



THE DIRTY WORK OF **BANPU:**

WHAT THAI INVESTMENT IS DOING IN INDONESIA

MARCH 2016

GREENPEACE



This Greenpeace investigation and report shows how the coal mining industry in East Kalimantan Province has destroyed the landscape and damaged ground water quality. All this has happened with the support of local government, which has licensed this destruction. The latest data suggests about 75% of East Kalimantan has been assigned for coal mining.

According to Distamben Data of East Kalimantan, 218 out of 407 companies have begun mining operations; the other 189 companies are still in the exploratory phase. Kutai Barat Regency alone has issued 268 licenses; 51 companies are already mining, while the remaining 217 are still carrying out feasibility studies.¹ One of the biggest operators is a company based in Thailand - Banpu.

Greenpeace's findings are based on site investigations in two locations in East Kalimantan, and one in South Kalimantan. In East Kalimantan, our investigating team recorded the destruction caused by the mining and the impact it has had on the landscape, with the creation of dozens of artificial lakes.

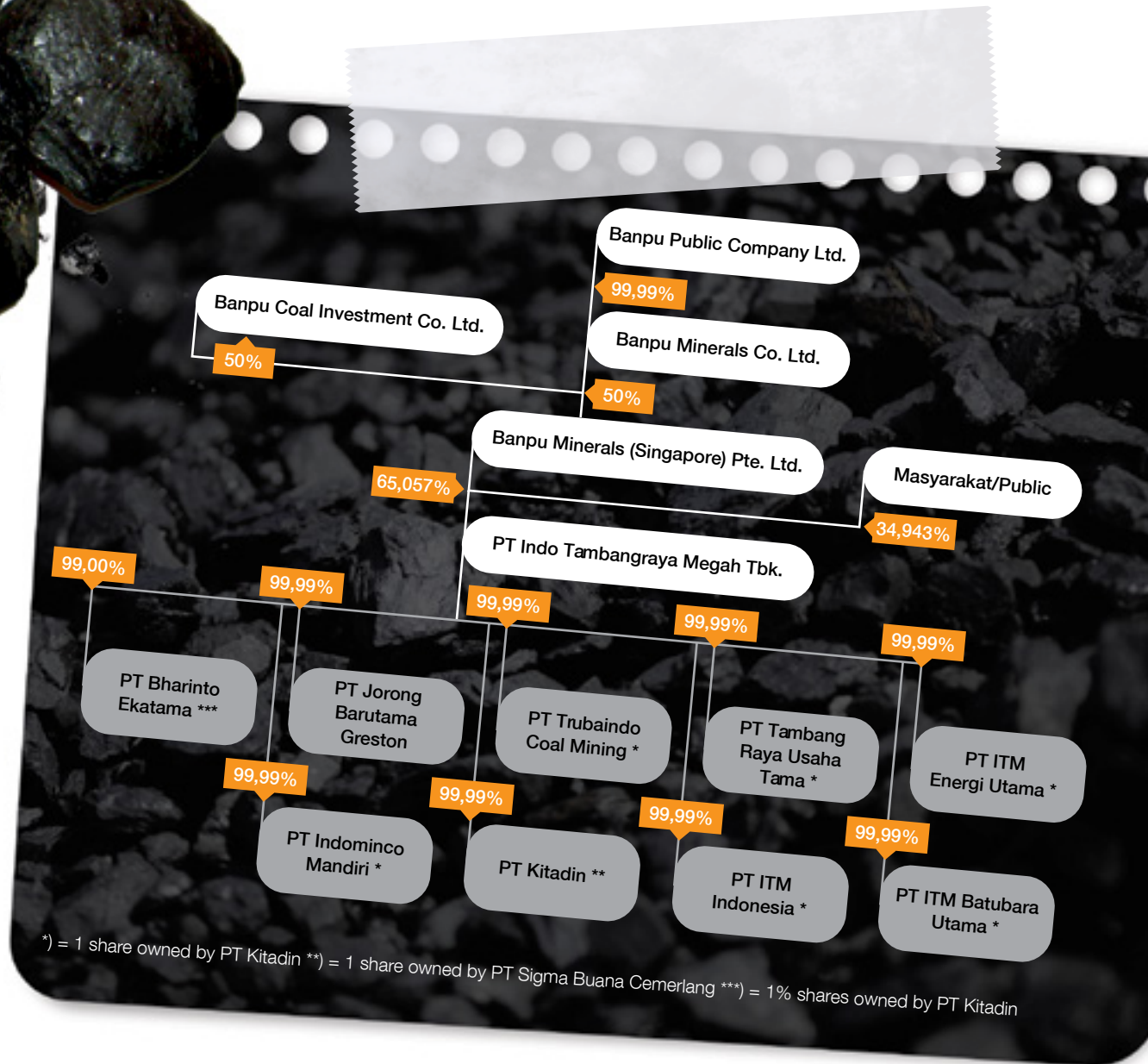
To make matters worse, these artificial lakes are now a source of drinking water for the local communities. whose land has been encircled by the coal mines. The irrigation system which once fed their fields has also been affected by the mining; in the dry season, the farmers find it difficult to irrigate their land, while in the rainy season, they find their fields – and even their homes - flooded by water overflowing from the artificial lakes.

