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Working Paper

Promotion of NTFP Value Chain in the Cardamom Mountain and Tonle Sap Landscape

Introduction

This Working Paper intends to provide information for the Royal Government of Cambodia (RGC) to consider in developing *Sub-component 2.2: Promotion of NTFP Value Chains* of the International Development Association (IDA) funded project entitled *Cambodia Sustainable Landscape and Ecotourism Project*.

The paper contains five sections:

- Background and Context
- Non-Timber Forest Products in the Cardamom Mountain and Tonle Sap Landscape
- Best Practice in Project Implementation and Approaches
- Development Partner Collaboration
- Recommendations

The World Bank commissioned three research papers focusing on Non-Timber Forest Product (NTFP) Value chains in the Cardamom Mountains and Tonle Sap (CMTS) Landscape. Summaries from these papers, and in some cases direct text, have been included in this working paper, highlighting key findings and relevant information.

The research papers include:

- UNDP (2017). NTFP Value Addition for Increased Benefit for Rural People. Economic & Policy Research on Non-Timber Forest Products in Cambodia.
- Conservation International (2019). Sustainable Landscapes and Ecotourism in Cambodia
- Nippon Institute for Economic Research (2019). NTFP Value Chain Analysis. Phase I –
 Prioritisation of NTFPs

Background and context

Project background

The objective of the Cambodia Sustainable Landscape and Ecotourism Project is to improve protected area (PA) management, and to promote ecotourism opportunities and non-timber forest product (NTFP) value chains in the Cardamom Mountains Tonle Sap (CMTS) landscape. To achieve this, the project will undertake strategic investments that are strongly aligned with RGC's development plans, in targeted areas within this landscape, through three components: (1) Strengthen Capacity for PA Landscape Planning and Management; (2) Strengthen Opportunities for Ecotourism and NTFP Value Chains; and (3) Improve Access and Connectivity. The project area is expected to cover the proposed provinces of Pursat, Koh Kong, Battambang, Kampong Speu, Kampong Chhnang, Siem Reap and Kampong Thom.

Additional Financing from the Global Environmental Facility (GEF) will address critical gaps in the IDA Project by strengthening forest governance and adding resources to community-based economic development. Specifically, the additional financing aims to fill gaps and support better outcomes from Sub-Component 1.2: PAs Landscape Planning, Management and Enforcement and Sub-Component 2.2: Promotion of NTFP Value Chains. The implementation arrangements and indicators from the IDA Project will remain the same. The overall estimated value for activities under Sub-Component 2.2 will be around US\$3 million.

The GEF grant funds will provide additional financing to scale-up the IDA project by helping to strengthen the capacities of important stakeholders (CPA communities, forest rangers, provincial authorities, and local community producer groups), and will connect better with private enterprises working on NTFP, ecotourism and agricultural products. This will contribute to a more inclusive and collaborative approach to sustainable forest management, expanded livelihood opportunities for local communities, and the improvement of forest and wildlife management. These activities are also closely aligned with those supported by other development partners who are leading conservation activities in the Cardamom Mountains, including UNDP, Conservation International (CI), Wildlife Alliance (WA) and Fauna and Flora International (FFI).

Cardamom Mountains-Tonle Sap Landscape

The CMTS landscape, which covers more than 3.8 million ha and includes one of the world's most productive freshwater fisheries and the largest protected forest in Indochina, is a global biodiversity hotspot and supports an estimated 5 million Cambodians with income, food, and water. Forests in the Cardamom Mountains provide several key services that underpin economic activities in the area, including ensuring the sustainability of the watershed in the CMTS landscape for the benefit of agricultural areas downstream. Water provision provided by these forests support agriculture in areas downstream of the Cardamom Mountains, including in Pursat, Battambang, and Kampong Chhnang, and provide freshwater and nutrients to support fisheries in the Tonle Sap Lake. An estimated 6.2 billion m³ of high-quality freshwater is provided by the Central Cardamoms Protected Forests. Many households in the landscape depend on farming and fishing on a full-time, part-time, or seasonal basis to supplement their income and depend heavily on fish for their protein and other nutritional needs (IFRDI, 2013).

Natural capital in the CMTS landscape is also important for Cambodia's resilience. Climate risk analysis indicates that drought and flooding because of extreme rainfall are challenges for Cambodia now, and these are expected to increase in the future. Analysis has shown that CMTS forests are key for regulating water flows, as they are hotspots within Cambodia for groundwater recharge (Arnan, 2019).

Loss of these forests could reduce stream flows by as much as 80 percent in the dry season, which could have significant negative impacts on large agricultural areas in Pursat and Battambang Provinces that rely on streamflow for irrigation. Forests in the Cardamom Mountains also help mitigate flooding from heavy rainfall events by acting as temporary stores of water as well as reduce potential soil erosion from the CMTS landscape by about 82 percent, and, thereby, heavy sediment loading in rivers. Although not contributing directly to Cambodia's climate resilience, the carbon stored in the CMTS landscape is important for climate mitigation in Cambodia and globally.

Socio-Economic Background

Community

The Cardamom Mountains are home to a variety of different groups, including the Indigenous Khmer Chong, ex-Khmer Rouge, internal migrants and provincial businesspeople. These heterogeneous communities are occasionally segregated and typically have little community cohesion or affinity. Developing fair and equal community organisations can therefore be difficult due to the unequal power dynamics. Gender inequality is also rife, with decision making power typically residing with the man, and gender-based violence, alcoholism and depression all common issues.

