



Executive Summary

The Royal Project Model: Best Practice Alternative Development Approach for Sustainable Economic, Social, and Environmental Development in the highlands



For further information

ROYAL PROJECT
THAILAND

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Background



A few hundred years ago, the highlands in the north of Thailand were endowed with rich natural resources and naturally provided a defensive function against possible foreign invasions across the country's western and northern borderlines. Substantial parts of this highland region are the origin of many river systems of enormous value to agriculture and human livelihoods in the northern and the central regions of the country. The significant ones include Mae Ping, Mae Kok, Mae Taeng, Mae Chaem, and Nam Nan watersheds. It was in 1966 when the reality was revealed more about the natural and human conditions in the northern Thai highlands where the lifeline of people and the economy is originated. A vast extent of the forested area had been cleared for swidden cultivation by the hill tribe population that lived in extreme poverty and had the nutritional status and quality of life much lower than the acceptable standards. More

than 1,600,000 highland inhabitants in 20 provinces depended on traditional subsistence farming and swidden agriculture to make a living. Another crucial problem was their cultivation of opium, a narcotic and illegal crop under the Thai and international laws. The practice of swidden opium cultivation resulted in immense destruction of the forest, land and soil, and water resources. With the deforested hills, emerged the problem of landslides as well as flooding in the lowlands. The Thai government 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. Yet, the various problems remained unsolved. Importantly, the forest area in the northern drainage catchments continued to shrink by 16,000-32,000 hectares annually (Office of the National Economic and Social Development



Board, the Fourth National Economic and Social Development Plan for 1977-1981).

From 1964 onwards, the late His Majesty King Bhumibol Adulyadej The Great (Rama IX) and Her Majesty Queen Sirikit The Queen Mother along with senior members of the royal family regularly relocated the royal residence in the cool season to Bhubing Palace in Chiang Mai. While staying there, His Majesty spent frequent trips to visit his subjects in faraway villages in the North. From his visits to highland hill tribe communities, King Bhumibol had learned of the extreme poverty and the substandard health and literacy status of the hill tribe population whose chief means of livelihood, traditional subsistence farming and opium poppy production, had created the serious environmental impacts and the potential threats to the national security. He then determined to help improve the quality of life of the hill tribe people and the social, economic, and environmental conditions of the hill tribe communities using the “Alternative Development Approach.” Consequently, the **“Royal Sponsored**

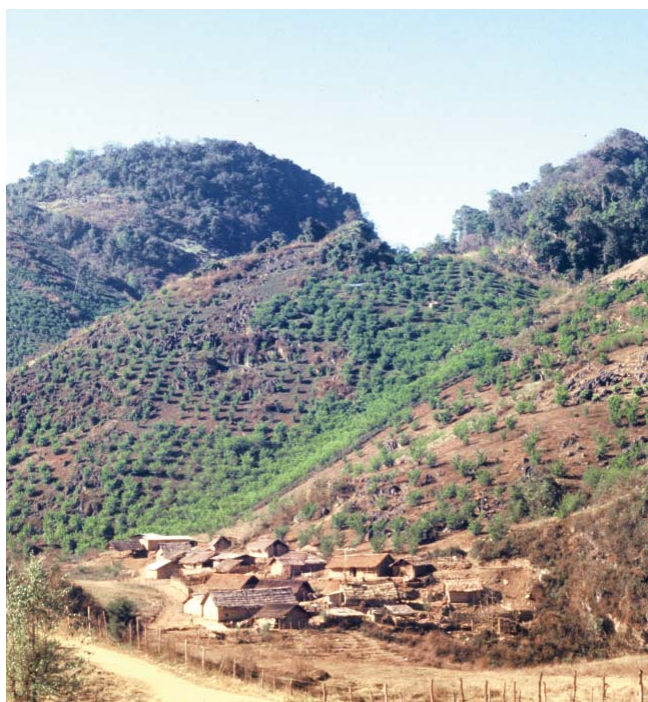
Hill Tribe Project” was created by royal initiative in 1969 and later its name was changed to the **“Royal Project”** for the development of hill tribe communities with the ultimate **humanitarianism and national security** objectives. In 1992, the Royal Project was registered as the **“Royal Project Foundation”** to become a legal entity as a non-profit public organization to facilitate and ensure a sustainable operation. King Bhumibol Adulyadej 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 the actualization of a balanced development across the social, economic, and environmental domains by focusing on humans as the center of development and appropriate conduct in various aspects of human life. To enhance the efficiency of hill tribe community development pursuits, His Majesty gave words of advice regarding the Royal Project Way of Working that efforts should be made in 1) streamlining, 2) expediting, 3) doing good deed without seeking attention, and 4) helping hill tribe people to help themselves so as to attain the following Royal Project’s objectives:

- 1) To render the hill tribe people humanitarian help;
- 2) To reduce the destruction of natural resources specifically forest and watersheds thus benefiting the whole country;
- 3) To eradicate opium cultivation; and
- 4) To conserve soil fertility and make proper use of land, by letting the forest be where it should, farming on land suitable for the purpose, and preventing the competing use of the same land.

In its operation since the early years, the Royal Project has got cooperation and participation from many volunteers officially working in various government agencies and academic institutions including the Ministry of Interior, the Ministry of Natural Resources and Environment, the Ministry of Agriculture and Cooperatives, Kasetsart University, Chiang Mai University, Maejo University, etc. It also received the cooperation and assistance in various forms from foreign countries and international organizations such as the USDA/ARS, the governments of New Zealand, Australia, Japan, and Taiwan, and the United Nations/Thai Program for Drug Abuse Control – UNPDAC (presently the United Nations Office on Drugs and Crime – UNODC).

His Majesty King Bhumibol Adulyadej, Rama IX, graciously gave practical guidelines for the implementation of the Alternative Development Approach addressing the use of **the core**

principles in the Sufficiency Economy Philosophy as a driving mechanism and the consideration 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 highland areas. 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 in 2015.





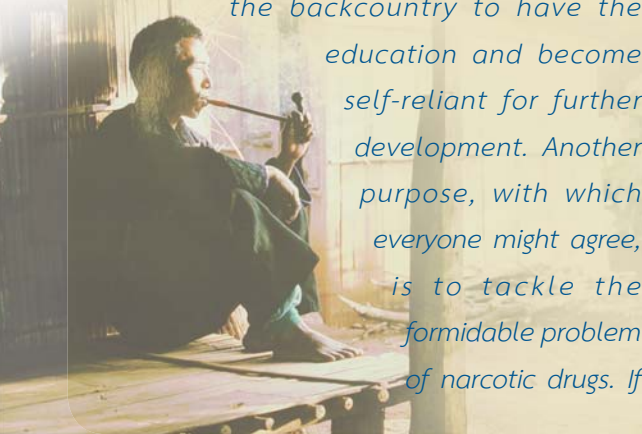
The King’s Philosophy

In the Alternative Approach for the Sustainable Highland Development in the Royal Project’s Approach

The royal speech on “Assistance to Hill Tribe People and Hill Tribe Project” given by His Majesty King Bhumibol Adulyadej at the Faculty of Agriculture, Chiang Mai University on 10 January 1974 essentially reflects the policies, goals, and the core activities and methods of the Royal Project’s operation.

