



# THE IMPLEMENTATION OF BIODIVERSITY & ZERO DEFORESTATION COMMITMENT

True Group is committed to protect biodiversity and support zero deforestation. This is an important issue that True Group has set the Biodiversity & Zero Deforestation Policy and pay attention to potential impacts of our business activities throughout the supply chain. We have a framework for risk assessment on Biodiversity & Zero Deforestation which covers own operation and adjacent areas across our value chain including upstream and downstream activities. The process description is demonstrated as follows:



Process	Detail							
1. Screening & Site	Determine the scope of study areas and do the pre-screening of the operational sites that							
Selection	have potential impact							
2. Assessment & Prioritize	Review and prioritize the metrics							
	Set the assessment criteria to classify and rate the risk areas							
	• Select the potential sites and compare with the significant conservation or biodiversity areas,							
	by applying the biodiversity programs such as the Biodiversity and Ecosystem Service Trends							
	and Conditions Assessment Tool (BESTCAT) for preliminary screening							
	Assess the high risk level conservation or biodiversity areas via Integrated Biodiversity							
	Assessment Tool (IBAT) by using location-specific approach							
	Identify relevant biodiversity risk and integrate into multi-disciplinary company-wide risk							
	management processes							
	Identify dependency-related biodiversity risks by using WWF Risk Biodiversity Filter							
	Determine Impact-related biodiversity risks							
3. Measure	If the operational sites are located close by the very high risk level conservation or							
	biodiversity, those sites must have the mitigation that hierarchy as follows:							
	1. Avoidance							
	2. Reduce							
	3. Restore							
	4. Offset							
4. Monitoring	Monitor and validate the mitigation hierarchy and disclose the progress of implementation							
5. Engagement &	Engage and communicate with stakeholders to operate business without affecting any							
Communication	biodiversity and mitigate deforestation risks							

Note: For more information, please refer to the policy at

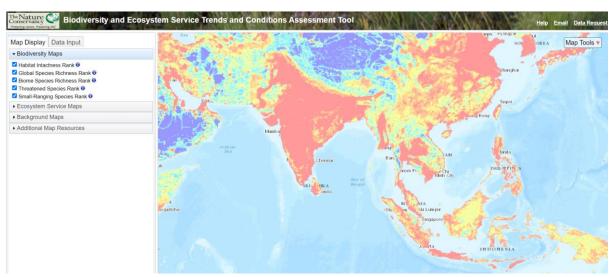
https://www.true.th/true-corporation/site/assets/truecorp/pdf/en/Biodiversity&Zero\_Deforestation\_Policy\_Web\_EN.pdf



## **Risk and Impact Assessment 2022**

True Group screens its operational sites/ base stations that are likely to impact on biodiversity. We set the criteria for pre-screening the material areas and site by excluding the urban areas and the towers installed on the building rooftop. Initially, there are 6,097 sites nationwide that may impact the biodiversity.

- Then we evaluate the pre-screened operational sites by applying the BESTCAT program, which defines
  the indicators/metrics for assessing the impact of risks covering 5 dimensions, that are prioritized according
  to the significances:
  - 1. Threatened Species Richness
  - 2. Biome-based Species Richness
  - 3. Global Species Richness
  - 4. Habitat Intactness
  - 5. Small Ranging Species Richness



Biodiversity and Ecosystem Service Trends and Conditions Assessment (BESTCAT) Tool

- According to the study result, there are 142 sites of signal tower located in a very high-risk area (score 91-100) of at least 3 dimensions. Therefore, further assessment is required in order to confirm if these areas are critical biodiversity.
- A total of 142 sites, located in a high-risk area, have been assessed for biodiversity risk using IBAT (Integrated Biodiversity Assessment Tool)
- The assessment results using IBAT for the 142 sites indicate that
  - Within a 50 km radius of 89 sites, it has been identified that the surrounding areas are located within protected areas.
  - Within a 50 km radius of 56 sites, it has been identified that the surrounding areas are located in key biodiversity areas.

In addition, the IUCN Red list of threatened species is illustrated as below figure.



# **IUCN Red List of Threatened Species**

Number of IUCN Red list of threatened species* (CR, EN, VU Category)	Number of Sites
>100	2
91-100	43
81-90	96
<80	1

<sup>\*</sup>The total number of species categorized as Critically Endangered (CR), Endangered (EN) or Vulnerable (VU) found within 50 km. of each site.