¹ <http://pertambangan.kaltimprov.go.id>

I. BANPU GROUP'S DIRTY WORK IN KALIMANTAN

Banpu Public Company Ltd (“Banpu”) is a listed company on the Thailand Stock Exchange. Its principle activity is energy – coal-mining, power-generation and alternative energy. It aims to become a leading company in Asia, and is expanding its business operations in Thailand, China, Australia, Laos, Mongolia, Singapore and Japan.

Banpu Group is a coal company – coal-mining and coal-fired power plants make up more than 93% of its revenues.^{2,3} And Indonesia is critical to Banpu’s business. It’s where nearly two thirds of its mining is carried out. In fact, Banpu is one of the largest coal producer in Indonesia.



*) = 1 share owned by PT Kitadin **) = 1 share owned by PT Sigma Buana Cemerlang ***) = 1% shares owned by PT Kitadin

2 Banpu Public Company Limited, Annual Report 2014
 3 Banpu Public Company Limited, 3Q2015 Results Highlight

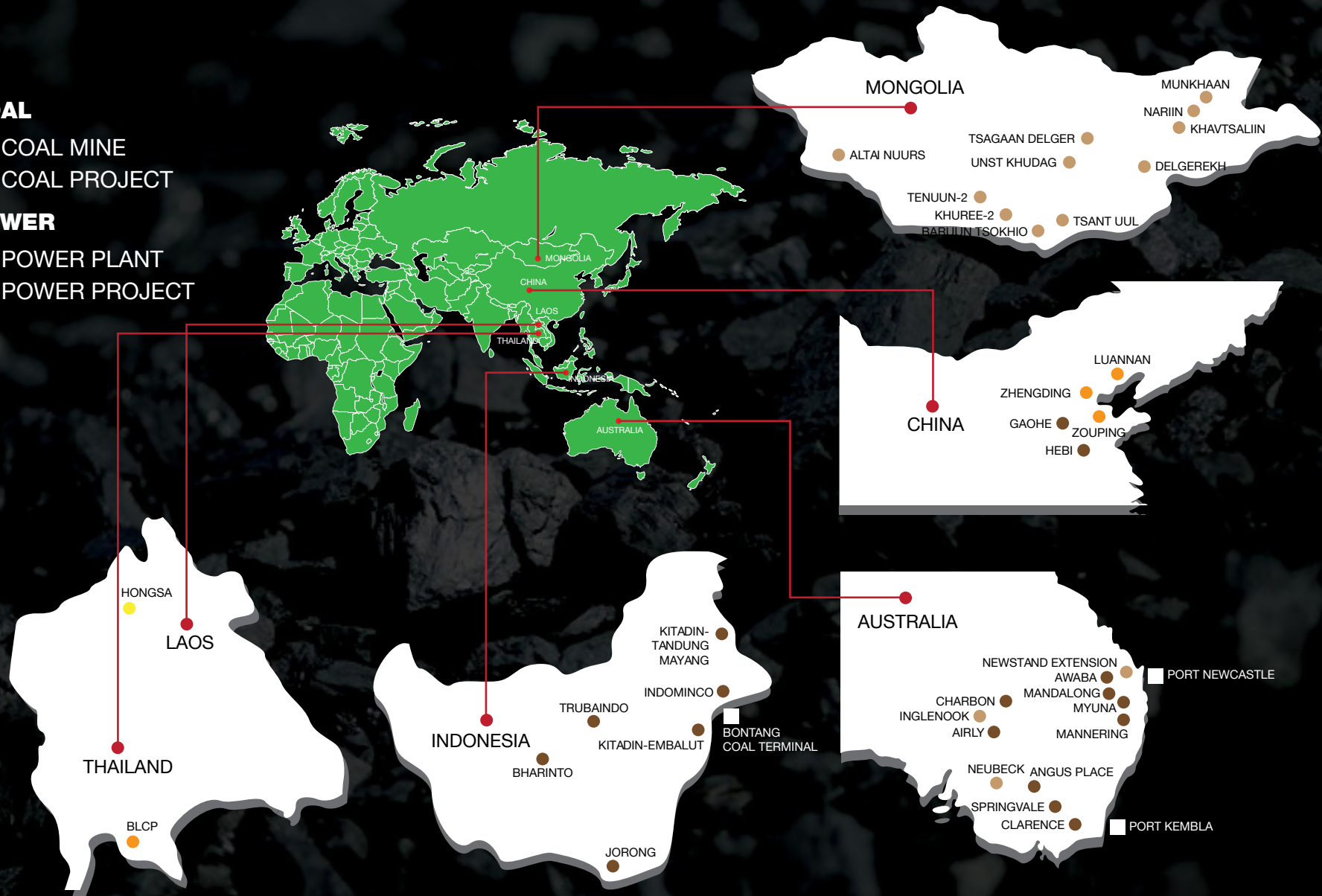
Picture 1. Banpu’s share ownership structure

