

Rattan Species In North Central Vietnam – Desk Study

Part of a 3 value chain analysis and programme development study



Companies

Connected with

Smallholders

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Introduction and acknowledgement

Early 2008 SNV Netherlands Development Organisation started an analysis for pro-poor economic development in agriculture and forestry dependent livelihoods in North Central Vietnam. The focus of this analysis was on people living in these districts that are still furthest below the Vietnam poverty line. In the six selected districts in three provinces¹ households, local businesses and entrepreneurs as well as local authorities and government departments were interviewed to identify potential products and value chains that can be enhanced for income and employment generation. Through an initial quick scan of key economic drivers for change and multi stakeholder validation workshops three main agriculture and forestry value chains were selected. These are Acacia (for pulp or timber), Rattan (for furniture or handicrafts) and Cassava (for starch or dried chips).

A more in depth study was commissioned by SNV over the June – August period of 2008 to identify opportunities and constraints for pro-poor value chain development. This study was carried out by two teams of consultants supported by SNV advisers in part of the field work and the validation workshops with stakeholders. One team of international and national experts² analysed the value chains from markets back to producers and the second team of national experts³ who did a baseline study in the same geographical area with special emphasis on the three selected value chains.

The two teams have produced a series of reports of which this report forms part. For each value chain a desk study and a detailed field study report was produced as well as a detailed report with recommendations and suggestions for implementation of value chain development interventions. The whole set of reports was completed with a baseline report.

SNV Vietnam would like to thank the two research teams and all stakeholders involved for their work and effort put into these studies which bring about a wealth of information on these selected three value chains.

The results of these studies are used to continue our work in North Central Vietnam in our efforts to contribute to the lasting reduction of poverty.

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¹ A Luoi and Nam Dong in TT Hue province; Dakrong and Huong Hoa in Quang Tri province; Minh Hoa and Tuyen Hoa in Quang Binh province. Later also Tan Ky and Thanh Chuong in Nghe An were added as SNV with partners is implementing the Pro-Poor Forestry Project in these districts.

² This team was lead by Mr. Chris Wheatley and Ms. Dai Peters and further included staff of the Hanoi based Handicraft Research and Promotion Centre and EDC of Lao PDR who participated in a smaller study for only rattan in Savannakhet province.

³ This team was from the Centre for Rural Development in Hue.

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1 - Rattan overview

Rattans are climbing palms belonging to the *Calamoideae*, a large sub-family of Palm family (*Palmae* or *Arecaceae*). There are around 600 different species of rattan belonging to 13 genera in the world. The largest rattan genus is *Calamus*, which about 370 species. Most of the best commercial species of rattan are members of this genus. The remaining rattan genera, *Daemonorops*, *Ceratolobus*, *Korthalsia*, *Plectocomia*, *Plectocomiopsis*, *Myrialepis*, *Calospatha*, *Pogonotium* and *Retispatha*, are centered in Southeast Asia. The countries with rattan resource in the world include Indonesia, Malaysia, Phillipines, Papua, Vietnam, Laos, South Asia, Australia, Central and West Africa

There are 30 species of rattan belonging to 6 genera found in Vietnam (INBAR). They are listed in Table 1

Table 1. Rattan genera and species in Vietnam

No	Genera	No. of species	Vietnamese name
1	<i>Calamus</i> L	19	May nep
2	<i>Daemonorops</i> BL	4	May nuoc
3	<i>Korthalsia</i> BL	2	May phuon
4	<i>Myrialepis</i> Becc	1	May rup
5	<i>Plectocomia</i> Mart et BL	1	Song la bac
6	<i>Plectocomiopsis</i>	1	Song voi

Source: VFSI, FIPI

Among 30 species, however, only 9 species are utilized and exploited commercially (Table 2). It is almost entirely collected from natural forests (wild) and home gardens (planted). For long time, rattan was planted in Red River Delta in North Vietnam and then spread to almost every Northern provinces and, since unification in 1975; it has also spread too much of the south.

Table 2: Rattan species of commercial importance in Viet Nam

No	Species	Diameter	Known distribution	Source
1	<i>Calamus poilanei</i> (<i>Song bot</i>)	Large (over 3 cm)	Widespread, especially the south, 200-1,100 m	Wild
2	<i>C. rudentum</i> (<i>Song da</i>)	Large (over 3 cm)	Almost every province, commoner in south.	Wild
3	<i>C. palustris</i>	Large (over 3 cm)	Widespread	Wild
4	<i>C. platyacanthus</i> (<i>Song mat</i>)	Medium-large (2-3 cm)	Every northern province, 100-1200 m (esp. 400-900 m)	Wild
5	<i>C. viminalis</i>	Medium (2-3 cm)	South	Wild
6	<i>C. tetradactylus</i> (<i>May nep/ruot ga</i>)	Small (1cm)	Throughout, especially northern provinces, 100-800 m, especially 100-500 m	Wild and home
7	<i>C. tonkinensis</i> (<i>May dang</i>)	Small (1 cm)	Widespread, nationwide	Wild and home
8	<i>C. amarus</i> (<i>May Nuoc</i>)	Small	North (provinces north of Hue)	Wild and home
9	<i>C. dioicus</i>	Small (1 cm)	Centre (Hue south to Dong Nai), 100-800 m	Wild

