BBP | Biodiversity-Based Products
as an economic source for the improvement of livelihoods and biodiversity protection (ASEAN)







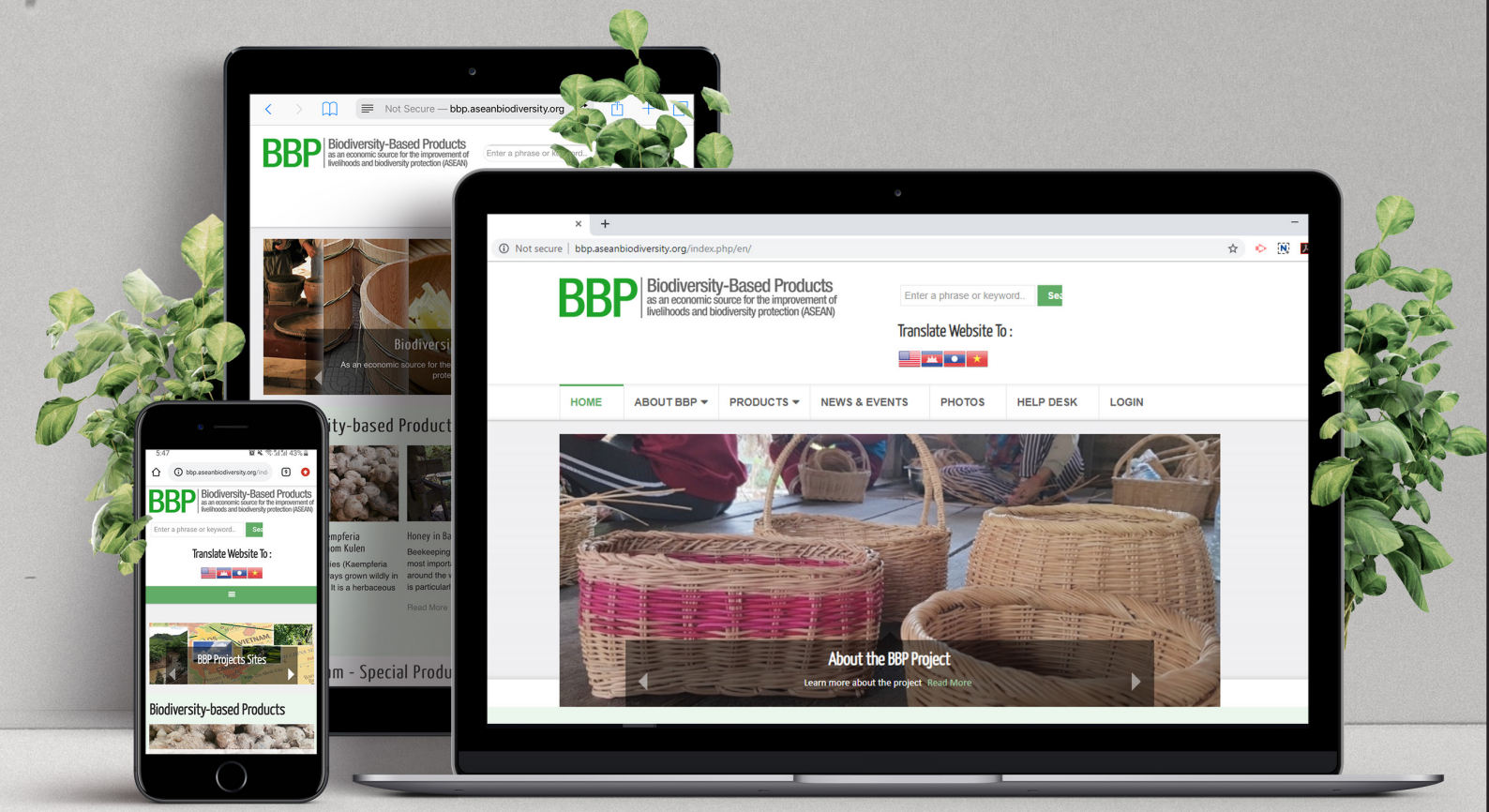
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Business and biodiversity:

Nature conservation on a commercial basis

As the world moves towards sustainable development, countries are coming up with innovative strategies and approaches to strike the balance among its three key aspects: economic growth, environmental protection, and social inclusion. Often these three contradict each other — economic growth is often to be taking its toll on the environment, while strict environmental protection is said to harm economic growth and exclude certain social groups, etc. Nevertheless, since the Rio Convention in 1992, the triple bottom line of sustainability – people, planet, profit – has become increasingly accepted in the business community. A key actor in all this is the private sector, which is a primary mover for economic growth. Businesses, whether small, medium, or large corporations, are important allies in providing opportunities for both the conservation of the environment and improvement of human wellbeing. Large companies have committed themselves to universal principles on human rights, labor, environment, and anti-corruption in the United Nations (UN) Global Compact and other initiatives.



These businesses are more and more considering the importance of natural resources and biodiversity, especially in terms of their value to their enterprise and economic development opportunities. Many have developed various strategies and mechanisms to place more efforts on environmental protection and commit themselves for example to the responsible sourcing of inputs. With biodiversity as the main source of their raw materials and ecological services needed for the smooth running of their business, the private sector significantly benefits in its conservation. During the UN Biodiversity Conference in Sharm El Sheikh, Egypt in 2018, the Convention of Parties (COP) recognised the important role of the private sector in the conservation of natural resources. The Parties to the Convention of Biological Diversity (CBD) stressed that mainstreaming biodiversity in the business sector will significantly contribute to efforts against biodiversity degradation. The Convention also promotes and strengthens best practices on sustainable consumption and production as implemented in the business sector; these practices favour the conservation and sustainable use of biodiversity. A key step to bring business and biodiversity together is the transition to sustainable, biodiversity-friendly economies. It is sometimes referred to as Business Biodiversity Concept, which is defined as "commercial enterprise that generates profits through production processes which conserve biodiversity, use biological resources sustainably and share the benefits arising out of this use equitably"[1].