Communities in the CMTS landscape suffer from high levels of food and income insecurity and are vulnerable to both market and climate shocks. This multi-faceted poverty not only drives illegal forest behaviors, but also reduces their ability to participate in project interventions and community discussions.

2019 was an El Nino year and many communities, mainly in the Koh Kong area experienced water shortage leading to crop shortages and health issues.

Income generation

The CMTS landscape harbors an array of NTFPs, agroforestry and agricultural products, which are already being utilized for income generation for the local communities.

For remote communities in the Cardamom Mountains, main income streams are dependent on the topography and market, but in general, include rice, fruit trees and root crops. NTFP collection, such as bamboo, rattan, resin etc. is conducted but has been reducing over time and it is typically demandled through specific buyers. Illegal forest activities such as logging and hunting make up a proportion of income for some forest communities or surrounding villagers, whereby in general, poorer community members use the forest to cover medical expenses and food deficit, and richer community members use it to increase weather and buy assets.

Koh Kong province is a rice deficit region however in some of the southern and central regions where lowland rice production is possible, rice surpluses are sold for income. This generally reduces when moving into upland areas. There are some small-scale village-level rice mills however they're sparse and de-husking by hand is still common for many of the poorer households.

Fruit trees offer a main source of income for many community members across the landscape. Bananas, for example, in Thma Bang, had initial strong market demand and little oversight which led to expansion and deforestation, however with the rise of banana production in Kampong Speu, and its closer vicinity to Phnom Penh, prices have since reduced. Cashew, Rubber and Acacia trees are

common, however these are typically larger scale and owned by people outside the communities – poorer local community members will generate income as day labourers on these farms.

In upland areas, especially in Veal Veng, root crops such as ginger, turmeric & galangal are common sources of income for local community members and grow well in the fertile soil and cooler temperatures. In these upland areas where it is difficult to grow rice, many poorer community members work as day labourers on commercial cash crop farms like pepper plantations.

Wealth inequalities exist within rural communities with household annual incomes ranging from \$90 to \$2,400 (Fauna & Flora International, 2019). For the most remote communities, it is not uncommon for villagers to live outside the cash economy for the most part and rely wholly on subsistence farming.

Low income, food insecurity and medical issues are prevalent within CMTS communities and often lead to community members taking formal and informal emergency loans. It is common for these debts to be repaid through unsustainable forest practices such as hunting, logging and increased encroachment (Fauna & Flora International, 2018).

Markets

Market systems in the CMTS are young, sensitive and ambitious. At the local village level, producers will sell their produce mostly to external micro to small scale traders, and occasionally to an internal trader who might have a vehicle or be a specialist in a certain product. Traders will often have personal relationships with producers and can request specific agricultural produce or NTFPs on an ad hoc basis. This is a high risk system for the villagers, as if the traders change their minds, the producers often don't have other traders to sell to and the produce spoil and waste. This is a common issue in the upland areas of Thma Bang and O'Soam.

There is limited access to market information on product demand or requirements for both producers and traders. There is very little produce grading and high post-harvest losses in storage, disease and transportation. Most point of sale is at the individual household level with very few collection points or cooperatives, and value chain actors will most often operate on their own accord.

At the provincial level, Koh Kong, Srae Ambel and Pursat cities are core market hubs with traders buying and selling wholesale produce, however there is minimal structure and it is mostly unorganised. There are some foreign traders at the both the village and provincial levels, often who are interested in specific products such as turmeric, ginger or agarwood.

There is good access to credit with Micro Finance Institutions (MFIs) present in most of the remote communities, alongside some active savings groups which have been organised by external NGOs. Informal loan networks exist in all communities.

Land tenure issues

[The text in this section is from Conservation International 2019 (p. 6-10) unless otherwise referenced]

Land disputes in Cambodia are mainly linked to the granting of ELCs, forced evictions, actions of local authorities and powerful elites, SLCs, unclear boundaries, and family disagreements. This is particularly true for those upland areas where land use is contested there is often disputes between settlers, migrants, and concession lands. In agricultural low-lands, land is less disputed. Formalising

the land titling process has unfortunately undermined soft title possessory rights, which are often denied when properly becomes highly valued (Grimsditch, 2012) thereby creating a risk of forced eviction for many.

An NGO study in 2015, deliberately unreferenced, surveyed 382 random households from Kampong Speu, Kampong Chhnang, Pursat and Battambang. It found that less than half (48.1%) of the respondent villagers who have rice fields in the region held documents to prove their ownership. This was also the case for 57.1% of villagers who have residential land, 76.9% of those who have Chamkar¹ land, 72.1% of those with forest land and 67.3% of the community land. These lands had only certification issued by the village and commune chiefs. Land disputes were most likely to arise over agricultural land of forest land, reflecting the importance land has in providing rural communities with their sources of subsistence and income. Over 75% of the respondents claimed that their household does not have sufficient income for maintaining the basic livelihood needs, and that losing access to land significantly worsens this situation.

The NGO study found that there are three main drivers of land disputes:

- Competing land claims under the 2001 law versus customary possession;
- Inconsistent decision-making between different levels of government; and
- Slow issuance of land title in contrast to rapid granting of land concessions

The study found that economic land concessions were the root cause of 73.2% of land disputes (concentrated in Kampong Speu and Pursat provinces), and social land concessions prompted 26.8%.

