

8. 要請書

The Terms of Reference Form for Japan's Technical Cooperation Project Type Technical Cooperation

Applicant: The Government of the Socialist Republic of VIETNAM	Project Title: <u>Study on Establishing</u> <u>Social Forestry Models</u> <u>applying Agro-forestry</u> <u>Systems in Strong</u> <u>Sulphate-Acid Soil in</u> <u>Vietnam</u>
Economic Sector: Forestry	Project Site: Tan Thanh, Long An province
Responsible Ministry (Ministry requesting the aid): Ministry of Forestry (MOF)	Implementing Agency (Agency in charge of execution of the project): Forestry Science Sub- Institute of Vietnam (FSSIV)

I. Project Description

1. Back ground

(1) Current Situation of the Sector

The rich and beautiful forests of Vietnam have always been prominent in the history and culture of the Vietnamese people. The forestry sector is critically important in the social and economic development of both urban and rural communities and the success of general development strategies will depend to a considerable extent upon the forest resource being managed in a sustainable way.

Production of wood for domestic and industrial fuel, construction, industry and trade, as a source of shelter, food and for medicinal plants are among the better known values of forests. But no less important is the less tangible values of soil and water conservation, protection of wildlife habitat are conservation of gene resources; these too have a vital position in the relationship between mankind and his environment. All have influenced the evolution of silviculture.

The influence of forests on soil erosion and the water regimes is also of key importance for economic activities dependent on these water flows. In Vietnam the two clearest cases are hydroelectric installations and irrigation works. In these cases, an even flow of water is valuable in diminishing the need for water storage, thus reducing water losses. Further, the presence of forests or other dense vegetation in the watershed serves to reduce soil erosion thus increasing the life span of dams and irrigation canals.

In many localities of Vietnam, particularly in remote, sparsely inhabited areas, forestry is the dominating economic activity. The agency carrying out forestry, such as a state forest enterprise, has to carry out a series of benefit to the local communities, ranging

from construction of roads through development of water supplies to the establishment and operation of health care centers and elementary schools.

In economic terms, the importance of the forestry sector in Vietnam can be judged by its contribution to the national economy, normally computed as the value of wages paid, profit, interest, depreciation, and other payments. By the 1986-1988 period, value added in the forestry sector had more than doubled and its relative share in the national income had increased from 0.83 per cent in 1986 to 1.5 per cent in 1989.

Considering on labor force directly involved in forestry activities, the number of full-time workers showed slight increases over the 1980-1986 period but has been decreasing since, as many state enterprises have laid off workers in order to reduce expenditures. Assuming that the part-time workers on average devote 25 per cent of their working time to forestry, then the number of individuals actually involved would be around 4 million.

(2) Problems to be solved in the Sector

i) Decline in Forest Coverage

The areas covered by natural forests are declining rapidly and existing forests are still being heavily logged in such a way that the commercially attractive species are being over exploited. This is only partially offset by replanting programmes mostly with exotic species.

In 1943 the forest coverage was estimated at 14.3 million ha or about 43% of the land area. Based upon satellite imagery figure forest coverage for 1973 was 9.5 million ha and for 1980 of 7.8 million ha. The latest inventory of 1987, gave a higher figure of 9.3 million ha. But this had to be attributed to a resetting of standards (areas with a very low percentage of forest coverage which originally were classified as non-forest were now classified as forest). Estimates made by the Ministry of Forestry, the annual loss of forests is some 110,000 ha. On the other hand 130,000-150,000 ha are annually reforested. Taking this into account one could say that the qualitative decline still continues but that the decline in forest area is at least partly offset.

Except for the Southern Highlands and in some border areas with Laos, there are no more large forests in Vietnam. Forests are scattered and small. This has its implications in relation to the involvement of people in the management of these resource.

It is difficult to make an accurate estimate of the current rate of change in the forest coverage of Vietnam as the existing data base, especially in respect of forest quality, is insufficient to furnish these figures. Especially figures on logging, shifting cultivation and natural regeneration are inadequate.

Another constraint is the insufficient application of appropriate natural forest management techniques. Techniques are to a certain extent known but for various reasons, of which the lack of funds is one, not applied. Many logged over or otherwise depleted areas still have a

good potential for natural regeneration, that provides good possibilities for relatively inexpensive programmes for forest improvement.

ii) Decline in Bio-Diversity

Directly related to the phenomenon mentioned above is the destruction of forest ecosystem. The fact that large forest tracts are getting scarce means that the survival chances for animals, for example large mammals, which depend on such habitats, are getting slim. It is not only the fact that their habitat is being destroyed but that they are more liable to get killed by hunters.

In the reforestation programme too much emphasis has been put on the use of a very limited number of species while neglecting the opportunities for natural regeneration.

In principle this point is realized by the Government and also by the people in the countryside. Sites for natural parks (special forests) have in principle been identified but only a few plans (13 of 87) have so far been outlined for lack of qualified staff and operating funds to undertake these tasks.

In many cases, on the designated sites, there are people who derive all, or part of, their means of existence from these sites. If it becomes necessary for protection that these people have to be resettled, acceptable alternative must be found. For this, plans must be developed and funds allocated, as this is an integral part of natural reserve development.

iii) Deteriorating living conditions for the rural population

Living conditions in many rural areas in Vietnam are at best marginal. With the land use systems which are being applied at the moment, the decreasing land availability in relation to the growing population becomes a principal constraint. Forestry might offer some solutions but the improvement of agricultural systems might prove even more promising, i.e. by increasing food crop harvests or improving the revenue from cash crops. This calls for site or region specific solutions which have to be designed with the local conditions in mind and with an open eye for market opportunities. It has to be realized that there will be less pressure on the remaining forests if the production of the agricultural areas in use can be increased.

The situation has taken a new urgency through the transfer of 7 million hectares of formerly State managed land to non-state units. Most of this land has hardly any forest cover and is often badly eroded. The question is what should be done with this land.

The principal approach to activate this type of changes should be agricultural extension coupled with forestry extension, to be able to suggest where forestry activities are the most advantageous and offer the best solutions for local needs. This is big task; the farmer must operate in the framework of a new socio-economic system with which he is not familiar and with ecological conditions which are often adverse. Macro solutions are not known and with the advocated approach is through

pilot projects to investigate the problems and demonstrate the potential. At present the agricultural extension system in the country is apparently not sufficiently geared to this task. It should be investigated how this can be organized and how the proper links with forestry and forest extension can be forged in order to develop site specific, agro-forestry based, farming systems.

Another constraint at the present is the non-availability of rural credit; the individual farmer and even cooperatives find it extremely difficult to attract additional capital, especially for investments with a somewhat longer time horizon.

iv) Lack of Institutional Efficiency

The socio-political system which Vietnam has followed for the past decades and which is being modified only recently has to a large extent been responsible for the creation of large unwieldy public organizations. In the Ministry of Forestry new graduates were assured of positions and the organization grew to a certain extent with no relation to the size and requirements of the sector. Investment in equipment for the staff were extremely low. In forest research, for example, average investment per research worker a year was around US \$ 2,000. Another point which highlights this situation is that only part of the reforestation fee (stumpage) collected is available for reforestation activities contributing significantly to the financial difficulties of the Ministry.

A reorientation and reorganization of the Ministry of Forestry are necessary. This should be based upon a clear policy defining the roles of the Ministry of Forestry and Ministry of Agriculture and the other state organizations. These changes should be in line with the new National Policy. Subsidies to compensate Government enterprises for their losses are being phased out. This may result in the shutting down of those enterprises with resulting losses of investments. It may be more advantageous for the Government to pursue a policy of privatization; selling of industries to entrepreneurs. In these cases the role for the Government will be to regulate the industry, how they should operate, what standards should be adhered to, etc.

