



Achievements of AD in Highland Sustainability The Royal Project Foundation's 55th Anniversary

The Royal Project Model : Best Practice of Alternative Development
Approach for Sustainable Development
of Economy, Society and Environment in the Highlands





*His Majesty The Late
King Bhumibol Adulyadej The Great*




kindly gave his speech

“Assistance to the Hill Tribes and the Hill Tribe Project”

on the occasion of the Royal Visit to the Faculty of Agriculture, Chiang Mai University

January 10, 1974




“Assistance to the hill tribes and the hill tribe project contributes direct benefits to the hill tribe people, promoting and supporting them to have a better living, enabling them to grow useful crops that provide them income.

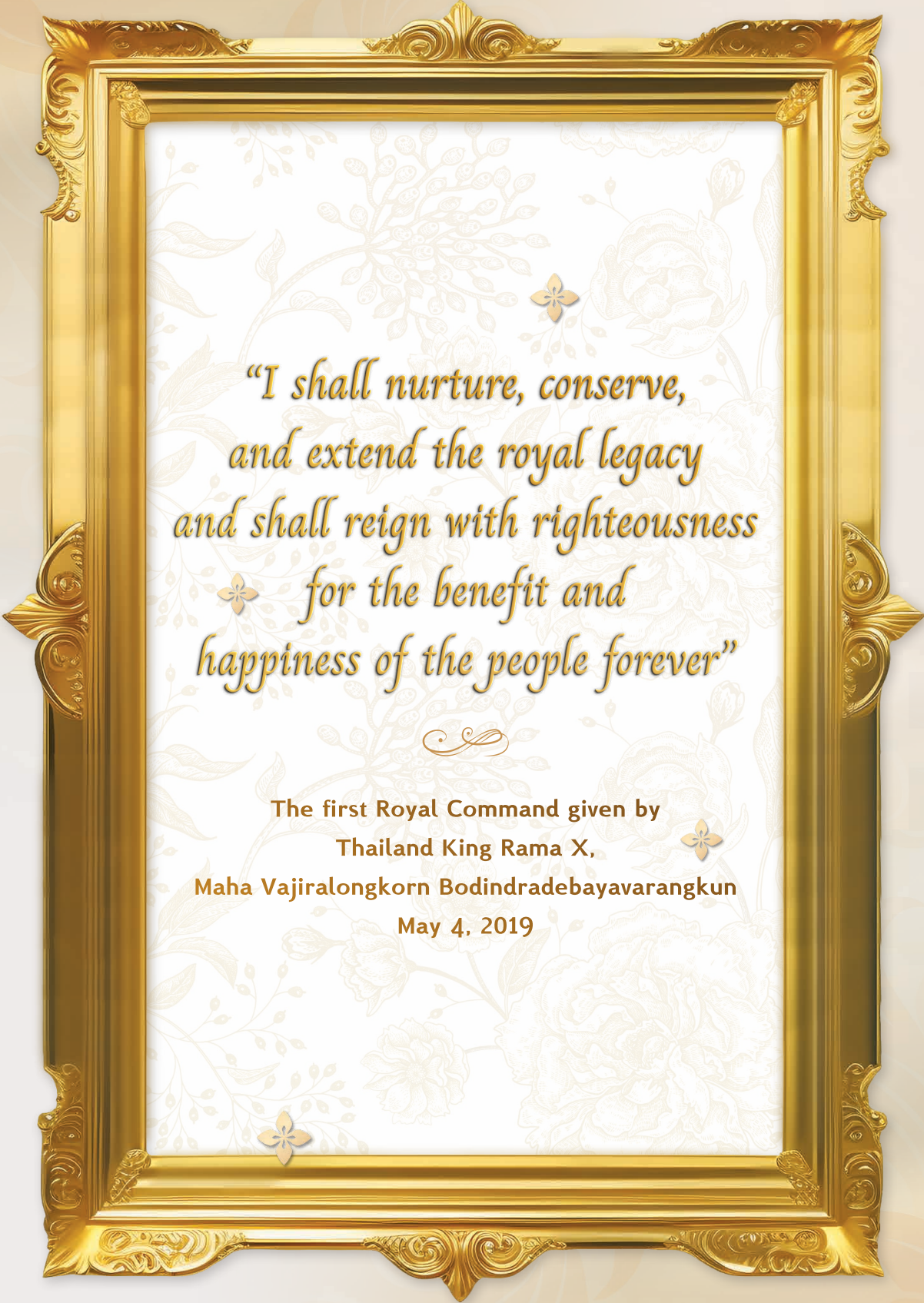
A purpose of this kind of project is of humanitarian, wishing those who live in troubled and lacking areas to have education and become self-reliant for further development.

Another purpose, with which everyone would agree to help, concerns a big problem of narcotic drugs. If we could help the hill tribe people to grow useful and economically valuable crops, they would stop growing narcotic crops and opium poppy.

This can enhance the effectiveness of the policy of banning opium smoking and trade. Another highly important consideration is what we know about the ways of crop cultivation practiced by hill farmers involving forest clearing and improper means of crop plantation. Such practice can lead our country to disaster. Thus the help from all of us can protect the benefits and the well-being of the whole country. If we can make this project successful and have the hill tribe people settled in place and then make a decent living, they would support the policy of forest conservation and soil preservation for long-term use.

This usefulness would be immensely sustainable.”





*“I shall nurture, conserve,
and extend the royal legacy
and shall reign with righteousness
for the benefit and
happiness of the people forever”*

The first Royal Command given by
Thailand King Rama X,
Maha Vajiralongkorn Bodindradebayavarangkun
May 4, 2019



February 12, 2023. His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun and Her Majesty Queen Suthida presided over the opening ceremony of Chanaka Dhibesra Damri Royal Project Agricultural Research and Development Center, T. Maehia, Muang, Chiang Mai Province.



His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun kindly granted the establishment of the **Royal Project Agricultural Research and Development Center**, T. Mahia, Muang, Chiang Mai Province and bestowed the name as “Chanaka Dhibesra Damri”

“Chanaka Dhibesra Damri” (Cha-na-ka-dhi-besra-damri) meaning : this agriculture research and development center was established to nurture, conserve and extend. The Royal Initiatives of His Majesty The Late King Bhumibol Adulyadej The Great.



◆ His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun and Her Majesty Queen Suthida presided over the opening ceremony of the Royal Project Fair 54, under the concept of “warmth of the mountains...stories unveiled...to the heart of the city” August 4, 2023, The Central World Mall, Bangkok



His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun ✦
and Her Majesty Queen Suthida presided over the opening ceremony
of the Royal Project Fair 55, under the concept of
“Love for the Earth : Embrace Every Warmth of the Loving Land”
August 1, 2024, The Central World Mall, Bangkok

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Achievements of AD in Highland Sustainability

The Royal Project Foundation's 55th Anniversary

**The Royal Project Model : Best Practice of Alternative
Development Approach for Sustainable Development of
Economy, Society and Environment in the Highlands**





1

Background of the Royal Project



In the past, the highlands in the northern part of Thailand were abundant in fertile natural resources, naturally forming national defensive function against possible foreign invasion, especially along the northern and western borderlines. These regions originate important watersheds, significant for agricultural and human livelihoods in the northern and central parts of the country. These watersheds are Mae Ping Watershed, Mae Kok Watershed, Mae Tang Watershed, Mae Chaem Watershed and Nam Nan Watershed. From 1966, it was revealed that the watershed areas of such important rivers were damaged from swidden cultivation done by the highland population who suffered from poverty and were down in nutritional status and quality of life. Over 1,600,000 highland inhabitants in 20 provinces depended on traditional subsistence farming and swidden agriculture for living.



Another crucial problem was their cultivation of opium poppy, a narcotic and illegal crop under Thai and international laws. Apart from swidden cultivations, the worst practice of opium growing, which had been done alongside with, was the shifting cultivation of slash and burn. All these caused the immense destruction of forests, land and soil, and water resources. The mountains were deforested and became bears. Soil erosion and landslides occurred regularly, causing severe floods in the lowlands. The Thai government thus attempted to solve the problems by entrusting the task of hill tribe community development to the Hill Tribe Welfare and Development Division of the Public Welfare Department under the Ministry of Interior. Still, the problems remained unsolved. Northern watershed forests had been continually destroyed by 100,000 – 200,000 rai, annually (Office of the National Economic and Social Development Board, the fourth National Economic and Social Department Plan for 1977 - 1981).





From 1964 onwards, His Majesty The Late King Bhumibol Adulyadej The Great and Her Majesty Queen Sirikit The Queen Mother along with senior members of the royal family regularly relocated the royal residence to Bhubing Palace, Chiang Mai, in the cool season. During those stays, His Majesty frequently visited his subjects in the areas of the North. From such visits, His Majesty then learned of extreme poverty, lack and substandard of health and education the hill tribes were facing. He was also aware of the facts that traditional agriculture and opium poppy cultivation practiced by the hill tribes affected environmental conditions tremendously and created potential threats of the national security. Consequently, His Majesty determined to help hill tribe communities to improve the quality of life, social and economic status and environmental conditions with the **“Alternative Development Approach”**. In 1969, the **“Royal Sponsors Hill Tribe Project”** was created, later changed the name to the **“Royal Project”**, for the development of hill tribe communities with **the ultimate humanitarianism and national security objectives**. In 1992, The Royal Project was registered as the **“Royal Project Foundation”** to become a legal entity as a non-profit public organization to facilitate and ensure a sustainable operation. His Majesty then gave several utmost important royal guiding principles concerning the alternative development approach for highland development based on the Sufficiency Economy Philosophy. This royal philosophy has been recognized as fundamental for actualization of a balanced development upon the social, economic and environmental domains, focusing on humans as a center of development and appropriate conduct in every aspect of people life in communities. He also delivered the Royal Project way of working to enhance the efficiency of hill tribe community development, being 1) streamlining, 2) expediting, 3) doing good deeds without seeking attention and 4) helping hill tribe people to help themselves as to attain the following Royal Project :

- 1) To render the hill tribe people humanitarian help,
- 2) To help the Thais by reducing natural resources destruction, i.e. forests and watersheds,
- 3) To eradicate opium cultivation, and
- 4) To conserve the soil, use proper land, let the forest stay where it should be, farm on suitable land with proper purpose and prevent competing uses of the same land



The Royal Project receives cooperation and participation of pioneers from various government agencies and academic institutions including the Ministry of Interior, the Ministry of Natural Resources and Environment, the Ministry of Agriculture and cooperation, Kasetsart University, Chiang Mai University, Maejo University, etc. Cooperation and assistance are also from several foreign countries and international organization such as the USDA/ARS, the governments of New Zealand, Australia, Japan and Taiwan and the United Nation/Thai Program for Drug Abuse Control-UNDAC presently the United Nations Office on Drugs and Crime - UNODC)



His Majesty The Late King Bhumibol Adulyadej The Great gave practical guidelines for the implication of the Alternative Development Approach addressing the **use of the core principles in the sufficiency Economy Philosophy** as a driving mechanism and the considerations of his three personal ways of working **“understand, access and develop”** to create the balance of all priorities of the highland community livelihoods. Thailand can be considered the pioneering country using the alternative development approach, particularly for solving problems in the highlands. This approach is holistic in characteristics evolving with many lessons learned and experiences accumulated for over 50 years and yielding concrete and successful outcomes. The concept of alternative development has been valued as a model applicable and reproducible in not only other highland areas but also other fields of development in Thailand and beyond. Reputedly, it aligns well with the Sustainable Development Goals set by the UN.



2

**The King's Philosophy
in the Alternative Approach
for the Sustainable Highland Development
in the Royal Project's Manner**



2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner



His Majesty The Late King Bhumibol Adulyadej The Great kindly gave his speech on "Assistance to the Hill Tribes and the Hill Tribe Project" on the occasion of the royal visit to the Faculty of Agriculture, Chiang Mai University on January 10, 1974 as..

“Assistance to the hill tribes and the hill tribe project contributes direct benefits to the hill tribe people, promoting and supporting them to have a better living, enabling them to grow useful crops that provide them income. A purpose of this kind of project is of humanitarian, wishing those who live in troubled and lacking areas to have education and become self-reliant for further development. Another purpose, with which everyone would agree to help, concerns a big problem of narcotic drugs. If we can help the hill tribe people to grow useful and economically valuable crops, they would stop growing narcotic crops and opium poppy. This can enhance the effectiveness of the policy of banning opium smoking and trade. Other highly important consideration is what we have known about the ways of crop cultivation practiced by hill farmers, involving forest clearing and improper means of crop plantation. Such practice can lead our country to disaster. Thus, the help from all of us can protect the benefits and the well-being of the whole country. If we can make this project successful and have the hill tribe people settled in place then make a decent living, they would support the policy of forest conservation and soil preservation for long-term use. This usefulness would be immensely sustainable.”

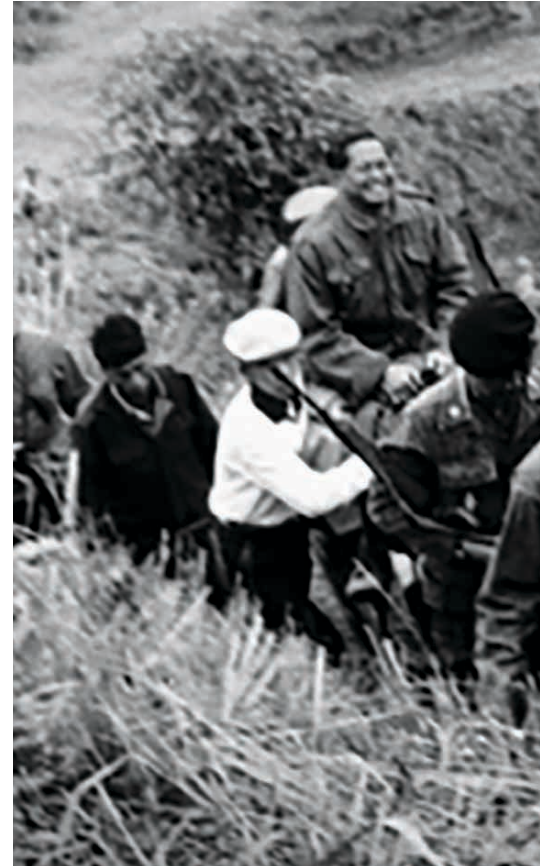




2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner

His majesty The Late King Bhumibol Adulyadej The Great had a profound understanding of the problems that occurred in the highlands of Thailand concerning poverty, shifting cultivation and opium plantation for living, all causing damage to watershed environment and the mountains become bald. Underlying factors of these problems were the traditional way of life of the hill tribe people, which was not a technical proper way to follow, due to the lack of knowledge and understanding in terms of living earning. On the other hand, law enforcement alone was not adequate to control narcotic problems in the highlands. Therefore, His Majesty considered to devise an alternative solution and advised that the hill tribe people who were reckoned the most important human resource in the highlands were to be developed, thus, capable of taking up a legal occupation and live in harmony with the highland forest and surrounding environment. Thereupon, he assigned the responsibility to the Royal Project to pursue research to identify crop varieties and animal species suitable for farming in the highland environment before extending those selected numbers to the hill tribe farmers. These suitable crops and animals should replace opium poppy cultivation, over time.





2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner

The Royal Project carried out studies and research starting from analyzing the problems occurred in the highland communities aiming to convince the hill tribe people to switch from growing illegal opium plants to environmental friendly temperate crops for income generation, hoping for reduction in forest encroachment and swidden farming. The Project encouraged the hill tribes of self-conduct trials, therefore, at first stage, they were provided with knowledge of opium substitute temperate crops and the advice of how to grow them. Once the hill farmers were convinced that those alternative crops can earn them greater than the opium poppy, they would convert their opium fields into permanent farming areas without the use of law enforcement. Otherwise, it would have led to unavoidable conflict in the public administration of the hill tribe communities in the long run. Positive changes among the farmers participating in the Royal Project inspired other hill tribe farmers to follow the practices, thus yielding expansion of the project subsequently, The Royal Project prototype of developing alternative opium replacement crops was extended and applied widely in other regions of Thailand and beyond. It was obvious that The Royal Project has helped change the mode of livelihoods of the hill tribes from destructive swidden cultivation to sustainable farming which, in turn, contributes to the restoration and conservation of forested watershed areas to rich and productive conditions, beneficial not only to the people of Thailand but also to others worldwide. The successful outcomes of the Royal Project could not have been realized without the royal ways of working advised by His Majesty, being.... understand, access and develop... exploding from within.





2.1

Understand, Access, Develop... in the Royal Project Form

1) Understand... traditional way of life of the hill tribe people and the highland context

His Majesty The Late King Bhumibol Adulyadej The Great comprehensively understood the traditional way of life of the hill tribe people as well as the context of the highlands. He perceived

(1) The hill tribes grew opium as the main crop for medicinal purposes and sold it for cash to support their families. An approach to encourage them to discontinue growing opium is to search for alternative crops with good potential in yielding higher income to replace opium poppy.

(2) Conventional farming was not a right practice for crop cultivation in the highlands since it led to destruction of forested watersheds. Technically proper farming should be introduced for good production of crops. Non-perishable kinds of crops were an option of variety selection because the produce can be preserved for a longer of time. Nonetheless, suitable utilization of forests should still be recognized.

