

Short-Term Consultancy Support to Ha Giang Province by a Forestry Sector Development Consultant

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Ha Giang Development Project for Ethnic Minorities (HPM)
Forest Protection Component
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1. Background

Department of Agriculture and Rural Development (DARD) is the main agency at provincial level to help the People's Committee (PC) conducting State management of forests and forest land. DARD in Ha Giang Province is also the implementing agency of the Sida supported Mountain Rural Development Project (MRDP) which is on-going in the province in its present phase since 1996.

Ha Giang Development Project for Ethnic Minorities (HPM) is a new multi-sectoral rural development project in the province. It has 10 components related to the development of different sectors in the province, one of them a *Forest Protection Component*. The total project budget is USD 19.3 million, financed by IFAD (credit), Vietnamese Government, Sida and UNDP. The project started in mid 1998 and will continue for 6 years.

The HPM Forest Protection Component will improve watershed management and upland development through professional training and technical assistance, and secure the forest cover, while improving the livelihood of the farmers, through arranging forest protection contracts and training for villagers in selected communities.

The Forest Protection Branch (FPB) in the province with its Forest Protection Stations (FPS) at district level is the implementing agency of the component.

DARD has worked out a three - year plan for input by international and national short - term consultants within the Technical Assistance provided by Sida. It includes consultancy support to the Agricultural Extension, the Animal Health and the Forest Protection components of HPM as well as general consultancy support to the forestry sector in the province through DARD.

Within this plan, a *Forestry Sector Development Consultant* has been recruited to give short - term consultancy support to the Forest Protection Component of HPM and DARD, particularly the newly established Forestry Development Branch (FDB). The consultant will make several visits to Ha Giang (4 months in total) over the next two years to ensure continuity in the technical assistance. See the Terms of Reference for the consultant's first visit in March - April, 1999 in **Annex 1**.

The consultant worked according to the following itinerary:

- 22 - 25 March: In Hanoi: Introduction meetings with MRDP staff.
- 26 March - 7 April: In Ha Giang: Meetings with MRDP, FPB, FDB, DLA and field visits to the FPSs in Bac Quang, Hoang Su Phi, Xin Man and Yen Minh districts.
- 8 - 12 April: In Hanoi: Meetings with FIPI and MRDP.
- 13 - 21 April: In Ha Giang: Meeting with DOSTE. Final discussions with DARD, FDB and HPM. Report writing.
- 22 - 24 April: In Hanoi: Meeting with IUCN. Round - up meetings with MRDP. Completion of the report.

The consultant met with the people listed in **Annex 2** plus a lot of villagers in the visited field areas.

2. Land and Forestry Situation in Ha Giang Province

Ha Giang Province is located on the very top of Vietnam, bordering China. The total land area is 788,437 ha covering three agro-ecological zones. The terrain is very mountainous with altitudes ranging from 200 to 2,400 m a.s.l.. 38% of the province has a slope gradient of 35° or more. The population is 557,280 (1996), of which 90% are ethnic minorities from 21 different groups, mainly H'Mong, Tay, Dao and Nung. There are 97,180 households, of which 34% are classified as "poor". The population density is 71 people/km². Administratively, the province has 10 district (including Ha Giang Town), 184 communes and 1,574 villages.

2.1. Land Situation

The distribution of land (1996) on different categories according to the official Land Administration classification is shown below.

Type of Land	Total Area	Land allocated to Households (1998)

	Ha	%	Ha	% of Total Area
Agriculture land	104,493	13	94,087	90
Forest land	268,380	34	112,518	42
Special use land	3,651	1	-	-
Resident land	6,126	1	5,500	90
Bare land	405,787	51	-	-
Total	788,437	100	212,105	27

See further the figures for forest land (including some bare land) used by FPB and DARD in **Chapter 2.2** below.

Thus 405,800 ha or 51 % of the total land area of the province is **bare land**. This includes grass land, shrub land, rocky land etc. It is increasingly being recognised that parts of the "bare lands" are actually used for agricultural and forestry production purposes in the form of cropped land, follows, grazing land and agroforestry. To restore (or re - classify) and bring the bare land under sustainable management is an urgent task and challenge for Ha Giang Province. The land allocation programme (Decree 02), the previous 327 programme and the new 661 programme (the Five Million Hectares Restoration Programme) are all national programmes attempting to approach this task.

HPM and MRDP are contributing at the provincial level.

The **land allocation** programme has proceeded fairly well in the province. So far (by the end of 1998), the land allocation to households has been completed in 161 of the 184 communes, and 79,997 households (82% of all households in the province) have received land tenure certificates (red books) for land holdings including agriculture land, forest land and residential land. Thus a total area of 212,100 ha, constituting 27% of the total provincial land area, has been allocated to households. This means that 90% of the agriculture land and 42% of the forest land (as per the above LA classification excluding bare land) in the province have been allocated to households so far. Comparing the three zones, the following percentages of the total land area have been allocated. Zone I: 27%, Zone II: 49% and Zone III: 19%.

A break down of the total allocated land area per district is shown in **Annex 7**.

The average land tenure certificate for households covers an area of 2.65 ha, divided as follows:

Agriculture land	1.17 ha
Forest land	1.41 ha
Resident land	0.07 ha
Total	2.65 ha

The low forest land area, probably indicates that all 79,997 households have not yet been allocated forest land. The provincial government has decided that maximum 3 ha of agriculture land and 63 ha of forest land (including bare land) should be allocated to one household.

The People's Committee (PC) in the province has recently issued a Decree (10 - NQ/HNTU on 16 January 1999), saying that all forest land, i.e. the 268,380 ha according to the LA definition, should be allocated before the end of year 2000, of which 60% should be completed before the end of 1999. DLA should be the principal organization for land allocation (before it was FPB). This means that DLA should allocate 155,860 ha of forest land in the two years 1999 - 2000. However, this will include allocation also to organizations, communities and government agencies. The DLA management believes this will be a difficult task considering the limited budget for allocation. Still, in addition to this possible achievement, the main part of the 406,000 ha of bare land should also be allocated or contracted and brought under someone's responsibility and sustainable management. The provincial government has decided, though, that 5% of the total province land, i.e. about 40,000 ha, should be kept as "reserve land" and not be allocated. There are also Nature Reserves covering an area of about 60,000 ha.

Sida stopped its support to land allocation in 1998 pending the fulfilment of the following conditions stated in the Agreed Minutes of May 1998:

- Formal revision of the land policy to more favourable conditions for the villagers;
- Clear commitment on the part of the provincial authorities to approve and apply the land allocation method developed by MRDP at wider scale.

The land law from 1993 was amended and supplemented through Decision No. 10/1998/QH10 of December 2, 1998, followed by corresponding amendments of the Decree No. 02 - CP on allocation of forest land. Some of the amendments and supplementations are listed below.

