Her Royal Highness Princess Srinagarindra established the Mae Fah Luang Foundation under Royal Patronage with a private donation of $3,098 as seed capital on 29 April 1972 to help solve the root problems of social issues, namely "Sickness, Poverty and Ignorance".
Her Royal Highness Princess Maha Chakri Sirindhorn was appointed by His Majesty King Bhumibol Adulyadej the Great as the Honorary President in 1996. Since then, Her Royal Highness has continued to carry on the vision of the Princess Mother for the greatest benefit of the people and inspire the next generation to become responsible citizens.
Since the start of the COVID-19 pandemic in January 2020, Thailand’s labor market has faced serious and continuous repercussions, particularly during the period from July-September 2021 when unemployment figures reached 870,000 persons, the highest since the start of the pandemic. The only sector that managed to grow was the agriculture sector, which employed a work force of 12.7 million people.

The employment circumstances of the Mae Fah Luang Foundation under Royal Patronage in Fiscal Year 2021 reflected that of the labor market, that is to say that farmers in the foundation’s project areas in Chiang Rai, Chiang Mai and Nan provinces suffered little or no disruption in their work or their income. Meanwhile, the labor force that had been employed in big cities or overseas were forced to gradually return to their hometowns, but this was still minimal in the big picture. Doi Tung Development Project in Chiang Rai Province saw some 400 local people returning home compared to the total population of 11,496. In terms of economic indicators, although income per household was reduced by 14 percent, savings saw an increase of 60 percent. At the Roi Jai Rak Project in Chiang Mai Province, per capita income rose by 41 percent, while savings increased by 7 percent.

The data from the economic and social survey above is evidence that the royal principle of Her Royal Highness Princess Srinagarindra The Princess Mother—who said, “Help them to help themselves” as a way to empower communities against economic, social and environmental anomalies—has had concrete results.

On 18 October 2021, the Mae Fah Luang Foundation under Royal Patronage was dealt a severe blow with the passing of Mom Rajawongse Disnadda Diskul, Chairman of the Advisory Committee, Mae Fah Luang Foundation under Royal Patronage.

Since 1972, M.R. Disnadda had been the key force in integrating the government and private sectors in implementing community development, earning the Mae Fah Luang Foundation the trust of the Thai Government as well as the global community, with invitations to share our development model on the international stage. This gave Thailand world recognition as the model of Sustainable Development.

In terms of the foundation’s management, M.R. Disnadda was a true example of the people-centric development approach. The strong basis that he built will continue to be a compass to direct the foundation to continue to create positive change that will benefit the public and the community at large.

Thanpuying Putrie Viravaidya
Chairman of the Board
Mae Fah Luang Foundation under Royal Patronage
Since 1972, the Mae Fah Luang Foundation under Royal Patronage has been applying the royal principles and initiatives of Her Royal Highness Princess Srí Nagarindrā The Princess Mother to address the basic economic, social and environmental issues of the people. This has successfully served the needs of the people, with tangible results in several project areas.

However, the issues that the Mae Fah Luang Foundation faces today are even more challenging than before. In the past year, Thailand and the entire world have had to face serious global problems that are increasingly becoming more severe, particularly in terms of economic effects as a result of the COVID-19 pandemic as well as climate change.

In 2021, the Mae Fah Luang Foundation drew upon its development experiences in the past to implement new projects, namely conducting research into high-value economic crops such as vanilla, in order to come up with new economic crops with good market potential in addition to coffee and macadamia. This will allow greater options for the communities to earn a stable livelihood in such challenging times as these.

As for the carbon credit management project in community forest areas—introduced in 2020 to allow communities to earn a stable income from their forests and reduce environmental degradation, whilst encouraging the private sector to purchase carbon credits to offset their greenhouse gas emissions—was expanded in 2021. Pilot plots for the Voluntary Emission Reduction Program were set up in conjunction with 8 community forests, totalling 10,561 rai, to be implemented along with the Livelihood Promotion and Wild Fire Prevention Fund.

DoiTung brand, the foundation’s social enterprise, has also adapted its operations to suit consumer habits and changing market trends such as collaborating with international brands like Onitsuka Tiger, and aggressively promoting online sales for all business units, as well as adjusting the internal work force to increase business potential.

In October 2021, Mom Rajawongse Disnadda Diskul, Chairman of the Advisory Committee of the Mae Fah Luang Foundation under Royal Patronage, passed away. This was an immense and tragic loss for the foundation, as he was a leader who had dedicated his life to the foundation and the communities within our project areas.

Having been appointed to the position of Secretary General of the foundation in July 2021, I pledge to walk in the footsteps of Mom Rajawongse Disnadda Diskul in carrying on the royal initiatives of Her Royal Highness Princess Srí Nagarindrā The Princess Mother, and the vision of the Mae Fah Luang Foundation in developing human potential that will lead to true sustainable development.

Veerathai Santiprabhob
Secretary-General
Mae Fah Luang Foundation under Royal Patronage
Board of Directors

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   Chairman of Nominating Committee
2. Dr. Veerathai Santiprabhob
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   Chairman of Executive Board
3. Mr. Banyong Pongpanich
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   Chairman of the Governance Committee
4. Ms. Phawana Niemloy
   Board Member and Secretary

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   Board Member
6. M.L. Dispanadda Diskul
   Board Member
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12. Ms. Buranee Rachjaibun
    Board Member

Advisors to the Board

Chairman of the Advisor to the Board
M.R. Disnadda Diskul

Advisor to the Board
1. Mr. Apilas Osatananda
2. Dr. Riksh Syamananda
3. Dr. Sumet Tantivejkul
4. General Pang Malakul na Ayudhaya
5. Mr. Nakorn Pongnoi
6. Mr. Alessandro Calvani
7. Mr. Boonchob Suttamanaswong
8. Ms. Pattama Petchtriang

Advisors to the Executive Board
1. Mr. Abhichon Chandrasen
2. Mr. Abhirarm Chandrasen
Vision

The Mae Fah Luang Foundation under Royal Patronage aims to develop communities, society, environment and cultures following the work of the Princess Mother in order to create happiness, sustainability, and stability.

Mission

To catalyse the growth of sustainable economic, social, cultural and environmental development by implementing integrated development, cooperation, consultation, and training. To establish the Foundation’s approach as Thailand’s principal development model.
1972
- Her Royal Highness Princess Srinagarindra, the Princess Mother, established the Thai Hill Crafts Foundation under the Patronage of H.R.H. Princess Mother.

1973
- Opening of the first Thai Hill Crafts store in Chiang Mai Province

1974
- Launch of the hill tribe youth training programme, allowing them an opportunity to attend school in the town of Chiang Rai, learn about communal living and mutual support as well as leadership skills.

1985
- The Foundation changed its name to “Mae Fah Luang Foundation Under the Patronage of Her Royal Highness the Princess Mother”.

1987
- Her Royal Highness the Princess Mother visited the 31st Watershed Conservation Unit located at Doi Tung and declared “I will reforest Doi Tung”. This was the origin of the Doi Tung Development Project (DTDP) and the construction of Doi Tung Royal Villa.

1988
- The government launched the 9,900-rai (1,584 hectares) Reforestation Project to mark the 90th birthday anniversary of Her Royal Highness the Princess Mother.
1989

- Founding of Navuti Co., Ltd. to mark the 90th birthday anniversary of Her Royal Highness the Princess Mother. The company aimed to plant economic forests within the Doi Tung Development Project area, with six partners namely the Crown Property Bureau, Mitsui Company (Thailand), the Siam Commercial Bank, the Bank of Asia, the Euchukiat Company, and the Sumitomo Mitsui Banking Corporation, all of which agreed not to expect any return on investments. All profits would be designated for further social and community development. It would become Thailand’s first full-fledged social enterprise.

1990

- The vocational training centre for sewing and weaving was set up in Doi Tung, which is now called the “Cottage Industry Centre and Outlet”. The first shop was opened at the Doi Tung Development Project, and is now known as “DoiTung Lifestyle”.

1992

- The Mae Fah Luang Arboretum at Doi Chang Moob was created to collect and preserve rare plant species such as rhododendron and native orchids. It also provided livelihoods for communities living along the Thai-Myanmar border, a notorious drug trafficking route.
- The Pha Mee Drug Rehabilitation Centre was founded to provide treatment for almost 500 drug users and to prepare them to re-enter society with dignity, with options for an honest and stable livelihood.

1993

- Their Majesties King Bhumibol Adulyadej the Great and Queen Sirikit the Queen Mother visited Mae Fah Luang Arboretum at Doi Chang Moob. His Majesty King Bhumibol Adulyadej the Great named the viewpoint at the highest point of the Nang Non Range “Siri Lae Myanmar”.


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1994
- The coffee roasting and macadamia processing facilities were set up as the next stage of the economic forest.

1995
- The first Café DoiTung was opened at Doi Tung Development Project.

1996
- After the passing of Her Royal Highness the Princess Mother, His Majesty King Bhumibol Adulyadej the Great accepted Mae Fah Luang Foundation under his royal patronage, and graciously appointed Her Royal Highness Princess Maha Chakri Sirindhorn as the Honorary President.

1998
- Education development began at Ban Kha Yaeng Phattana School, Doi Tung Development Project, with the introduction of Constructionism into the curriculum whereby children “learn by doing” and “learn by making”.

2000
- The United Nations Educational, Scientific and Cultural Organisation (UNESCO) commemorated the centenary of the birth of Her Royal Highness the Princess Mother by recognising her as the world’s “Great Personality in Public Service”.
- Doi Tung Development Project achieved financial self-sustainability, with profits from its social enterprises, handicrafts, tourism, food production, and agriculture being sufficient to cover operational costs and additional development programmes in the Doi Tung area.

2002
- Sustainable Alternative Livelihood Development Project (2002-2004) commenced in Yong Kha, Shan State, Myanmar, becoming the first international outreach project for MFLF.
- The United Nations Office on Drugs and Crime (UNODC) awarded DTDP a label with its logo recognising that income from DoiTung products “contributes to the achievement of a drug free world”.
- M.R. Disnadda Diskul, then Secretary General of the Mae Fah Luang Foundation under Royal Patronage, was appointed as member of the UNODC Steering Committee on Thematic Evaluation on Alternative Development.
2003
- The Montessori Learning Approach was introduced for early childhood development at Ban Kha Yaeng Phattana School, Doi Tung Development Project, using a child-centred approach that builds a strong foundation for life-long learning.
- A medical training centre was set up in partnership with the Japan International Friendship and Welfare Foundation (JIFF) to develop the skills of medical personnel and provide medical equipment to the four member countries of the Mekong Sub-Region - Laos, Myanmar, Vietnam and Thailand.

2005
- His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua (then His Royal Highness Crown Prince Maha Vajiralongkorn) presided at the opening of the Hall of Opium.
- Partnered with Siam Commercial Foundation to launch a royal tribute reforestation project (Reforestation Against Poverty) at Pang Mahan Village, Thoet Thai Sub-district, Chiang Rai Province, using the Assisted Tree Regeneration method.

2006
- Partnered with Chaipattana Foundation to expand the reforestation project to Puna Village, Thoet Thai Sub-district, Chiang Rai Province, using the Natural Tree Regeneration method or “reforestation without planting”.
- DoiTung coffee was granted Geographical Indication (GI) from the Department of Intellectual Property, Ministry of Commerce.

2008
- Advocacy for Alternative Development for a Sustainable Livelihood in Thailand to be included in Resolution No. 2008/16 of the United Nations Economic and Social Council.
2009
- M.R. Dinadda Diskul, then-CEO of DTDP, was recognised by the Schwab Foundation for Social Entrepreneurship as the “Social Entrepreneur of the Year 2009” for the region of East Asia and Southeast Asia.
- Partnered with the Royal Initiative Discovery Foundation to implement an integrated development pilot project according to Royal Initiative in Nan province (2009-2012), covering 21 villages in three districts, namely Tha Wang Pha, Song Khwae and Chalermprakiet.