The new orientation of the Government should emphasize a planning, coordinating and regulating role which requires a major reorientation and reorganization.

v) Lack of Operational Efficiency

The wood industry, in general, is characterized by inefficiency in the different phases of processing. Logging operations on the one hand cause a lot of damage in the forest and on the other hand leave behind usable timber. In the mills, recovery rates are low and the final product, due to low quality standards, receives a relatively low price. This situation is critical when the product is destined for export.

The phenomenon is due to a number of factors, the most important of which are:

- stumpage rates are low which makes raw material relatively cheap and reduces the incentive to avoid wastage;
- management remuneration in state enterprises is not related to economic performance;
- production and market requirement are poorly correlated;
- lack of properly trained man-power and forest industry managers;
- most equipment are obsolete and often poorly maintained;
- inadequate road and transport facilities;
- mill capacity, especially, for the more capital intensive industries such as pulp and paper, is underutilized which depresses the profitability and the economic continuity of the enterprise. Low environmental standards, such as pollution control measures in older paper mills are a problem of critical importance.

vii) Watershed Degradation

In a country which is for a large part mountainous, the protection of its watersheds is of prime importance. Soil stabilization to maintain fertility is one aspect but, in a country which intends to satisfy the bulk of its long-term energy requirements with hydropower, the regulation of water flow is a major consideration.

The protection aspect in many places clashes with the interests of the rural population. In the past, forest plantations have been removed by the local population. In steeper areas, sustainable methods which are economic have not been determined, although some interesting approaches are being taken both by the Government and the people.

The major constraint is the lack of knowledge of proper land use management and protection techniques. Although some research work has been started with some experiments, no appropriate solutions have been developed. What was said in relation to land use techniques in vulnerable areas can also be said in relation to the reclamation of already deteriorated areas. Further research work is necessary to determine technically suitable and economically feasible solutions which fit into the social patterns of the local population. There is a need for a coordinated effort. It may be mentioned that the Forest Inventory and Planning Institute (FIPI) and Forest Science Institute (FSI) have gained some useful experiences in this respect that could form a base for further development in the future.

viii) Wood Imbalances

The present wood requirements, especially for sawlogs and veneer logs, are outstripping the sustained supply potential of these raw materials. It is estimated that the annual growth of the natural forests is around 5 million m³ while annual consumption is around 6 million m³ and increasing. The standing forest capital is being consumed at a faster rate than it can grow and rejuvenate.

(3) Necessity and Importance of Improvement in the Sector
which lead to the Formulation of the Project

The Vietnamese government and the local authority are much interested in the rational use of the sulphate acid soil covering a very large area (upto nearly 2 millions hectares) mainly concentrating in the Mekong delta provinces. Most of this land still lays waste or is cultivated with forest and agricultural crops but the economic effectiveness is still low. However the econo-technological measures to raise high the effectiveness of the use of sulphate acid soil require big expenses while at present real conditions do not allow adequate investment on this. That is why a development research project to bring about solution to this problem with the funding by the Japanese side will be received and implemented with high priority.

Long An is one of the eleven provinces of the Mekong river delta. The natural area of this region is approximately 4 million hectares. Nearly 50% of the land is sulphate acid. Due to high soil acidity and prolonged 3-6 month water-logging of the land at the end of rainy seasons the cultivation of agricultural crops here such as water- rice is less effective, the productivity is low. Melaleuca leucadendron planting for construction material and extraction of essential oil from Melaleuca leucadendron leaves is main occupation of the people in this area (Melaleuca leucadendron essential oil extraction is done by handicraft method, the oil is therefore of low quality and is suitable only for home consumption and at low price). Fishing from natural sources also contributes an important part to the income which is still very low of the peasant households in the area. With such limited economic sources and a rather high population density and concentrates only in a number of localities suitable for agricultural crops, the living standards of the people in this area is still very low accompanied by low cultural level.

To improve the economic conditions and the people's living standards in the area, the local authority makes it a policy to improve the land by hydrological measures combined with seeking forest tree species and agricultural crop varieties with high productivity, producing commodities of high value and suitable to special soil conditions in the area, implementing the policy of allocation of land to the people for long use, encouraging the households to engage in agroforestry undertakings.

The needed research content such as: technical systems for cultivation on sulphate acid soil (including land cultivation technique, land improvement technique, selection of suitable planted forest tree species and agricultural crops, their structure, planting measures, tending and harvesting...); sociological survey in this area, establishing suitable cropping and forest plantation models for each peasant household, processing and consumption of products all are the matters that have not been studied.

(4) Relation between the Sector and the Project

The implementation of the Project is deeply related with the solution of the above-mentioned problems.

In general terms, the project would contribute to an overall improvement in the living conditions of the people in the area, particularly the poorer strata among them. Some specific benefits would be as follows;

- Increased supply of fuelwood and forest products through plantation on non-productive
- Increased production/productivity of food through intensified agriculture and improved cultivation practices
- Better health situation and improvement of literacy
- Improved conditions of wet lands through introduction of improved land use systems

(5) Reasons why Japan's Technical Cooperation is Requested for this Particular Project

It is known that before 1975 a number of Japanese specialists and companies had conducted highly promising research on the use of sulphate acid soil in South Vietnam. Besides, many competent Japanese specialists can design and manufacture mechanical devices suitable for land cultivation and other silvicultural operations for this special land area.

2. Objectives and Outline of the Project

(1) Objectives of the Project

i) Short-term Objectives

- Structure and physical, chemical characteristics of sulphate acid soil in this area.
- Types and contents of main toxic elements contained in sulphate acid soil and their influence on growth and development of forest trees and agricultural crops.
- Technical measures for soil treatment to limit the impact of the soil toxic elements on planted species.
- Trials for selection of forest tree species and agricultural crops of economic value and adaptable to sulphate acid soil.

- Research on developing cultivation technical measures to raise the productivity and quality of the planted forest tree species and agricultural crops.

- Method of training and support the peasant households to make them participate in agro-forestry undertakings.

- Research to establish cropping and forest plantation models for the peasant households in the area, introducing advanced techniques for application by the peasant households to stabilize and heighten the material and cultural life of the latter.

(ii) Medium and long-term objectives

To build this area into a stable raw material producing area, raising the people's living standards and contributing to the protection of the ecological environment.

Application of the results of this project to other sulphate acid soil areas in Western provinces of South Vietnam.

(iii) Relations between the Project and the Objectives, and how the Project will contribute to the accomplishment of the Objectives

The enforcement of the Project with necessary input by Vietnamese side will directly lead to following outputs:

- Technical measures for improvement of sulphate acid soil and effective cropping.

- Social measures for making peasant households participate in the agro-forestry undertakings.

- Structure of planted forest tree species and agricultural crops suitable to the sulphate acid soil and technical measures for intensive cropping.

- Establishment of cropping and forest plantation models for peasant households aimed at stabilizing and gradually raising their living standards on the basis of advanced cultivation techniques application.

Based on such outputs with materialization of assumptions, the objectives mentioned above will be achieved.

(2) Outline of the Project

Scope of the study:

The scope of study is limited to developing cultivation advanced techniques for effective use of sulphate acid soil in TanThanh area and designing and building cropping and forest plantation models for the peasant households in this area. It is also necessary however to study the natural, economic and people's living conditions in other sulphate acid soil areas of the Mekong river delta to expand the spatial scope where the results obtained by TanThanh Project can be applied.

Tanthanh plantation model should consist of these facilities such as model forest and farm lands of households, a nursery, a training center for households in and out of the model, a office of researchers and extensionists, machinery and their warehouse, irrigation systems, etc.

Study schedule:

1985:

- Nomination and formal approval of the Project study staff of both Vietnamese and Japanese researchers.
- Studying the natural conditions of the studied area including, soil, topographical, hydrological and vegetation factors.
- Designing experiments on land use techniques, trials of promising forest tree species and agricultural crops.
- Ordering and receiving the necessary facilities for the research including seed of forest tree species and agricultural crops.
- Conducting sociological survey in this area.