- For land with forest cover and land without forest cover which has not been allocated to organizations, households and individuals, the *People's Committee at commune level* shall take the responsibility to manage and elaborate plans for using or allocation of such land to organizations and households for uses in accordance with the planning approved by the competent agencies.
- For areas of *less critical protection forest* situated within one commune or one village and the area is too small for setting up a management board, it shall be allocated to people, households or individuals for use in conformity with the regulation of management and protection of protection and special use forest.
- The State will allocate *forest land without forest cover* to organizations, households and individuals for the purpose of reforestation, assisted regeneration or protection of the vegetation. These activities can be carried out *in combination with economic production in forestry, agriculture or fishery* in some cases, such as watershed forests of low priority and environmental protection forest.
- For forest land covered by natural or planted forest or with vegetation which needs to be protected, families and individuals who have been allocated such kind of land areas shall be given the responsibility for protecting and managing such areas in accordance with a *contract* signed. Those forest land users are entitled to enjoy the benefits reaped from their working and investment on those land.
- In addition to allocation, the State will also *lease* forest land to organizations, households and individuals. The leasing will apply to (1) the production forest remaining after allocation to organizations, households and individuals has been made, and (2) protection and special use forests which have environmental or natural view qualities suitable for eco-tourism activities, entertainment or science research.

2.2. Forestry Situation

The Forest Protection Branch (FPB) and the Department for Agriculture and Rural Development (DARD) in the province use somewhat different figures for the total forest land area in the province. Both figures are presented below.

Forest Land in Ha Giang Province **according to FPB** (1997):

Land with forest	215,327 ha
- Natural forest	212,457 ha
- Plantations (grown up)	2,870 ha
Bare land	362,085 ha
Total Forest Land (1997)	577,412 ha

According to this information, the forest cover was **27 %** in 1997.

Forest Land in Ha Giang Province **according to DARD**, based on a forest inventory carried out by FIPI in 1992:

Natural forest	208,562 ha
- Production forest	50,771 ha
- Protection forest	146,591 ha

- Special use forest	11,200 ha
Bare land	406,084 ha
(of which with forestry potential)	309,332 ha)
Total Forest Land (1992)	614,646 ha

DARD has contracted FIPI to carry out a new forest inventory in the province in 1999, as part of the preparations and planning for the new 661 programme. Thus updated information about the forest land in the province will be available in a few months. See further **Chapter 5**. Most of the forest is secondary forest or other types of degraded forest. There was only 2,400 ha of rich and medium timber forest found in the natural production forest category in 1992, i.e. only 1% of the total land under forest. Bamboo forest and mixed bamboo/timber forest occupy some 29,000 ha. Agriculture activities continue to spread up the slopes into the forest land. Shifting cultivation is still practised, particularly in Zone 1. There is no general logging ban in the province. The consultant did not manage to find any statistics on annual logging volumes, species etc. in the province.

The new 661 programme has set a target to increase the forest cover in the province to **50%** by the end of year 2010. This means that the land under forest should be increased from the present 215,300 ha (using FPB's figure above) to 394,200 ha in year 2010, i.e. a total increase of 178,900 ha and a reforestation rate of 16,300 ha per year. **Is this a realistic target?** Even if a great part of the reforestation will be carried out through natural regeneration, this will be a huge and costly undertaking. See further below.

2.3. Forestry Organizations

The main forestry organizations in the province are the Forest Protection Branch (FPB), DARD with its Forestry Development Branch (FDB) and Extension Centre, and three State Forest Enterprises and four Provincial Forest Enterprises.

The **Forest Protection Branch (FPB)** and its Forest Protection Stations (FPS) at district level is (according to the Prime Minister's Decision No. 245/1988/QD - TTg) the agency to perform the responsibility of controlling and supervising the observance of the legislation on the management, protection and development of forests in the province. In special cases, it shall organise the cooperation with the armed forces and police in the locality to patrol and track down forest poachers and protecting the forests and prevent and fight against forest fires. FPB is also the implementing agency of the HPM Forest Protection Component. The total forest protection staff is 327 people in the province, divided as follows:

Level	Total	Gender		Educational Background		
		Men	Women	University	Secondary	Intermediate
Province	24	19	5	9	9	6
District	117	102	15	9	102	6
Commune	186	186	-	-	-	186
Total	327	307	20	18	111	198

6% of the staff are women (mainly at district level). 70% of the staff come from ethnic minorities (mainly at commune and district levels). Soon, also Forest Fire Protection Staff will be employed at commune level.

The **Forest Development Branch (FDB)** and the **Extension Centre** are parts of the DARD organization. According to the Prime Minister's Decision No. 245/1988/QD - TTg, DARD is the principal agency to help the PC to perform the responsibility of conducting State management of forests and forest land in the province. DARD is also the implementing agency of MRDP. The Extension Centre "Khuyen Nong" is providing agricultural and forestry extension services (advice and material supply) to farmers. A total number of 12 staff at province level and 47 staff at district level are working with extension. There is generally also an Extension Worker in each commune.

The FDB is a new unit under establishment within DARD. Its role, duties and organisational set - up are under consideration and discussion. However, it is clear that FDB will have an important role as co - ordinating unit in the province of the new 661 programme (**Five Million Hectares Reforestation Programme**). According to the

Prime Minister's Decision No. 661/QĐ - TTg, this programme has three objectives:

1. To establish 5 million ha of forest by natural regeneration and reforestation in order to increase the national forest cover to 43% as a contribution to environmental security, reduced natural calamities, increased water resources capacity, gene conservation and biodiversity. *The national task will be to create 2 million ha of special use and protection forests and 3 million of production forest. As mentioned above, the tasks of the Ha Giang Province will be to increase the forest cover to 50%, which means the creation of some 179,000 ha of forest.*
2. To effectively use bare land and denuded hills; to create more employment opportunities for people, thus contributing to hunger elimination and poverty alleviation, sedentarisation and fixed cultivation, increased income of rural and mountain people, social and political stability, national defence and security, especially in border areas.
3. To supply wood for production of paper and wood-based panels; to satisfy the demand for timber, firewood and other wood and non-wood forest products for domestic consumption as well as for export; to develop forest product processing industry making forestry an important economic sector which would be able to contribute to the socio-economic development in mountain areas.

The PC of the province has carried out a feasibility study of the 661 programme, and submitted the study to DARD. DARD has contracted FIPI to review the study and suggest necessary adjustments. FIPI (through its Phu Tho office) is carrying out forest inventory and conceptual planning for the province, which will be completed later in 1999.

The new 661 programme and the establishment of the new FDB have revealed the needs to reconsider the whole provincial forestry organization including the roles of FPB and DARD and a possible merging of them, as well as developing a consistent forestry strategy for the province. The Government will not provide all the funds needed to increase the forest cover to 50% in Ha Giang Province.

The province will have to find other additional sources of financing. There are three **State Forest Enterprises (SFE)** operating in Bac Quang District, involved in pulpwood production for the Bai Bang Pulp and Paper Mill. They are classified as self - sufficient economic enterprises. They occupy a total area of 17,630 ha of forest and bare land, of which 1,655 ha forest plantation and 6,107 ha regeneration forest. The provincial government will review their use of the land and finally allocate some specific land areas to them with red book. They will also be given a favourable credit scheme for the financing of the forest plantations.