Of the land disputes studied, 89% were resolved at the village or commune level. There were also six out of 28 disputes with companies that were solved at the commune levels and five resolved at the district level. The study concluded that goodwill amongst parties, clear decision-making authority for government agencies and community cohesion were important factors in successful resolution of the disputes.

Legal framework on NTFP collecting and trading

[The text in this section is from Nippon Institute for Economic Research 2019 (p.5) unless otherwise referenced]

The Law on Forestry 2002 and Sub-degree 2003 on "Community Forestry Management" recognize the traditional user rights of local communities living within or near the permanent forest reserves to collect dead wood, picking wild fruit, collecting honeys, taking resin and collecting other forest by-products. Article 40 of the law on forestry indicates that local communities have the right to barter or sell forest products if the activities do not affect the sustainability of the forest. Nevertheless, the third party or customers, who have collected the forest by-products from local communities with the purpose of trade, shall pay the royalty and premium payment to gain the permit for products transportation.

Article 2 of the Sub-degree 2006 on "Forest and Non Timber Forest Products Allow for Export and Import" states that exporting non-timber forest products that were extracted from legal source of natural forest are permitted. The number of processed and non-processed forest and non-timber forest products including but not limited to furniture, assembled bamboo sticks, rattan, vine, all kinds of wood, resin, wild mushroom, flower, leaves, fruits of wild plants are allowed to export. However,

¹ Chamkar land is a Land which is used for growing crops other than rice

the exports of forest and non-forest products are subjected to pay taxes, excepted for the export of the processed products following traditional styles at family or tourist scales (Article 6).

Regulations related to NTFP royalties have been found conflicting, resulting in ambiguity in enforcement and in turns creating rooms for informal fees and negatively affecting trade flows (Mulcahy, G and Boissière, M, 2014). Article 53 of the Forestry Law (2002) stipulates that local communities who collect and sell NTFPs from State Forests under customary user rights are not required to pay royalties or premiums for commercial or subsistence use. Article 12 of the sub-decree on Community Forestry Management, however, provides an ambiguous statement by referencing Article 55 of the Forestry Law which states that the royalties and premiums, in terms of the right to harvest, process, transport and sales of NTFPs, are payable. Because of this ambiguity and informal fees, coupled with costs and difficulty in obtaining transport permits, NTFP traders and collectors tend to avoid regular routes and instead transport their products through informal channels.

Non-timber forest products in the Cardamom Mountain and Tonle Sap Landscape

The following section summarises findings from several reports on NTPF value chains in the CMTS. All reports acknowledged limitations due to limited primary data, therefore findings have been presented in order to stimulate ideas in structuring an in-depth agricultural and NTFP market assessment for the project.

Bamboo

[The text in this section is summarised from UNDP 2017 (p. 12-19) unless otherwise referenced]

Background

Bamboo is available throughout Cambodia and has mainly been collected for household use. It is fast growing, up to 30 meters in six months, and has an extensive root network which allows it to prevent soil erosion, store carbon and preserve the water table (Lugt P. et al, 2009).

Domestically, bamboo provides a wide range of materials and is a significant source of income for local communities and the Cambodian economy. The most popular products made from bamboo in Cambodia are poles and slats (for fishing, farming and construction), chopsticks, toothpicks, bamboo matts, barbecue sticks, incense sticks and handicrafts (Conservation International, 2019).

Market system

Stock

Throughout Cambodia, natural stock have markedly declined over the years, however there still remains a considerable amount of domestic and wild species suitable for commercial use (Conservation International, 2019). Within the CMTS landscape, the bamboo has been identified in 14 communes, most commonly the wild species Bambusa procera, known locally as Tha Ngor. Tha Ngor bamboo has been said to be highly concentrated in two communes, including Dang Peaeng of Srae Ambel district and Pramaoy commune of Veal Veaeng district. In Dang Peaeng, the natural bamboo stock was estimated at 3,000 hectares (Nippon Institute for Economic Research, 2019).

Collection

Although wild bamboo is widely available, due to the low value and demand, it is only collected when there are confirmed buyers, normally with an advance payment for the processor or broker.

Transport

Permits are needed to transport big volumes of bamboo which local collectors are often not able to procure. Transporters take care of facilitating these permits and other fees necessary.

Processing

Bamboo processed products are typically basic, labour intensive and lower-value market alternatives. Baskets, chopsticks, incense sticks and food sticks are the most popular, with typically only weaved baskets produced at the village level (Nippon Institute for Economic Research, 2019). Furniture is manufactured by micro entrepreneurs and an array of innovative products are starting to be produced by new players in the industry such as bamboo straws, waste pellets and char for use in agriculture.

Wholesale

Traders connect the village level collectors to the market outside the village. They are typically micro or small sized and are lacking in entrepreneurial skills, capital and innovation.

Retail

Retailers are often micro to small-scale and are mostly found in markets. Bamboo poles are mainly sold in depots and construction shops. There are some village level bamboo basket producers who sell at markets themselves.

Export

Bamboo baskets are exported by retailers/wholesalers to Thailand, and are typically of low value and sensitive to shocks in Thailand's economy.

Enabling environment

There is no clear institutional support or services for the bamboo sector in terms of research, product development and market access. There are currently a number of NGO-led initiatives however they are fragmented in locality and intervention.