There are several initiatives that focus now on promoting business actions for biodiversity-friendly production and commercialisation, mostly targeting the agriculture, forestry, fisheries, and tourism sectors.

Biodiversity-based Products (BBPs):

Providing sustainable income and protecting biodiversity in the ASEAN

Although it is only three per cent of the world's total land surface area, the ASEAN region is home to rich natural resources and biodiversity that offer significant potential for socio-economic development. Understanding and acknowledging the value of biodiversity has therefore been an imperative in any effort — whether public or private — towards progress.

Notably, the ASEAN Member States or AMS (composed of Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam) host about 18 per cent of all known flora and fauna species on Earth; three of the

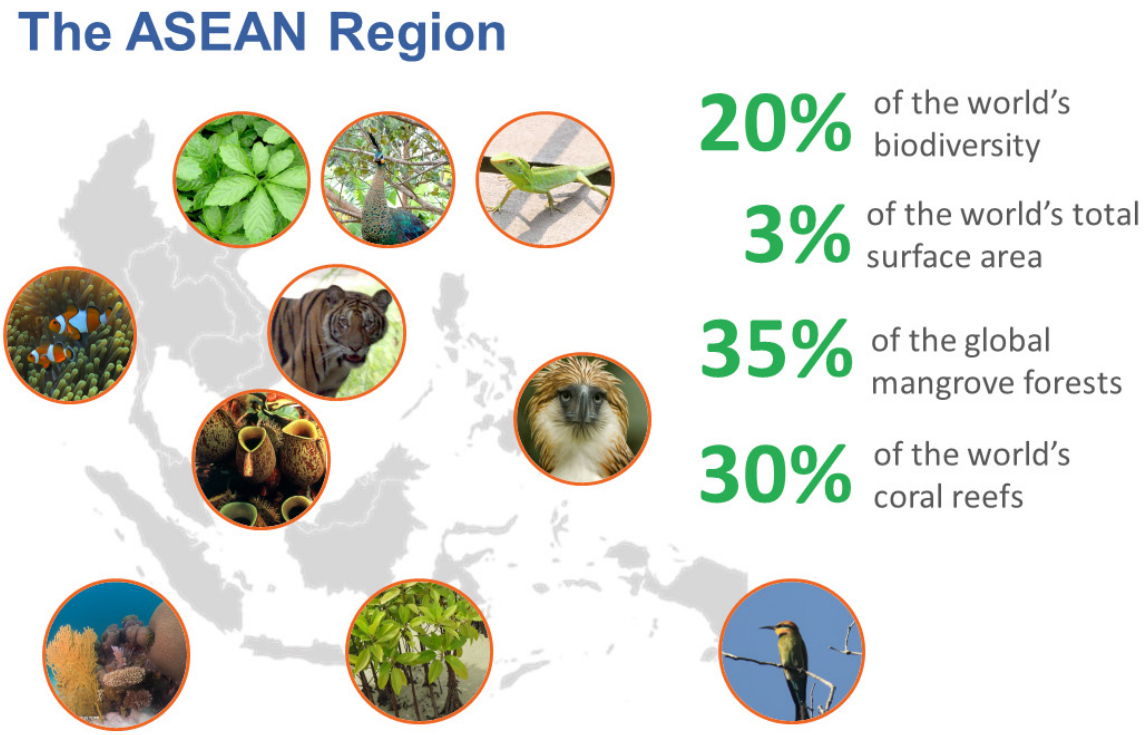
[1]Bishop J., Kapila S., Hicks F., Mitchell P., and F. Vorhies. 2008. Building Biodiversity Business. Shell International, Ltd., IUCN.

18 megadiverse countries (Indonesia, Malaysia, and the Philippines); about 35 per cent of the global mangrove forests; and 30 per cent of the coral reefs. This wealth of biological resources does not only represent the diversity of life; it also poses immense opportunities for economic development. While services provided by nature are at the basis of many economic processes, those economic activities often also alter biodiversity and ecosystems and degrade them when not done carefully.

The AMS aspired to use this economic potential of biodiversity by further developing sustainable trade relations for biodiversity-based products at the national, regional, and possibly global level. Biodiversity-based products (BBPs) are physical, tangible products and services that are dependent on or derived from biodiversity resources or the natural ecosystems.

However, the potential of BBPs, especially for the local population in buffer zones of protected areas in the region, was not sufficiently analysed and their market potential was often unknown — challenges that were addressed by the project *Biodiversity-based products (BBP) as an economic source for the improvement of livelihoods and biodiversity protection*. The BBP Project specifically aims to support the AMS in the promotion of BBPs for the improvement of livelihoods and biodiversity protection, according to their needs.

Funded by the German Ministry of Economic Cooperation and Development (BMZ), the BBP Project is one of the three modules of the German – ASEAN Centre for Biodiversity (ACB) Cooperation Program entitled *Protection of Biological Diversity in the ASEAN Member States in Cooperation with the ASEAN Centre for Biodiversity* (CARE4BioDiv). On behalf of the Deutsche Gesellschaft für International Zusammenarbeit (GIZ) GmbH, the four-year project was jointly implemented by the GFA Consulting Group and the ACB from March 2015 until June 2019.



