://en.slacolaos.com/company-profile>.

Limited (or “CHALCO”)<sup>7</sup> – with no Lao shareholder disclosed. China’s CHALIECO Shenyang Aluminum and Magnesium Design and Research Institute Co. Ltd. (CHALIECO SAMI) holds the engineering and procurement contract. Both CHALCO and CHALIECO are subsidiaries of the Aluminum Corporation of China (CHINALCO), effectively making CHINALCO a key partner joining ITD and Ruoychoi/Reignwood as project proponents.<sup>8</sup> However, further specifics about SLACO’s corporate structure, particularly in relation to associations with Lao private or state investments, remain opaque and not publicly available.

According to company news releases, Thailand’s Bangkok Bank Company Ltd. appears to be among the major providers of financial backing.<sup>9</sup> No other specific financiers or minority shareholders are known as of mid-2020.

### **Project Plans**

When the initial environmental and social impact assessments were completed in 2009 for the SLACO mining and refinery complex, the Government of Laos reportedly flagged approximately fifty items of concern to be resolved by the company.<sup>10</sup> Rather than first addressing authorities’ questions, the company moved ahead with initial construction and preparatory work.<sup>11</sup> However, further project delays led to it being put on hold indefinitely.

A revised and updated Environmental and Social Impact Assessment (ESIA) was eventually submitted and approved by the Government of Laos’ Department of Natural Resources ten years later, in December 2018. Minor design modifications included a company decision to shift the original proposed location of the refinery to be in closer proximity to the mine, and the integration of a start-up phase followed by a secondary period when output could be expected to double.<sup>12</sup>

Accordingly, the plans consist of:

- excavating an open-pit mine,

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<sup>7</sup> Aluminum Corporation of China Ltd., “SEC Form 20-F: Annual and transition report of foreign private issuers” (19 April 2018): <<https://sec.report/Document/0001161611-18-000020/>>.

<sup>8</sup> Aluminum Corporation of China Ltd., “About the Company: Company Profile”: <[http://www.chalco.com.cn/chalcoen/gsgk/qyjj/A130101web\\_1.htm](http://www.chalco.com.cn/chalcoen/gsgk/qyjj/A130101web_1.htm)>; China Aluminum International Engineering Corporation Limited, “About the Company: Company Overview”: <[http://www.chalco.com.cn/zlgien/gywm/gsjj/A070101web\\_1.htm](http://www.chalco.com.cn/zlgien/gywm/gsjj/A070101web_1.htm)>.

<sup>9</sup> SLACO, “SLACO’s Project Finance Seminar at Italthai Tower 41<sup>st</sup> floor” (November 2018): <<http://en.slacolaos.com/slacos-project-finance-seminar-at-italthai-tower-41st-floor>>.

<sup>10</sup> Lazarus, K. In Search of Aluminum: China’s Role in the Mekong Region (HBF Cambodia, IISD, and WWF: 2009): <[https://www.boell.de/sites/default/files/In\\_Search\\_of\\_Aluminum.pdf](https://www.boell.de/sites/default/files/In_Search_of_Aluminum.pdf)> . p. 31.

<sup>11</sup> Lazarus, K. In Search of Aluminum: China’s Role in the Mekong Region (HBF Cambodia, IISD, and WWF: 2009): <[https://www.boell.de/sites/default/files/In\\_Search\\_of\\_Aluminum.pdf](https://www.boell.de/sites/default/files/In_Search_of_Aluminum.pdf)> . p. 31.

<sup>12</sup> ESL Sole Ltd., “SLACO Bauxite Mining Project ESIA: Chapter 1” (2018): <[https://slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](https://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>. pp. 1-3; 1-4.

- extracting and crushing the bauxite ore,
- disposing of tailings waste ('red mud') in a designated slimes pond and overflow zone,
- transporting this material along hauling roads to a new refinery plant for producing alumina from the bauxite,
- smelting the alumina for export preparation, and finally,
- hauling the refined materials via road/rail to Thailand for eventual shipping onwards from the Laem Chabang port (after being processed at the ITD Industrial Complex terminal).