The detail of each site that has the total number of IUCN Red list of threatened species (CR, EN, VU Category) more than 100 species.

Site	Critically Endangered (CR)	Endangered (EN)	Vulnerable (VU)	
1 <sup>st</sup>	31	92	194	- C
2 <sup>nd</sup>	31	92	196	

## **Biodiversity Risk and Impact Summary**

According to the biodiversity risk and impact assessment, we have identified biodiversity-related risks associated with the telecommunication sector by using the WWF Biodiversity Filter Tool. In addition, we use the location-specific approach to assess in each area. Therefore, dependency and impact-related biodiversity risks were identified as follows:

## WWF Biodiversity Risk Assessment Results:

Risk Type	Risk Category	Group	Indicator name	Risk Level (No. of Site)				
KISK Type	Kisk Category	атопр	Thucawi hame	Very low	Low	Medium	Hight	Very High
	1. Provisioning Services	Dependency	Water Scarcity Forest Productivity and Distance to Markets Limited Wild Flora & Fauna Availability Limited Marine Fish Availability	34	108	-	-	-
	2. Regulating & Supporting Services - Enabling	Dependency	Soil Condition Water Condition Air Condition Ecosystem Condition Pollination	142	-	-	-	-
PHYSICAL	3. Regulating Services - Mitigating	Dependency	Landslides Fire Hazard Plant/Forest/Aquatic Pests and Diseases Herbidde Resistance Extreme Heat Tropical Cyclones	-	-	86	56	-
	4. Cultural Services	Iral Services Dependency Tourism Attractiveness		142	-	-	-	-
	5. Pressures on Biodiversity	Impact	Land, Freshwater and Sea Use Change Tree Cover Loss Invasives Pollution	-	-	107	35	-
NAL	6. Environmental Factors	Impact	Protected/Conserved Areas Key Biodiversity Areas Other Important Delineated Areas Ecosystem Condition Range Ranty	-	24	46	72	-
REPUTATI ONAL	7. Socioeconomic Factors	Impact	Indigenous Peoples (IPs); Local Communities ( Resource Scarcity: Food - Water - Air Labor/Human Rights Financial Inequality	-	131	11	-	-
æ	8. Additional Reputational Factors	Dependency	Media Scrutiny Political Situation Sites of International Interest Risk Preparation	-	105	37	-	-

## Biodiversity Risk and Impact Assessment for Upstream and Downstream of the Value Chain

• Upstream: Our significant upstream activities involve the construction of signal towers and electronics & semiconductor manufacturers. We are aware of the importance of biodiversity and, as a result, we have developed a screening process and biodiversity requirements for supplier selection. Our procurement team ensures that these requirements and screenings are met by suppliers, and we have found that all of our suppliers already have established biodiversity policies, management systems, and assessment approaches to demonstrate their awareness of biodiversity. Additionally, our suppliers have implemented



Biodiversity Action Plans (BAPs) for areas located in high-risk zones. Moreover, we have implemented mitigation plans in collaboration with local communities and stakeholders to address their opinions and expectations.

• Downstream: Our significant downstream activities involve the usage of our services by customers via signal towers. Consequently, we have already assessed the biodiversity risks in the adjacent areas of these signal towers. The results of the assessment indicate that there is no high-risk level of dependency or impact on biodiversity in these areas.

According to the biodiversity risk and impact assessment by using the WWF Biodiversity Filter Tool. The stakeholder's level of dependency or impact on biodiversity is summarized as below.

