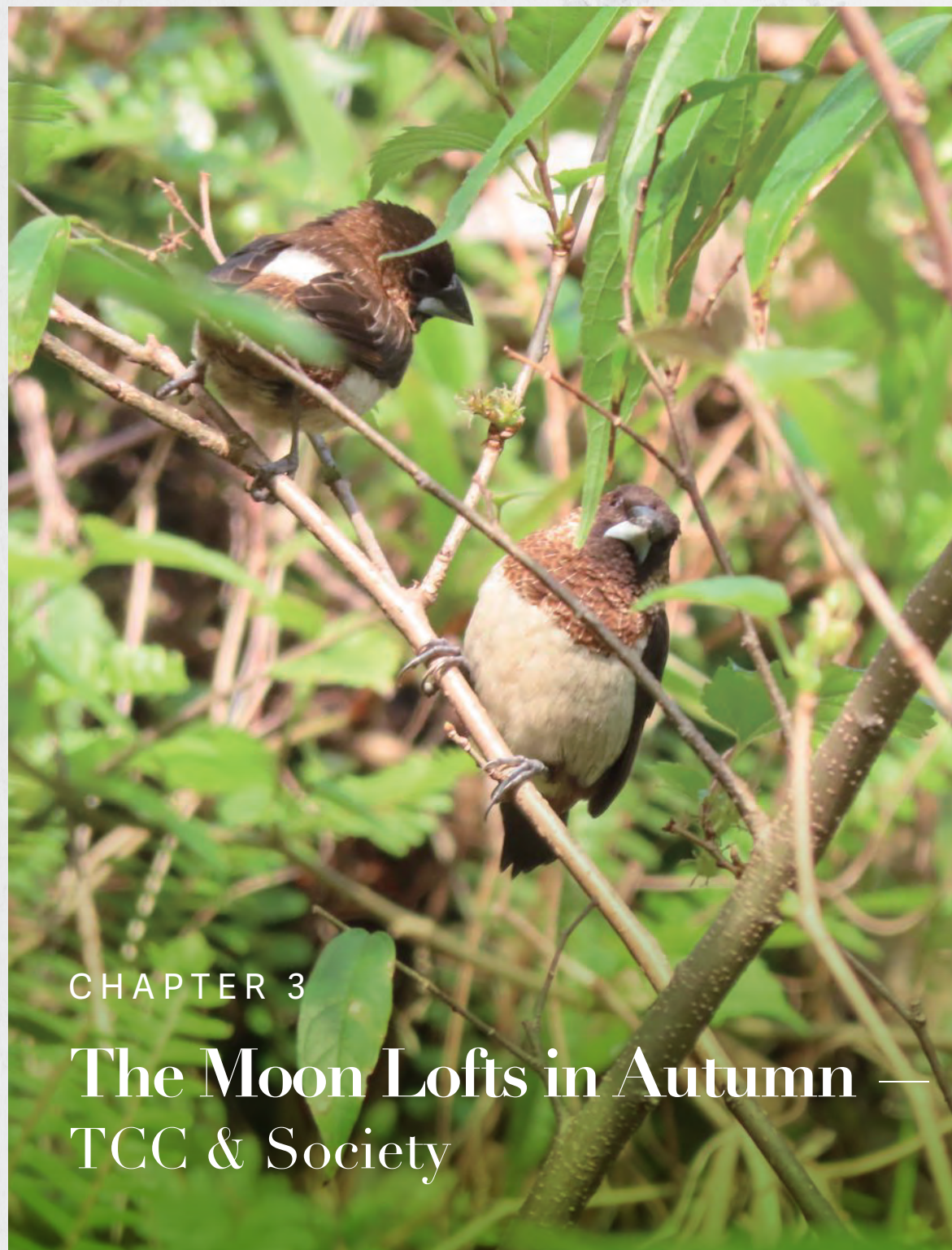


Lonchura striata / Jinchang Quarry



CHAPTER 3

The Moon Lofts in Autumn — TCC & Society

GREEN
PLANTS
LEAVES

MILKY WHITE
RUMP

CHEST
FEATHERS
LIGHT BROWN

PRIMARILY
BROWN
PLUMAGE

*"In the future, this land will have a lifeline connecting TCC, the tribes, and nature.
It will link the dreams of every colleague and every villager."*