The Project used the following methodologies and tools:

1. Capacity WORKS as the GIZ management tool to identify and monitor the five Success factors: Strategy, Cooperation, Steering Structure, Processes, and Learning and Innovation
2. Environmental communication for sustainable development
3. GIZ ValueLinks methodology on promoting pro-poor green value chains. As part of the BBP Project, in cooperation with other biodiversity-related projects around the world, a specific guideline on biodiversity-based value chains was developed
4. State-of-the-art media and training materials to communicate, globally network, and train stakeholders in the ASEAN region

Together with the national partners in Cambodia, Lao PDR, and Viet Nam, different biodiversity-based value chains were piloted in selected ASEAN Heritage Parks (AHPs) and National Protected Areas.

Considered as one of ASEAN's interventions in mainstreaming biodiversity in the business sector, the BBP Project laid the groundwork for related policy formulations, provides lessons learned from the pilot projects implemented, and produced several knowledge products as references for similar future projects.

Biodiversity-based value chains

The Project supported the development of BBPs along the value chain approach, referred to as biodiversity-based value chains or BBVCs.

BBVCs aim at adding value to biodiversity and are comprised of the following: the sustainable sourcing of raw materials as input according to certain environmental, social, and economic criteria; the sequence of related business activities for consumption, which range from production to transformation and marketing; and the set of enterprises that perform them such as producers, processors, and traders. Unless benefits arising from the commodification of biodiversity can be added, all value chain actors, from local communities and private sector to governments, will have little motivation to implement the sustainable conservation of biodiversity.

Promoting the development of a BBVC has been bright in the Project´s pilot countries of Cambodia, Lao PDR, and Viet Nam. In a BBVC approach, the development objective commenced with the economic growth of the local livelihood that progressed to environmental protection and social development.







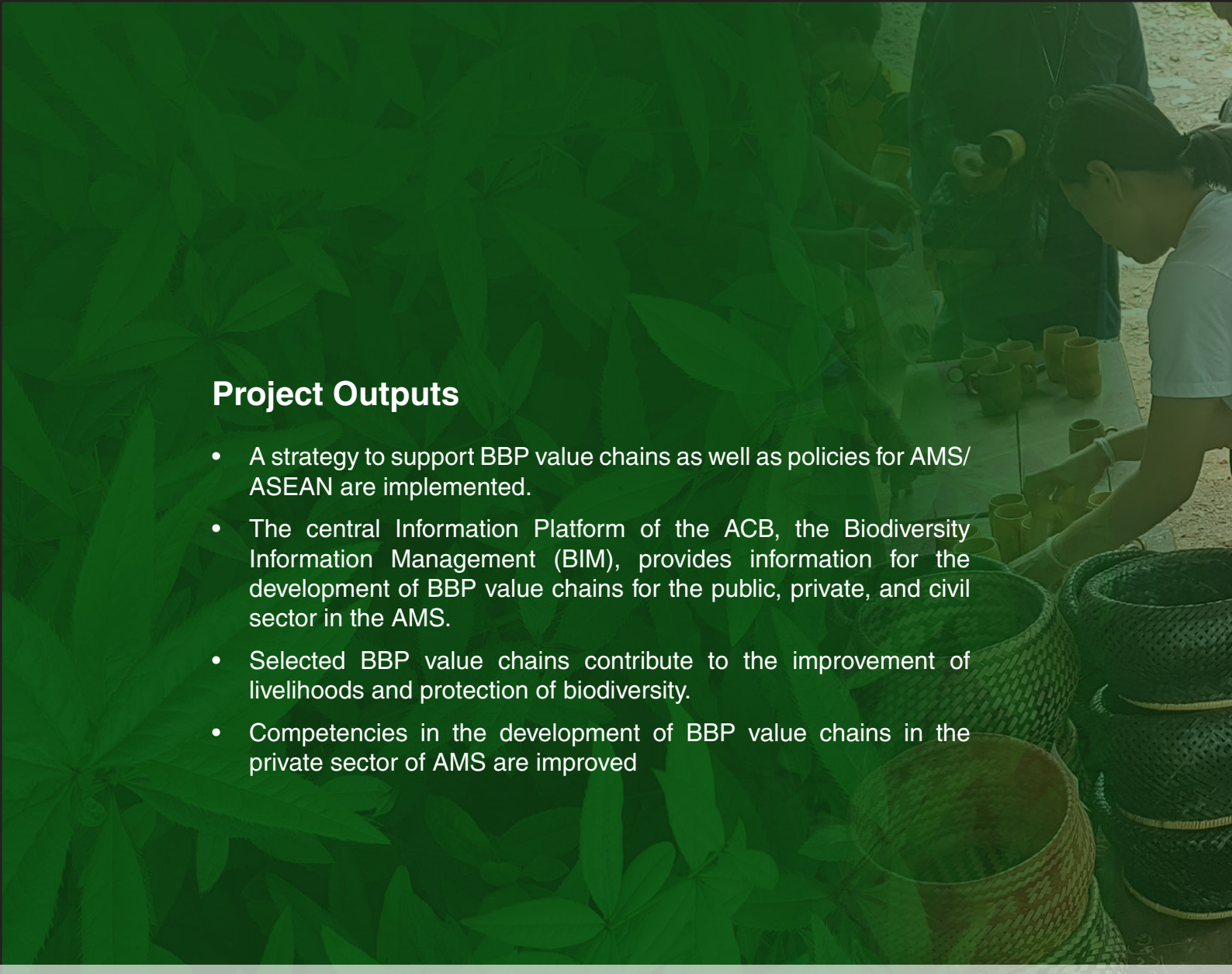


The BBP pilots in Cambodia, Lao PDR, and Viet Nam: *An overview*

The Project chose three countries to lead the development of BBVCs as models for further upscaling in other AMS. In Lao PDR, the project involved communities in the buffer zone of Nam Ha National Park for the development of a bamboo value chain. In Viet Nam, BBVCs around medicinal bath herbs and Giao Co Lam medicinal tea were piloted with households in five communes in Hoang Lien National Park. It also piloted honey and the popular vegetable Bo Khai with households in six communes around Ba Be National Park. The partners in Lao PDR and Viet Nam, the park management and local households, started their field-based activities in the value chain development in April and May 2017. In Cambodia, the value chain development began in June 2018. In this fairly short period, these villages were able to place their BBPs in the market as their associations or clubs were strengthened through business planning and capacity building in the enhanced production of the different products and sustainable resource management. Partially, the villagers are the producers and marketers of the final products, while in other cases, premium sales-purchase agreements were concluded with the villagers as raw material suppliers and custodians of the natural resource inputs and the respective processing companies. Among other activities, the in situ and ex situ planting measures with seedlings from newly established nurseries further contribute to the sustainable management and conservation of biodiversity.

