COMPREHENSIVE REPORT
FROM
FACT-FINDING MISSION IN QUANG NAM PROVINCE

on

RATTAN VALUE CHAIN IN QUANG NAM

By

Dr. Thai Thanh Ha	Lead Consultant
Dr. Ninh Khac Ban	Consultant
Mr. Le Thanh An	Junior Researcher
Mr. Do Hoang Chung	Junior Researcher

In submission to

Client:

GTZ-Office Vietnam
on behalf of the Project
"Promotion of Small and Medium Size Enterprises"
97 Tran Quoc Toan
Tel: 053 858543;
Fax: 053 - 850497

Acknowledgement

There are many people that we would like to thank for supporting and helping us complete this mission report. First of all, we would like to express our sincere thanks to all officers of the concerned departments in Quang Nam province who have un-selfishly assisted us in fully providing us with useful information for this report. We are especially touched by their hospitality and friendship.

We also would like to express our sincere thanks to Mr. Le Minh Anh, vice-chairman of Quang Nam province for his great support in rattan industry. He was the first person we contacted and he showed a great support to us by facilitating our meetings with various provincial departments in Tam Ky for the collection of secondary information on the rattan sector in Quang Nam province.

Our deepest gratitude should go to Mr. Huynh Khanh Toan for his efforts in arranging the meeting with rattan processors in Quang Nam so that we could conduct in-depth interviews and organize the discussion with them for data collection which is necessary for report writing.

There are many other high-ranking officers, department heads from the provincial authorities we wish to thank for their time and their patience while we were conducting the interviews with them on this fact-finding mission in Tam Ky, Quang Nam province.

We would also like to send our sincere thanks to Mr. Binh - Vice district governor of Nam Giang in arranging the meeting with ethnic rattan collectors, as well as with Mr. Liec, chairman of Tay Giang district for his time with us, so that we could interview and have their own general assessment of the rattan sector and extraction in the district, thus making this report readable and of value.

We are especially grateful to GTZ funded project on SME promotion, which has generously given us this assignment and financial support so that we can complete it with great success.

And finally we would like to thank many other people whom we did not even have a chance to know their names for their valuable assistance and friendship during the whole interview process. Their information is extremely useful for us to work on this comprehensive report. Their friendly treatment and whole-hearted suggestion for survival in this stringent area will never be forgotten.

Team of consultants

Dr. Thai Thanh Ha
Dr. Ninh Khac Ban
Mr. Do Hoang Chung
Mr. Le Thanh An

Executive Summary

This report presents several first-hand results from the fact-finding mission on rattan sector conducted by two consultans and two junior researchers in Quang Nam for the month of October 2005. The main approaches for getting data and information include the focus group discussion, in-depth interviews with key stakeholders; provincial officials as well as rattan companies (cooperatives) directors/owners; Data were also gathered from the various secondary sources. This report is composed of three main parts.

Presented in the first part is the general overview of the rattan sector globally and across Vietnam. The world has come to a recognition of the important role that rattan sector plays in the socio-economic development as well as job creation when 90% of all factories are employing an average of 50 people with an average investment of US$ 2,000 per person which is ten times that much in a conventional furniture plant. More than 700 million people trade or use rattan for a variety of purposes. the global trade and subsistence value of rattan and its products is estimated at over US$7,000 million per annum. In Vietnam, the statistics show that rattan production moves around in the range of 20,000 and 80,000 thousand tons of rattan. Vietnam is a major producer and exporter of rattan canes, mainly Calamus poilanei, Calamus platyacanthus and Calamus palustris. However, the current capacity would not be able to match the volume of demand and export. Natural stock is severely depleted, and there is scant focus on models of sustainable harvest. Vietnam is sourcing large amounts of cheap, easily exploitable wild rattans from both Cambodia and Lao PDR. Since 1996, the export of finished products has continued to increase partly as a result of Vietnam's economic reforms. As such, new export markets such as Germany and the US are gaining importance. The total export of rattan & bamboo has exceeded US$ 100 million for the year 2004. The rattan is an important raw material for the handicraft industry, which employs at least 2 to 3 million people in Viet Nam. For Quang Nam, the rattan extraction has come to such a breaking point that the rattan reserve will run out very quicky in the near future. Action must be taken to prevent it from happening. It must be stressed that the rattan sector has gained an increasingly important role in the province's economy as the rattan export earnings are equivalent to less than US$ 1million, contributing to 0.66% of total GDP of Quang Nam. There are several policies and institutional grounds initiated by the central government and provincial authorities in an attempt to lend the support to the rattan sector. From 1990 up to present, the Vietnamese government has issued more than 30 policies or legal legislations in regards with the preservation and development of NFTPs. Among these policies and institutional framework include the policies on the preservation and development of NFTPs; policy framework on the production, processing and the trading of NFTPs; Program 327 and 5 million forest hectare program. In the rattan processing, the Vietnamese government has also issued an important Decree No 134/2004/NĐ-CP on 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. The natural resource tax as well as the other policies such as VAT, business; income tax and land rental which are also preferential for the development of rattan sector. At the provincial level, there has not been any specific policy on rattan sector in Quang Nam, but a system of common policies on the promotion of the handicraft enterprises in rural areas. To encourage the rattan sector in Vietnam, the government and the international donors have started several important innitiatives such as Vietnamese National Initiatives on exploitation of non-timber forest products; GTZ funded SME promotion program; WWF financed Truong Son innitiative and many other programs.

The second part of this report is concentrated on raw material supply analysis in Quang Nam. This technical component of the report deals with assessing type, quantity andd source (forest or plantation) of raw material sourced in the province with an emphasis on specific rattan species used for rattan furniture and home appliances. The investigation is conducted with

regards to the identification of known species of rattan, and preferred harvesting sizes and species in Quang Nam province. It also describe the growth rates of known species; seasonality; approximate abundance and location based on standard resource assessment criteria within Quang Nam; This part also focuses on the description of the current exploitation of the resource; legal ways of exploitation concerning the permits and quota system; xploitation by SFE's, protection forest of the management board and the local people in relation to localities of rattan resources, processed and traded Quang Nam; current user rights and land rights. It also concentrates on the assessment of the the the outside parties collecting rattan giving no consideration to current user rights, permits and/or quota's; the protection of the rattan resources as well as the habitat destruction and threats from illegal collectors. This part of the report focuses on the ex-farm prices of different species and the current and development over the last 5 years when sold to collectors and processors and the importance of rattan resources for people's livelihoods. An emphasis is given to the assessment of type, quantity, prices and source (forest or plantation) of raw material sourced in neighbouring provinces or imported; the analysis of sustainability issues concerning raw material supply, with an emphasis on specific rattan species used for rattan furniture and home appliances and with projections on the longer term, ecologically sustainable harvest volumes. In addition, the legal/ customary rights to collection as well as the enforcement of forest protection and resource used. In the end, it also discusses the value chain and the most suitable points with the aim at the development of a chain of custody system.

The third part of the mission report is focused on the rattan cluster abd value chain analysis in Quang Nam. The mapping of the value chain in the province indicates that local rattan harvesters are mainly ethnic people. They are the first people who supply the rattan raw materials in the value chains. While there is no statistics on the number of local ethnic rattan harvesters in the five mountainous districts, it is estimated, on the basis of age categories and the population per district, that there are about 7,850 ethnic rattan harvesters. The second type of actor in the value chain include the rattan collectors/agents who are mostly Kinh ethnic people who have small groceries in the communes while the collecting agents are the ones that do not have groceries because they deeply specialize in rattan trading. They are the middle men between the local harvesters, the processing enterprises and export companies. They play an important role in the market value chain because they know all of the information and tell it to the commune rattan collectors. At present, there are about 21 commune-level rattan traders, 12 agents; and 06 rattan collectors in Quang Nam. The third actor in the value chain are the mountainous trading companies which are organized vertically to collect not only rattan products but also the other NFTPs and to trade them for profit. Geographically, there are six (06) mountainous districts in Quang Nam. Namely: North Tra My , South Tra My; Nam Giang, Dong Giang; Tay Giang; and Phuoc Son, so there are also six mountainous trade companies in these district. The rattan processing and exporting enterprises are the last actors along the rattan value chain in Quang Nam. In the past, there was a clear distinction between rattan processing companies and rattan exporting enterprises. Nowadays, however, the rattan exporting enterprises tend pursue the backward integration. That is, they try to re-structure the company in such a way that they undertake all steps along the rattan value chain: from purchasing the wild&fresh rattan from trading companies, processing, chopping, and making end-products upon the client's orders. This tendency has come as the results of cost-effectiveness as well as the assurance of sufficient volume of raw rattan materials to meet the on-time delivery of the end-products. There are an approximate number of 16 processing-cum-exporting rattan enterprises in Quang Nam and all of them do not have any of their management certifications such as ISO, OHS, SA whatsoever. the processing activities of these companies must be inspected by the provincial DONRE on a regular basis. The environmental safety certification will then be issued upon the passing inspection. There is a high competition among these SMEs in Quang Nam. The profit margin distribution among these actors boils down to the fact that the the processing and exporting enterprises are the one that take the largest share of profit (61%) at the expense of the commune traders/collectors. In terms of the need for support, it has been hinted that Quang Nam's processing companies are in a high need for business management skills; market access and information; technology transfer as well as modernization of rattan processing equipments. They also see as the utmost priority for management certification such as ISO or the certified Health, Safety and Environmental Standards. To ensure the sound development of rattan industry in Quang Nam province, there are several institutions which play a supportive role. These include Quang Nam Trade Promotion Office; Business Association; COOPSMEs; and provincial Centre for Encouragement of Rural Industry (CERI).

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

EUR	European Currency
5MHRP	Five million hectares of reforestation program
CERI	Centre for Encouragement of Rural Industry
COOPSME	Cooperatives and SME Alliance
ISO	International Standardization Organization
Lao PDR	Lao Peope Democratic Republic
MARD	Ministry of Agriculture and Rural Development
MOSAIC	Management Of Strategic Areas for Integrated Conservation
NTFPS	Non-Timber Forest Products
PPC	Provincial People Committee
SA	Social Accountability
SME	Small and Medium-scale Enterprises
WWF	World Wildlife Funds
WB	World Bank
USD	US dollar (15,800 VND/US dollar)
UN	United Nations
VAT	Value Added Tax
VND	Vietnam Dong

Part A GENERAL INTRODUCTION

1. *Pre-amble*

This comprehensive report is prepared as the results of the fact-finding mission on rattan sector in Quang Nam province. This short-term mission lasted through the month of October, 2005 in the province of Quang Nam and it was carried out by the two consultants, with one lead consultant focusing on economic component, and the other consultant specializing in technical background on rattan. The approach to get the necessary information is to consult with stakeholders in the province, data and information on Quang Nam rattan sector were collected through the focus group meeting and in-depth interviews, and secondary data gatherings from the various sources of information.

This short-term mission was designed as a continuous effort by GTZ and its local partners since the launch of a new SME promotion program in Quang Nam province. The mandate of this newly created SME program is to improve the competitiveness of small businesses in selected sectors, with a focus on agro-industry. In Quang Nam, the counterparts of GTZ are very keen on supporting the rattan cluster/value chain because of its considerable economic potential as well as competitive advantage. Supposedly, there are currently 28 companies and cooperatives involved in the rattan cluster, and are processing a large percentage of the total rattan volume in the province of Quang Nam. With the aim at having better information and understanding of the rattan cluster/value chain in Quang Nam, the SME promotion program planed to conduct a baseline study whose results will assist them in designing the intervention and support strategy for rattan sector in Quang Nam province.

Equally important is the fact that multinational companies like IKEA Vietnam have increased their purchase of natural fibre products in Vietnam. These companies express the assurance to fulfil the requirements on quality, environmental and social standards by working closely with their suppliers. Efforts are being taken to improve the supply chain when it comes to reducing costs, in an effort to maintain the competitive advantage over the competing countries like Indonesia and China. In this process, rattan sector has become the first priority that need to be brought into the forefront of the discussion. As the result, several projects are being taken to improve the environmental sustainability of rattan raw material supply. But until today, no project is yet covering the different topics of the complete value chain of rattan, from the forest where it grows or the gardens where it is planted, through the harvesters, the trading agents, processing companies and exporting companies to the final consumer. In order to strengthen the rattan cluster in Quang Nam, all these aspects and especially the interdependencies need to be better understood. This study shall contribute to this understanding and provide ideas for interventions in the value chain.

2. *World-wide recognition of the importance of NTFPs and rattan*

In recent years, rattan and other Non-Timber Forest Products, e.g. bamboo and medicinal plants, have been accorded as international priority in contrast to their previous categorization as "minor forest products". This heightened attention results from the recognition of their increasing economic, ecological and socio-cultural importance and the consequent need for sustainable use of the resource.

The full socio-economic potential of rattan has not yet been realized. So far not many quantitative estimates of the true value are available. Domestic trade and subsistence use of rattan create benefits estimated at US$3 billion per annum and another US$4 billion are generated through global exports. Additional benefits may accrue from the intervention in the sector to systematize the best practice in the resource use, management, marketing and processing of rattan.

Furthermore, today only a small portion of the approximately 600 species of rattan found is used for commercial purposes. If more of the presently under-utilized and lesser-known species are added to this list, the benefits could be wide ranging. Rattan is almost entirely collected from natural forests and rattan gardens, however, in recent years, uncontrolled harvesting and deforestation have led to resource exhaustion of the desired species in many rattan-producing countries in Asia.

Although Asia is the dominant player, it accounts for only about 58 percent of the world trade in rattan activity, the remaining 42 percent being held by industrialized countries, importing Southeast Asian rattan. Compared with world trade of all furniture (US$80-100 billion), rattan furniture trade represents less than 4 percent. However, in Asia the output of the rattan furniture industry represents well over 25 percent of all furniture industry output, and it is growing dramatically.

The rattan industry is highly fragmented with over 90 percent of all factories employing less than 50 people, i.e. cottage and small-scale enterprises. In general, rattan furniture manufacturing is highly labour-intensive, employing well over one million people in Asia, of whom about 500,000 work in the manufacturing sector and another 700,000 are involved in the collection (and primary processing) and transportation of raw material (a majority on a seasonal basis). The average investment per worker in a modern rattan factory is about US$2,000, whereas it is ten times that much in a conventional furniture plant.

3. Fact finding mission on rattan sector in Quang Nam

3.1. Objectives of the mission

The overall objectives of the assignment include:

- Collect basic information and provide an overview of the rattan sector in Vietnam
- Collect baseline information of the raw material supply in Quang Nam, with an emphasis on specific rattan species used for rattan furniture and home appliances and with projections on the longer term, ecologically sustainable harvest volumes
- Collect baseline information and analyze the rattan clusters/value chains in Quang Nam, i.e. the companies involved in raw material supply, processing, trade and export
- Collect information on the institutional framework of the rattan clusters in Quang Nam, i.e. supportive institutions, business associations, service providers, others

3.2. Value chain approach in this rattan sector analysis

Over the past two decades, global markets have experienced the emergence of new ways of coordinating production and exchange, commonly described as value chains. The value chain encompasses the range of activities required to bring a project from conception to consumption. In contrast to the more traditional linear notion of supply chains, this approach conceives of a network of relationships affecting the process, and assigns a key role to institutions and governance mechanism in determining who benefits and to what extent. This fact-finding mission was implemented through a detailed study of the value chain of rattan sector in Quang Nam, with a view to obtaining a clear picture of the relative positions of different actors, the institutions governing their incorporation, and the benefits accruing to each players along the way.

The rattan value chain is a relevant approach in rattan sector for several reasons. First this is because the rattan sector itself is rather complicated, incorporating small and large-scale processors, a continuum of processors from SMEs to multinational firms, an array of traders responsible for most of the interactions between the other stakeholders. The rattan processing industry is very dynamic. Thus, the features of the rattan sector offer a wide range of outlets for both high and low quality rattan, and crucially, the opportunity to capture gains by upgrading production and processing. Further, the rattan sector favours the involvement of small processors which, owing to current market conditions, tend to be more efficient than their large counterparts. This kind of efficiency mainly comes from the less investment costs, quicker adaptations to the customer preference, and leaner management. Finally, regional variation in the structure of value chain enables an examination of the disparate effects on the actors along the value chain by focusing on the case study of Quang Nam rattan industry on a comprehensive basis. That is, the examination must be started from the rattan harvesting, trading, processing, and exporting in an attempt to figure out the focal points for policy interventions

4. The world's rattan trading in recent years

Rattans are the most important group of forest species after timber, especially in Asia. Humans have used rattan for livelihood and subsistence for many centuries throughout the documented history of mankind. Although rattan is confined mainly to Asia, the material found its way to many other parts of the world, such as ancient Egypt, Europe during the Renaissance period, and France during the reigns of Louis XIII and Louis XV of France. Rattan is by far the most important Non-Timber Forest Product (NTFP) in international trading. Yet, until recently, this group of plants received only benign attention from all but a small band of enthusiasts. Worldwide, over 700 million people trade in or use rattan for a variety of purposes, such as the beautiful furniture for which the material is universally known. According to FAO (2003), the global trade and subsistence value of rattan and its products is estimated at over US$7,000 million per annum. Undoubtedly, furniture is the most popular rattan product. Besides furniture, other products include carpet beaters, walking sticks, umbrella handles, sporting goods, hats, ropes, cordage, bird cages, matting, baskets, panelling, hoops, ammunition boxes and a host of other utility products. It is likely that rattan species with subterranean stems or those with widely radiating, horizontally growing roots could have a significant role in preventing soil displacement. Rattan is an integral part of the tropical forest ecosystem owing to its climbing habit. The innumerable pinnate leaves, which extend up to 7 m or more in length in many large species with their mosaic arrangement, play a major role in intercepting the splash effect of rain. The species also play a vital role in enriching the soil by their leaf litter, which adds to the organic content of the soil. These ecological and other economic benefits of rattan as noted above, raise the value of standing forest.

Table 1.1. The world's recent exports of rattan and top rattan exporters

Top Exporters in recent years (total 2001-04)		Recent Export Years in the world	
Countries	**Trade Value**	**Period**	**Trade Value**
Indonesia (36.9%)	$68,862,894	2004	$45,654,253
Singapore (26.5%)	$49,351,016	2003	$49,535,579
China, Hong Kong SAR (23.4%)	$43,607,002	2002	$42,739,213
China (3.8%)	$7,011,113	2001	$46,817,324
Vietnam (2.9%, only 2001-03)	$6,476,000	**Average**	**$46,186,592**
Malaysia (1.8%)	$3,354,112		
Other countries (4.8%)	$7,805,813		
Total Export: $186,467,950			

Source: COMTRADE database, UN statistics

* This calculated percentage covers only for the 2001-2003 period due to Vietnam unavailability of imports in the COMTRADE database

Table 1.1 indicates the world export statistics on rattan. For the 2001-2004 period, world's rattan trade valued at US$ 186,476,950, with an annual average of US$ 46,186,592. In this period, Indonesia is still the largest rattan exporter, which account for 36.9% of the world's total export of rattan. Singapore is ranked as the second largest rattan exporter whose value is estimated at US$ 49,351,016 (or 26.5% of the total world trade in rattan export). China Hong Kong accounts for the third biggest share of the world's value of exported rattan at 24.3% (or $43,607,002). For the 200-2003, Vietnam reached the figure of exporting rattans to the outside world at the value of US$6,467,000, accounting for 2.9% of the total world trades in exported rattan. This share of exported rattan for Vietnam would be higher when the data for the year 2004 is to be taken into account.

Table 1.2. The world's recent imports of rattan and top rattan importers

Top Importers in the selection		**Recent Import Years in the world**	
Countries	**Trade Value**	**Period**	**Trade Value**
China (38.6%)	$101,639,122	2004	$55,341,578
China, Hong Kong SAR (12.3%)	$32,496,915	2003	$62,296,137
EU (10.4%)	$27,328,891	2002	$56,218,001
Singapore (6.9%)	$18,121,830	2001	$62,350,997
USA (4.2%)	$11,011,412	**Average**	**$59,051,678**
Vietnam (3.5%)*****	$7,730,000		
Other countries (24.2%)	$65,207,434		
Total rattan Import: $236,206,713			

Source: COMTRADE database, UN statistics

* This calculated percentage covers only for the 2001-2003 period due to Vietnam unavailability of imports in the COMTRADE database

The above Table also presents the world's recent imports of rattan as well as the leading rattan importers. The total values of imported rattan are estimated at the value of more than USD $236 million for the period of 2001-2004. Among those top importers is China as the lead importing nation, which accounts for 38.6% of the total world rattan imports, followed by Hong Kong in the second place (12.3% at the value of more than US $32 million). Vietnam takes the sixth standing among the countries in terms of imported rattan (3.5% or more than US $7 million). Once Vietnam's data of imported rattan is made available on UN data-base, it is projected that its percentage must be higher, so is the ranking of Vietnam in dollar terms.

Part B. MAIN FINDINGS FROM THE MISSION IN QUANG NAM

1. Overview of the rattan sector in Vietnam.

1.1. Economic information on the rattan sector.

According to FAO 2003 study, Vietnam is a major producer and exporter of rattan canes, mainly Calamus poilanei, Calamus platyacanthus and Calamus palustris. However, the current capacity would not be able 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

Table 1.3. Rattan production, 1995 to 2005

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Rattan Tons	28,500	25,975	25,639	80,097	65,700	53,891	44,204	36,259	29,741	24,396	20,011

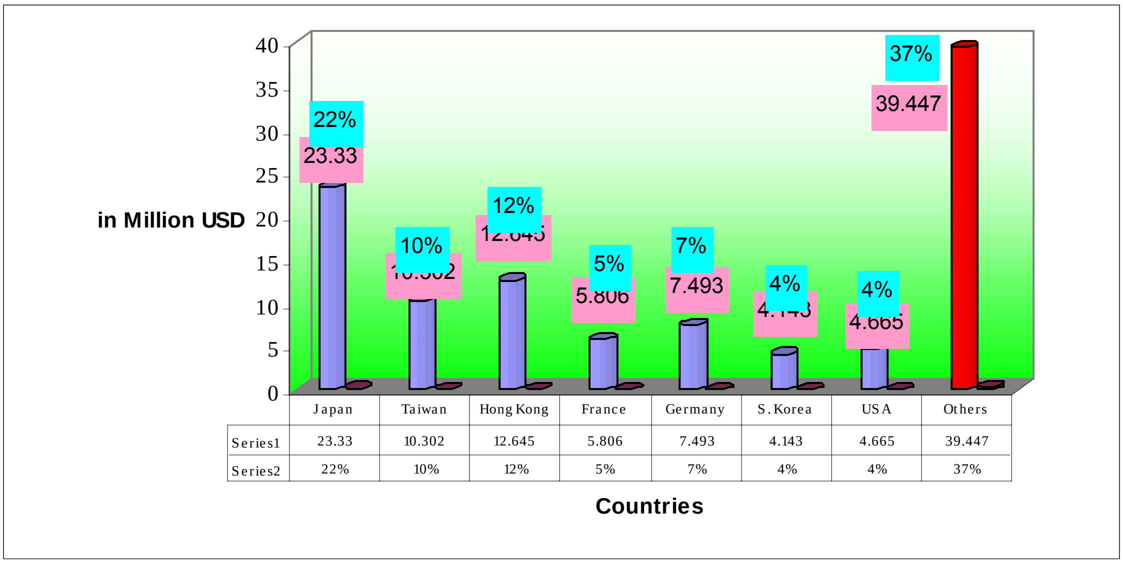
Source: MARD, National project on preservation and development of NTFP for 2006-2020
** Figures for 2000-2005 periods are calculated by the consultant*

Uncontrolled rattan harvesting for many years has led to the near extinction of rattan resources across Vietnam. To support the growing handicraft industry, the government is encouraging the cultivation of rattan among the stakeholders. In Thai Binh, Hai Duong, Ha Tinh and Nam Ha provinces rattan has been planted in home gardens for centuries as a multipurpose tree. Annually, farmers can produce some 1,500 to 2,000 tonnes from their home gardens across the country. Nowadays rattan markets have been liberalized and are operated by private traders, primary processing factories and exporters along with state-controlled export companies. Few secondary processing activities are conducted in Viet Nam for the local market and in general most of the exported products are in the primary processed form. The secondary processing in furniture and other home appliances is done usually by the importing countries. Annually some 20,000 to 40,000 people are involved in rattan exploitation and processing, which makes the industry an important contributor to employment. The most important rattan species in Viet Nam are: *Calamus tetradactylus Hance* (small diameter) in the north; *Calamus tonkinensis Becc* (small diameter) and *Calamus rudentum Warb* (small diameter) nationwide; song mat (*Calamus platyacanthus Warb*) (large diameter) in the north and *Calamus poilanei Lour* (song bot) (large diameter) in the south. Species like *Calamus tetradactylus Hance* (may nep), *Calamus tonkinensis Becc* (may dang) and *Calamus amarus Roxb* (cay mai) have been domesticated in home gardens.