To power the refining and smelting process, SLACO will develop new coal-fired facilities (with coal likely sourced from mines in Cambodia);<sup>13</sup> secondary sources of energy include existing hydropower sources. In terms of location, the refinery and smelter sites are located not far from Nya Heun/Heuny indigenous communities. Already, they have been subjected to land impoverishment and livelihood uncertainties as a result of the development of the Xe Pian-Xe Namnoy Hydropower Project.<sup>14</sup> Yet, no known discussion has taken place with them to explain the impacts of the associated thermal coal plants, let alone to seek their consent for any aspect of the planned refinery/smelting and coal complex. Neither is there any project document available that indicates proponents have taken into account associated cumulative impacts on peoples' health and surrounding ecologies.

### **Lack of Disclosed Plans**

As of May 2020, no details about the refinery or smelter have been disclosed publicly, while only one summary chapter of the Environmental and Social Impact Assessment for the mining operations has been posted online by the company, along with a brief overview of the expected transportation process to Thailand's Laem Chabang Port, updated as of March 2019.

Over a decade ago, in 2008, Lao Government officials requested the company submit a full community and /or land acquisition and compensation plan as well as information about how any resettlement issues arising would be managed.<sup>15</sup> Despite there being an absence of details on how the company will support affected communities<sup>16</sup> or handle the impacts on the surrounding forest and riparian ecosystems, official clearance to move ahead with the project was provided by Lao authorities in 2018. Since then, project proponents have held various

<sup>13</sup> Lazarus, K. In Search of Aluminum: China's Role in the Mekong Region (HBF Cambodia, IISD, and WWF: 2009): <[www.boell.de/sites/default/files/In\\_Search\\_of\\_Aluminum.pdf](http://www.boell.de/sites/default/files/In_Search_of_Aluminum.pdf)> . pp. 17, 24.

<sup>14</sup> ESL Sole Ltd., "SLACO Bauxite Mining Project ESIA: Chapter 1" (2018): <[slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](http://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>.p. 1-7.

<sup>15</sup> Lazarus, K. In Search of Aluminum: China's Role in the Mekong Region (HBF Cambodia, IISD, and WWF: 2009): <[www.boell.de/sites/default/files/In\\_Search\\_of\\_Aluminum.pdf](http://www.boell.de/sites/default/files/In_Search_of_Aluminum.pdf)> . p 31.

<sup>16</sup> For example, the chapter of SLACO's ESIA that is posted online provides a summary of expected benefits for local people but does not provide corresponding information about how the company would take precautionary steps to minimize negative impacts or resolve them. ESL Sole Ltd., "SLACO Bauxite Mining Project ESIA: Chapter 1" (2018): <[slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](http://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>.p. 1-11.

meetings with provincial and local authorities, including discussions with them on how “to get rid of the poor life of the local people”.<sup>17</sup>

As of late 2019, company staff were reported to be in the process of trying to negotiate compensation and land/housing losses for villages in the surrounding areas of the hauling roads and combined refinery-smelter complex (see below). However, the mining concession encompasses areas currently relied upon for swidden agriculture and gathering non-timber forest products by many families from nearby communities. To date, these households have been effectively excluded from any similar form of project-facilitated negotiation process.<sup>18</sup>

### **Further Associated Risks: Track Record of Bauxite Mining and Refineries in Vietnam**

Within the Mekong region, comparable large-scale bauxite mining and alumina smelting complexes in operation for which sufficient information exists to draw conclusions, include the Tan Rai and Nhan Co. projects in the Central Highlands of Vietnam. Both of these projects are joint ventures operated by state companies in partnership with CHINALCO’s CHALIECO,<sup>19</sup> and as a result, share the same subsidiary as the SLACO investment.