2011
- Launch of “Kladee” or “Sustainable Flood Relief Project” in 13 provinces - Phitsanulok, Phichit, Nakhon Sawan, Uthai Thani, Chai Nat, Lopburi, Sing Buri, Ang Thong, Ayutthaya, Nakhon Pathom, Nakhon Nayok, Pathum Thani and Nonthaburi. The project was aimed at aiding flood victims to recover their livelihoods.

2012
- The United Nations General Assembly adopted the MFLF’s SALD approach as proposed during the ICAD conference at the Doi Tung Development Project in 2011 as universal guidelines for development projects that would solve problems and needs of the communities effectively and sustainably.

2013
- Launch of the Nan Reforestation Project (2013-2017), covering 250,000 rai (40,000 hectares), building upon the livelihood development project initiated in 2009.
- MFLF was approached by the United Nations High Commissioner for Refugees (UNHCR) to implement the “Profiling Project of Temporary Shelters along the Thai-Myanmar Border” of approximately 130,000 displaced people in nine temporary border camps to help understand the demographics and their future livelihood preferences.
2014
• MFLF received the 19th Nikkei Asia Prize awarded by Nikkei Inc. media corporation of Japan as an “Outstanding Organisation for Culture and Community”.

2015
• Her Royal Highness Princess Maha Chakri Sirindhorn indicated her wishes during the annual Board Meeting for the Doi Tung Development Project to implement teaching the Thai language in schools in Mae Fah Luang District.
• Partnered with the Royal Initiative Discovery Foundation (RIDF) to repair check dams, reservoirs, and pipe networks in Nan Province. MFLF conducted training and operations for a total of 663 check dams covering 100,000 rai (16,000 hectares) of farmland throughout the province, and increasing income for local farmers by $18,587,533 a year
• DoiTung coffee was granted Geographical Indication (GI) from the European Union.

2016
• Partnered with the Office of the Basic Education Commission, Ministry of Education, to reform the school curriculum for children whose first language is not Thai in schools in Thoet Thai, Mae Salong Nok, Mae Salong Nai and Mae Fah Luang sub-districts in the Mae Fah Luang district, Chiang Rai province. A total of 26 schools were targeted for this project which covered 2017-2021.
• Scaling up of the water system development and management project in Mae Fah Luang District
• Partnered with Deutsche Gesellschaft fur Internationale Zusammenarbeit GmbH (GIZ) under the “Global Partnership on Drug Policies and Development” (GPDPD) to provide consultancy work for countries facing issues of illicit crop cultivation and other related issues.
2017
• Partnered with the private sector and other development foundations in a project called “Team D”. The four foundations include MFLF, RDF, Rakkaew Foundation and Thailand Sustainable Development Foundation; the 10 corporations include Bang Chak Corporation PCL, Charoen Pokphand Group Co., Ltd, Mitr Phol Co., Ltd, Pracharath Rak Samakkhee (Thailand) Co., Ltd, Slam Cement Group PCL, Slam Commercial Bank PCL, Tesco Lotus Co., Ltd, Thai Beverage PCL, Bank of Ayudhya PCL and Unilever Thai Trading Limited. The project was an integrated approach to area-based development for sustainability according to King Rama IX’s development principles and the Mae Fah Luang Development Model.

2018
• Her Royal Highness Princess Bajrakitiyabha Narendira Debyavati visited the Roi Jai Rak Project for the first time since its inception in November 2017 in Tha Ton sub-district, Mae Ai district, Chiang Mai province.
• DTDP achieved success in its Zero Waste to Landfill waste management efforts within the Doi Tung Development Project area.

2019
• Participated in the Workshop to Drive the Integrated Northern Border Drug Mitigation Operation Plan (2019-2022) together with the National Command Centre for Drugs, Ministry of Justice, to ensure the effective implementation of drug mitigation plans.
• Partnered with the Republic of the Union of Myanmar to inaugurate Nam Moei Check Dam at Mong Lin, Tachileik Township, to address flood and drought issues.
• Partnered with the “Dental Unit of His Majesty the King”, Faculty of Dentistry, Chulalongkorn Hospital, Royal Initiative Discovery Foundation, Yala Province and Yala Provincial Health Office, to organise the Royal Tribute Mobile Dental Clinic 2019 to provide dental health checkup and treatment, and disseminate knowledge on oral hygiene to the general public free of charge in Bannang Sata District, Yala.
Province. This was the second such event in the three southern border provinces, and received the full cooperation of all sectors.

- MFLF signed an MOU for joint innovation development with Geo-Informatics and Space Technology Development Agency (GISTDA) on the use of aerospace technology and geo-informatics during "Thailand Space Week 2019" to support development work based on His Majesty the King’s sustainable development principles.

- Doi Tung was declared as one of 10 top cultural travel destinations in Thailand by the Ministry of Culture.

- The first seminar on "Developing the Thai Language Syllabus for Children whose First Language is not Thai" to exchange knowledge, processes and skills in Thai language teaching for primary school students in order to achieve greater efficiency as shared by experienced teachers of 39 pilot schools within the Doi Tung Development Project area and in project extension areas.

- The Autumn/Winter 2018-2019 fashion collection from the DoiTung brand was displayed at Milan Design Week 2019 in Milan, Italy, to showcase contemporary Thai textiles that reflect the artisanal communities on DoiTung, combined with creative designs made from natural materials that are eco-friendly and promote a sustainable society that is recognised on the global stage.

- Fashion products from the DoiTung social enterprise that received the DEmark Award Winner 2019 were showcased at the "Thai Textile: A Touch of Thai" exhibition in Japan organised by the Thai Ministry of Arts and Culture together with representatives from both the government and private sectors.
2020

- Mae Fah Luang Foundation was certified as a participating organisation in the mitigation of greenhouse gases campaign by the Ministry of National Resources and Environment in conjunction with the Thailand Greenhouse Gas Management Organisation. This was based on the foundation’s carbon footprint programme of 2018 and the zero carbon activities at the opening ceremony of Café DoiTung, Rajapruek Lounge, UN ESCAP Building, Thailand, and at the Colors of Doi Tung Festival.
- The MFLF won the Prime Minister’s Export Award in the Best Design category. M.L. Dispanadda Diskul, the CEO of the Mae Fah Luang Foundation under Royal Patronage, received the award from Prime Minister General Prayut Chan-o-cha.
- The Doi Tung Development Project received the G-Green Production Award “Gold Level” from the Department of Environmental Quality Promotion, Ministry of Natural Resources and Environment.
- The Mae Fah Luang Foundation under Royal Patronage and the Securities and Exchange Commission (SEC) jointly initiated the “You Care for Forests, We Care for You” project in 16 community forests in Chiang Rai, Chiang Mai, Mae Hong Son and Phayao provinces. It is expected that a total of 392,220 tons of carbon dioxide equivalent will be produced in the 20-year period.

2021

- Mae Fah Luang Foundation participated in the “Thailand Voluntary Emission Reduction Programme” or T-VER and successfully registered 8 community forests under the T-VER, amounting to an estimated annual carbon offset of 5,500 tons of carbon dioxide equivalent.
Doi Tung Development Project

Basic Information

- **Time Frame**: 1988 - Present
- **Location**: 29 villages on the Nang Non mountain range, Chiang Rai Province
  - Area: 14,685 hectares (based on the permit issued by Thailand’s Royal Forest Department)
- **Beneficiaries**: 1,721 households of 11,496 people

Background

Doi Tung Development Project (DTDP) was established in 1988 by Her Royal Highness Princess Srinagarindra, the Princess Mother, as a result of her resolution, “I will reforest Doi Tung” to help improve the quality of life and revive the national resources there. Doi Tung is located in the Golden Triangle, once the world’s largest drug producing region.

At the start of the project, the forests were found to have been totally razed and left barren, local communities living in a state of abject poverty, with no access to education or basic healthcare. The villagers were mostly stateless and the area was controlled by militia, giving the people no choice but to resort to illegal practices such as slash and burn farming, opium poppy cultivation, drug and human trafficking.

Her Royal Highness Princess Srinagarindra, the Princess Mother, realized that the root cause of these problems was “poverty and the lack of opportunity”, so she addressed the basic issues of “sickness, poverty and ignorance” in a holistic manner through a people-centric approach. Economic gains had to be balanced with social stability and environmental abundance. This was done through developing the basic infrastructure, creating livelihoods that suited the geo-social conditions of the area, developing knowledge and skills that covered the entire value chain, restoring the natural environment and improving education for the youth. The mechanism used to create a stable income for the community was the social enterprise under the DoiTung brand, which emphasized the use of high-quality natural materials, folk wisdom and craftsmanship. There are five business units: handicrafts, horticulture, processed food, cafe, and tourism.

The success of DTDP’s development work in the past has gained international recognition. This Sustainable Alternative Livelihood Development Model has been replicated in communities suffering from various issues in many countries such as the Republic of the Union of Myanmar, the Islamic Republic of Afghanistan and the Republic of Indonesia.

Fundamental Problems

1. 70% of people were stateless.
2. Denuded mountains as a result of deforestation and shifting cultivation
3. Lack of infrastructure, extreme poverty ($116 average annual per capita income)
4. Controlled by armed militia
5. Drug cultivation, addiction and trafficking, as well as human trafficking
Development Outcome: What Do the People Get?

Environmental Impact: Land Usage of Project Area

Total area 14,685 hectares

- Conservation forest 9,731 hectares (66.3%)
- Sustenance forest 555 hectares (3.8%)
- Cultivation area 1,321 hectares (8.9%)
- Economic forest (coffee, macadamia, tea and fruit) 2,568 hectares (17.5%)
- Residential area 510 hectares (0.5%)

Economic Impact: Comparison of Income, Expenses, Debt and Savings (US$/household/year)

Income: 5,696, 17,942, 17,946, 17,424, 17,422, 17,042
Expenses: 2,357, 3,280, 2,703, 3,494, 3,494, 3,684
Debt: 2,659, 5,696, 5,696, 5,696, 5,696, 5,696
Savings: 2,357, 5,696, 5,696, 5,696, 5,696, 5,696

From the fundamental issue of poverty where villagers earned an income of US$114/person/year, Doi Tung Development Project was able to address the problem, raising the income to US$2,754/person/year by 2021.

Social Impact: Educational Opportunities of the Community

Educational Opportunities

- Uneducated 30.5%
- Educated 69.5%

Levels of Education

- Bachelor’s degree up 12.1%
- Diploma / Vocational Certificate 3.3%
- Secondary Level 45.5%
- Primary Level 25.2%
- Kindergarten 3.6%

Comparison of Wildfires

- 1997: Damage 504 hectares (2.94%)
- 2017: Damage 347 hectares (2.02%)
- 2019: Damage 291 hectares (1.12%)
- 2021: Damage 36 hectares (0.21%)
Key Achievements in 2021

1. DoiTung Brand

1.1 Design for Sustainability

Mae Fah Luang Foundation (MFLF) is dedicated to preserving local livelihoods and promoting local labor in order to create jobs and sustainable incomes. This is done through the DoiTung brand, which takes an inspiration from traditional ethnic wisdom, combined with modern design elements that encompass environmental impact awareness throughout the entire production, from the conceptual phase that relies on recycled materials to minimizing production waste.