1986 - 1987:

- Laying out the cropping experiments as having been designed.
- Designing and establishing a number of pilot cropping and forest plantation models for a number of peasant households.

1988:

- Continued perfection the development of researches on cultivation techniques; data collection and preliminary evaluation of research results.
- Adding new researches in the direction of intensive management, raising the productivity of planted forest species and agricultural crops on the basis of seed, soil and cultivation technique improvement.
- Organizing and rendering guidance to the peasant households in the application of the advanced technique available from cropping and forest plantation models.

1989 and the subsequent years:

- Monitoring, tending and data collecting from the laid-out experiments. Evaluation of the research results and developing new advanced techniques from these results.
- Initiating research on processing techniques of forest and agricultural products obtained in the framework of the Project to raise the income for the producers.
- Guiding the peasant households in the application of the advanced techniques developed from research results of the Project.
- Designing the establishment plans of 110 models covering whole the sulphate acid soil areas.

(3) Input Plan

(a) Japanese Input

(i) Short-term expert (Number of experts) (Sector, their field)

It will be requested in case of need.

(ii) Long-term expert (Number of experts) (Sector, their field)

Four (4) experts.

- a) Research on Sulphate acid soil;
- b) Trial and selection of forest tree species;
- c) Implementation of oil cultivation experiments; and
- d) Research on establishment of cropping and forest plantation models and sociological survey.

(iii) Acceptance of trainees (Number of trainees) (Sector, their field)

Nine (9) trainees.

Counterparts of above mentioned Japanese experts.

(iv) Provision of equipment (the major equipment to be provided) (Total amount of the cost)

a) Study equipment

Vehicle, Personal computer, Facilities for establishing Model village, Soil Analysis Equipment, Green House, Nursery Equipment, etc.

b) Inventory equipment

Satellite digital data, aerial photographs, Computer for data processing and drawing maps, etc.

c) Extension equipment

Slide projector, Over-head projector, Video camera & player, Vehicle, etc.

* The total costs are under estimation.

(b) Vietnamese Input

(i) Counterpart personnel (number of counterpart personal) (Sector, their field)

Nine (9) Counterparts

- Research on sulphate acid soil: 1 experienced Ph.D and 1 forest engineer.
- Trial and selection of forest tree species: 1 Ph.D, 2 forest engineers
- Implementation of soil cultivation experiments: 1 forest engineer
- Research on establishment of cropping and forest plantation models and sociological survey: 3 engineers

(ii) Facilities

Project office in FSSIV, , Local project office and lodging in Tan Thanh

(iii) Equipment

Electricity, water supply, telephone, drainage and other necessary equipment

(c) Period of cooperation

Year to be started in 1995, (5 years)

3. Benefit, Effect, and Publicity of the Project

(1) Population that will benefit directly from the Project

The direct beneficiaries of this project are local people who will migrate in to the Model areas in Tan Thanh.

(2) Population that will benefit indirectly from the Project

It is difficult to estimate a number of indirectly beneficiaries of this project living in quite a large area. This is a kind of environmental protection project, therefore whole the people live in Mekong Delta areas, about 14,203, are included in the beneficiaries. In addition, the social forestry measures that will be developed by the project will be applied in whole the country. It can say that not only considerable populations in Mekong Delta Areas but also all the Vietnamese are indirect beneficiaries of this project.

(3) Area that will Benefit from the Project

About 700 to 800 ha of land areas in the Tan Thanh Model areas are the direct benefit areas of the project. According to the middle term objectives, the result of this project will be applied to whole the Mekong Delta areas, therefore 2 million ha of the sulphate acid soil areas are included in the benefit areas. In addition, as explained in (2) above, whole the areas in Vietnam are the benefit areas of this project.

(4) Economic and Social Effects of the Project

i) Current Situation

About 2 million ha of the sulphate acid soil areas are left without utilization, though increasing population in the Mekong Delta areas requier many productive lands.

ii) Expected Effects of the Project

It is expected through the Project that economical and social development.

At first, in short term, the social infrastructures in the Model areas will be developed, and the local people shall be trained.

Then, in middle term, it is expected that the social effects such as the income increasing because of the increased yield of agro-forestry products; and the development of the health and sanitation because of the increased food.

Finally, it is expected that the income per capita will be raised up through the improvement of economical and social situations of whole the Mekong Delta Areas.

4. Request to Other Donor

Is there any request made to other donors for assistance closely related to this project?

No.

5. Priority

This project is given extraordinary high priority by both State Planning Committee and Ministry of Forestry of the government of Vietnam.

Ministry of Forestry is facing a mountain of subjects that should be carried out on the spot. Among these subjects, the Project is given the highest priority.

Such subjects are got together in following 4 fields:

- Institutional Strengthening;
- Forest Eco-System Conservation;
- Forest Industries Development; and
- Forestry in Land-Use.

The Project is included in the category of the "Forest Industries Development" and "Forestry in Land-Use". Since in the Mekong Delta areas it is quite a serious problem that the decline of forest coverage and the degradation of lands, the necessity of the Project is quite big.

6. Ministry and Agency in charge of the Project

(1) Outline of Implementing Agency (The Agency in charge of the execution of the Project)

(i) Organization Chart of the Agency (in general)

See organization charts attached.

(ii) Authorities and Duties of the Agency

FSSIV

FSSIV is one of the regional research center of the Forest Science Institute. FSSIV is in charge of Forestry Research development and Extension Service of Research Results.

FSIV is a research organizations under MOF and Minister of Forestry is directory in charge of FSIV. FSIV is also under control of Ministry of Science and Technology as one of state level research

organizations. FSIV is main forestry research organization in Vietnam. FSIV carries out forestry researches decided by MOF, and joins national research programs of Ministry of Science and Technology.

(iii) Personal

FSSIV	
Doctors	2
Forest engineers	7
Forest Technicians	4
Others	3
Total	16

(iv) Budget (Revenue and Expenditure)

FSSIV

120 million dong (12,000 USD) a year

(2) Outline of Supervising Ministry

(i) Organization Chart of the Agency (in general)

See organization chart attached.

(ii) Authorities and Duties of the Agency

MOF is one of the ministry of the government of Vietnam. MOF is in charge of all aspects related forestry sector. MOF also provide technical services to provincial sub-department of forestry.

(iii) Personal

150 persons (only in Headquarters)

(iv) Budget (Revenue and Expenditure)

340 billion dong (34 million USD)

7. Capability of the Implementing Agency

(1) Current Situation

FSSIV

FSSIV is carrying out forestry researches especially to meet new demands of internal and international forestry aspects under the guidance of FSIV.

(2) Problem of the Agency

FSSIV

Equipment, facilities and knowledge of staffs are out of dated to meet internal and international research demand of today. Because of lack of finance, it is difficult to improve drastically. Poor English capabilities of staffs hinder exchanges of new research results among other countries.

It does not fulfill its function as a important brunch of the main forestry research organization of

Vietnam, FSIV. Research fields of staffs are biased. Because of lack of net-works, FSSIV can not control and guide other forestry research organizations in South.

UNDP/FAO had provided some equipment and facilities to strengthen capabilities of FSSIV, but so far no dramatic changes.

(3) Improvement Plan

FSIV is preparing a project for improving itself into "National Forestry Research Development and Training Institute (NFRDTI)". MOF would like to request Japan's Grant Aid and Project Type Technical Cooperation for contributing establishment of NFRDTI.

However, targets of NFRDTI are whole country, therefore it is not directory contribute to this project concentrated in Mekong Delta areas.

