Collaboration on the Sumatran Tiger Conservation program

Description of the Program

This program is based on the urgent need to protect the Sumatran tiger. In implementing this program, PT Agincourt Resources (PTAR) has collaborated with the Persmahuna Bodhicitta Mandala Medan Foundation (YPBMM), which works in partnership with the North Sumatra Natural Resources Conservation Agency (Balai Besar KSDA). PTAR actively contributes to the conservation of the Sumatran tiger by providing support and assistance to the Barumun Sumatran Tiger Sanctuary.

The "Collaboration on the Sumatera Tiger Conservation Program," which has been implemented since 2020, has yielded positive outcomes. A total of 12 Sumatran tigers have been successfully rescued and cared for through this activity, and 5 of them have been successfully released back into their natural habitat. This success shows that the program provides significant benefits in the rescue and rehabilitation of Sumatran tigers.

The success of this program is crucial for conserving the endangered population of Sumatran tigers and protecting this species, which is legally protected. The measures taken under the framework of the "Collaboration on the Sumatran Tiger Conservation Program" have had a positive impact on the Sumatran tiger population and its conservation efforts.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of Sumatran tigers successfully conserved. In this program, the Biodiversity Index is not calculated because only one species (Sumatran tiger) is being conserved.

Absolute Calculation in year N **= The number of Sumatran tigers successfully conserved**

Absolute in 2025 = 13 individuals

No	Local Name	Scientific Name	Number of Individuals Successfully Conserved					
			2020	2021	2022	2023	2024*	2025*
1	Sumatran Tiger	*Panthera Tigris Sumatrae*	6	7	11	12	12	13

*Data from January to June 2025

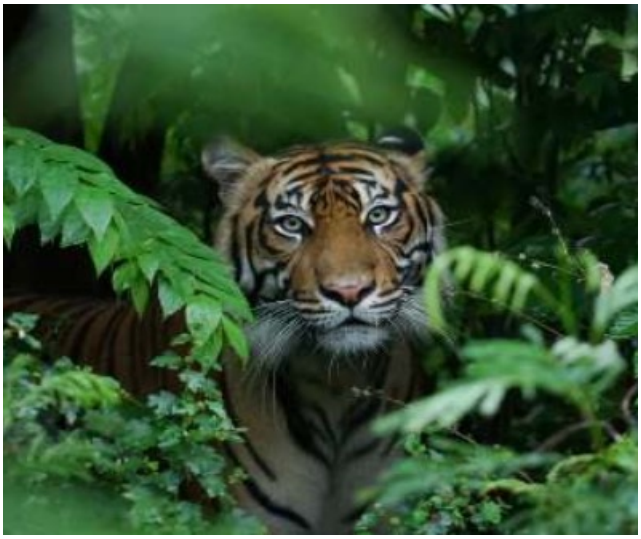
Pre-Program Scheme

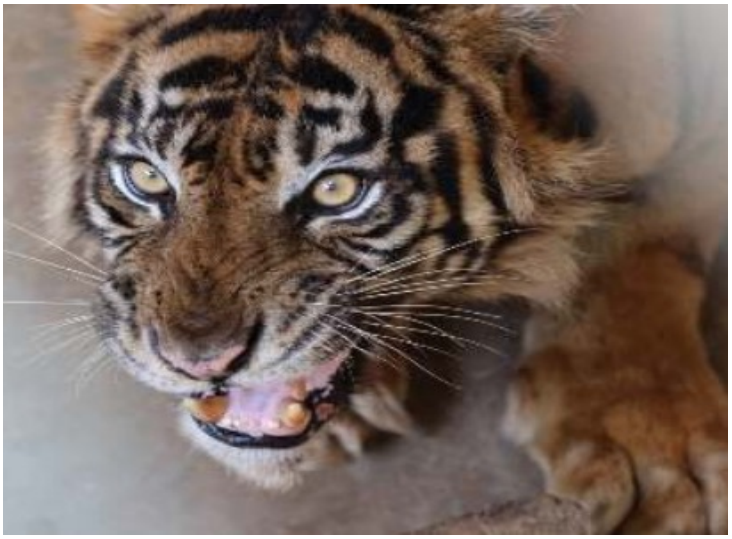
There are Sumatran tiger species in the conservation area → **Optimal protection for the Sumatran tiger species has not yet been implemented**

Post-Program Scheme

There are Sumatran tiger species in the conservation area → **PT Agincourt Resources collaborates with the Persmahuna Bodhicitta Mandala Medan Foundation (YPBMM).** → **Sumatran tigers have been successfully rescued and cared for**

Documentation of the Program





River Revitalization Through Lubuk Larangan in Batuhoring Village

Description of the Program

One of PTAR's efforts in implementing biodiversity protection is through the "River Revitalization through the Lubuk Larangan Batuhoring village " program. This program aims to preserve the traditional Lubuk Larangan practice and promote the breeding of jurung fish, an endemic species of South Tapanuli, as a form of river ecosystem and biodiversity conservation.