There are also four **Provincial Forest Enterprises (PFE)** in the province, formally under DARD. They are located in the districts of Vi Xuyen, Hoang Su Phi, Yen Minh and Bac Me. The enterprises have been involved mainly in reforestation activities on provincial forest land through special government projects, such as programme 327. In this programme, the enterprises have had short - term contracts with households on forest plantation and protection. These enterprises are not self - sufficient economic enterprises, and will act as implementing units of forest projects. It is said that the PFEs will be given new roles in the implementation of the 661 programme. They will be implementing units for this programme in their respective district. Forest land (protection forest and special use forest) will be allocated to them with red book for reforestation and management. The PFEs will then make sub - contracts with households for plantation and protection, i.e. similar model as in the 327 programme.

In districts, where there are no PFEs, district Project Management Units (PMU) will be formed and act in a similar way as the PFEs. The PMUs will also get land with red book and continue to exist after the completion of programme 661 in 2010.

Finally, there is also a Forest Product Processing Enterprise in the province manufacturing different kind of wood work and furniture.

The consultant will look further into the forestry organizations including the forest enterprises and give recommendations after his second visit to the province in October/ December 1999. However, the consultant would like to make a few recommendations, related to bare land and organizations, already now:

- The "bare land" issue should be approached in a **site-specific** way at village/commune level. Let the villagers restore and develop the bare land, based on an agreed village land use and forest management plan. Give them technical support through **extension**, and financial support from e.g. the 661 programme, put into a **Community Forest Development Fund**, with monitoring from the commune level. This is a logical development when the villagers have been given long-term management responsibility for most of (or whole) the village land through land allocation and forest protection/management contracts. It is suggested that FDB should start pilot activities on this through MRDP.

- As part of this approach, the un-allocated land, which remains when the present round of allocation to households has been completed, should be allocated with red book to the **communes**. They should then, through a participatory forest management planning process, make sub - contracts with households, groups of households or whole villages in the form of joint forest management agreements/contracts. The ideas of having the Provincial Forest Enterprises and PMUs at district level as "middlemen" in the forest management, is a too indirect approach with involvement of too many outside actors. It sounds similar to the previous 327 approach which was not very successful in the aspect of land management.

3. HPM/Forest Protection Component Field Activities

The HPM Forest Protection Component has two field activities: forest plantation and forest contracting.

3.1. Forest Plantation

There is no forest plantation activity mentioned in the Project Document and no targets given. There the activities are named seedling production and enrichment planting. However, the project management has decided to carry out some forest plantation on bare land as this is considered an effective reforestation method.

In 1999, the project will carry out forest plantations in five districts covering a total area of 200 ha located on bare land in communal watershed areas. HPM supplies the seedlings (mainly *Cunninghamia* and *Pinus*) from small nurseries organised by households contracted by HPM. The planting is done by villagers with supervision and payment from HPM. The total payment for the planting, including seedlings and maintenance for 4 years, is VND 2.5 million/ha (USD 180/ha), which is in line with the guiding principles of the 661 programme. It is said that the planted areas will later be allocated or contracted to the villagers for management and protection.

It is not yet decided how much area will be planted in the coming years. It is said to depend on the other government programmes, the availability of land etc.

3.2. Forest Contracting

The main activity of the HPM forest component is to establish contracts with villages or households for protection and management of protection forest/watershed areas. This activity will cover a total area of 20,000 ha in 22 communes in 8 districts by the end of year 2000 with the following annual targets.

Area Total	Year		
	1998	1999	2000
Contracted Area, ha 20,000	1,000	10,000	9,000
No. of Districts	5	8	8
No. of Communes	6	17	22
No. of Villages	7	?	?
No. of Contracts	7	?	?

The project achieved 1,004 ha through 7 contracts in 7 villages in the last quarter of 1998. There will be some 50 - 60 villages with signed protection contracts by the end of 1999, maybe 80 - 100 by the end of year 2000. It seems that, so far, there is generally one contract per village.

HPM started the Forest Protection Component activities in 1998 by arranging **training** of the involved staff in June - October as follows. The formal starting point of the Component was, however, on August 11, 1998, when the Working Plan was approved.

June 1998: Training of province staff on PRA (in general).

A 7 - day course for 30 people from all HPM components was arranged in Ha Giang through funding from

UNDP. Mr. Hoang Van Tue, Forest Technician from FPB, attended. He has since then been in charge of the field activities of the Forest Protection Component.

July 1998: Training of staff from FPB and the Heads of involved FPSs.

A 30 - day course on "Improving Capacity of Forest Protection Staff at Province and District Levels" for 10 people (2 Technicians from FPB and 8 Heads of Stations). The course, which was arranged by the University of Forestry in Xuan Mai through funds advanced by the Government, had the following main content:

- Extension methods
- PRA method/tools (with focus on forestry)
- Social forestry/community forestry
- Inclined land agriculture techniques
- Forest planning related to forest protection contracting
- Design and management of forest projects

October 1998: Training of protection staff at District and Commune levels

Two 10 - day courses for a total of 60 people from the FPSs and the involved communes. The course was a short version of the course in July above.

In a second step in 1998, FPB worked out **guidelines** for the PRA exercise and the procedure for forest protection and management contracting including a format for the contract.

The model for **PRA** (see **Annex 3**) is, according to FPB, a combination of models used by FAO and MRDP. It is designed to be carried out at village level. However, due to limited budget for PRA in the HPM budget (only VND 1.8 million/commune), PRA could be carried out only at commune level (only one PRA per commune). The content of the PRA is mainly general village development, and it takes 4 - 6 days to carry out the exercise. The possible forest land areas to be included in the protection contract are not specifically looked into and discussed in the PRA. The PRA is lead by a Facilitating Team consisting of 1 Technician from FPB, 2 staff from FPS (trained on PRA), 1 protection staff from the commune, and 1 representative of the PC at commune level. From the commune/villages, there are the following participants: 1 representative each from the Women's Union, the Youth Union, the Soldiers (retired soldiers) and the Elders at commune level, and the Heads of the villages in the commune. After the PRA, the Technician from FPB prepares a report with the documents and conclusions made by the participants. The report is sent to the Provincial Project Coordination Unit (PPCU). It is not clear what will happen with the actions plans (at village or commune level?) drawn up in the PRA according to the guidelines. Will they be subject to support from also the other components of HPM?

After the PRA, the activities move to village level, where finally the protection contract will be signed. HPM has selected villages where the agriculture and the production forest lands have already been allocated to the households. The remaining un-allocated land in the village is generally a block of protection forest/watershed protection area which now will be contracted to the village as a whole or to a group of households. The 7 contracts signed in 1998 had an average size of 143 ha.

The **procedure** leading to the contract signing is shown in the guidelines in **Annex 4**. There is a similar facilitating team from FPB/FPS and the commune working with this procedure. First there is a meeting with the villagers, when they get information about government policies, the HPM project and its strategies and the procedure for the forest protection contracting. The meeting will identify households who are willing/interested to enter into a forest protection contract. Then the Forest Protection technicians will survey the planned contracting area and produce a map with the forest divided into compartments. The forest or vegetation in the compartments is estimated in terms of species and standing volumes (m^3/ha). This is a kind of baseline data of the current situation of the forest to be contracted. After this field survey and data processing, there is a second meeting with village representatives when they agree on the forest land area and the description of it.

