

9. Human Resources

9.1 Employment

9.1.1 HRD Development Strategies-present and future

With tourism recognized as a key economic sector by the Government of Vietnam, increasing emphasis is placed upon the human resources required by the sector. The Tourism Master Plan 1995-2010 prepared by VNAT has identified human resources, and service quality improvement as major strategies for the achievement of ambitious national tourism objectives. To achieve this end VNAT has mobilized international assistance to build additional training capacity, assist in curriculum reform and for teacher retraining both at the national level and also for the Central region.

9.1.2 Description of sector labor market patterns

Employment patterns

VNAT is currently undertaking a national human resources survey, which will describe employment and skill levels in the sector. The eleven study provinces surveyed by the JICA Study Team noted skill shortages in both the management and skilled worker categories in hotels and tour guiding. The study provinces prioritized training for the hotel sector, and in tour operations.

According to VNAT, the total national tourism workforce in 1999 was 150,000. Tourism is increasingly seen as an attractive employment area by students and as an economic option by provinces in the region. The tourism schools in Hue and Hanoi are popular choices and student applications exceed places by 10 to 1.

Wages in the sector in the central region tend to have a flat structure, are lower than in Hanoi and HCMC and do not appear to be above other central region industry averages, with the highest paid managers receiving approximately one million with skilled workers receiving 8-900,000 VND. In the public sector and state-owned enterprises salaries are augmented by bonuses and benefits. Employment in the state sector in the central region is stable. Some enterprises pay above industry rates to retain skilled staff. However, other state companies note that they pay the industry average and experience no difficulty in retaining staff. In part this reflects the preference felt by many Vietnamese for state sector employment, obstacles to labor mobility and also reflects the low level of development of private sector enterprises

Enterprise ownership characteristics

The more developed the province, the higher number of enterprises in the tourism sector, compared with the less developed provinces. The central region accounts for 14.7 per cent of enterprises in the trade, tourism and service sector. The state owned sector accounts for the smallest number of enterprises and the largest proportion of employment. The private sector in the central region accounts for only 6.8 per cent of total private sector enterprises, a smaller part of total

enterprises than the national average.

In the hotel and tour operator sector, the majority of the enterprises, and the largest enterprises are owned by the provincial government, or by VNAT. In the restaurant, souvenir and handicraft sub-sectors, the enterprises tend to be smaller, and are more likely to be under family ownership. Growth in this sector has been rapid and driven largely by the private sector. Data on this sector is not collected by the provincial tourism authorities.

9.2 Education and Training

9.2.1 Government Expenditure

The 1990s have experienced a very high level of commitment to education from government. Public current expenditures on education have increased both in absolute terms and as a percentage of GDP, rising from 1 per cent of total GDP in 1990 to 3.4 percent in 1998. However, the percentage of total government expenditure on education is still low compared to other countries within ASEAN. (Appendix 7.2) Salaries account for 80-90 per cent of public expenditure on education. Only 16 per cent of the total budgeted annual spending is on vocational training, a figure that has remained largely unchanged since 1990.

9.2.2 Primary Education

Vietnam has made great progress towards the universalization of primary education, especially when compared with other nations of similar socio-economic status. The literacy rate is 91 per cent for the nation as a whole. Some provinces and cities have attained net enrolment ratios of up to 98-99 per cent for the 6-10 age group but others only over 70 per cent. Overall, the internal efficiency of primary education has improved with the completion rate increasing to 60 per cent in 1994/1995 and over 70 per cent in 1997/1998 (Pham M.H., 1999). Major regional differences still exist and, quality of education delivered continues to be of concern. In particular, ethnic minorities experience financial, geographic and cultural constraints in access to education.

9.2.3 Secondary Education

The transition rate from primary to secondary schools is relatively high and net enrolment ratios in lower secondary education have doubled in the past five years to reach 61 per cent for girls and 62 per cent for boys. Drop-out rates in secondary education are higher, 10 per cent for lower (Pham M.H., 1999) and 6 per cent for upper but repetition rates are lower, 2.5 per cent for lower (Pham M.H., 1999) and 1.4 per cent for upper. Due to high dropout rates, internal efficiency of lower secondary education remains 50 per cent on average. Reduction in dropout rates in upper secondary education has raised internal efficiency of upper secondary up to 60-70 per cent.

Shortages of qualified teachers are acute, and the lack of qualified staff induces teachers to teach subjects in which they have no formal training. There is a generalized lack of equipment and materials for experiments.

9.2.4 Tertiary Education

Since the year 1988/1989, the number of students enrolled in higher education has risen remarkably. Total enrolment in higher education has grown faster than that in primary, lower and upper secondary education (Appendix 7.3). However, regular full-time students account for less than 50 per cent of the total enrolment in higher education. The rapidly increasing number of students, given the slowly growing teaching staff, facilities for study, has deteriorated the quality of higher education seriously.

Nationwide, 13 universities provide training in tourism management. Many other universities offer language programs, however no tour guiding/operation courses are available in the central region. Curriculum is generally developed by the institution for the two latter years of study in the case of degree courses, and for short courses which are increasingly offered to provide in-service or skills upgrading to employees within the tourism sector. The more established universities in the major centers have drawn upon foreign assistance to develop curriculum and to provide teachers, both for course delivery and for teacher training.

Hanoi Open University (private university) graduates from the hospitality management or tour guiding and management degrees experience little difficulty in finding employment. Graduates from the universities in the central region experience greater problems finding employment in their field of training. Nationally, approximately 1000 students graduate from tourism management degree courses per year.

9.2.5 Technical and Vocational Education and Training (TVET)

Tourism Training

The government strategy is to increase the number of vocational training places in tourism both nationally and in the central region however the tourism sector currently lacks training resources. The latest general labor census conducted by MOLISA showed that 84 per cent of the workforce lacked skills to the appropriate level. VNAT estimates that approximately 4 per cent of the workforce are being trained at any one time (1998 figures). Da Nang city estimates that only 20 per cent of the workforce has basic skills in tourism, although the provincial tourism department has trained 1,800 on short-term courses in the last 5 years. Both nationally and in the central region training demand from the tourism industry exceeds output from the training institutions. The pace of employment growth indicates that it is unlikely that tourism training schools alone will meet the estimated demand for skilled workers, however there is no integrated workplace-based training system.

Table 9.2.1 Work Force Qualification Level

Qualification Level of Tourism Sector Workforce	Percentage of Workers
Percentage of workers with university level qualifications	20-30
Percentage of workers with professional secondary level qualifications	22-45
Percentage of workers with vocational secondary level qualifications or lower	27-58

Source: Provincial data
JICA Study Team

The main training institutions for tourism are the Tourism Training colleges, in Hanoi, Ho Chi Minh City, Vung Tau and Hue, which are upper secondary technical institutions, accepting the majority of entrants after they have completed lower secondary school. These schools focus on hotel and hospitality training, and to a lesser extent on tour operations. The schools in Hanoi and Hue are under the administrative control of VNAT, while the HCMC school is under the control of the Saigon Tourist Company, an enterprise owned by the HCMC PC. Nationally, there are 15 vocational training schools providing some kind of tourism.

The Hue Tourism Training School, established in 2000 with considerable financial assistance from the Duchy of Luxembourg has the mandate to provide tourism training for Hue, the Central region and the Central Highlands, and will have a capacity of full-time 400 students per year when fully operational. Short courses will be delivered both on the campus and in other provinces. Tuition fees are 1 million VND per year, and access is difficult for poorer students and those without residence in Hue for financial and housing reasons.

The school consists of a training school with 7 classrooms, fully equipped demonstration kitchens, restaurants, front office, bedrooms etc, constructed for US\$1.25 million in 2000/01, and supported by the Duchy of Luxembourg. The Thua Thien-Hue Department of Tourism has also provided a hotel to be converted to a practical demonstration centre. The Hue school provides training in hotel operations (Front office operations; Food preparation, Housekeeping and Food and Beverage) to a one year and two year diploma level. The school plans to provide training in tour operations and tour guiding from 2002 and to deliver short courses for tourism employees, particularly in language for tourism (Chinese, Japanese).

Curriculum

For long courses such as diploma or certificate courses, the curriculum utilized is that developed at the national level, with some modifications made to suit local conditions. Curriculum has recently been revised for entry-level hotel training. Curriculum for the tour operations sector is required for management and tour guiding.

For short courses, the curriculum is generally developed by the training institution at the time to meet the needs of the trainees. The Open University holds stakeholder workshops each year to improve the relevance of the curriculum offered while Da Nang is developing curriculum more closely aligned with regional needs. Training materials both in Vietnamese and English are in short

supply.

Trainers

Secondary technical education has the lowest student-teacher ratio due to its sluggish growth. Only the specialized tourism training centers have trained trainers in tourism studies. Many of these have been recruited from the industry recently. Most other vocational training schools which provide tourism training along with other areas of skill will require trainer re-training in order to deliver tourism training.

Enterprise -based training

Both nationally and in the central region, for all levels below management, the bulk of the training in the tourism sector appears to take place through short courses delivered in the workplace or on-the-job. As most tourism training colleges provide entry-level training primarily for the hotel sector, and to a lesser degree for the tour operations sector, most other sectors provide training on-the-job.

Most of the large tourism companies provide significant amounts of tourism training in-company. Companies also place staff on work placements in tourism companies in other parts of the country as well as in other countries. The Huong Giang company in Hue, with total employees of 425 places between 20-30 employees for on-the-job training in other countries each year. Overall, approximately 0.6 percent of current employees are being trained outside Vietnam at any point in time (VNAT 1999 data). However, of the central region companies surveyed, few companies have a formal training plan or track the level of training expenditure.

Smaller organizations, such as the Bach Ma National Park, lack the budget to provide training, and rely on external assistance to provide English language and tourism guiding skills to staff.

Very few enterprises in the central region are part of a chain arrangement. Those that are can utilize the extensive training arrangements and overseas placements offered by the chain HRD departments. The Century Hotel in Hue provides some overseas placements to key staff in regional hotels, for a period of a few weeks to a few months. Some of the larger hotels (generally joint-venture) in Hanoi and Ho Chi Minh City are able to provide training placements for hotel staff from other provinces.

Nationally, training is largely informal in the restaurant and handicraft sector. There is an apprenticeship tradition within most crafts (stone masonry, ceramic production, etc.) however the training system is unregulated, although artisans are recognised by the government. There is no data on the number of apprentices currently working in each craft areas.

9.3 Institutions and Organizations

9.3.1 Structure of Education and Training System

The education system in Vietnam is organized into four parts: Preschool; General; Higher; and Technical and Vocational Education and Training. The organizational structure of the education and training system is presented in Appendix 7.3. In general a student enters the education system at grade one, spends five years in primary education, four years in lower secondary education and three years of upper secondary, and finishes with four years of university education. Choices regarding vocational education are made after the completion of either primary or lower secondary school.

The Vietnamese education and training system is governed by the Education Law. Overall responsibility for the education system according to the Education Law rests with the Ministry of Education and Training, which cooperates with the Ministry of Planning and Investment and the Ministry of Finance in areas of policy, target setting and financing.

In 1998, the Prime Minister transferred responsibility for vocational training from MOET to MOLISA under the new General Department of Vocational Training (GDVT). The responsibility for technical education remains with MOET. The rationale for the establishment of GDVT under MOLISA is that, among other things, a demand-based TVET system cannot be separated from determining training needs, labor force requirements, employment, which are currently functions of MOLISA.

The management of education and training is decentralized vertically to many other line ministries and government agencies such as VNAT who administer many TVET institutions. Horizontally, provincial governments and the central government share in running higher education and TVET. Provinces manage secondary schools and vocational training centers. This is illustrated in table

Table 9.3.1 Responsibility for operating Education and Training Institutions

	District	Provincial	Central
Primary and kindergarten	X		
Lower secondary schools		X	
Upper secondary schools		X	
Vocational training centers		X	
Secondary vocational schools		X	X
Secondary technical schools		X	X
Colleges		X	X
Universities			X

Source: MOET (1996) (in Pham M.H. (1999) *Giao duc Viet Nam trich nguon cua the ky XXI*. Ha Noi: National Political Publishing House).

Technical and Vocational Education and Training

TVET in Vietnam is intended for those who have finished basic education (primary or lower secondary) but have not enrolled in the next level of general education (lower or upper secondary). TVET programs are classified into two types: *long-term regular* (or *school-based*) programs and *short-term* programs offered by vocational training centers.