COAL

- COAL MINE
- COAL PROJECT

POWER

- POWER PLANT
- POWER PROJECT



Source: modified from http://www.banpu.com/en_operation.php

Picture 2. Banpu's operation in Asia & Australia

Banpu's business in Indonesia is run by a subsidiary company, PT Indo Tambangraya Megah Tbk ("ITM"), which is listed on the Indonesian Stock Exchange. ITM controls a number of other companies operating across Kalimantan. In 2014, ITM produced 29.1 million tonnes of coal, both for the Indonesian market and for export – in particular, to Thailand. ⁴

Its mining operations, particularly in East Kalimantan and South Kalimantan, show the deep and lasting scars that Banpu has left on the landscape – from cleared forests to polluted water and contaminated land.

4 Annual Report PT ITM Year 2014



Coal mining concession in
Kutai Kartanegara, East Kalimantan
Image@greenpeace

II. EMBALLUT: WHERE GREEN LANDSCAPES ARE ONLY A MEMORY

About 12 kilometres from Kutai, in East Kalimantan, there is a village with a rich Balinese culture, brought there by the 250 families who moved to Kerta Buana in 1980 to join the government transmigration program, and settled alongside local people from other tribes.

Despite years of mixing and inter-marrying between the different tribes, the village retains its Balinese culture, with its Hindu-Bali rituals and customs. Most of the villagers are farmers who turned the fertile surrounding region into productive agricultural land, sustaining the 5,000 people in the village.

Swamps were drained and the land was cleared. Through the hard work of the villagers, Kerta Buana village became one of the major rice producers in East Kalimantan.



*Pura Dalem, a places of worship for Hindus in Kerta Buana village. The background picture shows the proximity with coal mining operation.
Image@greenpeace*

THEN THE COAL MINING COMPANIES CAME

Not far from Kerta Buana is another village, Bangun Rejo. It looks like a semi-abandoned wasteland. Once it had a population of nearly 10,000 spread over four hamlets. Now only two hamlets are left. The land is now in the hands of PT Kitadin mining, a subsidiary of ITM.

When PT Kitadin began its mining operations, farmers soon found their harvests were affected. So when PT Kitadin offered



Coal mining concession in Kutai Kartanegara,
East Kalimantan
Image@greenpeace

to buy their land, many sold and moved to local cities. **Caring for the land is central to Balinese culture and selling it was a bitter blow.** Those who stayed in the countryside soon found that the money they had made from selling their land ran out, and they were forced to become labourers on other people's land.

As the farmers left the land and the village, Bangun Rejo began to die.

What happened in Bangun Rejo haunts the head of Kerta Buana village. I Nyoman Derman, the chairman of the local farmers' group, fears that his village will share the same fate.

THE SLOW DEATH OF KERTA BUANA VILLAGE

The roar of mining operations is like a threat bearing down on Kerta Buana village. I Nyoman Derman can only gaze despairingly at the mines as he remembers his struggle against the mining company.