The pilot measures in Cambodia, Lao PDR, and Viet Nam have taken notable steps along the BBVCs from enterprise development at the village level to consumer product development through high quality production including compliance to markets standards and certification processes, as well as establishing or strengthening market linkages for communities.

The BBP pilots in the three ASEAN countries demonstrate that biodiversity is not only an ecological life support but an important source of livelihood and basis for economic activities if managed well.



Project Outputs

- A strategy to support BBP value chains as well as policies for AMS/ ASEAN are implemented.
- The central Information Platform of the ACB, the Biodiversity Information Management (BIM), provides information for the development of BBP value chains for the public, private, and civil sector in the AMS.
- Selected BBP value chains contribute to the improvement of livelihoods and protection of biodiversity.
- Competencies in the development of BBP value chains in the private sector of AMS are improved

Project Milestones

- A draft Policy Document tentatively titled Mainstreaming of Biodiversity Across Relevant Sectors through Biodiversity Based Value Chains was submitted to the ASEAN Working Group on Biodiversity and Nature Conservation (AWGNCB) for further refinement.
- Together with the Biodiversity Conservation Agency, a policy workshop was conducted in Viet Nam for the inclusion of BBP and value chains in the revision of the national Biodiversity Law.
- A central information platform with Help Desk feature is online and accessible at http://bbp.aseanbiodiversity.org/. The site is regularly updated with updates from the Project.
- In situ and ex situ planting measures for biodiversity conservation and sustainable use: specific promotion of home garden planting to reduce the pressure on the forests from unsustainable wild collection; reforestation in areas where natural raw material was depleted.
- Organisational strengthening of the households into clubs or associations was supported, including development of by-laws and regulations and various capacity building measures in business planning, marketing and branding, and sustainable management of natural resources.
- In Lao PDR, bamboo furniture and handicraft are being produced and sold by villagers around Nam Ha National



Park, providing stable income for the community producers. As a significant achievement, the bamboo products were awarded with the One District One Product (ODOP) certification in early 2019.

- In Viet Nam, the range of BBPs in Ba Be National Park and Hoang Lien National Park include honey, Giao Co Lam tea, Bo Khai vegetable, and medicinal bath herbs. Sales-purchase agreements with private sector partners provide a premium price to households and guarantee long-term business relationships between the value chain partners.
- In Cambodia, black ginger medicinal tea and vine handicraft products were developed with local producer groups from Phnom Kulen National Park/Siem Reap and private sector business partners and are marketed between Siem Reap and Phnom Penh.
- The Project produced a video documentation of the BBP pilot measures and as well as various communication materials.
- Diverse capacity-building measures were conducted to promote knowledge and understanding of BBVC development among the ACB and Cambodia, Lao PDR, and Viet Nam project stakeholders and partners through training of trainers/facilitators, workshops, and learning visits.