Quotas, permits and royalty permits are required for commercial harvest and transport of bamboo. These act as a barrier for collectors to move up the value chain and can force them to remain in the informal sector.

Relations and linkages

There are established informal links from collectors and processors to market which are bridged by traders or aggregators. Due to the low demand and the products basic nature leading to little room in negotiation on price, there is minimal motivation for communities to collect. Strengthening market linkages, increasing market volumes and market reach could support the collectors, and an established link with a trader or buyer may allow collators to advance to producers.

Experienced stakeholders

- Organisations working on Bamboo
 - o German Corporation for International Cooperation GmbH (GIZ)
 - Winrock
 - The World Wildlife Fund Cambodia (WWF)
 - o NTFP-EP Cambodia
 - Angkor Handicraft Association
 - The Rattan Association of Cambodia (RAC)
- Bamboo Enterprises
 - Bambusa Global Ventures (BCG)
 - Bopha Angkor Enterprise
 - o Cambambo Enterprise

Rattan

[The text in this section is summarised from UNDP 2017 (p. 20-27) unless otherwise referenced]

Background

Rattans are a spiny, climbing palm in the subfamily Calmoideae with over 550 different species belonging to 12 genera. They have been harvested from local forests for subsistence use for centuries and have been used to make baskets, mats, utensils and for construction (Peters, 2014).

Market system

Stock

There is limited data on rattan stocks in the CMTS landscape however it has been reported that commercial species of rattan are native to the area, further research will be needed to identify the specific species and stocks (Conservation International, 2019).

Collection

Rattan is mainly harvested from the wild as domestic cultivation can take up to 4-5 years of growth which can make the sector uncertain and unstable. There are no known rattan plantation but enrichment plantings have been conducted by community forest groups assisted by WWF Cambodia and projects like Cambodia HARVEST.

Aggregation

There is minimal community aggregation unless initiated by an NGO partner. Most rattan is sold unprocessed to traders who will aggregate and sell on.

Processing/Production

Rattan requires boilers and a space to dry to be treated. There is only one confirmed wholesaler in Srae Ambel who is known to do this on a commercial level in the CMTS landscape.

Furniture - Processing is not necessary for furniture production, which is mostly manufactured by micro and medium scale enterprises located in Phnom Penh, Preah Sihanouk and Battambang. These enterprises mainly target the small domestic market which caters to tourist-oriented establishments.

Baskets - Rattan basket is a small sector focused mainly on low-value disposable baskets for fruits and flowers (Kampong Speu) for the domestic market and traditional peak baskets (Siem Reap) exported to Thailand.

Wholesalers

Traders and wholesalers will typically stay with buyers they already know and products they're certain that will sell. There is minimal innovation or expansion.

Retailers

There is high competition among rattan furniture retailers.

Export

Exports are weak with Thailand being the largest partner however complexities of permitted procedure, low competitiveness and a lack of international market access are barriers to exporting rattan furniture.

Enabling environment

Quotas, transport and export permits and royalty payments are required for semi-finished and finished products at commercial scale. These push some to stay in the informal sector and others not to grow.

Relations and linkages

All relationships are informal, wholesalers dictate the price with some negotiating power for the collectors, prices have risen over the years.

Experienced stakeholders

Enterprises

- Rattan Association of Cambodia (RAC)
- Veal Rinh Enterprise
- Krang Art Rattan Cluster

Organisations

- WWF Cambodia

Resin

[The text in this section is summarised from UNDP 2017 (p. 27-32) unless otherwise referenced]

Background

Tapping wild trees for resin is a common and historical income generating activity in Cambodia. Resin can be collected almost all year round, except between March and April, and a single individual can tap 50 to 100 trees per week (Conservation International, 2019). Tapping of resin trees is done in at least 10 provinces, in the north and north east regions of Cambodia, and it is estimated that from 28% to 43% of household in these regions engaged in resin tapping in 2014.

Market system

Stock

Although prevalent in the Prey Lang and Eastern Plains landscape, the communities in the CMTS landscape do not collect resin at the same scale. The CI study notes that this may be due to ecological or cultural differences and emphasises the significant knowledge gap concerning the extent of resin producing trees, market value and community skills in the CMTS landscape.

As the resin trees are usually large emergent Diptocercarps, changes in land use and logging are a threat to the volume and sustainability of resin supply.

Collection

Resin collection is done by households with traditionally owned resin trees, mainly in state-owned forests. There are no known plantations of resin trees.

Aggregation

In the Prey Lang and the Eastern Plains landscapes, aggregation is done at the village, commune and then provincial level in Phnom Penh. There is no data on aggregation of resin from the CMTS landscape.

Processing

There is currently limited segregation of resin according to species or clear quality standards for higher value uses of some species. Simple semi-processing, including filtering and packing, can increase the value of the production, however permits and royalty payments are required to do so as it requires storage and additional activities that are considered beyond customary rights. These permits tend to beyond the capacity of collectors and small-scale aggregators so they do not process.

Wholesale

There are a small number of key wholesalers and exporters who are the main drivers of the resin value chain. They have connections to established markets and the capital to consolidate high volumes and fulfil legal requirements. The demand in the domestic market is mainly for use in sealant and waterproofing for boats, whereas the international demand is typically for use in paint and varnish manufacturing (Conservation International, 2019)

Export

Provincial wholesalers will often transport directly to boarders where the resin is picked up by importers.