Long-term regular programs are carried out in following institutions:

Secondary vocational schools: These schools admit students at two different levels: those who have completed primary with the duration of study from two to three years and those who have completed lower secondary education with the duration from one to two years, depending on the skills taught. Secondary vocational education is designed to train skilled workers.

Secondary technical schools: The curriculum in these schools is a blend of general education and technical training. Secondary technical schools usually recruit lower secondary leavers. After completing the course of study varying from three to four years, students are considered middle-level technicians and are eligible to enter a university or college.

Appendix 7.4 shows that the numbers of both secondary vocational and technical schools are decreasing. The enrolment in secondary vocational education dropped to 46,498 in 1993/1994, then went up slightly to 79,488 in 1995/1996. The recovery of the enrolment in secondary technical education was stronger, leading to 69,057 students in 1995/1996 higher than in 1986/1987.

Students and trainees enrolled in school-based TVET programs represent only a tiny proportion of all the enrolments in Vietnam's formal education and training system. From 1991/1992 to 1995/1996, total number of students in secondary vocational and technical schools was less than 150,000. The quality of long-term vocational programs tends to be low due to out-of-date equipment and curricula.

Short-term programs. Most of Vietnam's TVET takes place in short-term programs supplied by vocational training centers managed by provincial-level government agencies. There seems to be no formal education requirement for admittance to a short-term program. The World Bank groups the various types of short-term vocational training under three headings:

Vocational training centers for upper secondary students: Upper secondary students require practical training provided by upper secondary schools or nearby training centers. They can learn during vacation periods or in a few hours per week during the school year.

Vocational centers for training and upgrading skills: This training is to prepare young adults and school dropouts to work in specific vocations.

Centers for employment promotion: Apart from training, these centers offer services such as credit and mediation between businesses and job seekers.

Higher Education

Under central planning, all tertiary institutions were managed directly by government Ministries and their state enterprises. Vocational and professional schools were linked to state enterprises, while universities "belonged" to particular Ministries. Numbers of entrants were restricted for various reasons, but mainly because graduation meant that the state supplied the student a job. Transition has removed this employment responsibility and now tertiary institutions operate on a commercial basis not too dissimilar to developed countries. As a result, demand for university degrees has surged relative to

vocational skills. At the university level, the rapid increase in student numbers has undermined the quality of teaching.

Tertiary education in Vietnam occurs in colleges and universities. Colleges provide teacher training, health and fine arts skills through three-year diploma courses. Since 1994/1995, universities in Vietnam have been organized into three broad types. First, the “multi-disciplinary universities of the major cities; second, the specialized universities which focus on a single area of study such as economics, engineering, fine arts or law, etc, and thirdly, non-public universities consisting of two “open universities” in Ho Chi Minh City and Hanoi and sixteen “people-founded universities” in some of Vietnam’s largest cities (see Appendix 5).

9.3.2 Relevant Regulations

The important laws in the area of HRD are the Education Law (1998), which articulates regulations on education and training matters, and the Labor Law (1994) governing employment wages and conditions. The GOV is currently discussing additional regulations providing tax and land incentives to foreign investors in the vocational training sector. The government acknowledges that investment in vocational training is lower than required.

Tourist guides will be more closely regulated in the future, under a regulation to be promulgated in the near future. Currently guides need a level of foreign language proficiency in addition to general knowledge in order to pass the examination and become licensed as a tour guide. The new regulation will more clearly articulate the level of skills required.

10. Natural Environment and Tourism Development

10.1 Present Condition on Natural Environment

10.1.1 Geographical Feature

The Study Area is characterized by narrow, and mountainous and coastal features. Most of the Study Area drains into the East Sea. These are sloping from west to east in general. The mountainous area is located in the eastern side of the Truong Son Range. The coastal area has some rivers and valleys, which made many sand dunes, lagoons and bays.

The mountainous area has humisols, and the coastal area has fertile alluvial fluvisols and acid sulfate soils. Soil erosion is one of the greatest losses of natural resources in the Study Area.

10.1.2 Flora and Fauna

The mountainous topography and the East Sea exert a strong influence on Vietnamese flora and fauna. In the Study Area, this is essentially a zone of sub-equatorial monsoon forest, therefore the most humid with many dense forests in general. However it is decreasing caused by demographic pressure. Uncontrolled exploitation is increasing, although reforestation has been implemented to revitalize a life system so vital to human existence. The current land cover in the Study Area is monsoon forests include the dry dipterocarp forests, and lowland evergreen/ semi-evergreen broadleaf forests.

10.1.3 Climate

Due to wide stretch along the coast with South China Sea in its range of latitudes and altitudes, the Study Area has a remarkably diverse climate. Two monsoons bring influence upon this climate. The winter monsoon comes from the northeast between October and March bringing wet winters to all provinces of north of Khan Hoa province (Nha Trang), but dry and warm temperatures to the south. On the other hands, the southwestern monsoon brings warm, humid weather to the whole provinces from April to October.

Northern part of the Study Area has also heavy rainfall that sometimes brings severe flash flood owing to nation wide climate changes and geographical conditions with mountains. The Study Area has been also suffered by severe storm with violent and unpredictable typhoons in June to October-November, especially northern part of the Study Area such as Quang Binh, Quang Tri province. Major character of Study Area divided by three areas geographically could be characterized as follows:

Northern part (Quang Binh, Quang Tri, TT Hue): (1) Heavy rains and frequent storms with typhoons from July to December, and (2) Relatively low temperature in winter season (around 20 °C).

Middle part (Danang, Quang Nam, Quang Ngai, Binh Dinh, Phu Yen): (1) Heavy rains and some storms with typhoons from September to December, and











(2) Same temperature condition in winter and summer but comparatively low humidity than northern part except Da Nang and Quang Ngai

Southern part (Khanh Hoa, Ninh Thuan, Binh Thuan); (1) More sunny days from March to Jun and some storms with typhoons in winter season, and (2) Relatively high temperature in winter season (around 24 °C) and low humidity (dry area)

The climate conditions and its constraints are indicated in Table 10.1.1.

Table 10.110.1.1 Monthly Climate Constraints of Major Provinces

Meteorological Condition	Province	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Typhoon Frequency *1	TT Hue												
	Da Nang												
	Binh Dinh												
	Khan Hoa												
Sunny Days *2	TT Hue												
	Da Nang												
	Binh Dinh												
	Khan Hoa												
Rainfall *3	TT Hue												
	Da Nang												
	Binh Dinh												
	Khan Hoa												

Note: *1/Typhoon evaluation by tracking record in 1954~91,  :Rare,  :Sometimes,  :Frequent
 *2/Average sunny days per month(1994~96),  :>10 days,  :10~5 days,  :<5 days
 *3/Average rainfall per month(1994~96),  :<50mm,  :50~100mm,  :100~300mm,  :>300mm
 Source: Environmental Conditions Compendium of Vietnam 2000, Strategy and Action Plan for Mitigating Water Disasters in Viet Nam 1994/MOWR, UNDP, UNDHA

10.2 Environmental Conservation System

10.2.1 Environmental Impact Assessment (EIA) System

Ministry of Science, Technology and Environment (MOSTE) provides guidance for content and procedure of preparation and appraisal of EIA Report (EIAR) for foreign and domestic investment projects in Vietnam. MOSTE regulates the classification of projects into three groups:

- Group 1 (G1): Projects do not need to prepare EIA-R (Table 10.2.1),
- Group 2 (G2): Projects, which are not listed in G 1 & 3, have to prepare Detailed EIAR (DEIAR), and
- Group 3: Projects, which are of complicated production characteristics or locations (Table 10.2.2).

For the projects which is classified as Group 3, EIAR have to be prepared in two steps:

- Step 1 (S1): Preparation of the Preliminary EIAR (PEIAR) when applying for Investment License (IL), and
- Step 2 (S2): Preparation of the DEIAR after getting IL, DEIAR needs to be appraised before starting construction.

COMPREHENSIVE STUDY ON TOURISM DEVELOPMENT
IN THE CENTRAL REGION OF THE SOCIALIST REPUBLIC OF VIETNAM

Table 10.2.1 List of Projects that do not Need to Prepare EIA Report

No.	Project
1	<u>Consultant offices</u>
2	<u>Office houses</u>
3	Banking, finance, auditing services
4	Telecommunication and post service (except microwave stations)
5	<u>Education, training, science research (without experimental workshops, laboratories dispose the hazardous substances)</u>
6	Quality verification (do not use hazardous substances, flammable/ explosive materials, radiation)
7	Newspaper and book publish house (except printing works)
8	Radio stations, television stations (radio wave transmission tower; < 100m)
9	<u>Hotels (less than 100 rooms and not includes swimming pool, golf course)</u>
10	<u>Trading center, supermarket</u>
11	Trade service
12	<u>Food service</u>
13	Mechanical assembly (not includes painting, coating, machine parts production)
14	Electric and electrical assembly (not included machine parts production, painting, coating)
15	Garment production
16	Textile (except dyeing, wiping out, colour printing)
17	Consumer goods: shoes making, stationary, book binding, sewing with leather/ canvas (except ink production), with staff less than 10 workers
18	<u>Carpentry (except wood processing with chemicals)</u>
19	<u>Handcrafts production</u>
20	<u>Resettlement (< 100 households)</u>
21	Wind/ solar power stations
22	Hydro power stations under 10 kVA
23	Hydraulic systems, irrigation systems < 100 ha
24	Forest planting, industrial tree planting < 50 ha
25	<u>Health service (< 30 in-patients)</u>

Note: *: Items with bold/ underline will be proposed as tourism development

Source: Modified from "Documents of setting up a report on Environmental Impact Assessment" (1998)

Table 10.2.2 List of Projects that have to Prepare EIA Report in 2 Steps

No.	Project
1	Offshore and terrestrial oil/ gas exploitation, oil/ gas pipeline, oil/ petroleum storage
2	Oil refinery, petrochemical industry
3	Products that directly effect (by waste gas emission and waste water discharge) on natural conservation areas, environmentally sensitive areas, tourist areas, highly polluted areas (stipulate by concern Ministries)
4	Metallurgy
5	Nuclear reactor
6	Airport
7	Industrial park and export processing zone
8	City planning, economic region planning
9	Production/ storage of chemicals, dying, leather tanning
10	Paper production (includes cooking process)
11	Microwave stations
12	Harbor (for ship deadweight > 10,000 tones)
13	Reservoirs, hydraulics systems/ hydropower systems (> 10 millions cubic meters)
14	Highway
15	Waste water treatment works, landfill site, incineration plant, composting plant
16	Gold and rare soil exploitation
17	Water treatment/ supply > 30,000 cu m/day
18	Waste water treatment system > 10,000 cu m/day
19	Body incinerator

Source: Modified from "Documents of setting up a report on Environmental Impact Assessment" (1998)

*: Items with bold/ underline will be proposed as tourism development

According to Table 10.2.2, the following project types, which will be proposed as tourism development, are required to implement two step-EIA:

- Airport
- City planning, economic region planning
- Harbour (for ship deadweight > 10,000 tones)
- Reservoirs, hydraulics systems/ hydropower systems (> 10 million cu.m)
- Highway
- Wastewater treatment works, landfill site, incineration
- Composting plant
- Water treatment/ supply > 30,000 cu.m/day
- Waste water treatment system > 10,000 cu.m/day

Projects that include a number of production processes, being conducted in different locations, or production/ technology characteristics of processes are different, each process must be prepared a separate EIAR.

EIA Procedure

EIA Procedure for G 1: In documents submitted to apply for IL, it is necessary to present all factors that might cause negative impacts to environment, and waste treatment measures to meet with Vietnam's Environmental Standards (VES, Table 10.2.3), and concurrently must have commitment to comply with Vietnam's legislation on environmental protection.

EIA Procedure for G 2: In project's Feasibility Study (F/S) to apply for IL, there must be a chapter or a separate part that presents project's potential impacts on environment. That will be a base for State management authorities for

Environmental Protection for consideration in reviewing process for project. After getting IL and decision of construction sites, project proponent must prepare DEIAR and submit to appropriate management authority for Environmental Protection for appraisal. The contents of the DEIAR are shown in Table 10.2.4. Decision on Approval for EIAR is a legal basis for State agency for Construction Permission (CP) to allow starting construction and to co-operate with State management authority for Environmental Protection to appraise construction design and waste treatment works/ systems. Legal documents required for appraisal are Application Form for EIA, DEIAR, and Technical Economic Report (F/S Report). The time limits for appraisal of DEIAR are within sixty days of the receipt of complete legal documents. In case of the documents is not complete, State agency for environmental appraisal, within ten days, will inform project proponent to supplement the documents.