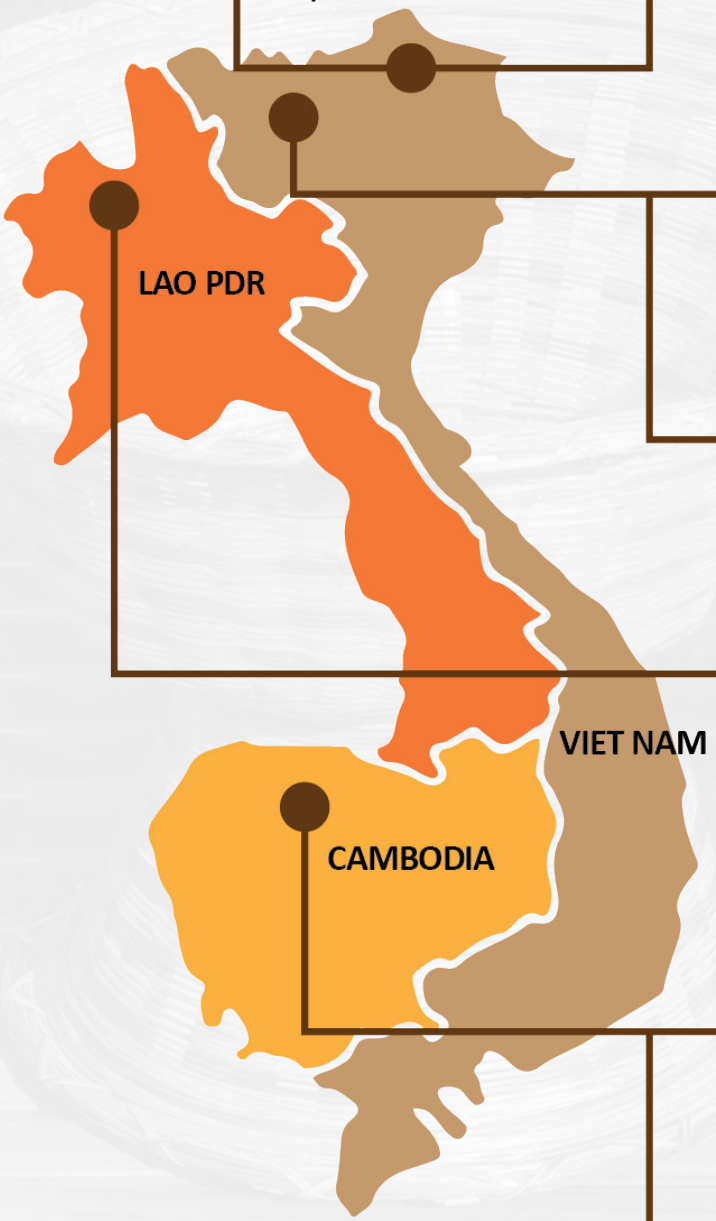
Ba Be National Park



Honey



Bo khai



Hoang Lien National Park



Giao co lam



Medicinal bath herbs

Nam Ha National Protected Area



Bamboo furniture and handicraft

Phnom Kulen National Park



Black ginger



Vine handicrafts



Adding value to nature:

Biodiversity-based products for local livelihoods in Cambodia



The Phnom Kulen National Park (PKNP), a 37,373-hectare protected area in Northwestern Cambodia lies approximately 50 kilometres North of Siem Reap town, where the world-famous heritage temples of Angkor Wat are situated. With an elevation of up to 500 metres above sea level, Phnom Kulen is named after the evergreen lychee tree species (*Litchi chinensis*, or "kulen" in Khmer). It is divided into two distinct plateaus and is the source of the Siem Reap River and a critical part of the upper water shed catchment for Siem Reap Province. The PKNP is also the most sacred mountain in Cambodia and is of immense spiritual, cultural, and historical value.

Acknowledging the potential of sustainable biodiversity resource utilisation for livelihoods as an important conservation strategy in PKNP, the area was selected as one of the project sites to promote biodiversity-based products (BBPs). The large-scale clearing of forest land for cashew nut plantations and unsustainable use of natural resources affects the biodiversity of the park.

In June 2018, the PKNP management together with the BBP Project started to organise the communities of three villages in the park´s buffer zone for the establishment of value chains for black ginger and vine (or climbing fern) handicraft. Following the value chain methodology, the Project pursued market link-ups with private sector partners to strengthen access to markets, branding, and promotion of the BBPs.



Valuing traditional medicine - The Black Ginger value chain

Black ginger species (*v*) is endemic in the wilds of PKNP. Black ginger is a short-lived ginger plant with dark purple type of root and has been the subject of increased scientific interest in recent years. Since this species has been degraded in the wild, the locals started to grow it in their home gardens. Black ginger is an important plant in traditional medicine for several treatments as well as food supplements.

Black ginger's blackish root is bitter but has a gentle spice and aroma. Various studies emphasise its health benefits such as cure for liver problems, digestive stomach disorders, and as a natural supplement in maintaining male vitality. While being well-known in many Asian countries, the medicinal qualities of black ginger have just recently become appreciated in Cambodia and the demand is growing. However, the villagers around PKNP have not widely used this medicinal plant and mainly sold black ginger to local traders at a low price since they were often not aware of the benefits of the plant and lack better market access. The participating 26 households in the villages of Anlong Thom and Thmor Chrunh were encouraged to cultivate black ginger in their home gardens between cashew trees, coconut trees, mangoes, and lychees, among others in order to enhance their source of income. The Project provided black ginger rhizomes as seedlings for the villagers and strengthened the participants' knowledge on best practices of black ginger planting, harvesting, and storing.

The BBP Project supported the whole black ginger value chain — from cultivation and harvesting, to processing to tea, packaging, labeling, and marketing. A business relationship has therefore been established between the villagers and a professional tea producer near Phnom Penh. The Keo Mony Association, dedicated to support specifically local communities' livelihoods, has the facilities for tea processing, packaging,



and labeling and was supported by the Project in enhanced marketing of the new product, mainly online and through radio promotion. The tea producer and the villagers signed sale-purchase agreements, securing the villagers with a long-term buyer, and the producer with sustainable supply of black ginger, thereby establishing a win-win situation for both stakeholders, producer, and farmers.



Through the established biodiversity-based value chain for black ginger, the local communities are provided with another source of income. The benefit of black ginger is that in can be cultivated in partially shaded areas, hence it can be grown in home gardens or between existing cashew nut trees without the need for new agricultural area expansion. The increasing demand for medicinal black ginger products offers a long-term perspective for livelihood improvements even for villagers in remote locations like buffer zones of National Parks.

Controlling an invasive species through handicraft weaving

The villagers of Thmey village in the buffer zone of PKNP mainly live from growing cashew nut trees which can only be harvested around March and April. Apart from the cashew trees, villagers also produce upland rice and cassava, and raise livestock. Some villagers, mostly women, have some off-farm income from collecting Non-Timber Forest Products (NTFPs) like medicinal plants, fibre materials, pandan leaves, or fruits. However, people are struggling to get a stable income and to support their children´s higher education.

Voir Lelor or *L. salicifolium*, also known as vine or climbing fern, can be found near the rivers of PKNP and is considered an invasive species. In the past, it has occasionally been sold to traders who in return sold it to some villages for the production of small handicraft items like combs. However, there was no real market for such products so the villagers neglected this species, not knowing about its potential as a stable income source.

Experts assessed the potential of the vine and found it perfectly substitutes rattan as raw material for handicraft items, considering rattan is a diminishing resource which regenerates very slowly. The vine can regenerate within six months and spreads extensively if not controlled. The



logical consequence was to control the expansion of the invasive species through its use as raw material for handicraft which also provides income for the 21 villagers in Thmey who decided to join the vine handicraft value chain pilot.