8. Operation and Management of the Project

(1) Personnel

	(persons)	
	Current	When Project is completed
Supervising Ministry*	150	150
Implementing Agency**	16	21
Directly Responsible Personnel***		9

Note: * the number of staffs of the headquarters of MOF.
 ** the number of staffs of FSSIV, FIPI and CEMMA.
 *** the number of the C/P

(2) Budget

	(billion dong)			
	2 years ago (1992)	1 year ago (1993)	Now (1994)	When Project will be completed (1996)
Supervising Ministry*	220	260	340	400
Implementing Agency**			0.1	0.1
Direct budget of the project				not estimated yet

Note: * total budget of MOF except invests from donors
 ** total budget of FSSIV except invests from donors
 about 11,000 dong = 1 USD

(i) Has the additional budget been already allocated?

No.

(ii) How and when will the additional budget be allocated?

The government of Vietnam will allocate the budget when both governments agreed to implementation of the project.

(3) Technical abilities of Local Staff

(i) Technical abilities of Local Staff

All the C/P are experts of each fields though their knowledge are out of dated.

(ii) Educational background of those who are in charge of the Project

All the C/P are University graduates.

10. List of Related Projects

(1) FSSIIV

FSSIIV has established sevral Social Forestry Models in differeent natural and socio-economic zones in the Mekong Delta Areas.

(2) OSB

OSB has established small scall Social Forestry Model village in Song Be province.

(3) FAO

VIE/75/016, Strengthening of the Southern Branch Forest Research Inst. of VN, Nov. 1978 - Jun. 1983

II General Development Plan

1. Title of the Plan

Socio-Economic Development Plan from 1991 to 1995

2. Economic and Social Situation

From 1976, when Vietnam was reunited, attempts were made to extend the centrally-directed socialist system prevalent in the former Democratic Republic of Vietnam over the entire nation. However, as early as 1979, the first attempts at liberalization and economic decentralization were made. Since 1986, this process has been speeded up considerably. At present, private entrepreneurship is encouraged and private ownership of means of production is accepted. Several new laws on foreign investment have been promulgated. Further, state enterprises are now required operate on a self-financing basis, covering their costs of production from sales proceeds.

During 1989, inflation was also brought under control and a single rate of exchange was established. For several years, exports from Vietnam stood at about one third of imports. This rate improved to 75 % in 1989, when the value rose by 80 % over that of 1988, to 1.8 billion "dollars or rubles"

The present phase of the economic reform process in Vietnam has its origin in the sixth congress of the Vietnamese Communist Party in December 1986, but has continually developed since then. At present, the policy can be summarized in the form of the following eight interlinked target areas:

1. Introduce the market as the guiding mechanism for economic activities. This should lead to increased efficiency in resource utilization and increased production of various commodities.

2. Reorient the economic structure of the country, giving agriculture, forestry, and fishery high priority, and mobilize the non-state sector (collectives, families, and individuals) for investment and cooperation with the state sector.

3. Apply an open-door policy in order to encourage foreign cooperation.

4. Pay attention to social problems, strengthen democracy, and gradually establish a revised legislative system.

5. Reduce the size of the armed forces while still safeguarding the security of the country.

6. Continuously revise the contents of the three key programmes:

- Development of staple and non-staple food production
- Consumer goods production
- Export

7. Reduce the inflation rate through monetary policy.

8. Continue the reform process while continuing the preparation of the socio-economic plan for 1991-1995.

Financial assistance from China to Vietnam (approx. USD 1 billion/year) was terminated in 1979, and that from the USSR (approx. USD 3 billion/year) progressively decreased during 1989 and 1990. With the continued trade embargo by the Western countries, the Government's financial position continues to be extremely difficult, with corresponding shortage of investment funds. Some alleviation of this situation may eventually be obtained from oil production, with levels expected to rise from 3.5 million tons in 1990 to 15 to 20 million tons by 1995.

3. Outline of the Plan

(1) Counter-Inflation Measures

Bring down the ratio of inflation to one-digit number, though it was two-digit in 1991.

(2) Food Production

Achieve the amount of the annual food production 24 or 25 million tons till 1995, solve the internal food problems, and secure the state storage, the livestock feed and annually 1 or 1.5 million tons of the food for export.

(3) Livestock Industry and Development of Products for Export and Processing

Increase the yield of Livestock to more than 30 % of amount of the annual output of the agricultural production. In coming 5 years, rise up the quantity of the exporting processed meat from 310,000 ton to about 500,000 ton.

(4) Industrial Crops

Extend the tea fields to 90,500 ha till 1995, produce 54,000 ton of dry tea, and export 5.4 million USD.

Extend the mulberry plantation from 15,000 ha in 1990 to 30,000 or 35,000 ha till 1995. Increase the yield from 420 ton to 1,800 or 2,000 ton.

Extend the cotton field from 12,800 ha in 1990 to 50,000 ha till 1995, and increase the yield from 9,000 ton to 45,000 ton.

(5) Forestation

Among 9.6 million ha of bare lands, forest 3 million ha of which 1 million ha of the concentrated afforestation, 1 million ha of the natural regeneration, and 1 million ha of the scattered reforestation.

(6) Supply Electricity

Increase the electricity supply for the central and the south Vietnam to 7.5 billion kW to meet 90 % of the demands in these areas. In addition, improve the electricity networks in the North Vietnam to export 1 or 1.5 billion kW to China.

(7) Job Opportunity

Prepare the employment for 4 million more people and increase the income of the government, and restrain the social ills and the negative phenomenon.

(8) Restructure of State Economic Sector

Support the State Companies to play a leading part in as the economic organizations and to give full scope to their abilities in the fields of the technology development and the economic efficiencies. Establish the situations of which the government suitably control the market economies.

(9) Socio-Economic Development in Mountainous Region

Provide annually 250 or 270 kg of food a person. Produce 200,000 ton of the tea, 60,000 ton of the coffee for export, and 1,000 ton of the silk. Forest 3 million ha of land. Increase annually 4.5 % of the home manufacturing and the handicrafts.

(10) Education and Training Development

Complete to establish the suitable education systems for the socio-economic reorganizations.

(11) Health

Establish the local health stations, the family plans, and the health of the mother-and-baby. Extend the health service. Take measures against the infectious diseases such as the diseases of the intestines, the bubonic plague, the dengue, the rabies, the tuberculosis, AIDS, and other venereal diseases. Devise the countermeasure of the malaria. Produce and supply the medicinal drugs. Protect against the Neck-goiter.

(12) Governmental Policies on Science and Technology

Implement the 30 research projects.

(13) Reformation of the Administrations

Establish the well-regulated and modern administrative organizations based on the socialistic democracy.

4. When will the plan be executed and completed

1995.

5. Relation between this project and the plan

The project directly related with both "(5) Forestation" on the Socio-economic Development Plan.

Though the Plan will be completed, the Chairman of the Council of Ministers ensured that the following activities are carried out in the coming 10-15 year period in his decision No. 327 made in September 1992. In addition, the local cost for the Project will be prepared by the state government based on the decision.

- (1) Regreening of the major part of the degraded hills.
- (2) Protection of forests and the environment.
- (3) Utilization of bare land in hilly areas, of coastal alluvial flats, and of water bodies for production of goods and supply of industrial raw materials.
- (4) Fulfilling the programme for fixed cultivation and sedentarization.
- (5) combining economic and social activities.
- (6) stabilizing and gradually improving the material as well as the spiritual life of people in new economic zones and of people belonging to ethnic minorities.
- (7) Creating incomes to the State and consolidating the national security.

Not only that, under these state plans, Ministry of Forestry also has the objectives till the year 2000, that aims totally 5 million forestations that is the total amount adding 2 million ha more to the forestation objectives of the Socio-Economic Development Plan to 1995 above.

On the other hand, for donors, there is the Tropical Forest Action Program (TFAP) set by Ministry of Forestry cooperating with FAO that recommends to invest totally 475 million USD for the projects from 1992 to 2000. This Project is based on one of the projects, the Project Profile No. 3.9, "Industrial Plantation Development".