Table 10.2.3 Environmental Standards

<p>1) Environmental Standards described in the Law and Guidance</p> <ul style="list-style-type: none">a) Land protection;b) Water protection;c) Air protection;d) Regulate noise pollution;e) Radiation and ionization;f) Environmental protection in residential areas;g) Environmental protection in production areas;h) Environmental assessment in the field of forestry protection;i) Environmental assessment in the field of protection of biological systems;j) Environmental assessment in the field of protection of ecological systems;k) Protection of the sea and oceans;l) Protection of natural preservation areas and natural landscapes;m) Planning for industrial, urban and civil constructions;n) Transportation, storage and utilization of toxic and radioactive materials;o) Exploitation of surface and underground mines;p) Motorized transportation;q) Establishments using micro-organisms;r) Environmental protection of underground;s) Environmental protection of tourist areas;t) Export and import illness-treatment areas.u) <p>2) Available Environmental Standards (Provisional Environmental Criteria, MOSTE, 1993)</p> <ul style="list-style-type: none">a) Maximum permissible concentration for toxic chemicals in ambient air at workplace;b) Maximum permissible concentration for toxic chemicals in ambient air at populated areas;c) Maximum permissible concentration for toxic chemicals in surface water;d) Drinking and domestic water quality: Physical and chemical aspects;e) Drinking and domestic water quality: Microbiological and biological aspects;f) Maximum limit of waste water's constituent discharging into water sources;g) Surface water quality inflowing to water plants before treatment;h) Ground water quality for water supply;i) Coastal water quality;j) Microclimate at workplace;k) Lighting in industrial construction;l) Noise: Allowable levels at workplace;m) Noise: Allowable levels at populated area;n) Vibration criteria;o) Maximum allowance concentration of dust in ambient air at workplace;p) Requirement of the chimney height for places of fuel combustion;q) Sanitary protective distance requirements for thermoelectric power plants and boilers;r) Classification of minimum sanitary protective distance for enterprises and plants;s) Safety regulation for ionizing radiations.
--

Table 10.2.4 The Contents for Detailed EIA Report

<p>I. Introduction</p> <ol style="list-style-type: none"> 1. Objective of the Report 2. Document, Data Status of the report 3. Selection of the Assessment Method 4. Organization, members, method and the process used in preparing report <p>II. Brief description of the report</p> <ol style="list-style-type: none"> 1. Name of the Report 2. Name of the Holder, the agency implement the setting up feasibility study or documents equivalent to the project value 3. Socio-economic objective, the potential significant of the project 4. The main contents of the Project. The socio-economic benefit that project can provide 5. Project progress, plan for project exploitation 6. Project cost, cost process <p>III. Environmental status at the project location</p> <ol style="list-style-type: none"> 1. General description of the geographical, socio-economic conditions related to the project location 2. Forecast of the conditions if the project is not implemented <p>IV. Impact of the project implementation to the environmental and natural resources factors</p> <ol style="list-style-type: none"> 1. <u>Description of the Impact to the project implementation to each Environmental factor at the project locations.</u> <p>Presenting the characteristics, degrees, and occurrences at each time of the impact. Compare to the circus stance of not implementing project:</p> <p><i>A. Impact of the physical environmental forms water quality, air quality (Hydropheres, airpheres, etc.)</i></p> <p><i>B. Impact of the Biological resources and ecosystems</i></p> <ol style="list-style-type: none"> 1. Aquatic ecosystems 2. Terrestrial ecosystems <p><i>C. Impact to the Natural Resource and Environment</i></p> <ol style="list-style-type: none"> 1. Water supply 2. Transportation 3. Agriculture 4. Irrigation 5. Energy 6. Exploration 7. Industry 8. Small Industry 9. Land use to other objections 10. Creation, Heals protection <p><i>D. Impact to the direct condition that impact to the people living quality</i></p> <ol style="list-style-type: none"> 1. Socio-economic condition 2. Cultural condition 3. Aesthetic <p><u>2. General environmental assessment in the case for the project implementation</u></p> <p>Analysis of the synthetic Environmental development for each alternative for project implementation. The damages to natural resources and environment resulting from each alternative. The measures overcoming. In this part, it needs to avail.</p> <p>The material inputs to production The waste of the production The products Impact forecast of these materials to environment</p> <p><u>3. The mitigating measles to limit negates impact of the project on the environment</u></p> <p>Presenting in a detailed manner the technical measures, technology, management for overcoming the negative impact on the environment of the project Comparing the resulting benefits and the costs for each alternative of the project</p> <p><u>4. General assessment</u></p> <p>General assessment of the degree of condense of the forecast of the environmental impact assessment. The study, investigation, survey that would be required for more confident conclusion and further adjust of the forecast of the environmental impact assessment in the future</p> <p>V. Recommendations on the alternative for project implementation</p> <ol style="list-style-type: none"> 1. Recommendation for alternative selection to implement the project based on the environmental point of view 2. Recommendation for the Environmental protection measures associated with the approved alternative
--

EIA Procedure for Group 3: At S 1, the projects have to prepare the PEIAR and submit together with Pre-F/S Report or submit together with IL Application documents. The contents of the PEIAR are shown in Table 10.2.5. This is one of legal basis for reviewing process and granting IL. If PEIAR completely presents technologies, materials, fuels, assessment of potential and scale of negative effects on environment, mitigation measures and waste treatment technologies to meet with VES, MOSTE will consider to exempt preparation of DEIAR. The time limits for appraisal of PEIAR is within fifteen days of the receipt of complete legal documents. In case of the documents are not complete, State agency for environmental appraisal, within seven days, will inform State agency in charge of granting IL to require project proponent to supplement the documents.

The procedure at S 2 is same as the procedure of DEIAR for G 2.

Organizing of Appraisal

Because of project's sectoral characteristics and scales that have different impacts on environment, the appraisal of EIA Report is decentralized. The appraising power is divided into two organization such as MOSTE and Department of Science, Technology and Environment (DOSTE) in each province or city, as shown in Table 10.2.6. In this list, the projects are categorized into forty-one types. The following project types, which will be proposed as tourism development, are required to implement EIA:

- Leather plant, Textile plant
- Railway, Motorway of grade 1, 2, 3, Airport, Port
- Hydropower dam water reservoir
- Tourism and entertainment resort, Hotel and business sector

10.2.2 Natural Conservation System

Protected Area

The Government of Vietnam (GOV) provides Protected Areas, such as National Parks, Nature Reserves, Cultural-Historical and Environmental Reserves, Floral Reserves, Marine Reserves. There are 1 national Park, 3 Cultural-Historical and Environmental Reserves, 9 Nature Reserves, 2 Floral Reserves, 8 Marine Reserves in the Study Area, and 1 national Park, 2 Cultural-Historical and Environmental Reserves, 11 Nature Reserves, 3 Floral Reserves in the Central Highlands (Table 10.2.7, Figure10.2.1).

Table 10.2.5 The Contents of the Report for the Preliminary Environmental Impact Assessment

<p>I. Introduction</p> <ol style="list-style-type: none">1. Objective of the Report2. Document, Data Base of the report3. Brief project decryption <p>II. Data of the environmental situation</p> <p>Qualitative, quantitative assessment, in the case where there is no quantitative data then classing according to degree: Heavy, medium, light, unknown by each natural factors (water, soil, air, etc.)</p> <p>III. Environmental impact assessment during project implementation</p> <p>General assessment according to the main factors:</p> <ol style="list-style-type: none">1. Air2. Water3. Noise4. Rock5. Ecosystem6. Solid waste7. Historical landscape8. Infrastructure9. Transportation10. Community health care11. Other factors <p>IV. Conclusions and recommendations</p> <ol style="list-style-type: none">1. Conclusion on the Environmental Impact of the Project2. Recommendation to the problems that need to have detail assessment
--

Table 10.2.6 Appraisal Decentralization of EIA Report

No.	Type of Program and Project	Control Agency	DOSTE (*2)
		MOSTE (*1)	
1	Mining	Big and medium mine	Small
2	Oil exploring and refinery, oil chemicals and gas; oil	All	
3	Chemical plant	All	
4	Steel plant	All	
5	Non-steel metal plant	All	
6	<u>Leather plant</u>	<u>Over 1,000 tons/year</u>	<u>Rest</u>
7	<u>Textile plant</u>	<u>Over 30 mil m/year</u>	<u>Rest</u>
8	Plant protection chemical plant	All	
9	Rubber and paint plant	All	
10	Plastic plant	Over 1,000 tons/year	Rest
11	Radiation plant	All	
12	<u>Airport</u>	<u>All</u>	
13	Export processing zone	All	
14	<u>Hydropower dam water reservoir</u>	<u>Over 100 mil m³/year</u>	<u>Rest</u>
15	Irrigation system	Over limitation	Rest
16	Thermal and other kinds of power plants	Over 30 MW	Rest
17	Cement plant	Over 500,000 tones/year	Rest
18	Paper and paper pulp mill	Over 40,000 tones/year	Rest
19	Pharmaceutical plant	Central	Rest
20	Fertilizer plant	Over 100,000 tones/year	Rest
21	Food processing factory	Over 1,000 tons/year	Rest
22	Sugar plant	Over 100,000 tons/year	Rest
23	<u>Hospital</u>	<u>Over 500 beds</u>	<u>Rest</u>
24	<u>Railway, motorway of grades 1, 2, 3</u>	<u>Over 50 km</u>	<u>Rest</u>
25	Power transmission station	Over 110 kV	Rest
26	<u>Tourism and entertainment</u>	<u>Over 100 ha</u>	<u>Rest</u>
27	Oil and gasoline store	Over 3,000 m ³	Rest
28	Poisonous chemicals store	All	
29	Plantation	Over 2,000 ha	Rest
30	Wood exploitation farm	Over 3,000 ha	Rest
31	Industrial forestation farm	Over 2,000 ha	Rest
32	Aquacultural farm	Over 200 ha	Rest
33	<u>Port</u>	<u>Over 100,000 tones</u>	<u>Rest</u>
34	Ply-wood factory	Over 500,000 m ² /year	Rest
35	Migration area	Over 500 households	Rest
36	Alluvia plain	Over 500 ha	Rest
37	Engineering factory	Over 50,000 tones/year	Rest
38	Telecommunication stations	Radar station and central broadcasting station	Rest
39	Freezing	Large and medium scale	Small
40	Construction materials factory	Large and medium scale	Small
41	<u>Hotel and business sector</u>	<u>Large and medium scale</u>	<u>Small</u>

Source: Modified from "Documents of setting up a report on Environmental Impact Assessment" (1998)

*1: MOSTE; Ministry of Science, Technology and Environment

*2: DOSTE; Department of Science, Technology and Environment in Each Province

*: Items with bold/ underline will be proposed as tourism development

COMPREHENSIVE STUDY ON TOURISM DEVELOPMENT
IN THE CENTRAL REGION OF THE SOCIALIST REPUBLIC OF VIETNAM

Table 10.2.7 Protected Area

Protected Area		Name	Province	Area (ha)	Source
National Park	Study Area	Bach Ma	Thua Thien - Hue	22,030(*1), 22,031(*2)	*1, *2
	Central Highlands	Yok Don	Dac Lac	58,200	*1
Scenery Protected Area	Study Area	Bac Hai Van	Thua Thien - Hue	14,547	*1
		Nam Hai Van	Da Nang	10,850	*1
		Deo Ca Hon Nua	Phu Yen	8,876	*1
	Central Highlands	Lak	Dac Lac	12,744	*1
		Rung Thong Da Lat	Lam Dong	32,051	*1
Natural Area	Reserve Study Area	Nui Giang Man *	Quang Binh	60,000	*1
		Phong Nha - Ke Bang(*1), Phong Nha(*2)	Quang Binh	116,700(*1), 147,800(*2)	*1, *2
		Khe Net *	Quang Binh	23,600	*2
		Khe Ve - Minh Hoa *	Quang Binh	10,000	*2
		Nui Giang Man *	Quang Binh and Thanh Hoa	60,000	*2
		Dakrong *	Quang Tri	40,526	*2
		Phong Dien *	Thua Thien - Hua	41,548	*2
		Ngoc Linh *	Quang Nam	18,430	*2
		Ban Dao Son Tra	Da Nang	4,370	*1, *2
		Ba Na - Nui Chua	Da Nang	43,327	*1, *2
		Cu Lao Cham	Quang Nam	1,544	*1
		Song Thanh - Dac Pring(*1), Song Thanh	Quang Nam	93,000(*1), 93,249(*2)	*1, *2
		A Vuong *	Quang Nam	-	*2
		Phu Ninh	Quang Nam	23,409	*2
		An Toan *	Binh Dinh	26,044	*2
		Nui Ba	Binh Dinh	6,800	*2
		Krong Trai	Phu Yen	22,290(*1), 27,290(*2)	*1, *2
		Deo Ngoan Muc	Ninh Thuan/ Lam Dong	2,000	*2
		Rung Kho Han Nui Chua	Ninh Thuan	29,673	*2
		Bien Lac - Nui Ong	Binh Thuan	35,377	*1, *2
		Ta Kou	Binh Thuan	17,823	*1, *2
		Kalon - Song Mao	Binh Thuan	20,000	*2
		Central Highlands	Chu Mom Ray	Kon Tum	48,658
	Ngoc Linh *	Kon Tum	50,000	*1	
	Kon Cha Rang	Gia Lai	16,000	*1	
	Kon Ka Kinh	Gia Lai	28,000	*1	
	Chu Hoa *	Dac Lac	17,360	*1	
	Chu Yang Sin	Dac Lac	32,328	*1	
	Easo *	Dac Lac	22,000	*1	
	Nam Ka	Dac Lac	24,555	*1	
	Nam Nung	Dac Lac	6,463	*1	