(3) The life quality standard of the hill tribe people had to be improved via good agricultural practices gathered from studies and research. Such practices could yield acceptable produce with preservable quality, rendering adequate income for better lives of the family members.

(4) Reforestation in watershed areas was necessary. Reforesting with various species of trees and plants other than the original forest tree species was ideal. Growing multi-purpose trees for wood, firewood, food, fruit, etc. in reforested areas could inspire the hill tribes to join in and contribute in conservation of the watersheds and catchment basins with consciousness of preserving their own valuable subjects.



At the early stage, the Royal Project aimed at studies and research to search, select and breed crop and animal species. Agricultural development suitable for the highland context of the temperate zone of the country with extreme inconvenient transport was the key operation. Studies and research on plant varieties and productive animals, yielding the produce of high quality and value, also durable with less shipping loss, was another target of the studies. These selected varieties and species should be different from those available in the lowlands. Prior to extending the selected plants and animals to be used by the hill farmers, optimum and applicable methods of raising, including a suitable plan of land use must be inspected. Forest encroachment in watershed areas must be under control, for the benefits of environment and watershed conservation.

Currently, The Royal Project still carries on the research of plant variety and animal species acceptable for the highland context. The results of this research are extended to the hill farmers as an income-generating occupation. This Royal Project's operation has widely benefited other hill farmers outside the project operational areas having similar environments.

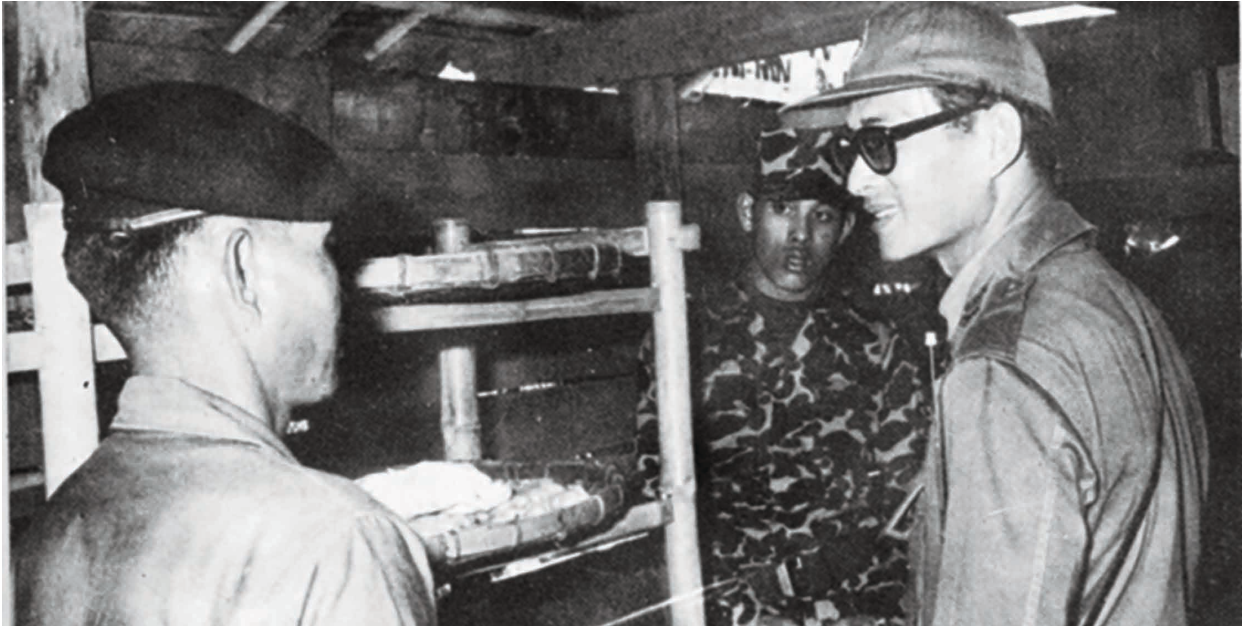




2) Access... the remote highland communities with different ethnic identity and social settings

Whenever traveling to various areas in the northern region to work or visit local villagers, especially in the operational area of the Royal Project, His Majesty The Late King Bhumibol Adulyadej The Great and the senior members of the Royal Family were seen meeting and conversing with their subjects in the rural setting in a down-to-earth and friendly way, enhancing the morale and spirit of the hill tribe farmers to adopt the cultivation of opium substitute crops up to the point that opium production in Thailand was completely eradicated. Apart from that, the hill tribes even cooperate in development of quality of life of the hill tribes and participate in natural resources conservation and restoration of watershed areas alongside with producing good quality products.

His Majesty and the senior members of the royal family have been regarded as the role model of a developer with leadership. His Majesty's trips to several remote and rough villages to visit the hill tribes in the highland communities made him learn of the living conditions as well as problems around them to help lessen such burdens appropriately, taken into account of the hill tribe's ethnic-specific identity, different cultural and social settings and the varying environmental conditions.



In the early years of operation, The Royal Project received cooperation and participation from several groups of volunteers from universities and other agencies. These volunteers visited the hill tribe farmers in villages weekly to advise, demonstrate and train those farmers on crop cultivation and animal husbandry. These villages were called "villages to visit" The volunteer groups were from: -

- ✦ Kasetsart University, responsible for Ban Chang Kian, Mae Sa Mai, Angkhang and Kae Noi.
- ✦ Chiang Mai University, responsible for Ban Doi Pa Kha, Huai Phak Phai, Pu Muen Nai, Ban Mai Rom Yen, Tham Wiang Kae, Ban Suad and Jom Hod.
- ✦ Meajo Institute of Agricultural Technology, responsible for Ban Wang Din, Pha Mee, Sa Ngo and Muaeng Ngam.
- ✦ Department of Agriculture and the Hill Tribe Welfare and Development Center under the Department of Public Welfare, responsible for Ban Mae La Noi, Huai Hom, Dong, Pa Pae and Rak Mai.



In addition to the field visits by the volunteer teams, The Royal Project created a close relationship with the hill tribe communities in the highlands. The Royal Project then established several centers and stations as the Royal Project Development Center and the Royal Agricultural Station and assigned the project officers to station in those units. These working units were scattered in the Royal Project operational areas. The officers worked as developers in economic, social and environmental fields. They would oversee the problems and needs of the communities.

The access to accurate information concerning the problems and needs of the hill tribe communities through visits and verbal communication enhanced the operational performance of the Royal Project. **The whole process is considered the explosion from within or the explosion on the actual basis of highland communities, aiming at developing the hill tribe community members as human-centered to operate on development work**, pushing forward the community-based participation to promote the strengthening of local communities as well as societies, by focusing on the hill tribe participation, encouraging problem-self-solving to create efficiency, effectiveness, transparency and social fairness in societies. The main concept of such development processes involves the holistic human-centered mechanism in which technical and local knowledge are combined for application to ensure stable and sustainable highland development, known and understood as the Royal Project method.







3) Develop... from discerning the problems and the needs of the highland communities to forming the Royal Project Way

The Royal Project has been carrying out development on the basis of cooperation, develop from problem discerning and community status, addressed as the Royal Project Way. Cooperation and participation are provided by various government agencies, rural and central to support knowledge development concerning agriculture, essential infrastructure for living and agriculture, education and health of Thai hill tribes, conservation and restoration of watershed forest with participation of the hill tribes in communities as collaboration. The knowledge gathered from research work is extended to promote the farmers. The farmers are then enlightened and understand environmental friendly means of crop cultivation. They are aware of the importance of conservation and restoration of natural resources, seen thoroughly through the grouping of various category of the farmers, such as agriculture cooperatives, natural resources conservation group and so on.

The Royal Project way of working was inspired by His Majesty initiatives, determination, conduct and wisdom to attain sustainable highland development under the **Philosophy of Sufficiency Economy**. This concept can create three dimensional balance in life for highland population, economically, socially and environmentally, of which considered as the best practice in a full cycle holistic development. Such concept has been implemented and extended for over 55 years to other organizations in Thailand and beyond in solving problems in highland agricultural development, narcotic crop plantation, poverty and hunger including problems on climate change and damage conditions of natural resources worldwide.

Literally, the Royal Project way of development driving is based on the concept of Sufficiency Economy with collaborations from various entities, e.g. individual, community, government agencies, private sectors, and international organizations. The full cycle development being... upstream as research for knowledge... midstream as extension development for occupation building.... and downstream as marketing management.... carries out to success in solving the problems of opium plantation, poverty, shifting cultivation, destruction of natural resources and environmental conditions in the Royal Project's highlands.





2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner

2.2

The key steps and framework of alternative development activities undertaken by the Royal Project in the highlands :

1) Initiation of research and development cooperated by volunteers

The Royal Project's working personnel comprises volunteers from various agencies such as Kasetsart University, Chiang Mai University, Maejo University, Mahidol University, Land Development Department, Department of Public Welfare, Royal Irrigation Department, Department of Agriculture, Department of Agricultural Extension, Department of Fisheries, Office of the Permanent Secretary for Ministry of Agriculture and Cooperatives, Thailand Institute of Scientific and Technological Research and Provincial Electricity Authority, including some research institutes and Highland Research and Development Institute (Public Organization). Collaborations are also from retired experts and some private sectors.

Active volunteer staff are still working on research and extension services to the farmers while permanent staff work full-time both at the central offices and at the remote research centers and stations.

2) Research conducting

Research and development on sustainable alternative following The Royal Project Way are on the basis of seeking knowledge for development and application as appears in the royal speech that **“...when one does not know, one has to do the research...”** Prior to extending plant varieties and animal species to the hill tribe farmers, to raise for income, the Royal Project has to conduct the research in finding good varieties or types suitable for raising in various environments.

In 1969, His Majesty The Late King Bhumibol Adulyadej The Great made a grant of 20,000 baht to start the Royal Project Research on temperate crops to replace opium poppy cultivation. Academic staff and researchers, a volunteer research team from Kasetsart University, conducted an experiment on top grafting of peach. Good varieties of peach were grafted on the local peach stocks at an experimenting plot, an orchard, later called “Suan Song San” regarding the granted amount of fund received. Later, more species of temperate crops were tested at that place. His Majesty also had “Khun Chang Khian Highland Agriculture Training Center and Research Station” established to be run by the academics and researchers of Chiang Mai University. There, studies and research on crops and animals were conducted. During the early years, the Royal Project received financial supports from USDA/ARS and a support in terms of plant stocks and agricultural experts from the Republic of China (Taiwan) to work on opium replacement crops. After the promising crops and livestock were identified from the results of on-field research and trials, subsequent research was conducted on good agricultural practices and some aspects to production. The knowledge was then transferred to the hill tribe farmers, inspiring them of advantages of replacement crops and animals over opium poppy, especially on income generating aspect. Thence, the hill tribes had switch from swidden cultivation to sustainable agriculture and the opium fields were then replaced with temperate crops and other agricultural activities. Currently, in 2024, the Royal Project has extended the knowledge and technical practices earned from research to the hill tribes in various villages.

Over 376 kinds and 587 varieties of crop and animal are raised for the hill tribe household consumption as well as for market sale to substitute the income from opium growing. From the early years of studies and research till now, the crops selected through those work have been registered as protected new plant varieties in the categories of vegetable, fruit and flower in total of 26 species, 91 varieties. As for registration of intellectual property protection, 75 items were patented and 2 were petty patented. Knowledge and new technology to enhance operation efficiency of the Royal Project derived from long-time studies and research as follows :





2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner

2.1) Crop production At the start, there were no plant materials nor the knowledge about crop types including their cultural practices suitable for highland production. Transportation to the remote villages in the highlands was rough and there was no road. Considerations were thus made on finding non-perishable food crops bearing the produce with long shelflife, transportation durable and adaptable to remote highland environment. The choices being (1) Rice and upland crops. Research and extension were focused on proper method of rice cultivation and the production of sufficient rice for consumption. Leguminous crops of red kidney bean, lima bean and pinto bean were introduced for trials and selection. Good varieties of beans were extended to the hill farmers. They would then use those beans as replacement crops for opium cultivation, high protein crops for their family consumption and green manure crops for soil preservation. (2) Temperate fruit started from improvement of local peach at the early years of research and development, followed by studies on cultivation of various kinds of temperate fruit, sub-tropical fruit and small fruit trees such as peach, avocado, strawberry, passion fruit, etc. Those selected varieties of fruit were suitable for highland climate and produced good and permanent income for the hill farmers. (3) Temperate vegetables. Studies aimed at varietal improvement of numerous kinds of temperate vegetables for short-season crops to grow for quick income while waiting for fruit trees to bear fruits. This vegetable project became a success. More farmers on highlands grew those vegetables which soon became the main crops and largely expanded through the highland villages, creating attractive income for hill farmers until currently. (4) Flower and ornamental. Several kinds and varieties of flower and ornamental were studied and field trialed such as carnation, gladiolus, cymbidium and so on aiming

at reducing the amount and value of import cut flowers from foreign countries to a certain extent. Breeding research of those plants have also been carried out. The Royal Project has been promoting cultivation of flower crops in the highlands and the hill farmers have responded well. Currently, the Royal Project supports more than 50 varieties of cut and pot flower and ornamental to build up the hill farmer's occupation. (5) Arabica coffee. Research has been done on finding arabica varieties tolerant to coffee leaf rust disease. Suitable cultural practice for arabica coffee plantation in the highlands as well as arabica varietal improvement are also studied. (6) Oolong tea. Field trials of Oolong tea number 12 and young twig Oolong tea has been carried out in the Royal Project area at first before sharing to the hill farmers for production. (7) Improvement and propagation of the Royal Project's crops. Varietal improvement of the Royal Project's exotic plants were conducted. Propagation and seed production of those selected varieties were carried out. Vegetative propagating materials are collected to be extended to the farmers. This multiplication program can help minimizing imports of seeds and plant propagating materials from abroad and in the meantime can lower the farmer's production cost as well. (8) Biological product for plant protection. Research on developing biological products to replace the use of chemical pesticide around the Royal Project areas was commenced firstly at the Royal Project ground then advanced to product production of lab-grade at the laboratories of Plant Protection Department and sold to the farmers at cost price. These bio-product was very effective and attract the farmers vastly in terms of chemical replacement. Currently, this bio-pest control is getting more popular and highly needed. (9) Hemp. (*Cannabis sativa*). Initiating from the royal speech of Her Majesty Queen Sirikit The Queen Mother, hemp was recognized and was included in the project of research and development on cultivation and product processing. It becomes an income-generating crop for the farmers and communities and maintains its value of fascinating handicraft and (10) Exotic plants. Her Majesty Queen Suthida kindly bestowed two species of exotic plant from the Alpine climate to the Royal Project. Research on possible cultivation and flowering of these two plants were conducted and the results came out well. Currently, edelweiss and gentian can be propagated and grown all year round with normal flowering. Extracts from edelweiss are further studied to develop cosmeceuticals. Several plant species from the collection of Her Royal Highness Princess Sirivannavari Nariratana Rajakanya for a total number of 18 species 44 varieties were also studied and developed. These plants are collected in the nurseries at "Sirivannavari Botanical Garden" in the area of Angkhang Royal Agricultural Station. Introduced temperate plant show is arranged to educate school children and students, interested citizen and farmers are also welcome to the show.





2.2) Livestock and Fishery.

Primarily, the Royal Project conducted experiment and promoted the rearing of local breed of chicken and pigs for household consumption. Later, research involved sheep raising, beekeeping for honey, cross-bred chicken, brassy chicken, black-boned chicken, cross-bred swine and milch buffalo, aiming at home consumption and selling the surplus. Related research involved utilization of animal waste by converting into bio-gas as an alternative energy to replace LPG and fuelwood or processing into biofertilizer. As for fishery, the Royal Project in collaboration with the Department of Fisheries experimented on the possibility of raising commercial aquatic animals in the Royal Project area in the highland environment to reduce import products. Success has been evident in terms of aquatic animal raising as well as rainbow trout and sturgeon of which its roe is salt-cured into caviar.

2.3) Forest resources and Environment. The Royal Project originated the research on forest restoration in the area of Angkhang Royal Agricultural Station since 1982 by introducing more than 20 species of fast growing tree from the Republic of China (Taiwan). After growing for more than 12 years, only 4 species, 20 varieties of those trees grow well in Angkhang environment. The tree stocks of these selected varieties were given to the villagers in the highland communities to grow them in the areas of the “Wood Lot Program” under the royal patronage of Her Royal Highness Princess Maha Chakri Sirindhorn in the fashion initiated by His Majesty The Late King Bhumibol Adulyadej The Great to promote three kinds of forest for four benefits in the Royal Project area.