**DoiTung Brand Won Prime Minister’s Award for Sustainability**

The MFLF won the Best Design Award in the field of Creative and Innovation at the Prime Minister’s Export Award 2021, which is the Thai government’s highest award bestowed annually to celebrate the foremost Thai exporters. Awarded Best Design was the Re-Pleats-Plastic: Pha Khao Ma, inspired by one of Thailand’s most significant fabrics, Kaoma. Kaoma is a multipurpose textile that has been a huge part of the Thai way of life for centuries. The graphics on the handwoven fabric are derived from Kaoma’s original aesthetics, which are bold and colorful checkered images. PET recycled yarns are used as the protagonist throughout the collection as it embodies sustainability concept in modern-day fashion, whilst reflecting the philosophy of Circular Economy. Pleated structure is another detail that has been incorporated across the pieces to add DoiTung’s twist into the outfits.
'DoiTung' Teamed up with 'Onitsuka Tiger' to Produce a Special Footwear Collection from DoiTung Hand-woven Fabric

Onitsuka Tiger, a Japanese fashion brand that combines sports-inspired fashion with its heritage and innovation, in collaboration with the Doi Tung Development Project, launched a special footwear collection that supports local craftsmanship and social sustainability.

The outcomes are several handmade textiles put together from spinning the thread into delicately woven fabrics by DoiTung artisans. In comparison to machine-woven fabric, the fabric featured in these products is much softer, and the patterns more delicate. The patterned textile is used for the upper of the three classic models - MEXICO 66, MEXICO 66 PARATY, and SERRANO which come in 5 patterns to choose from.

Exclusive only in Thailand, the Mexico 66™ models feature an upper made from fabric carefully woven by DoiTung artisans using 100% recycled PET thread from plastic bottles. There are 2 designs available. One boasts a black and grey striped pattern with embroidered logos and the other appeals with a tiger print. The sole also differs in red or yellow, as a nod to key colors for both DoiTung and Onitsuka Tiger.

The other 3 models - MEXICO 66, MEXICO 66 PARATY, and SERRANO were launched together globally. The collection encapsulates both Thai and Japanese qualities that celebrate Thai craftsmanship and Onitsuka Tiger’s iconic footwear. The mission was to create a product with a timeless design, durable and comfortable construction, which would be appreciated across the globe. All three global models are created through environmentally-conscious manufacturing process.
IKEA in Collaboration with ‘DoiTung’ and 4 Designers to Create Household Collection Supporting Social Enterprises and Local Artisans

IKEA launched a unique collection called “LOKALT”, in collaboration with local designers and social enterprises from Thailand, Jordan and India, conveying contemporary designs combined with local handicrafts. The collection consists of household items that reflect culture, way of life, and traditional craftsmanship. It aimed to promote careers for local artisans in each country.

The featured designers for LOKALT were Thai designers Ploypan Theerachai – Decha Archjananun of THINKK design studio from Bangkok, Tania Haddad from Amman, Jordan, and IKEA in-house designer Akanksha Deo, who is based in Delhi, India. The social enterprises in charge of producing works for the collection LOKALT included the DTDP from Thailand, Jordan River Foundation from Jordan, Industree, and Diamond, the female carpet weavers in India.

The DTDP artisans produced the ceramics designed by THINKK design studio. The collection celebrates traditional Thai way of sharing meals and dining together while adding a modern twist with function.
1.2 Eco-Friendly Production Process

Products under the DoiTung brand are manufactured taking into consideration the effects on the environment and the community, and therefore aim for zero waste under the Circular Economy concept. This emphasizes the maximization of existing materials and reducing waste through three methods: Reuse, Recycle, and Re-material.

Zero Waste Management

The MFLF places great emphasis on the upstream waste management. Products under the DoiTung brand are manufactured employing the 4R principle (Refuse, Reduce, Reuse, and Recycle). A total of 905 kgs of waste was recycled, resulting in a reduction of greenhouse gas emission by 2.65 tons of carbon dioxide equivalent.

Weaving Factory and Textile Dyeing Factory

Our weaving and textile dyeing factories have recycled waste from production process into new products, including utilizing textile and yarn scraps for product decoration and process experiments. The textile dyeing factory also uses natural dyes and locally sourced materials such as rust, coffee grounds, macadamia nut shells, indigo, and onion skins.

Mulberry Paper Factory

The mulberry paper factory reuses mulberry paper pulp to reduce waste to landfill, resulting in a reduction of greenhouse gas emission by 2.31 tons of carbon dioxide equivalent.

Alternative Energy

In 2021, the Foundation used 9.59% alternative energy in the form of solar cells, heat pumps and biofuel, equivalent to US$48,484. A total of 196 tons of waste was segregated, reducing greenhouse gas by 235.52 tons of carbon dioxide equivalent. The segregated waste was reused with value-added to produce worm castings fertilizer, to be used as alternative energy, and for other recycling purposes.

In addition to this, 21 tons of macadamia husks per year or 1.7 tons per month were used as biofuel, equivalent to a reduction in energy costs of US$2,803 per year, or US$233 per month. The Foundation’s water treatment system has resulted in 3.03% of water being recycled, reducing tap water usage by 10,494 cu.m. per year, or US$4,770, and reducing greenhouse gas emission by 2.98 tons of carbon dioxide equivalent per year.

Coffee

DoiTung ready-to-drink coffee comes in recyclable PET bare bottles without plastic labels. The bottles are sealed with small-sized stickers that can be peeled off easily. In addition to this, DoiTung opts for aluminium for coffee capsules since it has the highest rate of recycling. A machine to separate coffee grounds from their capsules was built to ensure that the used capsules can be recycled.

Waste Management

In 2021, the MFLF scaled up the Zero Waste to Landfill Project to the surrounding communities of the DTDP. The appropriate and systematic waste management at the community level resulted in a success in reduction of waste to landfill, which was aligned with the objectives of the project. In comparison to 2020, the weight of waste in 2021 decreased by 68%. 133 tons or 94% of the total waste were managed based on the principle of the circular economy, which generated a total income of US$12,770 and reduced waste management cost by 52%.

Doi Tung Development Project also organized 15 trainings for 492 staff, villagers, and students. The waste management center welcomed a total of 261 study visitors.
2. Social Enterprise

2.1 Community Entrepreneurs

Improving the Quality of Coffee

In 2021, coffee quality improvement was carried out with a focus on strengthening the potential of coffee farmers at the DTDP and other projects by the MFLF. Data of each farmer and each farming plot was collected to monitor the farmers’ performance. This has led to a steady improvement in the quality of coffee products and a sustainable income for coffee farmers. The 2020/2021 (from October 2020 to March 2021) harvest season brought a total income of US$606,060 for farmers in the DTDP. The average per capita income increased by 57% compared to the previous year, or from US$613 to US$965. The coffee plantations in Nan province generated a total income of US$66,060.

The MFLF expanded research and development of coffee types to provide coffee farmers with a more sustainable income. The MFLF employed a new method of coffee processing to uplift the quality and competitiveness of DoiTung coffee. The new flavor which was different from other competitors could potentially bring higher income for the coffee farmers. The Foundation also did a market test on auction of special batches of green beans that generated as high as US$202 per kg or a total of US$16,724 of value to the beans.

2.2 Social Enterprise Leaders

Social Enterprise Development Fund

Due to the spread of coronavirus (COVID-19), many social enterprises faced the shortage of human resources. The MFLF therefore provided financial support totaling US$129,394 for social enterprises that had demonstrated their potential and had created substantial positive impact on the society. The three social enterprises that received the support included Buddy HomeCare Social Enterprise Co., Ltd. that provides homecare program for older persons through job creations for indigenous youth; Steps Social Enterprise Co., Ltd. that supports employment for people with special needs; and Locall Platform Co., Ltd. that supports local product distribution.

High Value Economic Crops Project

The MFLF initiated the High Value Economic Crops Project to study new types of economic crops with the potential to create value-addition and bring a high price. With the same amount of resources in terms of cultivation and product management, the high value economic crops can bring villagers higher yield and income per unit of area. In 2021, the MFLF focused on a study of “vanilla” through many experiments, including cultivation plot management and primary processing. Data from the experiments were collected by technology to ensure the most accurate data analysis. The lessons learned from the experiments were compiled and developed into a manual on cultivation plot and product management for farmers participating in 2022 cultivation project.
The Roi Jai Rak Project was initiated to support the government’s drug mitigation policies, and create national stability through capacity building activities for local communities. Today, narcotic drugs have become an urban problem, with rampant production, trade and trafficking particularly in the north of Thailand. The Roi Jai Rak Project has therefore adapted alternative development principles into the urban context, creating immunity for the target group who once earned an income from illicit activities, and providing them with honest livelihoods.

The long-term area-based alternative development principles that have been adapted include “Survival, Sufficiency, and Sustainability” in all dimensions — economic, social, and environmental; capacity building for the community in terms of agriculture, animal husbandry, irrigation, handicrafts, processing of agricultural produce to create value-addition, tourism and natural resource management, eventually allowing the community to carry on the development work on their own.

Background

The Roi Jai Rak Project was initiated to support the government’s drug mitigation policies, and create national stability through capacity building activities for local communities. Today, narcotic drugs have become an urban problem, with rampant production, trade and trafficking particularly in the north of Thailand. The Roi Jai Rak Project has therefore adapted alternative development principles into the urban context, creating immunity for the target group who once earned an income from illicit activities, and providing them with honest livelihoods.

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Key Achievements in 2021

In 2021, the project team and the target communities continued the comprehensive area-based development activities to promote stable sources of income and reduce household expenses through skill and capacity development. The activities included development of water systems to enhance agricultural capacity and opportunities for more than one cropping; employment of intensive farming to increase the quantity and quality of agricultural produce; integrated promotion of livestock husbandry; and development of healthcare system; promotion of handicraft skills among women’s groups; value-addition for agricultural produce to mitigate price fluctuation; utilization of out-of-grade produce; and development of tourist attractions. At the same time, education development was also prioritized with a focus on the communities’ schools and child development centers. Public health and basic hygiene practices were one of the priorities, as the project continued to follow up on the Volunteer for Good volunteers or the former drug patients. Last but not least, the land usage management system was established for long-term forest conservation. The key achievements of each development dimension are as follows:
Water
The project team installed five water tanks of 50 cubic meters for agriculture, fishery, domestic consumption, and product processing. Additional four small agricultural check dams were built to serve 40.48 hectares with 30 beneficiaries. The project also provided support in terms of water system design and development for the Subdistrict Administrative Organization.

Agriculture
The project provided trainings on the theory of intensive farming for 152 staff and local development volunteers. The trainings aimed to transfer farming knowledge and introduce farming of new high-value alternative crops. Vegetable seeds were distributed to 1,133 households to reduce expenses and strengthen household food security. At the same time, 48 local youth participated in young farmer activities to equip themselves with household farming skills. The project also produced 21,244 mushroom cubes as an alternative crop to generate income for the community. Straw from paddy fields was used to grow mushrooms to reduce open straw burning which could lead to smog pollution.

72 farmers participated in the improvement of lowland rice yield on an area of 57.92 hectares. The harvest of lowland rice yielded 355,071 kilograms or 6,137.5 kilograms per hectare, which was an increase by 21% from the previous year. In terms of the highland rice, there were 24 farmers on 19.44 hectares. The total yield of highland rice amounted to 35,407 kilograms or 1,825 kilograms per hectare, increasing by 18% due to a pandemic. The reduction in the livestock mortality rate was equivalent to US$21,951. According to the 2021 census, the community’s income from livestock totaled US$621,877. The project also organized chicken raising activities for 43 students to gain experience on chicken raising and vaccination. The activities helped equip the students with livestock husbandry skill and encouraged them to keep the chicken mortality rate below 20%. 84% of the students passed the training criteria.

Handicrafts
The project team continued to promote activities of the women’s handicraft group. At present, the group has in total 54 members. The group produced 39,375 items under the DoiTung brand and 9,933 handicraft products, accounting for a total income of US$13,433 and US$1,617 respectively.