Retail

Retail of both raw and filtered resin is by a few long established enterprises in Phnom Penh and provincial capital markets. Mainly small and medium scale, they sell the raw resin to boat and house owners.

Enabling environment

Trade of resin beyond customary rights requires licenses and permits for transport that small scale producers are not able to procure due to limited capital, network and know-how. Regulations and processes of trading licensing, transport and royalty payments may therefore exclude small scale producers and traders from engaging markets beyond local villages or communes.

Enforcement of legislation is weak, including the protection of rein trees. Chapter 8 Article 29 of the Forestry Law prohibits the logging of tree tapped for resin under customary rights. However there are reports that resin trees are being logged.

Relationships and linkages

Within the CMTS landscape, there is currently limited data on the relationships between market actors.

Experienced stakeholders

- Korean Research Institute
- Institute of Biodiversity and Wildlife Research
- WWF Cambodia
- NTFP-ED
- Conservation International

Agricultural products

In the CMTS landscape, many forest communities produce and sell raw and processed agricultural and agroforestry products. It may therefore be worthwhile expanding the definition of non-timber forest products to include agricultural and agroforestry products. In this section, a brief overview of some current products are noted.

Agro-forestry: Banana, Cashew, Rubber, Acacia and Seasonal Fruits

In many communities within the Central and Southern Cardamom Mountain National Parks, locations likely to be key eco-tourism sites, banana plantations are a main source of income. Their strong market demand and good price has led them to be a driver of community-level forest encroachment. By bringing the technical and market support under the purview of the project and CPAs management planning, profits and market stability can rise and drivers for encroachment can be reduced.

Cashew, rubber and acacia trees are being grown at an exponential rate by both local communities and small businesses. Incentivising biodiversity conservation certification through the market systems could have impact on a large area of land, however this would necessitate direct management rather than just technical assistance. Participatory Guarantee Systems certification (PGS) could be a potential route to increase value added and could fit under a CPAs management.

Agricultural products: Ginger, Turmeric, Galangal, other root crops and herbs, medicinal plants, teak, swallow/swift birds' nests

In upland areas, root crops such as ginger, turmeric & galangal are common sources of income for local community members and grow well in the fertile soil and cooler temperatures. Japanese companies are a main buyer of these root crops, especially in O'Soam, and the prices and demand seem to be robust. These crops can be integrated into an agro-forestry system and processing into dried or powdered products could be a potential route for adding value.

Processed products: Essential oils – Lemongrass, Ginger, ylang ylang; charcoal (bamboo or acacia); bamboo products (e.g. chopsticks); cosmetics

The production and sale of essential oils could have great potential as a conservation-compatible economic initiative throughout the Cardamoms. Fauna & Flora International has been supporting a community enterprise in Thma Bang in lemongrass essential oil production and the enterprise shows to be autonomous and profitable. With high prices, strong domestic market demand and scope to branch out into other oils such as ginger, ylang ylang, cardamom and camomile, essential oils could be a promising product to focus on. In addition, the bamboo and acacia mentioned above could be processed into a variety of products, including sustainable charcoal, chopsticks, or furniture.

Challenges for Communities Reliant on NTFPs

[The text in this section is summarised from Conservation International 2019 (p. 20-21) unless otherwise referenced]

In supporting forest communities to develop their incomes from NTFP and agricultural collection/production there are a number of challenges which will need to be overcome. These have been summarised in a briefing document compiled by Mulchy and Boissière (Mulcahy, G and Boissière, M, 2014).

- Some communities close to markets lack the raw materials to produce commercial products as the forests were already severely degraded. Other communities have the raw materials, but transport to market is either costly or non-existent.
- Information on current prices and market trends is lacking among NTFP collectors
- Those seeking access to NTFPs through registration of Community Forests found the process to long and complicated; and CF registration did not give communities the ability to combat encroachment and the harvest of their NTFPs by outsiders.
- Local communities who collect and sell NTFPs from State Forests under customary user rights, as per article 53 of the Forestry Law (2002), are not required to pay royalties or premiums for commercial or subsistence use. However, the Sub Decree on Community Forest Management (article 12), passed in 2003, states that the royalties and premiums, in terms of the right to harvest, process, transport and sell NTFPs, are payable as outlines in article 55 of the Forestry Law. Law enforcements institutions at the numerous checkpoints have used this ambiguity to their advantage.
- The informal fees, royalties and the cost and difficulty of obtaining transport permits have encouraged many traders and collectors to avoid the regular routes to market, instead they transport their product illegally and the trade is not officially documented.

There are significant risks that must be appropriately mitigated in the development and growth in NTFPs in the CMTS landscape. A large portion of the communities in this landscape lie adjacent to protected areas; therefore, most of the initiatives must focus on the efficient use of the currently available cultivated land, rather than require expansion into natural areas. This requires extensive community land-use planning, monitoring and setting up systems of compliance such that any products from areas illegally converted or degraded cannot have access to the market.

In addition to this, reliance on wild harvested NTFPs requires a significant management scheme to ensure no negative impact on wild-harvested species or their habitats. Rattan and bamboo may be able to be cultivated in forested areas under a form of agroforestry management, but there must be clear conservation provisions to avoid natural areas being degraded.

Due to high transport costs and low economies of scale, communities will likely be uncompetitive on the NTFP market, therefore investments in this landscape should be conducted under a sustainability framework which provides incentives for social and environmentally responsible practices which increases the value of the product.