2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner

2.4) Processing for value addition to agricultural outputs. With increase output volume of crops from research works and extension efforts of the Royal Project, the hill tribe farmers began to suffer from the depressed farm gate price from selling to the middlemen. Therefore, the first Royal Project's Food Processing Plant was built on the campus of Chiang Mai University to enable the hill tribe farmers to sell their output at the higher prices. More research was conducted on produce processing for consumption e.g. research on strawberry processing including other kinds of temperate fruit, herb, cereal and varieties of vegetable using appropriate technology to add value to the processed products. Later, in 1972 the "First Royal Factory" was built in Fang District, Chiang Mai Province to buy produce of the farmers in the Royal Project at fair prices for processing into food products under the trademark "Doi Kham" to increase the value for the farm output and increase market distribution channels. Studies and research were provided to develop food products following the initiative of "Agro-industry for Rural Development". Later, three more of the Royal Factory were built for the same purpose. In 1994, His Majesty The Late King Bhumibol Adulyadej The Great made an order for the Crown Property Bureau to take charge of The Royal Factories, instead of the Royal Project Foundation, under the name "Doi Kham Food Product Company Limited" to operate as a social business to make all social members happier from the balanced and financially sustainable development.



2.5) Postharvest management to reduce output loss Studies and research started with harvest index and grading standard of the Royal Project outputs. Later work involved passive cooling and passive cooling facility was later on set up at the Angkhang Royal Agricultural Station for postharvest storage. Other research included output quality, postharvest loss reduction, quality control of output from the Royal Project area and the improvement of the overall postharvest management system.

2.6) Marketing With increased farm output the Royal Project had to bring the opium replacement crops, fruit and flower for selling in Chiang Mai and Bangkok markets. Research had to be made on the marketing system for the Royal Project brand, the marketing of highland crops, pricing and marketing margins, consumer's behavior and their attitude towards the Royal Project products and the impact of free trade on the Royal Project's operation.

3) Multi-party participatory holistic alternative development approach

In the beginning, research and development activities of the Royal Project were confined to a limited number of the hill tribe communities. With increased knowledge gained from practical experience and research concerning social, economic and environmental aspects in the highland context, the research and development activities of the Royal Project thence could be arranged into a systemic program for alternative development pursuit. The practical knowledge extended to the hill tribe farmers fostered their willingness to actively participate in the Royal Project's work. In 1978, His Majesty had implementation units of the Royal Project established in various highland communities in the backcountry to reach out to the vulnerable people with the fundamental aim to improve their quality of life in conjunction with the eradication of opium poppy and restoration of watershed forests. The work in early stage was funded by His Majesty to start developing the hill tribe communities through integrated approach assigning responsibility for the volunteers from universities and government agencies to work with the villagers in specific community area. Later on when central and local government agencies taking part in the Royal Project increased in number and support, the field implementation units became established as the **"Royal Project Development Center"** having academics from universities and government agencies volunteered to work and take responsibilities in managing the projects in each area to develop targeted hill tribe communities. Those volunteer teams were from Chiang Mai University, Kasetsart University, Meajo University, the Public Welfare Department, the Land Development Department, the Northern Regional Office of Agriculture and the Department of Agricultural Extension.





In 1972, the United Nations financially supported highland development and sent their officers to assist promotion of occupation development to improve quality of life of hill tribe people in the North of Thailand under the United Nations/Thai program for Drug Abuse Control: UNPDAC through the construction of six Royal Project Research, Training, Development and Extension Stations at Khun Chang Khian, Khun Wang, Mae Tho, Ban Pui, Doi Sam Muen and Ban Khum. A number of academic staff from the Faculty of Agriculture, Chiang Mai University joined this program as the project coordinators and heads of the stations, considering this as the beginning of the Alternative Development Programs in replacing narcotic crop cultivation of current UNODC.

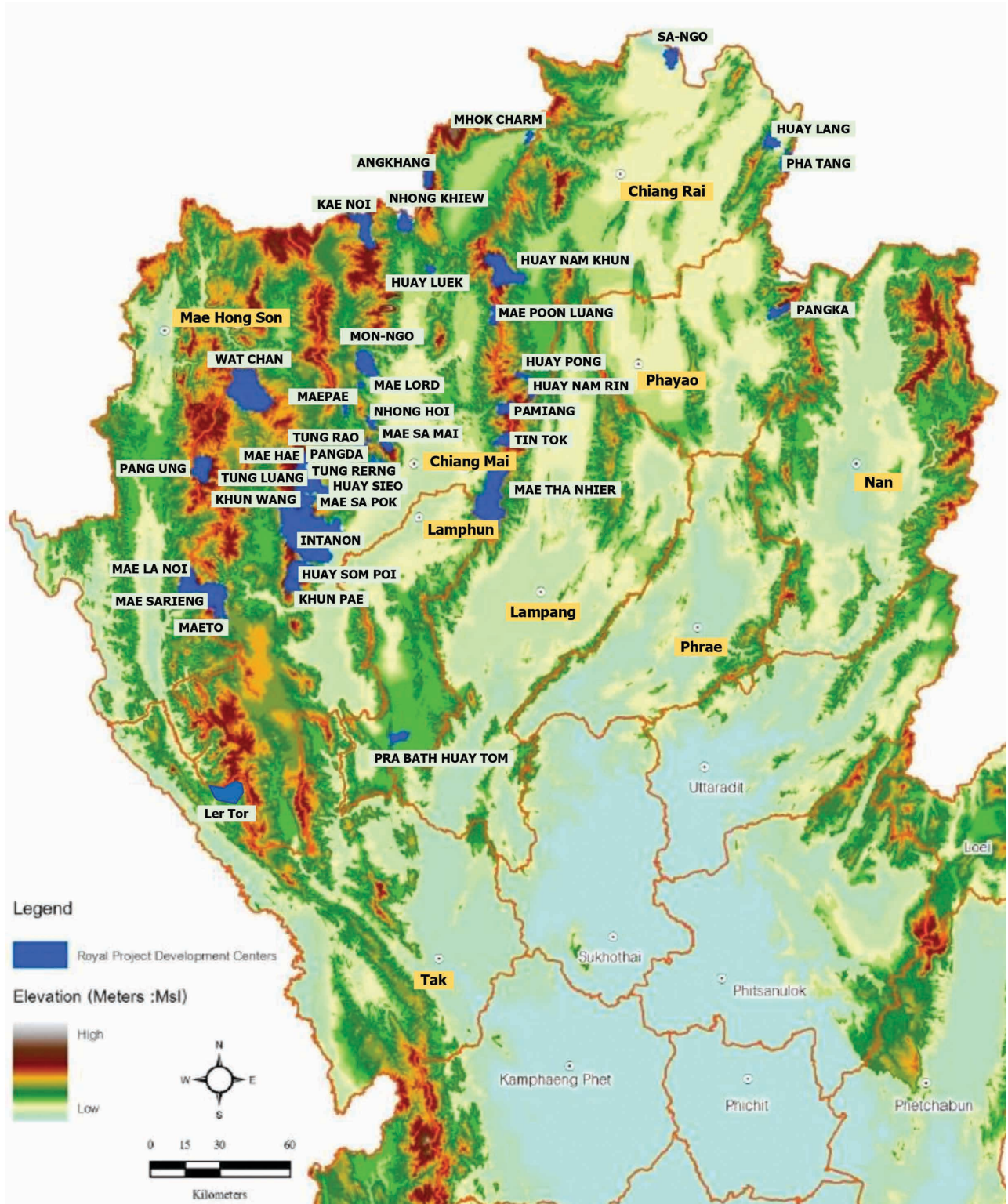
Apart from this, there also were collaboration in highland agricultural development among international donor and the Royal Project, i.e. the Thai-Australian Highland Agricultural Project: TAHAP during 1969 - 1974, the Thai-German Highland Development Program: TG-HDP during 1981 - 1998 and the Thai-Norwegian Church Aid Doi Yao-Pha Mon Highland Development Project: DP-HDP, with the objective to help improve the efficiency of farming systems and livestock production in the highlands.



Thereupon, the work of the Royal Project in highland community development in various parts were started in sequences and in 1992 His Majesty had the Royal Project status changed to **the Royal Project Foundation** to assure the permanent and sustainable operation. As a consequence, the cabinet passed on an approval on March 17, 1992 for the government to allocate annual budget to support the Foundation's operation, effective in 1993 budget year and for the establishment of the committee for coordination and support for the Royal Project chaired by the Prime Minister. The committee has the responsibilities and authority to consider and lay down the policy on the administration of various government agencies on the parts relating to the Royal Project and approves the programs, projects, activities proposed and the budget requested by the Foundation for the 26 involved government agencies to implement both technical affairs and infrastructural development.

The Royal Project Foundation's development efforts are made on the basis of multi-party holistic collaboration at the local and central levels and area-focused problem solving method, considering the different problems and conditions in different highland communities. Currently, the operation area of the Royal Project Foundation covers seven northern provinces including Chiang Mai, Chiang Rai, Mae Hong Son, Lamphun, Lampang, Phayao and Tak benefiting the totally 515 villages, 58,973 households, 217,379 populations. The achievements from its use of participatory holistic alternative development approach in different domains are summarized and presented below.





39 Royal Project Development Centers



3.1) Economic development for income generation

The Royal Project Foundation has operated continually on research and development of new plant variety improvement and suitable methods of cultivation on the changing of highland environment and technological development. In agricultural extension, importance has been focused on adoption of environmentally friendly production techniques to minimize the use of agro-chemicals for the better health of the crop growers and consumers as well as for natural resources, soil, water and forest conservation in the highlands. The techniques also serve the purpose of getting the output with quality certifiable for the national and international standards. The Royal Project Foundation is a prototype of enterprise, getting the system of Good Agricultural Practice (GAP) developed, in cooperation with the Department of Agriculture and other involved agencies, until GAP became in place in the highland agriculture.

Some crops under the supervision of the Royal Project Foundation are certified for Global GAP and Organic Agriculture standards which are known to use strict measures in the inspection and control of toxin residues. The Royal Project Foundation also has a policy to promote the use of bio-substance to replace or minimize chemical application with supervision and inspection measures for quality control and production safety before selling the farm output to customers.

As the output from research fields and farms in extension programs became increased in volume, the hill tribe farmers thus confronted the problems of limiting market outlets and the low selling price. Therefore, the Royal Project set up a marketing division in 1981, functioning as an agent selling the output of the hill tribe farmers under the project to market in a business-like pattern to ensure the reasonable paid price, in the meantime, providing transportation and postharvest management services. The marketing division set up with the objectives: 1) to ensure the market outlet for the farm output especially to the new crops from the research introduced to the hill tribe farmers to grow as a trial, 2) to guide the farmers to prepare their production plan taking into account the market demand and to improve their output quality and 3) to draw consumer's interest to buy temperate crops and hill tribe produce. As a non-profit seeking marketing agent, the marketing division has the policy to buy output from the hill tribe farmers at a fair price, considering the market situation and season for distribution to market place or end-consumers. The marketing margin was thence used in running the marketing business, in the manner of markets for societies. Primarily, the Royal Project set the price of all types of the output from the Project's Programs of opium replacement development and extension services, under the brand "Doi Kham", currently the "Royal Project brand". The output includes fresh products from the highlands, processed goods, tribal handicrafts and other products, 1,700 items in number. These products are placed in seventeen of the Royal Project outlets, in Bangkok and other provinces, to help minimize the imports



2

The King's Philosophy in the Alternative Approach for the Sustainable Highland Development in the Royal Project's Manner

of temperate and sub-tropical products from abroad. Meanwhile, some produce and products under the brand “the Royal Project” are exported to foreign markets, and this is another economic benefit for the country. Furthermore, the Royal Project has made the programs of occupation development, other than those concerning agriculture, e.g. cultural handicraft or the hill tribe wisdom to create supplement income for the households.

To improve postharvest quality of the produce, the Royal Project thus established **The Royal Project Produce Center**, one in Chiang Mai and the other in Bangkok for postharvest management by developing production process through modern technology of Pre-cooling and Vacuum-cooling, keeping the produce quality under the GMP and HACCP standards, with Traceability system. More of the Royal Project Produce Center were established in various operational areas of the Royal Project to collect and classify the farmers' produce, including packaging inspection prior to transporting to the Royal Project Produce Center in Chiang Mai and Bangkok, or to end-consumers in various provinces. With good and effective logistic system, the consumers are able to access fresh, clean and safe products.





3.2 Social Development

The Royal Project Foundation aimed at social development and several aspects to foster community strength within the framework of Sufficiency Economy Philosophy of His Majesty The Late King Bhumibol Adulyadej The Great. Following are the key activities for the development in four social perspectives.

(1) Development and promotion of Education As the basic Thai literacy was considered important for hill tribe development, His Majesty The Late King Bhumibol Adulyadej The Great had Border Police Patrol Schools established in distant villages both inside and outside the Royal Project's operation area to enable the hill tribe children to get at least the primary schooling. Meanwhile, informal adult education was arranged for the hill tribe farmers to have adequate knowledge and ability to get the access to broader information and technology relating to agriculture marketing, society and environment. The Royal project cooperating with Chiang Mai University Library developed a mobile library program for the hill tribe communities to encourage the hill tribe people in the Royal Project operational area realize the value of reading and improve their knowledge. On the other hand, the Royal Project will send their staff and the hill tribe farmers more than 250 in number, annually, to attend training sessions at the Khun Chang Khian Training Center and Research Station under the responsibility of the Faculty of Agriculture, Chiang Mai University for them to understand the impacts of opium poppy cultivation and appreciate the cultural practices in the production of introduced opium replacement crops, focusing on conservation of highland resources, including hill tribe education development.



(2) Public Health Development The Royal Project in cooperation with the Ministry of Public Health, a volunteer team from Chiang Mai University and other local government agencies arranged medical services and health education program for the hill tribe villagers to promote family planning and birth control. They were also educated about the use of modern medicines and alternative methods for several home treatments of illness and discomfort, instead of using opium. Various activities were arranged to promote good hygiene and sanitation within the households and in the community. The Royal Project in assistant with the Public Welfare Department set an educational campaign to get the hill tribe people to be aware that opium is illegal, and to enhance the capacity of community to prevent spreading of narcotic drug.



(3) Development and promotion of self – reliant group formation for community His Majesty The Late King Bhumibol Adulyadej Kindly gave 20,000 baht to the villagers in Ban Pa Pae, Mae Hong Son Province to set up a rice bank to solve the problem of inadequate rice for consumption and stated that “This is the first rice bank in the world”. The household in need can borrow the rice from this bank for their own consumption or as the sowing-seed rice. The loan repayment for the rice can be made after harvesting the following season crop. This marks the beginning of the development and promotion activities targeting at group formation for self-reliance in the community. Later, other forms of community group or organization have been



developed or promoted such as agricultural cooperative, savings group and self-reliance community group. Training program was arranged to create the skill of the hill tribe villagers in devising the community self-reliance plan.

(4) Development of learning from the Royal Project's experiences The Royal Project Foundation has provided services to share the learning from the Royal Project concerning the sustainable highland development such that the body of knowledge from research and development activities can be transferred to the hill tribe farmers in particular and other farmers in general for application. From their learning the farmers are expected to become self-reliant within the framework of the Sufficiency Economy Philosophy, which is supportive to the revival and conservation of natural resources and the environment, as well as to the management of the rural affairs by community participatory process. The Royal Project Foundation has developed a database for dissemination and utilization of the technical knowledge, findings and experiences from the project operation. It has also helped develop the capacity of the Royal Project Development Centers and the Royal Agricultural Research Stations that have different outstanding features and achievements to become the learning centers in various specialized aspects for school children, students farmers, government officers, academics, local development workers and interested persons to visit or attend training sessions offered by the center. Furthermore, the Royal Project Foundation has worked in cooperation with the Highland Research and Development Institute (HRDI) to extend the project achievements for application or reproduction in other highland communities beyond its operation area and beyond Thailand.



3.3) Development of Natural resources and environment

Most of the hill tribe communities situated in the head-waterhed area. The hill tribe farmers had to use steep sloping hillside portion of the land for farming. They use traditional farming method of shifting cultivation, meaning to slash the forest trees and burn them to clear the surface soil for crop cultivation. This swidden method of farming caused severe soil erosion and degraded the soil. The Royal Project Foundation thus started working in collaboration with the Royal Forestry Department to set up “Royal Forestry Project” for restoration and conservation of natural resources and environment through such measures as controlling agricultural land use to prevent resource degradation, running campaign on forest tree planting and natural regeneration of forest resources, using suitable methods to slow down soil erosion process or reduce the degree of soil erosion, building water conservation systems and constructing earth check dams. The Royal Project Foundation has worked with the Land Development Department since the beginning in implementing soil and water conservation activities throughout the Royal Project’s operational area to deal with surface runoff and soil erosion. In 1979, a land utilization plan was developed for zoning the land into forest, rice and field crop and orchard or agroforestry areas. In 1994, the Royal Project Foundation helped and encouraged the hill tribe villagers to establish the villagers’ forest as part of the Villagers’ Wood Lot Program under the royal patronage of Her Royal Highness Princess Maha Chakri Sirindhorn, planting trees for domestic use as building material or fuelwood instead of cutting trees from natural forests. Besides, the Royal Project Foundation has made an arrangement with the local community and involved local government agencies in organizing various environmental protection and conservation activities such as constructing earth check dams to increase soil moisture and water availability in the head-watershed area for domestic use and farm irrigation, and building forest fire breaks.