-Nelson An-ping Chang, Chairman of TCC Group Holdings

*In the TNFD framework, society is
defined as part of nature, echoing the
core philosophy of Chairman Nelson
An-ping Chang that*

***"humans are
part of nature."***



TCC values social communication and practices the mutual benefit of industry and the tribes. In the Hoping and Suao mines, TCC proactively conducts tribal consultation and consent voting and regularly opens the mines for visits, allowing the community and tribes to participate in TCC's operational decisions. Additionally, TCC DAKA Eco-Factory (hereinafter TCC DAKA) was established in the Hoping Circular Production Park in 2020. The Hoping EcoPort within the park, highly regulated by the Industrial Bureau, began to open for public through the DAKA Circular Economy Tour. The Suao Plant integrated into tribal life and services through initiatives like "Dongyue Mothers' Class" and "Tribal Traditional Wild Vegetables Education." TCC's concept of social inclusion extends to Mainland China, where in 2021, the Shaoguan Plant became the first open factory in Mainland China.



TCC DAKA Open Eco-Factory

Living in harmony
with nature

1 - Water Wells in Spring
TCC & TNFD

2 - Clouds Changes in Summer
TCC & Forests, Soil, Oceans

3 - The Moon Lofts in Autumn
TCC & Society

4 - Mountains Delight in Winter
NbS & Benefit Sharing

5 - The Change of Seasons
TCC is committed to achieving balance between humans and nature

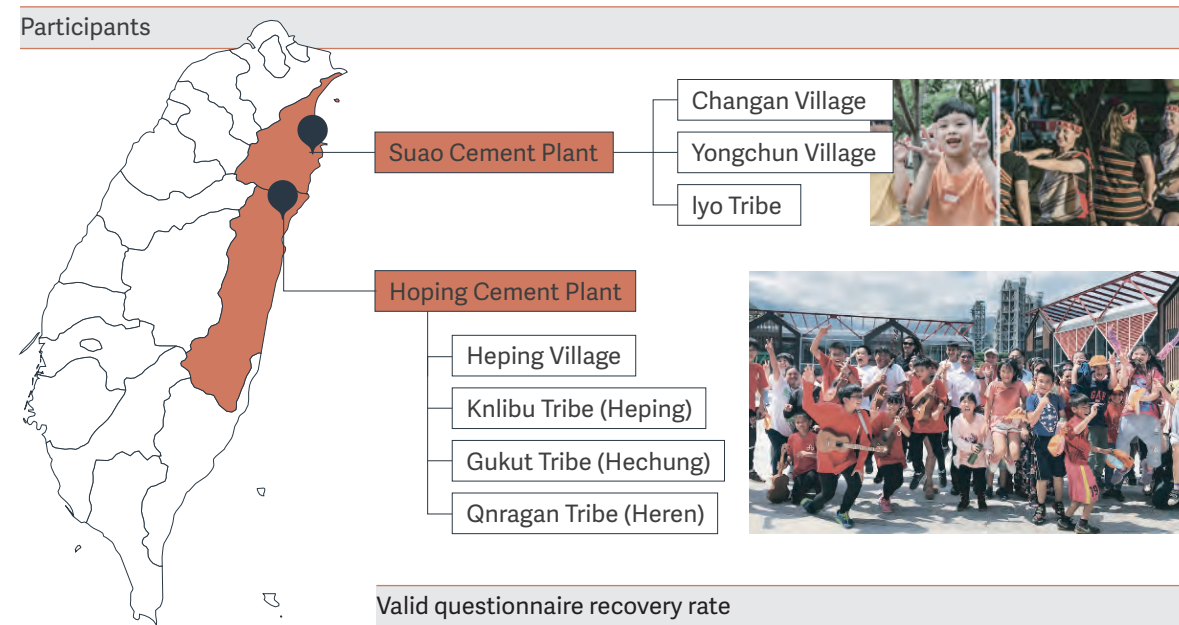
Appendix
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3.1 Mutual Care with Tribes

