

SCG Biodiversity Progress 2022

Biodiversity Assessment & Biodiversity Management Plan

SCG-Cement-Building Materials Business
Biodiversity Progress 2022
Biodiversity Assessment & Biodiversity Management Plan

Biodiversity and Ecosystem – Target, Strategy & Management

Biodiversity is under threaten with accelerating species extinction rate upon impact of human activities. SCG, recognizing the importance of biodiversity and ecosystem, thus implements biodiversity conservation project wherever it conducts business, and is committed to achieve “Net Positive Impact” in all processes involved.

Targets

2052

Net Positive Impact after closure of first quarry

2022

Similarity Index in rehabilitated quarry area must equal to buffer zone at higher than 60%

Strategy

1. Sustainable management of biodiversity benchmarked to international indicators.
2. Engage communities and stakeholders to raise awareness and understanding in ecosystem conservation and biodiversity
3. Be a model of biodiversity conservation and extend scope to other areas.

Management

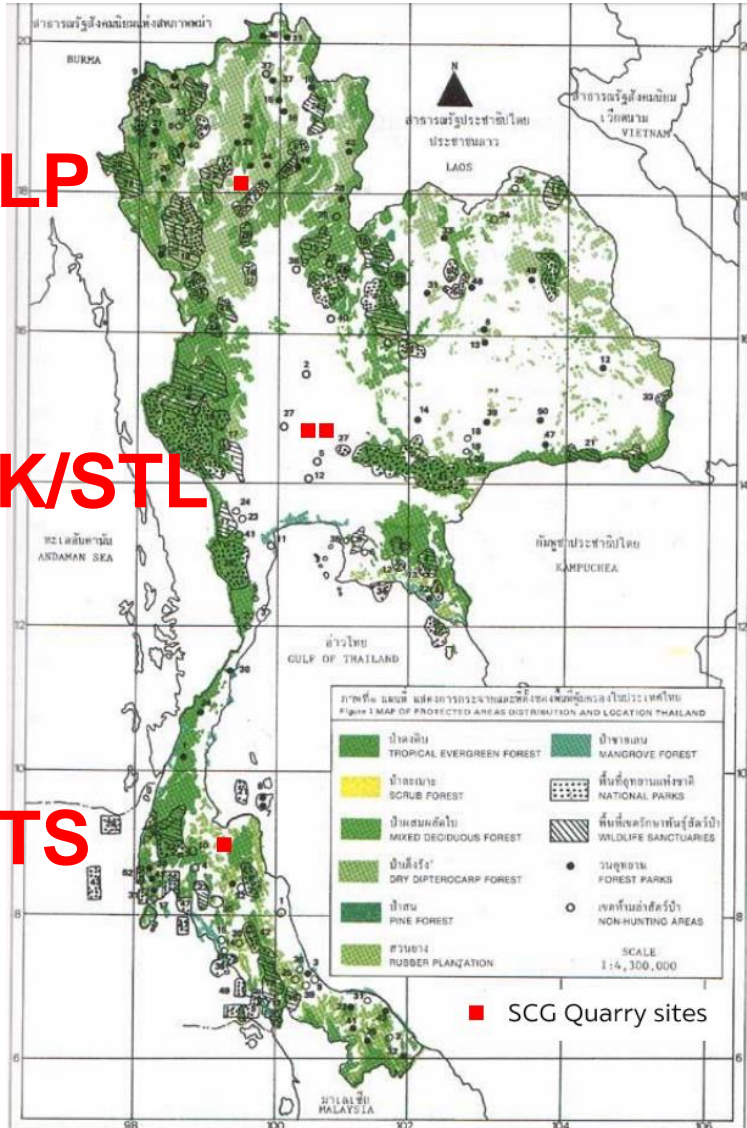
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SCG Quarry Sites vs. Thailand Protected Area