Key Areas of implementation and Approaches

This section presents the core principles of two approaches to development, a Sustainable Livelihoods Approach and a Market Systems Approach. Further readings can be found in the bibliography. This section also presents key areas of project implementation, including points to consider, resources and best practice.

Sustainable Livelihoods

In 1998, the British Department for International Development (DFID), adopted this definition of Sustainable Livelihoods:

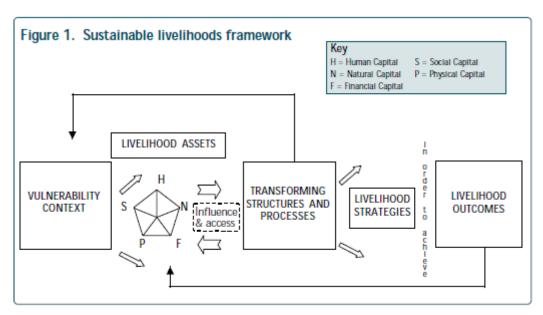
A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (DFID, 1998).

Sustainable Livelihood Approaches (SLA) were first developed in the 1980's as a reaction to widespread dissatisfaction with traditional development work. They differ by examining people's lives as a whole, rather than focussing only on their financial situation. A SL approach is one which is guided by SL principles and framework. Key principles and concepts of the approach include:

- Being people centred instead of seeing people as targets of development, they are seen as the actors and the protagonists of a project.
- Building on strengths Instead of providing people with assets the lacks, an intervention should understand peoples skills, knowledge and capacity and build upon them
- Empowerment Interventions should aim to empower populations by increasing their voice and influence and giving them a greater choice about how they make a living.
- Sustainable Sustainability is more likely if the first three principles are adhered by.
- Holistic An intervention should be aware of the complex nature of people's livelihoods and multi-dimensional poverty.
- Equitable An intervention should reduce exclusion of the poor and create inclusive mechanisms that allow them to participate and have greater voice and choice.

(IMM Ltd, 2001)

DFID developed an SL Framework which is to be adapted and modified to each context, however is good guidance for understanding how to reduce poverty and vulnerability. More information can be found in DFID Sustainable Livelihoods Guidance Sheets (Department for International Development, 2001).



Market System Development

Market system Development (MSD), also known as Making Markets Work for the Poor (M4P) is an approach to reducing poverty which enhances the way that poor populations interact with markets. The Springfield Centre defines MSD as:

...seeking to develop market systems so that they function more effectively, sustainably and beneficially for poor people, building their capacities and offering them the opportunity to enhance their lives.

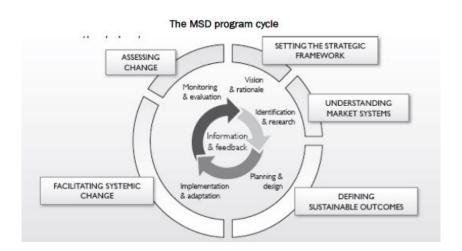
It notes that market systems can be broken down into three main areas:

- The Core This is where goods and services are exchanged between the providers and the consumers
- The Rules These include both the formal rules (regulations, laws) and informal rules (cultural norms and practices) which govern participation and behaviours in the market.
- The Supporting Functions These are the functions which support the core, for example infrastructure, financial services and skills and capacity. (The Springfield Centre, 2009)

Market System Development programming includes several core features:

- A systems perspective MSD recognises that all market actors, functions and rules, do not operate in isolation, but are instead, a part of an interacting system.
- Large scale or system change Interventions may start small, however will be part of a broader strategy to make markets work better for the poor.
- Sustainability Emphasis is on the sustainability of the system rather than the individual market actors
- Facilitation MSD interventions focus on facilitating changes that improve the market system rather than directly delivering solutions.
- Adaptive Management Recognising the complex and dynamic nature of market systems,
 MSD programmes monitor interventions closely and refine, adapt and improve strategies
 throughout. (Department of Forign Affairs and Trade, 2017)

An MSD programme will follow the below cycle, with the steps continually being revisited as more is learnt



Source: The Springfield Centre (2009)

Key areas of interventions

Setting the strategic framework

In addition to a thorough theory of change, a framework and approach should be decided upon in the programme planning stage. This will give structure and direction, help to reduce mission creep and will establish a base for monitoring and evaluation. Key points to consider at this stage include:

- Which approach will be most effective in the landscape and will best fits into the overall IDA project?
- How might improving NTFP values chains dovetail with Community Protect Area (CPA) and eco-tourism governance and implementation structures?
- What are the core principles of project delivery, what approach will the project take?
- What type of input from the communities is needed at this point?

Best practice

- Multi-stakeholder workshops to make these decisions with neutral or outside facilitators
- Discussion to be built from an understanding of MSD and SLA frameworks and principles to inform the structure and guiding principles
- Learning from challenges and successes from past projects in the region, see Development Partner (DP) section for details

Setting up the project management systems

Robust project management and monitoring and evaluation (M&E) systems from the start can reduce inefficiencies, improve oversight and increase impact. It can also facilitate easier data collection and milestone management.