6. Is there any assistance that other donors have extend to the project and/or programme in the general plan?

In these years, the supports from each donor seem increase rapidly. Only considering the forestry project, there is a long list, the "Outlines of the Cooperation for the Forestry Sector of Vietnam by the Third Countries and the International Organizations" attached.



Signed: Prof. Dr. Nguyen Quang Ha

Titled: Minister

Ministry of Forestry

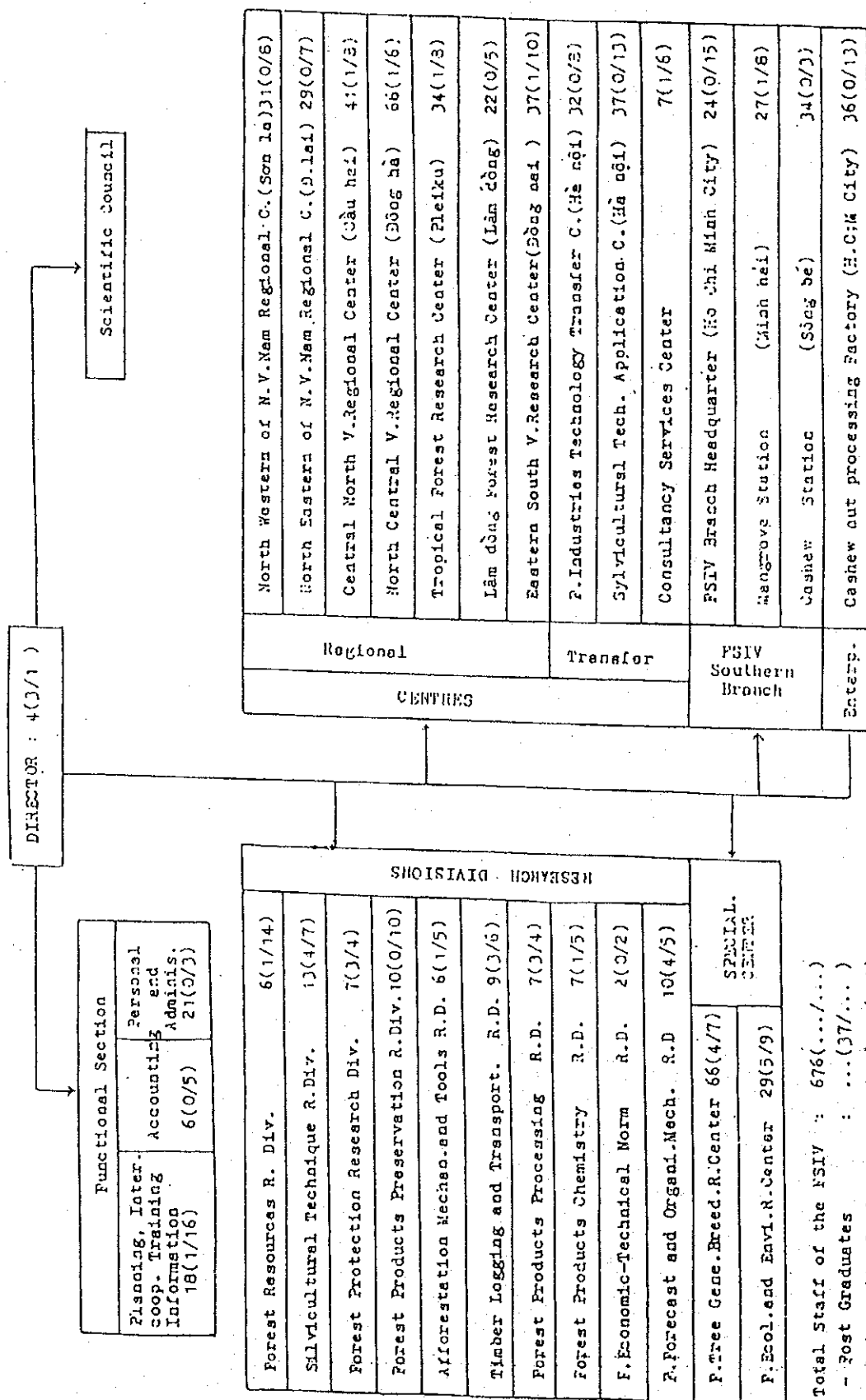
On behalf of the Government of S.R. Vietnam

Date: 26 Nov. 1994

LIST OF APPENDIXES

1. Chart-1 FSIV Organization Chart
2. Chart-2 Organization Chart of MOF
3. ANNEX Outlines of the Cooperation for the Forestry Sector of Vietnam by the Third Countries and the International Organizations
4. Table-1 Long An Province in Mekong River Delta
5. Table-2 Study Schedule
6. Map-1 Project location
7. Map-2 Soil Map
8. Map-3 Land Use Map

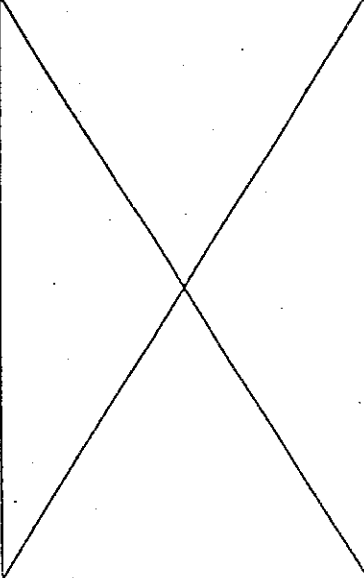
Chart - 1 PSIV ORGANIZATION CHART



Total Staff of the PSIV : 676(..../....)
 - Post Graduates : ... (37/....)
 - University Graduates : ... (..../....)

Chart - 2

9. 林業省組織図 Organization Chart of MOF

技術経済会議 Technical Economic Council	大臣 Minister - - - - - 次官 Vice Minister	- - - - - 省人民委員会 Provincial People's committee
1. 大臣官房 Office of the Minister 2. 計画局 Planning dept. 3. 人事組織労働局 Organization & Labour dept. 4. 森林科学技術局 Science & Technology dept. 5. 財政局 Finance & Accounting dept. 6. 造林局 Silviculture dept. 7. 林産工業局 Forest Industries dept. 8. 国際協力局 International Cooperation dept. 9. 監査局 Inspection dept. 10. 情報広報普及局 Information Extension dept. 11. 森林保全局 Forest Protection dept. 12. 植林計画運営局 Forest Plantation Programmes Management dept.	研修組織 Training systems 林業大学 Forestry Collage 技術学校 Technical schools (3) 職業訓練校 Vocational schools (5)	省林業部 Provincial Forestry Dept. 県林業課 District Forestry Sub-Dept. 地方林業署 Local Forest Enterprises 地方公社 Local Companies 森林組合 Forest Cooperatives
	研究組織 Research organizations FSI - 地方センター Regional Centers FIP I - 地方支所 Local Brigades	
	製造貿易組織 Production and trade systems 1. 直轄林業署 Central Forest Enterprises 2. 林業局 Agro-Forestry-Industry Unions (7) 3. FORMACH 4. 林業設計建設公社 LICOLA 5. NAFORIMEX (3) 6. 種子供給公社 Seed and Planting Material Company	

ANNEX

Outlines of the Cooperation for the Forestry Sector of Vietnam by the Third Countries and the International Organizations (after 1986)