Among the key issues at these sites in Vietnam as published online in local press between 2014 and late 2019, are:

- instances of leaks of corrosive sodium hydroxide fluid (used for washing the bauxite in preparation for refining) and wastewater into surrounding soil and rivers that have

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<sup>17</sup> SLACO, “News: The provincial and central stage was held”(October 2019): <[en.slacolaos.com/the-provincial-and-central-stage-was-held/](http://en.slacolaos.com/the-provincial-and-central-stage-was-held/)>.

<sup>18</sup> In the published ESIA Summary Chapter, SLACO asserts that the mining concession area encompasses land originally belonging to people from 5 villages, but that all residents have been duly compensated and resettled by the XePian-XeNamnoy Hydropower Project. See: ESL Sole Ltd., “SLACO Bauxite Mining Project ESIA: Chapter 1” (2018): <[slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](http://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>. p 1-6. However, the consolidated resettlement site of the XePian-XeNamnoy project has been widely reported as a place where people experience chronic hunger, dire shortages of water, an absence of basic infrastructure (including latrines and pumps) and land impoverishment. As a result, many families’ survival depends on harvesting food and non-timber forest products from areas encompassed by SLACO’s concession. See for ex: Mekong Watch, “Factsheet: XePian-XeNamnoy Hydropower Project” (March 2020): <[www.mekongwatch.org/PDF/FS-XPXNN.pdf](http://www.mekongwatch.org/PDF/FS-XPXNN.pdf)>.

<sup>19</sup> See for ex: Environmental Justice Atlas, “Tan Rai Bauxite Mining in Central Highlands, Vietnam” (Aug 2016): <[ejatlas.org/conflict/tan-rai-bauxite-mining-in-central-highlands-vietnam](http://ejatlas.org/conflict/tan-rai-bauxite-mining-in-central-highlands-vietnam)> ; VN Express , “‘Unprecedented’ corrosive chemical leak at Vietnam alumina refinery”(4 August 2016) : <[e.vnexpress.net/news/news/unprecedented-corrosive-chemical-leak-at-vietnam-alumina-refinery-3447432.html](http://e.vnexpress.net/news/news/unprecedented-corrosive-chemical-leak-at-vietnam-alumina-refinery-3447432.html)>.

caused (i) mass fish deaths in local watersheds and (ii) nearby residents to report severe skin rashes/irritations<sup>20</sup>;

- nauseating emissions causing respiratory illnesses, chronic nasal inflammation, and eye irritations for people in the surrounding communities<sup>21</sup>;
- shortages of local clean water for daily use in nearby residential areas<sup>22</sup>;
- soil, vegetables and orchards contaminated, rendered uncultivable by alumina dust<sup>23</sup>;
- erosion, severe subsidence and unprecedented landslides in areas previously relied upon for small-scale subsistence farming<sup>24</sup>;
- equipment for environmental monitoring being dysfunctional or not on site/in use and an absence of safety checks on site, including for waste discharges, as well as
- red mud tailings ponds built but not in use/functional.<sup>25</sup>

At least some, if not many, of these consequences could be foreseeable on the Bolaven Plateau if the SLACO mining, refinery and smelter complex moves forward. In the absence of regulatory mechanisms, government oversight or inspections, as well as of opportunities for monitoring by media, community members or independent non-profit groups in Laos, the possibilities to hold project proponents to account for the resulting impacts on the well-being of people and the environment remain highly limited at best.

### **Community Concerns**

According to the discussions the company had with local and provincial representatives as well as the information about the project's development online, SLACO suggests that their operations will not only support local shops through the demands of their (non-local) workforce, but that they will also hold technical courses to develop their employees, while sponsoring local health services as well as support for school facilities.<sup>26</sup> Budget and timeline commitments as well as specificities of material support remain publicly undisclosed.