Tourism
The project team saw the potential in establishing tourism as a secure alternative livelihood and source of income for the community, since the project location is situated in hill areas, which are considered to be appealing natural capital that can be developed into a tourist attraction. Tourism could open up new distribution channels, as well as livelihood alternatives for the community. Maintenance of garden and shops, including management of tourist spots could generate domestic sales were 33,425 kilograms, worth US$15,975. The project also purchased 9,196 kilograms of out-of-grade mangoes, worth US$4,277, from the enterprise group for further processing for value addition.

Livestock
Pig, black-boned chicken, Muscovy duck, and egg-laying duck were distributed to 91 villagers in the form of a revolving fund. Another 89 impoverished villagers received Nile tilapia, beef cattle, and rugosed frog, including stables and a feed fund as sources of food and extra income. A fund of 30 beef cattle was established for 15 impoverished villagers. At the same time, quality livestock feed was developed to make livestock feed more accessible and affordable. Livestock healthcare was also provided by local livestock volunteers. As a result, livestock mortality rate decreased when compared to the start of the project: pigs from 6% to 7%; cattle from 4% to 2%; whereas the mortality rate of poultry slightly increased from 15% to 18% due to a pandemic. The reduction in the livestock mortality rate was equivalent to US$21,951. According to the 2021 census, the community’s income from livestock totaled US$621,877. The project also organized chicken raising activities for 43 students to gain experience on chicken raising and vaccination. The activities helped equip the students with livestock husbandry skill and encouraged them to keep the chicken mortality rate below 20%. 84% of the students passed the training criteria.
recurring income within the community. Since the project started to open its door to tourists in December 2020, the number of tourists has reached 5,525 people, generating an income of US$6,571 from the entrance fee, which was less than forecast due to the spread of COVID-19. The number of tourists using the services of the community market and the local products amounted to 24,409 annually, generating a total income of US$98,832. Together with the Roi Jai Rak market which is open on Tuesdays and Saturdays, the number of visitors throughout the year totaled 41,951.

Processing for Value Addition

The MFLF partnered with the King Mongkut’s Institute of Technology Ladkrabang (KMITL) to conduct research and development of 6 processed products: frozen grilled Japanese pumpkin, dried pickled cape gooseberry in syrup, fried Japanese pumpkin, ready-to-drink mango and passion fruit cider, vacuum fried pumpkin, and pumpkin soup. A community rice mill was established as a center to purchase paddy rice from farmers at fair prices to help farmers struggling with unfair prices for paddy rice and reduce logistical costs. The community can also buy rice at prices lower than the market, allowing them to reduce household expenses.

Education

The project team conducted the monitoring and evaluation on Montessori teaching through revision of Montessori learning tools. The project also organized a variety of activities: teacher and parent capacity development activities through Parent Management Training (PMT) with a total of 41 participating parents; and Preschool Parenting Program (Triple P) with 28 participating parents. Teaching and learning systems within schools were concurrently improved for highest efficiency in the learning environment.

Public Health

The project team continued to follow up on the Volunteer for Good group in terms of their living conditions and the outcome of financial support for livelihood. 93 out of 146 volunteers could be followed up on. It was found that 90 volunteers or 97% did not revert to drug use. The team also joined hands with the Mae Ai district government to address the spread of lice in the Roi Jai Rak project area, resulting in over half of the students having had their head lice treated. Only 44.08% still had head lice issues, compared with 72.78% at the start of the project. The project also partnered with Mae Ai District Public Health Office to provide COVID-19 vaccines for the villagers within the project area to control the spread of the virus.

Land Usage Management

The project team laid out temporary pegs to demarcate the cultivation land boundaries and record the data into a geographic information system (GIS). The data led to the issuance of land use certificate for 1,649 plots or 72% of 2,303 plots of cultivation land. The No Wildfire Fund was established covering the conservation forest area of 3,395 hectares in 24 villages. It was found that 24.44 hectares were ravaged by wildfires, a reduction of over 42.58% from the previous year. The project therefore generated a total of US$5,789 from the fund.

The team also conducted a survey of forest areas and identified demonstration plots to be registered to the Thailand Voluntary Emission Reduction Program (T-VER). At present, the project is waiting for the cabinet’s approval of land use authorization in order to proceed with land registration following the rules and regulations of Thailand Greenhouse Gas Management Organization (TGO).

Other Activities

The annual census conducted to assess changes in economic and social impact of the target 24 villages showed that the total population was 4,709, or an increase from the previous year by 8% or 338 people. This was due to the migration back to hometown caused by the spread of coronavirus (COVID-19). In terms of the economic aspect, the community’s total income was US$8,357,273 or an increase by 17% from the previous year. This was due mainly to an increase of income from agriculture and livestock, as well as COVID-19 cash support from the government, resulting in a higher average annual income per household which stood at US$5,725, or an increase by 10% from the previous year. The average household expenses declined by 7%, while the average savings rose from 52% to 76% per household. There was a slight increase in the average debt from the previous year, or US$1,312 per household. However, 441 households or 39% are below the Chiang Mai Province poverty line, reduced by 7% from the previous year. The most pressing issues as specified by the community are agricultural promotion, infrastructure development, and water system development.
Fundamental Problems

1. Poverty
   Villagers lacked knowledge and skills to earn a living; economic disparity

2. Lack of Water Management
   Insufficient water for use and consumption during the dry season; lack of irrigation system; ineffective use of water for agriculture

3. Drug Issues
   Drug users and traffickers were still rampant under the influence of drug trafficking networks

4. Agriculture
   Excessive use of farming chemicals; lack of agricultural knowledge; insufficient water during the dry season; degraded soil; high livestock mortality rate due to lack of know-how

Development Outcome: What Do the People Get?

Economic Impact: Comparison of Income, Expenses, Debt and Savings (US$/household/year)

Social Impact: Educational Opportunities of the Community

Educational Opportunities

- Uneducated: 26%
- Underaged: 6%
- Educated: 68%

Level of Education

- Bachelor’s degree up: 2020: 5%, 2021: 9%
- Diploma / Vocational Certificate: 2020: 5%, 2021: 7%
- Secondary Level: 2020: 40%, 2021: 49%
- Primary Level: 2020: 48%, 2021: 35%

Environmental Impact: Comparison of Wildfires

- Damage: 2020: 266 Area (hectares) 1.25%
- Damage: 2021: 152 Area (hectares) 0.71%
Domestic Projects

The Carbon Credit from Community Forests for Sustainability Project

Basic Information

Time Frame
2020-2025

Location
15 villages in Phayao, Chiang Rai, Chiang Mai, and Mae Hong Son provinces
Area 3,099 hectares (community forest area coverage based on the Community Forest Act B.E. 2562)

Beneficiaries
2,726 households of 7,961 people
The Carbon credit from Community Forests for Sustainability Project aims to establish a system to assess and manage carbon credit in community forests through a public-private partnership where local communities are encouraged to be the caretakers of their forests. The project is implementable under the Community Forest Act B.E.2562 which allows communities to utilize natural resources sustainably in community forests. The private sector can be incentivized by tax deduction from its funding to the project. The project will serve as a preparation of carbon credit from the forests for limitation of corporate GHG emissions in the future where corporates will need carbon credit to offset their carbon footprint of organization (CFO).

The project could serve as a secure and sustainable source of income for the communities, as well as a model of sustainable solution that can be replicated across the country to address social and environmental issues such as climate change and global warming, post-COVID-19 labor migration, drought, food security, and PM2.5 pollution.

The MFLF serves as an advisor to the communities regarding the participation in Thailand Voluntary Emission Reduction Program (T-VER) to assess their carbon credit in the future. The program will also enhance the community capacity in forest preservation and management of community development fund for 16 community forests through partnership with the Ministry of Natural Resources and Environment (MNRE), the Royal Forestry Department (RFD), the Thailand Greenhouse Gas Management Organization (TGO), the Geo- Informatics and Space Technology Development Agency (GISTDA), the Securities and Exchange Commission (SET), and the private sector entities that support efficient and lawful operations of the project.

Additionally, the MFLF will serve as an agent to monitor and evaluate the operations based on the project main indicators, namely the size of wildfire-affected areas in the community forests, the amount of carbon credit, and livelihood group formation.
The MFLF partnered with the RFD, the SET, Thai Beverage Plc., Siam Commercial Bank (SCB), TMT Steel PCL, Intouch Holdings PCL, PricewaterhouseCoopers ABAS Ltd., QTC Energy PCL, and PTG Energy PCL to pilot training courses and workshops on establishment of carbon credit study plots in forests and sustainable development of community capacity for 105 representatives of the community forest groups at the DTDP.

From October 2020 to February 2021, the MFLF and the community forest representatives successfully set up 210 T-VER demonstration plots in 15 community forests. In 2021, 8 community forests in three provinces were successfully registered under T-Ver: Ban Pi, Phayao province; Ban Pa Sang Doi Kaew, Ban Pa Sang Nuea, Ban Phu Khao Kaew, Ban Rong Bon, Chiang Rai province; and Ban Tor Pae, Ban Sob Pong, Ban Mae Su, Mae Hong Son province. From the total 1,749 hectares of community forest areas as specified in the Community Forest Act, 1,690 hectares are considered the project areas, amounting to an estimated annual carbon offset of 5,500 tons of carbon dioxide equivalent. Other 7 community forests are pending verification.

The private sector also provided the 15 participating communities with financial support of US$176,064 (US$57 per hectare), for which the communities laid out a fund management plan agreed by the community members. 56% of the funding was allocated for forest management activities such as constructing firebreaks, monitoring wildfires, building check dams, and reforestation. In 2021, 11% of the total area or 368 hectares were affected by wildfires. However, 13 out of the 15 community forests were wildfire-free, decreased from 23.95% of the total area or 699 during 2016-2020.

The other 44% of the financial support was allocated to the community development fund for resources management and life quality development activities such as communities’ landscape and environmental improvement, community forest market project, livelihood creation from biodegradable leaf plates project, and organic fertilizer pellets and fertilizer from fallen leaves project. The fund was also allocated for capacity development activities such as study visits to sufficiency economy villages, including development of the community livelihood groups: bamboo product producers, Indian honey bee farmers, honey producers, seed farmers, and senior gardeners.

Key Achievements in 2021

Domestic Projects | The Carbon Credit from Community Forests for Sustainability Project

32
Domestic Projects

Tea Oil and Other Oilseed Crops Research and Development Project

Basic Information

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Location</th>
<th>Beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 - Present</td>
<td>Pang Mahan and Puna villages, Mae Fah Luang District, Chiang Rai Province</td>
<td>571 households of 3,305 people</td>
</tr>
</tbody>
</table>

Area

1. Pang Mahan Village: 2,726 hectares
2. Puna Village: 5,011 hectares
Total area 7,738 hectares

Background

The project was initiated in 2006 to address poverty issues, provide alternative livelihoods for the local community, and address forest encroachment. The MFLF partnered with the Chaipattana Foundation to conduct studies and grow tea oil trees as an economic crop on the royal initiative of Her Royal Highness Princess Maha Chakri Sirindhorn who recognized medicinal benefits of the plant and its high market price that would offer great economic stability to the local community. Land for cultivation was allocated for the villagers, and a variety of occupations were introduced, while the villagers had to participate in forest conservation efforts to allow man and forest to coexist in a sustainable way, following the royal initiative of His Majesty King Bhumibol Adulyadej the Great.
Key Achievements in 2021

In 2021, the project promoted the maintenance of tea oil plots by grafting of 41,703 shoots (71% of the target) with a 99% rate of survival. A total of 91% or 164 plots were pruned. The total yield of tea oil amounted to 123.51 kilograms, worth US$551,058. Data of each tree are continuously collected for effective plot management.