Source: VFSI, NTFPP

So far, the latest published quantitative data on the exploitable area of rattan stocks in Vietnam is 381,936 ha in 2005, according to the source from the Ministry of Agriculture and Rural Development, of which the North Central Coast, including Thua Thien Hue, Quang Tri, Quang Binh, Ha Tinh, Nghe An and Thanh Hoa is the biggest area (201,076 ha), after that is the South Central Coast with 180,270 ha. The figure also

showed that the explorable volume of rattan is almost 36,510 ton nationwide and its major species are “May Nep” and “May Nuoc”.

Table 3: Exploitable area of rattan in Vietnam

Unit: ha

	Northwest	Northeast	North Central coast	Central highlands	South Central Coast	Total
Natural rattan			201,076		180,000	381076
Plantation rattan	40	550			270	860
Total	40	550	201,076		180,270	381,936

Source: MARD, figures from provinces in May, 2005

Even this figure has not fully showed the stocks of rattan because of its availability in the Central Highlands recently, but the figure showed the potential of rattan in the North Central Coast of Vietnam. In practice, most of wild rattan volume are mainly observed and exploited in Phu Yen, Khanh Hoa, Gia Lai, Dac Lac, Dong Nai, Quang Nam, Quang Tri, Thua Thien-Hue, Quang Binh, Ha Tinh, Nghe An, Yen Bai, Ha Giang, Tuyen Quang and Binh Dinh provinces, meanwhile most of home rattan species are planted and exploited in Thai Binh, Hung Yen, Hai Duong, Vinh Phuc, Phu Tho, Thai Nguyen, Yen Bai, Ha Tinh, Thanh Hoa, Hoa Binh and Ha Tay provinces.

The Ministry of Agriculture and Rural Development has also recently approved the Plan to conserve and develop the Non-timber Forest Products to 2010, of which the area planned for rattan development till 2010 is 740.000 ha with 5 major plantation areas: Northeast, Northwest, North Central Coast, South Central Coast and Central Highlands (Decision No. 2242 /QD-BNN-LN dated 7 August, 2007).

Currently the NC region is a “hot site” for the plantation of rattan. All provinces in this region have developed rattan materials through a lot of plantation models of May Nep and May Nuoc, some of them have started harvesting. The expenses for plantation of May Nep in both cases of monoculture and intercropping are broken-down as shown in Table 4.

Table 4. Expenses for rattan plantation – comparing monocrop and intercrop

Expenditure	Unit	Unit price	Mono-crop		Inter-crop	
			Quantity	Amount	Quantity	Amount
Seedling	tree	800	12,000	9,600,000	3,000	2,400,000
NPK (50gr/tree)	kg	14,000	600	8,400,000	150	2,100,000
Thuốc BVTV, ..			-	-		
Labour			-	-		
Technical training			-	-		
		Total		18,000,000		4,500,000

1.1 Processed rattan

The most important product of rattan is cane; this is the rattan stem stripped of its leaf sheaths. This stem is solid, strong and uniform, yet is highly flexible. The canes are used either in whole or round form, especially for furniture frames, or split, peeled or cored for matting and basketry.

The processing of “May nep” and “May nuoc” are rather different. As for “May nuoc”, the harvesters often use simple tools like knife, sickle and hooks to harvest rattan. After cutting the tree, they peel the leaf sheaths, bundle rattan and hand carry it to purchasing place (rattan collectors/traders). The processing (sorting, cleaning, washing, sulphurising and drying) is mostly done by the processors/traders. They are

responsible for straightening, head cutting, removing the nodes, sulphurizing, drying, cleaning, grading, splitting, peeling, coring, bleaching and then drying to have finished rattan material.

The cleaned rattans are smoked using sulphur. Sulphurising process is done by covering clean rattan bundles with a plastic tent and smoking the sulphur inside the tent. The purpose of this process is to improve the cane whitening. It needs 7 to 10 kg sulphur for 1 ton of rattan and takes about 24 hours to be finished. The smoked rattans are then ready for air-drying.

The processes of splitting, peeling and coring are done by machines. In some places, especially in rattan craft villages (Phu Vinh, Ninh So, Truong Yen...) splitting and peeling are sometime done manually, in this case, the quality of cane are very nice but the productivity is rather low (only 10 kgs/8 hour as compared to 500 kgs/8 hour in case of machine, but local people sometimes prefer it because of high plasticity).