Lubuk Larangan is considered a local wisdom that has a strong influence on traditional practices of nature conservation and in protecting rivers from pollution, damage, or excessive exploitation. Lubuk larangan is a collective customary policy aimed at raising community awareness in preserving local fish species that are becoming increasingly rare in rivers, particularly the jurung fish species. For a certain period of time, the community is prohibited from catching fish and river biota so that fish fry can develop well.

The community agreed to be responsible for preserving the fish and conserving the river. This commitment was strengthened by the drafting of village regulations containing prohibitions and sanctions for those who violate them, until the Lubuk Larangan is eventually opened and the community is allowed to harvest fish there. Through Batuhoring Village Regulation Number 01/141/DTD/V/2022 concerning Lubuk Larangan, efforts to protect biodiversity, especially in aquatic ecosystems, can be carried out.

With this legal basis, the conservation of the jurung fish can also be carried out. The jurung fish, an endemic species of South Tapanuli, must be continuously preserved to maintain its population. Thru this activity, the community around the river received education on the cultivation and care of the jurung fish. By 2023, the number of jurung fish fry released into the Batu Horing River reached 10,000.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of jurung fish conserved. In this program, the Biodiversity Index is not calculated, since only one species (jurung fish) is being conserved.

Absolute Calculation in year N **= The number of jurung fish fry released into the river**

Absolute in 2024 = 0 individuals

No	Local Name	Scientific Name	Number of Fish Fry Released (individuals)			
			2022	2023	2024*	2025*
1	Jurung fish	*Neolissochilus Thienemanni*	5.000	0	3.000	0
2	Carp fish	*Cyprinus carpio*	10.000	0	0	0

*Data from January to June 2025

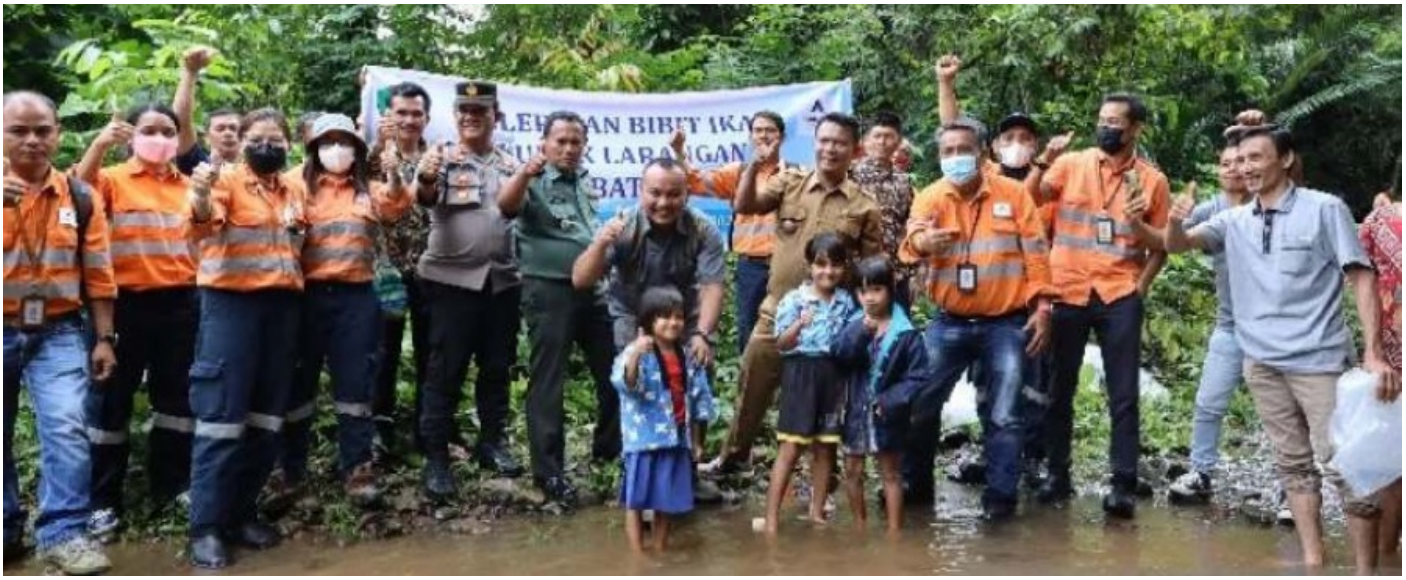
Pre-Program Scheme

River Ecosystem in Batuhoring Village → **Pollution, damage, or overexploitation has occurred in the river**