1. UNDP/FAO

- (1) VIE/86/026 "Strengthening the Capacity of Forest Seed Production and Supply", project document signed on 6 Jan. 1989, duration 3 years (expired), UNDP contribution USD 1.1 million.
- (2) VIE/86/027 "Fuelwood Afforestation in Different Ecology Zones", project document signed on 6 Jan. 1989, duration 3 years (expired), UNDP contribution USD 1.1 million.
- (3) VIE/86/028 "Forest Fire and Insect Pest Management", project document signed on 6 Jan. 1989, duration 3 years (expired), UNDP contribution USD 1.0 million.
- (4) GCP/VIE/012/AUL "Training of Staff at the Forestry College in Vietnam", project document signed in Aug. 1989, duration 30 months (expired), external input USD 0.17 million, contributed by Australia.
- (5) VIE/92/002 "Provision of Technical Support to WFP Project 4304 'Reforestation in Coastal Vietnam'", project document signed on 21 Apr. 1993, duration 2 years, UNDP contribution USD 0.7 million, see 2.(3).
- (6) VIE/92/039 "Institutional Strengthening for the Implementation of the Tropical Forestry Action Plan"
- (7) (intended) "Watershed Management and Land Conservation in priority watershed", preparing the project aiming to coordinate the each donor and to establish the model project in the Da river basin.
- (8) GCP/RAS/133/JPN "Regional Expert Consultation on Participatory Agroforestry and Silvofishery Systems in Asia-Pacific", carried out the International Workshop from 15 to 21 Nov. 1992.
- (9) GCP/RAS/142/JPN "Regional Reforestation Project", from Dec. 1993, duration 2 years, funded by Japan.

2. World Food Programme (WFP)

- (1) Project 2780, lasting from 1986 to Feb. 1990 (expired), WFP contribution was valued at about USD 15 million, covering reforestation in the central provinces of Nghe Tinh, Quang Binh, Quang Tri, Thua Thien, and Quang Nam-Da Nang. Australia supported the project with nonfood items.
- (2) Project 3352, lasting for four years from Jul. 1990 with a WFP contribution valued at USD 17 million, covering reforestation in the northern provinces of Hanoi, Bac Thai, Vinh Phu, and Ha Son Binh. Australia supported the project with nonfood items.
- (3) Project 4304, to last for four years and cost some 25 million USD is now operational. It covers thirteen coastal provinces from Thuan Hai northwards to Thanh Hoa and also Quang Ninh. Considering forestry, 100,000 ha of the forestation is planned. UNDP/FAO dispatches a forestry expert, SIDA supports FIPI.

International Cooperation in Forestry Sector

and Australia provides seeds. The first Multi-donor project.

3. Sweden

The Vinh Phu Pulp and Paper Mill at Bai Bang was established with Swedish support. The mill is entirely under Vietnamese management, from mid-1990, while continued Swedish support will be given to forestry in the three provinces of Vinh Phu, Ha Tuyen and Hoang Lien Son. The present project, lasting for five years in an initial phase, will receive an annual contribution from Sweden valued at about USD 7 million. The amount includes a total of about 2 million USD available to the Ministry of Forestry for purchase of forest seed, training in English, scholarships, and hiring of consultants:

4. German

From 1991, the cooperation budget has been prepared, but it has been carried-over without concrete project. However, from 1993, GTZ has carried out the feasibility study for the watershed management and the small scale model project in Son La province dispatching a team of experts for FIPI. GTZ hopes to cooperate with Japan's Grant Aid project for North-West, in its implementation phase from 1995:

5. New Zealand

From 1993, spending 0.1 million USD, dispatch consultants to prepare the 3 feasibility studies on the project such as the watershed management of the Da river basin, the management and protection of the Cuc Phong National Park, and the Industrial Plantation in the North-Central

6. Switzerland

Planning to strengthen an education of social-forestry at Forestry College. Switzerland side shown its proposal in March 1994.

7. EU

Planning to provide about 20 million USD for the project preventing primeval forest in Nghe An province. Despatching study team in May 1994.

8. Australia

Many projects are supported by AIDAB fund. In July 1994, supporting a training course on Tropical Forest Management at Gia Lai province calling trainees from Vietnam and neighboring countries.

9. Mekong Committee

Only minor contributions to the forestry sector have so far been obtained from the Committee.

10. NGO

(1) OSB (Australia)

Has assisted afforestation in Dong Nai Province.

Assist 2 villages in Son La province (Chien Xinh-- across the road from the FSI, Moung La province, Na Noong

International Cooperation in Forestry Sector

village) through branch office of the Forest Science Institute to get some demonstration model at the village level and to strengthen the capacity of the FSI. in 1993, finalized project agreement for 3 years.

(2) CIDSE (France)

Has contributed to the preparation and implementation of the management plan for Co Ba Forest Enterprise in Nghe Tinh province.

(3) JIVC (Japan)

Has cooperated the project on the mangrove forest in Ho Chi Minh city.

(4) CARE

In Phu Yen district of Son La province, a design mission is scheduled for July to look at forestry/agroforestry/agriculture, could start at the end of 1993, start in 3 communes (pilot phase: 2 years) but is anticipated to cover the entire district over a 12 year period.

(5) ACTION AID (UK)

In Mai Son district in Son La province, underway since 1989 agricultural extension is to cover all the communes in the district over the next 10 years, and is requested to extend the project also in Yen Chau province by the provincial government.

(6) Quaker Service (USA)

Works in Moc Chau and Quynh Nhai districts in Son La. just passed the half way point of a 5 year program agreed on by the Son La Province People's Committee, Women's Union, OSV and the donor agency Danchurchaid, supported small pilot projects in agroforestry and food security, and supported in building a reservoir at the Research Center of FSI.

(7) ISHE (Japan)

Prepares to make an environmental education video on the mangrove forest for school children, aiming use the system of subsidies of Japanese government, cooperating with the Mangrove Ecosystem Research Center in the National Pedagogic University in Hanoi.

(8) NICCO (Japan)

Guiding the agroforestry technology to the ethnic minority groups in Lam Dong province, and to establish the 2,380 ha of plantation in the lands kept already in 1993, supported by the Japan Fund for Global Environment.

(9) Actomang (Japan)

Following studies in 1993, starting mangrove plantation project at Quang Ninh province from 1994, and supporting some organizations in Vietnam, supported by the Japan Fund for Global Environment and Japan Fund of International Volunteer Savings.

International Cooperation in Forestry Sector

Note: according to the TFAP Maine Report and the result of the interviews with the International Cooperation Department of MOF and each donor.