In terms of life quality improvement, the project distributed 1,310 black-boned chickens to 50 households. The distributed chickens reduced the expenses by US$5,954. Additional 1,300 black-bones chickens were also distributed to 8 farmers within the local network to try out the market, generating a total of US$4,394 for the farmers.

In addition to this, handicraft development activities created an income of US$4,163 for local women’s group comprising 24 members. A total of 26,007 cultivated banana seedlings were distributed to 229 farmers and a total of 110,700 out of 347,853 Assam tea saplings were provided to 90 farmers, which were estimated to generate an annual income of US$51,576 for the farmers. Chilli plants were distributed as pilot post-harvest crops in the area of 0.8 hectares, which yielded a total of 5,550 kilograms of chilli and generated an extra income of US$492 per person.

The annual socioeconomic survey of 553 households that aimed to prepare a livelihood promotion plan showed that the project participants earned an average income of US$11,868 per household per year compared to an average income of US$1,620 per household per year at the start of the project, accounting for a 624.17% increase.

Fundamental Problems

1. Community conflict over water and land use
2. Drug trafficking and addiction
3. Monocrop culture, lack of water management system, insufficient rice for local consumption
4. Watershed forest encroachment
5. Lack of livelihood knowledge and skills
Development Outcome: What Do the People Get?

Environmental Impact: Land Usage of Project Area

<table>
<thead>
<tr>
<th>Pang Mahan Project Area</th>
<th>Puna Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation forest</td>
<td>1,455 hectares</td>
</tr>
<tr>
<td>53.30%</td>
<td></td>
</tr>
<tr>
<td>Sustenance forest</td>
<td>192 hectares</td>
</tr>
<tr>
<td>7.07%</td>
<td>2.57%</td>
</tr>
<tr>
<td>Tea oil tree cultivation area</td>
<td>232 hectares</td>
</tr>
<tr>
<td>8.53%</td>
<td>6.42%</td>
</tr>
<tr>
<td>Residential area</td>
<td>12 hectares</td>
</tr>
<tr>
<td>0.45%</td>
<td>1.22%</td>
</tr>
<tr>
<td>Total</td>
<td>2,726 hectares</td>
</tr>
<tr>
<td>30.65%</td>
<td>20.78%</td>
</tr>
</tbody>
</table>

Economic Impact: Comparison of Income, Expenses, Debt and Savings (US$/household/year)

<table>
<thead>
<tr>
<th>Pang Mahan Project Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
</tr>
<tr>
<td>2006: 1,099</td>
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<tr>
<td>2007: 6,032</td>
</tr>
<tr>
<td>2008: 6,248</td>
</tr>
<tr>
<td>2009: 4,502</td>
</tr>
<tr>
<td>2010: 5,356</td>
</tr>
<tr>
<td>2011: 2,275</td>
</tr>
<tr>
<td>2012: 3,326</td>
</tr>
<tr>
<td>2013: 4,039</td>
</tr>
<tr>
<td>2014: 2,135</td>
</tr>
<tr>
<td>2015: 1,278</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>2006: 2,099</td>
</tr>
<tr>
<td>2007: 3,328</td>
</tr>
<tr>
<td>2008: 4,079</td>
</tr>
<tr>
<td>2009: 2,245</td>
</tr>
<tr>
<td>2010: 1,257</td>
</tr>
<tr>
<td>2011: 1,293</td>
</tr>
<tr>
<td>2012: 347</td>
</tr>
<tr>
<td>2013: 1,278</td>
</tr>
<tr>
<td>2014: 1,241</td>
</tr>
<tr>
<td>2015:</td>
</tr>
<tr>
<td>Debt</td>
</tr>
<tr>
<td>2006: 119</td>
</tr>
<tr>
<td>2007: 969</td>
</tr>
<tr>
<td>2008: 1,424</td>
</tr>
<tr>
<td>2009: 760</td>
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<tr>
<td>2010: 378</td>
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<tr>
<td>2011: 1,023</td>
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<tr>
<td>2012: 472</td>
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<td>2013: 56</td>
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<tr>
<td>2014: 932</td>
</tr>
<tr>
<td>2015: 1,424</td>
</tr>
<tr>
<td>Savings</td>
</tr>
<tr>
<td>2006: 2,099</td>
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<tr>
<td>2007: 3,328</td>
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<tr>
<td>2014: 1,241</td>
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<tr>
<td>2015:</td>
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</tbody>
</table>
Domestic Projects

Nan Economic Crop Processing Project

Basic Information

- **Time Frame**
  - 2013 - 2019: Nan Reforestation Project
  - 2020 - Present: Nan Economic Crop Processing Project

- **Location**
  - 20 villages, 4 sub-districts, 3 districts, in Nan Province
  - **Area** 40,000 hectares

Background

The Nan Economic Crop Processing Project is an extension of the Nan Reforestation Project which began in 2013. The MFLF partnered with the Royal Initiative Discovery Institute (RIDI) to implement this project to restore the natural resources in the project area and increase forest coverage while improving the quality of life of the local communities, encouraging them to coexist with forests in a sustainable manner.

The main activities included land utilization management to demarcate forests from cultivation and residential areas, appointing a committee and setting community rules and regulations on the usage and conservation of forest resources in areas designated as forests which include conservation forests to protect watersheds and areas of biodiversity, sustenance forests as sources of fuel and food that are to be managed by the community, and economic forests that provide the main source of sustainable income, replacing monocropping. They also act as a firebreak to prevent wildfires spreading into conservation forests and sustenance forests. The project also addressed issues of poverty and helped to improve the quality of life of the local villagers by promoting livelihoods through agricultural and livestock development, setting up seedling and livestock funds and processing, as well as improving water management systems for use, consumption and agriculture.
Key Achievements in 2021

The project has conducted research and development to improve the yield of cashew nuts and the quality of parchment coffee. The study of crops was carried out to find suitable alternatives for the local farmers and to reduce their dependence on monocrops. This also promoted community participation in the wildfire management and forest conservation. The activities included:

Sourcing Markets for Economic Crops

The project sourced markets for 21.8 tons of parchment coffee worth US$66,248, and 38.7 tons of cashew nuts worth US$28,721, resulting in a total income of over US$93,939 for the community.

Research and Development to Improve the Yield of Cashew Nuts and Alternative Crops (Economic Forest)

In 2021, 7 hectares were set aside as demonstration plots (16 plots for 15 local farmers) for the yield improvement of cashew trees with the target yield of 2.4 kilograms of cashew nuts per tree. The actual yield was 3.14 kilograms per tree, higher than targeted. However, the actual cost was also higher than the estimate. This was due to lack of plot care and maintenance for a long period of time, resulting in the need for intensive management such as microbial pesticide and foliar spray. Also, plot management had to be adjusted according to the local climate which affected the fruiting rate.

Study of Alternative Crops

From the 16 cashew nut demonstration plots, it was found that plots at an altitude of over 800 meters above sea level yielded significantly less than average, due to unfavorable environmental and climate factors for the flowering and fruiting that slowed the growth of the cashew trees. The solution would be to plant supplementary crops with a geographical fit to the area such as coffee, banana, bamboo grass in the same plot as the cashew trees. The MFLF also worked with the private sector to process cultivated bananas, and found that the bananas grown in the project area have good potential and high market demand both in and beyond the project area.

Wildfire Management

The community prioritized and strictly adhered to the government’s wildfire prevention measures. The wildfire prevention activities included repairing watch towers, constructing firebreaks, and monitoring wildfires in the area. In 2021, the rate of wildfire occurrences within the area of 0.8 hectares accounted for 0.002% of the entire area, or a reduction of 99% in wildfire occurrences compared to 2013. The local community committee also organized an annual meeting to identify wildfire prevention measures and management procedures of the wildfire fund for the wildfire monitoring activities in designated areas.

2018-2021 Wildfire Occurrences Compared to 2013

<table>
<thead>
<tr>
<th>Area</th>
<th>2013</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Percentage of reduction from 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>River basin (hectares)</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
<td>40,000</td>
<td>-</td>
</tr>
<tr>
<td>Fire-affected areas (hectares)</td>
<td>12,189</td>
<td>4</td>
<td>151</td>
<td>1,711</td>
<td>0.8</td>
<td>99</td>
</tr>
<tr>
<td>Percentage of fire-affected areas to the total area</td>
<td>30.47</td>
<td>0.01</td>
<td>0.38</td>
<td>2.92</td>
<td>0.002</td>
<td></td>
</tr>
</tbody>
</table>

Environmental Impact: Land Usage of Project Area

<table>
<thead>
<tr>
<th>Total area 40,000 hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservation forest 24,586 hectares 61.5%</td>
</tr>
<tr>
<td>Sustenance forest 3,608 hectares 9%</td>
</tr>
<tr>
<td>Cultivation area 6,184 hectares 15.5%</td>
</tr>
<tr>
<td>Residential area 221 hectares 0.6%</td>
</tr>
</tbody>
</table>

Development Outcome: What Do the People Get?

Environmental Impact: Land Usage of Project Area

Economic forest 5,401 hectares 13.5%
Residential area 221 hectares 0.6%
Thai-Myanmar Sustainable Alternative Livelihood Development Project

**Basic Information**

**Time Frame**
2018-2026: Scaled up from the original project in Tachileik and Mong Hsat districts from 2012-2017

**Location**
1. Naungtayar Subtownship (southern Shan State), an area of 54,714 hectares covering 4 village clusters of 99 villages
2. Tachileik District (eastern Shan State), an area of 17,090 hectares covering 3 village clusters of 30 villages

**Beneficiaries**
1. Naungtayar Subtownship project area: 5,764 households of 26,953 people
2. Tachileik District project area: 1,445 households of 7,462 people

**Background**

The project was aimed at addressing opium poppy cultivation as well as trafficking in the target area through providing legitimate livelihood options that would provide a sufficient and stable income for the community, reducing poverty and enhancing stability along the Thai-Myanmar border. It also served to create a model for holistic area-based development through a participatory approach that the government of Myanmar could replicate in other regions of the country.
Key Achievements in 2021

In the fiscal year 2021, the project focused on scaling up the development activities to a broader target area. The activities included development of irrigation, livestock, and livelihood creation through agriculture and processing of agricultural products for value addition. This aimed to provide livelihood alternatives for the community to be self-reliant in the long run, and to minimize the risk of involvement in narcotics and illegal substances. However, the continuous spread of COVID-19 and the political situations in Myanmar led to the travel restrictions to the project area. The MFLF therefore assigned local staff as key project coordinators working closely with the staff in Bangkok via online channels. Achievements according to areas are:

1. Naungtayar Subtownship, Pinlaung Township, Southern Shan State

Water

The project scaled up the irrigation system development to address water shortage in 14 villages through the support of materials and know-how. This included four dams, eight pipe systems of 10,077 meters, and 5 water tanks with a total capacity of 100 cubic meters, benefitting 6,308 villagers. In addition to this, five check dams were built to enhance the opportunity to earn extra income from cropping after rice harvest, benefitting 101 villagers of the total agricultural area of 64.7 hectares. A water fund was also set up and run by the community for the sustainable use and conservation of water resources.

Agriculture

The project installed a maize sheller for a community of 8 villages to maximize their post-harvest handling capacity. The project team joined hands with Charoen Pokphand Produce Co., Ltd. (CPP) to follow up on the harvest of maize crops for animal feed. The yield was 5,506 kilograms per hectare, which was 10% higher than projected, or an increase of 44.7% from the previous year’s yield of 3,806 kilograms per hectare. The total profit was US$266,695 or an annual average of US$612 per hectare, accounting for an increase from the previous year by 96%. The project also distributed means of production to 1,021 participating farmers in the fiscal year 2021, covering an area of 1,513 hectares. This was an increase of 131% in the number of farmers participating in the project, and a three-time increase in area coverage.