Skema Sesudah Program

River Ecosystem in Batuhoring Village → **River revitalization in Batuhoring Village is carried out through Lubuk Larangan by providing jurung fish fry.** → **Jurung fish, an endemic species of South Tapanuli, is being conserved to maintain its population**

Documentation of the Program



River Revitalization Through Lubuk Larangan in Garoga Village

Description of the Program

PTAR carries out biodiversity conservation efforts through the "River Revitalization Through Lubuk Larangan in Garoga Village" program. This program aims to preserve the traditional Lubuk Larangan practice and increase the population of jurung fish, an endemic species of South Tapanuli, as a concrete measure to maintain the sustainability of the river ecosystem and its biodiversity.

Lubuk Larangan is regarded as a form of local wisdom that has a positive impact in upholding traditional nature conservation practices and in preserving the river from pollution, damage, and overexploitation. Lubuk Larangan is a customary regulation that involves community participation in conserving local fish species, particularly the jurung fish, which is becoming increasingly rare in the river. During certain periods, the community is prohibited from catching fish and other aquatic organisms, allowing fish populations to thrive.

In order to preserve biodiversity in the aquatic ecosystem, the local community has agreed to take responsibility for fish and river conservation. This agreement is reinforced through the establishment of village regulations that stipulate prohibitions and sanctions for those who violate the rules. Ultimately, once an adequate condition is reached, the Lubuk Larangan will be opened, and the community will be allowed to fish there. This is formalized through the Village Regulations.

Garoga Village Regulation Number 05 of 2022 concerning Lubuk Larangan for the Conservation of Fish in the Garoga River Area, which enables efforts to protect the aquatic ecosystem.

With this legal basis, the conservation of jurung fish can also be carried out. The jurung fish, an endemic species of South Tapanuli, must continue to be conserved to maintain its population. Through this activity, jurung fish fry released into the Garoga River reached 3,000 individuals in 2022.

Metode Perhitungan Absolut:

The absolute calculation represents the cumulative number of jurung fish conserved. In this program, the Biodiversity Index is not calculated, since only one species (jurung fish) is being conserved.

Absolute Calculation in year N **= The number of jurung fish fry released into the river**

Absolute in 2024 = 0 individuals

No	Local Name	Scientific Name	The number of jurung fish fry released (individuals)			
			2022	2023	2024*	2025*
1	Jurung fish	*Neolissochilus Thienemanni*	5.000	0	0	0
2	Carp fish	*Cyprinus carpio*	12.000	2.800	2.500	0

*Data from January to June 2025

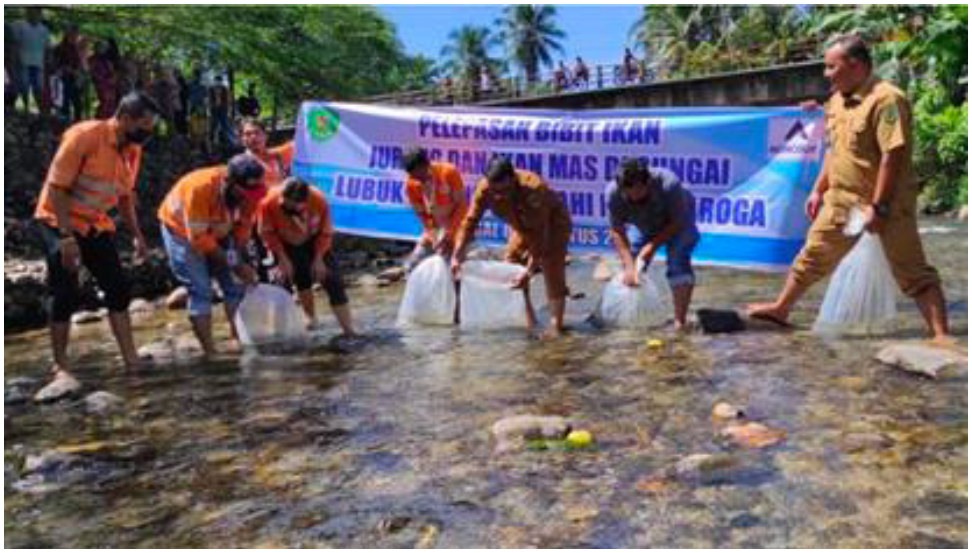
Pre-Program Scheme

River Ecosystem in Garoga Village → Pollution, damage, or overexploitation has occurred in the river