Nyoman was one of the Balinese farmers who moved to Kerta Buana in 1980. He worked with the other farmers to prepare the land for planting with rice.



For years, Nyoman says, Kerta Buana thrived as the swamp was drained and the land prepared, ready for rice to be planted. Then in 2000, PT Mahakam Sumber Jaya (MSJ, Harum Energi Group) started mining on land to the north of the village.

The company began by building roads so it could transport the coal. The roads soon created problems for the villagers, when their farms began to flood.

“When it rains, the rice paddies flood with water,” says Nyoman. “The water flow is not smooth, but rushes off the surface of the road.”

Soon after, the company approached villagers offering to buy their land. Nyoman and some other farmers refused to sell, preferring to put up with the flooding rather than give up their land.

“After the mining began, the villagers held a demonstration because the mining was happening in the area which is the source of water for our farms,” says Nyoman.

The mining companies ignored the villagers’ protests and continued their operations. More and more of Kerta Buana’s land was swallowed up by the mining, as another mining company, PT Kitadin (a subsidiary of ITM) began operations to the south of the village.

A number of farmers gave up the struggle, and sold their land. But not Nyoman. He continued to protest against the mining and was arrested, accused of stirring up the protests.

Nyoman spent three months in prison at the end of 2003 for



trying to defend his land against the mining. But worse was to come. His wife was travelling to visit him in prison when she was killed in a traffic accident. His fate seemed to deter other villagers from continuing their protests.

“When I got out of prison, the demonstrations had stopped,” says Nyoman. “People were too scared to continue the protests.”

Nyoman can now only watch as the heavy mining equipment moves in, destroying the farmland which he and others had worked so hard to cultivate.

“We can’t farm the land like we used to, it’s hard to produce food at all. We don’t produce enough to sell our rice, it’s difficult enough just to survive until harvest.”

“I pray that the mining will stop, that the pits will be filled in and the land given back to the people. But I am afraid that there is no hope for our future here.”

Kerta Buana village, in Kutai Kartanegara- East Kalimantan, circled by the coal mines Image©greenpeace

THE CHOKING EMBRACE OF THE MINE PITS

Currently, about half of the agricultural land in Kerta Buana village, amounting to approx. 700 hectares, has been lost to mining concessions. To the east and south of the village are active mining areas; to the north is mines which no longer in use, leaving the abandoned mining pits⁵

PT Kitadin is the company responsible for the mining around Kerta Buana village, and that around the neighbouring village of Embalut.

⁵ Interviews with the local community confirms that half of the agricultural land in Kerta Buana has been lost to mining concessions. The Statistical Bureau officially reported that remaining of 796 ha of harvesting paddy fields (Statistical Bureau Kutai Kartanegara Regency. 2015. Kecamatan Tenggarong Seberang Dalam Angka. <http://kukarkab.bps.go.id/index.php/publikasi/19>), Another information from Penyuluh Pertanian Lapangan (field agricultural officer) state that approx. 700 ha has been converted to coal mine.

Kerta Buana village, in Kutai Kartanegara- East Kalimantan

Image©greenpeace

PT. Kitadin constructed a canal that channel the water discharge out from the mining settling pond to the nearby river. The canal pass through the middle of the village.

Consequently during heavy rain the discharge water overflowed houses and paddy fields. The villager reported that the discharge water from this mining operation looks turbid and oily at times (see Figure 3)

FLOOD AND DROUGHT

Since 2003, the villagers of Kerta Buana have been complaining about the flooding which damages their crops. It's an area which is very dependent on controlled irrigation, carried out in the traditional Balinese way.

In January and February, when the rainy season is at its peak, the villagers say the artificial lakes left by the mining operations overflow, and flood the rice fields with what they believe is contaminated water. The drainage channel built by PT Kitadin runs right through the village, so when that overflows the villagers' homes are flooded.

PT Kitadin-built canals and drainage channels passing through Kerta Buana village and paddy fields. When heavy rains fall, the waste from the mining operations, including waste oil and vehicle fuel, overflows into the rice fields polluting the crop **

If the rainy season brings the risk of floods, in the dry season the farmers cannot plant their rice as the irrigation system dries up. The water which should feed the irrigation system is instead



Community's water wells. When the coal mine starts, the community experienced difficulty in getting water, as the risk of ground water level drops.
Image©greenpeace



trapped in the abandoned mine pits, while the farmers' fields dry up in the sun.