“The assistance to the hill tribe people and the hill tribe project”, said the King, “will render direct benefits to the hill tribe population because this contemplation is meant to help them attain a better life by enabling them to grow crops which are useful to them and can provide them income. A purpose of this kind of project is of humanitarian, to enable people in the backcountry to have the education and become self-reliant for further development. Another purpose, with which everyone might agree, is to tackle the formidable problem of narcotic drugs. If

we can help the hill tribe people to grow economically valuable crops, they will stop cultivating opium poppy. This project will help enhance the effectiveness of the national policy of banning opium smoking and trade. Another highly important consideration is what we have known that the opium cultivation practices by hill farmers involving forest clearing and burning can cause severe damages to our country. Therefore, our help for them to stop improper cultivation is tantamount to protecting the benefits of the whole country. This is because, with the project’s success in making them settle in place and earn a decent living, the hill farmers will support our policy of soil and forest conservation with tremendous and long- lasting benefits.”



His Majesty King Rama IX had a profound understanding of the roots of the problems occurring in the highland area of Thailand relating to the extreme poverty, swidden cultivation, opium production for income, and

eventually the destruction of watersheds and the growing expanse of bald mountains. What was viewed as an underlying factor of these problems was the traditional way of life of the hill tribe people who did not do cultivation in a technically proper manner due to their ignorance in terms of knowledge and law. As the law enforcement alone was not adequate to control the narcotic crop production, His Majesty thus devised an alternative solution for the development of hill tribe farmers he regarded as the most important human resource on the highlands enabling them to take up a legal occupation, and live in harmony with the highland forests and the surrounding environment. Consequently, 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 the selected ones to the hill tribe farmers for cultivation and husbandry to replace opium cultivation.

The Royal Project conducted its study, exploration, and research activities by firstly analyzing the situations to identify the main problems prevailing in the highland communities with the primary objective to encourage the hill tribe farmers to switch from the illegal opium poppy cultivation to the production of the environmentally friendly temperate-zone crops for income generation and for reducing the extent of forest encroachment to do swidden farming. Prior to the field implementation on the basis of self-conducted trials by the hill tribe farmers, the Royal Project provided knowledge

and advice to them about the cultivation of opium substitute temperate-zone crops. When the hill tribe farmers found their choice of alternative crops could provide them an income greater than that from opium poppy, they converted their opium fields into permanent farming area without the use of the law for enforcement, which otherwise would have led to the conflict in the public administration of the hill tribe communities in the long run. Various positive changes among farmers participating in the Royal Project had inspired other hill tribe farmers to follow the practices. Subsequently, the Royal Project prototype of the development of alternative crops for opium replacement has been extended and applied widely in other regions of Thailand and beyond. The Royal Project initiative indeed has helped change the mode of livelihoods of the hill tribe people from the destructive swidden cultivation to the sustainable farming practices which in turn contribute to the restoration and conservation of forested watershed area to the rich and productive conditions beneficial not only to the people downstream in Thailand but also to others who share the global environment. The successful outcomes of the Royal Project of course could not have been realized without the royal ways of working of His Majesty to understand, access, and develop such that an explosion from within can take place.





Understand, Access, Develop In the Royal Project's Approach

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

His Majesty King Bhumibol's understanding of the traditional way of life of the hill tribe population and the highland situations is profound and comprehensive. He perceived that (1) the hill tribe farmers would discontinue the cultivation of opium poppy, their main cash crop, and switch to the production of opium substitute crops if the alternatives could generate them a higher income than opium did; (2) the improper conventional farming practices in the highland ecosystem, which could lead to the degradation of forest and watershed resources, would disappear if the hill tribe farmers got practical technical advice and knowledge concerning the cultural practices in the production of opium substitute crops which could give them attractive income from good quality of the crops or the processing of crops into marketable products and if they could make use of forest resources in a non-destructive nature; and (3) the quality of life of the hill tribe population could be improved once the hill

tribe farmers had an access to knowledge and inputs for the farm production and processing of the selected economic crops and animals based on the results of studies, exploration, and research.

The highlands of northern Thailand have a cold climate. Naturally, the types and varieties of crops and animals suitable for farming in the Thai highlands are different from those appropriate in the lowland conditions. Therefore, the early effort of the Royal Project after its inception was to identify temperate and semi-temperate zone crops through study, survey, and research for further selection, breed improvement, and trials, as well as farm management design after the livestock component was considered. The crops and animals proved to thrive well in the highland conditions were then multiplied in number for introducing to the hill tribe farmers for farming under supervision of the agricultural extension workers and agricultural scientists to ensure proper land use practice and satisfactory output as well as to prevent further encroachment into the forested watershed areas. The proper methods of farming did contribute to the improved natural environment and the



conservation of forests in the catchment basins. Furthermore, the distribution of tree stocks for the hill tribe people to reforest three types of the forest for four benefits, following a pearl of royal wisdom, had brought about a behavioral change as the hill tribe villagers cherished the use values of the trees and thus stopped tree cutting and forest land clearing.

Today, the Royal Project still continues its endeavors to constantly find out from study, exploration, and research activities and results about the types and species of crop and animal with high production and income potentials from the cultivation and the husbandry in the highland environment. In the course of 50 years, the Royal Project's operation has benefited farmers not only those in its operational areas but also those elsewhere with similar climatic and mountainous features to a wide extent.

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

Whenever traveling to various areas in the Northern Region to work or visit local villagers particularly those in the operational area of the Royal Project, His Majesty 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 charmingly friendly ways. These gracious royal manners enhanced the morale and spirit of the hill tribe farmers to adopt the cultivation of opium substitute crops up to the point that the opium production in Thailand was completely eradicated. Furthermore, the hill tribe villagers

were and still are highly cooperatively participating in the development activities to elevate the quality of life in the highland communities, conserve the natural resources and environmental quality, restore the forested catchment basins, as well as to ensure they could turn out quality produce and products.

His Majesty King Rama IX and all senior members of the royal family have been regarded as the role model of a developer with leadership. His Majesty's trips to many remote hill tribe communities along the rugged terrain made him learn of the living and farming conditions of the locals as well as the various socio-economic and environmental problems prevailing in reality in the highlands. It became his wish to alleviate the plight of the poor and deal with various problems in the highlands through the prudent means, taking into account the ethnic-specific identity, the different cultural and social setting, and the varying environmental conditions across communities and geographic features.

In the early years of its operation, the Royal Project got many volunteers from the project-participating universities and government agencies to involve in activities and functions in response to the royal initiative. Every week, the volunteers who were actually practicing academics and government workers would visit hill tribe farmers in their responsible villages to provide farming advice, field demonstration, and training relating to crop production and animal husbandry. The villages, understood among the volunteers as their "assigned villages to visit", were those under the responsibility of volunteers from

❖ Kasetsart University including Ban Chang Khian, Mae Sa Mai, Angkhang, and Kae Noi;

❖ Chiang Mai University including Ban Doi Pa Kha, Huai Phak Phai, Pu Muen Nai, Ban Mai Rom Yen, Tham Wiang Kae, Ban Suad, and Jom Hod;

❖ Maejo Institute of Agricultural Technology including Ban Wang Din, Pha Mee, Sa-Ngo, and Mueng Ngam;

❖ Department of Agriculture and the Hill Tribe Welfare and Development Center under the Department of Public Welfare including Ban Mae La Noi, Huai Hom, Dong, Pa Pae, and Rak Mai.

in the Royal Project's operational area and have the functions and responsibilities to look over the problems and the needs of hill tribe community members and serve as the agent of local development in social, economic, and environmental aspects.