Indigenous peoples and local communities play a crucial role in nature conservation. In September 2023, the TNFD released the "Guidance on engagement with Indigenous Peoples, Local Communities and affected stakeholders," pointing out that indigenous populations make up less than 5% of the global population and manage less than 50% of the land landscapes and less than 33% of inland waters. However, they have successfully protected 80% of the world's biodiversity.

Initiating EU CSDDD Due Diligence Indigenous and Community Human Rights and Environmental Risk Assessment

To understand whether corporate operational activities have harmed the rights and interests of the local communities and indigenous peoples, TCC conducted a stakeholder opinion survey in March 2024. In response to the Corporate Sustainability Due Diligence Directive (CSDDD) passed by the EU in April 2024, TCC further initiated a "Human Rights and Environmental Due Diligence" in June 2024.



Community 84%
Indigenous peoples 86%

Specification of Indigenous Peoples' Matrix

Indigenous peoples focus on their own rights and communication aspects, biodiversity, environmental degradation/waste/land use, water resources, and climate change.

Human Rights and Environmental Risk Matrix: Indigenous Peoples

SEVERITY OF IMPACT ON INDIGENOUS PEOPLES	HIGH	Indigenous Peoples		
	MEDIUM		Environmental Degradation, Waste, Land Use Water Resources Climate Change	Bio-diversity
	LOW	Working Hours/Wages and Benefits Forced Labor/Human Trafficking Collective Bargaining, Child Labor, Discrimination Freedom of Thought and Conscience, Freedom of Association	Bullying and Harassment Freedom of Expression Diversity and Equal Remuneration	
		LOW	MEDIUM	HIGH
LIKELYHOOD OF OCCURRENCE AT TCC ACCORDING TO INDIGENOUS PEOPLES ASSESSMENT				
<div><div></div> Primary Risk <div></div> Secondary Risk <div></div> Low Risk</div>				

Specification of Community's Matrix

Community focus on environmental issues including environmental degradation/waste/land use, water resources, biodiversity, and climate change.

Human Rights and Environmental Risk Matrix: Community

SEVERITY OF IMPACT ON COMMUNITY	HIGH	Environmental Degradation, Waste, Land Use Water Resources Biodiversity		
	MEDIUM	Forced Labor/Human Trafficking Freedom of speech, Discrimination, Equal Remuneration, Bullying and Harassment, Diversity and Equality, Working Hours/Wage and Benefits	Climate Change	
	LOW	Collective Bargaining, Child Labor, Freedom of Thought and Conscience, Freedom of Association		
		LOW	MEDIUM	HIGH
LIKELIHOOD OF OCCURRENCE AT TCC ACCORDING TO COMMUNITY ASSESSMENT				
Primary Risk Secondary Risk Low Risk				

Comprehensive analysis

Indigenous peoples concern about whether corporate actions may harm the rights of local indigenous communities, yet there has been no communication with them; community residents focus on issues related to the environment and waste. TCC has developed preventive and mitigation measures in response to identified human rights risks, while also promoting the spirit of sustainable industrial and urban development through diverse activities and community interaction.

Proactively engage in consultation and consent rights for indigenous peoples to participate in the operational decision-making process

In respecting the living spaces of indigenous peoples, TCC adopts thorough explanations and communications for mine development, and strengthens community safety, welfare, and conservation efforts.

Sustainable Hoping

In March 2022, regarding the mining of the Hoing Plant, TCC proactively applied for Consulting Indigenous Peoples or Tribes to Obtain Their Consent and Participation in accordance with Article 21 of the Indigenous Peoples Basic Law.