SLP

SKK/STL

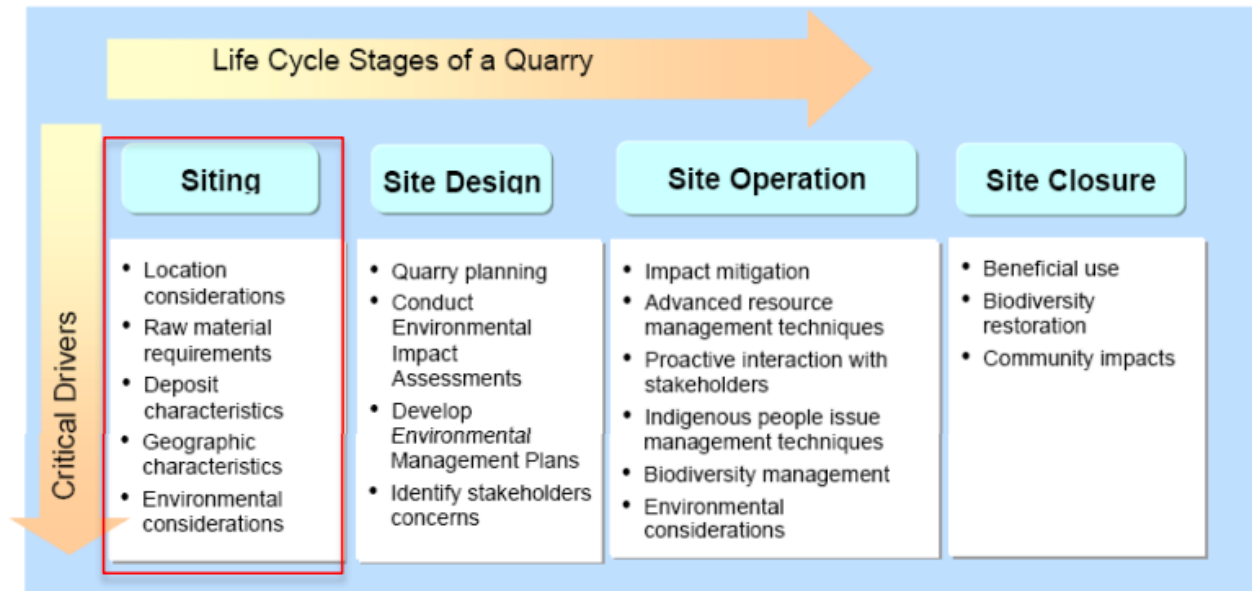
STS



GRI EN11: High Biodiversity Value Thailand's Protected Area

- Wildlife Sanctuaries
- National Parks
- Forest Parks

SCG has no quarry site located in globally or nationally important biodiversity area, including Thailand's Protected Forest Area such as Wildlife Sanctuary, National Park or Forest Park announced by laws



Sites				Exposure		Assessment	Management Plan
Site name	BU	Location	Areas (Hectares)	National Reserved Forest between 0 and 2km from nearest site	World Heritage areas and IUCN category IV Protected area	Baseline study/ Impact Assessment	Mitigation & Monitoring
The Siam Cement (Keang Khoi) - SKK	CBM	Saraburi	412	Yes	No	<ul style="list-style-type: none"> • Flora & Fauna survey • BMP Impact assessment • BMP Biodiversity level assessment 	<ul style="list-style-type: none"> • 100% BMP • Avoidance : Semi – opencut method, leave approx. 50% of concession area as a buffer zone • Minimization : Semi – opencut method, reduce vibration, dust, and noise • Rehabilitation : 100% Native species • Offset : Forest restoration in other areas • Conservation actions : Conserve endemic species • Monitoring plan – rehabilitation progress, water quality, and air quality
The Siam Cement (Ta Luang) - STL	CBM	Saraburi	773	Yes	No		
The Siam Cement (Thung Song) - STS	CBM	Nakhon Si Thammarat	796	Yes	No		
The Siam Cement (Lampang) - SLP	CBM	Lampang	933	Yes	No		

Biodiversity Mitigation Hierarchy

SCG commits to have a Net Positive Impact on biodiversity. We have developed an innovative mine design called the “Semi-Open Cut” that leave approx. 50% of concession area along the mine boundary line as a buffer zone to maintain the visual aesthetic of the natural landscape and conserve biodiversity and ecosystem functions in the area, as well as being a reference for mine rehabilitation.

SCG uses mine design program to minimize the operation area at a time, leaving some part of the operation area untouched until needed and rehabilitate the finished area as soon as possible.

SCG have been collaborating with experts from various educational organizations to design mine rehabilitation with biodiversity conservation concept, focusing on planting local native species and creating ecosystem services in the area as well as developing endemic species conservation program to maintain key species in the area. Also, having BMP in every site.

SCG committed to a zero net deforestation. We collaborate with Department of National Parks, Wildlife and Plant Conservation and Royal Forest Department to restore forest with biodiversity conservation concept in other areas as part of Natural Climate Solution.