10. Natural Environment

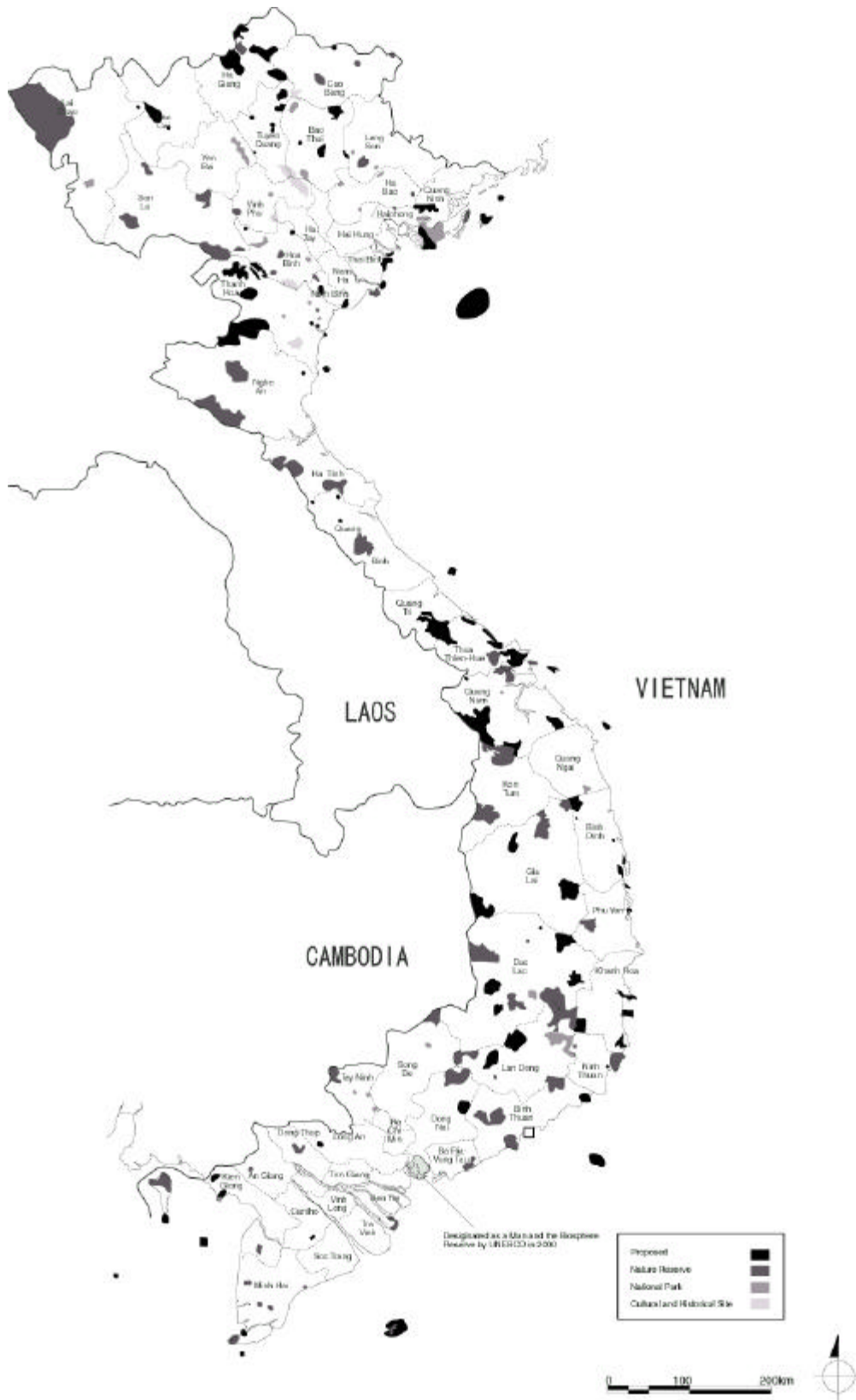
			Ta Dung	Dac Lac	8,521	*1
			Nui Ba - Bi Doup	Lam Dong	73,912	*1
Flora Area	Protected Study Area		Phong Dien *	Thua Thien - Hue	25,000	*1
			Rung Kho Phan Rang	Ninh Thuan	16,775	*1
		Central Highlands	Eral *	Dac Lac	50	*1
			Trap Ksor *	Dac Lac	100	*1
			Cat Loc	Lam Dong	30,635	*1
Marine Area	Protected Study Area		Dao Con Co *	Quang Tri	350(*1), 2,490(*2)	*1, *2
			Hai Van - Son Tra(*1)/ Hai Van - Hon Son Tra(*2) *	Thua Thien - Hue(*1)/ Thua Thien - Hue/27,416(*2) Da Nang(*2)	- -(+1), 27,416(*2)	*1, *2
			Tam Giang - Cau Hai *	Thua Thien - Hue	4,189	*2
			Dao Ly Son *	Quang Ngai	812(*1), 7,925(*2)	*1, *2
			Cu Lao Cham *	Quang Nam	1,544	*1, *2
			Quy Nhon *	Binh Dinh	5,800	*2
			Cu Mong *	Phu Yen	3,000	*2
			O Loan *	Phu Yen	2,450	*2
			Hon Mun - Bich Dam(*1), Hon Mun(*2)	Khanh Hoa	110(+1), 10,500(*2)	*1, *2
			Quan Dao Truong Sa	Khanh Hoa	10,000	*1
			Nha Phu - Hon Heo *	Khanh Hoa	4,500	*2
			Thuy Trieu *	Khanh Hoa	5,000	*2
			Nai *	Ninh Thuan	1,000	*2
			Dao Phu Quy *	Binh Thuan	2,300	*1, *2
			Cu Lao Cau	Binh Thuan	50	*1
			Hon Cau - Vinh Hao *	Binh Thuan	12,500	*2
Cultural Historical Site	and Study Area		Bac Hai Van ****	Thua Thien - Hue	14,547	*2
			Nam Hai Van	Da Nang	10,850	*2
			Nui Thanh	Quang Nam	1,500	*2
			Ba To	Quang Ngai	6,770	*2
			Quy Hoa - Ghenh Rang *	Binh Dinh	5,555	*2
			Vuon Cam Nguyen Hue	Binh Dinh	798	*2
			Deo Ca Hon Nua ****	Phu Yen	8,876	*2

Source: *1; Map of Vietnam Natural Conservation and Resort Sites System (Department of Environment, MOSTE, 1999)

*2; ditto (Revised and Enlarged Edition)

Legend: *; proposed area (not official)

Figure 10.2.1 Protected Areas in the Study Area and Central Highlands



Source: Map of Vietnam Natural Conservation and Resort Sites System (Department of Environment, MOSTE, 1998)

International Convention

The GOV is affiliated with or ratified international bilateral or multilateral conventions concerning environmental conservation, natural conservation, environmental protection as follows:

- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (CWII, Ramsar Convention)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, Washington Convention)
- Berzel Convention
- Convention on Biological Diversity
- International Convention for the Protection of Birds (ICPB)
- Convention for the World Cultural and Natural Heritage
- Tropical Forest Action Plan (TFAP)
- Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter
- Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships, 1973
- United Nations Convention on the Law of the Sea

10.3 Relation Between Natural Environment and Tourism Development

In general the EIA will be implemented for the projects, which are proposed at the Master Plan stage. The examination of site selection or alternative development is not able to implement in this present EIA system. Therefore the special attention on environmental protection should be paid at the higher level of planning, especially decision making stage. Strategic Environmental Assessment (SEA) is the formulated, systematic and comprehensive process of evaluating the environmental impacts of a policy, plan or programme and its alternative. The followings are the items to be paid special attention to protect natural environment at master plan stage in the Study Area and Central Highlands from the viewpoint of SEA.

- Coastal zone and marine areas, which have vulnerable ecosystem, such as wetlands, mangrove forests, coral reefs and marine landscape, especially Marine Reserves and the coastal area of Nha Trang
- Cultural and historical remains of national and international importance, especially Hue, Hoi An, My Son and the revolutionary remains of Quang Tri
- Flooding area, which has much rainfall and is the route of typhoon
- Vulnerable area on geographical feature, which has the potential on occurrence of landslide and erosion at mountainous area in Central Highlands
- Water pollution and solid waste problem in the populated area and by tourism facilities
- Cultural traditions of ethnic minorities
- Relationship between selection of tourism sites/ activities and international conventions

- National security and social safety in the marine areas international boundaries

The Department of Planning and Investment under VNAT is responsible for sustainable development on tourism sector in Vietnam. Therefore the institutional strengthening, such as the establishment of environmental section and staff arrangement of environmental specialists, of this Department will be required.

10.4 Development issues on natural environmental conservation

Natural environmental conservation is indispensable for the base of tourism development from the following viewpoints:

- Natural condition as a base on tourism development
- City condition as a base on tourism development
- Environmental impacts by tourism development
- Other issues

10.4.1 Natural condition as a base on tourism development

The existing natural condition in the Central Region is mainly characterized as follows:

- relatively much rainfall in rainy season including typhoon;
- relatively little rainfall in dry season; and
- low forest cover ratio and relatively steep slope.

These conditions lead the flood in the rainy season, drought in dry season, forest degradation, and soil erosion.

10.4.2 City condition as a base on tourism development

On the hand, the cities such as Da Nang, Hue and Nha Trang have the role of tourism base for accommodation and tourism attractive such as restaurants, souvenir shops, museums, etc. These cities have been progressed their urbanization. The urbanization will be leading pollution especially water pollution, solid waste problems, and the impacts on aesthetics.

10.4.3 Environmental impacts by tourism development

Tourism developments including infrastructure projects have a possibility not only to affect environment, but also to decrease the values of tourism resources. To protect their impacts, the followings are required:

- Environmental consideration at early stage of planning
- Environmental impact assessment at planning stage
- Checking of impacts at operation stage

10.4.4 Other issues

The global issues are discussed in the world. In these issues, global warming

and biodiversity will be considered on the tourism development. These issues are responsible for the central government, and these impacts will be occurred indirectly and in the future. However, these issues will be considered at the stage of the selection the development site.

As mentioned above, there are some development issues in the Central Region. For the consideration of these, the cooperation of the authorities concerned is indispensable.

10.5 Development strategy and projects and programs to be required (toward 2010) on natural environmental conservation

The development strategy on tourism in Central Region is as follows:

- To protect and improve the natural condition and city condition as a base on tourism development, and
- To implement tourism development sustainable through adequate EIA system and human resource development.

In accordance with these strategies, the following projects/ programs are required.

10.5.1 Protection and improvement of natural condition

For the protection and improvement of natural condition, which has a role of the base of the tourism development, the following measures are required:

- Flood control
- Water resource development
- Forest management

10.5.2 Protection and improvement of city condition

For the protection and improvement of city condition, which has a role of the base of the tourism development, the following measures are required:

- Water pollution control in Da Nang, Hue and Nha Trang, and
- Solid waste management in Da Nang and Hue.