The access to accurate information concerning the problems and the needs of the hill tribe communities through visits and verbal communication did enhance the operational performance of the Royal Project. This led to the growing acceptance and cooperation on the part of the hill tribe farmers to make positive changes toward the royal advices. The whole process is characteristically **the explosion from within or the concrete outcomes brought about by using accurate information and human-centered development approach.** Indeed, the hill tribe people have worked in partnership with the Royal Project in the community-based and people's participation orientation to build up the strength of local communities and society and the self-reliance capacity of the hill tribe villagers to solve the highland problems. Inherent in such development process and approach are the transparency and the social fairness in all practices contributory to the greater efficiency and effectiveness of both the hill tribe farmers and the Royal Project in their endeavors. The main concept of such development process and approach addresses, in a nutshell, the holistic human-centered mechanism in which technical and local knowledge in all relevant fields are combined for application to ensure



Project Development Centers and Royal Agricultural Stations to closely oversee the project activities. These Development Centers and Stations are established in various locations



the stable and sustainable highland development. This concept has been 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 Way is characterized by the development efforts appropriate for the prevailing problems and the highland community context, utilizing multi-disciplinary knowledge and resources from the supporting government agencies and universities, with the participation of hill tribe people as the development collaborators. Its major components of work are agriculture, infrastructure, education and health,

and environmental conservation. In agriculture, human and technical resources are mobilized for the development of integrated highland farming systems underpinning the sustainability of both the decent human livelihoods and the environment. The agricultural research activities have resulted in many sets of recommendations concerning types and varieties of crops and livestock, cultural and husbandry practices, soil and water management and conservation, etc. for extension to the hill tribe farmers. Through time, the hill tribe farmers gain more knowledge and understanding about practicing the environmentally friendly farming systems while building up a greater awareness of the importance of the protection and rehabilitation of natural resources and the environment. Besides, human development has been evident from the formation among the hill tribe farmers into agricultural cooperatives and natural resources conservation groups.

The Royal Project Way of working was inspired by His Majesty's initiatives, determination, conduct, and wisdom to attain sustainable highland development, which were manifested by his royal ways of working to understand, access, and develop. With the profound understanding of the real problems and situations, His Majesty devised an alternative development approach which was subsequently advised to be taken with the application of



principles in the Sufficiency Economy Philosophy. This is a great visionary thought as the whole process can bring about the balanced development across the social, economic, and environmental domains of highland livelihoods. This is recognized as the best practice model for the holistic and comprehensive development contemplation. The nearly 50 years' experience of implementation in the Royal Project Way has been widely shared with, and transferred or extended to many organizations in Thailand and abroad that work to combat the problems of backwardness, drug crop production, poverty, and hunger in the highland areas as well as to deal with the perils of climate change and natural resources degradation at the global scale.

In essence, propelling the development in the Royal Project Way involves the application of various principles in the Sufficiency Economy Philosophy, the mobilization of heterogeneous technical and human resources from the collaborative entities either individual, community, public sector, private sector, or international organization, and the consideration of upstream-to-downstream linkages beginning at the upstream level with research works to arrive at appropriate farming systems, moving to the midstream level at which agricultural extension and occupational promotion programs are meaningful for the hill tribe farmers, and progressing toward the downstream level where marketing management has an important bearing on income of the farming households. With these efforts and strategies, the scenes of

opium fields, dire poverty, swidden cultivation, and destructive forest resources and environment have virtually become invisible in the northern highlands of Thailand.



The Key Steps and Framework of Alternative Development Activities undertaken by the Royal Project in the Highlands

1) Research

The research to support the sustainability of alternative development pursuits in the Royal Project Way is a comprehensive knowledge-based undertaking to ensure the reproducibility of the research results in practice. In response to His Majesty's remark that "research is imperative on what is not known", the Royal Project first focused on research and study to identify the kinds of plants and livestock appropriate for farming in the highland environment before promoting and supporting the hill tribe farmers to cultivate and raise for income. In 1969, His Majesty King Rama IX made a 6,667 US\$ grant to enable the academics and researchers of Kasetsart University that participated in the Royal Project to conduct an experiment on grafting better variety peach tree branch onto the existing peach tree of local variety as well as on the cultivation of other temperate-zone crops and trees. The experimental site was then dubbed as "Suan Song Saen" because the orchard was funded by the 200,000 baht (6,667 US\$). His Majesty also had "Khun Chang Khian Highland Agriculture

Training Center and Research Station” established to be run by the Faculty of Agriculture, Chiang Mai University, to conduct research and experiments on plants and animals for highland production. During the early research years, the Royal Project got support from USDA/ARS in terms of research grant and from the Republic of China (Taiwan) in terms of plant stocks and agricultural experts for the research and experiment on opium replacement crops. After the promising crops and livestock were identified from the results of on-field research and trials, subsequent research was carried out concerning good agricultural practices, postharvest management, processing, and marketing for value addition to the produce and products of the hill tribe farmers. The essence of component research is presented below.

1.1) Crop production

At the project inception, there existed no knowledge among project staff and researchers about crop types and varieties including the cultural practices suitable for highland production particularly when consideration had to be given to the difficult transportation as the remote highland villages had no road access. Thus, research works focused on finding food crops that could be stored for a lengthy period and not damaged easily from tough transportation condition, and that could grow well in the highland environment. (1) Rice and upland crops. The research and extension works involved the proper method of rice cultivation and the production of rice sufficient for subsistence

consumption, the cultivation trials of such imported leguminous crops as red kidney bean, lima bean, and pinto bean. (2) Temperate-zone fruit trees. Early work was on grafting a better line of peach on peach tree of the local variety. Later works were on other types of temperate climate fruit trees, the introduced semi-temperate climate fruit trees, and dwarf fruit trees for the selection of trees suitable for growing in the highlands and capable of providing attractive and stable income to the growers. (3) Temperate-zone vegetables. Research works intended to find suitable short-season vegetable crops for income generation during the time the fruit trees have no fruits for harvest. (4) Ornamental crops. Many kinds and varieties of ornamental crops such as carnation, gladiolus, and cymbidium were brought into field trials. (5) Arabica coffee. Early emphasis was placed on line selection for coffee leaf rust resistance, coffee crop care and maintenance, as well as extension services for the growers. (6) Oolong tea no.12 and no. 17 (soft stem). Trial plots for varietal selection were set up in the Royal Project area before promoting the hill tribe farmers to grow. (7) Breed improvement and seed production. Some selected varieties of exotic plants are grown for seeds to ensure availability of good quality seeds for growers, to minimize the import of seeds at higher price, and hence to lower the cost of production of farmers.

1.2) Livestock and fishery

In the beginning, 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, brasses chicken, black-boned chicken, cross-bred swine, and milk buffalo, aiming at home consumption and selling the surplus. The related research was on the utilization of animal waste by converting into bio-gas as the alternative energy to replace LPG and fuelwood or processing into bio-fertilizer. In the area of fishery, the Royal Project in collaboration with the Department of Fisheries experimented on the possibility of raising aquatic animals of significant commercial value in the highland condition to reduce the imports. The success in terms of both aquaculture and market has been evident for rainbow trout, sturgeon whose roe is salt-cured into caviar, hairy crab, and crayfish.