## WWF Scape Risk Types, Risk Categories, and Indicators

Risk Type	Risk Category	Group	Key	Indicator name	Indicator Risk Level (by Supplier Group))			
кізк і уре	Risk Category			Thurator haine	Electronics & Semiconductor Manufacturing	Construction Materials		
			S1_1	Water Scarcity	3.15	4.35		
	1. Provisioning	Dependency	S1_2	Forest Productivity and Distance to Markets	No dependency or impact	3.50		
	Services	Dependency	S1_3	Limited Wild Flora & Fauna Availability	No dependency or impact	3.00		
			S1_4	Limited Marine Fish Availability	N/A	N/A		
			S2_1	Soil Condition	No dependency or impact	No dependency or impact		
	2. Regulating &		S2_2	Water Condition	3,50	2.50		
	Supporting Services -	Dependency	S2_3	Air Condition	3.00	2.50		
	Enabling		S2_4	Ecosystem Condition	No dependency or impact	No dependency or impact		
롱니			S2_5	Pollination	No dependency or impact	No dependency or impact		
) E			S3_1	Landslides	3.00	3.00		
PHYSICAL			S3_2	Fire Hazard	3.50	3.50		
ᇤᅵ	3. Regulating	Dependency	S3_3	Plant/Forest/Aquatic Pests and Diseases	No dependency or impact	No dependency or impact		
	Services - Mitigating		S3_4	Herbicide Resistance	No dependency or impact	No dependency or impact		
			S3_5	Extreme Heat	2.50	3.50		
			S3_6	Tropical Cydones	3.00	3.50		
	4. Cultural Services	Dependency	S4_1	Tourism Attractiveness	No dependency or impact	No dependency or impact		
		Impact	S5_1	Land, Freshwater and Sea Use Change	2.25	2.25		
	5. Pressures on Biodiversity		S5_2	Tree Cover Loss	1.00	4.00		
			S5_3	Invasives	No dependency or impact	2.50		
			S5_4	Pollution	4.38	3.75		
	6. Environmental	Impact	S6_1	Protected/Conserved Areas	2.00	2.50		
			S6_2	Key Biodiversity Areas	1.50	1.50		
	Factors		S6_3	Other Important Delineated Areas	2.50	2.50		
	ractors		S6_4	Ecosystem Condition	1.75	2.12		
¥			S6_5	Range Rarity	1.50	2.00		
REPUTATI ONAL	7. Socioeconomic	Impact	<b>S7_1</b>	Indigenous Peoples (IPs); Local Communities (LCs) Lands and Territories	N/A	N/A		
Ĕ			S7_2	Resource Scarcity: Food - Water - Air	2.50	2.35		
7	Factors		S7_3	Labor/Human Rights	3.50	3.00		
R			S7_4	Financial Inequality	2.50	2.00		
		Dependency	S8_1	Media Scrutiny	3.00	4.00		
	8. Additional		S8_2	Political Situation	2.88	2.88		
	Reputational Factors		S8_3	Sites of International Interest	1.50	1.50		
			S8_4	Risk Preparation	2.00	2.50		

• The metrics and progress of True's operations in 2022 are as follows:

Metrics	Progress 2022
Percentage of operational sites which do not impact on biodiversity <sup>1</sup>	99.62%
Percentage of number of trees planting by True Group and our partners	96.40%
Compare to Target year 2022 and follow through the We Grow application <sup>2</sup>	

#### Notes:

<sup>&</sup>lt;sup>1</sup> Progress on Biodiversity: evaluated from the total operational sites, excluding the critical biodiversity risk pre-screening sites

<sup>&</sup>lt;sup>2</sup> Progress on Zero deforestation: estimated from total 33,740 trees planted in 2022 compared to the 35,000 trees target 2022 (accumulated)



# Progress of stakeholder engagement to protect ecosystems and restore biodiversity

## **Biodiversity Risk and Impact Result**

In 2022, TRUE conducted the biodiversity impact assessment., Implement mitigation, rehabilitation and compensation The result of the assessment is demonstrated as below:

				Implemented project					
No.	Signal	Areas	Threatened	Biome-based	Global Species	Habitat	Small Ranging	to avoid and restore	
	Towers		Species Richness	Species Richness	Richness	Intactness	Species Richness	the impact.	
1	BRR1607	Mueang District,	83	66	75	5	1	Sarus Crane Conservation and Restoration project in	
2	BRR6711	Buriram Province	83	66	75	5	1	Buriram province, the project aims to release them into the wild and	
								promoting the water ecosystem as their habitat and a food source every year.	
3	NAN6841	Tha Wang Pha District, Nan Province	97	85	95	58	81	Sobkhun Model  "Coffee for Forest with income for community" aims to Restore forests and generate income by planting trees, restoring watershed forests, promoting biodiversity, via support economy via local community	
4	PCK7258	Kui Buri District,	98	38	88	69	85	Patcharasuthakhachan urak Project, the	
5	PCK6750	Prachuap Khiri Khan	98	37	88	42	83	project aims to monitor and protect wild	
6	PCK7285	Province	97	35	88	20	82	elephants and provide early warning for potential conflicts between humans and wild elephants, reducing the conflicts.	