1.2. Volume and value of rattan exported by Vietnam

In the 1970s and 1980s, most rattan from Vietnam was exported as finished products to the former Soviet Union. With the collapse of USSR, this market was lost and the emphasis was shifted to the export of raw material and semi-processed materials to neighbouring countries like Thailand, Taiwan, Hong Kong, China and Japan. From 1993 to 1995, raw rattan exports declined as a result of Decree 90 which is a government regulation forbidding the export of raw and semi-processed rattan materials, in order to stimulate the national processing industries. The regulation was proclaimed in 1992, but trade in these products continued until 1995. Following the ban, the rattan sector in Vietnam experienced numerous problems, owing largely to a lack of processing technology and skilled craft people. However, by the year of 1996 the Vietnamese rattan-processing industry has become advanced. Since 1996, the export of finished products has continued to increase partly as a result of Vietnam's economic reforms. As such, new export markets such as Germany and the US are gaining importance.

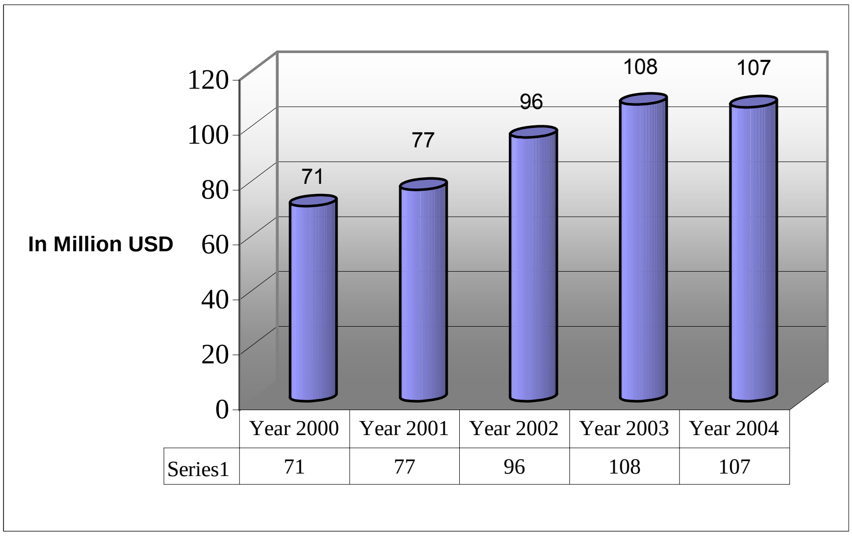
Figure 1.1. Bamboo and Rattan Exports by market by the year of 2004



Source: Vietnam Trade Promotion Agency, December 2004

The above chart shows that Japan is the most important market for bamboo & rattan export from Vietnam. The Japanese market takes 22% (or 23.23 million USD) while Hong Kong and Germany come as the second and third largest markets for Vietnam's rattan and bamboo producers. Rattan & bamboo handicrafts and furniture were important export products and the export value of bamboo & rattan products combined was estimated to exceed US $US 100 million. Demand for rattan is expected to continuously rise as the result of growing markets, thereby gaining the utmost importance more than ever before. The statistics show that nowadays, rattan is an important raw material for the handicraft industry, which employs at least 2 to 3 million people in Viet Nam. According to MARD (2005), each US$1 million earned from handicraft exports can generate jobs for roughly 3,000 to 4,000 workers in the handicraft villages. The main destinations for finished handicraft products made from rattan are Japan, China, Hong Kong, Taiwan, the United States and the Denmark.

Figure 1.2 Export Revenues of Bamboo and Rattan Combined for the 2000-2004 period



Source: Vietnam Trade Promotion Agency, December 2004 and MARD 2004 report

Table 1.3. Vietnam Rattan exports in the 2001-2003 period

Period	Trade Flow	Trade Value	Percentage of major countries
2001	Export to	$2,124,000	World (50%); Spain (24.9%); Singapore (12.5%); China (6.2%); Italy (3.1%); Hong Kong (1.4%); Philippines (0.8%); Thailand (0.8%; Japan (0.3%);
2002	Export to	$2,562,000	World (50%); Spain (13.8%); Singapore (11.7%); Philippines (8.3%); China (7.2%); Japan (2.7%) Laos (1.1%); Germany (0.9%); France (0.9%); Switzerland (0.9%); Denmark (0.4%); Hungary (0.4%) S. Korea (0.3%); Portugal (0.3%); Malta (0.2%); Australia (0.2%); Other Asian NES (0.2%); Russia (0.2%); Hong Kong (0.2%) UAE (0.1%); UK (0.1%)
2003	Export to	$1,790,000	World (50%); Spain (18%); Philippines (2.8%); Singapore (12%); China (9.2%); Italy (6.5%); Thailand (0.6%; Japan (0.4%); Hong Kong (0.4%)
Total Vietnam rattan Exports = $6,476,000 for the period of 2001 - 2003			

Source: COMTRADE database, UN statistics

Table 1.3 shows that the total value of rattan exports that Vietnam obtained for the year of 2001 is estimated at $2,124,000; and $2,562,000 for the year 2002; and $1,790,000 for the year 2003. The major trading rattan partners of Vietnam are Italy, China, Singapore, Japan and Spain as the percentage of rattan export values that Vietnam has made over the period. The total value of rattan exports for Vietnam reaches the figure of $6,476,000, accounting for 2.9% of the total world trade value in the exported rattan.

Table 1.4. Export Revenue of NFTPs in Vietnam for 1999-2005 period

Export revenues in USD million

Year	Bamboo & Rattan	Percent %	Other NTFPs	Percent %	Total NTFPs	Percent %
1999	54.739	70%	23.526	30%	78.265	100%
2000	71.000	73%	26.381	27%	97.381	100%
2001	77.842	72%	30.323	28%	108.17	100%
2002	96.368	70%	42.081	30%	138.45	100%
2003	108.567	66%	54.823	34%	163.39	100%
2004	107.0	68%	49.83	32%	156.83	100%
May-05	67.931	77%	19.921	23%	87.852	100%

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

* Other NTFPs include Cinnamon & Acacia; Medical Herbs; Resin; Natural Substance; Essential Oil and Altar

According to the National Project for preservation and development of NFTPs, total export value for NFTPs in Vietnam has reached 197.87 million, while rattan and bamboo has already take a share of US $107 million. Table below indicates the annual increase in total export revenue as compared to the 1999 data which are still under-estimating the true figure for Vietnam.

Table 1.5. Value of Vietnam Rattan Imports in recent years

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			

Source: COMTRADE database, UN statistics

The above table summarises in brief the total value of Vietnam rattan imports in the period of 2000-2003. In this duration of time, the total rattan imports is valued at US$ 7,730,000. In the year of 2000, Vietnam had to import half of its raw rattan materials from Indonesia among total value of US$ 144,000. However, from the year of 2001 onwards, it boils down to the fact that Laos PDR seems to be the largest trading partner in terms of importing the rattan on the part of Vietnam. That is, the value of rattan import accounts for 40.9% for 2001, and 40.8% for 2002. However, the Philippines has gradually become the important exporting partners for Vietnam since the value of imported rattans has been on increase over the 2001-2003 period.

Table 1.6. Vietnam NTFP Imports for the 1999-2005 period

In million USD

Year	Bamboo & Rattan	Percent %	Other NTFPs*	Percent %	Total NTFPs	Percent %
1999	0.352	2%	15.57	98%	15.922	100%
2000	0.709	3%	22.622	97%	23.331	100%
2001	0.589	2%	24.98	98%	25.569	100%
2002	0.775	3%	26.917	97%	27.692	100%
2003	0.714	2%	32.501	98%	33.215	100%
2004	0.995	3%	38.141	97%	39.136	100%
May-05	0.441	2%	22.872	98%	23.313	100%

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

* Other NTFPs include Cinnamon & Acacia; Medical Herbs; Resin; Natural Substance; Essential Oil and Altar

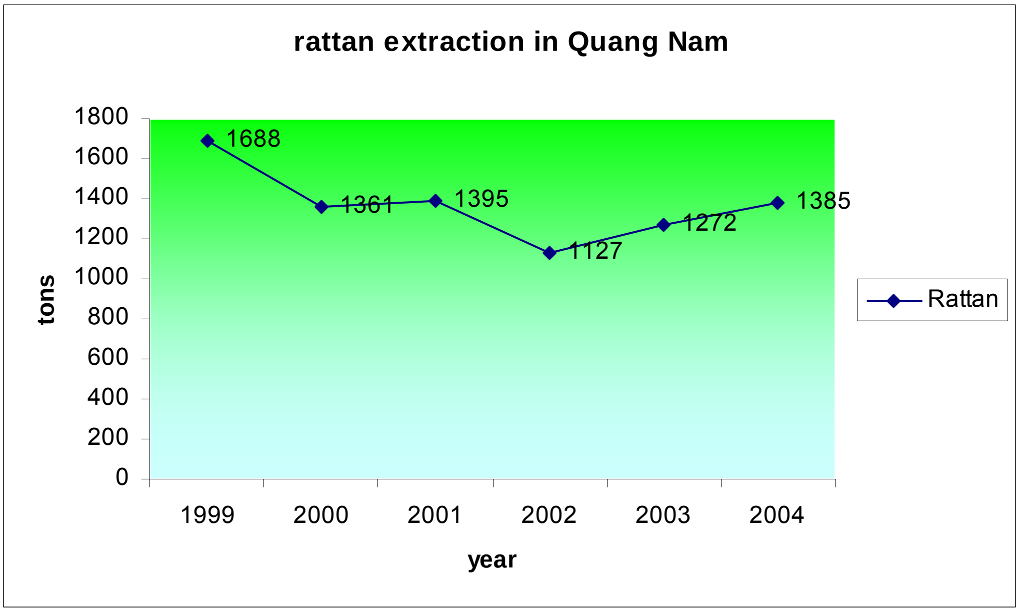
Table 1.6 above presents the value of rattan imports that Vietnam has made during the 1999-2005 period. The percentage of imports is maintained at 2%-3% for that period out of the total value while the other NTFPs including Cinnamon&Acacia; medical herbs; resin; natural substance; essential oil and altar always take a larger share (around 97%-98%)

1.3. Volume and value of raw material imported and exported in Quang Nam

1.3.1. Generals

In Quang Nam province, the raw rattan materials are mainly extracted in the mountainous districts of the province. They are: Bắc Trà My, Nam Trà My. Phước Sơn, Nam Giang and Đông Giang. According to Quang Nam PPC report, an average volume of 30% total raw rattan is considered to be imported from the neighbouring provinces such as Nghệ An, Đà Nẵng, Quảng Bình, Quảng Trị, and Quảng Ngãi) and from Laos as well. Figure 1.3. shows the volume of rattan extracted in the Quang Nam forests over the 1999-2005 period. In 1999, the volume of rattan extraction is 1688 tons which is the maximum volume as compared to the other rattan extractions for the following years. The volume for the year 2000 has decreased by 19%, reaching the level of 1,361 tons. However, the volume of extracted rattan for the year 2001 has been on the rise by 2.5% (or 1.395 tons) as compared to the year 2001. It seems that there is a downward trend for this duration of time, as the volume of extracted rattan for year 2002 is considered as the lowest level of 1,127 tons. In this six year period, the volume of extracted rattan as raw materials has been on decrease by 21% as compared to that of 1999 year.

Figure 1.3. Rattan extraction in Quang Nam province



Source*: Statistical Yearbook for Quang Nam, 2001-2004 period*

However, Figure 1.3 indicates that since the year 2002 onwards, the rattan extraction of Quang Nam has been taking place with a more rapid pace. This is, on one hand, attributed to the fact that the rattan harvesters quickly recognized the economic value of the rattan and thus, accelerating the rattan extraction in the Quang Nam's forest. On the other hand, the supply of rattan raw materials could not meet with the demand requested by the processing enterprises in the provinces. As the results, the rampant extraction has led to the unforeseeable exhaustion of natural rattan resources in Quang Nam. It is projected that this would exert a great impact on the livelihood of the people who are reliant on rattan, and on the sustainable development of the forest.

Table 1.7. Rattan Exports in recent years in Quang Nam

Rattan	2003	2004	2005 (first six months)
Units	99.000 products	206.000 products	118.000 products
Value	$42.000	$345.000	$197.000
Raw material exports	60 tons value at $166.000	102 tons value at $611.000	50 tons value at $295.000
Total Export Revenues	**$202,000**	**$946,000**[1]	**$492,000**

Source: Statistical Yearbook for Quang Nam, 2003-2005 period

The above table indicates rattan exports in Quang Nam province over the past three years. In terms of absolute units, the volume of rattan exports by Quang Nam province seems to be on the rise, with from 99 thousand products in 2003 to more than 118 thousand products for 2005. In terms of US dollar, the value of rattan export revenues, coming from the end-products, have also increased considerably, from US$42,000 for 2003 to US$197,000 for the year 2005. Also, the statistics pinpoints the fact that the rattan export revenues by Quang Nam has been increasing upwards over the past three years, from US $202,000 in 2003, and US $946,000 in 2004, and US $492,000 for the first half of the year 2005. This indicates the importance of rattan sector in the province's economy.

Over the past years, rattan sector has been developed tremendously in Quang Nam, expanding rapidly in the rural areas of the province, especially in the following districts of Duy Xuyen, Nui Thanh, Dien Ban, Thang Binh, and Tam Ky. This is because, the rattan sector has absorbed a considerable number of idle labour in rural areas. According to 2005 report of Quang Nam Department of Industry, the rattan sector has reached the total number of 900 tons of purely processed rattan, and 1.3 million diferrent rattan products valued at 34.8 billion VND which was increased by 23% in comparison to that of the previous year.

1.3.2. Number, size and regional distribution of companies involved in processing

In Vietnam, the rattan sector is not identified as an individual sector on which the policies or the other institutional supports should be created by the government. Rather, rattan and bamboo are combined together, and more often than not, the traditional cluster villages are defined by the policy makers. In this sense, the handicraft industry should have the most densely concentrated number of cluster villages in Vietnam.

The Table 1.8 below indicates the number of rattan and bamboo clusters in Vietnam. There are approximately about 713 rattan and bamboo villages in total, with the break-down by region. It seems that the Northern Region possesses the largest fraction of total rattan and bamboo villages which are estimated at 459 rattan & bamboo villages. In the North, Ha Tay province is the location in which the biggest number of rattan and bamboo villages are established. While the Central region is considered as the second biggest region, which is in possession of 171 rattan and bamboo villages. In the Southern region, rattan and bamboo villages are scattered across 13 provinces, with a total number of 83 rattan and bamboo villages.

Table 1.8. Distribution of the rattan villages across Vietnam

NORTH			CENTRAL			SOUTH		
ID	Province City	No Village	ID	Province City	No Village	ID	Province City	No Village
1	Ha Noi	6	21	Thanh Hoa	68	34	HCM city	5

[1] The 2004 GDP for Quang Nam is 2,280 billion VND, with a spot exchange rate 15,800 VND/USD, the value of exported rattan is equivalent to 14.9 billion VND, accounting for 0.66% of the total GDP for 2004

2	Hai Phong	10	22	Nghe An	34	35	Dong Nai	3
3	Ha Tay	208	23	Ha Tinh	15	36	Binh Duong	2
4	Hai Duong	9	24	Quang Tri	3	37	Dong Thap	7
5	Hung Yen	12	25	Thua Thien Hue	1	38	An Giang	8
6	Ha Nam	4	26	Quang Nam	10	39	Tien Giang	4
7	Nam Dinh	20	27	Da Nang	1	40	Vinh Long	2
8	Thai Binh	47	28	Quang Ngai	5	41	Ben Tre	2
9	Ninh Binh	21	29	Binh Dinh	9	42	Kien Giang	5
10	Vinh Phuc	8	30	Phu Yen	7	43	Can Tho	13
11	Cao Bang	14	31	Khanh Hoa	2	44	Soc Trang	4
12	Tuyen Quang	2	32	Ninh Thuan	14	45	Bac Lieu	25
13	Yen Bai	1	33	Binh Thuan	2	46	Ca Mau	3
14	Thai Nguyen	15		**Sub-total**	**171**		**Sub-total**	**83**
15	Phu Tho	4						
16	Bac Giang	21						
17	Quang Ninh	3						
18	Bac Ninh	9						
19	Lai Chau	8						
20	Son La	37						
	Sub-total	**459**						

Source: Vietnam Trade Promotion Agency, Ministry of Trade 2005

Since the rattan and bamboo are very intertwined with one another, therefore, the Vietnamese companies tend to integrate the production of bamboo and rattan so that they can realize the economies of scale in terms of labour skills, technology, and network of markets.

Table 1.9. Distribution of rattan and bamboo companies in Vietnam

Region	No of Rattan Companies	Average size (employees)	Provinces
Northern	70	150-400	Lang Son (1); Bac Ninh (2); Ha Noi (38); Ha Tay (17); Hai Duong (1); Hai Phong (1); Nam Dinh (4); Ninh Binh (2); Thai Binh (4)
Central	20	100-300	Nghe An (1), Quang Nam (5), Da Nang (11), Binh Dinh (1); Khanh Hoa (2)
South	60	200-300	Binh Duong (2); Can Tho (1); HCM city (49); Tay Ninh (4); Tien Giang (2); Vinh Long (2)
Total	**150**		

Source: Vietnam Trade Promotion Agency, Ministry of Trade 2005

According to the statistics from the Vietnam Trade Promotion Agency and the HCM city DPI, there are about 150 bamboo and rattan companies across Vietnam. It seems that these companies are equally located in the Northern and Southern parts of Vietnam. Hanoi and Ho Chi Minh city are the locations where the density of rattan and bamboo companies are mostly found. This is attributed to the fact that they are the export and import companies which need to run their business operation in Ha Noi or HCM city where they can easily have access to the export markets or where their customer base is stationed over there.

1.4 Political framework conditions for rattan sector in Vietnam

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.

1.4.1. Policies on the preservation and development of NFTP

From 1990 up to present, the Vietnamese government has issued more than 30 policies or legal legislations in regards with the preservation and development of NFTPs. These policies can be grouped into the following issues

Categorization of types of forests
Law on forest protection which was issued in 1991 was the first legal legislation to be concerned with the sector. The law states that all the national forest areas must be grouped into three (030 types of forest: Special Use Forest, Protection Forest, and Production Forest. In the spirit of this policy, the Special Use Forest should have the function of preserving the forest biodiversity. The specific legal documents (i.e. decree, ordinance, directive) should spell out the specific regulations on how the Special Use forest should be used. The law on forest protection and development was issued in 2004, as a replacement for 1991 laws. However, the categorization of forest types remained unchanged.

Management of endangered forest and species
There are several legal documents which were issued to govern the management of the endangered forests and species. These legal documents state specific details concerning the types of endangered forests and species in accordance to their economic value as well as the status of their extinction. There are also several legal policies to forbid the import and the export of the near-extinction species for commercial purpose (Annex 1, Annex 2, and Annex 3 in the CITES convention)

1.4.2. 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
Since 1992, the Vietnamese government has issued the policies on encouragement of forest development and these policies have been perfected over the period. Specifically, the forest owners should be allowed to borrow the loans from bank at the lower rate of 3.5 % per year. 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 such as 9% in 1999; and 7% in 2000; and 5.4% in 2001; and 5.4% for the period of 2001-2003. 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 1990, the government has issued the decree-laws on natural resource tax. 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 NTFP
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 NTFPs.

1.4.3. Policies on forestry and forest conservation

The evolution of forestry-related policies and programmes dates back to the 1950s when agricultural land and most forestland was nationalised and put under the management of cooperatives and state owned enterprises. Major reforms in agriculture and forestry began in the mid-1980s when the Government initiated a process to move from a centrally planned to a market driven economy. In the early 1990s, a National Forestry Action Plan (NFAP) was developed. Following this, a large number of laws, decrees, decisions, regulations, and circulars have been issued to support the implementation of the NFAP. Currently, the three main categories of forest are Special Use, Protection, and Production forests, reflecting dominant management objectives for conservation, environmental protection and forestry production respectively. While forestlands remain the property of the State, forests are being progressively allocated to economic units such as State Forest Enterprises (SFEs), cooperatives, households and other private organisations and social groups. During the implementation of the land allocation programme, several additional policies, directives, and regulations were issued by the state. That is, the Decree 02/CP on forestland allocation for forestry purposes, issued in 1994; Decision 202/CP on contractual forest management and reforestation, issued in 1994; Decree No 1/CP on contractual allocation of land to the SFEs for agriculture, forestry and aquaculture; Decision 245/TTG on state management of forests (with recognition of the role of communities). These regulations have been promulgated to address issues arising during implementation. Since 1996, a revised system for land allocation has been applied, allowing farmers to use allocated forestland for agro-forestry purposes. Land allocation processes are advancing slowly and underpin the transformation of state forestry into social forestry. In addition, guidelines have been issued for restructuring SFEs (Decision 90/TTg issued in 1994) as commercial enterprises, public service organisations, or Special Forest management boards. Overall, the role of SFEs is to be diminished in the forest sector and private investment is to be encouraged. Among these policies and programmes, the following are noteworthy:

Ban of timber harvesting from natural forests
Enacted in 1992, this has been among the most important changes in forestry policy. Furthermore, it has increased the importance of NTFPs, especially for local communities and SFEs that have been affected directly by this ban.