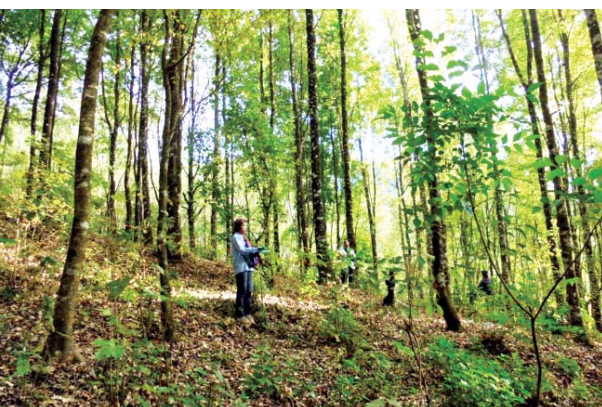
1.3) Forest resources and the environment

The Royal Project has undertaken research on forest rehabilitation on the Angkhang Royal Agricultural Station site since 1982 by planting more than 20 species of fast growing trees originating from the Republic of China (Taiwan). After 12 years of growing, only 4 kinds of trees with 20 species were found to be suitable under the local condition. The tree stocks of the selected varieties were given to villagers for planting in the area of the Villagers' Wood Lot Program under the royal patronage of Her Royal Highness Princess Maha Chakri Sirindhorn in the fashion initiated by His Majesty King Rama IX to promote three kinds of the forest for four benefits in the Royal Project area.

1.4) Processing for value addition to agricultural output

With the increased output volume of crops from research works and extension effort of the Royal Project, the hill tribe farmers began to suffer from





the woefully depressed farm gate price from selling to middle agents. 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. Subsequently, more research works were conducted with the use of modern technology to get a wide range of products processed from strawberry, fruits, herbs, cereal crops, and vegetables grown by the hill tribe farmers. In 1972, the "First Royal Factory" was built in Fang District of Chiang Mai Province to buy produce of farmers in the Royal Project at fair prices for processing into food products under the trademark "Doi Kham" to increase value for the farm output and increase market distribution channels. Further studies and research were undertaken for product development in response to the royal initiative on "Agro-industry for Rural Development. Later the Royal Factory was expanded to another three provinces for the same purposes. There was a change, however, in 1994 with His Majesty King Rama IX's 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 more happy from the balanced and financially sustainable development.

1.5) Postharvest management to reduce output loss

Study and research were carried out relating to the harvest index and grading different crop outputs into classes. Later work involved passive cooling and a passive cooling facility was subsequently set up at the Angkhang Royal Agricultural Station for



postharvest storage. Other pieces of research dealt with output quality, postharvest loss reduction, quality control of output from the Royal Project area, and the improvement of the overall postharvest management system.

1.6) Marketing

With the increased volume of farm output, the Royal Project wished to bring the opium replacement temperate crops, fruits, and flowers for selling in Chiang Mai and Bangkok markets. Prior to doing that, it had research conducted on the appropriate marketing system for the Royal Project brand, the marketing of highland crops, pricing and marketing margins, consumers' behavior and their attitude toward the Royal Project products, and the impact of free trade on the Royal Project's operation

The findings from research and experimentation on candidate opium substitute temperate zone crops were translated into extension and recommendation for the hill tribe farmers to do the farming themselves. After the hill tribe farmers had realized that the alternative crops earned them a greater income than opium did, they completely changed from swidden farming to sustainable permanent agriculture. The opium fields were converted into cold-climate cropland and the area for other farming activities. So far, more than 246 kinds and 529 varieties of plants and animals from the research and extension recommendations have been grown and raised by the hill tribe villagers for home consumption and the market from which they got more income than from opium production. Totally nine kinds and 40 cultivars of vegetables, fruit trees, and ornamental plants obtained from research works under the Royal Project have been filed for registration as new plant varieties under the Thai law. Other research results involving product, technology, design, etc. were applied for intellectual property right registration including 54 patents and 2 petty patents. The agricultural research and development to pursue the Royal Project's objectives have contributed to the body of knowledge about the highland environment and people, the attainment of new technology, and the improvement in crop care and marketing. Today, many crops promoted by the Royal Project become widely adorned and commercially popular in Thailand.

2) 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 the increased knowledge obtained from practical experience and research concerning social, economic, and environmental spheres in the highland context, the research and development activities of the Royal Project could be arranged into a systematic program for alternative development pursuit. The practical knowledge extended to the hill tribe farmers fostered their willingness to participate actively in the Royal Project's works. In 1978 and out of his royal coffer, 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 the rehabilitation of forest and watershed resources for the more tangible results. The highland community development was attempted through an integrated approach assigning the

responsibilities for the volunteers from universities and government agencies to work with the villagers in the specific community area. Later on when the 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 Centers". The administration remained relatively the same, with a volunteer actually affiliated with a university or a government agency serving as the director of the center. The universities and government agencies participating in the Royal Project endeavors include Chiang Mai University, Kasetsart University, Maejo University, the Public Welfare Department, the Land Development Department, the Northern Regional Office of Agriculture, and the Department of Agricultural Extension.

The Royal Project has also received cooperation from organizations overseas. Soon after the project inception, it got the assistance from the Vocational Administration Commission for the Retired Servicemen (VACRS) of the Republic of China (Taiwan) that dispatched agricultural experts as well as provided temperate zone fruit tree stocks from Taiwan for cultivation trials in the highlands of Thailand. The assistance was valuable because the VACRS had been successful in helping the retired servicemen to establish fruit tree orchards in the Taiwanese mountainous areas where the environment and climate are similar to those of the northern Thai highlands. Furthermore, Taiwan has made fund available for the Royal Project's volunteers, researchers, and personnel for training and field study in Taiwan



every year since 1970. Although the responsible agency in Taiwan for such objective was later changed to the International Cooperation and Development Fund of the Republic of China, the VACRS has remained making training and field study arrangements for the Royal Project's participants up to the present time. Furthermore, the Royal Project has maintained the technical cooperation agreement with the National Chung Hsing University in Taiwan.


The United Nations in 1972 provided both financial and personnel support for occupational development and promotion to improve the quality of life of the highland population in northern 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 practicing academics from the Faculty of Agriculture, Chiang Mai University joined this program to serve on the voluntary basis as project coordinator and head of the station. This cooperation and approach can be regarded as

the foundation of the Alternative Development Program of the present-day UNODP to replace opium poppy cultivation. The collaboration also existed between the Royal Project and other internationally donors assisted projects for highland agricultural development notably the Thai-Australian Highland Agricultural Project: TAHAP during 1969-1974, the Thai-German Highland Development Programme: TG-HDP during 1981-1998, and the Thai-Norwegian Church Aid Doi Yao – Pha Mon Highland Development Project: DP-HP, with the objective to help improve the efficiency of farming systems and livestock production in the highlands.

Following His Majesty's consideration, the Royal Project changed its status into the Royal Project Foundation in 1992 to assure the permanent and sustainable operation. As a consequence, the Cabinet passed an approval on 17 March 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 approve the programs, projects, activities proposed, and the budget requested by the Foundation for the 26 involved government agencies to implement both the 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 the central levels and area-focused problem solving method, considering the different problems and conditions in the different highland communities. Today, the operational area of the Royal Project Foundation covers six northern provinces including Chiang Mai, Chiang Rai, Mae Hong Son, Lamphun, Phayao, and Tak, benefiting the totally 468 villages, 49,624 households, and 191,821 population. The achievements from its use of participatory holistic alternative development approach in different domains are summarized and presented below.