Before the mining began, the farmers could rely on two crops a year and harvested as much as ten tons of rice. Now, they get only one crop and the rice yields have dropped to four tons.

With their traditional irrigation system disrupted by the mine pits, some farmers are now using the artificial lakes for irrigation water. But the water in these lakes is not suitable for irrigation, and the farmers find they are having to use more and more lime fertiliser as the quality of the land deteriorates.

So in both the wet and dry season, the farmers say they suffer from the impact of the mining operations – because the mining takes the water when it is dry, and causes flooding when it is wet.

BUYING DRINKING WATER

In the 1980s, when the villagers first came to Kerta Buana, they had to dig down only 3-5 metres to reach fresh ground water. Today they have to dig 10-20 metres. Many people now have to buy drinking water.

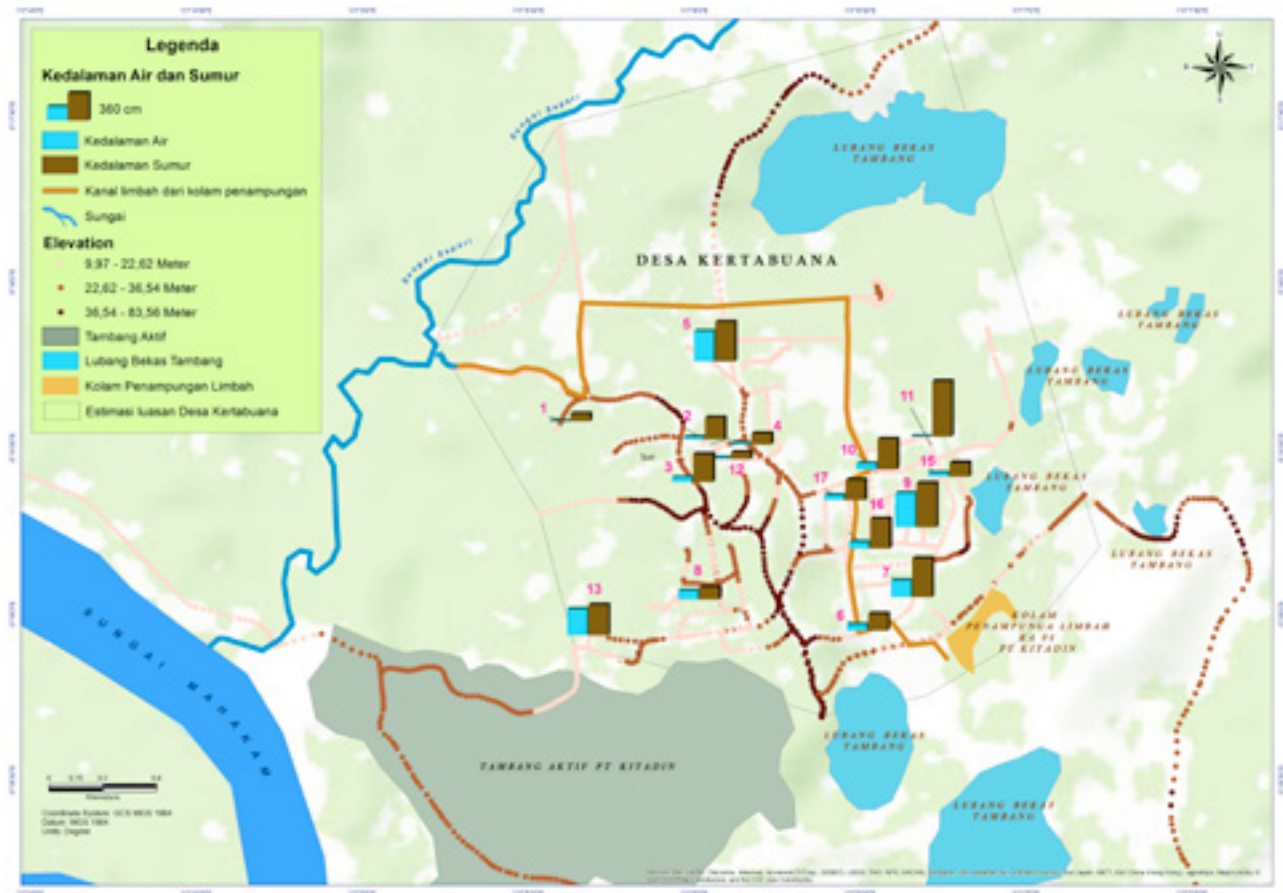
THE COAL MINING COMES, THE WATER LEAVES

Kertabuana is a little village surrounded by moonscape. Ever since the area was turned into coal mining sites, the community experience more difficulty in getting water. The ground water that they consume for their daily household needs may become runoff into the deeper ex-pit mine. In this map, only surface water were measured. However, in several places, some community reported that they had to dig as deep as 20 meter for water and use pump.