Avoidance

Minimization

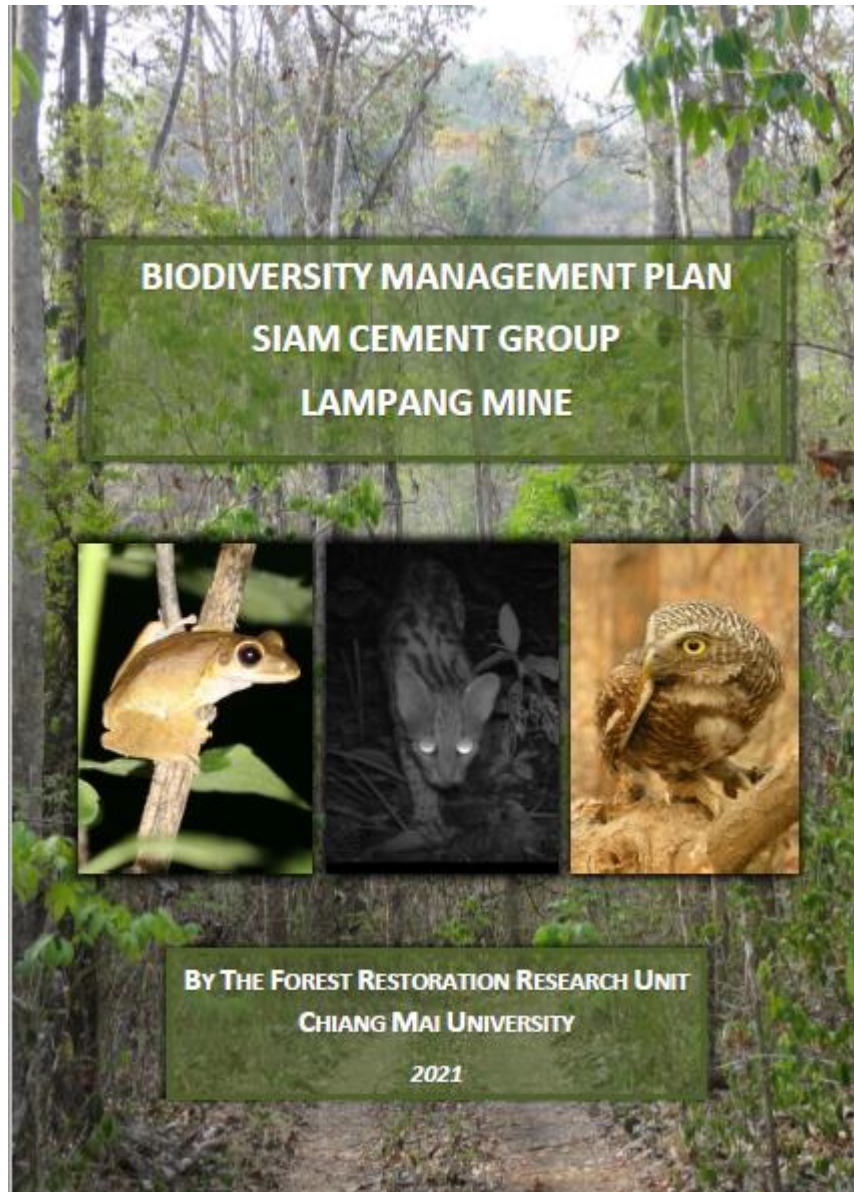
Restoration

Offset

Quarry	Total Concession Area (Ha)	Buffer Zone (Ha)	Open-quarry Area (Ha)	Rehabilitated Area 2022 (Ha)
SKK	412	97	316	44
STL	773	352	421	44
STS	796	480	316	12
SLP	933	541	392	17
Total	2,914	1,470	1,445	117

Rehabilitated area accounts for 8.09% of total open-quarry area

คิดเป็น 100% ของพื้นที่สิ้นสุดการทำเหมือง Rehabilitated area accounts for 100% of total finished quarry area



BMP – SLP



Project Leader
Dr. Steve Elliott,
an expert in tropical botany ecosystems
and wildlife conservation.