The Gukut and Knlibu tribes respectively convened consultation consent votes, with the Gukut tribe reaching an agreement vote rate of 82.2%, and the Knlibu tribe reaching 97.6%



The Voices of Heping Village Residents / Reference: Sustainable Hoping Kit

Dongyue. Iyo Hello

In December 2023, the mining of Suao Plant received tribal consultation consent with an approval rate of 85%



TCC celebrated Mid-Autumn Festival with the tribe

台泥太白山礦區落實水土保持新陽技術顧問 林崑龍技師：沒有土石流疑慮



台泥蘇澳太白山礦區，位在東岳部落西北方。台泥蘇澳廠針對礦山的水土保持計畫極為嚴謹，並由宜蘭縣政府督導，每週專業技師固定到現地測量，確保開採中及開採後周邊區域安全無虞。

TCC implements Soil and Water Conservation in the Taibai Mountain Mine, Engineer Kunlong Lin from Sinyan Consultant: No concerns of landslides

Reference: Iyo Tribe Kit

Joining Hands with Tribal Communities for Just Transition
Providing timely needs and empowering development

Establish Tribe Common Good Ecosphere

The industry is a community member. TCC DAKA, a non-profit, directs fees from DAKA Market vendors, guided tours, and a percentage of revenue from Uni-President Group and Starbucks to the Heping Elementary School Education Fund. TCC recruits local youths and women, providing jobs, and organizes environmental activities like “Recycle with Peace (Hoping) Now!” to reduce plastic use and waste, encouraging everyone to become an EARTH HELPER. TCC also hosts events such as environmental carnivals, mine tours, and activities with tribal food and wild vegetables to build a family-like relationship with the community. The “Hoping Energization Interactive Sports Game” invites parents and children from Heping Elementary School and kindergartens for interactive experiences, introducing new energy development benefits and collecting villagers’ opinions through a wishing tree activity.

Implement Just Transition

TCC aims to drive the lifestyle transition in communities surrounding its plants. Continuing the interactive experience of DAKA, focusing on Hualien's Heping Village, a major production base in Taiwan, and recognizing that school education serves as the core for cultivating and disseminating sustainable concepts, TCC initiated the “Hoping Carbon Reduction Parent-Child Bankbook” with Heping Elementary School in Heping Village in 2023. This initiative provides eco-friendly courses, encourages recycling, and energy saving, rewarding parents and children for adopting green habits. Participants log their activities in a bankbook to earn “carbon coins,” exchangeable for eco-friendly products at the Hoping Plant. By 2024, the program extended to Dong Ao Elementary School near the Suao Plant in Yilan.



The Mysterious Giant in the Heping Village -An Exhibition of the Sustainable Hoping at Huashan

Establish Tribal Consensus Fund

To effectively address the potential disparities between "low to middle income households" and "households actually living in poverty" within the tribes and to provide more timely and appropriate support, the "Hoping Sustainability Charity Foundation" was established in 2022. Adopting a tribal co-decision system, the foundation invited the village head of Heping and three tribal leaders to serve as directors. The foundation operates on a tribal consensus model, led by the village leader and three tribal chairs. Additionally, the Hoping Emergency Relief Fund was created to ease financial hardships of the needs.

Cultivate Tribal Talent

Rural education resources are limited, and tribal children must travel for studies after elementary school. TCC uses Cement Academy resources to help Heping, Shih Min, Yongle, and Dong Ao Elementary Schools offer after-school classes in archery, dance, and indigenous drama to preserve tribal culture and language.

TCC funds the English Teaching Assistant (ETA) program, hiring foreign teachers for Heping Elementary since 2020. TCC also collaborates with Hualien Szu-Wei High School and National Dong Hwa University (NDHU) to provide specialized classes, professional teaching staff, and internships. Students with relevant certifications receive bonuses (NTD 5,000 to 30,000) and priority employment opportunities.