To make matters worse, the ex-pit mine is now made as one of the source of drinking water for the local communities whose land has been encircled by the coal mines.

The irrigation system which once fed their fields has also been affected by the mining; A channel pass through the middle of the village, starting from the coal wastewater settling pond aiming to reach the river (see Orange line). In rainy season, the channel would overflow to land of the villagers.

Thus in the dry season, the farmers find it difficult to irrigate their land, while in the rainy season, they find their fields – and even their homes – flooded.



III. THE ABANDONED LAND MINE PIT



In Jorong and Tanah Laut Regency in South Kalimantan, the landscape is covered with abandoned mining pits. The pits have just been left by PT Jorong Barutama Greston, another subsidiary of Banpu, after it finished its mining operations. What was once rich Kalimantan forest now looks like a barren moonscape.

From a distance, the artificial lakes created in the pits shimmer with colours: But the water inside contains hazardous, and in some cases toxic, metals which the acidic water dissolves from the soil and rock in this area. The metals have the potential to pollute the land and pose health risks to the local people.

One of the pits is huge, 2 km wide. A Greenpeace investigation in 2014 revealed that the water in the lake was acidic, with pH value of 3.74, and manganese level above discharge standards.

6 Greenpeace Indonesia. Revealed : Coal Mining Pollutes South Kalimantan Water, November 2014.



A leak was detected at this site (pH 4.4)

A huge acid ex-mine pit (pH 3.74) of 2 km

Coal Mine Concession of PT. Jorong Barutama Greston, subsidiary of ITM, Banpu Group. Image@greenpeace

Yet there was an uncontrolled and unregulated discharge of acid water next to the pit.

Other mining pits in the area were also revealed to be very acidic, with pH values ranging from 3.15 to 4.66.⁶

Coal mining operations in Jorong not only destroy the landscape; they also damage the many creeks and rivers flowing through the area.

IV. INDOMINCO - THE STORY OF GREED



PT Mandiri Indominco is the largest subsidiary company of Banpu Group in Indonesia.

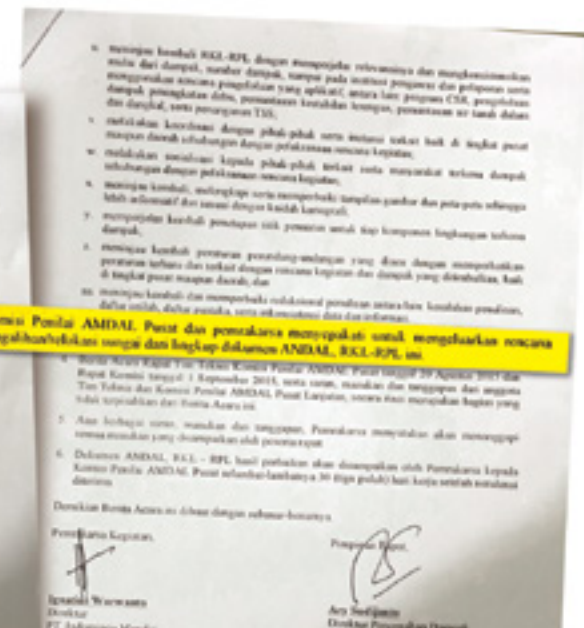
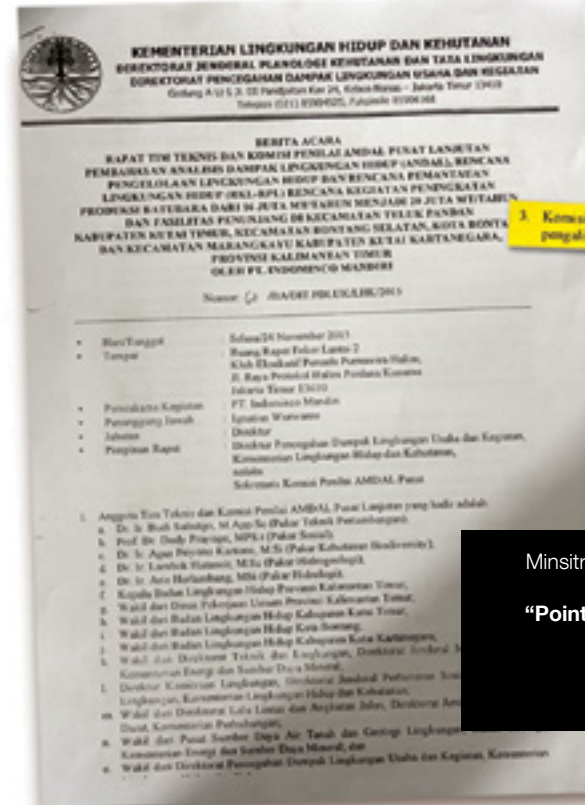
It has ambitions to expand, and is targeting the Santan river area. PT Indominco Mandiri's plans in the Santan river area would affect three rivers – the Santan, the Kare and the Pelakan.