Asst. Prof. Dr. Sutthathorn Chairuangstri

แผนการจัดการทรัพยากรชีวภาพ Biodiversity Management Plan (BMP)

บริษัทปูนซิเมนต์ไทย (ทุ่งสง) จำกัด จ.นครศรีธรรมราช



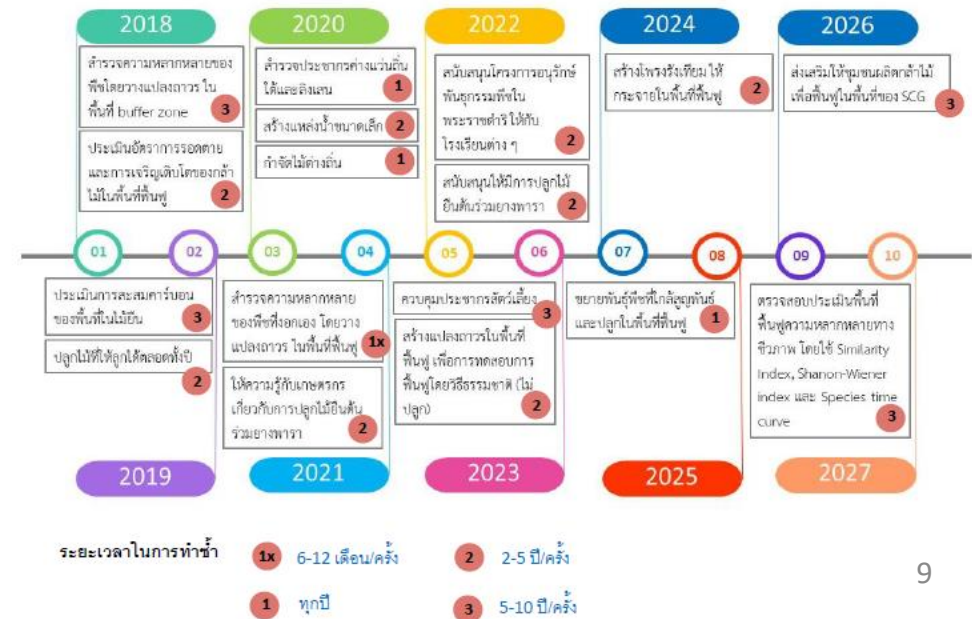
ความร่วมมือระหว่างบริษัท เอสซีจี ซีเมนต์ จำกัด และ คณะวิทยาศาสตร์
มหาวิทยาลัยสงขลานครินทร์

In collaboration between The SCG Cement Co., Ltd and Faculty of Science,
Prince of Songkla University



Project Leader
Asst. Prof. Dr. Sara Bamrungsri, an expert in Forest
Biology, Forest Ecosystem

ภาพที่ 13 แสดง Milestone ระยะเวลา 10 ปี (2018- 2027) ของเหมืองหินปูนทุ่งสง จังหวัดนครศรีธรรมราช



แผนการจัดการทรัพยากรชีวภาพ
พื้นที่เหมืองแร่หินปูนของบริษัท ปูนซิเมนต์ไทย (แก่งคอย) จำกัด
Biodiversity Management Plan
for Limestone Mining Area of Siam Cement (Kaeng Khoi) Company



คณะวนศาสตร์
มหาวิทยาลัยเกษตรศาสตร์

แผนการจัดการความหลากหลายทางชีวภาพ
พื้นที่เหมืองแร่หินปูนของบริษัท ปูนซิเมนต์ไทย (ท่าหลวง) จำกัด
Biodiversity Management Plan
for Limestone Mining Area of Siam Cement (Tha Luang) Company



คณะวนศาสตร์
มหาวิทยาลัยเกษตรศาสตร์



Project Leader
Assist.Prof.Dr. Sakhan Teejuntuk,
an expert on Advanced
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Forest Health Monitoring

SCGP Biodiversity Progress 2022

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Biodiversity and Ecosystem – Target, Strategy & Management

Biodiversity is under threaten with accelerating species extinction rate upon impact of human activities. SCGP, recognizing the importance of biodiversity and ecosystem, thus implements biodiversity conservation project wherever it conducts business, and is committed to achieve “Net Positive Impact”, “No Net Loss” and “No Net Deforestation” in all processes involved.

Targets

2021

Having biodiversity conservation area certified by FSC™ standard at least 10% of agroforestry area (3,000 Rai or 480 Hectares).