2.1) Economic development for income generation

The Royal Project Foundation has continually focused on research and development works to obtain new varieties of crops, suitable methods for cultivation on the changing highland environment, and technological development. In agricultural extension, importance has been placed on the adoption of environmentally friendly production techniques to minimize the use of agro-chemicals for the better health of the cultivators, consumers, and environment. 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 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 G.A.P and Organic Agriculture standards which are known to use the 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 the application of chemicals with supervision and inspection measures for quality control and product safety before selling the farm output to consumers.

As the output from experimental fields and farms in the extension programs increased in volume, the hill tribe farmers in particular confronted the problems of having limited market outlet and getting 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 fashion to ensure the reasonable prices paid, while providing transportation and postharvest management services. Specifically, the marketing division was set up with the objectives: 1) to ensure the market outlet for the farm output particularly that of the new crops introduced to the hill tribe farmers to grow as a trial, 2) to guide the hill tribe farmers to prepare production plan taking into account the market demand and improve their output quality, and 3) to draw consumers' interest to buy temperate-zone 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, and to use the

marketing margin for running the marketing business. To handle the output surplus and market problems, the first Royal Project Food Processing Plant was built on the campus of Chiang Mai University to enable the farmers to sell their output as raw material at a relatively higher price. Then, research on food processing and product development became another important undertaking. Appropriate technology has been used for the development and processing of strawberry, other temperate-zone fruits, herbs, cereal crops, and vegetables into a wide variety of products that make a substantial value addition. Moreover, the Royal Project has promoted and supported non-farm occupational development for the hill tribe villagers to produce handicrafts that contain the elements of hill tribe cultural heritage or tribal wisdom and knowledge to generate their supplementary income.

To improve postharvest quality of produce, the Royal Project built the Royal Project Produce Center, one in Chiang Mai officially named the Royal Agricultural Research Center and the other in Bangkok, responsible for postharvest handling of produce using modern pre-cooling and vacuum-cooling technology for quality control with GMP and HACCP measures and the traceability system. Furthermore, a packing house unit was established in each Royal Project Development Center responsible for receiving produce from member farmers, sorting the produce into size and grade, and packing prior to the delivery to the Royal Project Produce Center in Chiang Mai and Bangkok or shipping

directly to customers in various provinces. The efficient management of the logistic system has enabled consumers to consume fresh, clean, and safe produce. In the early years of commercial marketing, the Royal Project (under the directorship of His Serene Highness Prince Bhisadej Rajani) had all kinds of produce and products from the extension and promotion of opium replacement crops program sold under the trademark “Doi Kham”, which is now replaced by the “Royal Project” brand. Many Royal Project Shops have been set up in Bangkok and various provinces of Thailand to sell more than 1,700 items of fresh produce from the hills, processed goods, handicraft and other products which help lower the imports of temperate and semi-temperate vegetables and fruits. Some produce and products under the Royal Project brand are exported to foreign markets, and this is another economic benefit for the country on top of the reduction of imports.

2.2) Social development

The Royal Project Foundation has addressed social development in various aspects to foster the community strength within the framework of the Sufficiency Economy Philosophy of His Majesty King Bhumibol. Described briefly below are the key activities for the development in four social perspectives.

(1) Education

As the basic Thai literacy was considered crucial for hill tribe development, His Majesty had Border Police Patrol Schools established in the distant highland villages both inside and outside the Royal Project’s operational area to

enable the hill tribe children to get at least the primary schooling. At the same time, informal adult education was arranged for the hill tribe farmers to have knowledge and ability to get the access to information and technology relating to farming, marketing, society, and the environment to a greater extent. The Royal Project in collaboration with Chiang Mai University Library developed a mobile library program for the hill tribe villagers to realize the value of reading and improve their knowledge. Moreover, the Royal Project will send their staff and hill tribe farmers more than 250 in number every year 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 from opium poppy cultivation, learn the appropriate cultural practices in the production of the introduced opium substitute crops with a focus on the conservation of highland resources, and know the importance of educational development in the highland communities.

(2) Public Health

The Royal Project with the cooperation from the Ministry of Public Health, a volunteer group from Chiang Mai University, and other local government agencies arranged a medical service and health education program for the hill tribe villagers to promote family planning and birth control, and learn about the use of modern medicines and alternative methods for various home treatments of illness or discomfort instead of opium. Various activities were

arranged to promote good hygiene and sanitation within the household and in the community. The Royal Project with assistance from the Public Welfare Department ran an educational campaign to get the hill tribe people to be aware that opium is illegal, and to enhance the capacity of community organization to prevent the spread of the narcotic drug.

(3) Group formation for community self-reliance

His Majesty King Rama IX graciously gave 667 US\$ to the villagers in Ban Pa Pae, Mae Sariang District, Mae Hong Son Province for setting up a rice bank to overcome their problem of not having enough rice for consumption. He stated, "This is the first rice bank in the world." The household in need can borrow rice from the bank for consumption or use as seed and make loan repayment 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. Subsequently, 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 thus arranged to create the skills of hill tribe villagers in devising the community self-reliance plan.

(4) 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 students, farmers, government workers, 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 operational area and beyond Thailand.

2.3) Natural resources and the environment

Most hill tribe villages are located in the mountainous head-watershed area and the hill tribe farmers had to use the highly sloping



hillside portions for farming. The traditional practice of swidden farming involves the slashing and burning of forest trees resulting in rapid soil erosion. The Royal Project Foundation thus began working in collaboration with the Royal Forestry Department to set up a “Royal Forestry Project” for the restoration and conservation of natural resources and the 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 the 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 arrangement with the local community and involved local government agencies to organize 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.

2.4) Response to global climate change

The Royal Project Foundation has recognized the importance of the environmental impact of agriculture from the anthropogenic

emissions of greenhouse gases and the conversion of forest area for farm use which contribute to global climate change. It 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 emissions of greenhouse gases from farming which otherwise can cause environmental damages and ecological imbalance. 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 namely agriculture in eco-friendly nature, forest resource restoration and conservation, community environmental health and sanitary management, and community strength in responding to climate change. The development in this direction is indeed a novel concept to help elevate the standard of living and quality of life of the hill tribe people. The assessment of low carbon standards of the highland communities is the first attempt ever made in Thailand. So far 12 hill tribe communities in the Royal Project Foundation's operational area have been certified as low carbon society serving as prototype for other village communities to learn and follow.



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



A Best Practice Model of Alternative Development Approach in the Highlands in the Royal Project's Approach

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 King Bhumibol Adulyadej 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 crops and livestock for the hill tribe farmers to choose as the alternative to opium crop, the guidance for good agricultural practice, the advice concerning crop care and maintenance system and production and postharvest management, as well as the promotion for the use of cultural heritage in producing hill tribe handicrafts. Many introduced crops including vegetables, fruits, flowers, and herbs 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 strengthened from many development inputs. An appropriate land use plan has been developed for each highland community and supported 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. Meanwhile, different Royal Project Development Centers also serve as a learning center transferring knowledge to other farmers, project staff, and the interested general public both Thai and foreign.