1.4.4. Programme 327

Decision No. 327 issued on September 15th,1992, which aimed at the target on "greening barren hills" (Program 327 in short) and Decision No. 773 (Program 773 in short) on "the use of unoccupied land alluvial ground." These programs seek to increase the cover in bare areas and develop agriculture, forestry, and fishery in alluvial lands and wet lands along side rivers and seas, etc. in order to restore the eco-environment and protect waters and bio-resources. Farmers in the project areas who agree to do forestation or to protect woodlands receive financial support from the Government. Those who receive land for forestation receive an initial amount of VND 1.7 million for forest growing and VND 800,000 for three years of forest protection. Those who sign contracts for forest protection receive VND 50,000 per hectare per year (There have been some adjustments on cost of forest growing and forest caring but they are still low in comparison with the technical requirements). Households that grow industrial crops and fruits enjoy no-interest loans of VND 1 million per household. Additionally, the Government invests in developing physical infrastructures such as roads, markets, schools, healthcare stations, etc. In project areas. Annually, the Government spends some VND 600-700 Billion for these programs. The above programs have made notable achievements toward their objectives, including raising forest-cover rates. The major obstacle remains the support level, as the costs of forest protection and forestation are substantial. Loans for investment are still low, and the quality and efficiency of forests and gardens, especially rubber and cashew gardens, remain low.

1.4.5. Five Million Hectare Reforestation Policies (5MHRP),

As a follow-on of the 327 programme, the 5MHRP was approved in 1998 and remains the single most dominant programme of the forest sector. It envisages the establishment of 5 million ha of forest by 2010, to increase forest cover from 28% to 43% of Vietnam's total land area. One significant change is the targeting of 1 million ha for rehabilitation by natural regeneration. The 5 M ha also includes the establishment of some 450,000 ha of NTFP plantations for products such as cinnamon, star anise, pine resin, other essential oils, rattan & bamboo.

According to the 5MHRP policies, in 2010 Viet Nam could have more than one million hectares of NWFP plantations and other types of NWFP forests. The forest coverage has increased from 23.6 percent in 1983 to 33.2 percent in 2000 (MARD 2000). This is a result of the new reforms, which have opened opportunities for local communities to improve their forest resources and which have given them new possibilities to generate more income from NWFP. According to the Forest Strategy Group, a think tank of the MARD, it has been forecast that from 2001 to 2010 Viet Nam will need 300,000 – 350,000 tonnes of rattan and bamboo in order to satisfy the need of the domestic production.

The 5MHRP has multiple aims relating to:

- Conserving biodiversity and protecting soil and water resources;
- Creating raw materials for forest-based industries and for satisfying domestic and export demands;
- Contributing to sustainable development in mountainous regions, with special attention to ethnic minorities and upland communities practising shifting cultivation.
- Supporting national programmes on hunger eradication and poverty reduction.

The 5MHRP has high ambitions for income generation through forestry and NTFPs. But a common criticism of the 5MHRP is where does it intend to reforest its 5 million hectares? The "barren hills" of Vietnam are commonly promoted as the target areas for reforestation. But although the epithet suggests that these lands are unoccupied and useless, they are often important areas to poor communities for upland cultivation, fallow lands in crop rotation systems, and common access shrublands and naturally regenerating forests for NTFPs. The NTFPs are often vital supplies of energy, construction materials, foodstuffs, medicines, fodder, and adding income, especially in periods of food shortage or sudden illness.

1.4.6. Forestry Development Strategy (FDS)

The Government of Vietnam has developed in 2001 the Forestry Development Strategy, which identifies key orientations in sustainable forest resource management and forestry development for Vietnam during the period 2001 – 2010. These new directions reflect a shift from a resource exploitation-based forestry to a people-based one, focusing on forest protection, rehabilitation and development, biodiversity conservation, protection of precious and rare forest fauna and flora, promotion of small and medium forest product processing, contribution to hunger eradication and poverty reduction, improved livelihood of the poor people National Assembly Resolution No 8/1997/QH10 and Decision 661/QD-TTg dated July 29, 1998 people in mountainous areas, socialisation of forestry, improved role and contribution of the Forestry Sector in national socio-economic development. The role of NTFPs in this process is specifically recognised in six key forestry development programmes of the FDS, namely the 5MHRP Sustainable forest management and development programme; Timber and forest product processing programme; Forest resources inventory; assessment and monitoring programme; Forest tree seedling programme; and Human resources development programme. The people-based focus of the FDS and its multi-sectoral approach offer much promise to integrating poverty and forest conservation, but, like the FSSP, it is still an early development and its practical successes have yet to be proven.

1.4.7. 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.

1.4.8. 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. This is to be stipulated in more detail in the next policy

1.4.9. Guidance No 03/2005/TT- BCN

This guidance was issued by the Ministry of Industry on 23 June 2005 which specifies the details concerning the implementation of the Decree 134/2004/NĐ-CP on the encouragement of the industrial development in rural areas. This guidance was issued specially in support of the SMEs or cooperatives as well as family-based enterprises which all generally termed as "Rural Industrial Establishments". In the spirit of this, the rural industrial establishments should be supported specifically:

They should be considered as the target groups of the rural industrial encouragement programs initiated by central government, department of industry or other rural industrial encouragement services

These rural industrial establishments should be given financial supports in order to carry out the investment projects, staff-training, technology transfer, participation in trade fairs or EXPO on product promotion

These rural industrial establishments should be backed up in terms of market information or access. This should be implemented in the ways of free web-posting of the Ministry of Industry or free advertisements on the Ministry of Industry Newsletters

These rural industrial establishments should be allowed to participate in the national research programs

They are allowed to enjoy the preferential policies on the land rentals, investment, and technology transfer.

1.4.10 Export of NFTPs

Export enterprises that perform production, processing, and export-import activities covering agricultural and forestry products, equipment, and machines have to abide by the laws on export. According to Decree 13848/TM-XNK of 1997, the conditions and requirements for rattan exporting enterprises are as follows:

- An export-import license in suitable and clearly stated activities;
- Membership in the handicraft (or rattan products) Export-Import Association and a license issued by the Association;
- At least 3-year experience in rattan trading; and,
- Turnover in rattan trading no less than 5 Billion VND.

Instruction No. 01/1998/TM-XNK changed some of the conditions.

- Certificate of NFTP trading and 2-year experience;
- Sufficient capital for exporting rattans
- Creditworthiness; and,
- Good quality for export.

The conditions and requirements seek to improve the efficiency of rattan exporting firms, stabilize the market, and increase the competitiveness of Vietnamese companies.

1.4.11. Natural resource tax

To be allowed to exploit rattans or other NTFPs in the productive forests, the economic organizations or individual rattan exploiters are supposed to obtain the rattan exploitation permission from the provincial department of agriculture & rural development (DARD) or district people committees, depending on the volume of rattans to be extracted. In this licence, the rattan volume and the exploitation location must be clearly stated.

According to decree-law No 5/1998/PI-UBTVQH10, issued 16/4/1998, the rattan wholesaler has to pay resource tax of 5% only. Discussion with staff of provincial tax department, this also was confirmed. However, during collecting information the data showed that local wholesaler have to pay fee of 50 VND per rattan cane and 200,000 VND per ton for commune and district. This fee is used for reinvestment in forest development activities in the local area.

Several state-owned forest enterprises, private businesses, individual exploiters can apply for rattan exploitation permits. They may, however, not be involved in the rattan exploitation. Rather, they can rent the rattan exploitation permit to someone (or license renters) else who are financially capable for rattan exploitation. The license holders are responsible for making the natural resource tax payments on their behalf. The license renters must pay a certain amount of fees to the license holders at an agreed rate after they have already completed the transportation of rattan out of the forests.

Before the rattan exploiters move the rattan or other NTFPs out of the forests, they are obliged to submit the rattan exploitation licence to the forest controllers or tax officers who should deduct the actual exploited volume of rattans in a cumulative way until the permitted volume is finished. According to the Directive No 153/1998/TT-BTC issued on 26/November/1998 by the Ministry of Finance, the tax rate which is applicable to the rattan products to be exploited in the natural forests should be 5% as set forth in the article 9 of chapter V. The tax rate list, applicable to the rattan, should be attached to the Decree 68/1998/NĐ-CP. Since 1993, all the tax revenue derived from the natural resource taxation will be accrued to the central government budget and, accordingly allocated to provinces. The provincial authorities should be responsible for the management of this kind of tax revenue by making re-investment in the planting as well as protection of forests.

1.4.12. VAT, business; income tax and land rental

All the processing enterprises, the mountainous commercial companies, and rattan export companies are supposed to pay the Value Added Tax in accordance with the Decree No 79/2000/NĐ-CP. However, the export companies fall within the preferential tax treatment by the government, they would be eligible to the VAT refunds, as well as the export tax refunds once they have submitted the sufficient invoices and financial reports to the tax authorities at the end of the fiscal year.

Beside the local fee, the rattan purchasing companies have to pay following taxes. Discussion with director of Nam Giang trading company and Au Co rattan-bamboo-palm leave enterprise mentioned that the company also have to pay the following taxes: Business tax of 15% and Income tax of 28% (Recently, the government has amended the law of value added tax (VAT) into enterprise income tax and adjusting enterprise income tax from 32% down to 28%. Land rental fee: this is set forth according to the local regulations.

1.4.13. Quang Nam PPC issued Policies on Rattan related sector

Like the central government, there is no specific policy issued by the Quang Nam PPC on rattan sector. Rather, they are general policies on the development of traditional clusters which are indirectly related to the rattan sector. Over the past years, the provincial peoples committee of Quang Nam has issued numerous introductions/or guidance on encouraging the development of rattan related production in the province. These decisions/or guidance are numbered as:

- Decision No 13/2003/QĐ-UB dated 30/01/2003 which was mainly concentrated on the establishment of mechanism for encouraging the investment projects in Quang Nam

- Decision No 78/2003/QĐ-UB issued on 30/12/2003 which was concerned with the organization of rural-industry encouraging activities in the province.
- Beside these decisions, each local district would issue the decisions to attract the investors to their districts

1.4.14. Commune management fees for rattan exploitation

In accordance with the Ordinance of the executive committee of the provincial people committee, rattan traders are only supposed to pay the natural resource tax. However, the in-depth interviews revealed that the rattan traders have to implicitly pay 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 rattan cane. In some special situations, the rattan harvesters can lower down to 50% of the fee payments when they under-declare the volume of rattan to the tax officers or the forest controllers. The tax payers are not sure of the existence of such a fee, but they are still requested to pay in a hope that their business runs smoothly. There is no guidance for the specific use of this commune fee revenue.

1.4.15. 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[2], 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.

1.5. Most Important Government And Donor Initiatives To Support The Sector

1.5.1. 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 NWFPs 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.

[2] For example, some 3,800 species of medicinal plants have so far been identified by the Institute of Medicinal Materials, of which 114 species are classified as endangered. Less is known about other types of NTFPs in Vietnam

1.5.2. WWF Indochina Initiative on Rattan sector

The rattan sectors in Cambodia, Lao PDR and Vietnam are following a similar path of development but are at different stages. However, the relationship between each countries' rattan industry is inextricably linked. The project will gather up-to-date knowledge on the regional dynamics of the rattan trade, and give an overview of the conservation status of key species, both rare and commercially valuable. It would link experiences and expertise with existing conservation and sustainable harvest ventures. It will further synthesize all verifiable data on 10 main species collected and harvested with known associated growth rates.

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.

1.5.3. WWF Central Truong Son Initiative

Long-term objective of this initiative is to establish an integrated MOSAIC of complementary land-use and development practice to protect, manage and restore natural resources and biodiversity in the Truong Son in the industrialization and modernization process, while also contributing to institutional development, good governance and raised standards of living for local communities. The concept for the Central Truong Son Initiative was developed in partnership with the Government of Vietnam who nominated the Forest Protection Department, within the Ministry of Agriculture and Rural Development, as the lead agency in the initiative. The Central Truong Son Initiative focuses on the Vietnam component of the landscape in the six provinces of Quang Tri, Thua-Thien Hue, Quang Nam, Kon Tum, Gia Lai, Binh Dinh and Danang city.

1.5.4. Incorporating Primate Conservation within the Community Managed Landscape of Quang Nam Province

A component of the MOSAIC (Management Of Strategic Areas for Integrated Conservation)

1.5.5. Initiative for Capacity Building, Extension, Demonstration and Support for the Development of Market-Oriented Agroforestry in Quang Nam Province, Vietnam.

This support comes from the Italian Government and will be implemented for the duration of 2004-2006 as an Official Development Aid to Vietnam. At the provincial level, the Department of Agriculture and Rural Development (DARD), Quang Nam was designated as implementing institution. The total funds is estimated at 1.661.120 US$. This initiative is aimed at assisting the Government and the rural people in Quang Nam province to maximize the benefits of forest land allocation by supporting the development of environmentally sound and commercially profitable agro-forestry systems also on lands that are currently barren. The project will provide the capacity building, extension, demonstration and technical support for the development of market-oriented forest gardens and agro-forestry systems in Quang Nam province

1.5.6. Supports for technical Support for the Five Million Hectare Reforestation Program

This support was funded by FAO for the duration of 2000-2001. The total budget was approximately about 333,320 US$. The initiative was aimed at attaining the objectives which is to further develop Vietnam's capacity to effectively implement the "National Program for Reforestation of Five Million Hectares", leading to a substantial increase in forest cover, enhanced ecological stability, and expanded income opportunities.

1.5.7. Supports for Enhancing Sustainable Forest Harvesting in Asia

This support was funded by the government of Japan for the duration of 2003-2005. The total budget was approximately about 799.475 US$. The initiative was aimed at attaining the objectives which is to support activities directed at improving forest harvesting in three countries of the Asia Pacific Region (Lao PDR, Myanmar and Vietnam). Key emphasis will be given to improve management and sustainable utilisation of natural forests and plantations for the benefit of local people and national development

1.5.8. 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.

- Aromatic plants
- Bamboo
- Charcoal
- Dye plants
- Fuelwood
- Honey
- Medicinal plants
- Mushrooms
- Rattan
- Thatching and Plaiting plant materials

1.5.9. Vietnamese Government initiative on Encouragement of the rural industry

This initiative by the Vietnamese government was based on the Decion 132/2000/QĐ -TTg issued by the Prime Minister on 24 November 2000. This initiative is concerned with the policies and regulations on the encouragement of the handicrafts and industrial clusters in rural areas. This decision is composed of fifteen (15) articles, fully governing all areas of cluster development in the rural areas. Article 1 governs the areas of clusters in the rural areas among which the rattan processing and rattan handicrafts are encouraged to develop in the rural areas of Vietnam. The beneficiaries of this decision include all kinds of economic entities/organizations such as household enterprise, cooperatives, Ltd enterprises, joint-stock businesses, and joint ventures. The decision 132/2000/QĐ - TTg also clarifies in detail all the issues related to the development of handicraft clusters in rural areas. They are described as follows:

Role of government:
The government plays the role in long-term strategic planning for the development of handicrafts clusters in rural areas; encouraging the small enterprises to make a good use of natural resources (i.e. timber, rattan; bamboo and so on) in an effort to put a cap on the environmental degradation. The government also protects the legal rights for enterprises in terms of intellectual property rights; the establishment of business associations.

Land rentals
Handicraft cluster enterprises are given the "red book" (or land use right certificate). In case the rural clusters want to have more land or they want to move to a more spacious location, then the Local People Committees take the responsibility to rent the land to them at the lowest rate possible. All in all, the handicraft clusters are given the utmost favourable conditions to get the land for setting up their enterprises.

Raw materials for production
The provincial authorities take the responsibility to present the master plan in order to ensure that raw materials supplies are sufficient for the cluster enterprises in the neighbourhood. For the raw materials that belong to the forest resources, MARD will have to encourage the businesses to use raw materials from the grown forests or imported raw materials.

Credits and financial investment
The handicrafts cluster enterprises have the privilege in the financial investment within the Decree No 51/1999/NĐ-CP, issued on 08 July 1999 by the state which governs the details of implementing the Laws on Domestic Investment Encouragement. For excellent business plans, which have been appraised by the district People Committees, they will then be given loans by the Fund for Supports and Development at a subsidized rate of interest. The cluster enterprises in rural areas can have trusted loans but the implementation will fall within the Decree No 178/1999/NĐ-CP issued on 29 December 1999 by the government in terms of loan assurance of the credit organizations.

Tax and fee

The handicraft cluster enterprises will have a favourable treatment in tax as stated in the Decree No 51/1999/NĐ-CP issued on 08 July 1999 by the government. The details of tax or fees payable to the cluster enterprises are clarified in the Decree No 04/1999/NĐ-CP issued on 30 January 1999. Since this decree outlines the main points for all kinds of cluster enterprises, therefore, no articles mention specifically about the rattan sector.

Product quality and certification
The cluster enterprises are supposed to continuously increase the product quality and competitiveness. They have to take the full responsibility for the product quality with regard to the consumers. The cluster businesses are encouraged to register for the quality certification, product design as well as intellectual property rights for their products.

Information and market for products of cluster enterprises
The cluster enterprises in rural areas will have the right to participate in trade fair or EXPO inside the country. In this situation, these enterprises will have a subsidy of 50% of the cost for renting a stall in the trade fair. In case the cluster businesses want to take part in trade fairs abroad, they will be given a partial financial support from the government budget. The Ministry of Trade also gives out the instructions to the commercial attaché abroad to seek out the

opportunities for, or to introduce the potentials of the cluster enterprises so that they can export directly to foreign clients.

Labour and Training
Priorities should be given to rural people from whom lands are taken away by the government. Besides, the cluster enterprises should employ the on-the-spot local labourers. The master craft men are allowed to organize the training courses on a basis of a negotiable fee. Vocational training centre must be set up at each district and operated by the government budgets. The state-run industrial art schools must support the cluster enterprises in terms of product design and type of products.

1.5.10. Forest Sector Support Programme (FSSP)

Adopted by the Government in November 2001, FSSP aims at better guiding and managing support activities in the forest sector during the period 2001 – 2010. The FSSP is considered by the international community and the Government of Vietnam as a tool of the FDS for 2001 - 2010. The Government's interests in NTFPs are also revealed in the national research agenda that was subsequently revised and published in the proceedings of the "Forest Sector Support Program Workshop: Setting Research Priorities for Vietnam's Five Million Hectare Reforestation Programme", which was held in Dalat, 20 – 22 November 2001.

1.5.11. National system of protected areas

Vietnam's system of protected areas consists of 17 National Parks, 60 Nature Reserves and 18 Landscape Conservation Areas (Protected areas and development in Vietnam: lessons learned, forthcoming). A special category for Species/Habitat Conservation Area has been recently introduced, but no such sites have yet been established. The protected area system is officially recognized as 2,123,354 ha. The Ministry of Agriculture and Rural Development has proposed to increase the number of sites to 109 and expand total area to 2,629,188 ha

1.5.12. Ford Foundation Quang Nam Forest Land Allocation Initiative

The project will develop a comprehensive framework for the allocation of land and management of natural resources to indigenous communities in the mountainous areas of Quang Nam province. The project will build capacity to devolve state-owned, 'open-access' land to locally managed common-property regimes. This is a vital step in securing indigenous property rights, recognising local institutions and re-enforcing social, environmental and economic benefits. The main activities include detailed participatory development of an allocation procedure and an adaptive mosaic of local management regimes to reflect the diversity of local institutions and aspirations. Three pilot sites will precede a provincial process to devolve nearly 500,000 ha of State land to local community institutions by 2010. This two year project will therefore shape provincial capacity and policy, and harmonise with other models of forest land management in Vietnam

1.5.13. MPI-GTZ Small and Medium Enterprises Development Programme

In May 2005 MPI and GTZ launched the SME Development Programme. The Programme's objective is to improve the competitiveness of Vietnam's private small and medium enterprises (SMEs). The focus of the new Programme is on improving the business environment for private sector development and to enhance the market position of SMEs in selected sectors, specifically in provinces outside the major growth centres. This support will focus on the four target provinces such as An Giang, Dak Lak, Hung Yen and Quang Nam. The overall objective is to significantly improve the competitiveness of private small and medium enterprises in

Vietnam. Total financial support from the Germany is about 8,311,000 EUR. Core Coordination Partners include:

- Ministry of Planning and Investment (MPI)
- Vietnam Chamber of Commerce and Industry (VCCI)
- Vietnam Academy of Science and Technology-Institute of Materials Science (VAST-IMS)
- Local Governments of four selected provinces

The areas in which the emphasis will be put include (1) SME Policy/Business Investment Climate. (2) Local Economic Development. (3) Competitiveness of Selected Sub-Sectors. (4) Material Testing and other advanced technical services.

2. Raw rattan material supply analysis in Quang Nam

Quang Nam province has a land area of 1,040,878.02 ha, of which the forestland is 539,869.53 ha that comprise 51.8% of the total provincial natural land area. Quang Nam is located in a strategic geographic area in central Vietnam. The NTFP resources are very diversified. Rattan is one of these products, which has non-timber origin and has been harvested from the forest. In Quang Nam, rattan is linked to community and existing development of traditional handicraft villages, contributing to job opportunities, income generation, and livelihood improvement. However, in Quang Nam like many provinces in Vietnam, the forest use in the past had been mainly timber exploitation, neglecting rattan management, protection and development. Therefore, while the area of natural forest is reducing, rattan is degrading as well and they bring serious effects to forest residents.

Many questions have been raised, such as: How many rattan species are there? Where is the abundance and location of rattan and what is their role in household livelihood in the mountainous area? Is there a legal framework to facilitate rattan development? What is the extent of habitat destruction of rattan? What kind of protection is available for the rattan resource?, etc. However, it is a big issue that needs more time to study. With the short time of a fact finding mission, this report attempts to cover partly these mentioned issues.

This component of the fact-finding mission on rattan sector in Quang Nam is aimed at the following objectives

- Assess type, quantity and source of raw rattan material in Quang Nam province.
- Assess type, quantity, prices and source of raw rattan material sourced in neighbouring provinces.
- Analyse sustainability issues concerning raw material supply, with an emphasis on specific rattan species used for rattan furniture and home appliances and ecologically sustainable harvest volumes.

To conduct the raw material supply of rattan in Quang Nam province, the following methods were used

- Review key documentation to obtain a better understanding of the rattan sector in Vietnam in general and Quang Nam in particular.
- Conduct detailed interviews with representatives of relevant organizations in Quang Nam province. Undertake visits to two communes to observe rattan exploitation and marketing activities and conduct in-depth interviews with rattan harvesters, local middlemen and local authorities.
- Conduct rattan rapid assessment (J. T. Williams et al 1995) in three forest types in Nam Giang district to identify composition of rattan species, number of rattan clumps, number of rattan individual in each clump, measurements of length and diameter of stems.
- Identify scientific name of rattan species based on morphological characteristics of rattans.