One agricultural training center was established to grow high quality coffee as an alternative high-value crop. 25 tea leaves drying fields were built for household clusters in 6 villages, totaling 63 beneficiaries. Training workshops on tea pruning and new tea leaves roasting techniques were taught to 87 interested farmers. The workshop participants could later sell their tea leaves at an average of 125 baht per kilogram, which was 50% higher than the original price. The project also provided financial support for planting 1,153 firewood trees which could be used for tea processing and prevent potential deforestation for natural fuel sources.

Livestock

The project partnered with the Livestock Breeding and Veterinary Department (LBVD) of Pinlaung township, southern Shan State, to organize skills training workshops on veterinary care for the community. The team set up 11 medical funds, from which a total of 994 animals received treatment, and organized 4 mobile veterinary units for livestock vaccination, resulting in a total of 6,497 animals vaccinated. A revolving livestock fund was established to provide 18 cows and 50 buffaloes as a means of livelihood to gain extra income for impoverished farmers. In addition to the first group of beneficiary farmers, the revolving fund would allow a wider group of farmers to benefit from the livestock distribution in the future. 40,504 napier grass saplings were also distributed as high nutritious feed for the livestock.

Economic and Social Census

The project conducted the annual economic and social survey of 545 households in 99 villages to plan development activities that correspond to the problems and needs of the community. The survey showed that a majority of the villagers are farmers with an average household income of US$1,429 per year, whereas the average household expenses remain at US$1,496 per year, or 4.65% higher than the income. 14.5% of the households are above the international poverty line of US$645 per person per year, which accounts for an increase by 0.6% in comparison to the previous year. 96% of the households, compared to 80% from the previous year, had year-round food supply. Most of the households still rely on rainwater, whereas 20% of the households face water shortage for farming, accounting for a 2% increase from the previous year. The duration of water shortage decreased by an average of 1.6 months.

Diarrhea and dental health were the main health issues. The most pressing issues as specified by the community were public health, education, and water system development.
2. North Tachileik District, Eastern Shan State

Water

The project developed a water system to provide access to water for use, consumption and agriculture through provision of materials and know-how, supplemented by local labor to build one agricultural check dam with water channeling system, one small utility check dam, three groundwater systems, two pipe systems with a combined length of 7,100 metres, and two water tanks with a combined capacity of 9 cubic metres. The water system benefits a total of 1,323 people and 17.6 hectares of farmland. The project also advocated for establishment of a community-run water management fund with the rules set up by the community for the sustainable use and conservation of water resources.

Livestock

The project organized a chicken raising activity to encourage local youth to learn the practices of animal husbandry. 9 out of the total 24 participants successfully reduced the chicken mortality rate to less than 20%. The project also provided veterinary care to the community, resulting in a total of 243 animals receiving treatment. Beef cattle raising was promoted as a means to earn extra income. The project distributed eight beef cattle to four beneficiary households and 47,300 napier grass saplings to 56 farmers as high nutritious feed for the livestock.

Economic and Social Census

The census during 2018-2020 showed that the water system development had reduced the duration of water shortage by an average of 1.6 months. However, the villages far from the water sources still lacked water capital and relied mainly on rainwater. The water system development resulted in an average increase of rice yield by 14-19%, including the opportunity for post-harvest cropping. In 2019, the farmers’ income from the second cropping increased by 6.3% or a total of US$62,688. The farmers’ income in 2022 is expected to show a sharp decline due to the COVID-19 imposed restrictions on access to market and logistics.

Fundamental Problems

1. Narcotic crop cultivation, trafficking and trade
2. Lack of efficient water management
3. Lack of medicine and vaccines for livestock
4. Lack of agricultural knowledge, processing for value-addition, and market access
1. Incorporation of Developmental Environmental Rating Scale (DERS) and Teacher Appraisal Instrument (TAI) into Montessori Teaching

The MFLF employed two Montessori teaching measuring tools, namely the Incorporation of Developmental Environmental Rating Scale (DERS) and Teacher Appraisal Instrument (TAI), which are originally developed by the NCMPS of the United States of America and adapted to fit the context of the schools in Mae Fah Luang district. The tools allowed teachers to measure the quality of their own classrooms and working methods. They also help assess students’ learning which will enable teachers to develop Montessori teaching on their own. The assessment of 34 schools in Mae Fah Luang District indicated a satisfactory level of Montessori teaching, 72% of DERS and 69% of TAI.

2. Project-Based Learning (PBL)

The MFLF encouraged the Project-Based Learning approach to develop student capacity in seven skills of research, communication, analytical thinking, planning, teamwork, and problem-solving skills. Due to the spread of coronavirus (COVID-19), teacher trainings, classroom supervision, and knowledge exchange seminars in the schools were conducted online. Quality interaction between participants was maintained through opinion sharing in Zoom Break-out Rooms, chat boxes, real-time message reply and recording on Google Shared Drive. Learning plans were archived on Google Drive.

The evaluation of students in the DTDP area reveals that 78% of 351 students in Level 1 (Prathom 1-3) and 87% of 299 students in Level 2 (Prathom 4-6) demonstrated development that met the learning objectives. 22% of students in Level 1 needed assistance in the areas of critical thinking, as well as creative thinking and problem-solving skills, whereas 13% of students in Level 2 needed assistance in the same areas.

2021 Evaluation of Project-based Learning Outcomes

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Passed 78%</th>
<th>Partial Improvement required 22%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Passed 87%</td>
<td>Partial Improvement required 13%</td>
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PBL teachers used open-ended questions to stimulate thinking and creativity of students in the making of, for example, booklets, pop-up books, roleplay, everyday objects, campaign signs, interviews with the local community, and technology in creating videos. The works of PBL students were shared with other teachers and academic personnel in the DTDP area to encourage knowledge and experience sharing.

3. Thai Language Syllabus Development for Children in Prathom 1-3 Level whose First Language is not Thai in the DTDP and Mae Fah Luang District

In 2021, the MFLF and the Chiang Rai Primary Education Service Area Office 3 created a manual on “Improvement of Thai Language Teaching with Team-Based Learning (TBL) Process” that came with video clips demonstrating examples and teaching evaluation forms for internal supervision and self-evaluation. The manual aimed to help 18 teachers at Prathom 1-3 Level improve their teaching expertise and facilitate classroom teaching at the school or Thai language development center.

Furthermore, the MFLF and Saint Andrews International School Bangkok (STA) organized online workshops and telesupervision sessions to develop the capacity of primary school teachers in giving assistance to students in the area of basic Thai reading and writing.

4. Skills Training in the Reading and Writing of the Thai Language for Prathom 4-6 level in Academic Year 2020

The MFLF and the Sirindhorn Thai Language Institute, Chulalongkorn University, organized online sessions for “Teacher Trainings to Create Reading Materials for Prathom 4-6 Students” to enable teachers to create reading materials that suited Prathom 4-6 students and were aligned with the students’ interests and context.

5. Incorporation of Technology Resources into Learning

A variety of technology resources such as VR glasses and 360° media were incorporated into science, social studies, and English. An interactive teaching approach with the use of multimedia and presentations on a smart board allowed students to do their research on tablets and laptop computers during classroom discussions. Materials from the TruePlookpanya website were used in the classes that lacked teaching personnel.

In addition to this, the MFLF organized a variety of activities to strengthen the network of scholarship students, including orientations, capacity development activities, friend visits, house visits to give advices and moral support, guidance on schooling through online channels and the Facebook account, and counselling for youth interested in furthering their education which helped them plan accordingly for their future career.
6. Vocational Skills Development

In 2021, the MFLF reviewed, revised, and developed additional vocational courses in the areas of agriculture, food, and handicraft. Workshops with relevant experts were held to develop curricula for career preparation and proper learning management. The guidelines were integrated with the Project-Based Learning program using DTDP as the knowledge center for field training, granting the students an opportunity to learn from external experts in the areas of product design and development, logo design, online sales, and accounting.

Extracurricular Activities

1. Creative Learning Space for Children and Youth (Faidee Center)

Faidee Center was established as a space for nurturing good citizens to ensure the sustainability of good life quality in the DTDP. The center provides vocational courses and creative leisure activities which match the youth’s interests with their potential. This is to build a solid foundation which prevents youth from straying off the straight and narrow. The courses and activities also serve as their leadership and management skill trainings.

At present, the center has 1,383 members, of which 8% or 110 members are regular users. The center also provides 10 vocational courses based on geosocial characteristics and youth’s interests: Caterer, Thai Dessert Chef, Photographer, Designer and Tailor, Forest Explorer, Cactus Breeder, Environmentalist, Banker, Police, and Rescuer. Eight clubs have been set up: Dancing, Music, Tour Guide, Cooking, Cafe, Crafts, Football, and Photography. The number of club members totaled 86. The members received regular skill trainings throughout the year and practised their field trainings at an annual event called the Colors of Doi Tung and other competitions in Chiang Rai province.

In 2021, due to the spread of coronavirus (COVID-19), the centre organised “Fun at Home” activity, where the center staff delivered a tool kit box with a manual to interested individuals who registered on the center’s Facebook page to participate in online activities through Facebook Live or video calls every Saturday.

2. Scholarships

In 2021, a total of 22 scholarship students completed their studies. The MFLF further promoted and granted scholarships to 20 students who had demonstrated their potential as follows: one for Mae Chan Wittayakhom School, nine for Rajabhat Chiang Rai University, five for Mae Jo University, two for Mae Fah Luang University, two for Chiang Rai Vocational College, and one for Chiang Rai Technical College.
In 2021, the Living University Division held training workshops and study visits within the MFLF’s project sites, and also partnered with other organizations to hold training workshops off-site to disseminate the Mae Fah Luang Development Model to a wider audience. There were 135 groups or 5,982 visitors in total - 131 local groups and 4 international groups, as follows:

The spread of coronavirus (COVID-19) resulted in a decrease in the number of workshop participants and visitors in comparison to the previous year. Most of the visits and workshops were also changed into online and off-site presentations.

In 2021, the Living University Division developed the website https://changeagent.maefahluang.org to be an online exchange platform for individuals interested in sustainable alternative livelihood development. The website also provides online courses on development as an extended channel of knowledge dissemination, including a variety of field visit options to accommodate a diverse group of interested individuals.
1. A MFLF’s representative presented the royal biography and rural development activities of Her Royal Highness Princess Srinagarindra to students from B.Grimm School, Sa Kaeo province on 3 October 2020.


3. Online study visits on the topic of sustainable development and community health for students from the Faculty of Social Administration, Thammasat University on 23 and 30 April 2021.

4. The Attorney General and the Provincial Attorney visited the DTDP and engaged in an exchange of opinion with the community and the volunteers of the Roi Jai Rak Project on 18-19 December 2020.

5. The Management and staff from Mitsui & Co. observed the development practices and engaged in the community activities at the DTDP and the Roi Jai Rak Project on 26-28 November 2020.


7. Top executives and staff of the Electricity Generating Authority of Thailand (EGAT) have conducted regular visits to learn about sustainable development and project management since 2016.
Flagship Projects

Hall of Opium, Golden Triangle Park

Basic Information

Time Frame
2005 – Present

Location
Sob Ruak Village, Chiang Saen District, Chiang Rai Province
Area 40 hectares

Beneficiaries
9,496 visitors

Background

This is an interactive knowledge center on the history of opium that dates back 5,000 years, with the aim of creating awareness for visitors about the dangers of addictive drugs through an exhibition in a modern multi-media format designed to be fun and captivating, entertaining while providing information or edutainment. The aim is to reinforce youth conscience to stay away from drugs, reducing demand; a parallel approach to Doi Tung Development Project which served to reduce supply.
Key Achievements in 2021

Children and Youth Development Network Project for Drug Prevention

A series of trainings were organized for the target youth groups to create awareness on the dangers and impact of drugs. In 2021, the project reached a target group of 2,114 participants: 1,386 participants aged 9-18 in Chiang Rai; and 728 aged 9-15 from the Roi Jai Rak Project, Chiang Mai.