For larger diameter canes (May nuoc), sulphurising is replaced by boiling process. The canes are boiled in a tank with a mixture of water and diesel oil with a ratio of 100 to 4 for about 1 hour. Diesel oil is applied to remove the waxy component of the canes. Later the canes are air-dried in a standing position for a period of about 1 week. Drying process is necessary to reduce water content. Both smoking and drying process are necessary to protect the cane from fungus and insects (powder post beetles).

Although rattan is exploited in many provinces throughout country but the processing of rattan in Vietnam now is clustered in the North Central Coast (Thua Thien Hue, Quang Tri, Nghe An...), South Central Coast (Quang Nam, Da Nang) and the Red river delta (Hung Yen, Thai Binh). The processed rattan materials here are delivered to all craft villages in the country for the production of handicraft products.

Table 5: Processing stages of rattan

Stage	Area	Players	Processing Steps	
			Purpose	Activities
Raw Material	Forest and garden	Cutters/ Farmers	Harvesting	Cutting Removing the sheath
		Forest-gate collectors	First Treatment (cleaning/cutting)	Preliminary sorting Bundling
Semi-finished material	Hung yen, Thai Binh, Vinh Phuc, Ha Tay, Quang Nam	Processors & traders	Surface treatment, Grading	Straightening Head cutting Removing the nodes Sulphurizing (May nep) or Boiling with oil (may nuoc) Drying Cleaning Grading (colour, size) Splitting Peeling Colouring Bleaching (SiO ₂ , Cl, NaOH, Sulphur) Drying

1.2 Rattan products

The major usage of rattan in Vietnam is for handicraft production. There's over 700 craft villages nationwide working with natural fibres, of which bamboo and rattan are the main ones.

May nep, May dang, May nuoc... is popularly use for weaving items (tray, basket...), Song da, Song bot, Song mat is used for furniture. Most of furniture and basket wares are for export. There is a clearly difference between the rattan handicraft items in the Northern provinces as compared to the ones in the Central and Southern provinces. The craft persons in the North mainly use "May" as material for their products, and these products are popularly weaving and small items like baskets, boxes, trays, mats,

bags..., meanwhile most of the craft persons in the Central and South use “Song” or both “Song” in combination with “May” as materials for their products. The products from the Central and Southern provinces are mainly big items like tables and chairs, shelves, cabinets, containers...

2 - Value chain of rattan in the North Central Region of Vietnam

The rattan sector itself is rather complicated, incorporating rattan growers, rattan exploiters, local collectors, processing units, traders and the rattan material buyers that are often handicrafts exporters.

In NC provinces, natural or wild rattan accounts for major part. These raw rattan materials are mainly extracted in the mountainous districts of the region. They are: Nam Dong, Aluoi (Thua Thien Hue province), Huong Hoa, Dak Rong (Quang Tri province), Quynh Luu, Que phong (Nghe An)...There’s also a part of rattan is considered to be imported from the neighbouring provinces such as Quang Nam, Quang Ngai...and Laos as well.

Local rattan harvesters are mainly ethnic people. They are the first people who supply the rattan raw materials in the value chains at the beginning, and then rattan products would go down along the line. There are unreported numbers of the ethnic local harvesters in the NC. However, they are mainly stationed in the previously-mentioned mountainous districts.

There are collectors in the village/ commune. At the present the village collectors sell harvested rattan to commune collectors and these collectors will sell to the rattan purchasing companies who come from Thanh Chuong (Nghe An), Thua Thien Hue and Quang Tri provinces... There’s also the case that village collectors selling directly rattan to the purchasing companies. In general, the commune rattan collectors have to bear the types of costs/expenses such as the costs of purchasing the rattans from the local harvesters, the costs of their labour for classifying and packing the rattans The commune collectors also often have to pay fees to people’s committee of communes (100,000 VND/Ton).

Rattan purchasing companies in the NC usually are also rattan processing units and trading processed rattan. After purchasing rattan, the production units will make further processing so that the processed products can be ready for craft producers. Rattan is treated here from grading, straightening, cutting tail, sulphurising (or boiling in case of big rattan – “Song”), drying, splitting, peeling, coring to packing and being ready to produce or sell. The quality of processing rattan is much influential in the quality of rattan craft products. These purchasing companies have their own factories/ workshops and required equipments for processing. They have purchasing contracts of raw rattan material with rattan production companies inside and outside of NC provinces like Ha Tay (now Hanoi), Ha Nam, Thai Binh, Da Nang...

3 - Market linkages and demand

The development of rattan material is much depending on the sale of rattan products, especially for export market where consumes almost 95% of total rattan products in Vietnam.

There’s no specific figure on exportation of rattan handicrafts but the mixture of both rattan and bamboo ones. The export turnover increased every year (15-20%) and reached 219 million USD in 2007 with the participation of almost 1,700 production and exportation enterprises (Table 6).