Putting into context the situational changes in the three domains of the Royal Project's development endeavors helps provide significant implications for the understanding of how and in what ways the holistic development



approach taken by the Royal Project has contributed to the improved livelihoods of hill tribe population living in the marginal area of the country which is the primary goal of the establishment of the Royal Project. 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 solved successfully due to the visionary thinking and contemplation of His Majesty King Rama IX focusing 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 semi-temperate crops such as vegetables, fruits, and cut flowers which eventually become leading economic crops has generated an immense income for the growers, the community, and the country, as well as helped lower the imports of produce in the same or similar kinds from foreign countries.



The Concrete Changes in Social, Economic, and Environmental Situations over the 50 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 are producing more than 300 kinds of crops and livestock 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 bold mountains. 	<ul style="list-style-type: none"> ❖ Disappearance of forest land clearing by slash-and-burn method, 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 levels 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 highland areas of Thailand and 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 King Bhumibol Adulyadej to enable the hill tribe people to stop opium cultivation by extending to them other promising cash crops to grow instead of 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 a 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 Approach are instrumental for the peace and social harmony in a society, the security in life, and eventually the peaceful and happy life of people in Thailand and beyond.



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

The achievements over the 50 years of the Royal Project's operation using the holistic alternative development approach in the context of hill tribe communities in the remote highland conditions have validated the good practice nature of such approach for solving the problems of opium poppy cultivation, dire poverty, swidden farming practice, and natural resources and environmental degradation 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, and 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 process. Thus, 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 list. 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, 11 April 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 Scheme in the green zone and forest management category of Thailand Greenhouse Gas Management Organization (Public Organization), 10 July 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 from 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 the narcotic crops by peaceful means and foster a good international understanding.”

2.2) The UNEP Gold Medal of Distinction presented to His Majesty King Bhumibol Adulyadej In 1992 by the Executive Director of the United Nations Environment Programme 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 King Bhumibol Adulyadej in 1994 by the United Nations International Drug Control Programme (UNDCP) in recognition of outstanding contributions to drug control efforts in Thailand by using alternative development approach in the Royal Project framework to improve the livelihoods of the hill tribe population.

2.4) The Colombo Plan Award given by the Colombo Plan Drug Advisory Program (DAP),

an international organization aiming at solving narcotic drug problems in Asia and the 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 King Bhumibol Adulyadej 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 of the Royal Project.

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 King Bhumibol for his dedication to soil resources management which has been recognized worldwide. The World Soil Day was 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 the only recipient of the award in the world. From 2018 onward, 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.



The Contribution of the Royal Project in the Economic Dimension

A research project titled "Contribution of Royal Project to Thai Society in Economic, Environmental, and Social Aspects" undertaken by Kasetsart University reported in December 2011 provides the findings on the economic benefits from the Royal Project's operation in five components. The total benefit from **the four decades' activities up to 2008 was assessed at 16,457.28 million US\$,** about 40 % of which being monetary benefit and the rest 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 158.70 million US\$, with 25 % being monetary benefit and 75 % being non-monetary benefit. These numbers indicate that the utilization of research results create a value three times the research budget which reflects the high efficiency in the use of research budget.



(2) Socio-economic benefit. It is amounted to 2,354.16 million US\$, with 80 % being monetary benefit (net income and asset value of the farming households) and 20 % being non-monetary benefit (net income in-kind). The findings suggest that the agricultural development on 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 5,801.62 million US\$, outweighing all other benefits, and is 100 % non-monetary benefit from the rehabilitation and conservation of forests particularly 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 7,534.32 million US\$, 65 % monetary benefit and 35 % non-monetary benefit. The findings also suggest 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-zone crops. Meanwhile, the introduction of new choices for farmers to choose to replace opium cultivation is tantamount to giving them the concrete motive for “an explosion from within” as they are empowered to become strong by their own hands and able to make independent decisions.

(5) Market benefit. The assessed value is 608.51 million US\$ with 99 % coming from

selling in domestic market and 1 % from export. The analytical result reveals the market was developed in five northern provinces of Thailand to absorb agricultural output of the hill tribe farmers in the Royal Project’s operational area and it was efficiently developed to displace the imports of temperate-zone vegetables, fruits, 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 the five components reported above although no subsequent research or study has been carried out to assess the non-pecuniary benefit of its operation. However, a concrete project outcome is the enormous and growing income from which the hill tribe farmers directly benefit. During 2009 – 2018, the farmers earned 172.53 million US\$ from selling their output to the Royal Project for re-marketing and 124.37 million US\$ from selling in local community market. Furthermore, they made about 12.31 million US\$ from selling handicraft and processed products. Yet, the non-monetary benefit can be easily appraised from the growing strength of the community capacity in protecting and conserving the valuable forest trees and nature in class 1 watershed areas which eventually renders the significant environmental benefit for the society at large and which the credit should also go to the Royal Project Foundation.



The Royal Project Model for Sustainable Development

The accomplishment of the Royal Project’s highland development endeavors over the past 50 years is remarkably tangible in the transformation of the hill tribe communities once depending on 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 King Bhumibol, 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 situations in each locality. A guiding principle of His Majesty is that problem solving needs to be human-focused using the concept of “understand, access, and develop” by means of study, research, 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 well understood as the collection of methods, philosophies, and theories based on His Majesty King Bhumibol Adulyadej’s genius and decades of work, extending to numerous areas of development. It first came to light when His Majesty initiated the project aiming at eradicating the dire 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 into play. 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 the 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

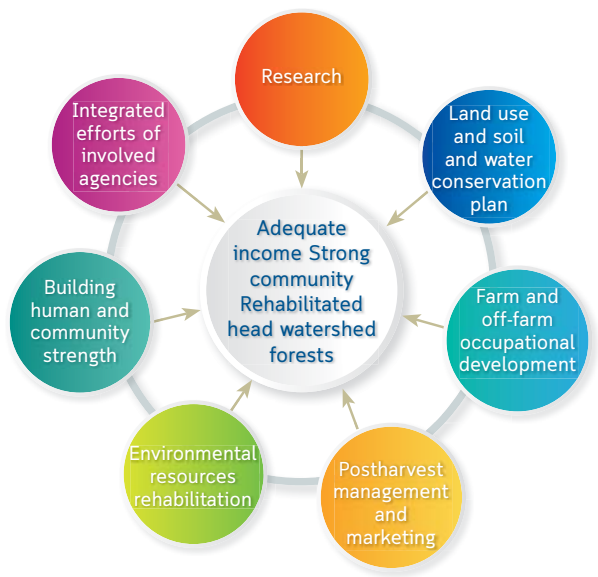
the internal and the external dynamics, the Royal Project has undergone organizational and operational change and development through time particularly to respond suitably to the change in the social and environmental context of the highland communities. Thus, the timeline of the Royal Project Model can be broken into four development phases.

Phase 1 Inception: pioneering highland research and development activities

Most works in this phase were implemented according to the royal initiatives beginning with the land use planning in each community for the appropriate introduction of opium replacement crops, the reduction of opium poppy area, and the zoning of forest land for the establishment of three kinds of forest trees for four benefits. This is considered a good beginning. Then, research and agricultural extension works were undertaken to promote crop and livestock production for subsistence and some cash income.

Phase 2 Moving forward: for hill tribe people to realize a good nutritional status, well-being, and happiness... as evidence of success.

Following the demarcation of farming area in the forest land in the first phase, the second phase 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 from research and experiments were used as the basis for extension works in the village communities. Royal Project Development Centers were established in key villages primarily to oversee the agricultural extension activities which subsequently include those involving postharvest, processing, and product development. Other significant areas of development in this phase are the conservation of natural resources and the environment, and the building of social and community strength in the highlands.