In addition to this, a variety of learning tools and media appropriate to the target youth groups were developed to assist them in reviewing the impact of drugs on youth and people they associate with, including skills to turn their backs on all illicit substances and behaviors.
Mae Fah Luang Art and Cultural Park

Flagship Projects

Mae Fah Luang Art and Cultural Park

Basic Information

Time Frame
1973 – Present

Location
313 Moo 7, Pa Ngew Village, Mueang Chiang Rai District, Chiang Rai Province

Area
24 hectares

Beneficiaries
502 youths
2,768 tourists

Background

Originally known as Rai Mae Fah Luang, the Mae Fah Luang Art and Cultural Park started first as the office of the Thai Hill Crafts Foundation (the original name of MFLF). It was a place to "cultivate people" since it was a "home" to ethnic youths who had received a scholarship to study in a town school. They also learnt extra-curricular skills such as how to live with others. It later developed into a center for Lanna arts and culture, a knowledge center with a collection of ancient Buddhist artefacts, Lanna architecture, teakwood artefacts and antiques dating back over a century. Rotating exhibitions are held regularly by various artists. Highlights in the park include the Princess Mother Monument Courtyard and various pavilions including Haw Kham Luang, Haw Kham Noi, Sala Kaew and Haw Kaew. It is set in a large landscaped garden with mature trees and a lake, making it a popular tourist destination in the north, and a chosen venue to welcome state visitors.
Key Achievements in 2021

1. Mae Fah Luang Flower Festival

On 18 July 2021, the Mae Fah Luang Foundation under Royal Patronage, together with the Chiang Rai municipal government, organized the Mae Fah Luang Flower Festival to commemorate and pay tribute to Her Royal Highness Princess Srinagarindra to mark the 26th year of her passing. The festival was attended by representatives of the government, private sectors and the general public, with strict enforcement of COVID-19 safety measures.

2. Annual Exhibition
   'Woodworking in Thai Architecture'

The Mae Fah Luang Art and Cultural Park ran the "Woodworking in Thai Architecture" exhibition all year round to revitalize local wisdom about woodworking in Thai architecture. The exhibition attracted students and the general public with its unique contribution to Thai cultural value and society.
Production of Greenhouse Gases

1. Goal and Indicators of Greenhouse Gas Mitigation related to Business Operations, Global Warming Management and Climate Change

The MFLF has been continuously collecting data on the Carbon Footprint of the Organization (CFO) in 3 areas: 1. direct emissions such as use of fossil fuels for production and use of fertilizers; 2. indirect emissions from energy consumption such as use of electricity; 3. other indirect emissions, such as air travel, use of tap water, and waste disposal in the form of carbon dioxide equivalent. This is to assess and disclose to the public the environmental impact from the MFLF’s operations through indicators of GHG emissions.

The increase in the MFLF’s CFO during 2018-2019 was due to the expansion of development projects to different areas. However, the spread of COVID-19 that put restrictions on travel and project activities had led to a decrease in the GHG emissions, whereas the data showed a rise in eco-efficiency of the business units. In other words, the MFLF is consuming energy more efficiently, as less energy is consumed in comparison with the revenue. The 2021 Colors of Doi Tung Festival became a carbon neutral event as the MFLF took accountability in offsetting the carbon footprint from the festival through the project activities.
2. Internal Greenhouse Gas Mitigation Efforts

The MFLF continues to make our operations environment-friendly by shifting to renewable energy sources such as solar energy, biomass, and biogas. This is to reduce our reliance on fossil fuels which are the largest contributor to climate change. In 2021, the MFLF developed a bamboo charcoal gasification system to replace the use of cooking gas in mulberry paper production and dyeing. A heat exchange system for the mulberry paper drying machine was also developed for more efficient energy consumption. Additionally, a solar cell system with the capacity of 61.56 kilowatts was installed at the MFLF’s headquarter in Bangkok. The above mentioned activities have increased the proportion of alternative energy consumption to 9.1%, which is in accordance with Thailand’s goal to increase alternative and energy consumption by 30% within 2037.

The MFLF is aware of limited water resources in Doi Tung, and therefore installed a water treatment system in the coffee processing. The system comprises a biogas pit and membrane processes which allow the wastewater from the coffee processing to have a higher quality than the specified standard of industrial wastewater. The MFLF also extended the operation to the community level by installing a demonstration grease trap for a riparian community of 25 households to decrease water pollution. At present, the MFLF can reuse as much as 3.9% of the wastewater.

The MFLF’s staff also takes part in GHG emission reduction through a variety of activities: waste segregation workshops to ensure all-around participation to achieve Zero-Waste to Landfill; and use of personal reusable lunch boxes and cups to reduce single-use containers.


The MFLF has strived to become a “carbon neutral organization” in 2022 and aims to assess our CFO and verify the amount of GHG stored in the forest areas of the DTDP in Chiang Rai province and the project in Nan province through participation in the “Thailand Voluntary Emission Reduction Programme” or T-VER, hosted by Thailand Greenhouse Gas Management Organization (TGO). The MFLF has already registered three projects in T-VER, and has a plan to subsequently register the Roi Jai Rak Project in Chiang Mai province.
Policy Advocacy and Other International Conferences

1. Expert Group Meeting on Alternative Development (EGM on AD)

The MFLF, in cooperation with Thailand’s Narcotics Control Board, the Royal Thai Embassy in Vienna, Thailand’s Ministry of Foreign Affairs, the German Agency for International Cooperation (GIZ) through the Global Partnership on Drug Policies and Development (GPDPD), the Government of the Republic of Peru, and the United Nations Office on Drugs and Crime (UNODC) have organized the Expert Group Meeting on Alternative Development (EGM on AD) annually since 2013.

In 2021, the virtual meeting was conducted on the topic of “Latest Developments and Insights” from 15–18 March 2021. A total of 100 accounts from government representatives, alternative development experts, development practitioners, civil society organizations, and private sectors attended the meeting. The conference room paper with discussions and proposals from the meeting was submitted to the 64th Session of the Commission on Narcotic Drugs (CND).

The MFLF’s representative presented challenges of alternative development projects in urban settings where development must go hand in hand. Additionally, an integrated development approach must include public-private partnership to create alternative livelihoods that generate more competitive income against the drug trade. Integrated development is also inclusive of public health, especially health of drug users, and environmental preservation.

The topic addressed at the meeting also included the direction of medical cannabis production that should be based on the benefits of small-scale farmers and local needs. It was also highlighted that data collection of alternative development projects must demonstrate return on investment for beneficiaries with people-centred indicators. However, the spread of COVID-19 had impacted implementation of development projects, especially in terms of travel restrictions that prevented international experts from working in the field. The impact also included the tendency of decrease in funding, since many countries needed to allocate their budget for a more pressing issue such as public health management. The long-term impact remained to be closely monitored.
2. The 64th Session of the Commission on Narcotic Drugs (CND)

The MFLF’s Chief Executive Officer virtually joined the Thai government delegation at the 64th Session of the Commission on Narcotic Drugs (CND) during 12-16 April 2021 to advocate for the Thai Sustainable Alternative Development model in terms of multisectoral development to revive local communities impacted by the COVID-19 pandemic. The resolution was supported by the following 14 countries: the Republic of Guatemala, the Republic of Colombia, the Republic of the Philippines, Japan, the Federative Republic of Brazil, the Republic of Paraguay, the Republic of Portugal (representing the European Union), Malaysia, the Kingdom of Morocco, the Russian Federation, the Republic of Singapore, the United States of America, the Republic of Indonesia, and the Republic of Albania.

The MFLF’s representative also served as a speaker in a side event hosted by the governments of the Federal Republic of Germany and the Republic of Peru, and the UNODC, with 72 participants. The key point highlighted by the MFLF’s representative was that development and rule of law must go hand in hand in the application of integrated people-centered alternative development approach in urban settings. However, development practitioners and law enforcers must be of separate entities in order to gain trust and participation from communities. Partnership with private sector and academia is a key success factor to solution, since close partnership helps accelerate the process of income generation from alternative crops, which can yield higher profit in a shorter period of time in comparison with the narcotic crops. Furthermore, alternative development in urban settings includes treatment and harm reduction measures, combined with skills training for employment opportunities, while removing stigmatization in order to reunite the rehabilitated patients back to the community.

Sustainable Alternative Livelihood Development Conferences

As a result of our 30-year experience in the field of Sustainable Alternative Development, the Mae Fah Luang development model has been successfully replicated in various contexts. The MFLF has partnered with the Thai government and other international alliances to promote the Thai development model in an effort to advocate policies at the international level through the following forums:
3. Thailand’s Alternative Development Model: Our Journey to Global Sustainability, a Webinar

The MFLF, in collaboration with the Royal Thai Embassy in Vienna, the Republic of Austria, organized a webinar entitled “Thailand’s Alternative Development Model: Our Journey to Global Sustainability” to promote the linkages between the Sufficiency Economy Philosophy (SEP) and the Sustainable Development Goals (SDGs) in practice. The webinar was broadcast on the embassy’s Facebook page on 25 June 2021.

The Royal Thai Embassy in Vienna, the Republic of Austria, and the Permanent Mission of Thailand to the United Nations and Other International Organizations in Vienna, the Republic of Austria, highlighted the SEP as a longstanding basis for alternative development operations in Thailand and expressed the willingness to share the success with the international community to accelerate the achievement of the Sustainable Development Goals (SDGs) within 2030.

The MFLF’s representative presented 2 examples: the application of SEP to promote sustainable alternative livelihoods, with an example of the DTDP; and the Carbon Credit from Community Forests Project which incentivizes communities to preserve 16 community forests in Northern Thailand with private funding for establishment of the forest management and the community development funds, turning forest preservation into an income generation activity for the community and a return on investment for the private sector to store carbon credit for future trading.

Additionally, representatives from Ban Tonpueng, Chiang Mai province, shared the community point of view that the community was more incentivized to preserve the forest upon participation in the project, and how livelihood development funds helped create job opportunities for unemployed community members who returned to their hometown due to the spread of COVID-19.

The Royal Thai Embassy in Vienna, the Republic of Austria, re-broadcast the webinar in the business reception for Austrian businessmen interested in investment in Thailand on 8 July 2021. The MFLF provided DoiTung products for the exhibition of Thailand’s alternative development projects, where other products from Royal Project Foundation and Doi Kham were also presented.
4. Meeting of Group of Experts on Comprehensive and Sustainable Alternative Development (Grupo de Expertos sobre Desarrollo Alternativo Integral y Sostenible - GEDAIS)

The MFLF’s representative attended the Meeting of Experts on Comprehensive and Sustainable Alternative Development, organized by the Inter-American Drug Abuse Control (CICAD), an entity established by the Organization of American States (OAS) in 1986 to combat drug problems in the Western hemisphere and Latin America. In 2021, the government of Peru hosted the meeting which comprised a series of three online seminars from 25 May – 10 September 2021 and ended with an annual meeting on 20 October. The meeting was attended by approximately 70 online users from government representatives, non-governmental organizations, alternative development experts, and civil society groups.

The MFLF’s representative served as a keynote speaker in the second seminar on 10 September 2021 on the topic “Strategies for Strengthening of the Production Chain and Commercialization for Alternative Development Products”. The representative presented a case study of DoiTung social enterprise which offers socially and environmentally responsible products of excellent quality from alternative development projects through multisectoral partnership, especially the large-scale companies.