2.1. Distribution, growth of rattan in Quang Nam province

2.1.1. Distribution of rattan

Rattan is an important component in ecological tropical forest system in Vietnam. We are only just interested in rattan harvesting without paying attention to conservation and sustainable utilization of this valuable resource. With the destruction of natural forests, the habitats of many rattan species have been damaged. These rattan species have been exhaustively harvested yet few species have been listed in the Vietnam Red Data Book of threatened and endangered species. According to Pham Hoang Ho, Vietnam has about 30 rattan species belonging to 5 genera: Calamus with 22 species; Daemonorops 3 species; Plectocomia 2 species Konthalsia 2 species and Myrialepsis 1 species.

Like other provinces in the central region of Vietnam, Quang Nam has rich rattan resources. Rattan occurs naturally in all forest types in Quang Nam. Villagers have always carried out harvesting of canes from the natural forest. Due to pressure of the market as well as unsustainable exploitation of rattan resource in recent years the volume of rattan harvested has quickly declined. Some rattan species are assessed as endangered or vulnerable species (V) are *C. platyacanthus*, *C. rhabdocladus* species. During the research and survey in Nam Giang district, ten specimens of different rattan species have been collected.

Based on the important morphological characteristics of rattan such as the leaf sheath, climbing organ, leaflet, inflorescence and fruit, we have identified 10 species distributed in the mountainous districts in Quang Nam province (**table 2.1).** Especially the *Daemonorops poilanei*, *C. tetradactylus, C. platyacanthus* and *Calamus walkeri* species are exploited in large quantity for sale in raw material form or making rattan goods for domestic use or export. The data collected show that rattan grows in almost natural forest areas in Quang Nam. However, we can find rattan growing naturally in following mountainous districts: Dong Giang, Tay Giang, mountainous communes of Que Son, Hiep Duc, Tien Phuoc, Phu Ninh and most abundant in three districts of Nam Giang, Phuoc Son and Tra My. Rattan can be found in areas where light intensity is varying at wide range as well as different elevation, soil types and humidity.

Table 2.1 Composition of rattan species in Quang Nam

No	Scientific name
1	*Calamus bousigonii* Becc.
2	*C. tetradactylus* Hance
3	*C. rhabdocladus* Burret
4	*Plectocomia elongata* Mart. ex Blume
5	*Daemonorops poilanei* J. Dransf.
6	*C. platyacanthus* Warrb. ex Becc.
7	*Plectocomiopsis geminiflora* (Griff) Becc.
8	*C. dioicus* Lour.
9	*Daemonorops jenkinsiana* Mart.
10	*Calamus walkeri* Hance

2.1.2. Growth and development of rattan

Our research and survey results in Bach Ma, Thua Thien Hue province show that annual growth of each rattan species is very different from the others. Stem elongation is continuous but variable from period to period. Even within a species, growing in the same ecological condition, the growth rate annually is variable in length and age of plant **(table 2.2).** The maximum growth rate of rattan stem is period with stem climbing from 2.5m long to 4 m long.

Table 2.2. Growth rates of six commercial species of rattan

Length of	Growth rate stem (m/year)

stem (m)	*C. tetradactylus*	*C. plactyacanthus*	*C. walkeri*	*C. rhabdocladus*	*D. poilanei*	*D. jenkinsiana*
< 2.5m	0.2-1.3	0.1-0.3	0.2-1.2	0.1-0.2	0.2-1.2	0.1-0.9
2.5m<...<4m	1.5-2.0	0.4-0.6	1.8-2.5	0.4-0.6	1.5-2.0	1.0-1.5
≥ 4m	1.4-1.5	0.8-1.1	1.6-2.4	0.4-0.5	1.5-1.9	0.8-1.4

Table 2.3 shows that fruiting and flowering months of the rattan species are very different. The current situation of rattan harvesting and the flowering and breeding periods of mature canes in our study area occur at the same time so without harvesting guide that has had a considerable negative impact to survival of rattan population naturally. A planning and exploiting guide for each rattan species in specific ecological area would contribute to conservation and sustainable utilization of rattan resources.

Table 2.3. Flowering and fruiting of known rattan species

Species	Flowering time	Mature fruit time	Seed germination time	Harvesting time	Shooting time
Calamus tetradactylus	Mar-May	May-Jul	Aug-Sep	Jan-Dec	Jul-Aug
C. platyacanthus	Apr-May	Sep-Nov	Mar-Apr		Jul-Aug
C. rahdocladus	Apr-May	Oct-Nov	Mar.-Apr	Jun and Aug	Jul-Aug
C. walkeri	Mar-Apr	May-Jun	Jul-Aug	Sep-Dec	Jul-Aug
Deamonorop poilanei	Apr-May	Oct-Nov	Mar-Apr	Jul-Dec	Jul-Aug
D. jenkinsiana	Mar-Apr	Sep-Dec	Mar-Apr	Aug-Dec	Jul-Aug

The results of workshop in sustainable exploitation of rattan for the center provinces in Vietnam and our survey in Nam Giang district show that all Deamonorop poilanei species canes of 3.5 m length or more and 1.2-1.6 cm diameter (local commercial size ((≥ 4m long)) have been collected **(table 2.4).**

Table 2.4. Preferred harvesting sizes of known rattan species

Species	Diameter of stem (mm)	Length of stem (m)
Calamus tetradactylus	*5-8*	> 4
C. platyacanthus	12 (25-40)	> 4
C. rahdocladus	25-30	> 4
C. walkeri	10-12	> 3.5
Deamonorop poilanei	12-16	> 3.5
D. jenkinsiana	14	> 3.5

2.2. Estimation of rattan yield in Quang Nam

In order to estimate rattan yield in the natural forest areas in Quang Nam province, we conducted rapid assessment of rattan resources in Nam Giang district to provide baseline data for sustainable rattan exploitation and management in whole province. Nam Giang is a mountainous district of Quang Nam province that includes Song Thanh nature reserve with high biodiversity level.

Total natural area of Nam Giang district is about 183,650 ha. Nam Giang has an area of 99,000 ha forest encompassing 46,000 ha special use forests, 38,000 ha protective forests and 15,000 ha production forests. According to survey of concerned organizations, Nam Giang has rich diversity of rattan resources. Statistical results on harvested rattan volume show gradual decrease in the years from 2000 to 2004. Ten years ago, the harvested rattan volume from natural forest in communes in Nam Giang was over 1,000 tons but currently volume only is less than 500 tons per year **(table 2.10).**

The data presented in each following plot is an average number of rattan clumps, number of stems in one clump and percentage of plants of three length levels. Subsequently, these data was used to estimate number of stems in one hectare of each forest type.

Table 2.5. Current situation of rattan in one hectare of natural forest in Nam Giang

Study site: Cha Val commune, Nam Giang district
At elevation of 432-454m
Forest type: Protective forest

Species	Average number of clump/ha	Total stem/ha	Average number of stem/ha	Percentage number of stem with length (%)		
				< 2.5 (m)	2.5 <..< 4 (m)	≥ 4 (m)
D. poilanei	125.3	716.0	5.72	78.2	15.6	6.2
P. geminiflora	25	325.0	13	4.8	14.7	80.5
D. jenkinsiana	8.3	24.9	3	16.1	27.9	56.0
P. elongata	4.8	4.8	1			100
Total	175.3	1070.7				

Study site: Song Thanh nature reserve, Nam Giang district
At elevation of 355-376m
Forest type: Special use forest (Regeneration zone)

Species	**Average number of clump/ha**	**Total stem/ha**	**Average number of stem/ha**	**Percentage number of stem with length (%)**		
				< 2.5 (m)	2.5 <..< 4 (m)	≥ 4 (m)
D. poilanei	175,1	835.2	4.77	74.0	17.6	8.4
P. geminiflora	85.2	772.8	9.07	8.6	18.5	72.9
D. jenkinsiana	31.2	421.2	13.5	74.1	3.7	22.2
C. plactyacanthus	7.5	15.0	2	50.0		50.0
P. elongata	5.3	5.3	1			100
C. bousigonii	1.04	1.04	1			100
C. walkeri	12.5	20.0	1.6	25	25	50
C. tetradactylus	56.2	351.3	6.25	20		80
Total	1450	2421.8				

Study site: Ta Bhing commune, Nam Giang district
At elevation of 350-377m

Forest type: production forest **Species**	**Average number of clump/ha**	**Total stem/ha**	**Average number of stem/ha**	**Percentage number of stem with length (%)**		
				< 2.5 (m)	**2.5 <..< 4 (m)**	**≥ 4 (m)**
D. poilanei	75.6	290.2	3.87	87.7	9.4	2.9
P. geminiflora	75	525	7.0	19.0	14.3	66.7
C. plactyacanthus	4.0	8.0	2.0	100		
P. elongata	3.1	3.1	1.0		25	75
C. tetradactylus	25.0	150	6.0	40.3	35.4	24.3
Total	900	976.3				

The data presented in **table 2.5** are statistical results from plots in three forest types in Nam Giang. The results showed that the rattan density in the special use forest areas is much higher than that in the protective forest and production forest areas. The composition of rattan species in the regeneration zones of special use forests shows more diversity. Because the special use forests has limited disturbance of local people therefore the percentage of rattan canes (commercial size is over 4 m length) of *D. poilanei* species (8.4%) is higher than percentage of that in protective forest and production forest areas. During the field trip we found *Plectocomiopsis geminiflora* species growing naturally with high density in three forest types. Because the *D. poilanei* species is present in about 80% of the Quang Nam rattan market, we selected this species for estimating rattan yield in the forest types of Nam Giang and Quang Nam. At present, the maximum length of rattan canes in the production forest areas of heavy exploitation is less than two meters. The number of canes of *D. poilanei* species of more than 4 meters length in the pilots of production forest areas is also very few. From the above results we will see that almost rattan mature canes in the heavily disturbed forest areas in Nam Giang were exploited. This is evident to show the exploitation of rattan from the Quang Nam forests exert a high pressure on natural rattan resources.

Table 2.6. Existing rattan yield in one hectare in three forest types in Nam Giang

Items	Unit	Protective forest area	Special use forest area	Protection forest area
Cane of 4m length	Average cane/ha	44.4	70.2	8.5
Weight	Cane/ton	6,000	6.000	6,000
D. poilanei	Ton/ha	0.0074	0.012	0.0014

One hectare of production forest area yields about 290.2 canes of *D. poilanei* species encompassing 2.9% canes of over 4 m length, 9.4% canes of 2.5m to less than 4 m and 87.7% canes of less than 2.5 m length. The interviews with representatives of enterprises show that one-ton of *D. poilanei* species consists of 6,000 canes. In this study we will convert length of rattan stem into weight on this equation. Because the time for this field trip is limited, the number of research plots is not enough for analyzing standard error. The following data is calculated based on average error. Existing yields of commercial rattan canes of *D. poilanei* species are very low, about 0.0074 tons/ha in the protective forest areas, 0.012 tons/ha in the special use forest areas and 0.0014 tons/ha in the protection forest areas **(table 2.6).** Calculations based on annual growth rate of *D. poilanei* species (1.5m-2.0m/year) **(table 2.2)** and current rattan canes of range from 2.5m to 4m length show that annual rattan yield of 710.9 tons – 1,012.0 tons in three forest types or 287.7 tons – 460 tons in protective forest area and production forest areas could be exploited (**table 2.7**).

Based on data collected in Nam Giang forest types, we estimated *D. poilanei* species yield in three forest types in Quang Nam shown in table 9. As above-mentioned, due to number of rattan plots is limited so accuracy of this estimation is relative although that we can estimate rattan production in Quang Nam forests. **Table 2.2** shows that growth rate of young *D. poilanei* species is low (0.2m/year-1.2m/year) therefore yield of young canes in this period is not high. The growth rate of long stems of *D. poilanei* species is also higher than short stems. However, in one forest hectare, number of rattan canes of over 2.5 m length to less than 4 m length occupied about 15.6% total rattan canes in the protective forest areas, 17.6 % total rattan canes in the special use forest areas and 9.4% total rattan canes in the production forest areas **(table 2.5).** The yield of *D. poilanei* species can be harvested in each year is calculated based on canes of 2.5 m to less than 4 m length.

As we know, ecology and distribution of rattans in tropical forest areas is different from each other so that the yield estimation in this study could be higher or lower than surveys or estimations have been done in the past. The total of rattan yield that can be harvested annually is about 2,488.3 tons – 3,767.4 tons from three forest types and 1,778.4 tons – 2,841 tons from special use forest and production forest areas **(table 2.8)**. Comparing with rattan yield in the year 2003 (6,000tons/year), natural rattan resources have almost been exhausted in Quang Nam province. Reducing rattan yield in the Quang Nam also be presented by rattan volume have been collected year by year. In years 1997,1998, the exploiter could harvest about 80-100 *D. poilanei* canes per day but recently they only harvest 30-35 canes per day/person because the natural resource is limited and they have to go to further to exploit rattan. Interviews with middlemen in Za Ra village, Ta Bhing commune we found that in the years 1986,1987, they collected from their village about 5 – 6 rattan trucks (4,000-5,000 canes/truck) per month. At the present, they could only collect about 2,000 canes per month. The current rattan exploitation of Quang Nam in general and Nam Giang in particular is unsustainable. Therefore, detail studies on rattan yield, ecology, growth as well as negative impact of harvesting to rattan natural resources in each ecological area and each forest type should be conducted. Based on these studies, the plans for rattan sustainable exploitation and management for each area should be done every three years. Almost all informants unanimously think that length and hardness of rattan canes is reduced gradually in the last years. Mr Z Ram Ban, Cha Val commune said some years before he can collect about 70 – 100 rattan canes of 5 meters but recently, he can only collect about 30-40 canes of shorter stems (3-4.2m length).

In order to have enough length for buyer the harvester has to take all rattan stems included young part and digging of rattan rhizomes or root. In the forest areas that are not disturbed by local people such as nature reserves or special use forest areas the percentage of canes of over 4 meter lengths is higher than that in protective forest and production forest areas.

Table 2.7. Estimation of annual yield of D. poilanei species in Nam Giang district

Indicators	Unit	Protective forest type	Special use forest type	Production forest type
Current yield	Cane/ha (2.5<...<4m)	111.7	147.0	27.3
Growth rate	M/year	1.5-2.0	1.5-2.0	1.5-2.0
Cane yield annually	M/ha/year	167.5-279.3	220.5-294	41.0-68.3
Weight	M/ton	24000	24000	24000
Cane yield annually	Ton/ha/year	0.0069-0.011	0.0092-0.012	0.0017-0.0028
Natural forest area	Ha	38000	46000	15000
Total of rattan yield	Ton	262.2-418.0	423.2-552.0	25.5-42.0

Table 2.8. Estimation of annual yield of D. poilanei species in Quang Nam province

Indicators	Unit	Protective forest	Special use forest	Production forest
Cane yield annually	Ton/ha/year	0.0069-0.011	0.0092-0.012	0.0017-0.0028
Natural forest area	ha	240,214,06	77,170,1	71,113,34
Total of rattan yield	Ton	1,657.5-2,642.3	709.9 – 926.0	120.9-199.1

Based on rattan exploitation guides (FAO 1995) and workshop results in rattan exploitation held in Tuyen Hoa Quang Binh (29/9-1/10/2005), in order to maintain sustainable harvesting the population of natural rattan, half of number of plants in each rattan clump should be spared. For this reason, annual yield of *D. poilanei* species could be harvested from protective forest and production forest areas is about 889.2 – 1,420.7 tons/year in Quang Nam and 143.9 – 230.0 tons/year in Nam Giang and the following harvesting regulations have been stimulated to control the indiscriminate cutting of rattans:

- No canes should be harvested during flowering, shooting of the rattan population. Only mature canes should be extracted from the clumps immature or tender ones should not be collected or damaged.
- Digging of rhizomes or root will not be permitted
- No canes should be extracted from outside the specified blocks
- All the one-year-old canes plus six stems of the second year should be retained in the clump.

- Clumps consisting of less than six stems should not be worked.
- Felling should be done not less than 15 cm and no more than 30 cm from the ground level
- Half of mature canes should be retained for breeding rattan population

2.3. Current status of rattan exploitation in Quang Nam

As in the other provinces in central Vietnam, rattan exploitation activities have taken place in the mountainous districts in Quang Nam province. Harvesting calendar of the *D. poilanei* species is between September to October and from December to March of next year. This is due to the following reasons:

- Good weather
- Less work on agricultural fields.

Interviews with the exploiters mentioned that the harvesting cycle of rattan in some communes is usually three or four years cycle. However, farmers always go to forest to harvest rattan for sale during short period and in their free time. They also go in their free time to harvest high quality rattan such as *Korthalsia laciniosa* species for basketry, *P. geminiflora* for construction materials or matting.

Availability, collected quantity and market demand

The following table shows information about the current availability of the species, the collected quantity today and in the past, the plant stage and the market demand. The rattan species are enumerated according to their availability

Table 2.9. Availability, collected quantity and market demand of rattan

Species	Availability	Quantity today	Quantity past	Plant stage today	Markt demand
P. geminiflora	High	+ + + + + + # #	+ + + + + + # #	Mature and young	No market
D. poilanei		+ # # #	+ # # # # #	Young	High demand
C. tetradactylus		+ # #	+ # # #	Young	High demand
Korthalsia laciniosa		+ + + + +	+ + + #	Mature and young	Low market
C. walkeri		+ # #	+ # # #	Young	Moderate demand
D. jenkinsiana		+ #	+ #	Mature and young	Moderate demand
C. plactyacanthus		+	# # #	Young	High demand
P. elongata		+ +	+ +	Mature and young	No market
C. bousigonii	Low	++	# #	Matura and young	Moderate market

Legend: ***+ for use; # for sale***

Although formal data have been proved statistically by Quang Nam department of forest protection, the volume of illegal harvested rattan is not listed. Interviews with harvesters, middlemen and representatives of enterprises show that the volume of rattan has been exploited and traded in an informal ways is equivalent about 30% of formal statistical volume. Meanwhile, processing units in the province lack raw material for production and they have to buy rattan from other provinces. For example, annually Au Co rattan-bamboo-palm leave enterprise buy about 80% of raw rattan material from Quang Nam province and 20% material come from other provinces as Ha Tinh, Quang Ngai. Raw material from Quang Nam was sold for processing units in other provinces, after that the primary processing products come back to rattan and bamboo enterprises within the province. These issues are challenges to the enterprises in the Quang Nam and a rattan and bamboo association should be established to share experience in rattan industry, management and controlling raw material resources within

Quang Nam province that will provide employment and reduce production costs, increasing income for households and contribute to maintain a stable society

Table 2.10. Harvested rattan Volume in Nam Giang district and Quang Nam province, period year 2000 – 2004

Year	Rattan volume in whole province (ton)	Rattan volume in Nam Giang district
2000	3,072	1,300
2001	1,930	475.5
2002	1,127	876.0
2003	1,272	370
2004	837	270

Source: Quang Nam department of forest protection, Quang Nam statistical yearbook 2001-2003, Nam Giang statistical yearbook 2001-2003

The statistical results in **table 2.10** show the harvested rattan volume in the province has decreased rapidly year by year. Within five years (2000-2004) the harvested rattan volume is only left about 27.24% (837 tons). Meanwhile, a large rattan volume is traded in the local market and very difficult to estimate. For example, interviews with middlemen in Za Ra village, Ta Bhing commune, Nam Giang district who said that they sold 2,000 tons rattan to buyer from Hanoi in year 2000, while statistical data on volume of traded rattan in year 2000 in Nam Giang is only 1,300 tons.

Annually, Nam Giang mountainous traded company purchase about 200 – 300 tons rattan per year. Meeting with vice chairman of Nam Giang people committee show that there are two companies that are provided with harvesting permit within the district but actually, during the survey we found some small buyers from other districts or neighboring provinces came and purchased rattan without control of local concerning organizations. Therefore the real volume of harvested rattan in the Nam Giang annually is higher than statistical data, which have been given. On the other hand, rattan exploiters explained that currently number of canes that they can harvest from forest areas per day is reduced in comparison with that in the past. The length and diameter of canes are also shorter than that before and the exploiters have to go far into forest if they want to harvest mature rattan canes today. The long time spent to reach the resource as well as small amount of rattan is collected per day reflects the degradation of the forest resource base

2.4. Impact of exploitation to conservation and sustainable utilization of rattan in Quang Nam province

The sustainable management and utilization of natural resource is not only important for forest tree resources but also for non-timber forest resources. If the volume of a NTFP species is reduced, not only the existence of that species is threatened but the diversity of forest ecological system is also affected. Due to market pressure, rattans have been exploited freely without plans rendering natural rattan resources to become exhausted in this area. Discussions with rattan processing units and rattan buyers reveal that nowadays, Quang Nam has about 25 meso and small enterprises that are making products made from rattan and primary processing as boiling, drying and splitting and these products were exported through mandatory export way. One rattan-boiling unit can purchase and process about 300-500 tons of mixed rattan species per year. Director of Nghia Tin rattan trade and production company, Dai Loc district showed that within years 1990-1993 he purchased about 1,000 tons rattan per year from Dai Loc district Quang Nam province, at the present, annually he only can purchase about 100 tons rattan from communes in that district. The above data explains that the volume-harvested rattan annually is reduced 10 times after 12 years. On transect and in plots of this survey, we saw the *P. geminiflora* clumps of 10-15m length. The villagers said that there is no market for *P. geminiflora* species and this species is only use for construction material and making basket, which is sold on a local market. The harvested cycle of rattan is about 3-4 years per time in the study. However, buyers regulate the harvesting cycle of rattan. They return to the village annually to purchase harvested rattan. At present, the *D. poilanei* and *C. tetradactylus* species in Quang Nam province are not yet rare in term of species distribution but its volume is considerably reduced in the past few years. There are many reasons regarding reduction but one of them is applied unsustainable harvesting method. There are a lot of different kinds of harvesting organization systems. They depend highly on the situation of the forest and on the economic conditions of the farmers. If there is lack of money farmers go to the forest more frequently and stay for a longer time. The following description is an example of the organization system used for traded rattan canes. In the past, a group of farmers (3-5) used to go into forest and stay for a month to harvest rattan. The first step was to walk far into forest. Once they reached a point in the forest where there ware still a lot of mature rattan canes they cleared harvesting sites and built a small house. During the following days they harvested all the rattan stems with commercial length (over 4 meter). After harvesting the farmers brought the canes to villages. Because of the high amount of collected rattan, farmers used the river and streams to transport the rattan stems out of the forest.

Today there are still a few farmers who go into forest for two or three days to collect rattan canes for sale. Almost farmers usually go in the morning and come back in the afternoon. They usually go individually or small groups (2 people). The farmer knows where there are areas in the forest with a lot of rattan stems. They walk into one of these and collect the rattan stems. The farmers selected mature stems of rattan and harvested the entire stemswith $\geq$ 4 meter length. As the middlemen request for a specific size and quality of the stem, harvesters left as a result part of the stem behind; the part which is young or does not meet the requested length. This a waste of the available resources and also a major cause of forest fire during the dry reason. The interviews show that some women and children also harvest rattan. As they are not strong enough to pull out long stems, they cut also the timber trees entangled to that long stem. The above-mentioned systems of harvesting could be called unsustainable harvesting methods. The current situation of rattan exploitation in Quang Nam has had a considerable negative impact to sustainable management and utilization forest resources. At present, the buyers purchase only species of *D. poilanei, C. tetradactylus, C. plactyacanthus* and *C. walkeri* other species were sold for local user for making brooms, knitting materials, and baskets.