- Does the project require a professionally developed project management system, activity monitoring system or participation database?
- Do project managers and team require technical trainings or support?
- What are the systems for communication and coordination with Development Partners? (see below for DP section)

Best practice

- Conducting training needs assessments
- Hiring in technical backstopping for capacity gaps
- Set up professional project management systems and participant and activity database

Product Selection

There are several methods to identifying and selecting products to focus on in an MSD project. There below steps are typical best practices.

1) Agricultural and NTFP market assessment

The NTFP focused research reports summarised in this paper all recognise their limitations due to a lack of raw, up-to-date data. In order to fully understand the product range, a thorough on-the-ground agricultural and market assessment in the region, can help to identify all potential products.

International Development Enterprises Cambodia have been contracted by Save the Children Cambodia to conduct a market assessment in Koh Kong for a DFAT funded project. Collaboration at the point could be worthwhile to share learnings.

2) Product prioritisation

After compiling a comprehensive list of NTFP and Agricultural products present in the CMTS landscape, a prioritisation process can take place. Product prioritisation can take two steps. The first step is to develop criteria by which to rank the products to help select the top six or so potential products. A more thorough market analysis and market mapping can take place focusing on these products to shorten this list further and identify the core products.

Primary product selection criteria could include:

- Economic opportunity (e.g. demand, potential for market improvement, competitiveness)
- Potential impact on Well-being (e.g. No. of people to be involved in this product market system, potential social exclusions, potential income gains)
- Potential impact of conservation outcomes (e.g. potential impact on encroachment, potential for product to be conservation compatible)

The products are scored and ranked according to the set criteria, this should be used to support a discussion on deciding which products to focus on.

Resources

- Fauna & Flora International in partnership with Practical Action have developed guidelines for implementing participatory market system development in a conservation context, including details on product selection.
- Swiss Contact have developed their own tools for Market Systems Development.

Private sector engagement

Engaging the private sector will be key in strengthening values chains of NTFPs in the CMTS landscape. In order to successfully engage the private sector it is important to understand their motivations and their incentives. Conservation may not be their top priority, it might instead be product quality, sustainability of value chain, publicity or profit for example. It is important to identify the key decision makers in the enterprise and build a relationship of trust. Understanding how they like to be contacted, be it by email, phone or in person can make them more likely to attend meetings, events or workshops.

The right private sector partners can be identified in various ways, either as part of the market mapping process in product selection, at business or thematic networking events or through contacts. Spending time on relationship building at the start will help to understand their needs and personalising the process. As the project continues, the relationships may change, especially if their interaction with this project is only a small part of their business.

Best practice

- Use market mapping tools, producer events and contacts to initiatie contact with relevant private sector partners
- Identify key decision makers and understand their motivations and priorities
- Invest in relationship and trust building

Resources

 Fauna & Flora International in partnership with Practical Action have developed guidelines for private sector engagement in an MSD context, including a section on successful private sector engagement.

Facilitation

In an MSD approach, the role of the implementing institution is to bring different market actors together and facilitate the strengthening of a value chain. It is therefore important for the facilitator to build their trust of partners to be able to facilitate productive conversations and interactions between all market actors.

Implementing agencies should, as far as possible, be as un-interventionist in the value chain as possible and support market actors to develop their own capacities and communicate better with one another. For example, if there is the need for business contracts between a producer and buyer, the implementing agency might build the capacity of the producer in business acumen and contract negotiation skills. The buyer could be supported in writing the contract and making sure it's fair and expectations are set. The agency could then support the negotiations, organising a meeting space and being a neutral facilitator, helping to spot issues and support both market actors to find solutions.

Alongside being a tenant of the MSD approach, in-person facilitation is a core element of project implementation and is a skill that can be learnt. Facilitation is the process where a facilitator guides group members to share ideas, opinions, experiences and expertise in order to achieve a common goal and an agreeable action plan. They help a group to collaborate, work effectively and to learn different ways of problem solving and are neutral and do not share their opinion. A good or bad facilitator can make or break elements of a project.

Best practice

- Implementing agency to take a facilitator role in market chain development
- Professional facilitation trainings for all field staff and those with stakeholder relations

Inclusive business models

In the CMTS landscape, various types of business models link villagers to NTFP and agricultural value chains. These include micro enterprises, traders, processors, retails and wholesalers. The type of business model adopted depends on the local cultural norms, the population, the product to be traded and the market context.

An inclusive business model (IBM) is a business model which not only describes how an enterprise does business, markets its products and sources inputs and finance, but one which also includes benefits for small holders groups and small value chain actors (FAO, 2015).

When supporting existing businesses or the establishment of new ventures, IBM principles can be considered:

- Inclusion of existing value chain actors
 - Activities should tap into existing business linkages and value chain actors who have existing relationships
- Inclusion of less endowed actors
 - Initial interventions should target the most committed and capable to give the business model the best chance of success. As the project progresses and lessons are learnt, opportunities can be made to others with fewer assets.
- Inclusion of diverse market outlets
 - Promoting farmers to sell products to a diverse range of buyers, reduces risk and strengthens market systems.
- Inclusion of right partner mix
 - Smallholder-based business models are typically driven by either the producers themselves (motivated by increased bargaining power, new markets etc.), buyers (motivated by increased volumes, niche markets etc.) or the NGO sector (driven by economic development, conservation etc.). It is important not to have over dominance by one actor alone as it can affect the inclusiveness or competiveness of the market.