Phase 3 Reinforcing the Royal Project Model: to become an alternative development prototype for application elsewhere in Thailand and beyond

After the development priority was given more to subsistence and economic needs in the earlier phases, the third phase advanced to building a balance of economic, social, and environmental priorities. In the economic sphere, attention was placed on income generation from growing opium substitute cash crops. In the social domain, public services were provided in terms of education, public health, and security in life and property measures. Infrastructure was built including access 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 the improvement of the natural resources and environmental conditions. The development of market and marketing management helped increase the value of produce and products from the Royal Project's areas. The development toward 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**” that all the 39



Phase 4 Continuing, maintaining, and extending further the Royal Project Model

His Majesty King Maha Vajiralongkorn has expressed his royal support to continue, maintain, and extend further the Royal Project activities for the development of the highland areas in Thailand toward 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 toward all these goals by 2030 and thus becomes a best practice model for others to follow in Thailand and elsewhere in the world.

The Royal Project Model provides the good practice guidelines to realize the four main objectives of the Royal Project initiative under the principles of the Sufficiency Economy Philosophy, and the royal concept of work to “understand, access, and develop.” The works of the Royal Project have evolved over time, shaped by the dynamics of several factors, for example, the technological advance and consumer sector, and green agriculture in recent years. However, one of the success factors since the inception of the project until today has been the multi-party participation and cooperation from various agencies and the hill tribe communities. The Royal Project has been recognized as successful in contributing to the sustainable social, economic, and environmental improvement in the highlands and it is now on the way to attain further development results

for the hill tribe people, for us, and for the world.

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 development approach for the sustainable economic, social, and environmental improvements in the highlands, the hill tribe villagers in the Royal Project’s operational area have put an end to 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 system has been restored close to the point of natural balance. Meanwhile, 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 toward the sustainable adequacy and security goals in various aspects in line with the SDG 17 goals.





SUSTAINABILITY

Sufficiency · Security · Stability



Sufficiency Economy Philosophy
Best Practice on Highland Alternative Development

LEADERSHIP

PROBLEMS

- Poverty – Hunger
- Illicit crops - Opium
- Deforestation

ROYAL PROJECT MODEL: The King's Philosophy



Continuing, Maintaining, and Extending the Stable and Sustainable

Alternative Development Approach following the Royal Project Model



Continuing the royal initiative and the sustainable alternative development approach following the Royal Project Model

His Majesty King Maha Vajiralongkorn Phra Vajira Klao Chaoyuhua, the Honorary President of the Royal Project Foundation, has his royal resolution to continue, maintain, and extend the operation of the Royal Project, an initiative of the late King Rama IX 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's operational area, His Majesty announced his royal appointment on 17 November 2017 of a new Royal Project Foundation Board to continue, maintain, and extend further the Royal

Project's works to ensure the continued development and the benefits to all in the nation.

The Royal Project's approach to sustainable highland development is considered a practical strategy for solving problems in the highland context particularly those relating to the cultivation of narcotic crops. In contrast to the previous measures limited only to the control and suppression efforts, the alternative measure 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. More importantly, 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. Thus, a substantial part of research and development works in the Royal Project has involved the support for the hill tribe villagers to take up technically appropriate cultural practices in

farming, carry out some non-farm production, make suitable use of land resource 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 50 years considering the project outcomes. After the hill tribe villagers stopped growing opium poppy and switched to producing food crops for home consumption and temperate and semi-temperate zone crops for cash income, their quality of life became better. Their adoption of knowledge obtained from field research and experiments enabled them to do environmentally friendly farming systems using a 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 function as the important source of water in streams and rivers benefiting the whole country. With the human-centered attempts, the hill tribe population gained the 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 benefits 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 the social, economic, and environmental dimensions; and all these features form the Royal Project Model which has 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. It, thus, can be considered a practical prototype for highland development in other countries.



Maintaining the goals and the achievements of the Royal Project in the sustainable development

The Royal Project Foundation still aims at holding on to the development goals contained in the Royal Project Model and it has developed its 4-year strategic plan for 2019-2022 with the organizational vision statement of “to firmly continue, maintain, 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 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 a 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 and downtrodden, 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 say the upward social mobility of the hill tribe people from their increased income and improved quality of life must continue, the environmentally friendly production and consumption behavior must persist, the rehabilitated natural resources and environmental conditions 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 farming 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 backgrounds who keep exchanging knowledge and experiences constantly and interactively. Thus, on 21 June 2016, the Cabinet approved the 6-year Master Plan of Royal Project Development Centers for 2017-2022 which contains action plans incorporating the responsibilities of various government agencies to support the Royal Project Foundation to continue its 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 get knowledge about a best practice alternative development approach known as the Royal Project Model.



Extending the development efforts for the good of the hill tribe people, us, and the world

The Royal Project Foundation has produced numerous concrete and desirable

outcomes over the past 50 years of its 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 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 King Rama IX, the Royal Project Foundation has made preparation to organize an “International Conference on Rising to the Challenge of Sustainable Development Goals (SDGs) through Sustainable Highland Development: the Royal Project Model” during 19 -21 December 2019. This event is organized in remembrance of His Majesty King Rama IX who graciously and benevolently founded the Royal Project and in

honor of His Majesty King Maha Vajiralongkorn Phra Vajira Klao Chaoyuhua for his royal support to continue, maintain, and extend the development activities of the Royal Project Foundation, and for publicizing to a wider audience the achievements over the past 50 years of the Royal Project Foundation’s operation.

The Royal Project Foundation has compiled information for the analysis and summarization of the learning from the implementation of alternative sustainable development approach, bestowed upon us by His Majesty King Rama IX, since the inception up to present. This is meant to 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. By comparing with the UN-SDGs, 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 adaptation. The feedbacks and recommendations from the participants at this conference will be useful for our presentation of the Royal Project Model at the CND63 (the 63rd Session of the Commission on Narcotic Drugs), to be convened in Vienna, Austria, as it is the key platform instrumental for actions to reach the Sustainable Development Goals of the UN.

The Royal Project Foundation established the 39th Royal Project Development Center at Ler Tor in late 2016. This village is located in a remote and harsh-conditioned highland where the opium poppy is still grown (according to the report of the Office of National Narcotics Control Board, the opium cropped area increased from 32.64 hectares in 2009 to 56.91 hectares in 2016/17), and maize cultivation begins to expand by forest land clearing. The local villagers are poor and have too meager income to live on. The Royal Project Model has been implemented by the 39th Center to solve the problems faced by 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 Vajiralongkorn for his royal support to continue, maintain, and extend the Royal Project Foundation's operation for the well-being of all his royal subjects.

Imparting the accomplishments of the Royal Project Model for application elsewhere in Thailand and internationally.

The remarkable and unceasing achievements of the Royal Project Foundation in the development of the highland communities have been recognized far and wide, particularly the success in solving various dire problems existing prior to the Royal Project's inception and then in 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 areas elsewhere.