#### Collaboration with Stakeholders as of 2022

## Sarus Crane Conservation and the Doo Nok Application



The Company supported the Sarus Crane Reintroduction Project Thailand in Buriram to develop and conserve the Huai Jorakae Mak freshwater reservoir for sarus cranes. The Company in collaboration with The Zoological Park Organization of Thailand and other partners in 2019 signed the MOU to support the Wetland and Eastern Sarus Crane Conservation Center in Buriram province as a learning center and conservation of sarus cranes in order to promote biodiversity and ecosystem in the province. We have Doo Nok (bird-watching) application for reporting sarus crane and other bird species to support biodiversity awareness and plan to promote this application to cover the overall areas of our operation across the country. In 2022, a total of 12 sarus cranes were freed to nature and we

found additional 8 sarus cranes grow up. Our aim is to increase sarus cranes in the wild every year. To date, there are more than exceeding 120 sarus cranes. We also supported 80 farming households in their organic farms to expand food sources for cranes. In addition, The Company supported the Sarus Crane Reintroduction Project Thailand in Buriram to develop and conserve the Huai Jorakae Mak freshwater reservoir for sarus cranes.

## Sop Khun Model: Building Forest and Income through Coffee



True Group has collaborated with Charoen Pokphand Group to educate the community of Ban Sop Khun in Tha Wang Pha District, Nan Province, aiming to raise awareness and foster a love for the forest while restoring the once-dry and transformed watershed forest into a thriving and lush ecosystem. This project helped community members generate income from cultivating coffee and mixed crops, as well as planting large shade trees, such as the monkey jack, Burma padauk, Bombax, and common fig. This will help restore the forest, support sustainable living, and promote biodiversity and carbon sequestration. In 2023, True Group plans to plant an additional 15,000 trees in collaboration with communities in Nan Province to further mitigate the impact on biodiversity and increase forest area.

## Patcharasuthakhachanurak Project

True Group co-ordinated with the Faculty of Computer Science and Information Technology of Rambhai Barni Rajabhat University developed Al technology by applying the smart early warning system for wild elephants and creating Khachanurak application to monitor and identify only wild elephants together with location data, to send to a cloud storage, and then notify officers or responsible people in the communities. This project was effectively able to 90% capture wild elephant pictures and could be able the push the wild elephants back to the forest by 2,261 times. This elephant surveillance project could also help to reduce conflict and confrontation between the wild elephants and nearby farming communities. The Elephant Smart Early Warning Project aims to reduce conflicts and encounters between wild elephants and farming communities in the Kui Buri National



Park and the eastern forest zone in Chonburi, Rayong, Chanthaburi, Prachinburi, and Sa Kaeo Provinces. This project has successfully returned 2,261 elephants to the forest to date. In 2023, we plan to expand these efforts



to the western forest zone, the Phu Luang Wildlife Sanctuary in Loei Province, and the Khao Luang National Park in Nakhon Si Thammarat Province, to reduce conflicts between humans and 1,583 wild elephants.

## We Grow Together Project

We create a digital society and promote planting trees through the We Grow application, which allows users to monitor tree growth and carbon dioxide adsorption. In 2022, we provided economic small trees to employees participating in the We Grow Together Project to plant total 11,600 trees, resulting in an accumulation of 33,740 trees, to help restore the ecosystem and provide a sanctuary for wildlife species, as well as increase green spaces and act as a carbon sink. It is expected that these trees will absorb approximately 33,740 tons of carbon dioxide by 2030.





## **Way Forward**

- Assess the biodiversity impact in the proposed new cell tower installation areas in compliance with True Group's Biodiversity and Anti-Deforestation Policy.
- Collaborate with local communities and government agencies to plant 25,000 trees in Ban Yot Doi Watthana, Bo Kluea District, Nan Province, in 2023.
- Set the biodiversity and anti-deforestation targets to be achieved by 2030.