Table 6: Export of rattan materials and its products

Year	Rattan and bamboo material (ton)	Bamboo and Rattan products (thous. USD)	Growth rate (%)
1999	6,523	48,216	
2000	5,068	65,932	37%
2001	4,626	73,216	11%
2002	7,621	88,747	21%
2003	8,830	99,737	12%

2004	9,911	138,218	39%
2005	9,000	140,000	27%
2007	n/a	219,000	25%

Source: *MARD, National project on preservation and development of NTFP for 2006-2020*

By 2004, Japan is the biggest importer of rattan and bamboo handicrafts in Vietnam but now, the USA, Germany and Japan are top three importers of bamboo and rattan in Vietnam, of which USA is the first one.

Because of material shortage, some Vietnamese companies now have to import rattan from other countries, especially Indonesia and Laos (Table 7).

Table 7: Import of rattan for handicraft production in Vietnam

Period	Trade Flow	Trade Value	Percentage of major countries
2000	Import from	\$144,000	World (50%); Indonesia (50%)
2001	Import from	\$3,986,000	World (50%); Laos (40.9%); Indonesia (3.9%); Philippines (3.2%); Singapore (1.6%); Myanmar (0.4%)
2002	Import from	\$1,558,000	World (50%); Laos (40.8%); Philippines (5.5%); Singapore (2.1%); Indonesia (1.6%)
2003	Import from	\$2,186,000	World (50%); Laos (21.5%); Philippines (15.2%); Singapore (10.7%); Indonesia (2.6%)
Total Vietnam rattan imports = \$7,730,000 for the period of 2001 – 2003			

Strengths of rattan and bamboo handicraft sector in Vietnam

One of the strengths of bamboo, rattan, rush and leaf crafts in Vietnam is the large number of craft villages (713) across the country, comprising 24% of all types of craft villages. This sector also has the largest number of skilled workers, with a labor force composed of 342,000. They are able to produce a wide range of products, from furniture (chairs, tables...) to basketry (tray, pots, vases...) or mats...at low labour cost.

Weaknesses

Poor treatment and processing: The time from cutting down the rattan to processing is too long in many cases, especially for natural rattan (about 5 days), which causes a deterioration in rattan quality. Rattan passes through many hands that perform one or several levels of processing before it reaches its final stage. Most processing is still at a craft level carried out by households, based mainly on an individual's experience. The equipment and technology for rattan processing and manufacture has not been updated and is often obsolescent.

Shortage of information: Producers are the most important factor that determines the quality of handicraft products. If the producers are equipped with basic knowledge on material requirements, information on the use of the products, then they can control their work better than any other collector's or traders' inspection. However, this information is always in short supply in the craft villages. The producers often do not know the use of what they are making (result of 22/30 people asked). They are trying to make as similar as possible to the appearance of given samples, but they don't care for other requirements of quality, for example, that baskets to contain food should be treated in a safe way for human consumption. The lack of this information not only happens with producers but also with collectors and even traders.

The producers are also short of information on the development trends of similar rattan products, not only in the world market but also even in the other provinces of Vietnam. Therefore, there is nothing for them to benchmark in order to improve themselves in term of skills, creativeness. Many of them do not understand the legal matters of importing countries, trade practices etc nor do they understand about the taste of

customers. This shortage of information on market access and business-related information leads to their hesitance in approaching foreign markets directly.

The taste of customers is a matter that all traders surveyed are concerned about. They need this information in order to develop their own products to offer to customers, but this concept is still very blurred. Also, the taste of customers depends on many other factors, for example on seasons, which make the traders more confused. Because of this problem, the traders are often passive and just work on orders from customers.

Even though they are always stating that rattan craft products in Vietnam face fierce competition from China and Indonesia, they have no idea on the specific figures – they lack information about their competitors.

Design is a key factor to sell the products. It is obvious that bamboo and rattan crafts are very attractive because of their natural characteristics. But these crafts will lure more and more buyers they reflect typical traits of the buyer's own country, for example, rattan baskets for flower arrangement (Ikebana) in Japan. Many traders can not recognize this - they are in short of information on design initiatives. Even though traders are short of information, they are not willing to share with each other. This lack of information also extends to Vietnam - traders and producers often do not understand the policies of the Vietnamese government to support SME(s) in general, and especially SME(s) participating in export oriented rural industries. For example, they are always in need of loans, but they do not understand about sources like the Vietnam Development Bank.

Facilities for production: The requirement for the investment of machinery, equipment and facilities for production is necessary for producers, however, most of them just invest in some homemade or rebuilt machines (splitting, sulphurising room, heating room...), which is far from satisfactory in terms of technique, safety and environment. They lack qualified facilities for production.

The quality of production is also difficult to control between producers. The production is carried out at household scale and there is a big difference between the best and poorest quality produced in any one village due to low craftsmanship of some producers. Many of them learn by passing on skills from one to another and by on-job-training. This can lead to the poor output and, as a result, the quality of their products is inconsistent.