The BBP Project established contact with the Angkor Handicraft Association (AHA) in Siem Reap, an association dedicated to provide income for the local people and to promote high-quality handicraft items from Siem Reap. Through the different trainings conducted by an AHA trainer, the villagers learned about sustainable cutting techniques for the vine, and the preparations for the processing into handicraft products. Several modern designs, which meet the market demand, were introduced to the villagers. Initial hesitation about this new activity was quickly overcome after selling the first pieces of bracelets. Through the facilitation by AHA, more buyers like restaurants and shop owners from Siem Reap to Phnom Penh ordered specific designs in larger volumes. In case of new design wishes, the AHA trainers teach the villagers the required new skills and requirements so that the customers would be satisfied when receiving the order. If an order does not fulfill the quality requirements of a high-end customer, the villagers can still sell the pieces in local markets, thus providing them with income in either way.

Many women and elderly people joined this project since it allows them to be flexible in their time next to taking care their children and their homes. It also gives them an opportunity to earn a stable income, especially outside the harvesting season for cashews and lychees.

The sustainable use of vine/climbing fern supports not only the local livelihood but also biodiversity protection through











From food to furniture:

Adding value to bamboo resources in Lao PDR

The Nam Ha National Protected Area (Nam Ha NPA) is known to have one of the highest cultural and biological diversity in Lao PDR. It is the lone ASEAN Heritage Park (AHP) in the country and is located in the northern province of Luang Namtha. Nam Ha NPA covers a total land area of 222,400 hectares and spans over all five of the province´s districts. Ten years after its establishment as a national protected area, it was designated as an AHP in 2003. With its forest and grassland ecosystems, Nam Ha's mountains are teeming with vegetation and harbors a significant number of wildlife, particularly mammals and birds, and various non-timber forest products (NTFPs). The park is also home to the Nam Tha River, the first major tributary to the mighty Mekong River after it enters Lao PDR.

The high dependence on NTFPs and limited livelihood options had local communities around Nam Ha NPA engage in illegal logging, slash-and-burn agriculture, and clearing forest areas for rubber tree plantations and infrastructure construction. From the area's vast bamboo resources, the locals mainly harvested bamboo poles or young bamboo shoots as food for their own consumption or for selling to outside traders. With such limited benefits, there was little motivation for the villagers to protect the existing bamboo forests. Moreover, limited access to markets and lack of processing skills to add value to the bamboo were among the constraints identified in the communities. Biodiversity protection as well as economic development proved to be challenging around Nam Ha NPA.

To bridge these gaps and limitations, the BBP Project, together with the Department of Forestry under the Ministry of Agriculture and Forestry and its provincial and district line agencies, established a bamboo value chain in four villages located along the buffer zone of Nam Ha NPA. The participating 96 households in the four villages



of Hadnalaeng, Sopxim, Sinoudom, and Hadyong were organised into two producer groups per village — one group for furniture and one for handicraft production. In the harder furniture production, usually, only men are members. The handicraft groups have both male and female members, especially older people who can still contribute to the households´ income.

In a first step, group-formation took place, including the development of group regulations and business plans and the set-up of a group fund. Up to 30 per cent of the income from sales are set aside in the respective group fund for further investments and long-term financing of the business operations. A key preparatory step was the bamboo forest inventory which was jointly conducted by the villagers and the local agriculture and forestry office data from the forest inventory, sustainable management plans for the villages´ bamboo forests were developed.

A number of technical trainings on sustainable harvesting and professional production of bamboo handicraft and furniture items were conducted, including proper soaking and oven drying to prevent insect infestations. The villagers also underwent trainings on natural resource management, leadership, and gender. Next to strengthening the groups´ knowledge and capacities in sustainable bamboo production, the Project also linked the producer groups with the market. The Lao Bamboo Trader Association (BTA) for example is an active private sector partner of the Project, not only for training the villagers in the various bamboo-based handicraft and furniture designs to meet the market demands but also as a conduit to the final consumption market. Village outlets were established and are well received by various buyers passing by the villages, such as tourists or travelers to or from nearby China. The constant growth in sales is also largely attributed to the participation in different local and national trade fairs

that provided opportunities for business matchmaking, to showcase the products, gain new market access and expand the biodiversity-based business operations.

The processing of bamboo into handicraft and furniture products are new profitable ventures and sources of income for the villagers. A bamboo pole was previously sold for about 2,000 LAK (ca. USD 0.25) only, but one bamboo wind chime (handicraft) can be sold for 30,000 LAK (ca. USD 3.50), of which one villager can make about seven pieces a day and sell directly. A set of table and chairs can be sold for 1 million LAK (ca. USD 120) or more. Moreover, the producer groups are constantly expanding the product portfolio, following the market requests brought to them. The bamboo livelihood also touched based with the tourism sector around Nam Ha NPA. Tourist agencies have established tour stops at the villages for the visitors to see and learn about the bamboo production, and pay a tour fee to villagers, which provides additional income.



Project beneficiaries appreciate that among others, they can use the new income through the bamboo products to support their children´s school education. Some villagers have also shifted from slash-and-burn agriculture and other seasonal work to full-time bamboo production. All have expressed their happiness about the new, steady income source compared with the unstable NTFP collection before. Aside



from improving economic development, this has also paved the way to helping the protection and maintenance of the ecosystem that the biodiversity value chain relies upon.

A major milestone and reward for the work of the past years was the awarding of the One District One Product (ODOP) certification for the producer groups in early 2019, which was strongly supported by the districts of Luang Namtha and Nalae of Luang Namtha province as well as the district governors. This certification, issued by the Ministry of Industry and Commerce through its district offices, affirms compliance with the national quality standards for traded goods and emphasises the locally sourced raw material under systematic management.