Establish Tribal Service Team

Leveraging cement plant expertise, a Home Repair Project Team was created to serve tribal areas. TCC also expanded the Heping Community Bus Service. In addition to the community bus that has been supported by the Hoping Power Plant Rebate for a long time, a "Hoping Care Bus" of a rehabilitation bus level has been introduced. This bus connects Heping with key locations in Hualien City, like markets and hospitals, to support the medical and care needs of the elderly living alone in the tribes.

3.2 Environmental Education & Interaction

Hoping EcoPort

Certified as Taiwan's first port-based environmental education facility in 2022, Hoping EcoPort offered "Tenants of Harbor" and "Big Boats Entering the Port" courses in 2023 and actively cooperating with industry, government, academic institutions, and NGOs, including the Hualien Environmental Protection Bureau, Eco-Angel Environment Conservation Association, TUMT, NTOU, and NDHU, etc. Collaborated with NDHU in 2023, Hoping EcoPort showcased its biodiversity and coral restoration efforts, with over 600 people participated. In 2024, NDHU professors were invited to share the latest international TNFD framework, and an outreach service to schools was initiated, engaging in biodiversity courses and exchanges with students on coral ecology and conservation.



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Appendix
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TCC DAKA Eco-Tour Itinerary

Offering online reservations or customized itineraries, TCC opens up for the public to deeply visit the DAKA Park's solar installations, delve into the Hoping Mine and Hoping EcoPort, explore TCC's efforts in environmental management, restoration, and its zero-emission, zero-pollution, zero-waste circular economy model. The DAKA Tower, opening in 2024, is an exhibition space showcasing TCC's core values.

Through text, images, videos, and interactive experiences, it highlights the three pillars of sustainability: "low-carbon construction materials," "resource recycling," and "green energy." The space will host events promoting local collaboration. It aligns with TCC DAKA Renewable Resource Recycling Center's plans and aims to receive environmental education facility certification by 2026.



Tribal Wild Vegetable Education

Urbanization leads to changes in land use, resulting in a large number of local and adaptive plants becoming endangered. Wild vegetables, having adapted to climate changes over a long period, are an important source of food for indigenous tribes. Cichorium endivia and Zanthoxylum ailanthoides are common wild vegetables in Hoping Mine and are also traditional ingredients of the Taroko tribe. In August 2023, TCC DAKA hosted a sustainable eco-tourism event on foraging wild vegetables, led by Liu Xi of Wild Rhyme Agriculture. Participants learned to make wild vegetable wraps, connecting with the environment and Taroko culinary traditions. The event highlighted Hoping Mine's ecological diversity, discovering over 40 edible wild plants, supporting the mining team's efforts in native species rehabilitation.



3.3 Employee Engagement & Participation



In 2023, Hoping EcoPort employees formed the Water Environment Watch, conducting monthly water inspections, reporting pollution, and aiding in environmental education. Seventeen employees completed volunteer training and received certificates. The Watch removed 55.3 kg of waste during two beach cleanups. The goal is for 50% of employees to join by 2024 and to recruit contractors.

Since 2021, Hoping Power Plant and the Coast Guard Administration transformed the first floor of the security checkpoint near Hanben Beach into "Hanben Ocean Station" to support the Ocean Conservation Administration (OCA)'s "Salute to the Sea" policy. The station features permanent exhibitions, group tours, and environmental education activities, along with a "Convenient Beach Cleaning" tool rental service, promoting marine conservation and awareness about marine debris. In 2023, it hosted the "Oceanscape Exhibition" and participated in the Science Train Program promoting knowledge about marine debris,

biodiversity, and OTEC. The station team also joined the OCA's Marine Conservation Volunteer Program, participating in various conservation activities and earning certifications. Hoping Power Plant plans to expand its environmental education space and apply for certification as an environmental education facility, focusing on energy-related topics. It has been training environmental education personnel.