2021

No Net Deforestation

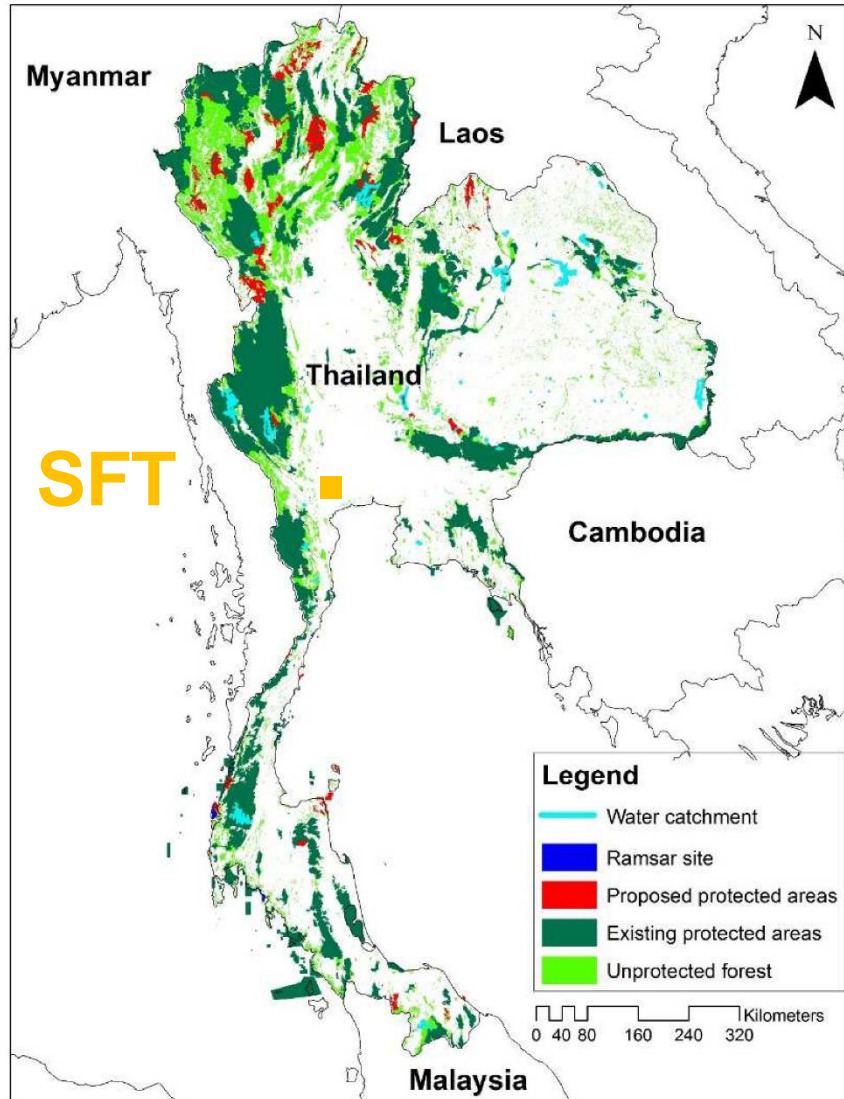
Strategy

1. Sustainable management of biodiversity benchmarked to international indicators.
2. Be a role model of biodiversity conservation and extend the effort to other areas.
3. Engage communities and stakeholders on the cause of biodiversity conservation.
4. Manage the use of community forest areas with participation under the principles of the Community Forest Areas.

Management

SCGP has a Sustainable Forestry Management Committee responsible for formulating policies, setting objectives, and goals of sustainable Forestry operations, by overseeing and monitoring afforestation under the Forest Stewardship Council: FSC standards. The Committee aims to create “Positive Ecological Balance” in all involved processes and cooperate with government agencies and the Royal Forest Department to support community forest activities. The activities were public relations and knowledge to the community on compliance and international standards and SCGP’s ecosystem and biodiversity conservation operations.