Inefficient management capacity: The traders of handicraft companies in general have poor management capacity. This is shown in many aspects, from strategy, communication, production and quality management, financial management, international trade. Especially, most traders are not clear in their *development strategy*. They have no business plan, no core products and targeted markets. They source whatever orders they receive from customers even they are not expert in that field. This may lead to the deterioration of the image of other handicrafts in Vietnam.

Almost 100% of leaders from surveyed rattan companies in NC are unable to communicate in foreign languages, 30% of them can use computers but just for word processing applications, 15% of them can communicate by e-mail and none of them can access other information through internet. In addition, their communication and negotiation skills are still poor. They often do not understand the cultural differences between countries that greatly influence the results of negotiations. Almost no traders are trained in financial management. They are unable to understand and analyse the financial statements of their company, so they can not judge the real financial position, or use the accounts to make decisions to improve their business. In addition they lack marketing skills, and don't have a strategy for product development (they don't know the taste of customers well), for price-setting (they often offer as much as they can and depend on the reaction of customers to adjust), for marketing (they have not planned for targeted markets), nor for promotion (catalogue, trade-fairs, website...)

Opportunities:

The image of Vietnam, a peaceful country of bamboo and rattan is one of the attractive points for foreign buyers besides the competitive advantage on labour cost in rural areas. The increase of bamboo material in China is also the reason for foreign buyer moving to Vietnam instead of China to source for not only bamboo but for different types of natural fibres.

Threats:

Shortage of material resources: Rattan materials are facing a danger of exhaustion. The harvesting areas (both natural and garden rattan) become further and further from the processing and producing places, the price is increasing year by year leading to the high cost of rattan handicraft products. There is, so far, no data on the source of rattan and its distribution by localities in Vietnam, there is also no data on its exploitation and plantation volume.

Rival Countries: The bamboo and rattan business in Asia is very competitive. Vietnam's main competitors for rattan products are Indonesia and the Philippines. Indonesia is the biggest rattan producer in the world. It has developed rattan industry clusters in the Kalimantan Island and Cirebon region. Foreign interests with advanced know-how have built craft factories in these countries.

4 - Institutional and policy environment

There are no specific policies on the rattan sector up to now in Vietnam and the government of Vietnam has not established any specific agency which is responsible for rattan sector or other NFTP sector. In fact, the state governance is mainly focused on creating a policy framework for the preservation and development of NFTP; issuing the exploitation license; and controlling the distribution of NFTPs. Below are briefly presented the major policies and regulations that have an impact on the rattan sector in Vietnam.

4.1 Policy framework on the production, processing and the trading of NFTPs

Land

Laws on land and other specified legal documents state clearly that the government should assign the land to the households, individuals on a free-of charge basis. The quota of assigned lands should not exceed 30 hectares for land tenure of not more than 50 years. This time duration indicate the favourable condition for the land assignees to make any profitable investments on their assigned forest lands.

Investment and credits

The forest owners should be allowed to borrow the loans from bank at the lower rate. After a five-year loan duration, forest owners are supposed to pay back in full amount the loan principal and interest. There are several modifications and changes to this type of interest rate over time. From the year of 2004, the government has issued a decree on the lowering the tax payment, land rental for the NFTP reforestation.

Privileges and benefits from the forest

The decision No 178/TTg issued in 2001 by the Prime minister has indicated that the forest land assignees, regardless of households, individuals, are allowed to exploit the forest by-products, fruits, flowers; altars; resin, bamboo, rattan; and inter-cropping of medicine herbs, special use of trees, and forest canopy.

Tax on natural resources

In 1998, the government issued another ordinance No 68/CP on the modification of natural resource tax at 10% rate for rattan. In 2003, the government continued to lower the natural resource tax rate down to 5% for rattan exploitation.

Exploitation, usage and distribution of NFTP

Since 1999, the Vietnamese government has issued several decisions on the exploitation, usage and consumption of the NFTPs of which rattan is the subject matter. These decisions have gone through a great deal of modifications. According to the existing regulations, the DARD shall give the approval and issue the license for exploitation of bamboo & rattan in the protection and production forests. Provincial People Committees shall grant the permit to the households, individuals for their exploitation of the NFTPs.

Commune management fees for rattan exploitation

As regulated by the law, rattan traders are only supposed to pay the natural resource tax. However, the in-depth interviews revealed that the rattan traders have to pay also a certain amount of fee that is called "Fee

for management of rattan exploitation and natural resources" to the communal authorities. This fee is estimated to be 100 VND per kg of rattan.

Export of NTFPs:

There's no tax for exportation of processed rattan products but rattan raw material is prohibited to export.