10.5.3 Protection and mitigation from environmental impacts by tourism development

For the protection and mitigation from environmental impact by tourism development, the following measures are required:

- Establishment of capability on strategic environmental assessment on tourism planning
- Improvement and upgrading of environmental impact assessment system
- Establishment of environmental monitoring system.

10.5.4 Measures for global issues and human resource development

For the measures for global issues and human resource development, the

followings are required:

- Coastal management
- Protected area management
- Capability building of governmental staff on tourism development
- Upgrading on environmental awareness of governmental staff, private company, and residents
- Environmental education of students

10.6 Priority projects and programs (toward 2005) on natural environmental conservation

The following projects/ programs are selected as priority projects/ programs on natural conservation.

Coastal Management

TM3: Nha Trang Coastal Resource Management Program

River Management

TM9: Phong River (Hue) Management Program

TM11: Thu Bon River (Hoi An) Management Program

Solid Waste Management

TM10: Hue Urban Waste Management Program

TM12: Hoi An Urban Waste Management Program

10.6.1 Coastal Management (Nha Trang Coastal Resource Management Program)

The outline of the Nha Trang Coastal Resource Management Center will be established for the following objectives (Table 10.6.1):

- Establish the coastal management master plan in Nha Trang Province;
- Assist the establishment of coastal management in the south part of the Central Region;
- Improve the existing EIA system in Nha Trang Province
- Implement water quality test at rivers and sea in Nha Trang Province;
- Evaluate the existing condition of wastewater from factories and domestic wastewater in Nha Trang Province;
- Implement the environmental seminar for government staff and private company in Nha Trang Province; and
- Implement the environmental education for students and residents in Nha Trang Province.

10.6.2 River Management (Phong River (Hue)/ Thu Bon River (Hoi An) Management Program)

The outline of the programs on river management is as follows:

- Establish the river management master plan
- Establish and improve the existing river management system

- Implement the river management seminar for government staff

10.6.3 Solid Waste Management (Hue/ Hoi An Urban Waste Management Program)

The outline of the programs on solid waste management is as follows:

- Establish the solid waste management master plan
- Establish and improve the existing solid waste management system
- Develop human resource concerning on the solid waste management.

Table 10.6.1 Project profile

Project Title: Nha Trang Coastal Management Center	
Project Implementing Agency: DOSTE of Kahn Hoa Province	
Project Location:	Project Description: The Center will be established for the following objectives: To establish the coastal management master plan in Nha Trang Province; To assist the establishment of coastal management in the south part of the Central Region; To improve the existing EIA system in Nha Trang Province To implement water quality test at rivers and sea in Nha Trang Province; To evaluate the existing condition of wastewater from factories and domestic wastewater in Nha Trang Province; To implement the environmental seminar for government staff and private company in Nha Trang Province; and To implement the environmental education for students and residents in Nha Trang Province.
Project Schedule: Building & Laboratory Construction: 2003-2004 Arrangement of Office Supply, Water Quality Test Equipment, Survey Equipment: 2004 Staff arrangement and training: 2003-2004 Statement of Need: Agreement on the establishment of the Center by Nha Trang People's Committee, DOSTE in Nha Trang Province, related authorities; Provision of the land; Preparation of the operation cost of the office, laboratory, and survey; and Preparation of the salary of the additional staff. Project Benefit: Improvement and prevention from coastal environment in Nha Trang Province; Upgrading of the initiatives of DOSTE in Nha Trang Province in the south part of the Central Region; Enforcement of DOSTE in Nha Trang Province; Prevention from environmental impact of the development by adequate implementation of EIA; Upgrading of the skill of water quality test; and Improvement and upgrading on environmental awareness of people in Nha Trang Province. Project Cost Estimate: Building & Laboratory Construction: US\$ 300,000 Arrangement of Office Supply, Water Quality Test Equipment, Survey Equipment: US\$ 300,000	

10.7 Initial environmental assessment (IEE) for projects/ programs classification on the environmental viewpoint

Thirty-seven (37) projects/ programs are proposed in the Study. These projects/ programs are categorized into three (3) types as shown in Table 10.7.1.

10.7.1 IEE for Each Project/ Program

Type A: Projects/ programs not including building construction

Type A-1 projects/ programs are mainly institutional ones, and Type A-2 mainly small office rental out of Vietnam. Therefore environmental impacts by Type A projects/ programs are not occurred.

Type B: Projects/ programs including building construction

This Type projects/ programs are mainly small-scale building construction/ improvement and park preparation/ improvement. Therefore environmental impacts by Type B projects/ programs are not occurred. The project/ program proponents should discuss with DOSTE in each province.

Type C: Infrastructure development projects/ programs

This type projects/ programs have the possibility to affect the environment. Table 10.7.2 shows environmental impacts by each projects/ programs. All projects/ programs are required the preparation of EIA in accordance with Vietnamese EIA regulations.

Table 10.7.1 Projects/ programs classification on the environmental viewpoint

Type A: Projects/ programs not including building construction	
Type A-1: Institutional projects/ programs	
ID2: Establishment of Vietnam National Tourism Organization	
TD2: Handicraft Product Improvement Program	
TD4: Historical - Cultural Museum Information Network	
TD10: Village Tourism Supporting Program	
Type A-2: Office Rental projects/ programs	
ID3: Set-up of VNTO Overseas Office in Key Source Market – I (Paris, Los Angeles, Tokyo, Guangzhou)	
ID4: Set-up of VNTO Overseas Office in Key Source Market – II (London, Beijing, New York, Sydney, Osaka, Bangkok)	
Type B: Projects/ programs including building construction	
ID1: Central Vietnam Tourism College Development Program	
TD1: Set-up of Tourism Information Center (TIC) – I; Principal (Da Nang) and Sub-Ordinate (Hue & Quang)	
TD5: Phung Hung Mall Development	
TD6: Hoi An Visitor Center Development	
TD7: Set-up of Tourism Information Center (TIC) – II; Other Provinces	
TD8: Handicraft Promotion in Rural Area (Champa)	
TM1: My Son Archeological Park Improvement	
TM2: Hoi An Urban Management Program	
TM3: Nha Trang Coastal Resource Resources Management	
TM4: Ban It Champa Park and Site Museum	
TM5: Nhan Champa Park and Site Museum	
TM6: Ponagar Champa Park and Site Museum	
TM7: Po Kong Galai Champa Park and Site Museum	
TM8: Nhan Champa Park and Site Museum	
TM13: Other Champa Site Improvement	
Type C: Infrastructure development projects/ programs	
Type C-1: Airport development	
TR1: Da Nang International Airport Terminal Improvement	
TR4: Hue Airport Improvement	
TR5: Nha Trang Airport Improvement	
Type C-2: Road & train development	
TR2: Phon Nha Cave Access Road Improvement	
TD11: Hue - Da Nang Tourism Train Development	
TD15: Coastal Cycling Road Network	
Type C-3: Port development	
TR3: Cruise Ship Passenger Terminal at Da Nang Port	
TD14: Nha Trang Marina Development	
Type C-4: Tourism development	
TD3: Lang Co Resort Development	
TD9: My Khe - Non Nuoc Coastal Area Development	
TD12: Imperial Enclose Restoration Program	
TD13: Khe Ga Cape Area Resort Development	
Type C-5: River Management	
TM9: Phong River (Hue) Management Program	
TM11: Thu Bon River (Hoi An) Management Program	
Type C-6: Solid Waste Management	
TM10: Hue Urban Waste Management Program	
TM12: Hoi An Urban Waste Management Program	

Table 10.7.2 Environmental Impacts by each Projects/ Programs

Type of projects/programs		C-1: Airport development	C-2: Road & train development	C-3: Port development	C-4: Tourism development	C-5: River Management	C-6: Solid Waste Management
Environmental items							
Social environment	Resettlement				X	X	X
	Economic activities	X	X	X	X		
	Traffic/ public facilities	X	X	X	X		X
	Split of communities						
	Cultural property		X		X		
	Water rights/ rights of common			X	X	X	
	Public health condition						X
	Waste			X	X	X	X
Natural environment	Hazard (risk)						
	Topography/ geology			X	X	X	
	Soil erosion				X		
	Groundwater						X
	Hydrological			X	X	XX	X
	Coastal zone			XX	XX	X	
	Fauna/ flora	X		XX	X	X	X
	Meteorology						
Pollution	Landscape			X	X	X	X
	Air pollution						XX
	Water pollution			X	X	X	XX
	Soil contamination						X
	Noise/ vibration	X					
	Land subsidence						
Offensive odor						XX	

Note: XX: The environmental items to which special attention has be paid. They might cause serious impacts that may affect the project formation depending on the magnitude of the impacts and the possibility of the measures.

X: The environmental items which may have a significant impact depending on the scale of project and site conditions.

No mark: The environmental items requiring no impact assessment since the anticipated impacts are, in general, not significant.

In case of the comprehensive development projects, all the items are classified in X, because their studies are usually at the master planning stage and the extent of impacts are not clear.

11. Social Environment

11.1 Results of Social Impact Assessment Survey in the Study Area

11.1.1 Objectives of the Survey

Objectives

Many negative impacts caused by tourism development are considered. The surveys of tourist in some major tourist spots have been conducted in order to understand present conditions and trend of tourism market of Vietnam. However, the other stakeholders such as tourist industry, government officials, local communities, etc. are not involved well into the survey to get their ideas toward tourism and to assess the socio-economic impacts and risks of tourism. In order to find the potentials and constraints of tourism development, to consider the measures to reinforce the advantages and overcome the problems, and to propose the sustainable tourism for the locality, the social environment impact survey is necessary with all target stakeholders.

The survey aims to collect and analyze the information such as ideas and attitudes of the stakeholders regarding tourism, their suggestions for solutions to mitigate adverse impacts and promote positive impacts, and opinions for appropriate tourism in each place with sustainability.

Survey Methods

The survey was conducted at the following 5 sites.

- Mai Chau (Lac Village): already popular as village tourism with an ethnic minority group and was selected as a pilot survey for this Survey
- Hoi An: historical town as World Heritage
- Lang Co Beach (Loc Hai Commune): beach resort located between 2 big cities
- Buon Don (Tri and Don Hamlets): village tourism in Central Highlands, famous for elephant riding
- Khe Sanh: potential village tourism in the Study Area

Table 11.1.1 Schedule of Social Survey

Activity	Time	July		August
		I	II	
Pilot Survey in Mai Chau District	—			
Meeting for Feedback of the Pilot Survey	—			
Social Survey:				
1. Hoi An		—		
2. Lang Co		—		
3. Buon Don		—		
4. Khe Sanh		—		
Analysis of the Results		—	—	
Submission of the Report			—	
Follow-up Activities				—

One team was consisted of one team leader and at least 4 surveyors. The surveyors were trained to understand and familiarize with the objectives and the way of the survey by the JICA Study Team, also through the Pilot Survey in Mai Chau.

Interview survey was conducted at relevant sites using questionnaires. The JICA Study Team members visited the sites partly to join or supervise the survey process. The number of total samples is 242. The samples cover related persons such as local officials, business people (hoteliers, restaurant, shop owners, etc.), tour guides and tour companies, residents who have been already engaged in tourism, and those who have not been involved in tourism yet.

11.1.2 Socio-economic Conditions of the Survey Sites

All information collected during the Social Survey and the summarized results are presented as follows.

Table 11.1.2 Socio-economic Conditions

	Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune	Khe Sanh Town
Population	445 persons	785 persons	78,963 persons	10,730 persons	9,088 persons
No. of Households	101	153	16,855	2,028	1,835
Ethnicity (Share of Total Population)	Thai (99.8%) Kinh (0.2%)	Mnong (61.8%) Ede (19.7%) Lao (9.4%) Others (Kinh, Gialai, Thai, Mien, Tay)	Kinh (97.5%) Chinese (2.5%)	Kinh (100%)	Kinh (87%) Bru Van Kieu (10.2%) Pa Co (2.4%) Other (Thai, Kado, etc.)
Labor Forces (Share of Total Labor)	Agriculture: 84% Commercial: 14% Unemployed: 0%	Agriculture/forestry: 84% Commercial: 14% Unemployed: 0%	Agriculture: 25% Commercial: 17% Cottage industry: 16% Unemployed: 4.8%	Agriculture: 20% Fishery: 35% Commercial: 40% Unemployed: 0%	Agriculture/forestry: 34% Manual worker: 39% Commercial: 12% Unemployed: 2.2%
Average Total Monthly Income per Household (VND) *	1,070,000 1,350,853	795,994 1,236,037	2,196,245 2,287,304	1,336,131 1,760,631	1,323,073 1,323,073

Note) * Upper figure is for total households interviewed and lower figure is for households with tourism activities
Source) JICA Study Team

Population

Among the 5 survey sites, Hoi An Town has the largest population of 79,000 consisting of majority group of Kinh (98% of the total residents). Ethnicity in Loc Hai Commune is single of Kinh and almost all residents are Thai in Lac Village. Other 2 places have various ethnic minority groups. The areas with local residents of other than Kinh are making ethnic minority groups as the most important tourism attraction.