(1) The extension of the Royal Project Model to other highland areas in Thailand by the Highland Research and Development Institute: HRDI (Public Organization)

With the great success of the Royal Project which entitles it to be a "sustainable highland development model" and the need to continue solving problems in the highland areas which otherwise would give rise to adverse impacts on the life and living condition of the general public including the natural resources and environmental quality of the country, the Thai government considered the implementation of the Royal Project Model for highland development in areas beyond the existing Royal Project Development Centers. Consequently in 2005, the Cabinet passed the Royal Decree on Establishment of the Highland Research and Development Institute (Public Organization). The

HRDI is responsible for implementing various activities to actualize the established organizational goals. It has an organizational structure, missions and functions, and administrative system within the Royal Project Foundation's framework, and works hand in hand with the Royal Project Foundation. The HRDI's research program focuses on building a body of knowledge instrumental for the development in various natures in the operational area of the Royal Project Foundation and other highland areas. It is community-based in orientation. In other words, the research will be conducted in response to the need of the community taking into account all the local settings such that the community will be readily accept and follow the useful recommendations from the research findings. The HRDI's development program aims at helping people in the highland communities to improve their livelihoods, fostering community strength, and encouraging the community's effort in the rehabilitation and conservation of the natural and environmental resources for sustainable utilization. The HRDI adopts the approach and methods used by the Royal Project which is a specific-geographic-area development giving priority in balance to the social, economic, environmental improvement, and the availability of infrastructure necessary for people to make a decent living from their occupation. The activities driving the development and changes involve the use of technical and local knowledge, the implementation by the HRDI staff, the participation of the community, the



collaboration with various development agencies, and the supervisory, supporting, and coordinating roles of the Royal Project Foundation. By working hand in hand with the Royal Project Foundation, the HRDI in its highland development endeavors also addresses the principles of the Sufficiency Economy and the well-honed royal concept of “understand, access, and develop.”

Presently, 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 inputs 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 Royal Project Model Based Highland Development Project” in 44 sites in eight provinces covering 616 village clusters, working in cooperation with the Department of Non-formal Education in “The Transfer of Knowledge from the Royal Project and Capacity Building of Highland Communities Project” in 785 Highland Community Learning Centers, and working in collaboration with the Ministry of Agriculture and Cooperatives and other pertinent agencies in “The Water Conservation Project for Her Majesty Queen Sirikit The Queen Mother” in 11 sites in seven provinces covering 126 village clusters. 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-conditioned highlands.

(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 far and wide 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 Udomxai Province in Laos, Shan State in Myanmar, and many areas in 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 toward sustainable development.

The Royal Project Foundation has been a part in propelling actions toward the UN-SDGs and was invited for the presentation on the success in promoting the production 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 problems. At the 60th CND Session in 2017, Her Royal Highness Princess Bajrakitiyabha Narendira Debutavati, 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 King Rama IX did -- 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 notion has always been taken by the Royal Project Foundation.



The Royal Project Model and SDGs

The development implementation by the Royal Project over the past 50 years following His Majesty King Bhumibol Adulyadej's initiative, sufficiency economy philosophy, alternative development approach, and many other royal words of advice has led to a great success with the signs of a high level of life satisfaction among hill tribe households and a well-rounded sustainable development in the highlands. Thus, 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 Nations General Assembly – UNGA on 25 September 2015 to change the world for the better (2016 – 2030) toward the 17 goals. All social, economic, and environmental development activities implemented by the Royal Project Foundation have been incidentally geared toward achieving the 17 sustainable development goals as the development objectives include:

- Goal 1** Eliminate poverty in all forms 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.



Maximizing Value of the Royal Project Model: Towards Global Partnerships for the SDGs

The Royal project is one of the country's biggest success stories in sustainable development. It has successfully tackled opium cultivation and deforestation in the mountainous North by tackling its root problem – the hill tribes' harsh poverty and lack of life opportunities. Under the stewardship of His Majesty King Bhumibol Adulyadej The Great, the Royal Project reforested the once-barren mountainous areas in 6 Northern provinces and improved the hill peoples' livelihoods by introducing alternative crops and turning them into cash products.





The Royal Project Learning Institute

for Highland Sustainable Development

With the royal commitment of His Majesty King Maha Vajiralongkorn Phra Vajiraklaochaoyuhua to continue, maintain, and extend the Royal Project Foundation to ensure its continued operation based on the leanings and achievements from its past 50 years' endeavors, it is considered timely on the occasion of the Royal Project Foundation's 50th anniversary to share the Royal Project Model to reach a wider audience, national and international. The Royal Project Model represents an alternative development approach recognized as the best practice in sustainable highland development with the remarkable and balanced achievements in the social, economic, and environmental spheres. The United Nations has acknowledged the merit of this best practice model by advising its development organs like UNDP, UNODC, and FAO to consider applying the model to support the process of SDGs in other regions of the world particularly where poverty and narcotic drugs are of utmost concern. It is vital to note that the holistic and integrated efforts and the “understand, access, and develop” principle in fostering the practices according to the Sufficiency Economy Philosophy are considered

the key success factors for the operation of the Royal Project Foundation.

The Royal Project's methods briefly presented above have been widely accepted and trusted in the development circle for their being based on the systematic studies and research and the constant refinement of knowledge. The development activities implemented by the Royal Project Development Centers have, thus, been practical, efficient, and effective, contributing greatly to the highland development. The site and the extension outcomes of each of the total 39 Royal Project Development Centers combined, therefore, can function as a specialized learning center in its own right for the academics, agricultural technicians, college students, school children, interested individuals, and especially farmers to visit and get knowledge. Each year, the 39 Centers receive more than 500,000 visitors to learn about sustainable highland development in all dimensions as they believe the knowledge and best practice they will learn will be applicable elsewhere in Thailand and abroad. In Thailand, a number of government agencies having part of their responsibilities relating to the highland affairs like the Ministry of Agriculture

and Cooperatives and the Ministry of Natural Resource and Environment have applied various elements of the Royal Project Model in their works. The Highland Research and Development Institute, in particular, has implemented the Royal Project Model in full in its 44 Royal Project Extension Centers in eight provinces.

Apart from the transfer of the knowledge related to the alternative development approach of the Royal Project Foundation to other agencies or organizations in Thailand for further application, the achievements of the Royal Project Foundation have entitled the Royal Project Model to be adopted for development in other regions of Asia and the world. The UNODC has introduced the Royal Project Model to highland development projects in Laos, Myanmar, as well as in Columbia and Peru. The Kingdom of Bhutan also established Royal Projects in the similar nature for sustainable development. It can be concluded that the alternative development approach of the Royal Project Foundation is the best practice which has been adopted wide and far by development agencies and academic institutes for use in Thailand and other countries. The enormous positive impacts from the Royal Project Foundation's operation have formed a driving force for us to compile the knowledge learned from the works by the 39 Royal Project Development Centers to systematically set up a formal learning institute.

The Royal Project Learning Institute for Highland Sustainable Development will function to provide technical, research, and educational

services in various forms such as online or electronic learning, formal education/learning, training, and advance research, covering the social, economic, and environmental fields, for the academics, agriculture-related professionals, development workers, and organizational administrators to learn and apply the knowledge about the best practice technically correct in their pursuance of the effective, efficient, and successful development works.



The Learning Institute of the Royal Project Foundation emphasizes the significance of the systematic process for the secure and sustainable development with the distinctive feature addressing human-centered capacity building for the benefit of mankind. Therefore, the establishment of **The Royal Project Learning Institute for Highland Sustainable Development**, to demonstrate that the knowledge and experiences accumulated from the implementation of the alternative development approach in the Royal Project's Approach can contribute to the achievements of the SDGs, is to fulfill the ultimate goal of integrated sustainable development.



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