International treaties

Vietnam has ratified the Convention on Biological Diversity (CBD) and the Convention on International Trade in Endangered Species (CITES), and has adopted a range of national conservation policies and objectives for the forest sector. However, there is an insufficient knowledge about NTFPs to plan and implement comprehensive actions in order to fully achieve all of these obligations and objectives. Critical knowledge gaps include the distribution, value, conservation status, threats and appropriate management regimes for important NTFP species, the range of feasible technical opportunities and appropriate social arrangements for the protection, regeneration and sustainable development of NTFPs in different categories of forests and within different poverty reduction, conservation and reforestation programmes and the actual conservation impact of Government regulatory systems and development programmes related to NTFPs.

Vietnamese National Initiatives on exploitation of non-timber forest products

Decision No 40/2005/QĐ-BNN issued by the MARD on 07/July/2005 on the regulations of timber exploitation and non-timber forest products. This decision is followed by very detailed regulations which are composed of five (05) chapters and 45 articles. This newly issued decision will serve as a replacement for Decision No 04/2004/QĐ - BNN-LN which was issued by the MARD on 02 February 2004. The only article which is concerned with the exploitation of bamboo, rattan and other NTFPs in the protection forest-cum-natural forest is the one No 35. Several important points from this article are to be read as follows: For the bamboo and rattan forests which are put into exploitation only when they reach the coverage of more than 80%.

- Maximum exploitation rate is 30%. Bamboo shoots are allowed to be exploited
- For procedures and formalities, they must follow the article No 25 of this regulation
- The forest exploitation rests with the forest owners. In case the forests belong to the responsibility of the Local People Committee, then the LPCs must be the one who should issue the exploitation license.

Decree No 134/2004/NĐ-CP on Encouragement of Rural Industrial Development

This decree was issued on 09th June 2004 by the government based on the request of the Minister of Industry. The government should take the lead role in organizing, guiding, supporting and facilitating the economic entities, individual person for the purpose of developing the industrial production in rural areas. This decree is composed of 4 chapters and 18 articles, explaining in detail the encouragement of rural industrial development. Based on this decree, there should be the establishment of the Fund for Encouragement of Rural Industrial Development at the three levels: central government, provincial level, and district level. In the spirit of the Decree No 134/2004/NĐ-CP, all kinds of economic entity, individual person, regardless of whether they are state-owned or non-state owned will fall within the scale of this decree. Specifically, they include: Small and Medium-sized enterprises, newly established and operated in accordance to the Enterprise Laws Small and Medium-sized enterprises, newly established and operated in accordance to the Enterprise Laws Cooperatives, established and operated on the basis of Cooperatives Laws Other forms of organizations, individual business owners.

Inter-ministerial Directive No 36/2005/TTLT - BTC -BCN

This directive was issued on 16/May/2005 by the Ministry of Finance and Ministry of Industry. This is the detailed version of the Decree No134/2004/NĐ-CP. This inter-ministerial directive lays out the detailed regulations and policies on the encouragement of Rural Industrial Development in terms of the usage of the funds for encouragement of rural industrial development at the three levels which belongs to the functioning of the Ministry of Finance.

In terms of financial funds, the industrial establishments will have the privilege to apply for the financial support from the Fund when they need to improve the technology or to have a new experimental demonstration. The maximum financial support they can get from the fund would not exceed 50 million

VND. It is also stipulated in this directive that rural industrial establishment also have the financial subsidies which amount to 50% of the total budget for renting a stand in the trade fairs or for participating in the EXPO abroad. At the same time, this directive also spells out the detailed regulations and the policies on encouragement of rural industrial development.

Decision 132/2000/QĐ-TTg worked out policies to encourage the development of rural craft industries. In general point of view

- The State shall adopt policies to encourage the consumption and use of products of the rural trades, particularly products made of domestic natural raw materials with a view to limiting the adverse impact of industrial, chemical and plastic products and waste material on the environment.
- The State shall encourage, create favourable conditions and adopt policies for the protection of the legitimate interest of production and craft establishment engaged in rural trades, especially the traditional trades, in order to meet the domestic consumption and export demand, attract labour and contribute to generating employment in the country side, eradicate hunger and reduce poverty, preserve and promote the nation's culture values.
- The State shall protect the legitimate interests, the ownership over property, technological know-how, inventions and innovations, copyright and industrial property rights, industrial models and designs of individuals and organizations investing in the development of the rural trades
- To encourage and create favourable conditions for organizations and individuals to mobilize social resources for activities of providing support, counselling, information, marketing, job training, industrial promotion, research into technologies, models and designs for the development of the rural trades.