Post-Program Scheme

River Ecosystem in Garoga Village → River revitalization is carried out through Lubuk Larangan by providing jurung fish fry → Jurung fish, an endemic species of South Tapanuli, is being conserved to maintain its population

Documentation of the Program



River Revitalization Through Lubuk Larangan in Batuhula Village

Description of the Program

PTAR carries out biodiversity conservation efforts through the "River Revitalization Through Lubuk Larangan in Batuhula Village" program. This program aims to preserve the traditional Lubuk Larangan practice and increase the population of jurung fish, an endemic species of South Tapanuli, as a concrete measure to maintain the sustainability of the river ecosystem and its biodiversity.

Lubuk Larangan is regarded as a form of local wisdom that has a positive impact on upholding traditional nature conservation practices and preserving the river from pollution, damage, and overexploitation. It is a customary regulation that involves community participation in conserving local fish species, especially the jurung fish, which is becoming increasingly rare in the river. During certain periods, the community is prohibited from catching fish and other aquatic organisms, allowing the fish population to thrive.

To maintain biodiversity in the aquatic ecosystem, the local community has agreed to take responsibility for fish conservation and river preservation. This agreement is reinforced through the establishment of village regulations that specify prohibitions and sanctions for violators. Ultimately, once adequate conditions are reached, Lubuk Larangan will be opened, and the community will be allowed to fish there. Jurung fish, an endemic species of South Tapanuli, must continue to be conserved to ensure its population remains stable.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of jurung fish conserved. In this program, the Biodiversity Index is not calculated, since only one species (jurung fish) is being conserved.

Absolute Calculation in year N **= The number of jurung fish fry released into the river**

Absolute in 2025 = 3.000 individuals

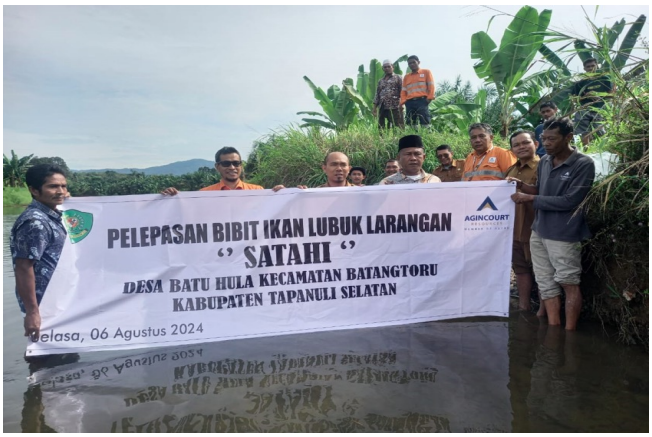
No	Local Name	Scientific Name	The number of jurung fish fry released (individuals)			
			2022	2023	2024*	2025*
1	Jurung fish	*Neolissochilus Thienemanni*				3.000
2	Carp fish	*Cyprinus carpio*			1.200	0
3	Parrot Fish	*Oreochromis niloticus*			700	0

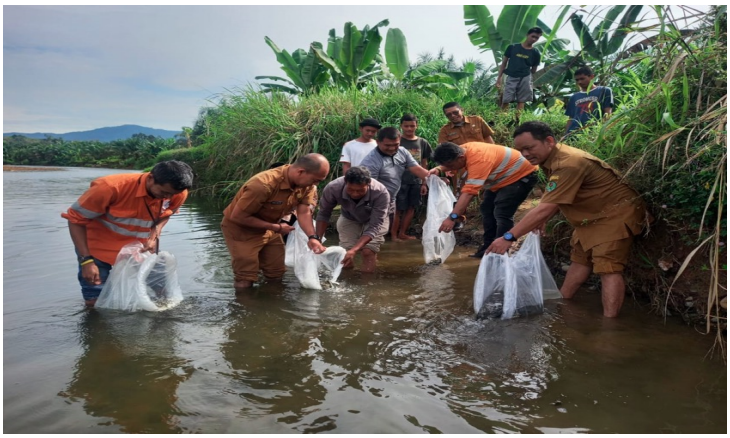
*Data from January to June 2025

Pre-Program Scheme

Post-Program Scheme

Documentation of the Program





River Revitalization Through Lubuk Larangan in Hapesong Baru Village

Description of the Program

PTAR carries out biodiversity conservation efforts through the "River Revitalization Through Lubuk Larangan in Hapesong Village" program. This program aims to preserve the traditional Lubuk Larangan practice and increase the population of jurung fish, an endemic species of South Tapanuli, as a concrete measure to maintain the sustainability of the river ecosystem and its biodiversity.