They results of this survey showed that some enterprises have already invested in cultivating rattan aiming to gain initiative in raw material supply for their production. There are about 25 ha C. tetradactylus species cultivated in following districts: North Tra Mi, Dai Loc and Nam Giang that are first indication of sustainable utilization of rattan resources in Quang Nam province. Beside rattan cultivation activities, the zoning of natural rattan population for natural regeneration and for harvesting management in the sustainable way is important. Nowadays, there are some models in zoning and protecting natural rattan areas in some central provinces. During study and survey, we found that there is large abundance of rattan areas that have been exploited freely. Discussion with some rattan processing enterprises and farmers showed that they have strongly expressed willingness to protect and manage abundance of rattan areas. Forest zoning for protecting and harvesting in sustainable way is expected from individuals and local associations as well as enterprises. Forest will allocate to whom? How are their benefits and responsibility? How are guides on replanting, maintain and exploiting? Answers to these questions need help from organizations, offices and enterprises in Quang Nam. Some districts have high harvested rattan volume annually but the rattan have been sold in raw material because without processing units in these areas so that establishing rattan processing units within these districts will provide more employment for local people, increasing income and reducing pressure on forest resources base.

2.5. Land allocation and land use in Quang Nam

Article 1 of the amended Land Law, approved by the National Assembly on 2 December 1999, provides that, "Land belongs to the ownership of the entire people and shall be uniformly managed by the State. The State shall allocate land to organizations, households and individuals for stable and long-term use whether or not with land use charge being imposed."

As regards the allocation of forestry land, Government Decree 163/CP dated 16 November 1999 on the allocation and lease of forestry land states that, "the State shall allocate to households and individuals only forestry land planned for construction purposes and for the development of productive forests, secondarily essential upstream protective forests and scattered upstream protective forests where conditions are not sufficient for the establishment of protective forest management committees. The forestry land rations to be granted to households shall be decided by the provincial-level People's Committee but shall not exceed 30 hectare for a period of 50 years. If upon expiry of the period the land user, who has during the course of using the same properly complied with the laws on land and on the protection and development of forests, wishes to continue the use of the land the relevant competent state body shall consider continually granting the land to that user for further use. In a case that the land user plants forest trees with a cycle exceeding 50 years, the land will continue to be allocated for further use. Circular 62/TTLT dated 6 June 2000 issued by the Ministry of Agriculture and Rural Development and the General Department of Land Management, which provides guidelines for the implementation of the said Decree, stipulates further that where forestry land with natural forest thereon is allocated to organizations, households and individuals, a statement about the forest's situation is required to be made in accordance with the provisions of Decision 682B/QĐKT dated 1 August 1984 of the Minister of Forestry (now the Minister of Agriculture and Rural Development). Forestland allocation is regarded as an important pre-condition for and incentive to villagers to invest in their land and to improve it. This certainly goes for agro-forestry activities and forest planning.

The area of Quang Nam is 1,040,878,02ha with 11,958.2 ha of agriculture land, 3,423.2 ha of aquaculture land, 35.2 ha salt land, 626.29 ha of other agriculture land, 76,766.08 ha of no agriculture land, 539,869.53 ha of forest land consisting of 388,524.5 ha of natural forest land **(table 2.11).** According to survey data, up to now, Quang Nam province allocated about 380,513.87 ha of forestland to villagers and people's committees in communes. Almost all forest area in Quang Nam majority is located in six mountainous districts. The department of environment and resources, department of agriculture and rural development and forest protection branch and people's committees of districts carried out forestland allocation to 63 mountainous communes. The 120,083ha/150,000 ha of forestland in the mountainous areas have been allocated to villagers and communes for management. The forestland allocation and management is considered to have been done and the villagers are expected that they will receive red book but up to now the red book is not delivered to communes, villagers because assessment of forest status and land-use planning have not been undertaken after land allocation.

Table 2.11 : Area of three natural forest types in Quang Nam

Forestland types	Area of forestland in function (ha)		
	Protective forest	Special use forest	Protection forest
Total area	288,420.33	78,035.17	173,414.03
Natural forestland	240,214.06	77,170.1	71,113.34
Regeneration forestland	27,857.47	554,7	41,551.58
Plantation forestland	13,029.6	291,5	30,395.07
Land for planting forest	7,319.21	18,87	30,534.03

Source: Quang Nam environment and resources department

Provincial people's committee entrusted Quang Nam environment and resources department to establish model of forest land allocation in ethnic minority communes in Bui Nam (Tra My), Tong Coi (Dong Giang) and Cha Val and ta Bhing (Nam Giang). Developing community forestry model aiming to ensure benefit and duty for villagers regarding harvesting non-timber forest products is a part of this program. Up to now, the allocation of forestland to communes is of great interest and highly appreciated by concerned organizations in the province.

Traditional land use right in mountainous communes
The village, as perceived by indigenous groups, exists as the most basic and direct sphere of their influence and survival. In general, the word village does not only mean a community and its activities, it also indicates residential land, forestland for cultivation, forest resources to supplement their diets, and water resources for fishing and consumption. Each village has its own boundaries that are clearly demarcated by streams, mountains, hills or simply a tree. According to the old traditions, villagers are allowed to use the village resources, including forest resources, water resources, etc. But once an individual leaves the village, this right is no longer valid. A field that is cleared and cultivated by one individual or family belongs to this person/family even long after it is left for forest regeneration.

2.6. Importance of rattan in rural households

Rattan is the second most important source of income (rice is the most important source) for ethnic minority communes (poor and landless households) in Quang Nam. Rattan has been exploited for sale to get cash to secure food for the family in the year (households facing food shortages during 3-4 months of the year). Rattan is exploited for sale to get cash for buying school books, pens, cloths at the beginning new school year as well as for spending in traditional festivals (such as the Vietnamese New Year). When the farmers had to classify the NTFPs according to their importance, five out of eight focus groups classified the rattan as most important product (Olivier Wetterwald, 2001). Therefore, rattan is important for supporting livelihoods and directly involved in poverty alleviation of poor communities of ethnic minorities who live near forests in mountainous areas of Quang Nam. At the present, income of collectors from rattan is about 30,000 VND to 35,000 VND per day. Our results showed that income of harvesters from rattan occupied about 40% of total household income in the communes that have large natural resources and about 10% household income in communes that have moderate rattan resources. In some villages such as Za Ra village, Ta Bhing commune, the number of households that go into forest for harvesting rattan is about 56% of total household in the village. During harvesting calendar, some harvesters spent about 28-29 days per month in the forest. The women and children usually go into harvested areas near their home; the men and young people have to go more far into the forest. Our survey results in Cha Val and Ta Bhing commune, Nam Giang district showed the following rattan species in the area that have been harvested for different purposes:

<u>Korthalsia laciniosa species</u>
Five to seven years ago the canes were sold to traders. In the past and today this species is mostly collected to process different kinds of basket. According to traditional habits, the ethnic minority people in mountainous areas in Quang Nam use to use *Korthalsia laciniosa* species for making nice and good rattan baskets. Some time, in order to have this good rattan material they have to go deep into forest as far as primary forest area. *Korthalsia laciniosa* species is also used to tie things together. All interviewed farmers mentioned that there are still a lot of *Korthalsia laciniosa* species in the primary forest areas.

<u>P. geminiflora species</u>
In the past, very few canes of *P. geminiflora* were sold to traders. Today the canes are still collected in a small quantity and only used for producing one kind of basket. The abundance of *P. geminiflora* species is high and there are still a lot of plants in the regeneration forest areas.

<u>D. poilanei species</u>

The canes of *D. poilanei* species were usually cut into fibers and woven into straps. In the past the canes of *D. poilanei* species were highly exploited for sale. At the moment there are no mature canes available around villages. The *D. poilanei* species is an important product to increase the income of farmers due to its high market demand. Unfortunately, it is over exploitated at the moment.

<u>C. platyacanthus species</u>
The farmers build torches with *C. platyacanthus* species to smoke out the bee nets. They also use it as a ladder to collect NTFPs. In the past they sold the canes of *C. platyacanthus* species. This species is very difficult to harvest and is usually not collected in a high quantity due to its low availability. The collected quantity in the past was low and today it is hardly collected.

<u>C. tetradactylus species</u>
C. tetradactylus species has the same use as other rattan (tie things together, produce collecting basket). *C. tetradactylus* species is very important because the farmers need the collecting basket to harvest their agricultural products. The *C. tetradactylus* species has high demand (after *D. poilanei* species) in the market now. The natural sources of *D. poilanei* species are also limited today.

2.7. Rattan production in neighboring provinces

In the past there were more than twenty rattan factories in Hue city to process rattan for domestic use and export. This is quite a lot compared with the four remaining factories today. These facts show that the rattan market is declining in recent years. Almost all raw materials have been purchased from mountainous areas in the province as A Luoi, Nam Dong districts and neighboring province as Quang Tri, Quang Nam. According to estimate from processing enterprises annually, they need more than 30 tons (small enterprises) to 100 tons rattan raw material. The materials used for making furniture and handicraft products are canes of the D. *poilanei* species, *C. tetradactylus* species, *C. platyacanthus* species and C. rhabdocladus species. The enterprises have to pay average price is 1,500 VND per cane of *D. poilanei* species ($\phi <$ 14mm and 4m length), 5,000 VND per can of *C. platyacanthus* species (($\phi \geq$ 14mm and 4,5-5m length) and 5,000 VND per kg of *C. tetradactylus* species. In addition, the rattan and bamboo enterprises in the province also processed rattan slices for handicraft owners from Ha Tay province. In the past, some rattan processing units purchased rattan canes from exploiters for boiling, drying, cleaning, and export to China. Interviews with owners of rattan processing enterprises in Hue city showed that today raw material is more difficult to buy, the quality of rattan canes is low, shorter and younger than that in the past therefore the quality of the finished rattan products is poor. The rattan furniture of these enterprises are sold in showroom in Thua Thien Hue and its agents in Quang Binh, Quang Tri provinces. Sometime, they have trading contracts with rattan and bamboo companies from Ha Tay province. Although impossible to assess exactly because the time for this study is limited, the volume of rattan in year 2002 in some provinces in central Vietnam is shown in table below:

Table 2.12. The volume of rattan in 2002 in some provinces

Province	Unit	2002
Quang Binh	Ton	650
Quang Ngai	Ton	500
Thanh Hoa	Ton	430
Ha Tinh	Ton	720
Quang Tri	Ton	320
T.T.Hue	Ton	2,192
Binh Dinh	Ton	770

Source: *Nguyen Quoc Dung (FIPI) and statistical yearbook 2002 of provinces*

At present, some provinces as Quang Binh, Ha Tinh, Thanh Hoa and particularly Quang Ngai have some models in that rattan are cultivated with banana, pineapple, and cinnamon in home gardens or forest gardens. All cultivated rattan in above model is *C. tetradactylus* species. The *D. poilanei* species had and has been strong interested in rattan processing enterprises in Vietnam so that in parallel with zoning rattan areas for protection and cultivation of *D. poilanei* species in the mountainous areas will make sustainable utilization of rattan resources and contribution to forest protection and biodiversity conservation in Quang Nam.

2.8. Analyze sustainability issues concerning raw material

2.8.1. Rattan market structure in Quang Nam

Our survey results show that rattan market structure in Quang Nam is fairly complicated. The relevant market chains for the rattan flow starting in commune of mountainous areas, finally, to the end users in bamboo and rattan companies in Quang Nam. Following the market chains from harvesters to consumers (rattan enterprises) we found that there are four groups that are directly involved in the rattan market chains at the local level **(Figure 2.1).**

- The exploiters are mainly poor or average households in six districts in Quang Nam. They are the indirect actors and the beginning of local rattan market chain. Some poor households, before going into the forest to harvest rattan they have to get money in advance from village middlemen or from agents of district mountainous trading companies and to pay back with rattan canes. It is estimated that there are 50% of total harvesters in Za Ra village, Ta Bhing commune have to get an advance of money before going into the forest. This trading model will help harvesters go further into forest and stay longer to better exploit rattan areas. The local harvesters reach market information through middlemen or people's committee of their commune.
- There are one to three middlemen per village depending on volume of harvested rattan in that village. At the present the village middlemen sell harvested rattan to buyers who come from Tan Ky, Quang Nam or from other provinces (Da Nang, Quang Ngai). The village middlemen have to pay fees to people's committee of communes (100,000 VND/Ton). This fee is placed in the public benefit fund and will be used for forest activities in commune. Some village middlemen have had contracts with rattan processing units from Dien Ban- Quang Nam or from Da Nang province.
- Agents who are staff of mountainous trading companies or rattan purchasing companies in the district. The agents usually select convenient places for easy transportation. These agents will get 100 VND commission per rattan cane.
- Rattan purchasing companies in the districts usually have purchasing contracts of raw rattan material with rattan production companies inside and outside of Quang Nam province. Normally, a purchasing company has 6 to 8 agents in the communes.

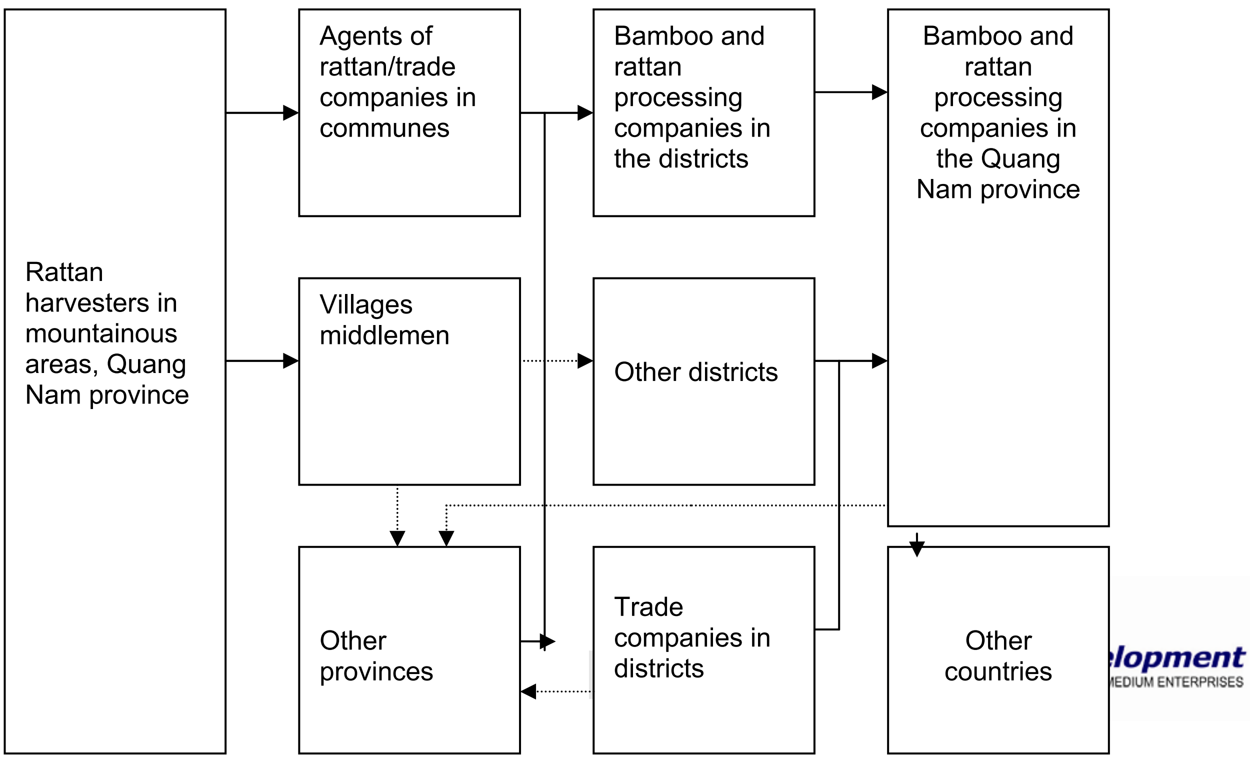
In the existing situation the middlemen, both private and governmental, play a role in the movement of the rattan canes. Village middlemen and agents in the communes provide the harvesters information on price and quality of the material so that they play an important role in local market chains. In some cases village middlemen have purchasing contracts with outsiders, who will fix a price for harvester in the village. Competition between private middlemen and governmental agencies who supply material to the processing units is not reflected at the commune level. There is no rattan-processing unit in some districts so harvesters have no other choice than to sell their rattan to the middlemen. Lack of raw material for production is very popular in the rattan enterprises so that some rattan production units have to buy harvesting permit from other purchasing companies with high price. The price for the rattan canes of *D. poilanei* species depends on the diameter and on the length. Moreover, the price is higher if the canes are processed and transported over great distances. The average price for purchase and sale in purchasing companies are listed (table 14).

Table 2.13. Purchasing and selling price of two rattan species

Species	Purchase (VND)	Sale (VND)
D. poilanei	900 – 1,000/cane > 4m	1,300 – 1,400/cane > 4m
C. tetradactylus	3,000/kg	3,300-3,500/kg

If harvesting permit is provided to the rattan production enterprises, rattan purchasing companies (middlemen) will be rejected and the income of harvester will be higher so the permit providers have to consider about that. Ten years ago, *D. poilanei* species is main rattan product in the market in central Vietnam, while *C. rhabdocladus, C. platyacanthus* species is also sold with moderate volume. According to statistical data from rattan enterprises two rattan species that have high demand in the Quang Nam rattan market are *D. poilanei* (80%), *C. tetradactylus* species (10%) and *C. rhabdocladus, C. platyacanthus* and others (10%). However, our survey in the Za ra village, Ta Bhing commune shows that village middlemen sold *D. poilanei* and *C. tetradactylus* species to rattan processing units in other districts in Quang Nam and Da Nang city. The *C. tetradactylus* species occupy about 20-25% of total of purchased rattan volume. As the general situation in Vietnam, the annual harvested rattan volume is much decreased and quality of the stem is also low and not enough for making finished products. The products from *D. poilanei* species nearly controll all rattan market in Quang Nam.

Figure 2.1. Rattan market structure in Quang Nam province



However, the number of D*. poilanei* canes of 4 m length that the middlemen requested for specific size and quality is very little. The exploiters have to go very far into forest or difficult access area if they want to harvest mature *D. poilanei* canes. The rattan is an important income source of mountainous communes in Quang Nam. Weakness in approaching market information and lack of supporting marketing rattan products in the local area generating income of household who depending on forest is decreased. Data gathered from communes showed that harvesters lack of access to information on price, demand and quality required by customers. Market information currently reaches the harvesters through village middlemen or purchasing rattan companies. Because of lack of knowledge and self-confidence in their potential ability to do some processing activities, most of the rattan products are sold in raw form. Market information for rattan products is identified as one important aspects and an opportunity for forest organizations and rattan processing enterprises to support local communities to increase the income of farmers and improve their living condition. The lack of market information system leads to the loss of harvester's power to bargain for a better price. Lack of export contracts is one of the constraints of rattan market system in Quang Nam. Establishing a local market information network for NTFPs in general and rattan in particular aiming providing useful information and market orientation for buyer and seller is necessary.

2.8.2. Distribution cost and benefit in market chains

We collected data from direct interviews with rattan harvesters, village middlemen, agents in Cha Val, Ta Bhing communes and rattan purchased companies (mountainous traded companies-wholesaler) and rattan processing enterprises in Nam Giang, Dai Loc, Nui Thanh districts in Quang Nam province. Based on the data, we calculated cost and benefit of direct actors in market chains.

Main costs of rattan harvesters who spend time to go into forest and cut 30-35 canes per day. At the present labor cost in the local is about 20,000-25,000 VND per day. One harvester collected about 30-35 *D. poilanei* species canes of 4 m length per day, that means they can earn about 30,000 – 35,000 per day. The direct labor cost of a rattan harvester is 10,000 VND higher than normal labor. However, harvesters have to spend more time to go into forest and overcome more difficult topography and work harder.

Village middlemen are usually headman in the village. They have to spend labor cost for classifying, resetting, preservation and loading rattan canes. Village middlemen also have to pay local fee of 50 VND per cane. They have not to pay any cost except above-mentioned costs.

Agents in the commune have only to spend labor cost for classifying, resetting, preservation and loading and unloading rattan canes.

Rattan purchased companies in the district have to pay following costs: local fee 50 VND/cane to commune and 200,000VND per ton to district, resource tax, VAT, transportation cost and the interest of the banks. In addition, scattered activities of rattan purchasing have been conducted along the main road and outside controlling of concerning offices. Cost and benefit of rattan market chains is presented in table below.

Table 2.14. average benefit of stakeholders in 2005

Stakehold	Average	Average turnover (*1000®)	Average cost (*1000®)	VAT	Fee (*1000®)	Resou	Other

er	benefit In million VND	Total turnover	Saled volume (kg)	pri ce	Total cost	Purchase d volume (kg)	Price	(*1000d)	Agen t	Distri ct	com	rce tax (*1000 d	costs (*1000 d)
Harvester	1800000	1800	600	3	0	0	0	0	0	0	0	0	0
Village middlemen	1.200000	19800	6000	3.3	18000	6000	3	0	0	0	600	0	0
Agent	8437000	0	0	0	0	0	0	0	0	0	0	0	0
Trade company	1140000 00	1.350.000	300000	4.5	900000	300000	3	67.500	67.50 0	60.00 0	30.00 0	67.500	43.500
Rattan processing company	350000	2.590.000	140.000	18. 5	2240000	300.000	7.63	129.5	0	0	0	0	0

The average estimated results of benefit show that village middlemen have only to pay local fees to commune. They advanced money from rattan purchasing companies or rattan processing enterprises. The average income of harvesters is about 1,800,000 VND per year occupied 21% total income of agents in the commune and much lower than benefit of purchasing companies (114,000,000 VND). There are many reasons for the reduction of natural rattan resource but negative impact of harvesting on forest system is one of the impacts that have to be improved so that rattan processing units in the area could extract a part of their benefit to reinvestment to management, protection and cultivation of rattan in order to maintain sustainable business plans.

2.8.3. Existing management and protection of natural rattan resources in Quang Nam

Decision 08/TTg dated 11 January 2001 and issued by the Prime Minister of the Government, which promulgated the regulations on the management of the three types of forests, provided for the exploitation and use of forests, namely:

+ Special use forests:

an intensive use of wood (i.e. dying or fallen wood trees) where the special-purpose forest is the one of cultural, historical or environmentally significant one. The management board of the forest may, whether by itself or by way of hiring any organizations, households or individuals, provide tourism and eco-travel services. It is strictly prohibited to use any land and especially controlled forests of a national garden for leasing, contracting or joint venture purposes or otherwise to change the natural condition of the forest.