Particularly, more specific incentives on land, raw materials, investment and credit, taxes and fees... have been given for the development of rural crafts as follows:

- As for land
The rural craft establishments that are using undisputed land in a stable manner shall be issued the land use right certificates by the People's Committees of the competent levels. Annually, under the land use planning and plans of the provinces or the centrally run-cities, the State shall permit the concession of part of the agricultural and forestry land for the development of the rural trades. Besides, for the rural craft establishments wishing to have land for relocation of their old narrow and polluting production workshops or to rent land for construction of new production workshop and/or protection, care, rehabilitation and planting of raw material areas, the People's Committees of the competent levels shall give them the pre-emptive right to rent land at the lowest rates.
- For raw materials used for production
The provinces and centrally run cities shall base themselves on their rural trade development requirements to elaborate planning's and plans on development of agricultural, forestry raw material areas so as to ensure abundant sources of the rural trades. Any rural craft establishments wishing to exploit raw materials being minerals resources shall be given priority in the granting of exploitation and use permits according to law provisions. Some raw materials being forest resources like wood, rattan..., part from those exploited from natural forest and balanced by the MARD in the annual exploitation and use plans, the establishment shall be encouraged to use raw materials from planned forests as well as imported raw materials. Also, the government encourages the development of the industries, cottage industry and handicrafts to produce or preliminarily process raw materials in service of the rural trades.
- For product consumption information and markets
The Ministries, branches and the People's Committees of different levels shall create conditions for the rural craft establishments to have timely access to information on markets, prices, specifications and standards of products according to the domestic and overseas market demands.
- For science and technology
The Ministry of Science, Technology and Environment shall organize, direct and earmark necessary funding sources in the annual plans for the technological research and renewal, design improvement and utilization of domestic raw materials resources, guide the application of appropriate technologies in order to raise labour productivity; reduce costs, diversify products and increase the aesthetic value and sophistication of products turned out by craft villages' products; study and transfer technologies treat wastes, putting an end to the environment pollution caused by the rural trades.

- **For labour and training**
Regarding labour, priority shall be given to the training and use of labourers who are members of households with land recovered by the State for the development of the rural trades, and local labourers.

As mentioned previously, the Ministry of Agriculture and Rural Development has approved the Plan to conserve and develop the Non-timber Forest Products to 2010, of which the area planned for rattan development till 2010 is 740.000 ha with 5 major plantation areas: Northeast, Northwest, North Central Coast, South Central Coast and Central Highlands (Decision No. 2242 /QD-BNN-LN dated 7 August, 2007).

4.2 Projects/ Programme on rattan development in Vietnam

WWF Indochina Initiative on Rattan sector

Vietnam is a major producer and exporter of rattan canes, mainly *Calamus poilanei*, *Calamus platyacanthus* and *Calamus palustris*. However, the current capacity to farm rattan cannot hope to match the volume of demand and export. Natural stock is severely depleted, and there is scant focus on models of sustainable harvest. Vietnam is sourcing large amounts of cheap, easily exploitable wild rattans from both Cambodia and Lao PDR. This initiative by WWF aims to:

- Identify key species and define status and potential.
- Research the regional rattan market dynamics and trends.
- Identify pilot areas for direct interventions to promote sustainable rattan harvesting.
- Identify key species and establish permanent sample plots for growth model data collection.
- Pilot community-based rattan production in Lao PDR, Cambodia and/or Vietnam.
- Identify the requirements for a chain of custody system for rattan purchasers and processors.
- Identify most preferred alternative to rattan harvesting, and investigate and develop pilot studies at community level to assess the potential of alternative products, plantations involving agro forestry and enrichment planting.

Initiative on Global Partnership Programme on Non-Timber Forest Products (NTFPs) for Livelihoods Development of Rural Communities

An action-research field-based Global Partnership Programme (GPP) on Non-Timber Forest Products (NTFPs) has been under development since March 2004 for inclusion as a GPP of the Global Forum for Agricultural Research or GFAR. It is now a pipeline programme pending formal approval. Technical issues on thematic areas of supply chain management, marketing, pro-poor commoditization, financing systems, etc, will be addressed by cross-cutting NTFP Thematic Groups, including bamboo and rattan.

5 - Previous relevant projects/programmes – successes and failures

5.1 Poverty Reduction Project in Central Province

The Poverty Reduction Project in Central Province of Quang Binh province has been implemented in Minh Hoa district since 2007 to plant 'May nep'. The project was funded by ADB for 16/16 communes of Minh Hoa district and there are 3 models in each commune, including:

- Mono-crop with the density of 50,000 trees/ha
- Rattan plantation under forest with the density of 20,000 trees/ha
- Rattan plantation around garden hedge, three tree per root, the distance between roots are 35 cm.

Total rattan trees were provided to Minh Hoa district are 570,000 trees (35,000 trees /commune, 16 communes) with seedling comes from Phu Tho province (The price of rattan seedling is VND 1,200/trees, the project support 50%, therefore farmers pay VND 600/tree. Besides, the project also supports 3,500 kg fertilizer/commune (100 gr of NPK/tree) and VND 100,000 for insecticide. The district organizes the training on rattan plantation techniques, printing leaflets and distributed to rattan growers.