Lubuk Larangan is regarded as a form of local wisdom that has a positive impact on upholding traditional nature conservation practices and preserving the river from pollution, damage, and overexploitation. It is a customary regulation that involves community participation in conserving local fish species, especially the jurung fish, which is becoming increasingly rare in the river. During certain periods, the community is prohibited from catching fish and other aquatic organisms, allowing the fish population to thrive.

To maintain biodiversity in the aquatic ecosystem, the local community has agreed to take responsibility for fish conservation and river preservation. This agreement is reinforced through the establishment of village regulations that specify prohibitions and sanctions for violators. Ultimately, once adequate conditions are reached, Lubuk Larangan will be opened, and the community will be allowed to fish there. Jurung fish, an endemic species of South Tapanuli, must continue to be conserved to ensure its population remains stable.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of jurung fish conserved. In this program, the Biodiversity Index is not calculated, since only one species (jurung fish) is being conserved.

Absolute Calculation in year N **= The number of jurung fish fry released into the river**

Absolute in 2024 = 5.000 individuals

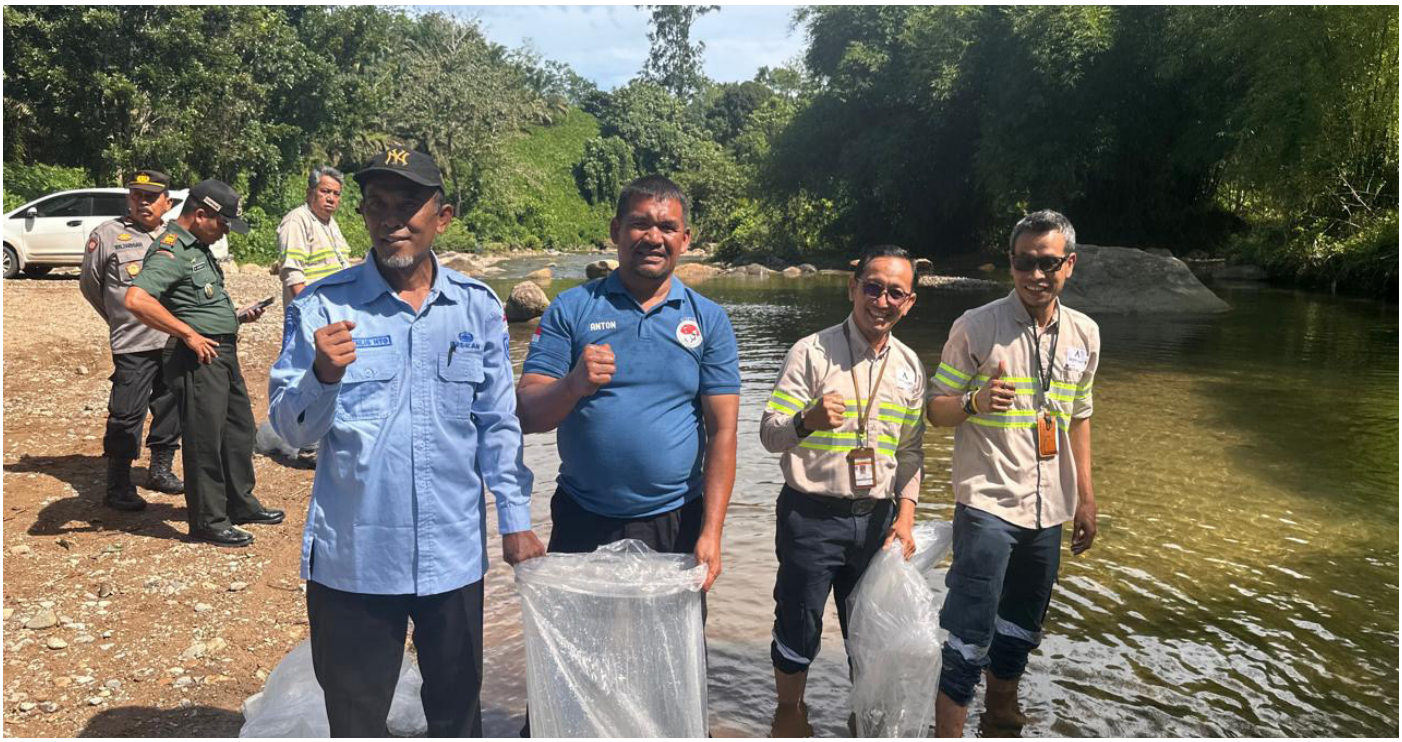
No	Local Name	Scientific Name	The number of jurung fish fry released (individuals)			
			2022	2023	2024*	2025*
1	Jurung fish	*Neolissochilus Thienemanni*				5.000
2	Carp fish	*Cyprinus carpio*			700	
3	Parrot fish	*Oreochromis niloticus*			5.700	
4	Gourami fish	*Osphronemus gouramy*			1.500	