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<sup>20</sup> VN Express , "'Unprecedented' corrosive chemical leak at Vietnam alumina refinery"(4 August 2016) : <[e.vnexpress.net/news/news/unprecedented-corrosive-chemical-leak-at-vietnam-alumina-refinery-3447432.html](http://e.vnexpress.net/news/news/unprecedented-corrosive-chemical-leak-at-vietnam-alumina-refinery-3447432.html)>.

<sup>21</sup> Tuoi Tre/Tuoi Tre News, "Sickness, foul smell from bauxite mining mar Vietnam province" (17 Sept 2014): <[tuoitrenews.vn/features/22495/sickness-foul-smell-from-bauxite-mining-mar-vietnam-province](http://tuoitrenews.vn/features/22495/sickness-foul-smell-from-bauxite-mining-mar-vietnam-province)>

<sup>22</sup> Tuoi Tre/Tuoi Tre News, "Sickness, foul smell from bauxite mining mar Vietnam province" (17 Sept 2014): <[tuoitrenews.vn/features/22495/sickness-foul-smell-from-bauxite-mining-mar-vietnam-province](http://tuoitrenews.vn/features/22495/sickness-foul-smell-from-bauxite-mining-mar-vietnam-province)>

<sup>23</sup> Tuoi Tre/Tuoi Tre News, "Sickness, foul smell from bauxite mining mar Vietnam province" (17 Sept 2014): <[tuoitrenews.vn/features/22495/sickness-foul-smell-from-bauxite-mining-mar-vietnam-province](http://tuoitrenews.vn/features/22495/sickness-foul-smell-from-bauxite-mining-mar-vietnam-province)>

<sup>24</sup> Viet Nam News, "Authorities vow to find cause of land collapse near aluminum factory"(1 Oct 2019) <[vietnamnews.vn/environment/524490/authorities-vow-to-find-cause-of-land-collapse-near-aluminum-factory.html](http://vietnamnews.vn/environment/524490/authorities-vow-to-find-cause-of-land-collapse-near-aluminum-factory.html)>.

<sup>25</sup> Viet Nam News, "Lâm Đồng plant's equipment degraded" (5 March 2018): <[vietnamnews.vn/society/423700/lam-dong-plants-equipment-degraded.html](http://vietnamnews.vn/society/423700/lam-dong-plants-equipment-degraded.html)>

<sup>26</sup> ESL Sole Ltd., "SLACO Bauxite Mining Project ESIA: Chapter 1" (2018): <[slacolaos.com/wp-content/uploads/2018/10/Mining\\_ESIA\\_Ch.01\\_Introduction\\_V1.1.pdf](http://slacolaos.com/wp-content/uploads/2018/10/Mining_ESIA_Ch.01_Introduction_V1.1.pdf)>.p. 1-11.

However, communities near the areas designated for new hauling roads, refinery construction and excavation zones remain unconvinced by these promises. After becoming more aware of the project proposal moving forward, they began raising concerns about the fate of their livelihoods over the course of 2018/19. By November 2019, community spokespeople were in the process of reaching out to National Assembly members and the provincial governor to call for the planned mining operations to be cancelled, so that they can retain their land and ways of life. A response from government officials is still pending.

At the time of writing, the three most directly impacted villages have not accepted offers of compensation or land purchases that would give the right of way or land access to SLACO. They collectively assert that they cannot move anywhere nearby if they are to survive because all other land in the vicinity has already been subsumed by plantations, dams or resettlement zones with no space to sustain their families. Four other communities in the surrounding areas have been offered compensation once the company finishes building the refinery. They, too, believe their livelihoods, health and well-being would be at risk if the mining development moves forward.

Together, villagers from these areas are asking for clear information in their own languages about the project and for clarity on how the company intends to avoid contaminating surrounding land, air and waterways. For now, they say it is their collective hope to continue to live there without facing the risks to their survival that would be brought by the imposition of bauxite mining operations – and for this assertion of life to be conveyed abroad.

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