Finally, there will be the signing of the **Contract of Forest Protection**. See the format in **Annex 5**. The contracting parties are: A: the Government, represented by FPS, and B: the villagers represented by the Head of the village or a representative of a group of households. The contract will be countersigned and stamped by the PC at district level.

The contract clearly describes the area to be protected, and the rights and the responsibilities of the two parties. The FPS will pay VND 50,000/ha/year to the villagers during the first five years as a Forest Protection Fee. They will also provide free seedlings for enrichment planting to the villagers. The villagers will have the rights to harvest firewood (dead trees and branches) and non-timber products. They will also be allowed to

harvest timber and products from trees planted and managed by them after the signing of the contract. The contract is valid for 20 years. The contract package consists of the following four documents:

1. Application for entering into forest contract
2. Description and agreement on the area to be contracted
3. Map of the area to be contracted
4. Contract of Forest Protection

On the field visits, the consultant asked the villagers how they will achieve their part of the contract. They generally said that they will (1) formulate local/village regulations for protecting and managing the forest, (2) organise Protection Teams among the villagers which, on a rotational basis, will patrol and protect the forest, and (3) start enrichment planting in the forest. They hoped that after the five years, when the Protection Fee will not be paid any longer, the forest will have recovered to that extent that it will yield more products (timber and non - timber) to be harvested by the villagers.

The ways they will use the Protection Fee funds differ from village to village. H'Mong villages generally will use the fees for common purposes (e.g. water supply). Some Tay villages were going to use part of it commonly, and distribute part of it to those who have been active in the forest protection.

3.3. MRDP's Method for Community Forest Management

MRDP has since long worked with participatory methods in pilot villages in Ha Giang Province with activities including PRA, establishment of village organizations (Village Development Committees, Interest Groups etc.), elaboration of village development plans, credit system, business development, monitoring system etc. MRDP also supported land allocation and land use planning (at different levels) in the province in 1996 - 1998. Generally, MRDP has been supporting farmer households and their efforts to develop the agriculture and forestry land allocated to them.

In 1998, MRDP took an initiative to a wider approach to community forest management planning. An extensive **study** was carried out, and a report named "From Protection to Protection through Production: a process for forest planning and management in Ha Giang and Yen Bai Provinces" was presented in May 1998. The study suggests a strategy for participatory planning and management of all forest land in the village, with particular attention on the forest land that has not yet been allocated to households. The study gave a lot of recommendations to the Forest Protection Component of HPM, e.g. to start at small scale and have a flexible and experimental approach, but very few of these recommendations were adopted by HPM. The Forest Protection Component follows the plans and strategy outlined by the HPM Appraisal Mission.

As a result of this study, MRDP started in the last quarter of 1998 **community forest management pilot activities** in two Dao villages, one in Yen Bai Province and one in Ha Giang Province. The latter is Nam Ty village in Hoang Su Phi District. MRDP worked out tentative Village Forest Management Planning Guidelines in November 1998 which are being tested in these villages.

Village forest management planning exercises were undertaken in the two villages in November - December 1998. The exercise, which could be seen as a PRA focusing on forest management, lasted 5 days including a number of activities: mapping, a survey of forest condition, a simple market analysis, the identification of forest management units (units for contracting), and making a village forest management plan. A representative of HPM/FPB (Mr. Duong Viet Ngia) participated in the exercise in Nam Ty.

Since then, the villages have been holding their own village meetings to discuss the details of the forest management plan. The results have also been presented to the PC in the respective districts. Activities that are on - going or remaining include:

- drawing up lists of households for group management;
- agreeing on local regulations for different forest management units;
- thinking about the organisation of forest protection groups;
- thinking about how to fund forest management activities, e.g. through a commune/village forest management fund;
- formulating and signing the forest management contracts.

According to MRDP, it is important to give the villagers enough time to sort out these matters and to really build consensus with all people in the community. The process should not be rushed too quickly.

3.4. Conclusions and Recommendations

- HPM's forest plantation sub - component is a bit uncertain activity with the objective and targets not yet formulated. Probably it will depend on the size of the proper enrichment planting that the contracted households and villagers will carry out in the contract areas, as the project will provide the demanded seedlings. The seedling supply should be developed to include a greater variety of local species (not only Cunninghamia and Pine). The best would probably be to have a HPM contracted nursery in each contract village, in order to build up the village capacity and secure sustainability in the operation. Seed collection is another important issue to be attended by the project.
- A comparison of the approaches used by HPM and MRDP for community forest management reveals the difference in working style between the two projects. HPM is a big delivery/implementation project, while MRDP is working at small scale with pilot projects and method development. HPM talk about forest contracting, while MRDP talk about community forest management and "joint forest management"¹.

HPM designed its forest contracting model quickly in mid-1998, trained field staff and started off "delivering" forest protection contracts. By the end of this year (1999), they will have issued some 50 - 60 contracts covering 11,000 ha in 17 communes in 8 districts.

MRDP started in a more innovative way, first with a conceptual study and then continued cautiously with pilot activities in two villages only. They see the change to community forest management as an important process and work closely and slowly with the villagers when developing the method, ensuring consensus and sustainability.

This difference in working style should be kept in mind when considering direct cooperation and coordination between the two projects. The role of MRDP, in this case, should be to develop appropriate models for community forest management and forest contracting, which then could be adopted and used in big scale implementation by HPM and others. HPM has expressed its willingness to cooperate with MRDP in finding good methods.

- Considering the given HPM project design with its tough implementation schedule (all forest contracting carried out in the first 3 years) and the limited budget for PRA, the FPB and its field staff are doing a good job and use a reasonably appropriate method.

However, the transfer of rights and responsibilities for forest management from the government to communities is a new and important process that requires reflections and adaptations by both parties. It is also important to recognise the villagers' **traditional knowledge** about their land and their management traditions, and base the new development on this existing knowledge and traditions. If designing and rushing off with the contracting too quickly, it is a risk that this process of change will not take place and the villagers will see this contract as another "protection contract" used e.g. by programme 327 in the past.

- The HPM method is not very participatory, although there are participatory activities. The starting PRA exercise is carried out at commune level with only the Heads of the villages participating from the village level. The PRA is rather general without discussions, planning and agreements on the actual village forest areas that will be subject to contracting. Thus the link between this PRA and the later process at village level aiming at the contract signing is very weak. It is understood that the FPB staff would prefer to have the **PRA at village level**, but that is not possible due to limited budget.

It is therefore suggested that the PRA should be carried out in each village as a preparation for the contracting, and that the HPM budget for PRA should be increased accordingly. The PRA should also more focus on the forest area to be contracted and involve the villagers more in working out a forest management plan for it.

- The format for Contract of Forest Protection is basically good. However, some comments and recommendations on some of the contract conditions are given below.
1. The villagers will be allowed to harvest timber and timber products from trees planted (and naturally regenerated?) by them after the signing of the contract. This is not an easy and clear principle as there will be difficulties in the future to distinguish between what has been created by the villagers and what was already there in the forest at the time of the contracting (even when there is a kind of description in the contract). It might also lead to enrichment planting of only introduced species in order to make these trees "stand out" more clearly in the forest. A more realistic and development oriented alternative would be to let the villagers gradually harvest the whole forest in accordance with an agreed **forest management plan** including a cutting regime based on sustained yield. Such a forest management plan

should then be attached or referred to in the contract. The PRA at village level should focus on developing such a forest management plan, i.e. to develop it jointly by the villagers and the facilitation team. The plan should also include some practical **environmental guidelines**, e.g. limitations on hunting and collection of endangered species as agreed upon by the villagers.