The bamboo value chain pilot in Lao PDR has shown that sustainable management of natural resources and economic development can go hand-in-hand. The value chain methodology brings together government, private sector, and local communities to find better ways in reducing poverty by using but not depleting the natural resources. Biodiversity-based enterprises have an incentive to conserve biodiversity as their businesses rely on those resources and provide new opportunities for local communities in remote places around protected areas.





Enhancing sustainable livelihoods and environment conservation through biodiversity-based value chains in Viet Nam

The Hoang Lien National Park, an ASEAN Heritage Park, is located in Viet Nam´s northwestern district of Sa Pa. It is situated at a height of 1,000-3,000 metres above sea level in the Hoang Lien Son Mountain Range. The park covers an inner area of 29,845 hectares with a buffer zone of 38,724 hectares.

The park hosts an abundance of flora and fauna due to the varying landscapes on its mountainous terrain and valleys. These scenic features attract a number of tourists from all over the world, making the area a hub for commercial establishments that serve as income sources for locals. However, the influx of tourists, the spread of infrastructure development, and the growth in population bear negative impacts on the Park's diverse natural resources. While tourism in Hoang Lien, Sa Pa district has spawned ambulant economic spinoffs for the locals to trade goods and services, these are on a seasonal basis only and not all local population equally benefit from it. The degradation of its forest ecosystem is a result of the conversion of forestlands into farmlands or commercial spaces. Other causes are excessive hunting and a growing population where almost 23 per cent of the households around the national park are poor and depend on forest resources for their livelihoods. These harmful practices disrupt the delicate balance between economic development and biodiversity protection in the area.



In order to enhance conservation activities in Hoang Lien National Park while providing livelihood support for local communities, the *Biodiversity-based products as an economic source for the improvement of livelihoods and biodiversity protection in ASEAN* (BBP) Project piloted different BBPs along the value chain approach.

The Project worked not only on strengthening the local communities' capacities in sustainable management of biodiversity-based livelihood sources but also focused on establishing or strengthening the market access for the villagers and the products. Through close cooperation with respective private sector business partners, premium sales-purchase agreements were concluded between the villagers as suppliers and the processors or direct market access to shops and hotels was supported.





Giao Co Lam Value Chain

In mid-2017, the BBP Project organised 52 households from the three communes of San Sa Ho, Ban Ho, and Ta Van in Sa Pa District for a Giao Co Lam tea value chain. Before the Project started, most of the households relied on subsistence farming such as rice, gourd, aromatic spices, squash, and Giao Co Lam.

Giao Co Lam (*Gynostemma pentaphyllum Cucurbitaceae*) is a crawling vine abundant in the park. It is commonly consumed by locals to prevent diseases related to blood and liver, thanks to its high saponin content. The tea is made from the harvested and dried leaves of Giao Co Lam.

Through the BBP Project, the household beneficiaries were introduced to the plant's distribution, growth conditions, and market demand. They were also trained in proper planting, harvesting, and post-harvest handling of the Giao Co Lam leaves which improved the final product's quality. The farmers were linked by the Project to the H'Mong Cat Cat Cooperative, which became the Project's business partner for professional tea production and marketing. The H'Mong Cat Cat Cooperative was provided with a modern drying machine for the tea leaves, and a vacuum packaging machine to ensure the product's food safety and freshness. The intervention also established nurseries, and the seedlings contributed to higher yields in the home gardens, as well as in the restoration of Giao Co Lam in the forest areas where it was nearly extinct. The roots of the Giao Co Lam help stabilise the soil under a network of growing plants, especially in Sa Pa where much of the landscape, while steeply sloping, is extensively used for farming.

The Giao Co Lam leaves that the farmers grow are now sold as tea by Cat Cat Cooperative with better packaging and labeling which indicates the important contents such as saponin and flavonoid and its health benefits. The H´Mong Cat Cat Cooperative buys from the farmers through a sales-purchase agreement at a higher price compared to the market. Accordingly, this is due to the increased quality of the Giao Co Lam raw materials as a result of better tending and harvesting practices and post-harvest handling. This agreement also secures continuous raw material supply for the tea production and gives in return better benefits to the farmers. This contributes to a more stable income and reduces the pressure on the forests through other unsustainable or harmful livelihood practices.

In order to promote the product to a wider market, the Project supported the H'Mong Cat Cat Cooperative's participation in the Fifth One Commune, One Product Fair in Quang Ninh Province in 2017 where larger contracts were signed with regular buyers in Hanoi. Additionally, a promotional outlet for the Cooperative´s Giao Co Lam tea was established in Cat Cat Village with high tourist traffic. The Giao Co



Lam tea is so highly demanded, that the cooperative seeks to expand the value chain model to other farmers. Since Giao Co Lam grows best in partially shaded areas, it is a perfect plant for intercropping and does not require any land clearance for expansion. It is also an ideal plant for home gardens; hence, many farmers are currently extending the growing of Giao Co Lam on their land. With this prospect, the Giao Co Lam value chain model and the close cooperation among the different actors along the chain has a bright future ahead to support both the local people´s income and biodiversity protection of Hoang Lien National Park.

Medicinal Bath Herb Value Chain

Farmers in Ban Ho and Tong Sanh Commune in Sa Pa district often depend on seasonal farming activities for their living and so was their earning which rose at harvest seasons and dipped during the wintry months of November to January. While they used their income to cover basic necessities and farm inputs like seedlings for the next planting season, it was not enough to meet the growing needs of their families, particularly the children's schooling, additional farm equipment to hasten ploughing, and other farm inputs to ensure higher yield.