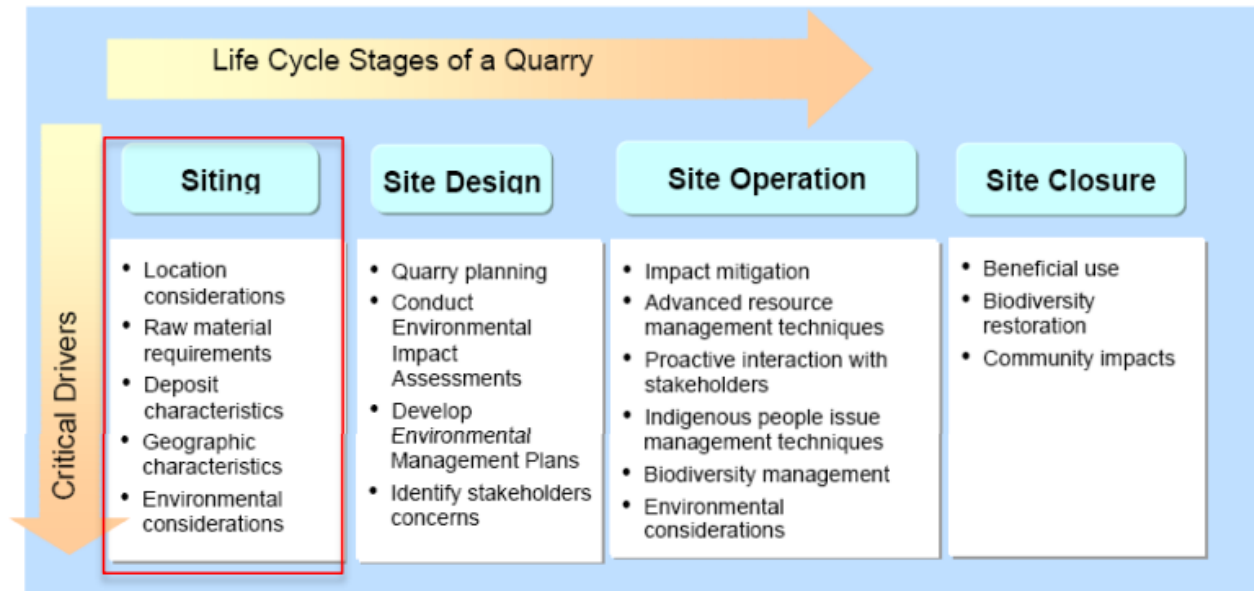
SCGP Sites vs. Thailand Protected Area



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Metrics used to measure impact on biodiversity

Sites				Exposure		Assessment	Management Plan
Site name	BU	Location	Areas (Hectares)	National Reserved Forest	World Heritage areas and IUCN category I-IV Protected area	Baseline study/ Impact Assessment	Mitigation & Monitoring
Siam Forestry (SFT)	SCGP	Wangsala, Kanjanaburi	1,886 (11,788.5 rai)	No	No	Scope : Agroforestry Area Impact Assessment <ul style="list-style-type: none"> Plant and Animal no impact HCV level 5 : The community need 	<ul style="list-style-type: none"> Monitoring of diversity species status Consider implementing biodiversity offset activities by considering <ol style="list-style-type: none"> (1) New or expanded protected areas or (2) Improved management of existing protected areas



3.5 HCV 5: Community needs

Sites and resources **fundamental for satisfying the basic necessities** of local communities or indigenous peoples (for example for livelihoods, health, nutrition, water), **identified through engagement with these communities or indigenous peoples.**

HCV 5 refers to sites and resources that are fundamental for satisfying the basic necessities of local people. The role of the HCV assessment is to characterize the level of dependence on the resource and to provide management recommendations for how to mitigate negative impacts on local people's livelihoods.

Diversity species status in Conservation Areas

Quarry	The Community Forest of Huay Saphan Samakee	Kamphaeng Phet Forest Park	Somchai Forest Park***
Area	336 Hectares	148 Hectares	18 Hectares
Type of Trees	65 Species, 51 Genera, 27 Families	101 Species, 77 Genera, 33 Families	100 Species, 74 Genera, 30 Families
Biodiversity Index of Trees (Shannon-Weiner Diversity Index)	2.88 (Moderate)	3.66 (High)	3.56 (High)
Type of Animals	81 Species	103 Species	98 Species
• Mammals	20 Species	15 Species	13 Species
• Reptiles	19 Species	20 Species	7 Species
• Amphibians	9 Species	12 Species	7 Species
• Birds	33 Species	56 Species	71 Species

*** Conservation areas expanded in 2022

Encourage Projects with Partners

Partner	Cooperation Activity
Forest Stewardship Council	- Provide advice and knowledge to development of the FSC standard system in the company continually
Forestry Research Center ,Kasetsart University	- Survey, study and research for long-term on biodiversity & ecosystem conservation and biodiversity management.
Faculty of Forestry ,Kasetsart University	- Support the experts about biodiversity management to give advise, knowledge and consult to the company.
Thai Forest Ecological Research Network ,Kasetsart University	- Monitor and give research knowledge in Long-term about conservation of biodiversity and ecosystems to company in order to develop Ecological Research
Forest resource management office, Royal Forest Department	- Promote conserve natural resources activities in the agroforestry area