2. What happens when the payment of the VND 50,000 Forest Protection Fee will be stopped after five years? Will the villagers continue to protect the forest? It will very much depend on the motivation and interest built up by the villagers for the contract during the first five years, and how the harvesting of the products from the forest will work in practice. It is promising to hear that some villages will put the protection fee into a common **Village Fund**. Why not also give the Plantation Fee (VND 2.5 million/ha) used in the forest plantation sub - component to the villages so that this money also could be used more flexibly through a Village Fund. Hopefully, the new 661 programme should also work in this way.
- It is suggested that HPM and MRDP should arrange a **joint workshop** in Ha Giang by the end of 1999 (in December) to present and discuss their respective methods and experiences on forest protecting contracting and joint forest management from 1998 - 1999, and try to arrive at common conclusions and recommendations. Possible issues that may be discussed in the workshops are:
 - Involvement of the villagers in the planning and contracting process.
 - Rights and responsibilities of the two parties in the contract.
 - Methods for sustainable production and harvesting of timber and non - timber forest products.
 - Local protection and management regulations developed by the villagers.
 - Long - term financing of the community forest protection and management, sustainability, risk of dependency.
 - Commune/village forest development and management funds.
 - Monitoring and controlling of the contracts.
 - Training and other support to villagers with contracts.
 - It is suggested that HPM should arrange **training** of the contract villagers on enrichment planting and methods for natural regeneration. Later on, HPM should also arrange training on sustainable production and harvesting of non-timber products and marketing of such products. However, the suggested study on timber and non-timber forest products (see **Chapter 4.2** below) should be carried out first.
 - **Research**, or compilation of existing research results, should be carried out on:
 - Enrichment planting (species, nursery techniques, planting and maintenance methods, growth rate, rotation, harvesting etc.)
 - Natural regeneration (forest types/species, methods for supporting natural regeneration, thinning regimes, methods for promotion of valuable species etc.)
 - Growth rates/yields from natural high forest (rich, medium and poor) and natural regeneration forest.
 - Models/guidelines, including cutting regimes with species control, for sustainable harvesting of natural forest of different types.
 - Non - harmful logging methods for harvesting of natural forest.
 - Guidelines for activities to improve the biodiversity (flora and fauna) in village forestry.

The research should as much as possible be carried out together with the contracted villagers and through simple trials and demonstration plots on their allocated or contracted land. MRDP will be able to contribute to this research through a short-term consultancy later in 1999. This input will include compilation of relevant existing research results, and holding training workshops with villagers and staff on simple methods for e.g. inventory, field trials and development of simple guidelines and regimes for sustainable harvesting of forest products.

Further research ideas (e.g. on production, marketing and processing) will certainly be identified after the **Forest Products Study** mentioned above (and described below).

- Finally, it is suggested that the present **forest land use classification** system with three types of forest should be reconsidered and modified. The category "protection forest" is not logical and development oriented. The use of it may even have blocked or hampered the development of this type of forest land. Actually all types of forest, including production forest, have a strong protection effect on the soil and water capacity of the land. It is therefore suggested that the Protection Forest (PF) category should be dropped and split in two parts. The PFs in very critical watershed areas should be combined with Special Use Forest into a new category that may be called "conservation forest". Logging should not be allowed in this category. The other PFs should be transferred to the Production Forest category (with or without special conditions for the management attached). In this way, a more positive policy, "protection through production", could be launched, and the Production Forest area will be bigger and yield more

timber and non-timber products. This additional Production Forest area should be allocated or contracted to households or communities. See further a more elaborated proposal for revised land use classification in **Annex 6**. This issue is also discussed in **Chapter 5.2**.

4. Economy and Markets for Forest Products

4.1. Background

Most households (82%) in Ha Giang Province have already received land for residence, agriculture and forestry with land tenure certificate (red book). This means that they generally have some paddy land, a home garden and a forest garden. Through the HPM forest protection contracting, households in 22 communes will soon also have management responsibility for the remaining land (generally watershed areas) in their villages. This is a very important change of the land and land tenure situation for these households, and it constitutes a new base for economic, social and environmental development in the province.

An important next step for DARD would be to encourage and support these households to manage and bring their forest land into economic and environmentally sound production. However, the households will invest in their forest land only if they know that there is a **market** for the forest products and a reasonable **economy** in the production.

Ha Giang Province is located in a remote area of Vietnam, but close to markets in neighbouring China. The two Chinese provinces bordering Ha Giang Province (Yunnan and Guangxi) have a total population of 120 million people, and are expected to constitute nearly insatiable market outlets.

There is a lack of updated information and data on what products the farmers collect from the forest land for own use and sale, particularly in the new land tenure situation. Such information will indirectly also give an indication of the biodiversity and endangered species in the province.

4.2. Recommendation for Studies

With reference to the Terms of Reference in **Annex 1**, it seems to be decided already that a comprehensive study on forest economics and marketing should be undertaken in 1999. It is assumed that the study will be financed within the Technical Assistance component of Sida.

The consultant suggests that the study, called **Ha Giang Forest Products Study (HGFPS)**, should have the following purposes:

1. Collect, compile and present information and data on the current situation of harvesting, collection, use and sales of timber and non-timber forest products from the forest land in Ha Giang Province, with focus on the households' use of the forest.
2. For a number of identified, important forest products make analyses of the economy (cost/benefit) and the market chain (production - harvesting/collection - processing - transport - distribution - final user) in order to find weak points. The Chinese market should be given special attention.
3. Based on (1) and (2) draw conclusions and make recommendations on possible policy changes, research, market studies, pilot projects/activities (on promotion of production, processing, marketing etc.) and training.

The study should be carried out by the Forest Development Branch (FDB) in cooperation with the Non - Timber Forest Products Research Centre (NTFPRC) in Hanoi, HPM and MRDP. The two latter may be potential users of the study results for pilot activities and training in their communities.

NTFPRC is involved in a IUCN supported project on non-timber forest products (NTFP) with pilot projects in Ha Tinh and Bac Kan provinces. The field work in Ha Tinh Province is carried out by the Centre for Natural Resources and Environmental Studies (CRES), while the work in Bac Kan Province by the Institute of Ecological Economy. These institutes may also be contacted. CTA for the project is Mr. Guido Broekhoven, sitting in NTFPRC's office.

The study, which should start as soon as possible and be completed by the end of 1999, should tentatively

include the following main activities:

(1) *Forming a project team.*

Members from the above organizations and other suitable resource persons should be identified and invited. It is suggested that the Associated Expert Mr. Bo Lager should be a Facilitator in the team.

(2) *Study tour to China*

It is suggested that the project team (or part of it) should visit Kunming in Yunnan Province to study the research situation and possible markets for non-timber forest products from Ha Giang Province. The tour may also give ideas for the design of the study. The team should visit organizations like the Institute of Ethnobotany at the Department of Botany at Kunming University, and the Centre for Biodiversity and Indigenous Knowledge (CBIK) in Kunming.