(Adapted from FAO 2015)

Populations in the CMTS landscape harbour complex social structures, heterogeneous populations and wealth inequalities. Therefore in order to promote the establishment of fair and inclusive producer groups or cooperatives, strong and long term facilitation will be required. Private smallholder enterprises will typically be less facilitation heavy however to be inclusive should have a community benefit aspect of their business model.

Best practice

For successful smallholder enterprises, in addition to trainings in business and financial management, marketing and operational management, it is important to invest in trainings on problem solving and gender equality/women empowerment. Gender norms can stifle entrepreneurial success and ability for women especially to think critically and be empowered to act, can dramatically improve the economic viability of a business.

Development Partner Collaboration

The IDA funded Cambodia Sustainable Landscape and Ecotourism Project will work closely with numerous partners across the different components in order to build on existing synergies and to support and scale up existing successful interventions. This section outlines potential approaches to working with DPs, best practice and a summary of key DP experience.

Development partners to review, edit and add to this section especially

Key Development Partners

Fauna & Flora International, Conservation International and Wildlife Alliance have had a presence in the CMTS landscape for many years, all working with local communities on conservation and livelihoods development projects. By collaborating with these partners, the project gains a multitude of community knowledge, best practice and institutional technical support.

Types of collaboration

There are several modalities of collaborating with DPs on a project, the main approaches include:

- DPs are granted specific thematic or geographical components of the project which they implement and report to the RGC
- A non-implementing DP (e.g. UNDP) are granted with the management of specific thematic or geographical components of the project. They then coordinate the implementing DPs activities and reporting to the RGC
- DPs are contracted as technical support, focusing on increasing the capacity of RCG staff to implement all the activities

Best practice in collaborating with DPs

Granting project activities

- The process of granting components of the project to DPs should be fair and transparent. It should acknowledges the benefits of including all DPs active in the region and focus on the DPs individual strengths.
- Open and transparent communication with all partners

Development Partner management

- DPs should be provided with clear roles, responsibilities and expectations
- Geographic and thematic areas of interventions should be clearly defined
- Regular meetings with all DPs should be conducted throughout the project to share key learnings
- Clear reporting timelines, templates and indicators should be agreed upon by all parties at the start

Summary of NGO partner skills and experience

The following pages provide a summary of DPs experience in the CMTS landscape. This can be used as a platform for discussion on allocating components of the project.

Fauna & Flora International (no more than 2 pages per DP)

Cambodia Experience
Experience in NTFP value chain strengthening in CMTS
Institutional resources

Strengths

•••

Location and Project focus summary

Example in red

Commune	District	Project focus	Year
Tatai Leu	Thma Bang	Agricultural value chain strengthening	2016 - on-
			going
O'Soam	Veal Veng	CPA development	2013-15

Conservation International (no more than 2 pages per DP)

Cambodia Exper	rience		
Experience in N	TFP value chain	strengthening in CMTS	
Institutional res	ources		
Strengths			
Location and Pro	oject focus sum	nmary	
Commune	District	Project focus	Year

Wildlife Alliance (no more than 2 pages per DP)

Cambodia Experience
Experience in NTFP value chain strengthening in CMTS

Institutional resources

Strengths

Location and Project focus summary

Commune	District	Project focus	Year

Recommendations

This section provides a set of recommendations for developing and implementing Sub-component 2.2: Promotion of NTFP Value Chains of the International Development Association (IDA) funded project entitled Cambodia Sustainable Landscape and Ecotourism Project.

Recommendations

Policy

- Clarify, de-regulate and simplify the regulatory framework for the extraction and trade of NTFPs by local community collectors
 - Clarify the contradictions in the Forestry Law and Community Forestry Sub Decree pertaining to the extraction and trade of NTFPs by local community collectors.
 - Develop a streamlined systems for NTFP inventory, permitting, royalty payments, quotas and other requirements.
 - Mainstream environmental safeguards within the framework to ensure sustainable and legal sourcing of NTFPs.
 - o Communicate the updated regulatory framework to all market actors.
- Streamline Community Protected Area approval processes and strengthen their rights to long term resource use and land tenure.

Environmental safeguards

- Ensure that the promotion of NTFP and agricultural products in the CMTS landscape do not negatively impact protected areas or wild populations
 - NTFP value chain development to be closely linked to the CPA process, including community land use planning, monitoring and enforcement.
 - Robust management and compliance systems to be put in place for structured NTFP sourcing
 - Where relevant, promote sustainable harvesting and production through an environmental certification scheme.

Market systems development

- A structured market systems development approach
 - Conduct thorough baselines and market analysis on NTFP and agricultural products in the CMTS to fill knowledge gaps, inform the project and identify priority products.
 - Include gender, environment and climate change resilience in the product selection criteria.
 - Support the establishment and development of private and group-owned enterprises through incubator programmes for priority NTFP and agricultural products.
 - Provide strong technical support, oversight and advice from conservation, agricultural, economic and social professionals.
 - Conduct business and financial management, marketing and operational management skills trainings for key market actors.
 - Conduct women empowerment and problem solving trainings to all female market actors.
 - Invest in and introduce new technologies, tools and equipment to improve product design and quality.
 - Facilitate the improved communication and collaboration between market chain actors to increase efficiency in market systems.

- o Build on existing market networks and product sectors, associations and groups.
- Take a gender transformative or sensitive approach to change social norms which hamper efficient and successful market chains.
- Integrate climate change resilience projects to mitigate against negative impacts on product production, sourcing or transporting.

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