3.4) Development concerning response to global climate change

The Royal Project Foundation has recognized the importance of environment impacts from the greenhouse gas emission and the climate change thus built a development model of transforming the hill tribe villages into the low carbon and environmentally sustainable communities with the objective to promote local social and economic development with eco-friendly practices and technologies. Emphasis is placed on the efficient use of resources to reduce wastes and greenhouse gas emission from farming which otherwise can cause damages to the environment and ecological balance. The Royal Project Foundation worked with the Highland Development and Research Institute and Mahidol University in the development of indicators and criteria for assessing the low carbon status or standards of the highland communities in four considerations as agriculture in eco-friendly nature, forest resource restoration and conservation, community environmental health and sanitary management and community strength in responding to climate change to elevate quality and set the standard for highland communities. The assessment of low carbon standards of the highland communities is the first attempt as made in Thailand. So far, 21 hill tribe communities in the Royal Project Foundation's operational areas have been certified as low carbon society serving as the prototype for other village communities to learn and follow.





3

**Valuable Impacts
of the Royal Project
on the Social, Economic and
Environmental Conditions**



3

Valuable impacts of the Royal Project on the Social, Economic and Environmental Conditions

3.1

The Best practice model of Alternative Development Approach in the highlands in the Royal Project Form

The Royal Project Foundation has implemented research and development activities in a multitude of perspectives with the adherence to the royal initiatives and words of advice of His Majesty The Late King Bhumibol Adulyadej The Great to support the balanced development across social, economic and environmental domains of the hill tribe population which will contribute to the improvement of quality of life and the reduction in opium poppy cultivation in the highland communities. The knowledge-based agricultural extension has involved the introduction of new kinds and species of crop and livestock for the hill tribe farmers to choose, the guidance for good agricultural practice, the advice concerning crop care and maintenance system and production including postharvest management as well as the promotion for the use of cultural heritage in producing hill tribe handicrafts. Various agricultural produce are processed into marketable products for value addition to the produce. The hill tribe farmers become self-reliant after following the guiding principles in the Sufficiency Economy Philosophy. The capability of individual and community has been strengthened from many development inputs.



An appropriate land use plan has been developed for each highland community supporting by various soil and water conservation measures as well as the community participatory efforts in the villagers' wood lot program and the restoration and conservation of head-watershed resources to improve water quality in streams. Many government agencies at the central and the local levels have had the roles to play, helping the Royal Project in the infrastructural development for long term benefits to the hill tribe population. Some private entities also gave cooperation in various aspects and forms. In the meantime, different Royal Project Development Centers also serve as a learning center transferring knowledge to the farmers, project staff and interested general public, both Thai and foreign.

Putting into context the situational changes in the three domains of the Royal Project's development, helps provide significant implications for the understanding of holistic development approach taken by the Royal Project, the

contribution towards improved livelihoods of the hill tribe population living in the marginal area of the country which is the primary goal of the Royal Project establishment. The followings are four main achievements in substance.

1) The hill tribe people realize an improved livelihood, become aware of their important role in conserving the productivity of the country's watershed resources, feel proud and dignified from getting the same social treatments and privileges as other groups of Thai people do.

2) The problems associated narcotic drugs have been successfully solved due to the visionary thinking and contemplation of His Majesty The Late King Bhumibol Adulyadej The Great on the peaceful conflict resolution by participatory and holistic development approach.

3) The natural resources, the ecological system and the forest in head-watershed area have been restored and conserved by the joint effort between local villagers and various development networks to the rich and sustainable condition.

4) The development of highland agriculture into the production of appropriate temperate and sub-tropical crops such as vegetables, fruit and cut flowers of which finally become the leading economic crops has generated immense income for the hill tribe growers, the community and the country, as well as helped lower imports of produce in the same or similar kinds from foreign countries.

The Concrete Changes in Social, Economic and Environmental Situations over the 55 Years Dynamics in the Royal Project's Operational Area.

Initial situation	Present situation
<ul style="list-style-type: none"> ✦ Extensive cultivation of opium poppy. 	<ul style="list-style-type: none"> ✦ No more cultivation of opium poppy in the Royal Project's operational area. ✦ The USDA removed Thailand from its major narcotic drug producers and traffickers list in 2004.
<ul style="list-style-type: none"> ✦ The hill tribe people grew rice, maize and local variety of peach for subsistence and income. 	<ul style="list-style-type: none"> ✦ The hill tribe people produce more than 376 kinds of crops and livestock, e.g. vegetables, fruit, flowers, field crops, tea, coffee and herbs, including the raising of chicken and milch buffalo for subsistence and income.
<ul style="list-style-type: none"> ✦ Swidden agriculture and planting of traditional crops were prevalent. ✦ Forest land clearing by slash-and-burn method brought about bald mountains. 	<ul style="list-style-type: none"> ✦ Disappearance of forest land clearing by slash-and-burn, swidden agriculture and traditional crop cultivation with the introduction of opium replacement crops in the appropriate farming systems. ✦ The hill tribe farmers select crops and livestock they find suitable for production in their environment. ✦ Farm outputs are certified for GAP and Organic Agriculture by accredited Thai and International certifying body or agent. ✦ Land use plan, soil and water conservation system and planting of vetiver grass are in establishment in every village under the Royal Project Foundation. ✦ The hill tribe farmers have their villagers' wood lot in place and contribute their efforts to the rehabilitation and conservation of watershed forest.
<ul style="list-style-type: none"> ✦ The hill tribe population were in extreme poverty, with dependence on opium production for income and forest product gathering for subsistence. 	<ul style="list-style-type: none"> ✦ The hill tribe farmers have an improved quality of life, earning an income level comparable to the national average from the production of opium replacement crops.
<ul style="list-style-type: none"> ✦ Poor literacy and lack of access to education. 	<ul style="list-style-type: none"> ✦ The hill tribe population can obtain education at the higher level in the formal education system of Thailand ✦ The hill tribe people can obtain additional knowledge from attending area-specific training and development activities.
<ul style="list-style-type: none"> ✦ Public health condition below standard. 	<ul style="list-style-type: none"> ✦ The hill tribe population have access to public health services, and the sanitary and hygiene conditions of their household and community are at standard level.
<ul style="list-style-type: none"> ✦ The hill tribe communities were remote from all means of communication and in the conditions difficult to reach and live. 	<ul style="list-style-type: none"> ✦ Basic infrastructure and public facilities reach and exist in the hill tribe communities.
<ul style="list-style-type: none"> ✦ Development without the use of good model, principles and methods. 	<ul style="list-style-type: none"> ✦ About 500,000 individuals, each year, come to learn about the highland development in the Royal Project's approach. ✦ The emergence of a set of good practices known as the Royal Project Model. ✦ The holistic alternative development approach in the Royal Project Model has been transferred and adopted for application and reproduction in other countries such as Laos, Myanmar and Bhutan.



The above outcomes are clearly the manifestation of the success of the Royal Project Foundation in working to realize the royal intention of His Majesty The Late King Bhumibol Adulyadej The Great to enable the hill tribe people to stop opium cultivation by extending to them other promising cash crops to grow instead opium poppy. The farming of crops and livestock suitable for the highland environment in a good practice system has contributed to not only the economic well-being of the country but also the revival of natural resources in the watershed forest areas to productive and rich condition for a sustainable long term utilization. More importantly, the quality of life of the hill tribe population has improved remarkably from not only the appropriate agricultural systems, but also the other dimensions of development such as infrastructure education, health, community strength, social equality, etc. The pride, dignity and social equality the hill tribe people have self-realized from the development process in the Royal Project's form are instrumental for peace and social harmony in a society, the security in life, and eventually, the peaceful and happy life of people in Thailand and beyond.





3.2

The Recognition of the Royal Project Model at the National and International Levels

The achievements over 55 years of the Royal Project's operation using the holistic alternative development approach in the context of hill tribe communities in the remote highland and conditions have validated the good practice nature of such approach for solving the problems of opium poppy cultivation, dire poverty, swidden farming practice and the degradation of natural resources and environment in the highlands. The continual provision of development inputs to the hill tribe villagers has built up the better local livelihoods, community's strength and self-reliance capacity including the sense of understanding, and awareness among the hill tribe people about the importance of the rehabilitation and conservation of the natural and environmental resources. Most development affairs are managed by people's participatory success. Therefore, the opium cultivation extent reduced substantially from the 1989/90 crop year to only 129 hectares in the 2003/4 crop year (2014-2015 Annual Opium Survey Report, office of the Narcotics Control Board). In 2004, the USDA removed Thailand from its major narcotics producers and traffickers lists. The achievements have led to the recognition and awards given to the Royal Project Foundation from various national and international bodies.

1) National level

1.1) Commemorative Plaque Award for "Low Carbon and Sustainable Highland Community Development" in recognition as an organization working in dedication to environmental protection, April 11, 2019.

1.2) Commemorative Certificate Award for "Assessment of Carbon Sequestration from Reforestation in the Highlands at Angkhang Royal Agricultural Station" under the low emission supporting in the green zone and forest management category of Thailand Greenhouse Gas Management Organization (Public Organization), July 10, 2019.

2) International level

2.1) The Ramon Magsaysay Award for international understanding in 1988. The end of award presentation speech contained the statement that ... “through grants and cooperation international donors and collaboration with various agencies in Thailand, the Royal Project has contributed to the reduction of the world’s dangerous narcotic drugs while helping improve the quality of life of the hill tribe people as well as restore the bountiful condition of forest in the head-watershed areas. The Royal Project has generated numerous impacts beneficial to people in both Thailand and the world, and it is widely recognized in the world community to be an initiative to eradicate narcotic crops by peaceful means and foster a good international understanding.”





3

Valuable Impacts of the Royal Project on the Social, Economic and Environmental Conditions

2.2) The UNEP Gold Medal of Distinction presented to His Majesty The Late King Bhumibol Adulyadej The Great in 1992 by Executive Director of the United Nations Environment Program in recognition of the exemplary leadership in various initiatives and eminent contribution to the improvement of the environment and nature conservation.



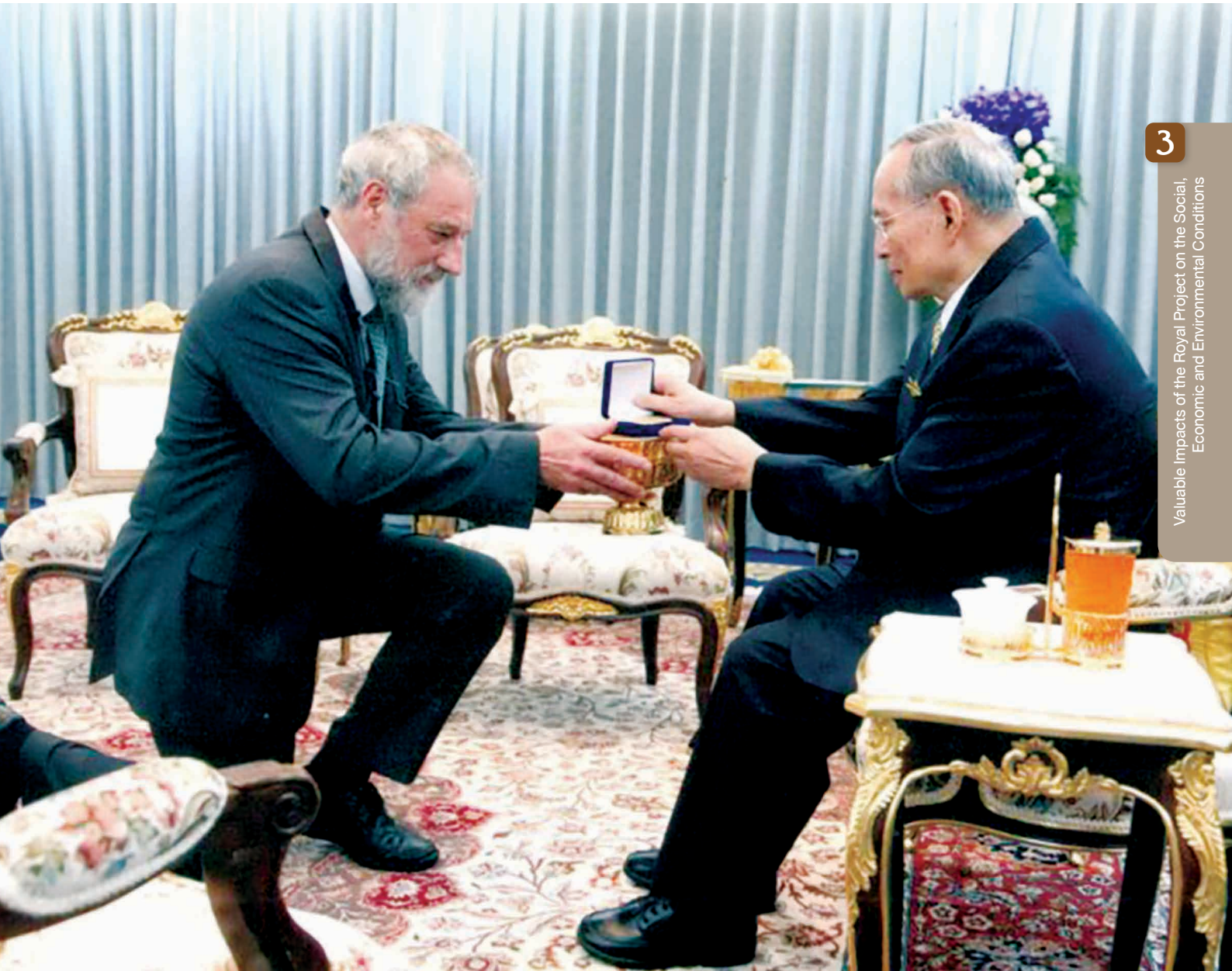
2.3) Award of Appreciation presented to His Majesty The Late King Bhumibol Adulyadej The Great in 1994 by the United Nations Drug Control Program (UNDP) in recognition of outstanding contributions to drug control efforts in Thailand by using alternative development approach to The Royal Project framework to improve the livelihood of the hill tribe population.



2.4) The Colombo Plan Award given by the Colombo Plan Drug Advisory Program (ADP), an international organization aiming at solving narcotic drug problems in Asia and Pacific, to the Royal Project Foundation in 2003 in recognition of being the only organization in the world successful in eradicating opium poppy cultivation by constructive means.



2.5) The UNDP Human Development Lifetime Achievement Award presented to His Majesty The Late King Bhumibol Adulyadej The Great in 2006 by the Secretary-General of the United Nations in recognition of the king's extraordinary dedication and contribution to human development by reaching out to the poorest and the most vulnerable people in Thailand-regardless of their status, ethnicity, or religion - listening to their problems, and empowering them to lead their lives by their own hands strongly and sustainably as indicated in the humanitarian objective to the Royal Project.



3

Valuable impacts of the Royal Project on the Social, Economic and Environmental Conditions

2.6) The King Bhumibol World Soil Day Award The Food and Agriculture Organization (FAO) at the 144th Session of the FAO Council in 2012 made a resolution to request the wider UN system to recognize 5th December as the “World Soil Day” and institutionalize the observance accordingly. The date, King Rama IX’s birthday, was chosen to honor His Majesty The Late King Bhumibol Adulyadej The Great for his dedication to soil resources management which has been recognized worldwide. The World Soil Day subsequently established by the UN General Assembly in 2013. This honor was originally proposed to FAO by the International Union of Soil Science (IUSS) that earlier presented the Humanitarian Soil Scientist Award to His Majesty, honoring him as the first and only recipient of the award in the world. From 2018 onwards, the kingdom of Thailand and the FAO have established the WSDA to be awarded on this date to outstanding individual, project or organization in the field of soil science and management.



3.3

The Contribution of the Royal Project in the Economic Dimension

A research title “Contribution of the Royal Project to Thai Society in Economic, Environmental and Social” Aspects undertaken by Kasetsart University reported in December 2011 provides the findings on economic benefits from the Royal Project’s operation in five components during the past **six decades that the total benefit from the activities was assessed at 1,181,240.46 million baht**, being less monetary benefit than the non-monetary benefit in environment and social components. Obviously, the contribution of the Royal Project to the improvement of the environment and the quality of life of the hill tribe population has a greater value than the monetary benefit as presented in more detail below.





(1) **Research.** The assessed benefit is 18,990.03 million baht, with more monetary benefit than non-monetary benefit. This indicates that the utilization of research results creates greater value than the research budget which reflects high efficiency in the use of research budget.

(2) **Socio-economic benefit.** It is amounted to 495,457.75 million baht, being more of monetary benefit (net income and asset value of the farming households) than that of the non-monetary benefit (net income in-kind). These findings suggest that the agricultural development in the highlands has brought about a cash flow in the local economy much more than the income in-kind the hill tribe households got from their production and marketing activities.





(3) Environmental benefit. The valuation is 373,778.19 million baht, outweighing all other benefits, and is totally non-monetary benefit from the rehabilitation and conservation of forests, especially in the class 1 watershed areas because these attempts will lead to moisture retention in soil and soil fertility improvement.

(4) Social development benefit. It was assessed at 258,998.56 million baht with higher monetary benefit than the non-monetary benefit. The finding indicates that the monetary benefit from the reduction of opium cultivation is far larger than that in the other components because farmers can earn relatively more income from the production of temperate crops. Meanwhile, the introduction of new choices for farmers to choose to replace opium cultivation is tantamount to giving them the concrete motive for “explosion from within” as they are empowered to become strong by themselves and are capable of making independent decisions.