In addition to this, the MFLF was invited to attend the GEDAIS annual meeting on 20 September 2021. The meeting would lead to discussions of the 2021-2025 strategy and operational plan on comprehensive and sustainable alternative development, and establish a discussion framework on alternative development topics in the upcoming 65th Session of the CND in 2022.

5. The 4th ASEAN Inclusive Business Summit

On 22 September 2021, the MFLF’s representative was invited to attend the 4th ASEAN Inclusive Business Summit by the ASEAN Secretariat, in collaboration with the Darussalam Enterprise (DARe), the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the Organization for Economic Co-operation and Development (OECD), and the Inclusive Business Action Network (iBAN).

The MFLF’s representative attended the summit as a keynote speaker on the topic “Promoting Social Enterprises, Inclusive, Responsible and Sustainable Businesses”. The key points presented included a pressing need for inclusive business operations, which could only happen through the government’s incentive scheme and promotion. Additionally, an organization’s unique values, such as environment-friendly production or inclusive hiring policies regardless of gender and age, could more easily attract like-minded business partners for joint investment, which would create a ripple effect on changes towards a more inclusive business operations in the big picture. The summit was attended by approximately 250 online accounts from ASEAN and international organizations.
6. "Enhancing Sustainable Development towards Thrivability" Seminar

The MFLF’s representative was invited as a keynote speaker to present the success story of DoiTung brand as a social business with people-centered sustainable development approach in the seminar “Enhancing Sustainable Development towards Thrivability” on 9 December 2020. The seminar was hosted by the Thai-Italian Chamber of Commerce at Montien Hotel Surawong Bangkok as a platform to exchange knowledge of sustainable development with its business partners and members. The presentation highlighted the heuristic influences of Her Royal Highness Princess Srinagarindra in the Doi Tung Development Project which allowed the community to sustainably grow and thrive. Creation of opportunities through various development projects had nudged people towards behavioral changes where promotion of development in many areas aimed for the community’s self-reliance.

7. "Business Opportunities with the United Nations" Seminar

On 9 December 2020, Thailand’s Ministry of Foreign Affairs in cooperation with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) hosted the seminar entitled “Business Opportunities with the United Nations” to introduce business opportunities with the United Nations, which is in line with the government’s policy in reviving and strengthening the Thai economy, especially in the midst of the COVID-19 pandemic. The MFLF’s CEO was invited to be a keynote speaker representing the Thai private sector with experience in conducting business with the United Nations. The CEO emphasized the MFLF’s 3 key business missions: sustainable income generation for the local communities; people-centered development approach; and resources maximization where product quality and services are ensured throughout the production chain without compromising social and environmental sustainability. This resulted in Cafe DoiTung having been selected to open a store in the United Nations Conference Center in Bangkok since 2019.
8. Partnership with the German Agency for International Cooperation (GIZ)

The MFLF has partnered with the German Agency for International Cooperation (GIZ) on the Global Partnership on Drug Policies and Development (GPDPD) project to exchange ideas on effective alternative development policies for countries that cultivate narcotic crops, with phase 1 of the partnership beginning in 2016, and phase 2 from November 2020 - May 2022. However, international travel was limited due to the COVID-19 pandemic, study visits and consultancy for countries planning to implement alternative development projects had to be conducted virtually.

The MFLF’s representative joined the virtual Brandenburg Academy on Drugs and Development Policies (BBA) as one of the instructors to communicate knowledge and understanding to government representatives from countries interested in implementation of alternative development projects, especially those in Latin America and Africa. The MFLF shared the experiences in drug policies and development through a video presentation entitled “Alternative Development: Examples from Thailand”. The presentation emphasized practical people-centric alternative development which prioritizes indicators of life quality over the reduction rates of narcotic crops or the number of seized drugs. The importance of setting a development project goal that is aligned with the SDGs was also highlighted. Additionally, a self-paced online course featuring 6 short video presentations is also available on the BBA. The 2 courses were developed to compensate for international travel restrictions. There were a total of 111 participants from eight countries: the Republic of Ghana, the Republic of Guatemala, the Republic of Colombia, the Federal Republic of Nigeria, the Federative Republic of Brazil, the Republic of Peru, the Republic of Albania, and Thailand. The MFLF’s representative attended a virtual discussion on 9 December 2020.
23rd Remembering the Late Princess Mother Exhibition

On the occasion of the birthday anniversary of Her Royal Highness Princess Srinagarindra, the MFLF in collaboration with Siam Piwat Public Co., Ltd. and Thai Beverage Public Company Limited organized the 23rd Remembering the Late Princess Mother exhibition on the theme “In Her Thoughts” from 21-25 October 2020 at the Lifestyle Hall, Floor 2, Siam Paragon Shopping Center. Her Royal Highness Princess Maha Chakri Sirindhorn presided over the opening ceremony on 23 October 2020.

Merit-Making Ceremony to Commemorate the 26th Anniversary of the Passing of the Princess Mother

Chiang Rai Province, in conjunction with the MFLF, held a merit-making ceremony to mark the 26th anniversary of the passing of Her Royal Highness Princess Srinagarindra on 18 July 2021 at the Mae Fah Luang Art and Cultural Park, Chiang Rai Province. The event was attended by the Governor of Chiang Rai Province and the Director of the Mae Fah Luang Art and Cultural Park, who led representatives from different agencies and units to pay floral homage - the highest form of showing respect in the Lanna tradition. COVID-19 precautionary measures such as social distancing and limitation of the number of attendees were strictly followed.
**Pha Khao Ma from DoiTung Brand Won the Best Design Award at the PM Export Award 2021**

The MFLF’s “Re-Pleats-Plastic: Pha Khao Ma” won the Best Design Award in the field of Creative and Innovation at the Prime Minister’s Export Award 2021, which is the Thai government’s highest award bestowed annually to glorify the foremost Thai exporters.

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**’DoiTung’ Teamed Up with ‘Onitsuka Tiger’ to Produce a Special Footwear Collection as a Global Showcase of Thai Hand-woven Fabric**

The Doi Tung Development Project, in collaboration with the Japanese fashion brand Onitsuka Tiger, launched a special footwear collection that reflects the brand’s belief in support for local craftsmanship and social sustainability. DoiTung used eco-friendly materials and processes to design and hand weave the patterned textile used for the upper of the three classic models - MEXICO 66, MEXICO 66 PARATY, and SERRANO which come in 5 patterns. The Mexico 66 models are exclusively available only in Thailand.

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**The MFLF Supported Social Enterprises through the COVID-19 Pandemic**

Mae Fah Luang Foundation under Royal Patronage provided financial support totaling US$129,394 from the MFLF’s Social Enterprise Development Fund to 3 social enterprises: Buddy HomeCare Social Enterprise Co., Ltd. which provides home care program for older persons through job creation for indigenous youth; Steps Social Enterprise Co., Ltd. that supports employment for people with special needs; and Locall Platform Co., Ltd. which supports platform for local product distribution.
## Statements of Financial Position

For the years ended 30 September

<table>
<thead>
<tr>
<th>Note</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in Baht)</td>
<td></td>
</tr>
</tbody>
</table>

### Assets

#### Current assets

<table>
<thead>
<tr>
<th>Description</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>61,853,046</td>
<td>57,229,014</td>
</tr>
<tr>
<td>Cash and cash at banks for specific purpose funds</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Current investments</td>
<td>1,540,868</td>
<td>1,530,157</td>
</tr>
<tr>
<td>Investments in securities</td>
<td>1,176,876,965</td>
<td>1,382,049,977</td>
</tr>
<tr>
<td>Trade accounts receivable</td>
<td>51,214,160</td>
<td>43,171,722</td>
</tr>
<tr>
<td>Other receivables</td>
<td>239,146,433</td>
<td>214,373,264</td>
</tr>
<tr>
<td>Inventories</td>
<td>5,672,942</td>
<td>9,998,675</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>13,353,105</td>
<td>15,296,067</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>1,616,772,237</td>
<td>1,723,648,876</td>
</tr>
</tbody>
</table>

#### Non-current assets

<table>
<thead>
<tr>
<th>Description</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment in subsidiaries</td>
<td>16,532,000</td>
<td>16,532,000</td>
</tr>
<tr>
<td>Other long-term investments</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>251,455,719</td>
<td>277,768,143</td>
</tr>
<tr>
<td>Intangible asset</td>
<td>7,250,936</td>
<td>5,755,029</td>
</tr>
<tr>
<td>Leasehold right</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td>287,047,804</td>
<td>312,389,815</td>
</tr>
</tbody>
</table>

**Total assets**

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total assets</strong></td>
<td>1,903,820,041</td>
<td>2,036,038,691</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these financial statements.
For the years ended 30 September

<table>
<thead>
<tr>
<th>Note</th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(in Baht)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities and fund balances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade accounts payable and other payables</td>
<td>49,484,348</td>
<td>42,305,322</td>
</tr>
<tr>
<td>Unearned income</td>
<td>3,211,479</td>
<td>5,224,419</td>
</tr>
<tr>
<td>Accrued expenses</td>
<td>14 14,089,442</td>
<td>18,152,022</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>15 7,077,307</td>
<td>10,780,954</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>73,862,576</td>
<td>76,462,717</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>73,862,576</td>
<td>76,462,717</td>
</tr>
<tr>
<td>Specific purpose funds</td>
<td>16 135,519,546</td>
<td>188,922,278</td>
</tr>
<tr>
<td>Fund balances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund balances</td>
<td>17 1,509,134,328</td>
<td>1,585,350,105</td>
</tr>
<tr>
<td>Reserve for project support</td>
<td>17 185,303,591</td>
<td>185,303,591</td>
</tr>
<tr>
<td>Unrealised gains on revaluation of investments</td>
<td>10 -</td>
<td>-</td>
</tr>
<tr>
<td>Total fund balances</td>
<td>1,694,437,919</td>
<td>1,770,653,696</td>
</tr>
<tr>
<td>Total liabilities and fund balances</td>
<td>1,903,820,041</td>
<td>2,036,038,691</td>
</tr>
</tbody>
</table>

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## Statement of Financial Position

For the years ended 30 September

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<tr>
<th>Note</th>
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</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Statement of revenues and expenses

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue from sale of goods and rendering of services</td>
<td>325,474,345</td>
<td>453,524,201</td>
</tr>
<tr>
<td>Revenue from donations</td>
<td>338,195,205</td>
<td>332,273,902</td>
</tr>
<tr>
<td>Investment income</td>
<td>26,996,936</td>
<td>36,125,684</td>
</tr>
<tr>
<td>Insurance reimbursement</td>
<td>715,019</td>
<td>1,005,727</td>
</tr>
<tr>
<td>Gains from investment</td>
<td>75,986,390</td>
<td>-</td>
</tr>
<tr>
<td>Other income</td>
<td>20,078,104</td>
<td>24,980,818</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td>787,445,999</td>
<td>847,910,332</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of sale of goods and rendering of services</td>
<td>185,011,280</td>
<td>224,888,982</td>
</tr>
<tr>
<td>Selling and service expenses</td>
<td>144,294,803</td>
<td>165,668,736</td>
</tr>
<tr>
<td>Administrative expenses</td>
<td>534,355,693</td>
<td>527,010,648</td>
</tr>
<tr>
<td>Loss from investment</td>
<td>-</td>
<td>82,926,276</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>863,661,776</td>
<td>1,000,494,642</td>
</tr>
</tbody>
</table>

### Expenses over revenues

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenses over revenues</td>
<td>(76,215,777)</td>
<td>(152,584,310)</td>
</tr>
</tbody>
</table>
Annual Report 2021
This Annual Report summarises the activities of Mae Fah Luang Foundation under Royal Patronage from 1 October 2020 – 30 September 2021.

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