*Data from January to June 2025

Pre-Program Scheme

Post-Program Scheme

Documentation of the Program



Conservation of Jurung Fish (*Neolissochilus thienemanni*) as an Endemic Species of South Tapanuli in Sumuran Village

Description of the Program

PT Agincourt Resources carries out biodiversity conservation efforts through the program "Conservation of Jurung Fish (Neolissochilus thienemanni) as an Endemic Species of South Tapanuli." This program aims to preserve the traditional local wisdom of Lubuk Larangan by raising awareness on how to cultivate Jurung fish to increase their population and by educating the community in Sumuran Village on river ecosystem conservation.

The program has a positive impact in safeguarding traditional nature conservation practices and in protecting the river from pollution, degradation, and overexploitation, particularly in Sumuran Village. The community has committed to caring for and protecting the fish, with a prohibition on catching fish or other aquatic organisms within the Lubuk Larangan area, with the expectation that after one year, the fish can be harvested through a ticketed fishing system.

With this regulatory foundation, Jurung fish conservation can be effectively implemented and must continue to be preserved to maintain population stability. Through this activity, 7,000 Jurung fish fry were released into the river in 2024.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of jurung fish conserved. In this program, the Biodiversity Index is not calculated, since only one species (jurung fish) is being conserved.

Absolute Calculation in year N **= The number of jurung fish fry released into the river**

Absolute in 2025 = 0 individuals

No	Local Name	Scientific Name	The number of jurung fish fry released (individuals)		
			2023*	2024*	2025*
1	Jurung fish	*Neolissochilus Thienemanni*	7.000		
2	Carp fish	*Cyprinus carpio*	1600	2.500	0

*Data from January to June 2025

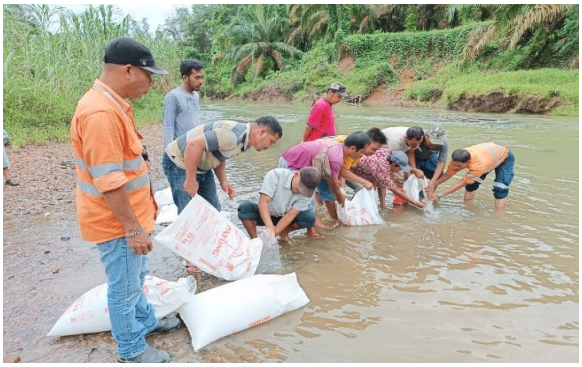
Pre-Program Scheme

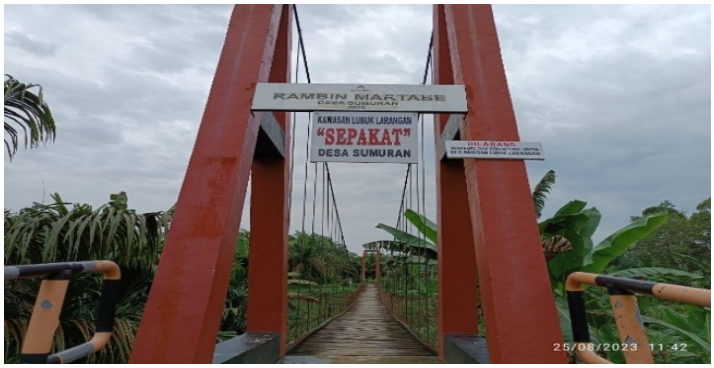
River Ecosystem in Sumuran Village → Pollution, degradation, or overexploitation has occurred in the river