(5) Market benefit. The assessed value is 34,015.93 million baht. Almost all of the benefits came from selling in domestic markets. Analytical results show that the market was developed in seven northern provinces of Thailand to absorb agricultural output of the hill tribe farmers in the Royal Project operational area and it was efficiently developed to displace the imports of temperate vegetables, fruit and cut flowers. An important implication is that the highland agricultural development supported by The Royal Project has also addressed the supply chain management and comprehensive agri-business considerations.







From 2009 onwards, The Royal Project Foundation has continued to implement the activities in all components stated above. The concrete project outcome is enormous and growing, of which the hill tribe farmers directly benefit. Throughout 55 years of operation contributions occur in the dimensions of economic, social and environment, valued more than 1,181,240.47 million baht in total, being 548,463.71 million baht in economic dimension, more than 258,998.56 million baht in social dimension and 373,778.19 million baht in environment dimension.



4

**The Royal Project
Model for Sustainable
Development**



4

The Royal Project Model for Sustainable Development



The accomplishment of the Royal Project's highland development endeavors over the past 55 years is remarkably tangible in transformation of the hill tribe communities once depending upon opium poppy for income and in acute poverty into ones forsaking entirely the production of the drug crop and the consumption and use of narcotic drug. These communities now find their contentment in life, are able to be self-reliant and contribute to the overall national security and natural resources sustainability. A key to this success has been the trust of people in the exceptional aptitude of His Majesty The Late King Bhumibol Adulyadej The Great, revered as an exemplary leader, a spiritual anchor and the heart and soul of all Thai people. The Thai social members are always ready to follow the royal initiative using the alternative development approach to attend to the welfare of the Thai populace because His Majesty has the profound understanding of the situation in each locality. A guiding principle of His Majesty is that the problem solving needs to be human-focused using the concept of "understand,



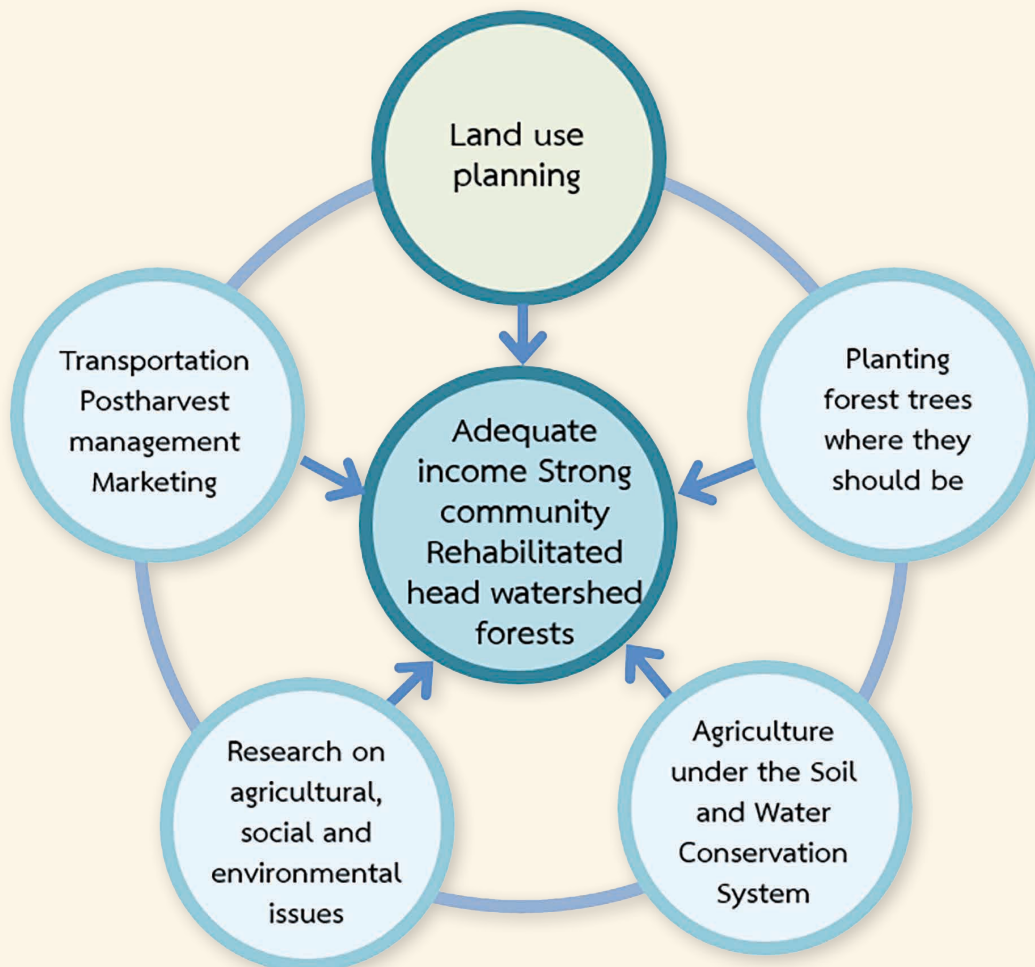
access and develop” by means of “study, research and develop” and practical field trial. The adherence of the Royal Project to this royal guidance in its operation has produced a set of good practices in highland development proving that the King’s Philosophy in practical application can bring about valuable benefits to the hill tribe people, the Thai populace, and the world.

The King’s Philosophy is understood as the collection of methods, philosophies and theories based on His Majesty The Late King Bhumibol Adulyadej The Great’s genius and decades of work, extending to numerous areas of development. It first took place when His Majesty initiated the project aiming at eradicating poverty, narcotic drug and environmental degradation from the northern highlands of Thailand using his three ways of work to “understand, access and develop” until the “explosion from within” comes along. The whole process is holistic in both means and ends, taking into account the economic, environmental, social, and community dimensions for development towards a civic society blessed with happiness, self-reliant ability, security and sustainability. The alternative development approach taken by the Royal Project for the hill tribes and highland development thus has become recognized widely both in Thailand and internationally. With the internal and the external dynamics, the Royal Project has undergone organizational and operational change and development through time to respond suitably to the change in the social and environmental context of the highland communities. Therefore the timeline of the Royal Project Model can be categorized into four development phases, as follow.

Model 1

Inception phase : highland land use planning

The works in this phase were implemented according to the royal initiatives, **starting with the land use planning in each highland community** for appropriate introduction of opium replacement crops, reduction of opium poppy area and the zoning of forest land for the establishment of three kinds of forest trees for four benefits of which was considered a good start. Next, research and development of crop cultivation and animal raising for subsistence and decent cash income were undertaken.



Model 2

Moving forward : continuance of study, research and development

Following the demarcation of agricultural area in the forest land as planned in the first phase, The second phase then was **focused on in-depth study, research and field trials**, as well as the support and promotion of opium replacement crops and livestock production for household consumption and income. The results obtained from such research and experiments were thence used as the basis for extension works in the village communities. Royal Project Development Centers were primarily established in key villages to oversee the agricultural extension activities which, subsequently include those involving postharvest, processing and product development, significantly focused on the conservation of natural resources and environment. Social and community strength building was also considered.



Model 3

Reinforcing the Royal Project Model : market development, income generating and quality of life promotion

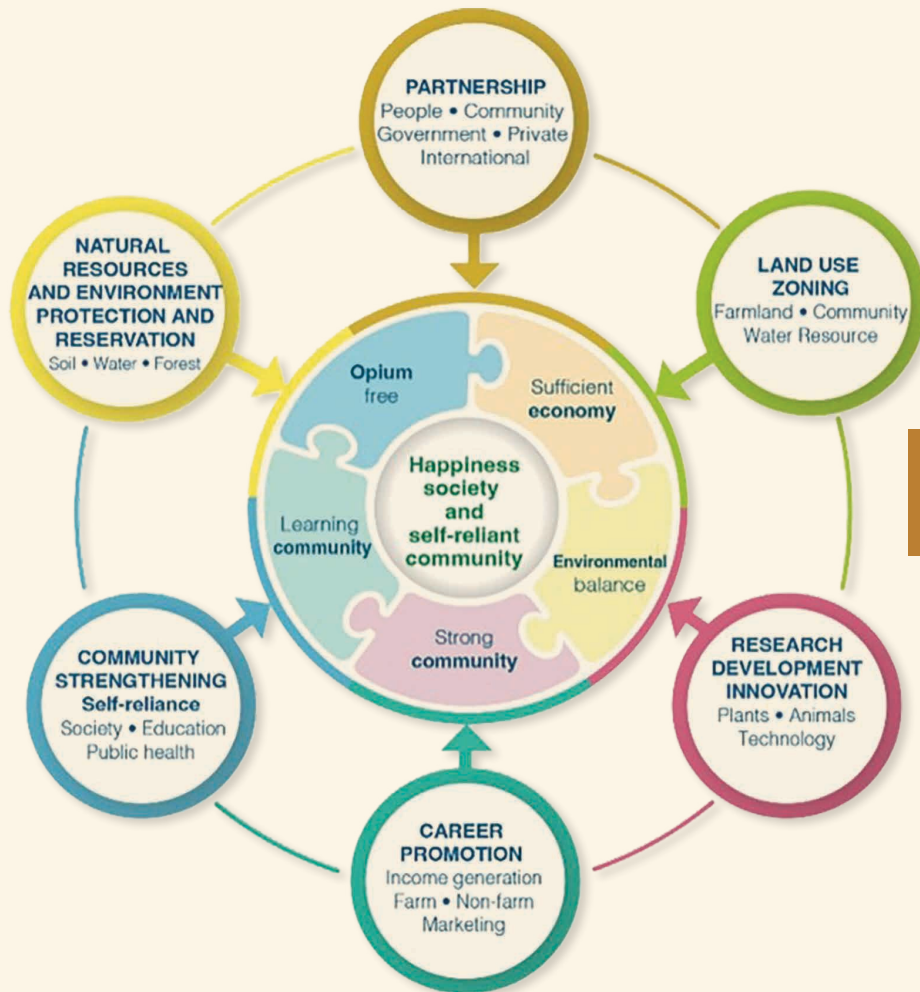
The third phase of the Royal Project Model advanced to building a balance of economic, social, and environment priorities. **In economic circle, attention was placed on income generation from growing opium substitute cash crops.** In social domain, public services were provided in terms of education, public health and security in life and property measures. Infrastructure was built, including road, electricity supply and mountain water supply system. Community strength was built from villagers' cooperation in soil and water resources conservation which also resulted in improvement of such resources as well as environmental conditions. Development of market and marketing management helped increase the value of produce and products from the Royal Projects areas. The development towards agri-business using such quality assurance measures as traceability and standard certification was the key to actualize the holistic development goal of the Royal Project to "help the hill tribe people, help us and help the world" practiced at the areas of 39 development centers and agricultural stations of the Royal Project.



Model 4

Development towards global change : situational adaptation in highland development, nationally and globally

His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun has expressed his royal support to continues preserve and build upon the Royal Project activities for the development of the highland areas in Thailand towards the international standards of the alternative development approach, which is a development for arriving at all the 17 UN Sustainable Development Goals. The Royal Project has demonstrated its ability to drive the development towards all these goals by 2030 and thus becomes the best model for others to follow in Thailand and elsewhere around the globe.



The Royal Project Model provides the good practice guidelines to realize the four main objectives of the Royal Project initiative under the principles of Sufficiency Economy Philosophy and the royal concept of work, to **“understand, access and develop”**. The works of the Royal Project have evolved over time and the project itself has been the multi-party participation and cooperation from various agencies and the hill tribe communities. Moreover, the project has been recognized as successful in contributing to the sustainable social, economic and environmental improvement in the highlands, and, it is now moving forward to attain further development results for the hill tribe people, for us and for the world.



ROYAL PROJECT MODEL: The King's Philosophy





After the implementation of development activities following the royal initiatives and advice recognized as the “Royal Project Model” or a set of guidelines regarding good practices in the alternative approach for sustainable economic, social and environmental improvements in the highlands, the hill tribe villagers in the Royal Project’s operational area have forsaken their opium cultivation and worked instead on the recommended farming systems. Various positive changes in the hill tribe communities have brought about the presence of the sufficiency economy and the rehabilitated natural resources and environment in the northern highlands. The local ecological ecosystem has been restored the hill tribe communities have built up their strengths and capability to become the learning centers for other communities that are striving for happiness and self-reliance to move further towards sustainable adequacy and security goals in various aspects in line with the SDG 17 goals.



5

Nurture... Conserve... Extend...
the stable and Sustainable
Alternative Development Approach
following the Royal Project Model



5

Nurture... Conserve... Extend... the stable and Sustainable Alternative Development Approach following the Royal Project Model



5.1 Nurture... the royal initiative and the sustainable alternative development approach following the Royal Project Model

His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun, the Honorary President of the Royal Project Foundation, has his royal resolution to nurture, conserve and extend the operation

of the Royal Project, an initiative of His Majesty The Late King Bhumibol Adulyadej The Great founded to improve the quality of life of the hill tribe population, eliminate opium poppy cultivation and rehabilitate the forest in head-watershed areas. With his royal contemplation of supporting further research and development activities in view of the changing social, economic and environmental conditions to foster the well-being and sustainable development of the hill tribe communities in the Royal Project operational areas. His Majesty announced his royal appointment on November 17, 2017 of a new Royal Project Foundation Board to nurture, conserve and extend the Royal Project's work to ensure the continued development and the benefits to all in nation.

The Royal Project's approach to sustainable highland development is considered a practical strategy for problem solving in the highland context, especially those relating to the cultivation of narcotic crops. In contrast to the previous measures limited only to the control and suppression efforts, the alternative measures for opium eradication used by the Royal Project was the development of alternative farming choices for the hill tribe farmers to adopt to replace opium production, taking into consideration the appropriate application of the Thai and the international laws for enforcement. Moreover, the alternative development approach of the Royal Project has a primary humanitarian purpose to solve the economic problems of poverty and hunger among the hill tribe population. Therefore, a substantial part of research and development works in the Royal Project has involved to take up the support for the hill tribe villagers technically appropriate cultural practices in farming, carry out some non-farm production, make suitable use of land resources in an environmentally friendly nature and build up the human and community strength.

The Royal Project Foundation determines to continue working in the alternative development approach to which it has adhered for the past 55 years. Considering the project's outcome, after the hill tribe people stopped growing opium poppy and switched to cultivate food crops for the family consumption while growing cash crops of the temperate and sub-tropical zone for cash income, their quality of life became better. They adopted the knowledge they learned from the project and practiced environmentally friendly farming systems, using lesser extent of land and a better land utilization pattern, which, in turn, led to a lower degree of encroachment into the forest-covered area. Consequently, the degraded forest condition in the head-watersheds could return to the natural richness status, enabling the upper watersheds to shed water into the streams and rivers, benefiting the whole country. With human-centered attempts, the hill tribe population gained access to better education and public health services which also helped improve their hygiene and sanitary condition. Meanwhile, community strength and environmental awareness were created through various mechanisms making the hill tribe villagers able to play the role in restoring, protecting and conserving the productive forested head-watersheds for the benefit of the local community and the country. Thailand can be regarded as the first country that experimented on incorporating knowledge from different disciplines and participants from different backgrounds to work in a holistic and integrated development pursuit addressing simultaneously and interactively in social, economic and environmental dimensions. All these features from the Royal Project Model has then been recognized and praised by the United Nations. The Royal Project Model has been extended widely for application and reproduction in the highlands of Bhutan, Laos and Myanmar. Thus, it can be considered a practical prototype for highland development in other countries.



5.2

Conserve... the goals and achievements of the Royal Project in sustainable development

The Royal Project Foundation still aims at holding on to the development goals contained the Royal Project model. It has developed its 4-year strategic plan for 2019 - 2022 with the organizational vision statement of “to firmly nurture, conserve and extend the research and development program to enhance the capacity of the people and communities in the Royal Project’s operational area to the point that they can help themselves to overcome their difficulties, become self-reliant, contribute to the protection of national soil, water and forest resources for the benefit of the larger society and serve as a model of sustainable development.” The primary development goals are to realize that (1) the farming households have sufficient income, better quality of life and well-being, (2) the community becomes strong and learned society, (3) the environmental resources are restored and continually protected, (4) The Royal Project Foundation is stable, sustainable and self-reliant. These goals are in line with the 20-year national strategic plan for 2017-2036 of which the vision is “Security, Prosperity, Sustainability in accordance with the Principles of the Sufficiency Economy Philosophy” and the UN-SDGS. The Royal Project Foundation is committed to developing the hill tribe communities to the point the Royal Project Model is used more widely elsewhere in the Asian region and the world for combating poverty and hunger of the poor, starting with assisting them to get a self-reliant local food security. It is also committed to making what already achieved sustainable. This is to express the upward social mobility of the hill tribe people from their increased income and improved to the quality of life must continue, the environmentally friendly production and consumption behavior must persist, the rehabilitated natural resources and environmental condition must be protected and conserved for public benefits and the practices following the principles of the Sufficiency Economy Philosophy among parties involved must continue to exist. Meanwhile, at the macro-level, the efforts of the Royal Project Foundation have contributed to (1) a higher economic competitiveness, (2) the greater opportunities for social equity and equality, and (3) an economic growth with improved quality of life from the environmentally friendly systems.