(3) *Household surveys*

There should be a survey in selected households to find out what products (timber and non-timber) the villagers collect in the forest. It is suggested that 2 villages in each of the 9 districts, and 5 households in each village should be selected for the survey, i.e. a total of $2 \times 9 \times 5 = 90$ households. Villages and households that are particularly interested and active in collecting products from the forest should be selected. A format for the interview with the households should be designed. The men and the women in the households should be interviewed separately in order to find out what men and women collect respectively. Examples of questions in the format would be. Type of product? Originating species (which tree, plant or animal)? How is it collected? Where is it collected (own forest garden, outside - where, how far etc.)? How is it produced/regenerated? Is the availability increasing or decreasing? What is it used for? Is it processed in the village? Is it for own use or for sale? Where/to whom is it sold? What price? How much is collected per year? Are the villagers supporting the growth/production/regeneration of the product? How? Could it be done? Which are the 5 (10?) most importing forest products for the household from an economic point of view (in priority order)? Are there any local regulations about the collection? Is there any cooperation in the village and/or with outsiders regarding the collection?

(4) *Survey of other parties collecting/harvesting forest products*

The team should identify other important organizations (such as state enterprises) or groups involved in collection/harvesting of forest products, and make similar interviews with them. The consultant may carry out interviews with the four provincial state enterprises. See **Chapter 7**.

(5) *Local market surveys*

The local market places in the 10 district towns should be visited and information collected about what forest products are sold, originating species, availability, use, price etc.

(6) *Export*

The team should try to collect information (official and unofficial) on export of forest products from Ha Giang Province to other provinces in Vietnam, China and other countries. In what forms are they exported? What quantities? What prices? Which border crossings etc.? Who are the buyers? Local and international market trends? Contacts should be made with WWF in Hanoi on this issue. Mr. James Compton (Tel. 8220640) is working there with monitoring of the CITES convention. He has written a document: "Borderlines - An Assessment of Wildlife Trade in Vietnam (1998).

(7) *Cost/benefit and market chain analyses*

Such analyses should be carried out for a selected number of important forest products identified in the above surveys. The analyses should be done from the villagers' point of view.

(8) *Review of policies and regulations related to forest products*

The current policies, regulations, taxes etc. related to production, collection/harvesting, processing, transporting, selling, exporting etc. of forest products should be reviewed. Information on endangered species ("red listed" species) should be obtained. See **Chapter 6**.

(9) *Conclusions and recommendations*

Based on the above surveys, analyses and reviews, the team should draw conclusions and make recommendations for possible actions in terms of policy development, activities/guidelines for promotion of production, collection/harvesting, processing, marketing and export, training, research, organisational changes etc. The consultant may participate in this activity. See **Chapter 7**.

(10) *Write a report and hold a seminar*

The team should write a study report and hold a seminar in Ha Giang in December 1999. Other useful contact persons, related to this study, would be:

- Mr. Tran Khac Bao at the Conservation Programme for Medical Plant Genetic Resources in Vietnam, Ministry of Health, Institute of Materia Medica, 3B, Quang Trung Street, Hanoi, Tel. 8252644.
- Dr. Le Xuan Canh at the Institute of Ecology and Biological Resources, National Institute of Science and Technology, Tel. 8345404.
- Professor Duong Duc Tien at the Natural Science College, National University, Hanoi. He has written a report "Harvests of Vietnam's Biodiversity in the Past, Present and Future" (translated from Vietnamese). The report is available in IUCN's library.
- Mr. Nguyen Duc Tao at the Vietnam Pharmaceutical Corporation. He has written a report "Earnings from Biodiversity of Medical Plants" which is available in IUCN's library.

There is also a study from Lao Cai Province: "Biodiversity Value of Hong Lien Mountains and Strategies for Conservation" (1997) by Frontier-Vietnam together with Institute of Ecology and Biological Resources, which report is available in IUCN's library.

5. Forest Inventory and Mapping

5.1. *Current Situation*

In the province, there are many types of maps available, related (more or less) to forest planning and management:

1. **Aerial Photos** from 1993 at scale 1:5,000 (enlarged) covering the four districts Bac Quang, Vi Xuyen, Hoang Su Phi and Xin Man. Available at the DLA office.
2. **Cadastral Maps** produced by DLA in connection with the land allocation at the following scales:
Scale 1:500 town areas
Scale 1: 1,000 - 2,000 agricultural land
Scale 1:5,000 forest land
These maps do not generally have coordinates and can not be put together to bigger maps, covering commune, district etc., without additional work and high costs. Therefore commune cadastral map has been produced only for one commune in Bac Quang District and for Ha Giang township (4 communes).
3. **Basic Terrain Map** sheets at scale 1:25,000 covering the whole province. Contour lines with 20 m equidistant. Produced by National Department for Mapping, based on satellite imagery (UTM) from 1978. Available at FPB.
4. **Administration Map (Topographic Map)** at scale 1:50,000 for the whole province. Contour lines with 20 m equidistant. Names of places, roads, streams, borders of districts and communes. Produced as (3) above. Available at FPB.
5. **Natural Forest Statistic Map** at scale 1:50,000 covering whole districts. No contour lines. The forest area is divided into compartments which are classified according to a forest classification system (including bare land and rocky area). Made by Forest Inventory Department in Tuyen Quang in 1992. Available at FPB and the districts.
6. **Watershed Forest Protection Map** at scale 1:50,000 with contour lines covering 16 communes in Chay river watershed. The maps shows the situation in 1990. The map has compartment which are classified according to a special land classification system. Made by Forest Inventory Department in Tuyen Quang in 1990. Available at FPS in Xin Man District.
7. **Current Forest Map** at scale 1:100,000 for the whole province (total forest land area 541,930 ha) based on forest planning map from 1985 (?). Made by Inventory Section of DOF in 1995. Available at FPB.
8. **Forest Management Map** at scale 1:100,000 for the whole province (total forest land area 614,646 ha) based on a forest inventory made by FIPI in 1992. Made by FIPI's regional office in Phu Tho in 1993. Compartments which are classified according to an extensive land and forest classification system.

Statistical information produced from the inventory. Available at DARD and FPB. Many of the maps (5) to (8) above are in a poor condition. Some of them (at FPB) are actually falling apart.

9. **Satellite Images** covering Ha Giang Province are available at FIPI in Hanoi. It is LANDSAT 5 TM (scale 1:250,000) from 1997 and some SPOT scenes (scale 1:100,000). The LANDSAT images are also digitised.

The Land Administration organization is working on a **Soil Map** at scale 1:50,000 which will cover the whole province. It is planned to be completed in 1999. The soil mapping is a national project with limited funds.

The Forest Inventory and Planning Institute (FIPI) is carrying out a new forest inventory in Ha Giang Province. They will later in 1999 produce a **Forest Land Use Map** at scale 1:100,000 and statistical and management information on the current forestry situation in the province. This information will be used particularly for the planning of the new 661 programme.