International Cooperation in Forestry Sector

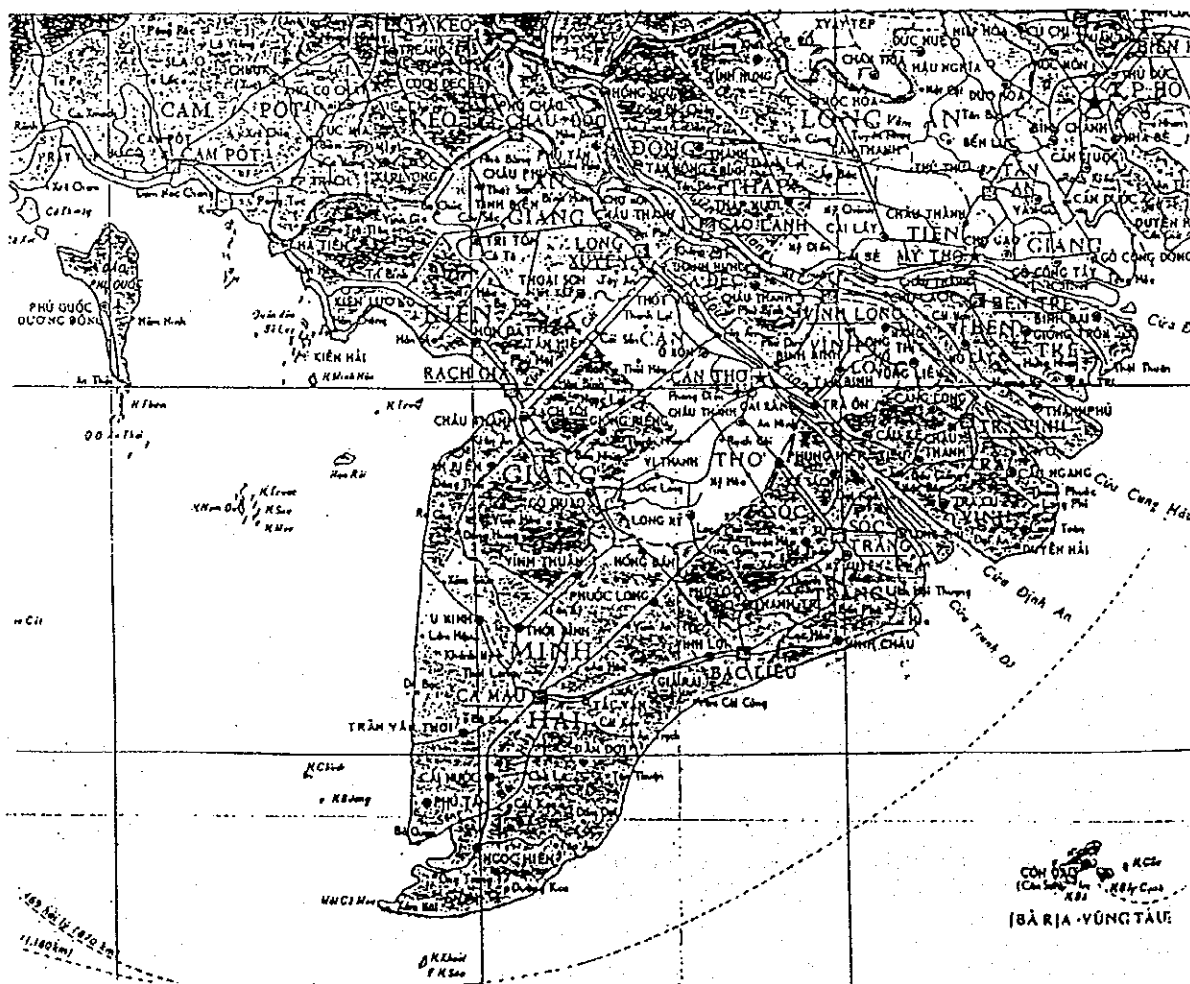
Table-1

LONG AN PROVINCE IN MEKONG RIVER DELTA

Province	Area (km ²)	Population (in 1989) (x 1,000)	Existing Forest (in 1990) (ha)	Reforestation Plan (1991-2000) (ha)
LONG AN	4,338	1,121	8,500	4,000
Dong Thap	3,276	1,337	3,200	1,000
An Giang	3,423	1,793	7,499	5,000
Tien Giang	2,339	1,484	5,238	1,000
Ben Tre	2,247	1,214	1,683	1,000
Can Tho*	2,951	1,812	2,405	5,000
Vinh Long*	1,487		1,200	
Tra Vinh**	2,369	2,682	1,300	4,000
Soc Trang**	3,191		5,589	
Kien Giang	6,243	1,198	74,198	20,000
Minh Hai	7,670	1,562	82,888	27,000
TOTAL	39,534	14,203	193,700	68,000

Note:

* & **: Divided into 2 provinces recently



Development Study for Acid Sulfated Soil Areas

/ /

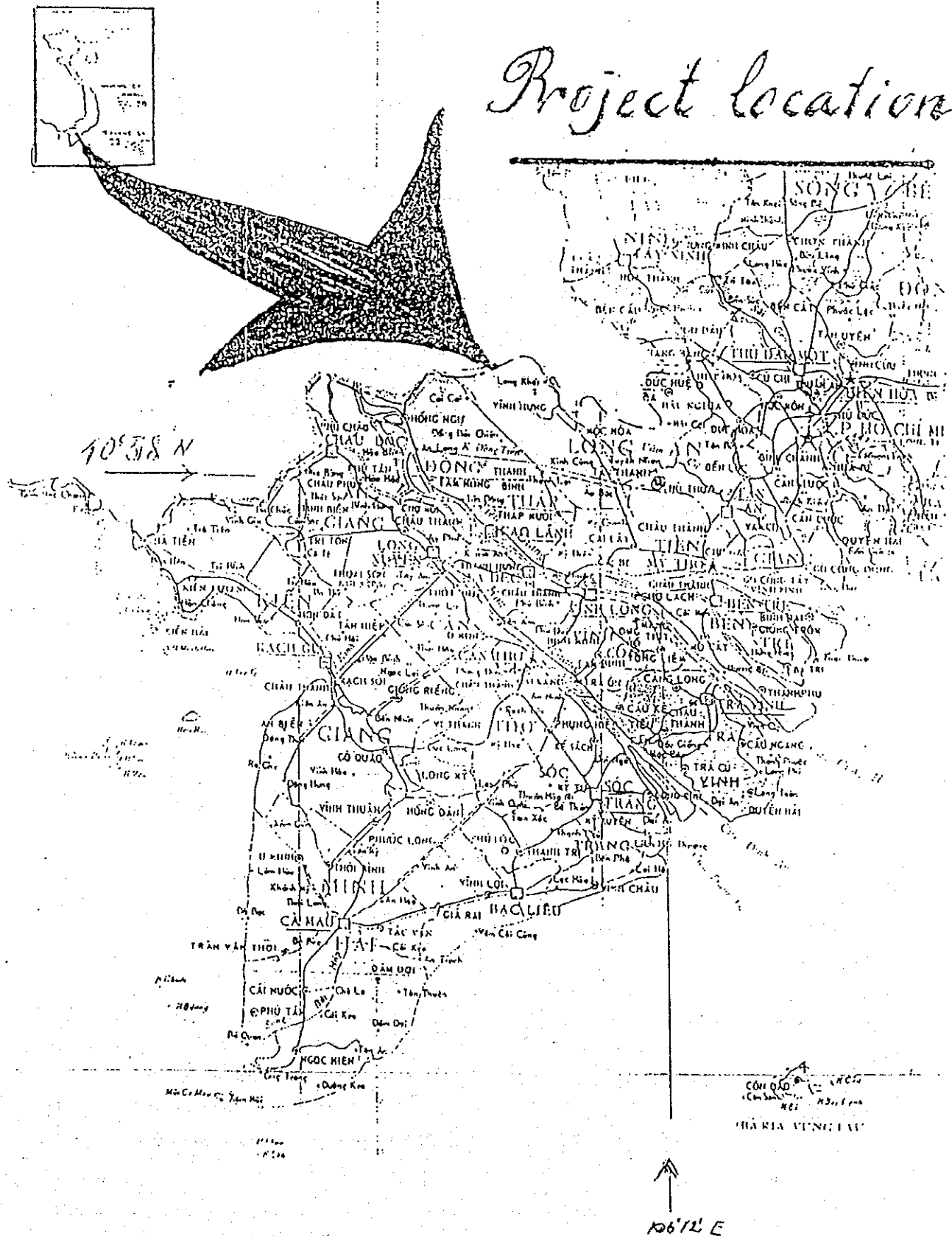
Table - 2

STUDY SCHEDULE

	1st year 1995	2nd year 1996	3rd year 1997	4th year 1998	5th year 1999
Study on Soil					
Nomination of Staffs	+++++				
Study on Natural Conditions	+++++				
Study on Effects of Toxic Elements					
Nomination of Staffs	+++++				
Study on Natural Conditions	+++++				
Development of Soil Treatment Measures					
Nomination of Staffs	+++++				
Design of Experiments	+++++				
Designing and Establishment of Measures		+++++	+++++	+++++	
Adding New Research on the Basis of Cultivation Technic Improvement					+++++
Monitoring and Evaluation of the result, and Developing New Technics					
Selection of Forest Tree Species and Agricultural Crops					
Nomination of Staffs	+++++				
Study on Natural Conditions	+++++				
Design of Experiments	+++++				
Ordering Seeds	+++++				
Laying out the Experiments		+++++	+++++	+++++	
Perfection of the research					
Research on Developing Cultivation Technical Measures					
Nomination of Staffs	+++++				
Designing and Establishment of Measures		+++++	+++++		