Another key success factor of the Royal Project Foundation’s operation is the holistic undertaking involving academics, experts and practitioners from different disciplines and background who keep exchange knowledge and experiences constantly and interactively. Therefore, the cabinet approved the Master Plan of Royal Project Development Center which contains action plans incorporating the responsibilities of various

government agencies to support the Royal Project Foundation to continue the operation for the sustainability of the development goals of the royal initiative, and to work in collaboration with the Royal Project Development Centers in serving as the learning centers for farmers, students and interested persons both Thai and foreign to visit and gain knowledge about best practice alternative development approach known as the Royal Project Model.





5.3

Extend... alternative development of national and international cooperations

The Royal Project Foundation has produced numerous concrete and desirable outcomes over the past 55 years of operation, entitling the royal initiated development approach to be recognized as the prototype of good practice and sustainable alternative development endeavor for duplication and application elsewhere in Thailand and beyond. It is because this approach is also striving for reaching various goals in agreement with the Sustainable Development Goals : SDGs set by the United Nations to reach by 2030.

To augment further the development efforts in response to the royal words of advice for sustainable development of His Majesty The Late King Bhumibol Adulyadej The Great, the Royal Project Foundation has made preparation to organize an “International Conference From AD to SDGs : Empowering the AD to Address the Global Challenges”, during December 1 – 4, 2024. This event is organized in remembrance of His Majesty The Late King Bhumibol Adulyadej The Great who graciously and benevolently founded the Royal Project and in honor of His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun for his royal to nurture, conserve and extend the development activities of the Royal Project Foundation and for publicizing to wider audience the achievements over the past 55 years of the Royal Project Foundation’s operations.



Information for analysis and summarization of the learning from implementation of the alternative sustainable development approach was compiled by the Royal Project Foundation. This approach was bestowed to us by His Majesty The Late King Bhumibol Adulyadej The Great since the inception up to present. Such analysis and summarization could explain why a best practice alternative development approach in the Royal Project way has gained the recognition wide and far for its effectiveness in solving the multi-dimensional problems in the northern highlands as well as in application elsewhere. Such application is relevant to sustainable development provided by UN-SDGs, benefiting people both in the highlands and the lowlands. The Royal Project model of alternative development approach becomes convincing enough for universal application provided that exchange of knowledge and experiences is made and the different social setting and environmental conditions are taken into account for application. The feedback and recommendations from the participants at this conference will be useful for our presentation of the Royal Project Model at the CND 68, to be convened in Vienna, Austria, as it is the key platform instrumental for actions to reach the Sustainable Development Goals of the UN.

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Nurture... Conserve... Extend... the stable and Sustainable Alternative Development Approach following the Royal Project Model





The Royal Project Foundation established the 39th Royal Project Development Center at Ler Tor in 2016. The village of Ler Tor is located in a remote and harsh-conditioned highland where opium poppy is still grown (according to the report of the Office of National Narcotics Control Board, the opium cropped area increased from 204 rai in 2009 to 355.69 rai in 2016/17) and maize cultivation begins to expand by forest and land clearing. Local villagers of Ler Tor are poor with too small income to live on. The Royal Project Model has been implemented by the 39th Center to solve the problems faced by the community members of Ban Ler Tor, Tambon Mae Tuen, Mae Ramat District, Tak Province. The establishment of this center is also meant to pay tribute to His Majesty King Maha Vajiralongkom Bodindradebayavarangkun for his royal support to nurture, conserve and extend the Royal Project Foundation's operation for the well-being of all his royal subjects.



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Nurture... Conserve... Extend... the stable and Sustainable Alternative Development Approach following the Royal Project Model

The remarkable and unceasing achievements of the Royal Project Foundation in the development of Highland communities have been recognized extensively, especially the success in solving various dire problems existing prior to the Royal Project's inception and then pushing the development in balance among the social, economic and environmental priorities. With the solid and sustainable outcomes from its alternative development approach, the Royal Project Model has been followed for highland development in the distant and hostile area elsewhere.

Currently, the HRDI is extending the Royal Project's achievements to other highland areas that are the catchment basins having significant function in draining water into streams and national river systems but which also are occupied by a growing number of hill tribe population. The target highland villages are generally located in the distant backcountry or near the international borderline, having serious environmental degradation, social and security problems. It is imperative that these highland areas get correct development outputs to enable the hill tribe villagers to have a livelihood security and contribute to the restoration and conservation of the natural and environmental resources. Currently, the HRDI is implementing "The Highland Development Royal Project" in 44 sites in eight provinces, covering 616 village clusters, working in cooperation with governmental and other pertinent agencies. All these development activities to improve the local quality of life are enormously meaningful for those hill tribe people living in the remote and harsh-condition highland.



2) The extension of the Royal Project Model to other areas abroad

The Royal Project Foundation and its partner, The Highland Research and Development Institute, have established an international technical assistance program to lend a support to the attempts in other parts of the world to overcome the problems of narcotic drugs, poverty and swidden agriculture which lead to the misuse of forest land and the environmental degradation. The program provides an insight into the sustainable alternative development approach inherent in the Royal Project Model which is characteristically a human-focused, environmentally friendly and Sufficiency Economy Philosophy-based development method to help the hill tribe people to attain food security, adequate income, better health and contribute to nature conservation. The Royal Project Model is a representation of the great achievements in terms of the total and peaceful eradication of opium poppy cultivation from the highlands and the rehabilitation of the head-watershed areas. It is recognized extensively for such achievements and has drawn an enormous international interest to learn and share experiences concerning its variant forms in different highland development centers and sites.

The Royal Project Foundation introduced the Royal Project Model for highland community development and opium replacement crop cultivation in Laos, Myanmar and the Kingdom of Bhutan. It has provided assistance in the forms of training the local extension workers and farmers and consultation services upon the request of recipient countries as well as the exchange of R & D experiences. So far, this international cooperation has helped improve the quality of life in the local communities and strengthen the international efforts towards sustainable development.

1) The Kingdom of Bhutan

The Royal Project Foundation initiated a technical collaboration with The Ministry of Agriculture and Forestry of Bhutan in 2001 to develop agriculture in the country. Later on, in 2002, His Majesty The Late King Bhumibol Adulyadej The Great kindly bestowed 1,000,000 baht to the Royal Project Foundation to conduct studies in growing various kinds of temperate fruit at Yusipang Agriculture Station. Technical trainings for working staff as well as the farmers of Bhutan were provided at the Royal Project Foundation. In the following year of 2003, His Majesty King Jigme Khesar Namgyel Wangchuck, at that time The Crown Prince of Bhutan, paid a royal visit to observe the works of The Royal Project Foundation and graciously stayed over at Angkhang Royal Agricultural Station, Chiang Mai. During such royal visit, His Majesty showed great interest in agricultural occupation promotion, such as cultivations of vegetable and fruit as well as fish rearing. Consequently, His Majesty had “The Royal Project of Bhutan” established in 2013, and two years later, the MOU agreement between the Royal Project Foundation and Bhutan’s Ministry of Agriculture and Forestry, as the operational unit, was signed. This agreement concerns the promotion of research and development carried out by the Royal Project of Bhutan, aiming at the application of the research outcomes and the experiences obtained from development works. The other objectives are personnel development, exchanging of study visits of the involved officers and leader farmers, encouraging them to become instructors capable of arranging training demonstration and technology transferring to other farmers.

From the early stage up to present, the year of 2014, The Royal Project of Bhutan have received quite a number of supports in research and development from the Royal Project Foundation including development of the learning centers, developments of crop cultivation such as those of vegetable, fruit, flower and ornamental, fishery and soil and water conservation. Consultation and improvement of floriculture and amenity landscape have been provided for learning as well as the recreation parks.





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Nurture... Conserve... Extend... the stable and Sustainable Alternative Development Approach following the Royal Project Model

2) Lao People's Democratic Republic

In 2008, The Royal Project Foundation and the Highland Research and Development Institute (Public Organization) acknowledged the operational situation of the Life Development Project in dealing with the people's hardship after forsaking narcotic crop cultivation then set up a technical collaboration project in the following year to extend the knowledge of utilization of opium substitute crop cultivation and sustainable highland development approach in the Royal Project way to help develop occupation for the people in Lao People's Democratic Republic. The first implemented village was Ban Huai Oon. The village was once the opium cultivated village. When the country delivered the policy of opium crop banning, it had to take up development of life and the livelihood of the villagers who, mostly, still hang on to the tradition way of agriculture for living, growing upland rice and maize for animal feed. Poverty was a big problem for the villagers with insufficient rice for consumption. Problems and difficulties derived from growing opium poppy for living was no different from what the hill tribe people in northern Thailand were facing, especially those from forest encroachment, swidden agriculture and slash and burn method of land clearing. In appropriate way of farming caused a serious problem of toxic chemical residues in the produce and products of agriculture, let alone the problems of unhealthy smoke from field burning and land clearing. Therefore, The Royal Project Foundation has brought in measures of development in the Royal Project way to help solving the mentioned problems and difficulties. Alternative marketable crops suitable for the land and soil and the environment have been introduced to the villagers. Intensive farming has been suggested and the produce are certified. Suitable crops for this village are greenhouse vegetables, and some temperate fruit, apart from grape and mango. The farmers have been educated and technology transferred under training and visiting system. Teams of expert from The Royal Project Foundation and the Highland Research and Development Institute (Public Organization) have paid visits and contribute good advice to the groups trainings and study visits to the Royal Project Foundation have been offered to the farmers. As the result, leader farmers and the Farmer Institutes are developed. Two target villages were developed and selected to be the learning center at the village level. There were 57 farmers joining the project and then trained for occupation building raising more than three million baht per year from safe agricultural practice, particularly at Huai Oon village. Later on occupation promotion program extended to the villagers of over 60 households or 80%, approximately, making 25,000 baht income per household, in average. These two villagers are well known for their organic vegetable production in the province of Udomxai. As time passes, the two pioneer target villages have readily become the effective learning centers in sustainable agriculture at the village level. Continuously, the government of Loas People's Democratic Republic cooperates with UNODC and the Office of the Narcotics Control Board in extending such achievement to develop other 15 villages in the provinces of Udomxai, Phongsaly and Hua Phan.





3) The Republic of the Union Myanmar

In 2013 The Royal Project Foundation in support of the UNODC Alternative Development Project stationed in the Republic of the Union Myanmar extended the Royal Project Foundation's knowledge on development of replacement crops for narcotic plant and sustainable highland development to the target farmers to adopt for their occupation build-up and improved quality of life. The Royal Project Foundation collaborates with the UNODC in the Republic of Union Myanmar to work in seven areas in three cities of the Shan State Army-South. There were 1,160 farmers from 60 villages took part in the project implementing cultivation of coffee and other economic crops, e.g. tea and avocado. The farmers also have to work on keeping and nurturing their community forest. The Royal Project Foundation and the Highland Research and Development Institute (Public Organization) have supported the operation of UNODC by transferring knowledge and development method in the Royal Project way cultivating the alternative crops in replacement of opium poppy, for example, vegetable growing in the green house, organic farming, postharvest management, marketing, and so on. These agricultural practices are transferred by provide technical training to the working staff and the leader farmer of the Republic of the Union Myanmar. In exchange, the Republic of the Union Myanmar sent the coffee experts to share information and knowledge of coffee cultivation and postharvest technology among the Thai staff suggestion on good varieties of coffee to be field tested in Thailand were also made by those experts.

The Royal Project Foundation has introduced the Royal Project Model to develop highland community and replace narcotic crop cultivation with appropriate economic crops in foreign countries. Supports are made by training local technical staff and farmers as well as through technical advices in agriculture as requested by recipient countries. Exchange is of knowledge and experiences obtaining from research and extension on the highlands are also valuable for technical staff from both ends.



As far as the collaborations were concerned such supports and exchanges successfully help improving the communities' livelihood, sustainably. The Royal Project Foundation has been a part in propelling actions towards the UN-SDG_s and was invited for the presentation on the success in promoting the productions of opium substitute crops using the alternative development approach at the conference of the Commission on Narcotic Drugs: CND in Vienna, Austria. The CND conference has been organized annually by the United Nations Office on Drugs and crime : UNODC for its 53 member states and relevant organizations to review the issues concerning the problems associated with narcotic drugs and debate on the measures to suppress the problem. At the 60th CND Session in 2017, Her Royal Highness Princess Bajrakitiyabha Narendira Debtavati, The Princess Rajasarinisiribajra Mahavajra Rajadhida (Princess Bajrakitiyabha Mahidol at that time) was presented an honor to be a Goodwill Ambassador of the UNODC and gave her royal speech on the need to take into account the living condition and life style in reality of people in each locality in the attempts to solve narcotic drug problem, the same way as His Majesty The Late King Bhumibol Adulyadej The Great probing into the problems and livelihoods in reality of the hill tribe people in the remote highlands when considering the use of alternative development, approach. This nation has always been taken by the Royal Project Foundation. As for the 67th international conference organized by The Commission on Narcotic Drugs : CND in Vienna, Austria, 2024. General discussion was made on... "Ten years of United Nations Guiding Principles-UNGP_s ... Past, Present and Future." The discussion was widely participated from several countries, e.g. Germany, Peru, Japan, Indonesia, Finland, EU, USA, Colombia, Morocco, China and Thailand. Exchange in perspectives, lessons, & experiences, and new global, challenges were made. Participants from Thailand shared achievements in alternative development approach practiced in the highlands of the northern parts of Thailand that the problems caused by opium poppy cultivation has been reduced, alternative opium replacement crops have earned the income for the high land farmers of 120,000 - 230,000 baht per household, in average, environmental friendly agriculture have been practiced, forest covered area increased to 368,000 hectares and watershed forest for the amount of 832,000 hectares have been restored and conserved, bringing Thailand to match 38 principles of the BCG and 17 of the UNGP_s. Representatives from Thailand set up an exhibition booth in exhibition area of the conference, displaying products from the farms/fields of highland farmers, e.g. coffee, tea and quinoa as well as some tribal traditional handicrafts. A Pga K'nyaw tribal lady who has joined the Alternative Development program has now a happy life and earns her own living from her traditional tribal art of hand-woven fabric. She brought some pieces to exhibit in the booth, giving inspiration to the audience.





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Nurture... Conserve... Extend... the stable and Sustainable Alternative Development Approach following the Royal Project Model



UNITED NATIONS COMMISSION ON
CRIME PREVENTION AND CRIMINAL JUSTICE
LEADING BODY OF THE UNITED NATION SYSTEM WITH PRI

The Royal Project Model and Sustainable Development Goals

The Royal Project Model has been recognized widely in Thailand and beyond with the notion that it is unquestionably in consonance with the Sustainable Development Goals adopted by the United Nation General Assembly-UNGA on September 25, 2015 to change the world for the better (2016 - 2030) towards the 17 goals. All social, economic and environmental development activities implemented by the Royal Project Foundation have been incidentally geared towards achieving the 17 Sustainable Development Goals as the development objectives include :

- Goal 1 Eliminate poverty in all form from the remote highland communities.
- Goal 2 Erase hunger and strive for food security by farmers' adoption of suitable and sustainable agricultural systems.
- Goal 3 Establish good health and hygiene for all individuals at all ages.
- Goal 4 Provide education at all levels for equality and equity in opportunities and provide life-long education opportunity for all.
- Goal 5 Enforce gender equality and strengthen the roles of women and girls.
- Goal 6 Provide adequate clean water and establish sustainable water management system.
- Goal 7 Develop energy supply for suitable and sustainable use.
- Goal 8 Create constant, comprehensive and sustainable economic growth.
- Goal 9 Develop infrastructure to accommodate the change and adaption and facilitate a sustainable and accessible use.
- Goal 10 Create work and reduce intra-country and inter-country inequality.
- Goal 11 Develop secure and safe highland community settlements.
- Goal 12 Establish responsible consumption and production.
- Goal 13 Establish measures to deal with climate change and its environmental impacts.
- Goal 14 Conserve and make sustainable use of water resources for development.
- Goal 15 Protect and restore the highland ecological system and promote the prudent and sustainable use of it.
- Goal 16 Foster the development of the society full of peace, justice and harmony for all to live in a peaceful and tranquil life.
- Goal 17 Vitalize the global partnership and cooperation for sustainable development.



The Royal Project Model, or best practices for alternative development, is considered one of the greatest contributions that aligns with the United Nations' 17 Sustainable Development Goals. These goals aim to eradicate all forms of hunger and malnutrition in countries worldwide. The Royal Project is thus regarded as one of Thailand's greatest successes in sustainable development in highland areas, addressing issues such as poverty, lack of livelihood opportunities, opium cultivation, and deforestation-longstanding problems faced by the hill tribes in remote highland areas. His Majesty The Late King Bhumibol Adulyadej The Great provided guidance that led to the success of the project, helping to reduce and eventually eliminate opium cultivation, transforming the area into one that produces various crops that provide sufficient income for the hill tribes.