Hong Hoa commune, Minh Hoa district is the biggest model. In 2007, Hong Hoa commune was provided VND 40 million/ha for pilot models: 1ha (50,000 trees) mono-crop plantation in Cau Roan hamlet; 40 households (each household 800 trees) in Van Hoa hamlet to plan under acacia forest and garden hedge.

After 8 months of plantation, 20% of trees died, the remaining grows slower than the seedling of May nuoc from natural forest. After 8 months, the rattan of mono-crop model has 15-20cm height, while rattan of intercrop & around garden has 20-25 cm height. Rattan leaves are yellow in both models.

According to local technician, there are two reasons: (1) rattan variety from Phu Tho were not suitable to local weather and land condition and (2) limited planting techniques and lack of good care. This model not yet creates good impression for farmers. The model use unsuitable and unqualified variety which made the growers tired. According to a grower, in Van Hoa 1 hamlet, Hong Hoa commune, he planted 800 trees around garden hedge but it grow slowly with yellow leaves, he is fed up and want to swift to acacia plantation. According to HRPC's expert, the situation can be overcome by the setting up of qualified rattan nurseries in order to reduce seedling cost (50%) and to ensure the quality of rattan seedling for farmers.

5.2 Scientific project for trial plantation of May nuoc and May nep in Tuyen Hoa district

The project was implemented by district agricultural department to support rattan plantation under 3 models:

- Rattan plantation under acacia forest: 30 households.
- Rattan plantation around garden hedge: 30 households
- Mono-crop: 7 households

The project was very successful. The rattan has 1,2 – 1,4 meter high after 1 year plantation. The varieties of May nuoc and May nep (may tat) were germinated locally. Many households wanted to plan rattan because they can see the good results from pilot model. The reasons for the success of this project are:

- Good variety/seedlings for farmers
- Close co-operation of agriculture extension staffs from district and commune level to give guidance for growers
- Growers have good knowledge as well as awareness about the rattan trees where they considered as their assets to care and to protect.

5.3 Project of Xuan Huong Company

The project was approved by Nghe An People's Committee. Xuan Huong Company has made a rattan nursery of 600,000 trees. In 2006 & 2007, Xuan Huong Company has implemented pilot model of garden hedge in 8 communes, 75-80% can grow well with 0.7 – 1 m height after more than 1 year.

Xuan Huong Company supplied seedling, fertilizer while farmer contribute labour and land. In general, the project was quite successful but they are in need of capital. The project temporary stops to wait for funding.

5.4 Lessons learnt

Thai Binh, Ha Tinh and Quang Ngai are three provinces where rattan has been planted and for several harvestings. Other provinces just started rattan plantation 3 years ago, so it is too soon to evaluate the results because growers still do not harvest yet.

Lesson learnt from successful projects can be summarized as follows:

- Awareness raising is needed for farmers to understand the potential of rattan plantations: rattan only needs to be planted once but can be harvested yearly since the 4th year. Rattan plantations can be a starting point for handicraft development, which can create value added for rattan trees.
- Carry suitable training method for farmers, mainly using "learning by doing", preventing unnecessary and complicated theory.
- Build up local rattan nurseries to reduce seedling cost, reduce transportation as well as ensure the quality of seedling.

- A good model should be validated first before implementation in a large scale.
- Farmers can only contribute labour and land, seedling and fertilizer need to be supported.
- Close supervision on the plantation and caring techniques is needed, preventing farmers from using fertilizers for other purposes.
- The agriculture extension staffs should be key players in close co-operation with women union, youth union etc in order to mobilize the participation of farmers.
- Yearly assessment and appraisal for good practice households is needed, to encourage people to plant rattan

Lesson learnt from unsuccessful projects can be summarized as follows:

- Lack of awareness raising, no good preparation for farmers about the difficulties of the project, they mainly mentioned about the advantageous aspects and not the problems
- Lack of good care. Take the example of Hong Hoa commune, Minh Hoa district, growers did not follow trained techniques.
- No nursery was built up, which resulted in high costs for rattan seedlings. Only a few farmers could afford to buy seedlings, it can not be spread well to other farmers
- The project partners may be not appropriate (not specialised in technical issues). In the Minh Hoa case, the project partners were the Financial & Planning Department. Xuan Huong Company has Youth Union as a project partner.
- Rattan plantation management for the first 2 years are extremely important. The local partners as well as growers need to have efforts in supervision and good care. In case of Minh Hoa, some farmers took the NPK meant for rattan to use on other trees.
- On exhausted land, rattan needs to have good care for the first period of time. It can be grown well under the shade of other trees. Finally, rattan is a climber, it needs supporting trees. In the case of Ha Tinh, people planted Thung Muc trees as supporters. In the case of Thai Binh for mono-crop, people used concrete pillars with iron wire to support rattan.



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SNV is dedicated to a society where all people enjoy the freedom to pursue their own sustainable development. We contribute to this by strengthening the capacity of local organisations.