The introduction of the BBP Project on developing the medicinal bath herb value chain in July 2017 brought new hopes for 93 households from the two communes to engage in another livelihood activity which will augment their existing source of income. It was around this time that the Hoang Lien National Park management, through the BBP Project, began to establish cooperation with a commercial producer of medicinal bath herbs and other providers of medicinal baths for tourists around Sa Pa as business partners in the bath herb value chain.



Medicinal bath herbs are known among ethnic groups in Viet Nam to treat aching muscles, joints, flu, itching, constipation, and other conditions. These medicinal herbs are considered to form part of the ethnic group´s traditional knowledge of healing from nature.

The villagers participated in the Project´s various learning activities about conserving, planting, harvesting, and processing of the medicinal bath herbs. They also learned how to properly raise their own saplings to further support the long-term planting of the valuable medicinal bath herbs around Hoang Lien National Park.

As part of the value chain model, the Project connected the villagers with business partners like Hung Dung Company, a commercial bath herb producer; and Stone Garden Homestay, a bathhouse for tourists in Ta Phin village. With growing tourist numbers in Sa Pa, the demand for bath houses or spas that use medicinal bath herbs thrives. The partnerships with the bath herb manufacturer and hotels and spas ensure the long-term cooperation through premium sales-purchase contracts. The private sector partners will support the expansion of the bath herb value chain model after the Project ends, carried on through further investments in other villages by the companies and the villagers themselves.

Earning an attractive additional income encouraged some of the households to expand the growing areas for medicinal bath herbs on barren land where they planted their own seedlings or the saplings received from the Project. Through the strong support of in situ and ex situ planting measures for the large variety of bath herb species, the biodiversity of Hoang Lien National Park will be conserved and maintained, while the bath herb tradition of Northern Viet Nam will be valued as a means of livelihood support.









Honey Value Chain

The buffer zone of Ba Be National Park makes an ideal habitat for beekeeping, a venture that is not new to this area. The BBP Project however emphasised the use of local bees, compared to some foreign bees that found their way to Ba Be in earlier times. A total of 44 households from Khang Ninh, Nam Mẫu, Quảng Khê, and Nam Cường communes, some of them completely new to beekeeping, decided to join the Project and were organised into four beekeeping clubs, one per village. Four experienced beekeepers were elected as club leaders who then helped the new members in the set-up of the honey production, and are the custodians of the modern honey extractors that were provided by the Project.

At Ba Be, the BBP Project supported the development of appropriate organisational club structures for the beekeepers with own regulations as well as with capacity building in advanced beekeeping techniques, breeding, and disease management in order to build a strong brand for Ba Be National Park's honey. The beekeepers also attended trainings in negotiation skills, business planning, and marketing and branding as the Project aimed at enhancing the links between producers and buyers such as shops or hotels around Ba Be.

While the volume of harvested honey is still low especially for the newcomers, it already provides a surplus to the households´ income, if not consumed by themselves.









The Ba Be honey from local bees only who source their food in the surrounding forest areas, is praised for its quality, texture, and taste by buyers who gladly pay a higher price for the golden liquid. To ensure the viability of the beekeeping value chain in Ba Be, particularly in terms of opening up to market arrangements and expanding market access, the BBP Project helped the beekeepers to establish contacts and initial contracts with shops and hotels in Ba Be. With increasing volume due to the splitting of beehives every year, it is expected that larger markets like Hanoi could be targeted in the long run.

At present, the 44 project beekeepers in Ba Be have 220 beehives, with the bees contributing not only to the local livelihoods. Bees play an important role in the overall ecosystem by pollinating flowers, vegetables, and fruits in the national park area, including the agricultural land, by transporting pollen from plant to plant as they collect nectar to bring to their hives, thus also contributing to one out of every three bites of food.



Bo Khai Vegetable Value Chain

Most households around Ba Be National Park rely on subsistence farming; raising pigs, chicken, and freshwater fish; or fermenting alcohol which they sell locally.

Some households have been growing Bo Khai in the past — a shrubby green leafy vegetable that they cultivated and raised on a parcel of land near their houses. It is considered a staple side dish in the cuisine of Northern Viet Nam.

Through the BBP Project in coordination with the Ba Be National Park, the Bo Khai value chain was initiated. What started with 42 households has now expanded to 111 households in the two communes of Khang Ninh and Quảng Khê. After attending several training sessions on improved growing, tending, and harvesting of Bo Khai, households were provided with seedlings to plant mainly in their home garden. The seedlings were raised in project-supported nurseries to enhance the growing of Bo Khai in the home garden and reduce the pressure on wild collection in the forest. Among the new techniques learned is the pesticide-free production practice, which was positively recognised by the farmers because of its positive effects on their health.

The Bo Khai harvests have a steady stream of buyers. Farmers deliver to hotels and restaurants in and around Ba Be District and are happy that they can increase





the volume of the harvested and sold Bo Khai since the previous "harvesting" technique usually involved ripping out the plant completely. As one of the main interventions, farmers were taught to cut only the top and the plant regenerates, allowing more harvests. The newly organized Bo Khai clubs recently signed an agreement with the San Ha Cooperative as a long-term business partner and buyer of Bo Khai. San Ha Cooperative has linkages with stores in Hanoi, where Bo Khai is highly demanded too, and was urgently looking for more supply. By securing an attractive price and a guaranteed purchase of Bo Khai at a premium price compared to the regular market, San Ha could secure the supply and return benefits to the local communities. This is a win-win situation for both stakeholders in the value chain. The cooperative will continue to work with the households after the Project ends on sustainable Bo Khai growing in home gardens. The participating households already expanded their Bo Khai growing areas when they had land available, while other neighbouring households expressed their interest to join the model after recognising the successful cooperation among the partners, from park management to villagers and the cooperative.

With Bo Khai being an all-time favourite dish of the Vietnamese, the success story of the Bo Khai value chain is certainly not ending here.

















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