Ler Tor

“Nurture Conserve Extend”

**The first and the Prototype
of the Royal Project Development Center
in the Reign of His Majesty King
Maha Vajiralongkorn Bodindradebayavarangkun**



6

The first and the Prototype of the Royal Project Development Center in the Reign of His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun

“Ler Tor Royal Project Development

Center” is the 39th Royal Project Development Center and the first in the reign of His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun. This center operates on the basis of the lessons learned achievements of the previously established centers integrated with the knowledge gained from long-time research, development and extension services carried out by the project, agreeably to the context of operational areas. Urgent policy was meticulously set, i.e. land use planning, five-year action plan (2022 - 2027) making, infrastructure establishment to promote occupation and improve quality of life, economic development, promotion of agricultural and non-agricultural occupation, social and community development, and last but not least, development of mechanism and process thus granting long-term self-driving among the hill tribes in the operational areas.





Ler Tor Royal Project Development Center has been developed following the good practice of Model 4 of the Royal Project Model for Sustainable Development, under the operating factors, conditions and components as follow 1) state of conduct/leadership at all levels, 2) clear policy with practical work plan, 3) stable and sustainable-based operation in collaboration with various national and international organizations, 4) combined power generation among the foundation/government agencies and integral operation agencies/ alternative development networking, and 5) public participation build-up involving...understand, access, development concerns. With the above-mentioned components, Ler Tor Royal Project Development Center has speedily thrived to all dimensions of development, economically, socially and environmentally, leading to self-reliant communities, improved quality of life among the community members, enhanced capacity in Thai-language communication, utilization of land use management, productive self-developed mechanism, economically and socially, among communities, as well as, conservation of natural resources and environment including restoration of watershed forest. All these, are the outcomes of determination in pioneering, researching and developing, holding on to the Royal Project Model of Sustainable Development in the highlands since inception in 2016 up to present. Thus, Ler Tor Royal Project Development Center deserves the recognition as the prototype center of a sustainable alternative development approach.



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The first and the Prototype of the Royal Project Development Center
in the Reign of His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun

With development and occupation promotion work carried out at Ler Tor community, crop cultivations of vegetable, fruit and field crop currently involves 624 hill tribe farmers, raising the income of 2 million baht, annually. Nevertheless, as can be seen elsewhere, changing in economic and social status, let alone environmental conditions, occurs quite drastically in all aspects of operational achievements, approaches in development considering occupation promotion, society and community, plus Ler Tor's natural resources and environment status itself, therefore, considerations should be taken on studies, research, and development towards various aspects of adaptation, to keep up with the global change impacts to allow the hill tribe people to have the elevated quality of life, and, stable and sustainable communities. Meanwhile, such adapted processes and approaches are accessible to other agencies nationally and internationally.





7

**Chanaka Dhibesra Damri;
Royal Project Agricultural
Research and Development Center**



7

Chanaka Dhibesra Damri; Royal Project Agricultural Research and Development Center



His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun kindly had the Royal Project Agricultural research and development center established and bestowed the name of **“Chanaka Dibesra Damri” (Cha-na-ka-dhi-besra-dam-ri) meaning : this agriculture research and development center was established to nurture, conserve and extend The Royal Initiatives of His Majesty The Late King Bhumibol Adulyadej The Great, determining to be “The Center of research, innovation, study, pushing forward new knowledge to the highlands in complete circle”** to transfer experiences allowing the Royal Project to be useful to the hill tribe people as well as surrounding citizen and the Thai population as a whole, continuously and sustainably.



Chanaka Dhibesra Damri, Royal Project Agricultural Research and Development Center is situated at Tambol Mae Hia, Muang District, Chiang Mai Province, covering the area of 24 rai, 9 square wah, and comprises seven buildings altogether :

1. Administrative Building

The administrative building has a usable area of 1,305 square meters. The first floor is workspaces for coordinating with both internal and external organizations, focusing on administrative tasks and public relations. The second floor contains a reception room, a multipurpose room, and the offices for the executive board members of the Royal Project Foundation.





2. Operations Building 1

The Operations Building 1 has a usable area of 1,824 square meters. It is designed for meetings and staff workspaces. The first floor includes a small meeting room, a multipurpose room, a studio for creating media content, a library for research and study, and a laboratory for personnel management, legal affairs, contracts, and discipline. The second floor features a large meeting room, which can be divided into two medium-sized meeting rooms.

3. Operations Building 2

The Operations Building 2 has a usable area of 2,236 square meters. It is designated for the main operations of 8 departments. The first floor includes workspaces for the Department of Production and Product Management, Finance and Accounting, and Administration and Support. The second floor contains the Research and Innovation Department, Promotion and Development Department, The Royal Project Research Stations and Development Centers Department, Policy, Planning, and International Affairs Department, and the Internal Audit Department.

4. Plant protection Building

The Plant Protection Building is a 1,060 square meters facility dedicated to research and development in plant pest management technology for highland areas. The building focuses on environmentally friendly products and innovations that align with sustainable agriculture practices. It also provides a plant clinic service for both staff and farmers involved with the Royal Project. Additionally, this building serves as a key resource hub for gathering data and offering educational opportunities related to plant protection in highland farming. It has been certified with a Biosafety Level 1 (BSL1) standard, ensuring a safe environment for handling agricultural research.

5. Seeds and Herbal Processing Building

The Seed and Herbal Processing Building spans 2,000 square meters and serves as a central hub for the storage and distribution of plant seeds to promote agricultural practices among farmers. In addition to its seed storage function, this facility is also dedicated to the extraction of natural substances from plants and herbs, where it conducts research, testing, and development of value-added products. These products include herbal and agricultural product processing to enhance their value, as well as the production of cosmetics, which meet the ASEAN Cosmetics GMP standards.

6. Biotechnology Building

The Biotechnology Building covers an area of 626 square meters and is dedicated to research, testing, and development in agricultural biotechnology. The building focuses on the following key areas :

1. Research and development of disease-free plants using biotechnology
2. Propagation of disease-free plants
3. Collection and preservation of plant varieties and
4. Diagnosis of plant diseases and certification of disease-free mother plants using molecular biotechnology techniques.

This facility plays a vital role in ensuring the health and quality of plant varieties by utilizing advanced biotechnological methods.

7. The Information Technology Operations Building (Data Center)

The Information Technology Operations Building covers an area of 410 square meters and serves as the central data center for managing and overseeing various network systems. These include internet system management, security systems, audio-visual systems, database systems and operational software systems. The building also houses key infrastructure such as server rooms, data storage systems, main network systems, cybersecurity measures and telecommunication systems connecting to the Royal Project Development Centers and Royal Agricultural Stations across the Royal Project Foundation. This facility ensures the seamless and secure operation of IT systems and communications across the foundation's projects.



Chanaka Dhibesra Damri, Royal Project Agricultural Research and Development Center was constructed in 2020 and completed in 2021, under the cooperation of the 3rd Battalion, 3rd Army Area. This center is run by The Royal Project Agricultural Research and Development Center. It is fully integrated with study, research, complete circle of plant varietal improvement, produce processing for product value addition, technology and innovation in plant protection, biotechnology, and post-harvest management.

The center aims at advancement in research and technology transfer. Another key objective is to extend to public the knowledge and experiences accumulating from 55 years of work, focusing on the royal initiative of His Majesty The Late King Bhumibol Adulyadej The Great towards highland development as well as the royal resolution of His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun in nurturing, conserving and extending the Royal Project's works benefiting the hill tribe people, the Thais and the world.



7

Chanaka Dhibesra Damri; Royal Project Agricultural Research and Development Center





8

The Royal Project's Learning Institute



8

The Royal Project's Learning Institute

The King's Philosophy... for stable and sustainable highland development

The royal remark of His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun to nurture, conserve and extend the Royal Project's works has turned the 55-year-achievements of the Royal Project into a learning institute. After long years of work, Alternative Development Approach, or later The Royal Project Model has created great positive impacts on the highlands in the North of Thailand and was then recognized by the United Nations. Suggestions were made from the UN to other agencies dealing with similar problem in troubled area elsewhere to take into consideration of adopting The Royal Project Model to practice in various parts of the world where policy of sustainable development of the United Nations (UN-SDGs) is acknowledge. Those agencies



concerned are, for example, the United Nations Development Programme (UNDP), the United Nations Office on Drugs and Crime (UNODC) and the Food and Agriculture Organization (FAO). Nevertheless, The Royal Project Model is considered as the best practice following the Royal ways of thought "understand, access, development", under the Sufficiency Economic Philosophy.



The Royal Project Model has been widely accepted and recognized in academic field. Alternative development approach has been seriously studied and practiced, systematically with efficiency and effectiveness, greatly benefiting the highland development. Operational areas of the 39 centers immensely contribute, as the learning center, to academics, students, pupils, citizen and, in particular, farmers. There are quite a number

of interested people requested to visit and learn from the centers, annually, at the average to 500,000 people per year. Learners participate well with the will to practice the knowledge and experiences gained from the learning institutes back at their places, both locally or internationally. As for Thailand itself, the government agencies involved in the highlands, such as, Ministry of Natural Resources and Environment, Ministry of Agriculture and Cooperation and others have adopted the model to practice, while the Highland Institute of Research and Development takes charge in full capacity, actively in 8 provinces to expand in 20 provinces more.

The Alternative Development Approach, subsequently, the Royal Project Model has been highly accepted by various development organizations, regionally and worldwide. Implementation of the model occurs in several countries, Asian and other regional grounds, promoted by the UNODC, such as Lao People's Democratic Republic, The Republic of the Union of Myanmar and some countries in South America, i.e. Colombia and Peru, etc. The Kingdom of Bhutan is much more advanced, currently, with the Royal Project of Bhutan for sustainability, established. In Thailand and beyond, the Royal Project Model is regarded as the best practice in highland development. Interested people can visit the learning centers in 39 operational areas of the Royal Project to find out more about the model.





8

The Royal Project's Learning Institute

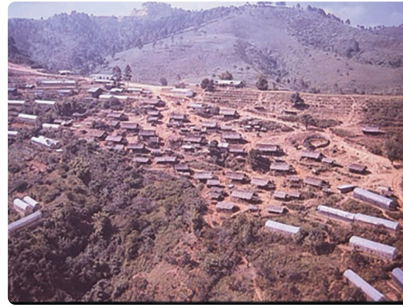


The Royal Project Foundation is well aware of the importance of systemically stable and sustainable development with clear pattern, **especially human resource development which is the center of development.** Therefore, establishment of the learning institute in the Royal Project Foundation is regarded beneficial to nation and beyond.



Timeline of key events in the Royal Project

Initiative of Researches (1969 – 1974)



1969 – 1970

- ◆ His Majesty The Late King Bhumibol Adulyadej The Great learned about **the poverty of the Thai hill tribes that survived by growing opium and swidden agriculture for living.**
- ◆ Kasetsart University conducted experiments to **replace the local peach variety with high quality foreign varieties** that could generate income comparable to opium.
- ◆ **The “Suan Song Saen” orchard, a cold-climate fruit experimental area,** was established with a royal donation from His Majesty The Late King Bhumibol Adulyadej The Great.
- ◆ His Majesty The Late King Bhumibol Adulyadej The Great, kindly **established “The Royal Hill Tribe Assistance Project”**, and kindly appointed His Serene Highness Prince (Mom Chao) Bhisadej Rajani as a director.
- ◆ His Majesty The Late King Bhumibol Adulyadej The Great, kindly **established “Royal Agricultural Station Angkhang”**, Fang district, Chiangmai province, as the first research station.
- ◆ His Majesty The Late King Bhumibol Adulyadej The Great, kindly contributed 20,000 Thai baht to **establish the “Rice Bank”** at Pa Pae Village, Mae-Sariang district, Mae-hongsorn province.

1971

- ◆ The **“Red kidney bean”** seeds from the United States, along with lima beans and pinto beans, were planted for testing at Ban Mae Tho, Hod District, Chiang Mai Province. Today, the Royal Red Bean has become an important promoted crop of the Royal Project Foundation.

1972

- ◆ The United Nations provided funding and assistance for promoting alternative livelihoods to opium cultivation through the **“UN/Thai Program for Drug Abuse Control.”**
- ◆ His Majesty The Late King Bhumibol Adulyadej The Great, kindly **established the “Instant Food Factory of Chiang Mai University”** as the first factory. Soon after, kindly established **“Banyang Royal Instant Food”** at Fang district, (Chiang Mai province), and subsequently established “Mae-chan Royal Instant Food” in Chiang Rai province.
- ◆ Research and testing found that the **Pharachatan 16 strawberry variety** can be cultivated and has become widely popular for sale in Chiang Mai Province.

1973

- ◆ **The Agriculture Research Service (ARS), United States Department of Agriculture (USDA), sponsored the research** on vegetables, cold weather fruits, Arabica coffee, Chinese tea, cut-flower plants, strawberry, mushroom, upland rice, fast-growing plants, and pest prevention.

1974

- ◆ His Majesty The Late King Bhumibol Adulyadej The Great along with His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun, elegantly went to see **“Arabica coffee plants”** of Karen (Name of a tribe) agriculturalists at Bannonglom, Chiangmai province. This incident made Arabica coffee spread to all hills and became popular in Thailand.
- ◆ Kindly established **“Arabica Coffee Research and Promoting Center”** at Mae-tang district, Chiang Mai province, to test and collect varieties of Arabica coffee. At the present, it is called **“Mae-Lord Royal Project Research Station.”**

Supports and Developments of Career Choices (1977 – 1986)



1977

- ◆ **Thung Rao Royal Project Development Center was established** in Mae Rim District, Chiang Mai Province, to improve the living conditions of the hill tribes, reduce opium cultivation, and restore the forested watersheds.

1978

- ◆ **Kindly established Royal Projects Development Centers of Mae-Hae, Mae Tha Nuea, Mae-Poonluang, Pang-Aung and Phra Bat Huai Tom** to develop the life quality of Thai people on the hills, reduce opium plantations, and rehabilitate river sources.
- ◆ The **“Dried Ornamental Plant Project”** or **“Bu-Nga Royal Project”** was initiated in collaboration with experts from Kasetsart University.

1978

- ◆ **Inthanon Royal Agricultural Station was established** in Chom Thong District, Chiang Mai Province, to serve as a research station for ornamental flowers, fruit trees, and cold-climate vegetables.
- ◆ **The Royal Project Development Centers of Thung Luang, Pa Miang, Sa Ngo, Wat Chan, Kae Noi, Nong Kieaw, Huai Luk, Teen Tok, and Mae Lanoi were established** to improve the livelihoods of the hill tribe people in the area, reduce opium cultivation, and eliminate shifting cultivation.

1980

- ◆ The first **“Royal Agricultural Fair”** was held at Suan Amphon to promote the work of the Royal Project to the public.

1981

- ◆ A **“Marketing Unit”** was established to sell products from farmers under the **“Doi Kham”** brand.

1982

- ◆ The **“Pest Control and Eradication Project”** was established to conduct research and provide guidance on pest control and eradication.
- ◆ The **“Moving Library for Hill Tribes Communities”** was established in collaboration with the Chiang Mai University Library. At present, it has been renovated to be a **“Social and Education Development Unit”** in order to cover a wide range of operations.
- ◆ The **Thung Roeng, Mae Sa Mai, Huai Siao, Huai Pong, and Huai Nam Rin Royal Project Development Center** were established to develop and promote livelihoods, improve the quality of life for hill tribe people in highland areas, and restore watershed forests.

1983

- ◆ The **Royal Agricultural Station Pang Da** in Samoeng District, Chiang Mai Province, was established as a research station for the propagation of cold-climate fruit trees, semi-tropical fruit trees, small fruit trees, vegetables, cereals, and fast-growing trees.
- ◆ The **Royal Project Development Centers of Mae Sapok, Huai Nam Khun, and Mhok Jam** were established to develop and promote livelihoods, improve the quality of life for hill tribe people in highland areas, conserve natural resources, and restore forests and watershed areas.

1984

- ◆ The **Mae Lord Royal Project Research Station** in Mae Taeng District, Chiang Mai Province, was established as a research station for selecting Arabica coffee varieties resistant to rust disease and as a collection center for Arabica coffee varieties grown under shade.
- ◆ The **Royal Project Development Center of Khun Pae and Nhong Hoi** were established to reduce opium cultivation by finding alternative crops that generate higher income, allowing the hill tribe people to sustainably farm the land and improve the quality of life in the villages.

1985

- ◆ The **Khun Wang and Mon Ngo Royal Project Development Center** was established to reduce opium cultivation by finding alternative crops that generate higher income, enabling the hill tribe people to sustainably farm the land, settle permanently, and avoid reverting to shifting cultivation and forest encroachment.
- ◆ The area promoted by the **“Royal Project Development Center”** has expanded to bring the successful outcomes of research to support hill tribe farmers.

1986

- ◆ In collaboration with the medical, nursing, and dental units of Chiang Mai University, a mobile medical unit was deployed to provide services to the hill tribe people in the Royal Project areas. It is now renamed **“Chiang Mai University Pracha Asa Royal Project Development,”** under the support of Chiang Mai University.

Empirical Achievements (1987 – 1997)



1987

- ◆ The **Pang Kha Royal Project Development Center** in Pong District, Phayao Province, was established to encourage locals to grow cold-climate fruit trees as an alternative to forest encroachment and opium cultivation.