Economic Activities

Lac Village, Tri/Don Hamlets and Khe Sanh Town are based on agriculture, and

commercial activities including tourism are the supplementary as the labor force. From the economic aspect, however, status of agriculture has decreased in Lac Village and Hoi An Town. Loc Hai Commune is a traditional fishing village and has changed to tourism village. In Hoi An Town and Khe Sanh Town, there is the unemployed. As for income level, Hoi An Town shows the highest figure, followed by Loc Hai Commune. Other 3 sites show the similar amount. It is clear that the average income of households with tourism activities is higher than that of households without tourism activities.

Infrastructure

Hoi An Town is the only place with piped water system (60% of the total households). Others are using water well, natural stream and rainwater. In Lac Village, Hoi An Town and Khe Sanh Town, 100% of the households are connected with electric line. The rate of households equipped with telephone is still low. The share of households with toilets varies from place to place and Tri/Don Hamlets show the lowest number. All households discharge wastewater directly or indirectly into the rivers and streams without any treatment. Garbage is disposed in different ways such as burned by individual household near or far from their houses, buried into the land, open dumping, a little is collected by the local government and some are recycled.

11.1.3 Present Situations of Tourism Development of the Survey Sites

Table 11.1.3 Number of Tourists and Accommodations

	Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune	Khe Sanh Town
Number of Tourists in 2000 (persons)	5,121	53,000	193,185	17,000	630
- Domestic	2,156	51,500	97,823	13,600	380
- International	2,965	1,500	95,362	3,400	250
Number of Accommodations	18	2	27	3	2

Source) JICA Study Team

Tourists

The total number of tourists per year is the largest in Hoi An. Since Khe Sanh has not been involved into tourism, the number is still small and most of the international tourists visit the ruins of the war for one-day trip. In Lac Village, the larger number of international tourists is received than that of domestic tourists. Major international tourists in all sites are from Australia, France, UK, U.S.A, etc. The total number of tourists includes tourist stay over night and one-day and half-day trips.

Hotels and Accommodations

In Lac Village, all accommodations are operated by individual households and the quality varies depending on their economic capacity, the number of tourists and relationship with tour companies/guides. In Tri Hamlet, 2 houses are owned and operated by Don Hamlet Tourism Center as accommodation which was established by Ban Me Tourism Trade Stock Company with financial support by provincial government in 1998. In Loc Hai Commune, there are 2 private hotels

and 1 state-owned hotel. However, the capacity is not enough to accommodate all visitors. In Keh Sanh, 2 accommodations are District guest houses which are usually used by government and business people. As tourists rarely stay there, the quality is low and has not been improved.

Shops

All merchant shops in Lac Village are selling traditional products to tourists and daily goods are bought in the district market. Hoi An Town has many shops and most of all provide services to tourists, selling handicrafts and foods.

11.1.4 Attitude toward Tourism Development of Local Inhabitants in the Survey Sites

Income from Tourism

Table 11.1.4 Income from Tourism Activities

	Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune
Average tourism income per month per household (A): VND	535,198	642,222	1,376,087	681,131
Average share of (A) in total income	39.6%	52.0%	60.2%	38.7%

Source) JICA Study Team

All households with tourism activities answered that income increased after they participated tourism activities. The income amount is various depending on the kind of activities and its scale. The highest income from tourism is 15million VND in Hoi An Town and the lowest is 40,000 VND in Tri/Don Hamlets. Tourism is important in terms of income resources for all sites and especially Hoi An Town and Tri/Don Hamlets show the share of tourism income among total income is more than 50%.

Tourist Attraction

The respondents consider that the following activities attract tourists. It can be said that the respondents understand and appraise their local attraction for tourists adequately.

Table 11.1.5 Tourist Attraction

Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune
To enjoy contact with local people	To see traditional performance	To see historical/cultural assets	To enjoy beautiful nature
To see traditional performance	To enjoy beautiful nature	To buy handicrafts	To enjoy local foods
To enjoy beautiful nature	To see cultural assets	To enjoy beautiful nature	To see cultural assets
To enjoy local foods	To buy handicrafts	To enjoy local foods	To see traditional performance
To buy handicrafts	To enjoy contact with local people	To see traditional performance	To enjoy contact with local people

Source) JICA Study Team

Positive and Negative Impacts

Positive and negative impacts caused by tourism are considered as follows.

Table 11.1.6 Positive Impacts

No.	Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune
1	Increase of income	Increase of income	Improvement of infrastructure	Improvement of infrastructure
2	Improvement of infrastructure	Get good jobs	Increase of income	Get good jobs
3	Get good jobs	Improvement of infrastructure	Get good jobs	Area become clean
4	Area becomes clean/beautiful	Various information of the outside	Improvement of social services	Improvement of social services
5	Improvement of social services	Introduce modern lifestyle	Area become clean/beautiful	Increase of income

Source) JICA Study Team

Many respondents recognize that infrastructure has been developed and some jobs have been created by tourism development. Also, tourism has increased household income (In Loc Hai Commune, that order is lower than the other areas).

Table 11.1.7 Negative Impacts

No.	Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune
1	Decrease of public security	Water pollution	Many street vendors	Many street vendors
2	Congestion with vehicle and people	Air pollution	Decrease of public security	Lifestyle change/Loss of tradition
3	Water pollution	Lifestyle change/Loss of tradition	Lifestyle change/Loss of tradition	Air pollution
4	Lifestyle change/Loss of tradition	Decrease of public security	Nature degradation	Decrease of public security

Source) JICA Study Team

Water or/and air pollution is recognized in most areas. However, it is sometimes difficult to decide tourism development is the cause of water pollution. Lifestyle has been changed and tradition has been lost because many visitors outside bring different culture and their own lifestyle. It is characterized that street vendors have increased as tourism development in Hoi An Town and Loc Hai Commune and they cause troubles with tourists. Also, the decrease of public security is seen in Hoi An Town and Lac Village.

Problems and Difficulties with Tourists

Major problems occurred between residents and tourist are communication with foreign languages and price of goods and charges such as entrance fee and usage of facilities. Lack of facilities including maintenance of historical assets is also recognized as problems for treating tourists by the respondents. Therefore, in order to attract more tourists to come and detain longer, the respondents consider that improvement of facilities especially road condition and toilets, improvement of language ability and cleaning of the area are necessary.

Willingness to Join Tourism

Most of the respondents are enjoying in doing tourism activities now and want to work in other ways such as tour guides, salespersons and hotel staff, etc., if possible. Some are, however, reluctant to do so. The reasons for willingness are increase of income, interested in tourism, and getting jobs. Some want to

make many friends through tourism activities. The reasons for not participating in tourism are that present job is good and that they do not like outsiders who disturb their daily life.

Preferable Future Development for the Community

In all survey sites, respondents prefer the community to welcome many tourists, to develop infrastructure and to increase income in future. As the local characteristics, Lac Village and Tri/Don Hamlets prefer to increase agricultural production, Loc Hai Commune to increase sea products, Hoi An Town and Loc Hai Commune to develop as beach resort. Some in Loc Hai Commune consider that awareness raising of tourism importance is necessary for local development and environment protection.

Necessities to Welcome Tourist and Government Support

All survey sites answer that as the first priority, renovation of houses and facilities such as toilets, bathrooms and kitchen, and equipment like telephones and TV, and as well as development of infrastructure (road and electricity system) are necessary. Fresh water resources and cleaning of the area and environment protection are also necessary to be considered. As government support, investment in infrastructure such as road and fresh water is the most important. Loan system to renovate houses for tourism activities and join tourism for the local people, language classes and provision of tourism business knowledge and formulation of legal system related to tourism business are also needed by the local people. Among the 4 survey sites, Hoi An has the higher demand than others showing strong intention of tourism development.

Table 11.1.8 Necessary Government Support

	Lac Village	Tri/Don Hamlets	Hoi An Town	Loc Hai Commune
To invest infrastructure	X	X	X	X
To lend capital to reconstruct houses and join tourism	X		X	X
To provide language classes	X		X	X
To control tourism business (clear legal system)		X	X	
To give knowledge about tourism business			X	X
To supply fresh water	X	X		

Source: JICA Study Team

Potential Tourism Development

Compilation of responses in Keh Sanh where tourism development has not started yet but has a possibility. Many of the respondents in this town have experienced to travel in the country. Their major purposes are to visit relatives and friends and business. They usually stayed in relatives' and/or friend's houses. Because of the location, people want to show the beautiful nature to visitors and they will welcome tourists even in their houses to stay together. However, since there do not exist specific local products and foods, the respondents do not consider them as the attraction. The influences of visiting many tourists are improvement of infrastructure, job creation, income increase as positive aspect

which are the same situation as the places already with tourism development. Negative impacts are not predicted by the people.

Hotel Interview

Since the number of hotels/accommodations is limited in Loc Hai Commune and Tri/Don Hamlets, all accommodations were interviewed. The perception of hotel employees does not differ from the local residents. However, it is likely that negative impacts are not recognized so seriously by hotel employees, compared with the local people.

11.1.5 Conclusion

Even though tourism development plan and infrastructure development plan and projects exist, their implementation and enforcement are not appropriate and sufficient.

From the Survey results, the following issues can be concluded.

- All respondents are willing to be hospitable to visitors by nature and require more activities to attract tourists. If the training and knowledge for tourism business are provided, their abilities and services can be improved.
- As a result of tourism development, income increase is clearly recognized by the people and it is the strong incentive to do tourism activities. Though it cannot be said that development of infrastructure and social services is directly from tourism, the priority is put on the infrastructure development by the local people.
- In spite of the income increase from tourism activities, the local people doubt the usage of income tax by the local government. There should be clear and transparent explanation regarding taxation system and its return of a part of tax to the community.
- Khe Sanh Town has a plan to be the second Da Lat (plateau with good climate and natural beauty) by development of road network connecting major tourism spots. Accommodations are not enough yet in quality and quantity and local products and attraction are not specified at the moment. Further, since the inhabitants are not involved into the planning, their ideas of tourism development is not practical.

11.2 Tourism and Rural Development

11.2.1 Social Environment Impacts of Tourism Development

Based on the results of the Social Survey, information collected and observation by JICA Study Team, it was found that tourism development causes the positive and negative impacts on social environment. The comparison among different survey sites can be shown in APPENDIX (Table 11). Among them, the important impacts are discussed from the viewpoint of rural development.

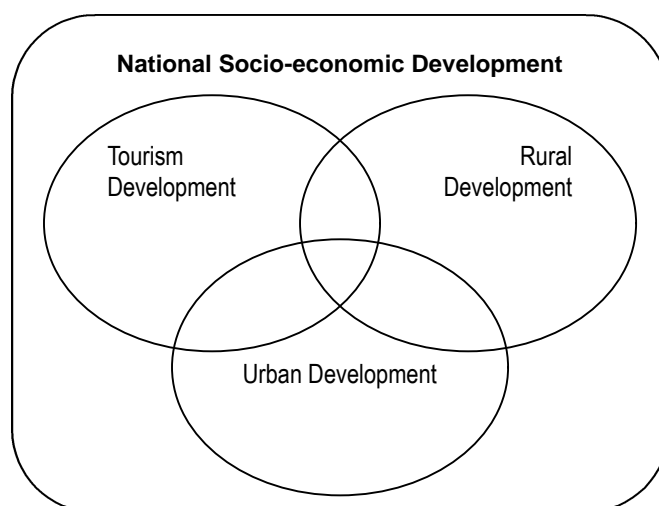
Positive Impacts

One of the targets of rural development is the increase of living standard of the local people. Poverty can be alleviated and welfare be improved through;

- development of infrastructure, and social services,
- increase of job opportunities,
- increase of income, and
- increase of local products.

They are major positive impacts of tourism development raised by the local people. Since tourism development can be considered to be a part of rural development as shown in the figure below, it is important to decide where tourism development should be placed in regard to the whole rural development in order to achieve effective tourism development.