+ Protective forests being natural forests:

It is permitted to intensively use any trees that are dried, or affected by pests, or over-aged, or that situated in an excessively dense area but at a rate not exceeding 20%, with exception for all kinds of wood specified in Group IA of the list attached to Decree 18/HĐBT dated 17 January 1992 of the Council of Ministers (now the Government), which promulgated the list of rare forest plants and animals and the regime for managing and protecting them; and to intensively use any fallen trees and left-over wood in order to facilitate the natural regeneration. It is also permitted to make best use of products other than wood and bamboo provided that this does not affect the protecting capabilities of the forest, except for the forest products specified in Group I attached to the said Decree 18/HĐBT. Bamboo forests that have reached a coverage rate of more than 80% can be exploited at a maximum rate of 30%, together with the exploitation of bamboo shoots.

+ Productive forests being natural forests:

Forests operators may make best use of forests through the improvement of forests, cutting down the number of planted trees, use of dried or fallen wood, and to exploit standard wood and other forests products under the forest operation plans as approved by the relevant competent body.

There are many decrees and decisions of the government regarding management and exploitation of timber and NTFPs including rattan but noticeable is article 26 and 35 of decision No 40/2005/QD-BNN dated 7 July year 2005 of the Ministry of Agriculture and Rural Development which promulgated the exploitation, gathering NTFPs except bamboo (except rare species, harvested prohibited species according to decisions pf the government) in the two natural forest types namely protective forest and production forest. However exploitation activities are without negative impact on growth and development of the rattan species. This decision is also promulgated in NTFPs harvesting permit, the Department of Agriculture and Rural Development and district people's committee in the provinces who can give exploitation permit to individuals, groups want to harvest NTFPs in the two natural forest types. Up to now, these decisions and decrees are only mentioned on NTFPs in general there are not specific regulations regarding exploitation of natural rattan resources.
Applying the decision No 40/2005/QD-BNN, in Quang Nam the branch of forest development under Department of Agriculture and Rural Development provides harvesting permits to individuals and organizations that have harvesting demand. The district people's committee can give harvesting permit but this only applied for harvested permits of less than 10 tons. The branch of forest protection has the responsibility for checking and taking over harvesting activities of people who have harvesting permits. At present the exploitation of rattan in Quang Nam has been conducted in three levels:

Rattan exploitation in commercial scale
Some companies were provided permits for exploitation of rattan in commercial scale. These companies usually rent labor from other districts and provinces so the benefit to the local people was lost.

Rattan exploitation in small scale
The local harvesters usually go into forest to harvest rattan to meet demand of outsiders. These exploitation activities are frequently done at unsustainable exploitation levels so the rattan resources are gradually decreasing.

Rattan exploitation for household use
Local people go into forest to harvest rattan for construction, knitting, matting and making baskets. This harvest mode happens all year-round in the three natural forest types
In order to get harvesting permit, individuals have to show their business permit and confirmation of the commune people committee, but enterprises have to get the consent of district people's committee. During each harvest time the people who have harvesting permit have to inform Quang Nam forest protection branch on rattan harvested volume. At the present there are no people from other provinces who asked for permits of rattan exploitation in Quang Nam. Discussion with representatives of branch of forest development in Quang Nam and Nam Giang district people committee we have known that people from other provinces can get rattan permit from Department of Agriculture and Rural Development in Quang Nam when they have had agreement from district people's committee of harvest sites. For the people who are living in the forest areas, rattan exploitation activities is part of their traditional way of life. The access to natural rattan exploitation is quite open for inside and outside communes. Interviews with staff of forest protection units and harvesters mentioned that currently controlling and management of rattan harvesting activities was not tight so this is the reason for the exhaustion of natural resources base. The transfer of rattan harvesting permits between purchasing companies and rattan processing enterprises within province increased price of the products so they have no power to compete with other producers in the rattan market and income of the laborers is reduced

The Nature Reserves in the Quang Nam has the tasks to protect and manage natural resources in their areas. As above-mentioned, harvesting forest products including non-timber forest products are prohibited in special use forest areas. From the interviews with representatives of forest organizations in Quang Nam province and field observation, we found that rattan exploitation has been carried out in the forest regeneration areas of special use forest in Nature Reserves. However, rattan exploitation activities are not opened and as much as in protective forest and protection forest areas. State forest enterprises in Quang Nam have managed large forest areas. Forest protection contracts have been signed with a number of households (20-25 ha/household). The contractors (villagers) have the right to extract non-timber forest products in the forest protection contracted area for daily household consumption and sale. According to decision C200 of the government, the state forest enterprises have to hand over their forest areas to the communes and district in the area.

Traditional forest management is a long tradition of sustainable use and management of natural resources through participatory consultations that previously existed within the ethnic groups in the mountainous areas. The enforcement and operation of government official management systems have limited exploitation of natural resources freely without plans but some negative reactions and illegal extraction of resources is ongoing.

The village is the single most important social unit for the indigenous peoples living in the forest areas. The model of commune forest allocation in Tra Mi and Nam Giang district is an opportunities for communes to become forest owners and display their role in natural resource utilization and management. In this model, the village assembly and management board discussed and makes decisions on forest activities after thorough consultations with other villagers. Village management board also formulates a set of „Huong Uoc“ with severe punishments and clear benefits associated with natural resources, specifically on issues related to shifting cultivation, hunting, rattan and other NTFPs collection. The village „Huong Uoc“ stipulated that exploitation of NTFPs in the commune areas is prohibited with people who are living outside commune if they do not have harvesting permit from village management board and commune people committee. The village forest protective team regularly patrolles and protects village forest areas. The model participatory management and protection of natural resources in sustainable way should be disseminated to neighbor communes. However, raising funds to maintain village forest protective activities should be considered by concerned organizations inside and outside of Quang Nam province.

3. Rattan cluster/value chain analysis in Quang Nam

3.1. Mapping of the value chain in Quang Nam province

3.1.1. Local Ethnic rattan Harvesters

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 Quang Nam. However, they are mainly stationed in the mountainous districts of Quang Nam province such as North Tra My, South Tra My; Phuong Son; Nam Giang; Dong Giang. In the past, it would take ethnic people approximately 3-4 hours to go to the forest for rattan extraction. In recent years, the rattan exploitation has been taking place in an uncontrollable way in Quang Nam, leading to the downward volume of extracted raw rattan supplies. This also indicates that the ethnic harvesters had to go deep into the jungles in order to collect the wild rattan. The interviews with processing enterprises in Quang Nam once more confirmed the fact that there is little rattan reserve left in the forests of Quang Nam. This also explains the fact that an increasing number of raw material suppliers who come from neighbouring provinces such as Nghe An, Thua Thien Hue, Da Nang, Quang Binh, Quang Tri, Quang Ngai, and Laos DPR. While there is no statistics on the number of local ethnic rattan harvesters in the five mountainous districts, it is estimated, on the basis of age categories and the population per district, that there are about 7,850 ethnic rattan harvesters who are dependent on the rattan for their daily livings. The distribution of ethnic rattan harvesters is presented in the table below:

Table 3.1. Estimated Number of local ethnic rattan harvesters in Quang Nam

Districts	No of rattan harvesters
Nam Tra My	1,350
Bac Tra My	1,823
Phuoc Son	1,242
Nam Giang	1,276
Dong Giang	2,160
Total ethnic rattan harvesters	7,850

Source: *Calculated by the author based on age categories, gender*

The costs of ethnic rattan harvesters can be considered as the opportunity costs for the time they would spend for collecting wild rattan in the forests. According to the interviews with the rattan traders at the hamlet level, the daily compensation for local rattan harvester, if hired to do the other jobs, is about 40,000 VND which should be taken as the opportunity cost for them. Main costs of rattan harvesters is the time they spend to go into forest and cut 30-35 canes per day. One harvester collects about 30-35 *D. poilanei* species canes of 4 m length per day, that means they can earn about 30,000 – 35,000 per day. The direct labor of rattan harvester is 10,000 VND higher than normal labor because of more energy to be spent as well as the specific know-how on the rattan. However, harvesters have to spend more time tin in the forest while harvesting the wild rattan, and thus facing many kinds of difficulties and risks. They do not have to spend any inputs for their trip into the forests. For some poor ethnic people, they were given advance money by the village collectors in order to buy foods and other necessities. The money is then deducted when rattans are hauled out of the forests and sold back to them.

3.1.2. Commune Rattan Collectors/Rattan Collecting Agents

The commune rattan collectors/agents are mostly Kinh ethnic people who have small groceries in the communes for selling such things as rice, salt, fish sauce, or additives for daily cooking. These commune collectors/agents trade everything that can be seen as profitable, meaning that not only rattan, but also other NTFPs that can also be traded from the local harvesters, and then, these goods would be sold to the other traders from else where. The rattan collecting agents do not have groceries because they deeply specialize in rattan trading. Their job is to go to the commune for rattan trading and then re-sell them to the processing workshop. They are the middle men between the local harvesters, the processing enterprises and export companies. They play an important role in the market value chain because they know all of the information and tell it to the commune rattan collectors. The consultations with the officials from the Provincial Forest Department indicate that commune rattan collectors and collecting agents are mainly settling down in 6 mountainous districts of Quang Nam. The consultations also lead to the approximate estimation that there are about 21 commune-level rattan traders, 12 agents; and 06 rattan collectors in Quang Nam.

In general, the commune rattan collectors/rattan collecting agents 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. In some cases, they may be asked to pay the management fees for the Local People Committee (estimated at 50 VND per rattan cane).

3.1.3. Mountainous Trade Companies at district level

In every district at the mountainous areas, the district authorities establish the mountainous trading companies which are organized vertically to collect not only rattan products but also the other NFTPs and to trade them for profit. Geographically, there are six (06) mountainous districts in Quang Nam. Namely: North Tra My , South Tra My; Nam Giang, Dong Giang; Tay Giang; and Phuoc Son, so there are also six mountainous trade companies in these district. As the information in Box 1 indicates, normally, these mountainous trading companies run a wide range of trading activities in the mountainous district such as rice, salt, fish sauce and other basic necessities. They also buy a wide range of NTFPs from the ethnic people and also trade them with the other basic necessities such as rice, salts, oil; and clothes. The mountainous trade companies also establish networks of collecting agents and outlet at the commune level in order to trade for the rattan raw materials. Thus, rattan would often start its journey along the value chain right from this point. In the past, all of the mountainous trade companies carried out the semi-processing of rattan, mainly by cooking the fresh rattans collected from the ethnic people in the oil liquid. However, since prices for oil and electricity haves been increasing, they stopped it, and transport to the larger processing companies in Da Nang or Quang Nam who can cut down the cost by processing the fresh rattans in larger volume.

Box 1 The Mountainous Trade Company of Nam Giang District

This company was presided by director - Nguyen Dinh Ha. The company has the total number of 40 employees who are paid with an average monthly salary of 1.5 million VND. In 2005, the company buys the rattan from the ethnic rattan harvesters with cash payment. The price is about 300 VND per metter of rattan and only the 5 metter rattan canes would be purchased. Besides, the company purchases any other NFPT and trades with basic things such as rice, salt, diesel, oil with the ethnic people. In 2005 the company has purchased 500 tons of fresh rattan as compared to 300 tons in 2004; and 400 tons in 2003. In the past, the company had a semi-processing rattan workshop, hower, it stopped the semi-processing last year due to the high price for energy (oil, electricity) and high salary for direct workers. Mr. Nguyen Dinh Ha said that his company often sells rattan collection to the Viet Hoa Joint Stock Company in Da Nang. Last year the sales revenue the company made was estimated to be at 20 billion VND, out of which sales revenue from rattan was about 5% (or 1 billion VND). The company opened 4 collecting agents in Dac Re; Tra Vanh; Le ze; Tanh My. More often, the ethnic rattan harvesters are supposed to go deep into the forests and haul the harvested rattan to the route 14D, then the company would use the car to collect and gather the fresh rattans in the company headquarter

To collect the rattan in the district of Nam Giang, The company had to pay many kinds of unwritten fees: At the village, the fee is about 50 VND per rattan cane; at commune, the fee is 50 VND per rattan cane; at district level, the fee becomes 200.000 VND per ton. Besides, the company has to pay natural resource tax of 100.000 VND per ton, VAT of 5% and income tax of 1%. The company obtained the rattan exploitation license from the DARD. Profit margin for rattan operation was projected at 5% out of the sales revenue.

In general, the mountainous trading companies have to bear the following types of costs/expenses

- Cost of purchasing the wild rattans from the commune collectors or commune collecting agents at the commune level.
- Costs of bringing the rattans to the collection points.
- Interest expenses from bank or other sources of financing that the mountainous trading companies often receive from the government such as poverty reduction programs for the ethnic people.
- Management fees or natural resource tax.

- In some cases, rattan collectors at the commune are supposed to incur the costs for uploading rattans onto the vehicles/vans

There is no SA; or ISO; OSH certifications applicable to the rattan products of these companies. The semi-processing used to be conducted for the purpose of keeping the rattan not rotten for longer period so that the export company can collect these wild rattans and transport them to their processing workshops.

3.1.4. Rattan Processing and exporting Enterprises in Quang Nam

Processing and Exporting enterprises in the past.

In the past, there was a clear distinction between rattan processing companies and rattan exporting enterprises. On the one hand, the rattan-processing company would purchase the raw materials from the collectors/agents or mountainous trading companies. Wild & fresh rattan would be cooked in the oil liquid, dry in the sun. On the other hand, dried rattans would be shorted, graded, and grouped in to quality classes and then chopped into rattan ropes in accordance to the request of the exporting companies, who received the orders from international clients who would spell out in detail the design of end-products for them to make.

Consultations with stakeholders indicate that there used to be two types of exporting companies who was involved in exporting activities in Quang Nam. The first type of export companies is the one that purchases the ready-chopped rattans and make the end-products for exporting to overseas markets (see Picture 2, and Picture 3 for more detail) . They accept the order from the foreign customers and produce the customized products, and then export them overseas. This type of export company is experienced in export field because they manage to establish a network of overseas customers and they keep their customer base to earn a sizeable profit as middle men.

The second type of export company is the one that does not have a manpower and international network to produce the end-products for the overseas customers. Rather, this type of processing enterprise is requested to undertake the processing of rattan cane in accordance to the standards and norms as set out by the international customers. These processed rattan canes are packed in plastic bags and transported by the shipping agents. For this type of processors, the international customers would send the quality controllers who are stationed in these processing enterprises and rattan quality must be checked right here in Quang Nam. If the quality is passed, the processed rattans should be forwarded to overseas customers without re-checking. The second type of export company can be demonstrated at the case of Viet Hoa Joint Stock Rattan Export Company in Box 2

Box 2 Viet Hoa Joint Stock Rattan Export Company

This export company purchases the wild rattans from mountainous trade companies, cook the rattan in the oil; dry in the sun, peel the outside cover; and sell to the international markets. The price for wild rattan is set at a fixed 3,600 VND per kg.

The total export revenue is about 110.000 USD per year. This rattan export company has to pay the export tax of 5%; VAT 0.5% but these taxes would be re-imbursed by the tax department at the end of the fiscal year. The rattan prices range from USD 1,500 for rattan Φ22-25; and USD 1,700 for Φ30-40; and USD 1,850 for Φ40.

The raw material for this rattan export company comes from Quang Nam; Phuoc Son, Giang, Dong Nai; Ha Tinh; Dong Ha; and Laos. Normally, the Viet Hoa Joint Rattan Export Company often signs contracts with mountainous trade companies, makes advance money (30%-40% of total contract value). When wild rattans are gathered, this export rattan company will send the rattan technicians to check the quality on spot. The total production costs account for 80% of total export revenue, profits before tax take a share of 20%.

Their international clients comes from Singapore (30% of export revenue); China (55%) and Spain (15%). The company sells the processed rattan to international clients through the middle men who often keep the name of their final clients secrete. Letter of Credit (LC) is the most often used method to settle the payment. Therefore, the profit margins could be higher if this export company can sell their products directly to the end-clients.

The director of this rattan export company complained about the unfair practice between SOEs and SMEs in many things such as procedures to borrow the bank loan, land space to set up the processing line, and the tax treatment. Like the other processing enterprises, the company does not have to bother themselves with the management certifications such as ISO, OHS, SA. However, the processing activities of these companies must be inspected by the provincial DONRE on a regular basis. The environmental safety certification will then be issued upon the passing inspection.

Rattan processing and exporting enterprises at present in Quang Nam

The consultation with Mr. Chien, vice-director of COOPSMEs revealed the fac that nowadays ther is no clear distinction between the rattan processors and exporters in Quang Nam. Rather, the rattan exporting enterprises tend pursue the backward integration. That is, they try to re-structure the company in such a way that they undertake all steps along the rattan value chain: from purchasing the wild&fresh rattan from trading companies, processing, chopping, and making end-products upon the client's orders. This tendency takes place because the rattan exporting companies have already received the orders from the cliens. And they have to take every measure to ensure the stability of raw materials for their production. Also, the backward integration will assist them in cutting or having more control over the costs since they can buy rattan raw materials at the source. For this reason, Annex 6 shows that there are 16 rattan processing enterprises which are all rattan exporting entities at the same time. Below is presented the characteristics of those 16 processing-cum-exporting companies which are mainly clustered in the district of Dien Ban.

Table 3.2. Characteristics of rattan SMEs in Quang Nam

Place	Name	Types of products	No of full-time Employees	Estimated annual Turn-over[3]
Dien Ban	Dien Ban 1	Processing, end-product exporting	250	1.1 billion VND
	Dien Ban 2	Processing, end-product exporting	150	0.8 billion VND
	Dien Ban 3	Processing, end-product exporting	300	1.1 billion VND
	Dien Ban 4	Processing, end-product exporting	400	1.7 billion VND
	Dien Ban 5	Processing, end-product exporting	200	1 billion VND
	Dien Ban 6	Processing, end-product exporting	350	2.0 billion VND
Duy Xuyen	Duy Xuyen1	Process, exporting semi-process	300	2.0 billion VND
	Duy Xuyen 2	Process, exporting semi-process	350	1.9 billion VND
	Duy Xuyen 3	Processing, end-product exporting	250	1.5 billion VND
Que Son	Que Son 1	Process, exporting semi-process	200	1.5 billion VND
Phuoc Son	Phuoc Son 1	Processing, end-product exporting	400	2.0 billion VND
Nam Phuoc	NamPhuoc 1	Process, exporting semi-process	300	2.1 billion VND
	NamPhuoc 2	Processing, end-product exporting	300	2.1 billion VND
Hoi An	Hoi An ExCo	End-products	200	0.9 billion VND
Hoa Vang	Viet Hoa	Process, exporting semi-process	400	4.0 billion VND
Nui Thanh	Au Co	Processing, end-product exporting	300-500	2.5 billion VND

[3] There is no statistics or financial reports. Profit margins are hard to be estimated as the company directors/owners tend to avoid this sensitive question. However, the rough figure can be 5% on total annual turn-over. Figures in the Table are projected through the consultations or in-depth interviews

There are several rattan processing&exporting enterprises in Quang Nam, and some of them are quite notable and having the backward integration as previously described. For example, the An Khe Bamboo and Rattan cooperative, The Duy Son II bamboo and rattan cooperative in Duy Xuyen District; the Au Co Rattan and Bamboo Enterprises, Nui Thanh district. These rattan processors are capable of producing more than 300 tons of processed rattan every year. They supply the local workshops and also sell their production to other provinces on a nation-wide scale. These rattan processors enlarge the competition among themselves in terms of costs by employing men and women to perform specific 'semi-processing' of rattan. Most of these firms are small in scale, financially dependent on value addition to rattan, and have little control over the resource. In Quang Nam, small firms are very vulnerable to market shifts because of the asymmetric market information. Rattan processors often face supply constraints because of their weakness relative to large firms; even inefficient large manufacturers out-compete them. Nevertheless, some semi-processors in Quang Nam reportedly make 50% profit, though the majority earns much less. Various government schemes such as the program on encouragement of rural industry, have had some success in strengthening this sub-sector through training in processing. In Quang Nam, there are presently about 16 enterprises which are involved in rattan processing. Among them are several typical rattan processors and a short description of these rattan processors is given below:

- ***Ltd Co. Rattan & Bamboo & Wood enterprise of Nam Phuoc***

This enterprise is located in Nam Phuoc district, Quang Nam province. In 2004, this enterprise produced an output of purely processed tons 200 of rattan and 120.000 rattan wares (or finished consumer products such as chair, small souvenirs, and the like) for exporting purpose. The sales revenue for the year of 2004 has reached 8 billion VND (or equivalent to 506.000 USD). The total number of employees is about 700 with the salary range of 600.000 VND - 1.500.000 VND per month. In the year 2004, the Ltd Co. Rattan Bamboo Wood enterprise of Nam Phuoc has made a one-billion VND investment on new workshops and equipments in the Tay An Industrial Zone of Duy Xuyen district. At present, the enterprise also maintains a network of 4 satellite branches who would take the task of producing the finished rattan products according to specific orders. That is, the Ltd Co. Rattan & Bamboo & Wood enterprise of Nam Phuoc would act as mother company to receive the orders from customers. Then, each satellite branches must be give separate orders to be completed. These satellite branches are located at the communes of Duy Thanh, Tay An, Duy Hoa, and Dien Ban in order to take the advantage of low labor costs, skilled labors as well as logistic locations.

- ***Duy Son II cooperative:***

This enterprise is located in township of Duy Xuyen district, Quang Nam province. In 2004, this cooperative has produced more than 200 tons of purely processed rattan and more than 300.000 rattan wares. The total revenue for the year 2004 was about 4.2 billion VND, and the cooperative employed more than 250 full-time workers with an average monthly salary of 600.000 VND. Besides, the cooperative also establishes a network of 05 satellite branches in the communes of Nam Phuoc, Duy Son No1; Duy Trinh; Duy Phuoc; and Duy Tan.

- ***Au Co Rattan Bamboo and Palm Leave enterprise:***

This enterprise is located in Nui Thanh district, about 30 km away from Tam Ky town. The enterprise was established in 1993. In the past, the enterprise used to produce the straw broom and export to the Eastern European Markets. Since the collapse of the Soviet Union, the enterprise decided to make rattan products. At present, there are about 500 full-time workers and 300 seasonal workers with an average monthly salary of 500.000 VND. In 2004, the Au Co enterprise produced 200 tons of purely processed rattan and 300.000 rattan wares for export. The enterprise has been maintaining a network of 06 sattelite sub-contractors in the communes of Tam Ky, Thang Binh, Tam Xuan; Tam Ngoc; Quan Go; Tam Thanh 1; Chau O township. The Au Co enterprise has raw rattan supplies from Quang Nam (80%) at the price of 2.4 million VND per ton, 10% raw rattan supplies from Nghe An at 2.7 million VND per ton, and 10% rattan supplies from Phuoc Son at 3,000VND per rattan cane of 3-metter length. The annual sales revenue was estimated at 10 billion VND and the after tax net income from rattan production was projected around 200 million VND (the actual figure can be higher as the net profits derived from on-the-job training courses for Centre for Encouragement of Rural Industry are not counted.