The company's plans ignore the fact that the rivers are critical to the lives of local people. They use them for transport, but more importantly for clean water, for fishing and for irrigation.

Ever since PT Indominco Mandiri began mining operations in areas upstream of the Santan River, the villagers began to notice that the water quality deteriorated, with a direct impact on the life of the local community. The villagers first noticed that the water looked different; then the fish started dying and people complained of feeling itchy when they used the water for bathing. They soon stopped using the water for drinking or cooking.

Worse was to come, when they discovered that PT Indominco planned to divert the river so that it could mine on the river bed.

The villagers were outraged. They had already suffered from the mining operations upstream; now the river itself was at risk, along with their fishing livelihoods.



Ministry of Environment and Forestry notice No.: 61/BA/DIT.PDLUK/LHK/2015, which states: **“Point 3. Commission of AMDAL/Environmental Impact Analysis (EIA) agrees to omit the plan of river relocation from the documents of ANDAL, RKL-RPL”**

The provincial government of East Kalimantan had issued the required permits for PT Indominco's operations, and had failed to protect the villagers. So they appealed to the Ministry of Forests, asking the ministry to stop the river diversion plan. After years of struggle, the villagers finally triumphed when on 12th February 2016, the Ministry of Environment and Forestry (KLHK) withdrew the approval for coal mining activity in the Kare and Pelakan rivers, citing the impact it would have on the social and economic lives of local people.

It was a rare victory against the mining companies. But the villages remain vigilant. PT Indominco Mandiri still has permission to increase its production in the area, and the rivers remain at risk from the mining operations up-stream.

The company is also re-submitting its Environmental Impact Analysis (EIA) to the ministry. The rivers of East Kalimantan are not yet safe.

CONCLUSION

The Greenpeace investigation in East Kalimantan and South Kalimantan demonstrates the harmful effect of coal mining operations on the land and local communities – damage that is likely to endure for many years to come.

Land Dredging for Coal Mining

The excavation of the land for open-cast coal mining has destroyed the landscape, and left it pock marked with artificial lakes – which are then abandoned when the coal mining ends. These lakes have interrupted the natural flow of ground water, so the villagers find it hard to get water in the dry season, but are flooded with run-off from the lakes when it rains.

Plan to Increase Coal Production

Despite the falling price of coal and the destruction wrought by the mines, several companies are trying to increase their production in the area – even proposing to divert the natural course of a local river. This plan has been defeated, for now. But the threat is not over. The coal company still plans to increase production, and its proposal is still on the table. Coal mining operations upstream of Santan River have already had an impact on the river's ecosystem, damaging the livelihoods of the surrounding community. If coal production is allowed to increase, the impact on the river and the lives of local people can only get worse.

Cover :

Kerta Buana village in East Kalimantan is a small village surrounded by moonscape. The community is increasingly pressured by Banpu Coal mining activities. The excavation of the land for open-cast coal mining has destroyed the landscape, and left it pock marked with artificial lakes – which are then abandoned when the coal mining ends. These lakes have interrupted the natural flow of ground water.
Image@greenpeace

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We thank you Monalisa and our colleagues at JATAM East Kalimantan.

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