Figure 11.2.1 Rural Development and Tourism Development



Source: JICA Study Team

Additionally, minority groups in the society (ethnic groups, women, the poor, the unemployed, etc.) can be involved if the opportunities to them are available. The local people increase their awareness that tourism development contribute to rural development.

(2) Negative Impacts

Negative impacts caused by tourism development will also damage rural development by;

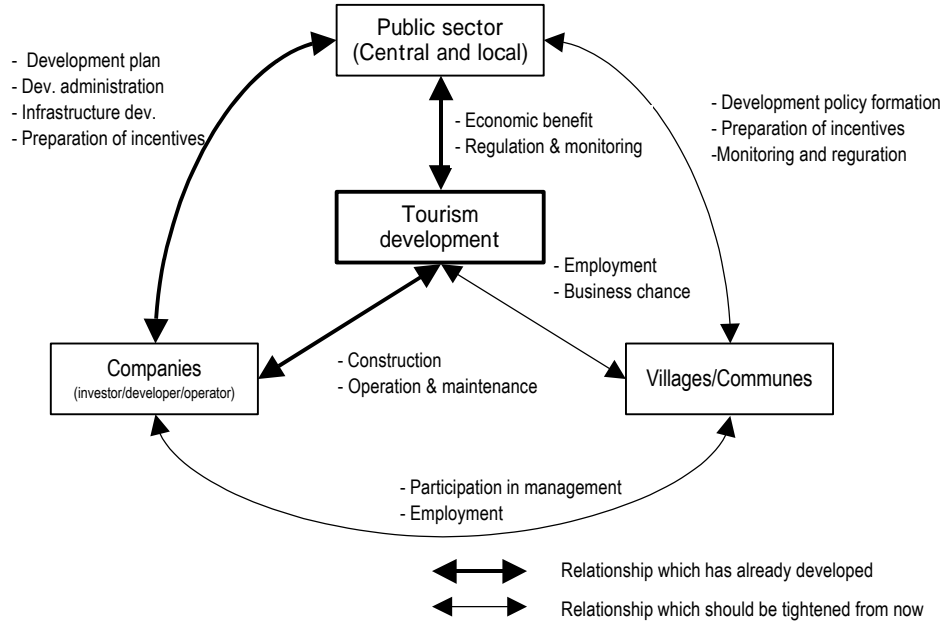
- sanitation problems and water pollution,
- economic disparity,
- transportation problems and noise/air pollution,
- lack of government support and information, and
- lack of development plan and regulations

Mitigation of these impacts can lead to prevent tourism development, rural development and even national socio-economic development from their

deterioration and unsuccessfulness.

Tourism development projects as well as other development projects usually involve 3 groups as major stakeholders in the Figure below.

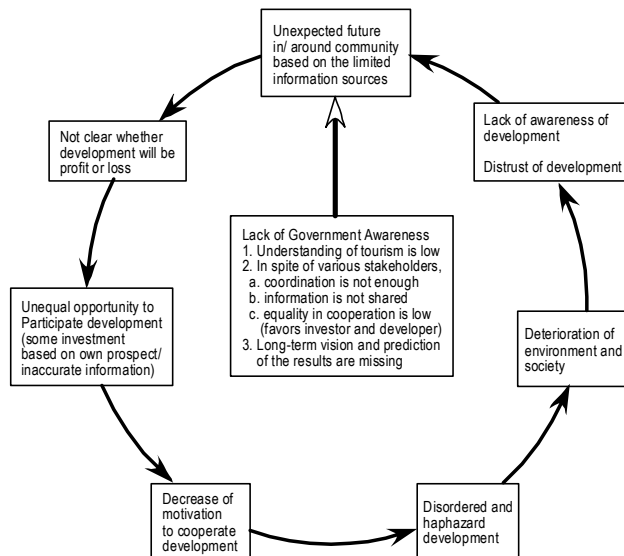
Figure 11.2.2 Relationship of Major Stakeholders



Source: JICA study team

At this moment, the relationship between the government and developer/investor has established in many cases. The other 2 relationships between the government and community and between community and developer/investor have not been established yet or have not been strong enough. Due to this uncompleted relationship among the stakeholders, the following vicious circle occurs.

Figure 11.2.3 Vicious Circle of Lack of Community Participation



Source: JICA Study Team

The reasons for lack of community participation are that the local people have no awareness of development, because their living conditions have not changed or become worse. For example,

- Social and natural environment deteriorate
- There are no job opportunities
- There are no business chances
- Disparity in the community society and region becomes large
- The background of this circle is lack of the government awareness, which provides very limited information of development to most of the local people.

Without enough information (in many cases, rumor is a major information source), the local people do not expect what will happen in/around their places. They do not know whether development will bring profit or loss to them. Based on a limited expectation, the capable persons financially and/or technically will rush to invest. Instead of cooperation, the people tend to compete anticipating the other persons without planning and order. It causes unexpected inequality and damage and only limited persons can get benefit. This makes the local people uneasy and confused with tourism development. The background of these events is based on the lack of the government awareness. This disturbs community involvement, which makes development unsustainable. Then, the inappropriate events happen one after another and environment and society deteriorate. The people become distrusted tourism development and the government and go back to the first step to continue these steps. In order to break this circle, good coordination, investment planning and involvement of local people is essential.

If the government provides support and appropriate information, the local people can understand what will happen. If they decide it will be benefit, the local people can participate tourism development. This provides motivation of cooperation with development. Further, if the living conditions become better, people will become aware of advantage of development. For example,

- Environment and welfare becomes better
- There are job opportunities equally
- Business develops
- People recognize the local advantages of their area

The people can receive benefit directly and indirectly and equal opportunities. Then, sustainable and efficient development can be achieved, which will be benefit not only for the region but also nation.

For this purpose, Local Participatory System is necessary to be formulated. The basic conditions are;

- Disclosure of Information: Plan should be informed to the local people.
- Transparency: All information related the area including advantages and disadvantages should be presented.
- Opportunity to participate: The local people can provide opportunities to

- consider the way of participation by themselves.
- Maintenance of the community: The structure of the existing community should not be destroyed.

11.2.2 Issues

In order to harness potentials and mitigate negative impacts, the following issues should be discussed.

Infrastructure development

Infrastructure and social services should be developed not only for tourism but also rural development. Road, electricity, and water supply, wastewater treatment and garbage disposal facilities development in the village, improvement of individual toilets in the house and the public toilets in the village, effect the village directly. Health clinic and schools are indirect effects of provision of healthy and capable labor force.

Provision of the government support and information

Based on 11.2.1, government technical and financial support and supply of information to the parties concerned.

Community involvement and training

As a whole community, development plan should be formulated with involvement of local people. Their needs and opinions should be reflected to the plan and promote their motivation for cooperation.

Environment protection

Natural environment is often utilized as attractive factor for tourism. In order to achieve sustainable tourism, natural environment should be protected. This will also support for rural development.

11.2.3 Tourism Development with Different Conditions

The issues pointed out in 11.2.2 can be seen how to effect tourism development as beach resort can be seen as follows.

Present condition

Some infrastructure without main road is not developed enough. Social and natural environment is delicate and its future depends on the plan of tourism development.

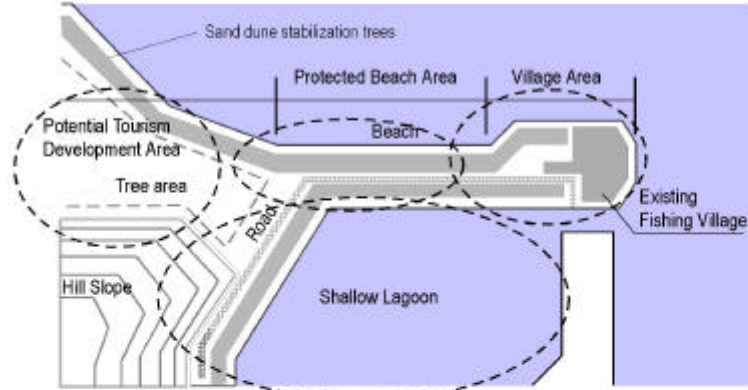
Without good planning, investment coordination and community involvement

Existing village is encroached by tourism development such as accommodation and tourism activity facilities and the life of the local people is disturbed. Natural and social environment are degraded and tourism development becomes stagnant.

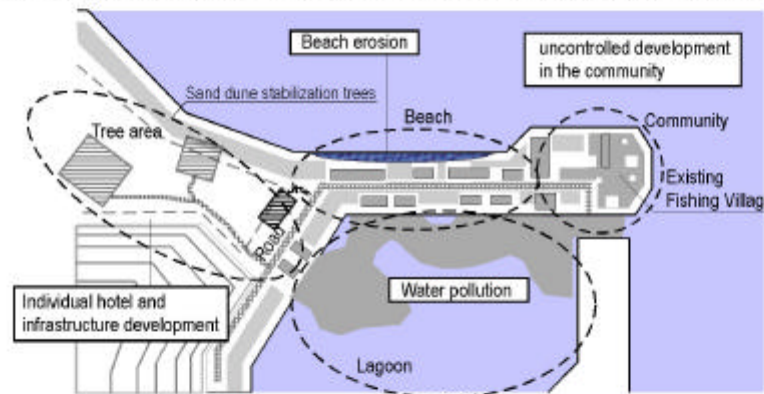
With good planning, investment coordination and community involvement

On the other hand, if all necessary conditions are available, tourism development can benefit not only the target area itself but also the community as a whole with sustainability.

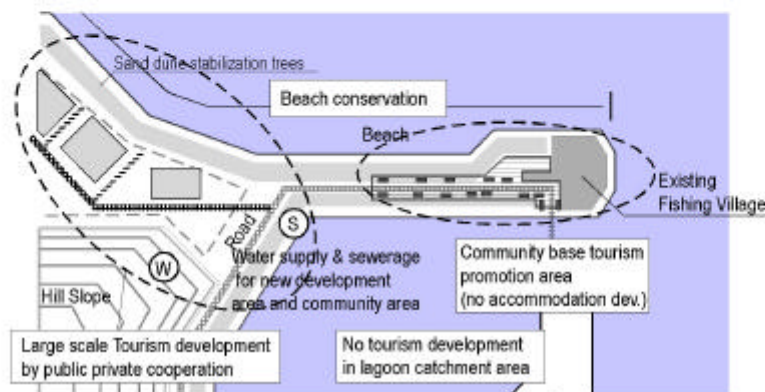
Figure 11.2.4 Sustainable Tourism Development (1)
Existing Natural and Social Condition of Potential Tourism Development Area



Tourism Development without Proper Planning, Investment Coordination and Community Involvement



Tourism Development with Proper Planning, Investment Coordination and Community Participation



Source: JICA Study Team

Figure 11.2.5 Sustainable Tourism Development (2)

<u>Existing Natural and Social Conditions</u>
Tourism development potential: <ul style="list-style-type: none">- Beautiful beach adjacent to a big city with good access- Fresh sea products
Natural environment: <ul style="list-style-type: none">- Risk of beach sand erosion (now protected by sand dune stabilization trees plantation)- Potential for pollution of shallow lagoon by waste water from catchment area
Social environment: <ul style="list-style-type: none">- A traditional community forms one fishing village area (Lagoon is important for fishing activity.)
Infrastructure: <ul style="list-style-type: none">- Major highway passing through the village- No piped water supply and sewage treatment facility

<u>Tourism Development without Proper Planning, Investment Coordination and Community Involvement</u>
Tourism development: <ul style="list-style-type: none">- Development of narrow sand dune area by clearing the sand dune stabilization trees- Hotels, restaurants and shops are constructed without consideration of future Highway improvement and infrastructure development- Large and medium scale development without sufficient and coordinated infrastructure- Small and medium scale development inside of the village without sufficient infrastructure and community development
Natural environment: <ul style="list-style-type: none">- Beach erosion due to the removal of dune sand stabilization trees- Lagoon water pollution due to the waste water inflow from the tourism development around the lagoon
Social impact: <ul style="list-style-type: none">- Inequal distribution of benefits by tourism development- Sanitation problem in the community due to the increase of waste from tourism business- Decrease of income from fishery in lagoon area due to the pollution
Sustainability: <ul style="list-style-type: none">- Tourism business will decline due to the deterioration of the natural and social environment- Marine resource for economic base of the village will be deteriorated due to the pollution of the lagoon

<u>Tourism Development with Proper Planning, Investment Coordination and Community Involvement</u>
Tourism development: <ul style="list-style-type: none">- Narrow sand dune area conserved and designated as limited development area for local communities beach development- Large and medium scale tourism with sufficient and coordinated infrastructure will be developed in the designated tourism development zone (The infrastructure will cover tourism zone and the village.)- Small and medium scale tourism development inside of the fishing village with sufficient infrastructure and community development
Natural environment: <ul style="list-style-type: none">- Beach environment will be kept clean by conservation of sand stabilization trees- Lagoon water to be kept clean by provision of the waste water treatment and development control of the lagoon catchment area
Social impact: <ul style="list-style-type: none">- Equal opportunities for the local residents to participate the tourism development- Clean/attractive place for the tourists will contribute local tourism business as income source for the community- Income increase from tourist demand increase on fishery products of lagoon area
Sustainability: <ul style="list-style-type: none">- Tourism business will be sustainable by natural environment conservation and local community support for the development- Marine resource for economic base of the village will be conserved and used sustainably

Source: JICA Study Team

11.2.4 Sustainable Tourism Development

In order to achieve, maintain, and improve sustainable tourism development, the following two factors are necessary.