In general, the processing enterprises have to bear the following types of costs/expenses

- Costs/expenses of purchasing the rattans from the collectors at commune
- Cost/expenses should include
- Natural resource tax
- Management fees (in case the collectors ask to pay for the communes)
- Value added tax
- Direct workers' salary and allowances
- Rental fees for processing workshops
- Depreciation expenses of fixed assets
- Costs of electricity
- Other input supplies
- Transportation costs to forward the processed rattan to the export companies

All of the processing enterprises do not apply any kind of certifications (ISO, OHS, or SA whatever) to their rattan products. However, the provincial department of natural resources and environment sometimes go to them and check the environmental safety measures and issues the heavy fines to these processing enterprises if the evaluation criteria are satisfactorily met.

3.2. Contracting and cooperation mechanism among the rattan actors

The Annex 6 shows the types of SMEs which are to be devided into collectives, private companies, limitted companies and joint stock enterprises. It can be said that the total number of SMEs in Quang nam takes a range from 400 to 550. Out of this figure, the total number of handicraft SMEs is 36; and of which the 16 SMEs specialize in rattan industry as can be seen in Annex 4 and Annex 6. In contrast, the number of SFEs are just 6 as presented in Annex 5.

The Quang Nam rattan sector employs men and women, young and old in various capacities. This rattan sector officially employs over 3,500 people (not including the rattan harvestors) who are involved in the rattan sector for either their livelihood or supplementary cash income. While most people involved in rattan depend on rattan for more than half their annual income, a small percentage of market actors gains the sizable profits from rattan trade. The various participants in the sector may be categorized into five groups. The actors for rattan market in Quang Nam is composed of the actors as depicted in the figure below.

The Annex 3 presents the estimated numbers of actors who is participating in the rattan value chain: the mountainours areas give the livelihood to more than 7 thousands local harvesters in 6 districts. It is worth of mentioning here the 3,000 full-time employees in handicraft rattan sector in Quang Nam, while not taking into account the similar figure of seasonal rattan workers as well as the local rattan harvestors, otherwise, the real figures must be higher.

At present, the rattan products in Quang Nam are in various forms, mainly from the rattan home appliances (chairs; rattan wardrobe and so on); to the rattan fine arts. There is a trend that rattan home appliances should replace the wood or other metal furniture in daily life of Quang Nam people. Consultations with the rattan processing establishments in Quang Nam shows that rattan products and rattan wares will also become attractive to overseas customers. However, these rattan-processing enterprises indicates that the domestic markets consume 10% of value of the rattan products and rattan wares, mainly taking the forms of high-quality rattan tables, chairs which often have a high production costs due to high salary for skilled labours. Therefore, there is a tendency that fewer rattan enterprises focus on this high-end product.

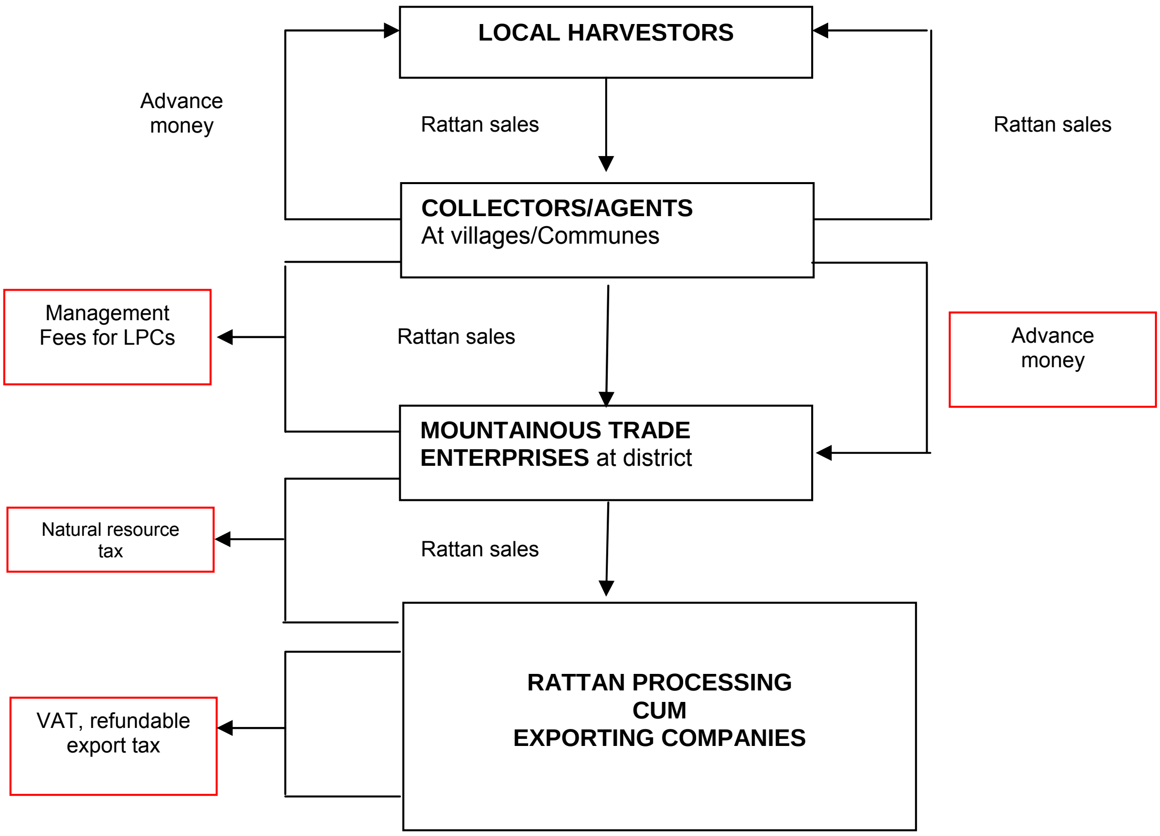
Approximately 90% of rattan products are exported to overseas countries such as Japan, Taiwan, European nations; USA; Singapore and so on. These rattan exports are conducted on the basis of mandatory contracts with big companies which have the export license. Among these exporting companies are

- BAROTEX, with a branch in Da Nang
- RAPEXCO (Nha Trang Rattan Processing Company)
- DONABACHAN from Taiwan
- HAPROSIMEX, Sai Gon
- BAMBOO HARDWOODS, Vietnam
- PURVEYORS OF FINE ARTS

From the observations during the fact-finding mission, there is not a clear cooperation mechanism among rattan SMEs and export companies in Quang Nam. While the total export earnings from a major forest export companies of Quang Nam reach more than 32 million USD, all the processors who were interviewed, have hinted that they have to depend on the export companies of the neibouring provinces such as Da Nang, Khanh Hoa, and HCM city for exporting their rattan products, giving no indication to the exporting companies of Quang Nam. Also, the consultations implied that the cooperation mechanism seems to be superimposed by the export companies as they know the customers of rattan products, the new trends in rattan product design and types of products. Therefore, they keep these kinds of secret to put pressure on the rattan processing enterprises.

Figure 3.1. Relationship among different agents in rattan value chain in Quang Nam

(Figure adapted from 2003 WWF report on rattan sector in Quang Nam)



The linkages among the actors in the rattan value chain in Quang Nam are depicted in the Figure above. According to the WWF (2003) report, it has been pointed out that the distribution of the profits per one kilogram of processed rattan tend to increase when rattan comes along the value chain, from the local ethnic harvesters down to the processors and export companies. The WWF also assumes that total profits for one kg of processed rattans should be estimated at 11.058 VND. However, 61% of these profits acrue to the processing enterprises, and the local rattan harvesters just enjoy 29% of the profits while the village collectors only take a smallest share of the profits because of their payment of the natural resource tax and the transportation costs. The local rattan harvesters take a rather big share of the profits because they only have to spend time for the opportunity costs without having to pay any other kinds of cost or tax and fees.

Table 3.3. Average profits distributed to each actors in the value chain

Value chain actors	Average profits per kg of rattan	%
Local ethnic harvesters	3,176 VND	29%
Village trader/collector	725 VND	7%
Commune trader/collector	420 VND	4%
Processors & Exporters	6,737 VND	61%
Total	**11,058 VND**	**100%**

Source: 2003 WWF report on assessing rattan in SFEs in Quang Nam.

3.3. Identify need for support regarding training, consulting, technology transfer, financing (with focus on processing companies)

The interviews with the rattan processors shows that there exists the need so that the processing enterprises can be supported in terms of training, consulting, and financing as well as technology transfer.

Training need for business management skills
Most of the rattan-processing enterprises are in high need for training courses which should be customized to the business owners. Business Management Skills; financial and accounting as well as marketing are most mentioned. The observations indicate that the outdated management practices are prevalent among the rattan-processing enterprises.

Market access and market information
It was revealed from the interviews that all the actors do not have sufficient information on the market, preferences for the products and customer base. This situation explains the lack of bargaining power among them. This is especially important for the export companies who suffer the losses of profits due to the superimposition of the international middle men.

Technology transfer and modernization of rattan processing equipments
For some rattan-processing companies, the equipments and technology are the decisive factors that assist them in improving the product quality and their competitiveness. While the research institutes often pay their attention to the SOEs, small enterprises do not have R&D capability to carry out the research on new technology for rattan processing. The outmoded technology and equipments have led these small rattan enterprises to the low operational efficiencies. In the past, rattan processors used to import expensive equipments from Taiwan. These equipments can presently be acquired in Vietnam at a lower price and the emphasis was switched to the need for anti-mouldiness of the rattans.

Management Certification ISO, SA, Health, Safety and Environmental Standards
The observations from the processing enterprises indicated that management certifications have not been applied. All of the processing enterprises have not followed the quality standard

system (ISO). They often count on the international clients for the certification of the origin of the rattan. Social Accountability is the new concept to the rattan-processing enterprises that they never hear about. The lack of safety measures are the most commonly seen thing. There is a great need and support for the training on the environmental standards among the processors.

Supports for the stable raw material areas
During the interviews with the rattan processors in Quang Nam, it can be concluded that there is an urgent demand for supports in growing the rattan raw materials among the processing enterprises. This is because the rattan in the natural resource base is decreasing dramatically. Rattan reserve in the forests of Quang Nam can not meet with the demand for more raw materials from the processing enterprises. Some processor had to send their men to Laos, Cambodia to buy the raw materials. Several rattan processing enterprises have started establishing their own raw material areas. The Au Co rattan enterprise in Nui Thanh already signed contracts with households to grow the rattans in their home gardens. Rattan seedlings are bought from Vinh Phu province in the North at the price of 1800 VND per young rattan tree.

3.4. Quang Nam Strategic Plan for Development of Rattan Industry

In the short-term and medium term, Quang Nam province aims to

- Focus on supporting the rattan enterprises to enlarge their production scale; Encourage the formation of new rattan enterprises that contract out to households
- Facilitate the loans for rattan enterprise to invest money in the technology, equipments to ensure high quality raw materials
- Promote the potential export markets for rattan enterprises by concentrating on the training courses of marketing, product designs as well as capacity-building for the leading enterprises in Duy Xuyen, Nui Thanh, Dai Loc
- Concentrate on brand-name building and product consuption channels so that rattan products of Quang Nam can compete in the international markets. This must be implemented in conjunction with the exhibition; tourism development in Hoi An and My Son; trade fairs with the objective of enlarging the high-end markets
- Encourage the rattan cottage industry as well as the formation of rattan clusters and villages which are geographically devided into the following areas:

- **Dien Ban area**: including the communes of Dien Tho, Dien Hoa, Dien Thang, Dien Phuoc with the objective of making 500.000 rattan products per year and employing 1000 workers in the form of contracting out to the communes
- **Duy Xuyen area**: will be entitled to enlarge the number of rattan companies in the communes of Duy Phuoc, Nam Phuoc, Tay An, Duy Thanh, Duy Son. These will form the rattan clusters along the Nam Phuoc-Phuoc Son route, with the objective of making 1 million rattan products per year to be targeted at the export and the tourists
- **Dai Loc area:** including the communes of Dai Quang; Dai Dong; Ai Nghia. These communes will be the places for re-locating the new rattan enterprises which make 400 thousand rattan products per year as well as 500 tons of purely process rattan
- **Nui Thanh area:** Au Co enterprise will be given more investment support to upgrade the technology, making 400.000 rattan products per year. Another rattan cluster will be formed here to produce 300.000 rattan products per year.
- **Tam Ky, Que Son, Thang Binh areas:** which will be planned for upgrading the existing rattan enterprises in terms of source of raw materials and channels of consumption.
- **Hiep Duc, Tien Phuoc, North Tra My, South Tra My, Phuoc Son, Nam Giang, Dong Giang** are the mountainous districts should be planned as raw material areas for the rattan enterprises in Quang Nam.
- Form the Business Association of Rattan Enterprises in Quang Nam as soon as possible.

4. Institutional framework of the rattan clusters in Quang Nam province.

There are several institutions which are notable to be mentioned in this report. The following section describes in detail some of these institutions which are considered in support of rattan sector in Quang Nam

4.1. Quang Nam Trade Promotion Office

Address: 204 Phan Chu Trinh Str. Tam ky Hamlet, Quang nam
Phone: 0510 812290
Fax: 0510 859130

This trade promotion office was set up in 1997 and supervised directly by the Provincial Department Of Trade And Commerce, Quang Nam. At present, the Quang Nam Trade Promotion Office was staffed by 5 persons with the following functions.

- 01 director of the office
- 01 accountant
- 01 administrative
- 02 trade professional promoters

There is no official registered number of the members at the Quang Nam Trade Promotion Office. Any small and medium size enterprise can register for their participation with the office on one-time fee basis. The clients, when taking part in the centre operation, can be given the guidance on preparing the investment projects in Quang Nam, or participating in the trade fairs, sending the employees to short-training courses, ect.

4.2. Business Association

Address: 204 Phan Chu Trinh Str. Tam ky Hamlet, Quang nam
Phone: 0510 852666
Fax: 0510 859130

The business association was founded on 31 December 2003. The association committee is composed of 9 members and headed by Mr. Do Xuan Dien, the director. There is a division of functions and responsibility among the association committee as follows

- One (01) director of the association
- One (01) vice-director who would deal with daily operations of the business association.
- One (01) secretary to the committee
- One (01) professional staff on IT
- One (02) professional staff on training facilitation
- One (01) professional staff on Human Resource Development support
- One (01) professional staff on Market information and market access

At present, there are about 39 members who join the business association since its foundation. The membership fee is approximately set at 500.000 VND per year and it must be paid at the beginning of the year. The Business Association offers the following services:

- Facilitating the linkages between the businesses and the provincial leadership so that the dialogue between them can be organized
- Organizing the workshops and forum so that the businesses in the province can meet together and share their point of view with each other
- Implementing the short training courses on business skills,

For the non-member trainees, the fees for such 2-day training course is set at 800.000 VND. However, the members of business association have the privilege of a 30% discount. In all cases, the potential clients can have a free-of-charge consultancy on how to establish a new business from the scratch, which procedures to fulfil; and how to keep updated on the market access and information.

Remark *Business Association Quang Nam is highly evaluated by its members*

4.3. COOPSMEs in Quang Nam

Address: 26 Tran Phu street, Quang nam
Phone: 0510 821153
Fax: 0510 859136
Mobile 0905020505

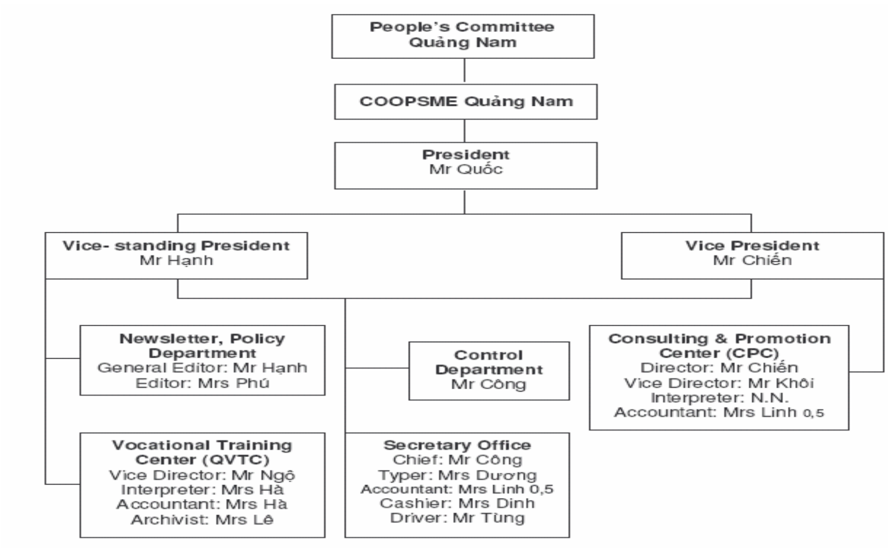
COOPSMEs was set up in 2000 and it now has a total staff of 15. The organizational structure was depicted in the figure below. In 2005, there are about 18 cooperatives to be considered as formal members among which 112 members are the SMEs/private businesses in Quang Nam. Apart from this, there are 30 informal members who want to join the COOPSMEs for some services such as training or trade promotion. To obtain the membership, the members (regardless of formal or informal) have to pay the membership of 600.000 VND to 1.200.000 VND, depending on their business size.

The COOPSMEs Quang Nam is supposed to provide the following services for its members

- Being as representative for its members
- Assisting the PPC in drafting strategic plan for development of Cooperative/SMEs
- Functioning of the consulting, market information for cooperatives and SMEs in Quang Nam, and providing them with the training courses on business entrepreneurship, marketing, financial managements and management skills
- Promoting the linkages between cooperatives/SMEs and international organizations in terms of organizing trade fairs, loans and credits.
- Facilitating the employment and job creations

Normally, the COOPSMEs is given an annual budget of 200-300 million VND mainly for day-to-day activities by the PPC Quang Nam. The German DED is now supporting COOPSMEs Quang Nam with training courses at an annual budget of 200 million VN. Apart from this, DED also assists the COOPSMEs Quang Nam in organizing the trade fairs for cooperatives /SMEs and getting the access to the financial institutions. For example, DED already assisted cooperative of Phu Tho in accessing the bank for social policies and it is already successful in obtaining 500 million VND from this bank. COOPSMEs Quang Nam is actively taking part in program 120 known as "Job Creation" program. In the spirit of this 120 program, the cooperatives and SMEs can get the loan from the bank for social policies only in case they can get an approval from Provincial Alliance for Cooperatives, MOLISA and the Bank. The task of COOPSMEs Quang Nam is to help them fulfil the procedures and formalities.

Figure 3.2 Organizational structure of COOPSMEs, Quang Nam



It is noted that the Central and provincial Alliances for cooperative are given an annual budget of 2 billion VND on this "120" program which is funded mainly through the three channels:

- Central Alliance for cooperatives
- Provincial Alliance for cooperatives
- District Alliance for cooperatives

It was indicated during the interview that the COOPSME Quang Nam also assisted the rattan SME and cooperatives in getting better designs for rattan products in Quang Nam. It has also entered into contract with the Central Institute for Cooperative Study for rattan ware design. The prototype of rattan wares is to be made on an experimental basis in Kim Bong cluster village, near Hoi An thanks to the financial support by ITC. Also, the COOPSME is submitting to DED with a plan for solar energy usage which is very well applicable to the cooperatives/ SMEs in order to dry the rattan. COOPSME, Quang Nam is highly valued by the clients in terms of its reputation.

Remark *COOPSME Quang Nam is highly evaluated by its members*

4.4. Provincial Centre for Encouragement of Rural Industry (CERI)

Address: 56 Hung Vuong, Tam Ky Quang Nam
Phone: 0510 811 295
Fax: 0510 811218

The provincial centre for encouragement of rural industry was established in 2003, on the basis of Decree No 134/NĐ-CP. The centre is operated, on the one hand, with the budget form the local authority, and on the other hand, with the profits from its activities. There are 19 employees in the centre, out of whom 9 person are paid with salaries from the budget of provincial program on encouragement of rural industry and the other 6 employees are paid by the centre own budget. Due to small operational budget, the centre has to set up a connection with NEDSEN and DED for financial support in its endeavour to promote the rural industry.

Annually, the provincial authority would assign a certain budget to be estimated on the basis of 200.000 VND per trainee, for a 3-month duration. The number of trainees to participate in the program on encouragement of rural industry belongs to the district. The centre would function as training course organizer. In this regard, the Centre would contact the Vocational Training Centre or the Centre also ask the businesses to accept the apprenticeship when the on-the job training courses are needed. In 2004, the Centre already organized 02 courses on rattan handicrafts and the on-the-job training courses took place in Au Co Rattan Bamboo enterprise and Duy Son 2 Rattan and Bamboo cooperative. Often, the Centre would draft the budget for organizing the rattan training courses and submit to the local industry department. As soon as the approval is given, the Centre would assign the quota to each district (mountainous districts are given first priority). The district can use a fraction of local budget to pay for the transport cost for trainees.

Remark *CERI Quang Nam is rather highly evaluated by its members*

5. Recommendations and Sollutions for a sound rattan sector development

5.1. General Recommendation to the rattan sector in Quang Nam

Policies

- Identify existing rattan clusters and networks of rattan SMEs, Attempting to set up clusters and networks by administrative fiat, it should be noted, rarely succeed.

- Policy must concentrate on groups of rattan producers and not individual small firms. Furthermore, intervention needs to be targeted, sector specific and strategic.

- Concentrate on institutions and instruments that facilitate the inter-face between rattan producers and the market, such as trade fairs, export visits and external buyers, for accessing marketing information, product development, fashion trends and for acquiring technical know-how.

- Support local and sectoral institutions that provide producer services such as technical training, technology support and market information. Use local levels of government for such support intervention and collaborate closely with representative businesses and local self-help institutions.

- Use large firms as important agents of change by promoting supplier enhancement programs. Work towards a macro-economic framework that provides for a levelled playing field and an incentive structure that allows rattan SMEs to operate on fair terms.

- Intervention appears to be far more effective in cases where policy agents have acted as facilitators and enablers.

Technical issues

- The know-how and technical skills of home-based and small-scale rattan processors/manufacturers need to be improved if the industry is to be transformed into one that produces high-quality finished rattan products.

- The accessibility of home-based and small-scale manufacturers to market information, raw material and capital needs to be improved. This will enable them to increase their profits, improve the welfare of their workers and strengthen their role in the overall development of the industry.

- Environmental measures, safety international standards such as EMS, ISO, and technology know-how should be given to the rattan processors/manufacturers

Institutions

- The functions of industry associations should be modified to create a beneficial impacts on its members.

- Policies that lead to the formulation and implementation of a strategy that would sustain the availability of raw material at reasonable and stabilized prices need to be pursued.

- The price at the collectors' level should be improved so as to encourage the collectors to stay in the business. Although in the short run it may cause some price increase, it will sustain supply of raw material in the long run.

- An auction market for raw rattan may be established through a cooperative of rattan collectors.

- The province should strengthen cooperatives through provision of capital and improvement of their management and product marketing skills, so that such cooperatives will serve the interests of their home-based and rattan small-scale manufacturers) in acquiring raw material at reasonable prices and marketing products.