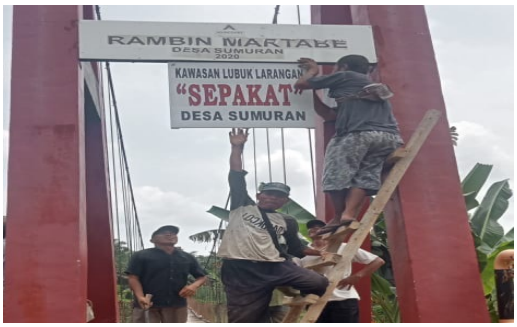
Post-Program Scheme

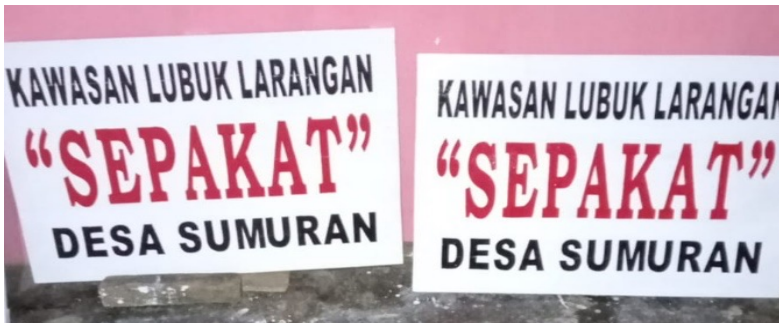
River Ecosystem in Sumuran Village → River revitalization is carried out through Lubuk Larangan by providing Jurung fish fry → Jurung fish, an endemic species of South Tapanuli, is being conserved to maintain its population while also contributing to the improvement of the community's economy

Documentation of the Program









Collaboration Program for the Conservation of Macaca sp. in an Effort to Safeguard Diversity and Ecology through the Establishment of a Macaque Rescue Center

Description of the Program

The collaboration between PT Agincourt Resources, Scorpion Indonesia Foundations, and the Natural Resources Conservation Agency of North Sumatra (Balai Besar KSDA Sumatera Utara) is expected to provide a holistic solution to address the uncontrolled population of Macaca sp. resulting from conflicts with local communities. Through integrated management and control efforts, it is anticipated that the population of Macaca sp. can be effectively and sustainably managed, while human–wildlife conflicts can be minimized.

Several facilities have been established at the Macaque Rescue Center, including rehabilitation enclosures, quarantine shelters, isolation cages, and a clinic. With the development of this Rescue Center, significant benefits are expected, particularly in addressing and managing conflicts between communities and Macaca sp. populations. Another key objective is to carry out conservation efforts for Macaca sp., especially within the Batang Toru ecosystem area.

Since its initiation in 2022, the program has already produced positive outcomes. A total of 78 Macaca sp. individuals have been successfully rescued through this initiative and released back into their natural habitat. This achievement demonstrates that the Macaque Rescue Center provides substantial benefits in the rescue and rehabilitation of Macaca sp. individuals affected by human–wildlife conflicts. It also represents an important step in safeguarding biodiversity and ensuring the sustainability of the ecosystem in the region.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of jurung fish conserved. In this program, the Biodiversity Index is not calculated, since only one species (jurung fish) is being conserved.

Absolute Calculation in year N **= The number of Macaca successfully rescued**

Absolute in 2025 = 0 individuals

No	Local Name	Scientific Name	Number of fish seeds released (individuals)			
			2022	2023	2024*	2025*
1	Macaca	*Macaca sp*	74	81	81	84

*Data from January to June 2025

Pre-Program Scheme

Post-Program Scheme

Documentation of the Program

Utilization of Arbuscular Mycorrhizal Fungi as a Growth-Boosting Strategy for Phosphorus Absorption in Dwarf Plants in Degraded Areas

Description of the Program

This program represents PT Agincourt Resources' commitment to accelerate restoration and enhance biodiversity indices, particularly in degraded areas. Prior to the implementation of this program, the degraded areas were unable to support plant growth due to soils containing high levels of toxic elements, which made it difficult or slow for plants to complete their life cycle. By planting seedlings that form a symbiotic relationship with Arbuscular Mycorrhizal Fungi (AMF), growth can be improved. Seedlings planted in soils lacking AMF inoculum (such as overburden and tailings) often experience stunted growth or fail to grow altogether.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of species that have successfully grown using mycorrhiza. Subsequently, the species diversity index is calculated. The species diversity index can be determined using the Shannon-Wiener method (Odum, 1996) with the formula:

$H' = - \sum Pi \, Ln \, (Pi)$, dimana $Pi = (ni/N)$

Description:

H' = Shannon-Wiener diversity index

ni = Number of individuals of species i

N = Total number of individuals of all species

Criteria for Shannon-Wiener diversity index (H'):

$H' \leq 1$ = Low diversity

$1 < H' < 3$ = Moderate diversity

$H' \geq 3$ = High diversity

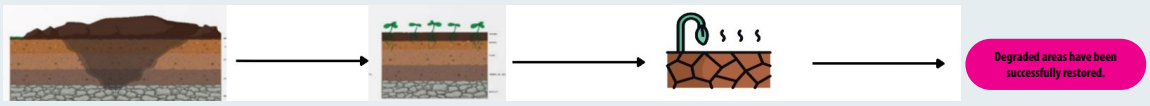
Absolute calculation = Number of species successfully grown using mycorrhiza

Absolute in 2025 = 7 species

No	Local Name	Scientific name	"total"	Pi = ni/N	ln Pi	Pi. Ln Pi
1	Saga hutan	*Adenanthera pavonina*	11	0,1746032	-1,7452	-0,3047243
2	Mahang	*Macaranga tanarius*	13	0,2063492	-1,5782	-0,3256573
3	Kabau	*Archidendron bubalinum*	11	0,1746032	-1,7452	-0,3047243
4	Tapak gajah	*Macaranga gigantea*	6	0,0952381	-2,3514	-0,2239405
5	Jambu-jambuan	*Syzygium sp.*	6	0,0952381	-2,3514	-0,2239405
6	Kemenyan	*Styrax benzoin*	5	0,0793651	-2,5337	-0,201087
7	Mukuna	*Calopogonium mucunoides*	11	0,1746032	-1,7452	-0,30472
Accumulation of species that successfully grew using mycorrhiza.			**63**			
Species Diversity Index (H')						**1,8887984**

*Data from January to August 2025

Pre-Program Scheme



Degraded area of former mining site

Land function restoration carried out

The plants grow slowly, with an average plant height of only 28.09 cm, an average of 13.17 leaves, and an average of 4.17 productive branches.

Degraded areas have been successfully restored.

Post-Program Scheme

Degraded area of former mining site

Plant seedlings were carried out

Plant propagation was carried out using

The degraded area has been successfully

Documentation of the Program

Enrichment of Meranti Tembaga, an Endangered Endemic Species, in the Original Forest Using Nursery Methods at Martabe Gold Mine

Description of the Program

This program represents PTAR's commitment to increasing the diversity index of the original forest at Martabe Gold Mine. Starting with the rescue of seedlings in the form of seeds and natural sprouts from the original forest, the program aims to conserve endangered plant species within the mining operational area. The rescued seedlings are then intensively cared for at PTAR's nursery facilities. Through this plant nursery, species from the original forest receive optimal care and development before being transplanted to their final locations.

The nursery activities are conducted to propagate and develop the species from the original forest more efficiently and effectively. The species that have undergone nursery treatment will be better prepared to adapt to new environments.

Seedlings rescued through the nursery program will later be planted in the original forest areas around the operational sites and mine reclamation areas. In addition to Meranti Tembaga, the program also includes species such as Gaharu (Aquilaria malaccensis), Merkuyang Putih (Shorea johorensis), Meranti Lengkung Daun (Shorea platycarpa), Damar (Agathis borneensis), and Keruing (Dipterocarpus grandiflorus). Through this program, the diversity index can be increased and the conservation of endemic species can be ensured.

Method of Absolute Calculation

The absolute calculation represents the cumulative number of individuals successfully conserved. In this program, the Biodiversity Index is not calculated, since only one species (Meranti Tembaga) is being conserved.

Absolute Calculation in year N = Number of individuals successfully conserved

Absolute in 2024 = 700 individuals

No	Local Name	Scientific Name	Number of individuals successfully conserved (Individuals)		
			2023	2024*	2025*
1	Meranti Tembaga	*Shorea leprosula*	700	700	720

*Data from January to June 2025

Pre-Program Scheme

Biodiversity Index in the Conservation Area → **Flora cultivation has not yet been carried out optimally**

Post-Program Scheme

Biodiversity Index in the Conservation Area → **Rescue of Meranti tembaga seedlings in the form of seeds and natural seedlings from the original forest using the Nursery Method** → **The population of Meranti Tembaga is increasing, thereby enhancing the biodiversity index and helping to preserve endemic species**

Documentation of the Program