1988

- ◆ Received the **“Magsaysay Award”** in the field of Peace and International Understanding in Manila, Philippines.
- ◆ The first annual product sale event, named **“Doi Kham Fair,”** was held in Chiang Mai.

1992

- ◆ It was **registered as the “Royal Project Foundation”** to become a stable and permanent public benefit organization with efficient management, ensuring greater positive outcomes in the future.

1993

- ◆ The **“Handicraft Project”** was initiated, inspired by the royal initiative of Her Majesty Queen Sirikit, the Queen Mother, regarding the conservation and preservation of the traditional wisdom of the hill tribe people.
- ◆ The **Mae Sariang Royal Project Development Center** in Mae Sariang District, Mae Hong Son Province, was established to improve the livelihoods of the hill tribe people based on the principles of sufficiency economy.

1994

- ◆ The **“Community Forest Project”** was established under the royal patronage of Her Royal Highness Princess Maha Chakri Sirindhorn to encourage local people in the area to plant three types of trees for four different benefits.

1994

- ◆ The United Nations Drug Control Program (UNDCP) presented the **“Gold Medal of Honor for His Majesty’s Contributions to Solving the Drug Problem”** to His Majesty The Late King Bhumibol Adulyadej The Great.
- ◆ The Crown Property Bureau took over the operation of Instant Food Factory by establishing it as a legal entity under the name **“Doi Kham Food Products Co., Ltd.”**

1995

- ◆ The brand name was **changed from “Doi Kham” to “Royal Project.”**

1996

- ◆ The **Mae Tho Royal Project Development Center** in Hod District, Chiang Mai Province, was established to improve the livelihoods of the hill tribe people, promote the cultivation of various cold-climate crops, reduce the use of chemicals, and restore and conserve the environment to ensure its fertility.
- ◆ The **Pharachatan 50 strawberry variety** was successfully developed in celebration of the 50th anniversary of the reign of His Majesty The Late King Bhumibol Adulyadej The Great.

Good and Happy Society & Strong Communities (1998 – 2017)



1998

- ◆ The **“Rainbow Trout”** was successfully cultured for the first time in Thailand at the fisheries research unit on the highlands of Doi Inthanon, Chom Thong District, Chiang Mai Province.

1999

- ◆ The **Huay Laeng Royal Project Development Center** in Wiang Kaen District, Chiang Rai Province, was established to help the local people secure stable livelihoods, increase their income, and improve the quality of life for the hill tribe communities.
- ◆ The **Pharachatan 72 strawberry variety** was developed and promoted to honor the 72nd birthday of His Majesty The Late King Bhumibol Adulyadej The Great.

2000

- ◆ The **Huai Som Poi Royal Project Development Center** in Chom Thong District, Chiang Mai, was established to assist residents in securing stable livelihoods, increasing income, and improving the quality of life for ethnic minorities, promoting self-reliance.

2001

- ◆ The **Mae Phae Royal Project Development Center** in Samoeng District, Chiang Mai Province, was established to promote livelihoods, improve the quality of life within the community, foster self-reliance, and restore and conserve the environment to ensure its fertility.
- ◆ The academic cooperation between the **“Royal Project Foundation and the Kingdom of Bhutan”** began, focusing on the transfer of cold-climate fruit tree technology and ornamental plants. A pilot area in Bhutan was planned to be developed as a place for relaxation and learning.

2002

- ◆ The development of the operational area began to become a **“Center for Learning in Highland Area Development.”**

2003

- ◆ The **“Royal Project Produce Center”** was established in Mae Hia Subdistrict, Chiang Mai Province, to serve as a collection center for produce.
- ◆ The **“Colombo Plan” award was received from The Colombo Plan: Drug Advisory Program (DAP)** in recognition of being the only organization in the world to successfully address the opium cultivation problem creatively and effectively.

2005

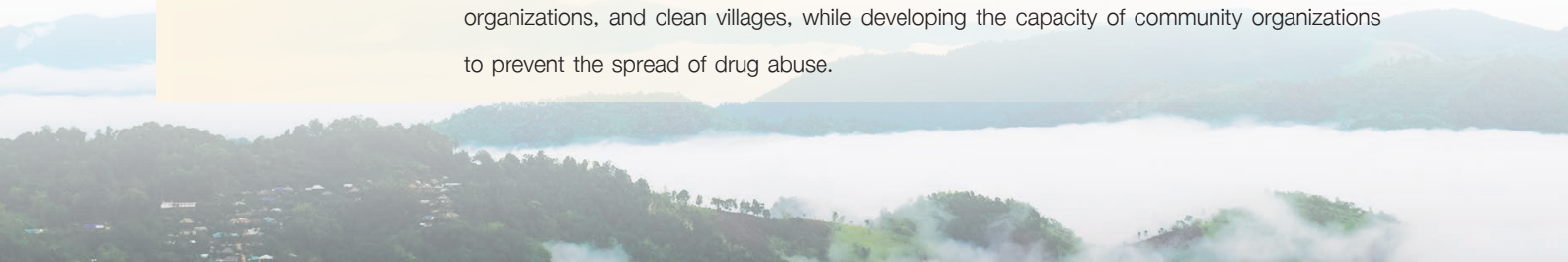
- ◆ The **“Highland Research and Development Institute (Public Organization)”** was established as a supporting agency to apply the successful outcomes of the Royal Project in other highland areas, under the name **“Royal Project Expansion Initiative.”**
- ◆ The **“Sturgeon” was researched for the first time** at the fisheries research unit on the highlands of Doi Inthanon, Chom Thong District, Chiang Mai Province.

2007

- ◆ The **Phatang Royal Project Development Center** in Wiang Kaen District, Chiang Rai Province, was established to promote and develop livelihoods for local people, improve and rehabilitate the land, and conserve forest resources and watersheds to maintain their integrity.
- ◆ The **Pharachatan 80 strawberry variety** was developed to honor the 80th birthday of His Majesty The Late King Bhumibol Adulyadej The Great.

2010

- ◆ Promote **Self-reliant Community Groups**, including cooperatives, self-reliant community organizations, and clean villages, while developing the capacity of community organizations to prevent the spread of drug abuse.



2012

- ◆ Register the varieties of “Peach, Nectarine, Passionfruit, Cape Gooseberry, Kumquat, Hemp, Cherry Tomato, Pea, Rose, and Curcuma” with the Department of Agriculture.
- ◆ Implement the “Royal Project Plant Breeding and Propagation Program” to support the promotion of agricultural practices for farmers.
- ◆ Food crops have been certified with “GAP, HACCP, McDonald’s, and Organic Farming Standards,” focusing on the use of bioproducts that are safe for producers, consumers, and the environment.

2014

- ◆ In collaboration with the UNODC in the Republic of the Union of Myanmar, support was provided for the opium substitution development project and the UNODC’s Alternative Development program to transfer knowledge and provide agricultural training to officials and farmers.

2015

- ◆ In collaboration with UNODC and the Lao People’s Democratic Republic (Lao PDR), the development of northern communities in Lao PDR, which previously cultivated opium, was carried out by transferring agricultural knowledge and experience to farmers in 19 villages.
- ◆ His Majesty The Late King Bhumibol Adulyadej The Great, bestowed the name **Pharachatan 88 strawberry variety** in honor of his 88th birthday celebration on December 5, 2015.

2016

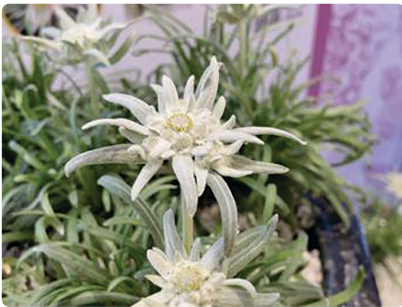
- ◆ The name of the “Royal Project Expansion Project” was changed to the “The Highland Development Royal Project”, implemented by the Highland Research and Development Institute (Public Organization). Currently, the project operates in 44 areas across Chiang Mai, Chiang Rai, Mae Hong Son, Tak, Nan, Kamphaeng Phet, and Kanchanaburi provinces.
- ◆ The **Ler Tor Royal Project Development Center** was established in Mae Ramad District, Tak Province, an area that is remote, rugged, and had opium cultivation. The residents were impoverished. This became the 39th operational area of the Royal Project.
- ◆ The “Royal Project Community Development Study for a Low-Carbon and Sustainable Community” was carried out in collaboration with the Faculty of Environment and Resource Studies, Mahidol University, and the Highland Research and Development Institute (Public Organization).



2017

- ◆ His Majesty The King issued a royal command to appoint a new **“Royal Project Foundation Committee,”** with a firm royal intention to nurture, conserve, and extend the Royal Project’s work to ensure its sustainability and alignment with the royal wishes of His Majesty The Late King Bhumibol Adulyadej The Great. **His Majesty also assumed the honorary president position of the Royal Project Foundation, while Privy Councilor Mr. Charanthada Karnasut was appointed as the chairman of the committee.**
- ◆ Registered the varieties of **“Nectarine, Cape Gooseberry, and Yellow Cherry Tomato”** with the Department of Agriculture.
- ◆ The “RoPF Elf” hybrid curcuma variety from the Royal Project won the **“Excellence Award in the Overseas Grower category”** at the 14th International Flowers and Plants Expo Tokyo (IFEX 2017) in Japan.

Empirical Results (2018 – 2024)



2018

- ◆ Appointed the **“Executive Committee of the Royal Project Foundation”** with Privy Councilor General Kampanat Ruddit as the Chairman of the Committee.
- ◆ **Registered the “Calla Lily and Tomato” varieties** and patented the packaging design for fruit products.
- ◆ Introduced the **RFID (Radio Frequency Identification) system to trace the origin of products** from the Royal Agricultural Station and 39 Royal Project Development Centers.

2019

- ◆ **Her Majesty the Queen graciously donated Edelweiss and Gentian plants to the Royal Project Foundation** on May 11, 2019, for research, testing, propagation, and cultivation purposes.
- ◆ **“Upon completing 50 years of operation,”** it has been recognized as a successful project in promoting peaceful alternatives to opium cultivation, improving the lives of hill tribe families, and ensuring safety for both the Thai people and the world. The operational area consists of 4 Royal Agricultural Stations and 35 Royal Project Development Centers, covering 7 provinces in the northern region: Chiang Mai, Chiang Rai, Mae Hong Son, Lamphun, Lampang, Phayao, and Tak.

2019

- ◆ Developed the **“Royal Project Foundation 4-Year Strategic Plan (2019–2022)”** in alignment with the 20-Year National Strategy and the United Nations Sustainable Development Goals (SDGs) to achieve well-being, self-reliance, and sustainable coexistence with the environment.
- ◆ Received the **“Belle Berry Awards Angel”** at the “2nd International Strawberry Brand Symposium” in the People’s Republic of China, in recognition of the project’s efforts in strawberry production to increase farmers’ income, enhance their quality of life sustainably, preserve the environment, and serve as an example for strawberry growers both domestically and internationally.
- ◆ Registered the varieties of **“Lettuce, Cos Lettuce, Baby Pak Choi, Quinoa, Nectarine, and Hybrid Curcuma”** with the Department of Agriculture.
- ◆ Received the Honorary Plaque for **“Low-Carbon and Sustainable Community Development in Highland Areas”** from the President of Mahidol University for being the first organization in Thailand to implement tangible environmental initiatives.

2020

- ◆ **Signed a Memorandum of Understanding (MOU) for academic cooperation with “5 universities and 1 institution,”** including Kasetsart University, Maejo University, Chiang Mai University, Rajamangala University of Technology Lanna, King Mongkut’s University of Technology Thonburi, and the National Science and Technology Development Agency (NSTDA).
- ◆ Signed a Memorandum of Understanding (MOU) for academic cooperation on research and development of low-carbon technology with the Highland Research and Development Institute (Public Organization), Mahidol University, and the Guangdong Academy of Agricultural Sciences, People’s Republic of China.
- ◆ **Registered the varieties of “Peach, Curcuma hybrid, and Tuberose”** with the Department of Agriculture.
- ◆ Her Royal Highness Princess Pacharakitiyapha Narenthira Thepphayawadee, Princess of Rajsarinisiripatchara Mahawachararachadida, opened the **“Royal Project Fair 51”** at Central World Shopping Center, Bangkok.
- ◆ His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun and Her Majesty Queen Suthida inaugurated the **“Royal Project Fair 2020”** at the Royal Park Rajapruek in Chiang Mai Province.

2021

- ◆ Signed a memorandum of understanding for academic collaboration with **PTT Public Company Limited and PTT Oil and Retail Business Public Company Limited.**
- ◆ Registered the varieties of **“Cherry tomatoes, Hong Kong kale, Japanese pumpkin, pears, strawberries, and coffee”** with the Department of Agriculture.

- ◆ Signed a Memorandum of Understanding (MOU) for academic collaboration with **the National Science and Technology Development Agency (NSTDA) and the Agricultural Research Development Agency (Public Organization) (ARDA).**

2022

- ◆ **The Royal Project Foundation received royal plants from Her Royal Highness Princess Sirivannavari Nariratana Rajakanya**, consisting of 18 species and 44 varieties of vegetables, herbs, fruit trees, and flowers.
- ◆ Signed a cooperation agreement for **a participatory reforestation project** with the Electricity Generating Authority of Thailand (EGAT).
- ◆ Presented plaques, certificates, and honors for the **“Low-Carbon and Sustainable Highland Community Development Project following the Royal Project Approach”** to community leaders in the Royal Project Foundation's highland development areas.
- ◆ The seminar for exchanging experiences on highland development with the international community, titled **“International Seminar on Sustainable Highland Development (ISSHD) Responding to Challenges Beyond The New Normal,”** organized by the Royal Project Foundation in collaboration with the Highland Research and Development Institute (Public Organization).
- ◆ Registered the varieties of **“Quinoa, Peach, and Hippeastrum”** with the Department of Agriculture.
- ◆ The **“Royal Project Fair 53”** was organized at Central World Shopping Center, Bangkok, showcasing a curated selection of premium quality products from the Royal Project.
- ◆ The **“Royal Project Fair 2022”** was organized under the theme “Good Health, Happy Life with Royal Project Products” at the Royal Park Rajapruek, Chiang Mai.

2023

- ◆ Her Royal Highness Princess Sirivannavari Nariratana Rajakanya graciously inaugurated the **“Sirivannavari Botanical Garden”** at the Royal Agricultural Station Angkhang, Fang District, Chiang Mai.



- ◆ **His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun and Her Majesty Queen Suthida** presided over the opening ceremony of **Chanaka Dhibesra Damri Royal Project Agricultural Research and Development Center**, T. Maehia, Muang, Chiang Mai Province.

2023

- ◆ **The Royal Project Foundation participated in the 66th session of the Commission on Narcotic Drugs (CND)** in Vienna, Austria.
- ◆ The following plant varieties were registered with the Department of Agriculture: **“Rose, Calla Lily, Chrysanthemum, and Chinese Pear.”**
- ◆ **His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun graciously granted the name “Royal Luscious” to the new variety of Chinese pear**, which was registered with the Department of Agriculture and promoted to farmers in highland areas.
- ◆ Established the **“Drinking Water Production Project”** at the Royal Project Development Center, Nhong Hoi.
- ◆ Established the **“Royal Project Tea House & Coffee”** at Chanaka Dhibesra Damri Royal Project Agricultural Research and Development Center, Chiang Mai Province, to build upon the success of research and development in tea and coffee.
- ◆ His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun and Her Majesty Queen Suthida opened the **“Royal Project Fair 54”** at Central World Shopping Center, Bangkok.
- ◆ The **“Royal Project Fair 2023”** at Chanaka Dhibesra Damri Royal Project Agricultural Research and Development Center, Chiang Mai.

2024

- ◆ The **“Royal Project’s Achievements on the 55th Anniversary”** were showcased in Berlin, Germany.
- ◆ The **“Highland Handicraft Hall”** was opened to honor the grace of Her Majesty Queen Sirikit, the Queen Mother, in promoting handicraft development. The hall also serves to nurture, conserve, and extend the knowledge and wisdom of handicraft traditions in the highland areas for sustainability.
- ◆ The **“Royal Project Forest and Bamboo Learning Center”** was established at the Royal Agricultural Station Pang Da, located in Samoeng District, Chiang Mai Province.
- ◆ The **“Royal Project Foundation Learning Institute”** was inaugurated at Chanaka Dhibesra Damri Royal Project Agricultural Research and Development Center, Chiang Mai.
- ◆ The **“Royal Project Foundation Learning Institute”** building was established in Bangkok.
- ◆ His Majesty King Maha Vajiralongkorn Bodindradebayavarangkun and Her Majesty Queen Suthida presided over the opening ceremony of the **Royal Project Fair 55**, under the concept of “Love for the Earth: Embrace Every Warmth of the Loving Land” at Central World Shopping Center, Bangkok.
- ◆ **The Royal Project Foundation signed a Memorandum of Understanding (MoU) to collaborate on research, development, promotion, and support for Arabica coffee**, in partnership with the Agricultural Research Development Agency, the Department of Agriculture, and the Highland Research and Development Institute (Public Organization).
- ◆ The International Conference titled **“From AD to SDGs: Empowering AD to Address Global Challenges”** and the **“Royal Project Fair 2024”** were organized at the Royal Park Rajapruek, Chiang Mai.