5.2. Specific sollutions to rattan product development in Quang Nam

More active role of Quang Nam rattan business association

- Formation of the Quang Nam Rattan Businesses Association in an effort to have a better access to the market information. The association should be operated for the first three years on the basis of project budget or subsidies from the province. It will then be run with the membership fees from the association members

Sollutions to Market development for rattan products

- Domestic markets should be enlarged in the forms of joint-ventures and business partnership with other rattan enterprises in the neighboring provinces. As the results, the distribution outlets could also be enhanced for Quang Nam rattan products
- International markets such as European, Japanese, Singapore, American markets should also be exploited with the high-end segments. In doing so, high-quality rattan products with eye-catching features must be ensured in order to satisfy the needs of international buyers
- Participation in the trade faires/trade exhibitions of handicraft wares so that Quang Nam rattan products can be known to the potential customers. This can be done with the fundings from the government
- Rattan product promotion should be implemented actively through the internet. In doing so, a website for Quang Nam rattan products must be constructed. Also, the Trade promotion Office of Quang Nam has to play a more active role in facilitating the Quang Nam rattan enterprises to take part in the e-commerce.

- Establishing the centers for rattan product promotion at the rattan clusters as well as the tourist resorts.
- Formation of direct rattan exporters in Quang Nam who are able to sell their rattan products to the final customers, thereby earning a higher profit margins

Sollutions to the Financial Funds

- To encourage the rattan product developments in Quang Nam, more investment capital should be put into the equipments, morden technology as well as the infrastructures of the rattan clusters.
- Financial capital for rattan product development can be mobilized from a variety of sources of funds such as source of fund No 120 for job creation; Poverty Reduction Fund; or the Fund for supporting the Investment and Development; or sources of money from the commercial banks ect.
- Quang Nam province is planning to work out a proposal to be submitted to the Central Government to subsidize the investment on the infrastructure at the rattan clusters
- Sources of fund can be partly obtained from the international donors. At present, JICA is interested in a project on "building up a master plan for the industrial cluster development in Quang Nam". And rattan is also a priority of this project.

Sollutions to the human resource development for rattan sector

- Labor is very ample in Quang Nam which is estimated to be about more than 1 million working-age laborers, accounting for 71% of total population. This number indicates a considerable potential for rattan development in Quang Nam
- For rattan laborers, short-training courses are more important because they just need the skills to perform their jobs. Quang Nam provincial authorities has estimated that an amount of 2 billion VND will be needed to conduct these short-training courses 4,500 rattan laborers in the first years
- On-the-job training courses should be conducted at the rattan enterprises so that the trainees can lear their practical experience to be used in a later stage.
- The provincial people committee should organize the study tours, or best-quality rattan product contests among the rattan enterprises in Quang Nam

Solutions to sustainable development of rattan material areas[*]

- Cultivation land is one on elements, which plays an important role to farmers. However, they only feel secure about cultivating and investing in their land when they are given a right to use land of long term
- The project and province authorities should pay attention to make plan of material production areas, especially take shape the concentrated material area to meet the demand of rattan processing units within province
- In order to guarantee interests as well as create faith to rattan producers, the state and province need to have a specific policy on production encouragement and support to them.
- Give support in building the model of cultivating rattan in the Quang Nam province. In addition, seek new varieties of high productivity and domesticate the native rattan species.
- For communes that have the community forest, it is necessary to set detailed regulations on exploitation and use of rattan in the community forest management plan. Enhancing the knowledge of local people on rattan exploitation and sustainable utilization should also be paid more attention.

[*] These sollutions are synthesized by Ninh Khac Ban at the end-of-mission work shop in Quang Nam

Sollutions to enhancing the competitiveness of Quang Nam rattan products[*]

- Building strong brand names for Quang Nam rattan products so that they can compete in the domestic and the world markets.
- Establishing a network of reliable and trusted buyers on a long term business basis. These are those customers who can sustainably comsumpt the rattan products from Quang Nam.
- Quang Nam rattan product must be exported directly to the international end-buyers so that the profit margins for rattan enterprises could be improved.
- Rattan product designs should be improved so that they could meet the requirements from the customers. This means product design experts should be invited to closely work with the enterprises.
- The provincial authorities of Quang Nam should issue a ban on the exporting raw ratta materials so that these raw rattan materials can serve as input for high quality product inside the province.
- Better aesthetic features should be added to the rattan products, especially the export rattan products should take into account the cultural characteristics of the countries to which the rattan products would be sold.
- More assistance from the rattan specialists or rattan experts is needed for the enterprises in Quang Nam

[*] These sollutions are synthesized by Thai Thanh Ha at the end-of-mission workshop in Quang Nam

ANNECES

Annex 1 List of interviewees in Quang Nam

No	Name	Position and Organization
1	Huỳnh Khánh Toàn	Giám Đốc Sở Công Nghiệp tỉnh Quảng Nam 56 Hùng Vương, thị xã Tam Kỳ tỉnh Quảng Nam
2	Đặng Đình Nguyên	Trưởng phòng quản lý và bảo vệ rừng, Chi Cục Phát triển Lâm Nghiệp , Thị Xã Tam Kỳ tỉnh Quảng Nam
3	Từ Vân Khanh	Cán bộ chi cục phát triển Lâm nghiệp, thị xã Tam Kỳ Tỉnh Quảng Nam
4	Phan Sỹ Hùng	Trưởng phòng Lâm nghiệp, Sở NN& PTNT tỉnh Đường Phan Bội Châu, thị xã Tam Kỳ tỉnh Quảng Nam
5	Trần Thái Hà	Phó Giám Đốc chi cục phát triển lâm nghiệp Quảng Nam
6	Nguyễn Trường Thiện	Giám đốc công ty mây tre lá Âu cơ, Huyện Núi Thành tỉnh Quảng Nam
7	Bernd Budde	Chuyên gia tư vấn kinh doanh, LMHTX Quảng Nam, 26 Trần Phú Thị xã Tam Kỳ tỉnh Quảng Nam
8	Markus Rodel	Chuyên gia tư vấn kinh doanh, LMHTX Quảng Nam, 26 Trần Phú Thị xã Tam Kỳ tỉnh Quảng Nam
9	Nguyễn Đỗ Chiến	Phó Chủ tịch LMHTX tỉnh Quảng Nam, 56 Hùng Vương, thị xã Tam Kỳ tỉnh Quảng Nam
10	Dương văn Lý	Phó giám đốc trung tâm khuyến công tỉnh Quảng Nam
11	Nguyễn Văn Liếc	Phó Chủ Tịch UBND xã Tây Giang, tỉnh Quảng Nam
12	Dương Chí Công	Giám Đốc sở Tài Nguyên Môi Trường 100 Hùng Vương, thị xã Tam Kỳ, Quảng Nam
13	Phan Công Chung	Phó phòng Quản lý đất đai, sở tài nguyên môi trường tỉnh quảng nam, 100 Hùng Vương, thị xã Tam kỳ
14	Nguyễn Ngọc Sơn	Trưởng Phòng Hành Chính Cục Thuế tỉnh Quảng Nam,
15	Do Tuan	Deputy director Song Thanh Nature reserve
16	Nguyễn Văn Vấn	Chi Cục Phó, chi cục Kiểm Lâm huyên Nam Giang, tỉnh Quảng Nam
17	Châu Văn Ngọ	Văn Phòng huyện Nam Giang
18	Bui Công Lương	Phó Phòng Kinh Tế huyện Nam Giang, tỉnh Quảng Nam
19	Nguyễn Văn Bình	Phó chủ tịch UBND huyện Nam Giang
20	Đỗ Đình Hà	Giám đốc công ty thương mại miền núi huyện Nam Giang, Tỉnh Quảng Nam
22	Le Trong Biet	Director of Ca Dy enterprise, Nam Giang district
23	Lê Văn Nghĩa	Giám đốc công ty sản xuất thương mại Mây Tre huyện Đại Lộc, tỉnh Quảng Nam
24	Ngô Hoàng Sơn	Cán bộ phòng bảo vệ rừng, Khu Bảo Tồn thiên nhiên Sông Thanh, Huyện Nam Giang, tỉnh Quảng Nam.
25	A Vo To Via	Xã Thanh Mỹ, huyện Nam Giang
26	Z Ram Ban	Farmer, Vinh Hamlet, Ta Bhing commune
27	Dich Tan	Farmer, Za Ra village, Ta Bhing commune
28	A Lang Bon	Farmer, Ba Thoi village, Ta Bhing commune
29	To Ngon Dua	Farmer, A Bat village, Cha Val commune
30	Ngo Xuan Thieu	Villager, Vinh village, Ta Bhing commune
31	Mi A Ban	Villager, A Bat village, Cha Val commune
32	Tia Thu	Villager, Za Ra village, Ta Bhing commune
33	To Ngon Dhon	Villager, Cha Val commune
34	Phan Quoc Ban	Director of Phu Hoang rattan company- Hue city
35	Doan Vui	Da Bac, Phu Loc district, T. T. Hue province
36	Nguyen Vien	Loc An, Phu Loc district, Thua Thien Hue province
37	Nguyễn Cứu Quốc	Chủ tịch liên minh HTX tỉnh Quảng Nam
38	Kiên Cường	Giám Đốc công ty cổ phần Việt Hoa,
39	Lê Minh Ánh	Phó Chủ Tịch UBND tỉnh Quảng Nam
40	Trần Hữu Đoàn	Giám Đốc Hiệp Hội Doanh nghiệp Trẻ tỉnh Quảng Nam
41	Huỳnh Viết Hải	Chủ Nhiệm HTX tiểu thủ công mỹ nghệ, Thị trấn Hội An, Tỉnh Quảng Nam
42	Mr. Nguyễn Văn Thuận	Chủ nhiệm HTX mây tre Duy Sơn 2, tỉnh Quảng Nam, Ngã 3 Nam Ngãi, Huyện Duy Xuyên, Tỉnh Quảng Nam
43	Ông Nguyễn Hồng Vân	7 - Trần Hưng Đạo, Tam Kỳ Giám Đốc Sở Thương Mại tỉnh Quảng Nam

44	Ông Đinh Văn Đào	Cục trưởng cục thông kê Tỉnh Quảng Nam 106 Trần Quý Cáp, Thị xã Tam Kỳ, tỉnh Quảng Nam
45	Mr Huỳnh Van Kéo	Giám Đốc Vườn Quốc Gia Bạch Mã, Thị trấn Phú Lộc, Tỉnh Thừa Thiên Huế
46	Ông Đinh Văn Báu	Cục Trưởng Cục Thống Kê tỉnh Quảng Ngãi, Đường Bà Triệu, Thành Phố Quảng Ngãi
47	Ông Dương văn Lý	Phó giám đốc Trung Tâm khuyến Công Sở Công nghiệp Quảng Nam 56 - Hùng Vương , Thị Xã Tam Kỳ, Quảng Nam
48	Ông Đinh Văn Phúc	Phó Chánh Văn phòng, sở Công nghiệp tỉnh 56 Hùng Vương, thị xã Tam Kỳ, Quảng Nam
49	Ông Trần Văn Trí	Giám Đốc sở Kế Hoạch Đầu Tư tỉnh Quảng Nam 02 Trần Phú, Thị xã Tam Kỳ, Quảng Nam
50	Ông Đặng Đỗ Tèo	Cán Bộ Chương Trình, 02 Trần Phú, thị Xã Tam Kỳ, Quảng Nam
51	Ông	Cục trưởng cục thuế tỉnh, Thị xã Tam kỳ tỉnh Quảng Nam
52	Ông Nguyễn Hồ Thu	Chánh văn phòng, UBND tỉnh Quảng Nam, Tam Kỳ, Quảng Nam

Annex 2 Quang Nam major export forest product companies and export earnings

Names of Company	Type of products	Export earnings in 2004 (000 USD)
Export forest Product Co	wood, pulp	8384
Export food processing Co	Cashewnut	1019
Import Export Company of QN	Forest product	41
Hoi An Trade company	Cinnamon,	202
Trade Company QN	wood, pulp	2282
Prao forest product Im-Ex Co	Forest product	560
Wood Handicraft of Cam Ha	Wood handicraft	19164
Dien Ngoc Wood processing co	Handicraft	852
Cinamon Tra My Co	Cinnamon,	460
Total Export Earnings		32,964

Source: Quang Nam Statistics Yearbook, 2005

Annex 3 Distribution of rattan actors in Quang Nam

Type of actors	Number	Distribution	distribution
Rattan Ethnic Harvesters	7,850	Nam Tra My	1,350
		Bac Tra My	1,823
		Phuoc Son	1,242
		Nam Giang	1,276
		Dong Giang	2,160
Rattan traders at communes	21		
Agents	12		
Rattan collectors	6		
Rattan Processors	**16**		
Rattan Cooperatives	**11**	**Dien Ban**	**6**
		Duy Xuyen	**2**
		Que Son	**1**
		Phuoc Son	**1**
		Nam Phuoc	**1**
Rattan Private Ltd Co.	**5**	**Nam Phuoc**	**1**
		Hoi An	**1**
		Hoa Vang	**1**
		Nui Thanh	**1**
		Duy Xuyen	**1**
Other Input Suppliers	4	Da Nang	1
		Nghe An	1
		Lao	1
		Khanh Hoa	1

Annex 4 List of Handicraft Enterprise in Quang Nam

No	Name of Handicraft Company
1	Au Co Rattan Bamboo Palm Leaf for Export
2	Batrang Viet Duc Ceramic Co Ltd
3	Cam Ha Wood Processing Enterprise
4	Quang Nam Import-export Co
5	Duc Ha Ceramic private enterprise
6	Dien Phuong Aluminum Bronze enterprise
7	Duong Ngoc Dung Bronze casting Privat Enterprise
8	Duong Tan Hai Interior Decoration and Wood Privat Enterprise
9	Duy Son II cooperative
10	Duy Son Bamboo Rattan Private Enterprise
11	Duy Trinh Cooperative
12	Dong Tin Co. Ltd.
13	Dong Tam Bamboo Rattan Cooperative
14	Duong Ngoc Thang Co. Ltd.
15	Dong Tam Co. Ltd
16	Forest Products Export Company of Quang Nam
17	Hoa An Co Ltd
18	Kim Bong Co. Ltd.
19	Kim Vinh Co Ltd
20	Lam Phung Cooperative
21	My Son Co. Ltd.
22	Non La Co. Ltd.
23	Hoi An Handicraft Cooperative
24	Porcelain Material Enterprise
25	Phu Duc Mien Trung Construction Trading&Manufacture Co.
26	Phuoc Son Trade Co.
27	Quang Vinh Co. Ltd
28	Son Phong Cooperative
29	Tan An Silk Private Enterprise
30	Thang Binh Terracotta Porcelain Enterprise
31	Thien Viet Trade and Construction Co. Ltd.
32	Thu Bon Quang Nam Forest Export Company
33	Thang Loi Manufacture & Export Handicraft joint stock Co.
34	Vinh Dien Processing Forest&Manufacture Wood Co. Ltd.
35	Viet Duc Wood Co.
36	27/7 Cooperative

Annex 5 State-owned Forest Enterprises (SFEs) in Quang Nam

State-owned Forest Enterprises	Area (hectare)	Labour (person)
1. Agro-forestry product import export, Thu Bon, QN	18,920	297
2. Agro-forestry product import export, Prao, QN	25,130	34
3. Song Kon State-owned forest enterprise	33,390	37
4. Ca Dy State-owned forest enterprise	18,340	20
5. Tra My State-owned forest enterprise	10,140	69
6. Phuoc Son State-owned forest enterprise	9,328	19

Source:Statistics Yearbook 2004, Quang Nam

Annex 6 SME development in Quang Nam

Types of SMEs	2003	2004
Cooperatives (including agricultural and non-agricultural)	38	39
Private companies	245	229
Limited Enterprises	142	188
Joint Stock Companies	14	23
Total	**439**	**549**

Source: Statistics Year Book Quang Nam 2005

Annex 7 MAP OF QUANG NAM

Annex 8 Pictures of rattan

<table>
<tr><td></td><td></td></tr>
<tr><td>Picture 1: Rattan Raw Materials</td><td>Picture 2: End - products for export at Au Co Company</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Picture 3: Processed Rattans for Export at Viet Hoa Co. Ltd</td><td>Picture 4: End - products for export at Duy Xuyen Coops</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Picture 5: Chopping rattans into rope at Au Co Co. Ltd</td><td>Picture 6: Oil Tank for cooking rattan</td></tr>
<tr><td></td><td></td></tr>
<tr><td>Picture 7: Making End-rattan products</td><td>Picture 8: COOPSMEs Quang Nam</td></tr>
</table>

Annex 9 Field questionnaire

QUESTIONNAIRE FOR ECONOMIC PARTS

3 - MAPPING OF RATTAN VALUE CHAIN

***3.1. Raw Rattan Suppliers**: At present, how many raw rattan suppliers in Quảng Nam ?*

Suppliers	place	mode of payment	size
....	....	....	....

***3.2. Collectors** : In your oppinion, rattan collectors are characterized by what??*

***3.3** - Let us know basic info about the processors*

3.3.1. Local private company ....
3.3.2. FDI ....
3.3.3 Joint venture ....
3.3.4. (SOEs) ....
3.3.5. Private (SME) ....
3.3.6. Cooperatives) ....
3.3.7. Households ....

***3.4** - Could you please provide information on the input suppliers for your rattan production*

Rattan seedling ....
Credit ....
Product design ....
Export Quota ....

***3.2** Any information on the following issues (FOR RAW MATERIAL SUPPLIERS ONLY)*

1. Family size?
2. Other inputs paid by rattan collectors?
3. What are your outputs?
4. Core rattan products?
5. Quality
6. Transaction costs
7. Buying price
8. Selling pricie
9. Profit margins
10. Certification such as ISO, OHS, SA and other things

In the process of **supplying rattan raw materials**, please specify

- Advantage ....
- Disadvantage ....

***3.2**- Any information on the following issues (FOR RATTAN COLLECTORS)*

1. How much do you collect rattans in terms of (ton/value in money)?
2. Inputs paid by the rattan collectors ?
3. Outputs received?
4. Core products?
5. What is the quality

6. Transaction costs
7. Buying price
8. Selling price
9. Profit margins
10. Certification such as ISO, OHS, SA and other things

In the process of **<u>collecting rattans</u>**, please tell us your

- Advantage ....
- Disadvantage ....

3.2- *Any information on the following issues (FOR RATTAN PROCESSORS ONLY)*

1. How much do you collect rattans in terms of (ton/value in money)?
2. Inputs paid by the rattan collectors ?
3. Outputs received?
4. Core products?
5. What is the quality
6. Transaction costs
7. Buying price
8. Selling price
9. Profit margins
10. Certification such as ISO, OHS, SA and other things

In the process of **<u>processing rattans</u>**, please tell us your

- Advantage ....
- Disadvantage ....

3.4 (MPI, DOI, COOP SMEs) cooperation between actors in rattan sectors

Rattan harvestors

Rattan collectors at village/commune

Ratan processors

Number of SME, Copperatives/enterprises participating in the contracting with export enterprises or trading enterprises in 2004

Câu 3.5. Training need assessment (FOR PROCESSORS ONLY)

To enhance the rattan processing, are there any need for training or consultancy in your enterprises, Please tick your preference below.?

* Rattan processing	☐ No	☐ Yes	Training provider.............................
* Business/management skills	☐ No	☐ Yes	Training provider.............................
* Market information	☐ No	☐ Yes	Training provider.............................
* Product design	☐ No	☐ Yes	Training provider.............................
* Support for finance and credit	☐ No	☐ Yes	Training provider.............................

* Technology transfer ☐ No ☐ Yes Training provider..............................

* Other supports needed (Please specify)

....

....

Cost -benefit analysis of the rattan processing enterprises

1. Cost of buying rattan raw materials
2. Cost of processing
   - Natural resource tax ....
   - Management fee
   - VAT
   - Worker salary
   - Asset depreciation
   - Rental for processing workshop
   - Electricity expenses
   - Other expenses
3. Transportation costs (for transporting rattan to export companiese)

4 Description of the supporting institutions for rattan sector in Quang Nam

Institutions / Indicators	**Rattan association**	**COOP SMEs**	**Trade office**	**Research institutions/**	**technology transfer**
Number of employees					
Number of members					
Number of customers					
Types of customers					
Number of services					
Type of services					
Service condition					
Assessment from customer/member point of view					

QUESTIONNAIRE FOR TECHNICAL PARTS

A - For exploiters or forest enterprise:

1- List the name of all rattan species that are exploited from forest or your garden? Which species are much exploited?
2- Specify the diameter and length of exploitable rattans? (for each species)
3- The annual growth of rattan species in following height:
   - 0.5 - 1.5 m
   - 1.5 - 3.5 m
   - 3.5 - 5 m
   - ➢ 5 m
4- Define the flowering, fruiting and harvesting period of each species?
5- Specify the size (diameter, length) and selling price for each species?
6- Methods of preliminary processing and preservation?
7- Markets, middlemen for buying and selling rattan?
8- Total cost (tax on exploitation of natural resources, business tax, land-tax, local fee, etc.?)
9- Legal rights to rattan extraction (ask permission or not and for which types of forests (special forest, productive forest, protective forest, etc.)
10- Methods of exploiting rattan species?
11- The land use right (the area of forest land is allocated? have a certificate of land use right or not?)
12- The persons have a right to exploit rattans in the region? (Do the persons who live in other regions have right to exploit?)
13- Income from rattan extraction (per day, month and for months/year)
14- The roles of rattans in the livehood and religious beliefs of local people?)

B- For concerning organizations, forest enterprises and establishments in district and province level

1- Total forest area (in hectares) in the whole province, the area of each forest type (special forest, productive forest, protective forest)
2- How many hectare of forest land/ forest for protection have been allocated?
3- The rattan yield of the province obtained from 2000-2005?
4- The annual rattan export and import productivity of the province (from 200-2005), the annual export quota? (see the statistical year book in the year of 2001-2002, 2003-2004 and 2005 if possible)
5- The buying and selling price of rattan processing and production establishment in the province?
6- The location where rattan species distribute widely? (estimate the area for each rattan species?)
7- List of production, processing and trade establishments in the province (including forest enterprises, state and private organizations?)
8- The law and regulations of the State and the province on rattan explotation and development in the province (all kinds of permits relating to exploitation)
9- Exploiters are permitted to exploit rattans in which locations (special forest, productive forest, protective forest, etc.)?
10- What types of tax and fee do the exploiters have to pay?
11- What are the available mechanisms of management and protecting rattan species?
12- Are the impacts of rattan extraction on environment, biodiversity and the rattan existence?
13- What are the threats to rattan resource in the province (exploitation, natural calamity, forest fire, etc.)?
14- The roles of rattans in household and province economy?
15- The locations cultivate rattans in the province?
16- Estimate percentage of each purchasing rattan species?
17- The orientation of the province toward conservation and development in the recent years?

C- Estimate the rattan reserve in the province

1- In the cultivated location (the total area, productivity, etc.)

2- In the natural location: (For three types of forests: special forest, productive forest, protective forest)

- Build the perquadrate sized 20 x 20 m
- Count the numbers of clusters and numbers of plants in each cluster.
- Total length of each cluster (all of plants in the cluster)
- Count the plants that reach the commercial length (over 4 m)