FIPI in Hanoi has built up extensive competence, computer hardware and software (MapInfo, ArcInfo, ArcView etc.) for a Geographical Information System (**GIS**) on forestry in Vietnam. They are also heavily involved in a National Programme for Forest Mapping and Statistics which was started in 1997. The purpose of this programme is that all provinces, districts and communes should collect and compile forestry data (on forms) and maps and send them to FIPI where they will be processed and digitised and put into data bases. Later the information will be sent back to the provinces in the form of forestry statistics and maps (at different scales). **Will this really work?** So far, not much data has been sent to FIPI.

5.2. Conclusions and Recommendations

- Forestry is an area - based production system working in a great variety of ecological, geographical and socio - economic conditions and situations. Inventory data and maps showing this variety of conditions will always be very important tools for the planning, management and monitoring of forestry operations.

A problem with information from traditional inventories and maps is, however, that it rather soon becomes old and inappropriate because the situations in the forest is continuously changing over time. This is the situation in Ha Giang Province where the forestry authorities, despite a lot of forestry maps and data books in the offices, have to carry out new, extensive and expensive forest inventories and mapping whenever they need to get an up - to - date picture of the forestry situation.

The time has come, when the authorities in Ha Giang Province should consider to introduce **GIS** to handle the area-based information related to land and natural resources. Some of the advantages with GIS compared to traditional mapping and data handling are:

- Easier to update the map information;
- Easy to produce maps at different scales for users at different levels (from e.g. 1:10,000 for village to 1:100,000 for province levels);
- Data from different sources can be combined and overlaid, which improves the possibilities for better analysis, planning and monitoring;
- Easier to keep data and maps in good order.

The technology for GIS is easily available and well proven since long time. It is not too expensive. FIPI has the technology well tested and developed, and they are ready to help the provinces to introduce and use it. Some provinces are already using GIS at big scale. DOSTE in Ha Giang has started (using MapInfo) and will continue building up the system.

- A GIS system for Ha Giang Province could include the following layers of map information:
 1. **Basic Terrain Map** with contour lines, rivers and streams.
 2. **Infrastructure Map** showing towns, villages, roads, railroads, power lines, dams etc.
 3. **Administrative Map** showing borders and names of province, districts, communes and villages.
 4. **Vegetation Map** showing the current situation of vegetation, forest, bare and etc. This map should give a neutral description of the current situation. The map may be used by different sectors, like forestry, agriculture and environment for planning and monitoring (e.g. of the change of the forest cover). It will

also show the current land use.

5. **Land Use Planning Map** showing the planned, long - term use of land based on an appropriate land classification system (see further below).
6. **Land Allocation Map** showing land allocated to different user categories, and land contracted on long - term to different categories. The map should not show individual plots, but whole blocks allocated to different user categories.
7. **Sectorial Maps** (on forestry, agriculture, irrigation, environment, tourism, climate etc.)
8. **Thematic Maps** (e.g. socio - economy, ethnic groups).

It will be possible to combine information from the different maps and make overlays. Maps 1 - 3 for Ha Giang Province are already and available at FIPI. The **Vegetation Map**, which would be very useful and urgent, should be updated every 5 - 10 year. It will be an important tool for forestry and environmental monitoring. It should be produced jointly by DARD and DOSTE. The **Land Allocation Map** would also be very useful for the different sectors involved in land management. However, as mentioned above, it will be costly to make if doing it properly. Maybe the DLA staff could make a cheaper version of it that is not 100 % correct but showing the approximate borders of the allocated blocks.

Maps should be printed out at e.g. the following scales for the different levels in the province:

Village 1:	10,000
Commune 1:	25,000
District 1:	50,000
Province 1:	100,000

The basic registration of data for the mapping system should, as far as possible, be done in a participatory way at village or commune level. If basing the information at e.g. satellite imagery interpretation, the map should be field checked at village or commune level.

It is suggested that a study visit should be arranged to FIPI from the province (with representatives of PC, DARD, FPB etc.) for a demonstration of the GIS technology.

- As mentioned in **Chapter 3.4**, the consultant suggests that the land and forest land use classification system in Vietnam should be revised in order to adapt to the real situation in the field and promote a sound land and forest management. See an elaborated proposal in **Annex 5**. In brief, it suggests that the Protection Forest category should be dropped. The forest in this category should be divided into two parts, one going to a new Conservation Forest category together with the present Special Use Forest, and the other going to Production Forest. Furthermore, there should be a new Agro - Forestry Land category located as a zone between Agriculture Land and Forest Land.

6. Biodiversity Assessment

6.1. Biodiversity Situation in Vietnam

The forests of Vietnam are rich in biological diversity. A great range of forest types are represented, including evergreen, semi - evergreen and deciduous dry dipterocarp forests in tropical and subtropical regions, pine dominated temperate forests, large mangrove systems in the Mekong and Red River Deltas, Melaleuca forests in the South, and mixed bamboo forests.

Over 7,000 species of vascular plant have been identified within Vietnam, but it is estimated that the total species count may be closer 12,000. This is in addition to the approximately 800 species of mosses and 600 species of fungi that have been recorded to - date. Over 10% of the floral inventory are endemic species, mainly centred in four refuges: the alpine Zone of the Hoang Lien Son Mountains, the Ngoc Linh Mountains, the Lam Vien High Plateau, and the humid forests of central Vietnam. Many species have considerable economic value - 2,300 species are known to be used for food, medicines, animal fodder, timber, oil, and numerous other purposes. Nevertheless, the small geographical ranges and low densities of several species render them highly vulnerable to extinction as habitats undergo quantity and quality degradation.

Vietnam's fauna is equally rich and includes 276 species of mammals, 826 species of birds, 180 species of reptiles, 80 species of amphibians, 471 species of freshwater fish, and many thousands of invertebrates. In addition, approximately 2,000 species of fish are known from the country's marine environment. However, 28 species of mammals, 40 species of birds, 7 species of reptiles, and one species of amphibian are listed in the IUCN (1994) **Red List of Threatened Animals**. These include the Asian Elephant, Javan Rhinoceros, Banteng, Kouprey, Wild Water Buffalo, Tiger, Leopard, Clouded Leopard, Eld's Deer, Pileated Gibbon, Concolor Gibbon, Douc Langor, Sarus Crane, White-shouldered Ibis, Giant Ibis, Whitewinged Wood Duck, Crested Argus Pheasant and Siamese Crocodile.

Despite the importance and precarious status of Vietnam's biological heritage, no systematic study of the flora and fauna of Vietnam has ever been completed. Thus remarkable scientific discoveries are still being made, such as the recent identification of two new large mammals: the Saola (*Pseudoryx nghetinhensis*), a primitive bovid, in June 1993, and the Giant Muntjak (*Megamuntiacus vuquangensis*), a large barking deer, in June 1994. Both of these species belong to a new genus and were found in Vu Quang Nature Reserve, close to the location where a new species of pheasant also was discovered. Never before in this century has one forest area produced three such important discoveries, confirming the global importance of Vietnam's biodiversity. Since their discovery, the existence of these species in other forest areas within Vietnam has been documented.