OCEAN GUARDIANS TEAM

Hanben Ocean Station (Yilan, Taiwan): Owen Yu, Rielly Syu, Zhenhan zhang, and Suner Chieh With a focus on cleaning, respecting, and preserving the ocean, the Ocean Guardians Sub-team conceived the "Express Beach Cleaning" initiative during the pandemic. The station is equipped with reusable beach cleaning tools, making beach cleaning as an easy action but large event. Everyone can come and join our list. Individuals, small families, or groups of friends can join us immediately when they visit or pass by the Hanben Ocean Station.

3.4 Talent & Cultivation

Soil Research Awards & TCC 2024 Soil Ecology Winter Camp

Soil Research Awards

TCC launched the soil research awards in 2024 to allocate resources to encourage research on soil ecology and biodiversity and cultivate talents in the field of soil science.



臺灣的跳蟲 Collembola of Taiwan

私人社團 · 1,388 位成員

加入社團 分享

Gold Prize | Hsin-Ju CHENG, Institute of Ecology and Evolutionary Biology, National Taiwan University

Springtails, once considered insects, have been reclassified into the Collembola class. Previously seen as pests, they are crucial for soil ecosystems, serving as predators and decomposers. Hsin-Ju CHENG, this year's Golden Prize laureate, expanded Taiwan's springtail species list from 26 to 58, adding 13 new species and boosting species richness by 123%. This work sets the stage for future research on springtails.



臺灣的擬蠍 Pseudoscorpiones of Taiwan

公開社團 · 916 位成員

加入社團 分享

Gold Prize | Hsiang-Yun LIN, Department of Life Science, National Taiwan Normal University

Since junior high, Hsiang-Yun LIN has been fascinated by pseudoscorpions, the carnivorous soil dwellers. For over 80 years, no new species were identified in Taiwan until Lin's work uncovered two new pseudoscorpion species and explored their symbiotic relationships with other insects, broadening the research field. Besides their research, both laureates lead Facebook clubs focused on springtails and pseudoscorpions, aiming to enhance and promote soil animal studies, aligning with TCC's goal to foster soil research.



"In the past, we call people 'earthy (old-fashioned)', or joke about 'eating soil (financially broken)' at the end of the month. I never imagined that earth and soil could be so full of depth!" TCC held the TCC 2024 Soil Ecology Winter Camp, selecting 20 applicants for issues on nature and biodiversity. Participants valued the camp, gaining insights through observation, activities, discussions, and presentations. They noted the overlooked richness of soil and its crucial role in climate regulation and food supply, highlighting the diversity of organisms like earthworms, springtails, and mites.

Soil Ecology Winter Camp Timetable

DAY 1	DAY 2	DAY 3
KBCC CEO/Chia-Wei LI The greatest challenge for humanity this century-Climate change and species extinction	NTU Associate Professor/Chih-Han CHANG Ecosystem Functions of Soil Biodiversity	Demonstration of Field Sampling
Exploring KBCC- Conversation with plants	Teaching Assistant/Hsiang-Yun LIN: Surviving in the Crevices	Student Reflections
Dr. Chiao-Ping WANG Knowledge Gaps and Challenges in Soil Biodiversity under Climate Change	Teaching Assistant/Yi-Zhi XIA: Soil Fauna of the Sky	
Student Grouping 1.Conservation 2.Biotaxonomy 3.Industry 4.Education/Promotion 5.Ecology	Taiwan Seed Improvement and Propagation Station Director /Ting-Lin CHANG Everyone Can Eat Three Meals a Day: Who Says It's Unrelated to Soil?	
	Assistant/Yong-Ren LU: Your Park Is Not My Park	
	Assistant/Bo-Wei YOU: From Linnaeus to E.O. Wilson	
	Dr. Chiao-Ping WANG What Is Soil Conservation? — From Science to Popular Science, From Popular Science to Scientific Inquiry	