Adding New Research on the Basis of Seed and Cultivation Technich Improvement				++++++	
Monitoring and Evaluation of the result, and Developng New Technics					++++++
Development of People's Participation Measures					
Nomination of Staffs	++++++			++++++	
Organizing and Rending Guidance					
Reserch on Processing Techniques of Forest and Agricultural Products					++++++
Research for Applying Studied Technologies					
Nomination of Staffs	++++++				
Conducting sociological survey	++++++				
Application of the Advanced Techniques					++++++
Dsigning the Modeles in Other Areas					++++++
Infrastructure Construction					
Nomination of Staffs	++++++				
Ordering and Construct Facilities	++++++				

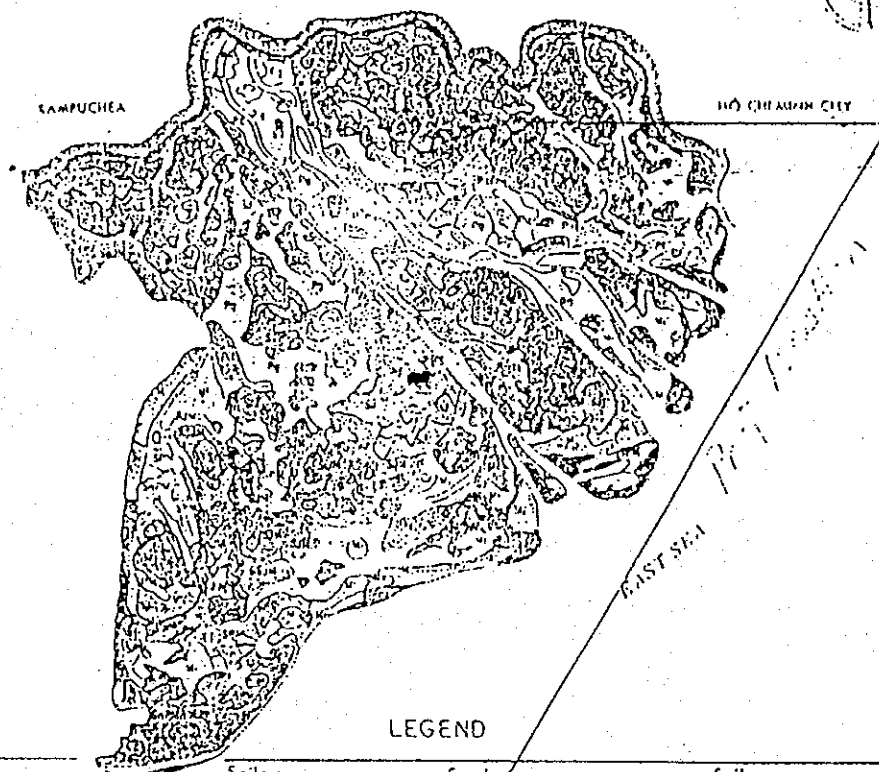
Map - 1



Map - 2

SOIL MAP OF THE MEKONG DELTA

SCALE : 1/2,500,000

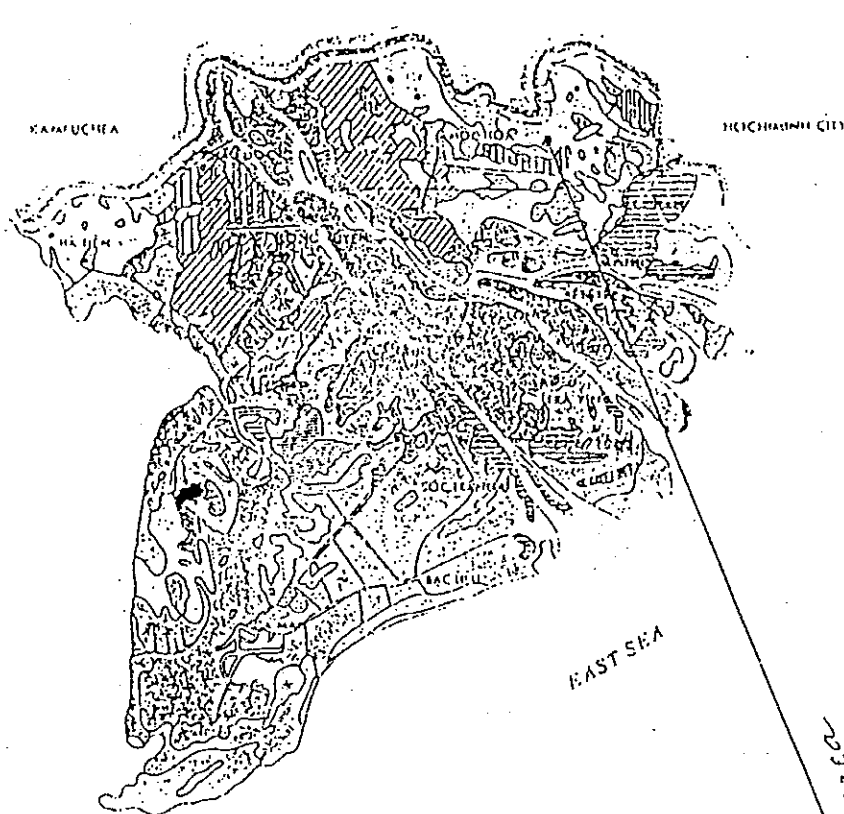


Symbol	Soils name	Symbol	Soils name
	Coastal sandy ridge soils		Strongly potential acid sulphate soils periodically intruded by salinity
	Mangrove's permanently saline soils		Moderately potential acid sulphate soils periodically intruded by salinity
	Periodically strongly saline soils		Slightly potential acid sulphate soils periodically intruded by salinity
	Periodically moderately saline soils		Well drained alluvial soils
	Periodically slightly saline soils		Deposited alluvial soils
	Strongly actual acid sulphate soils		Humic gley alluvial soils
	Moderately actual acid sulphate soils		Reddish-brown mottled alluvial soils
	Slightly actual acid sulphate soils periodically intruded by salinity		Yellowish-red mottled alluvial soils
	Slightly actual acid sulphate soils		Alluvial soils on ancient alluvium
	Strongly actual acid sulphate soils periodically intruded by salinity		Peat bog soils
	Moderately actual acid sulphate soils periodically intruded by salinity		Grey soils on ancient alluvium
	Strongly potential acid sulphate soils		Humic gley grey soils on ancient alluvium
	Moderately potential acid sulphate soils		Grey soils on magmatic acid and sandy rocks
	Slightly potential acid sulphate soils		Yellowish-red soils magmatic acid rocks
	Strongly potential acid sulphate soils permanently intruded by salinity		Eroded skeletal soils
	Moderately potential acid sulphate soils permanently intruded by salinity		

Map - 3

1985 LAND-USE MAP-THE MEKONG DELTA

SCALE : 1:2,500,000



LEGEND

	One rainfed rice crop		Unsustainable rice
	One floating rice crop		Mangrove rhizophoras
	One floating rice + one upland crop		Mangrove
	One rainfed rice + one upland crop		Molaleuca oil
	One rainfed rice + one shrimp culture		Molaleuca for wood
	One winter - spring (W-S) rice + one summer Autumn		Remained forest in the mountains
	One S.A rice + one main rainfed rice crop (S-A) rice		Uncultivated lands
	Two rice crops + one upland crop		Fallow lands
	Upland crop		Coconut
	Sugar cane		Shrimp culture
	Pineapple		Salt pans
	Pineapple and other plants		Fruit trees populated areas

JICA