However, Vietnam's rich biological heritage is under severe threat, primarily from a rapid decline in forest cover and intense hunting pressure. Between 1943 and 1987, Vietnam's forest cover decreased from 44% of the total land area to under 25% (8 million hectares). Remote sensing data indicate that less than 2 million hectares of primary forest remain, and that these are depleted at a rate of 100,000 to 150,000 hectares annually. The proximate causes of forest loss include agricultural encroachment due to population pressure, food insecurity and commercial demands, and ecologically unsustainable land use practices, including logging. The quality of forest habitats is also dramatically deteriorating. A combination of hunting pressure, habitat loss, and the devastating impact of a series of wars have taken a heavy toll on Vietnam's wildlife and forests.

The Vietnam **Red Data Book** (Volume 1: Animals and Volume 2: Plants) of rare and endangered species now contains 374 species of animals and 360 species of plants, of which several are close to extinction. The Red Data Book is no longer available in print. New editions will be produced as part of the follow up of the Biodiversity Action Plan.

The Government of Vietnam has taken several steps to improve environmental management and provide for the protection of biological diversity. Vietnam's first National Park, Cuc Phuong, was established in 1962. Since this initial effort, a protected areas system consisting of 87 parks totalling 1,097,937 hectares has been established. Management plans have been completed for 29 reserves, of which 10 are managed as National Parks.

Vietnam's protected areas system is legislated under the **Forestry Protection and Development Act** from 1991. This law establishes special use areas for National Parks and forests for watershed protection. The revised forestry polices under this Act also aim to (1) establish a system of protection forests of approximately 6 million hectares, (2) establish National Parks and Nature Reserves with a coverage of 2 million hectares, and (3) establish 11 million hectares of production forest (The total land area of Vietnam is some 33 million hectares).

Surveys of the reserves to investigate the possibility of enlarging the total system of protected areas to two million hectares have been approved. A new initiative to support this effort was proposed to the Government by the Forest Protection Department in August 1996 as an activity of the **Biodiversity Action Plan** (1995) and as part of Vietnam's efforts to implement the Convention of Biological Diversity. The Plan is now being revised with new activities up to the year 2010. A Draft Study on Aid to the Environment Sector is currently being discussed. Biodiversity assessments will be carried out area by area in order of priority. There are no plans to carry out a nation wide assessment.

Following a long period of international isolation, Vietnam has begun to recognise various international treaties and conventions. The **Convention of International Trade of Endangered Species (CITES)** membership became effective in April 1994. Vietnam ratified the **Convention on Biological Diversity** on October 1994.

The Ministry of Science, Technology and Environment (MOSTE) is responsible for coordinating biodiversity conservation activities in Vietnam as stipulated in the Prime Minister's Decision for implementation of the *Biodiversity Action Plan*. Through its network of provincial level Departments of Science, Technology and Environment (DOSTE), it can assist the central Forest Protection Department (responsible for National Parks) and the provincial Forest Protection Branch (responsible for Nature Reserves) and Forestry Development Branch (responsible for buffer zones) with policy guidance and environmental technical support.

Within MOSTE, the National Environmental Agency (NEA) is the department which administers biodiversity conservation and environmental issues.

6.2. Situation in Ha Giang Province

The biodiversity situation in Ha Giang Province is rather depressing. Many species have already disappeared along with the degradation of the forest and vegetation cover and excessive hunting. Ha Giang has not got much attention in the Biodiversity Action Plan. It belongs to biodiversity region "North East" which is not on the priority list for assessments or specific support.

However, there are four existing **Nature Reserve** areas in Ha Giang Province included in the Protected Area System of Vietnam.

Du Gia (Yen Minh distr.)	20,000 ha
Phong Quang (Vi Xuyen and Quan Ba distr.)	7,000 ha
Tay Con Linh (Hoang Su Phi and Xin Man distr.)	18,790 ha
Bac Me	15,000 ha
Total	60,790 ha

DOSTE in Ha Giang is doing a resource inventory in Tay Con Linh and Phong Quang areas. See a report from Tay Con Linh in **Annex 8**. Biodiversity assessments will gradually be carried out in these two areas.

The greatest environmental problem in Ha Giang Province, according to DOSTE, is the deforested rocky mountains with following erosion, and the farmers' over - use of fertilisers.

Important endangered timber species in the Ha Giang mountains are:

- Lat Hoa (*Chukrasia tabularis*)
- Lim Xanh (*Erythrophloeum fordii*)
- Po Mu (*Folkienia hodginsii*)

These valuable species are not naturally regenerating as they need a forest cover to grow under, and this cover has disappeared.

According to DOSTE, the forest sector is focusing on the soil-covered mountains when doing reforestation. DOSTE therefore has taken the initiative to develop a reforestation model for rocky mountain areas, such as in Quan Ba, Yen Minh, Dong Van and Meo Vac districts. In this model, a forest cover (using e.g. Mac Rac) will be established during the first three years. Then, valuable timber species, such as Lat Hoa, Lim Xanh and Nghien will be planted under the cover.

DOSTE would like to start a 50 - 100 ha pilot area project with this model, and is looking for financial support.

6.3. Recommendations

Regarding the biodiversity issue, it is suggested that:

- The proposed Ha Giang Forest Products Study should be carried out soonest possible in 1999. This study will, hopefully, give indications about the biodiversity situation and endangered species in the province. Based on this study, and the assessment work done by DOSTE, further possible activities and projects related to the biodiversity should be identified.
- HPM and MRDP should include practical environmental guidelines, such as restrictions on hunting and collection of NTFP in the protection and management contracts with households and villages, based on consensus agreements arrived at in PRAs.

- HPM should consider to carry out a more general assessment of environmental effects related to the implementation of the programme. It could be a type of extended Environmental Impact Assessment (EIA) or a Regional Environmental Assessment (REA). HPM should cooperate with MRDP on this matter. MRDP will have a special adviser on environmental issues (Mrs. Maria Berlekom) from August 1999.

7. Suggested Plan for the Consultant's Next Visit

It is suggested that the consultant should come back to Ha Giang for a second visit on October 11 - 30, 1999 (three weeks) and November 29 - December 11, 1999 (two weeks). The reason for dividing the visit into two parts is that the consultant is committed to work for another project in Asia in November.

Suggested tasks/activities in the second visit:

1. Generally follow up the discussion and recommendations from the first visit.
2. Assist HPM in setting up a monitoring system for the Forest Protection Component.
3. Continue to assist FDB in defining its role, particularly in relation to the two programmes MRDP and HPM.
4. Visit the four Provincial Forest Enterprises and give recommendations on their possible future development.
5. Participate in the joint workshop with HPM/MRDP on their first year experiences on forest protection contracting/joint forest management.
6. Assist the working team of the Ha Giang Forest Products Study to draw conclusions from the study and make recommendations.
7. Assist DARD generally in the development of forest strategies and policies for the province.
8. Plan for the consultant's third visit (in the year 2000).

¹**Joint Forest Management (JFM)** is a model for forest management in situations where the Government will remain the land owner and they make an agreement/contract with the villagers living in and around a specific forest to make them protect and manage the forest according to an agreed forest management plan. The villagers are allowed to harvest timber and non-timber forest in a sustainable manner from the forest, but they will share the profit with the Government, generally in the form of a tax. As the Government has great difficulties to protect the forest, and the villagers have a great need to get income from the forest, both parties are winners in JFM.