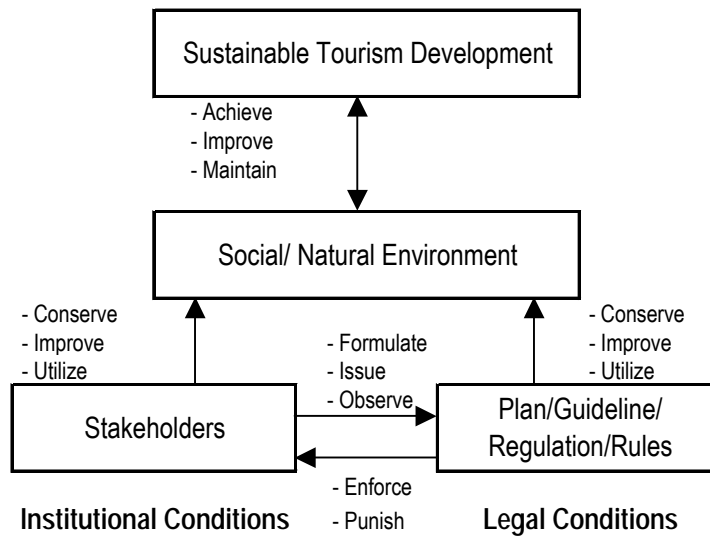
Institutional Condition

As discussed in 11.2.2, major stakeholders should cooperate. If their relationship works well, social and natural environment can be protected and improved by these organizations.

Legal conditions

If the above institutional conditions are good, the concerned organizations can formulate and issue the necessary plans, guidelines, regulation and rules which can conserve and improve/utilize effectively social and natural environment. Legal system can force to the organizations to obey it and can punish if they do not.

Figure 11.2.6 Factors necessary for Sustainable Tourism Development



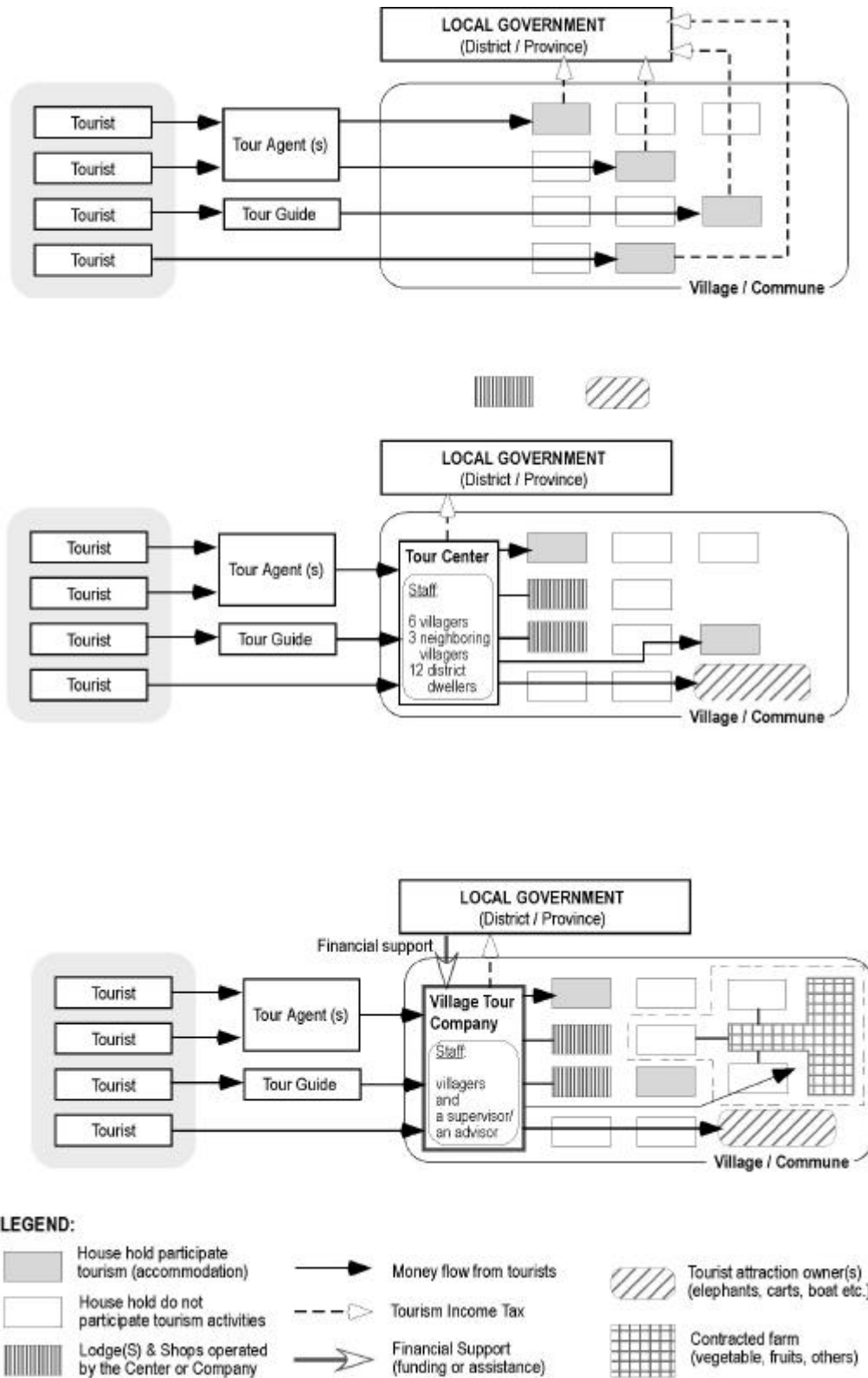
Source: JICA Study Team

11.3 Guidelines for Sustainable Village Tourism

11.3.1 Village Tour Operation System

At this moment, there are 2 types of village tour operation system in Vietnam as shown below. Each system has advantage and disadvantage. Considering these points, a new system is proposed after the existing 2 types are modified.

Figure 11.3.1 Village Tour Operation System



Source: JICA Study Team

In the individual system, investment is spontaneous based on the household's budget and no systematic plan can be formulated. On the contrary, as advantages of the new system, village company can plan activities and investment in advance within their financial and technical capacity. Also, the money flow can be seen clearly and the local people can understand where their money goes to and how they will be used. This makes the local people work not only for themselves but also for a whole community and helpful for promotion of coordination and collaboration among key stakeholders. Especially, in case of the clear events of development of infrastructure and socio-economic welfare of the villagers, community participation will be increased and the village community will be empowered. Since all tourists check in the village company, the village and the local government can understand the development situation correctly and also can manage all tourists in terms of social and natural environment protection.

11.3.2 Sample of Guidelines

The points are the process of the preparation and role and responsibilities of the different stakeholders.

11.3.3 Evaluation List of Tourism Development

In the process of the implementation of village tourism prepared according to the above guidelines, evaluation list for tourism development should be utilized in order to review and appraise. Depending on the situation, the development process can be modified and improved for appropriate development accordingly.

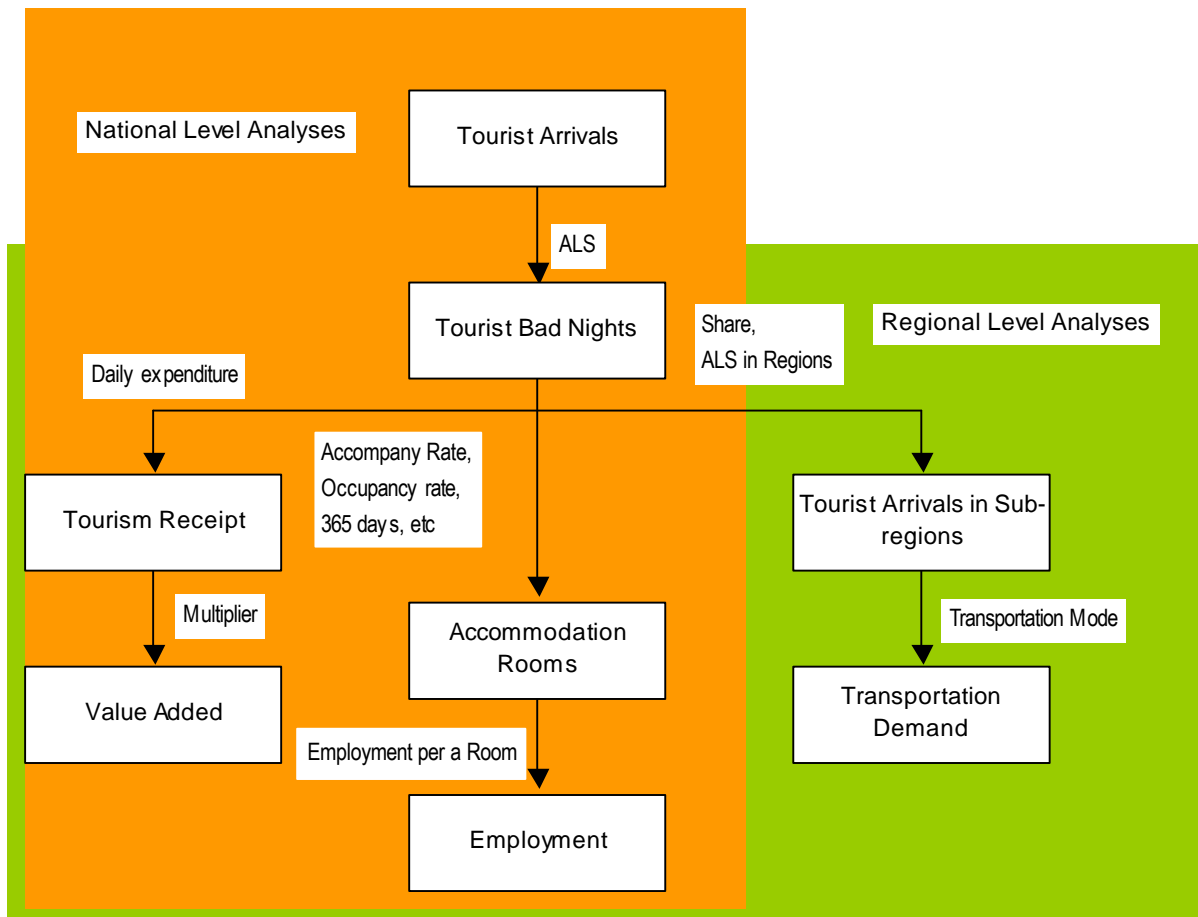
12. Frameworks for Tourism Development

12.1 Development Workflow

A workflow to introduce the tourism development framework for the Study Area until 2020 is shown in the Figure 12.1.1. In order to introduce key figure for tourism development, such as number of accommodation rooms, tourist arrivals and value added from tourism activities, national level framework has to be clarified. Therefore the JICA Study Team starts from the forecast of tourist arrivals to Viet man, both of international tourists and domestic tourists.

The JICA Study Team prepares for international and domestic tourist arrivals, accommodation rooms in regions, value added from tourism activities, and employment generation in the national level analyses, and prepares for accommodation rooms in sun-regions, value added from tourism activities, employment generations tourist arrivals in sub-regions in the regional analyses. Some key figures in the Study Area are compared with those in the Vietnam, and the role of tourism in the Study Area shall be revealed.

Figure 12.1.1 Process of Frameworks Formation



Source: JIC Study Team

12.2 Tourist Arrivals and Tourist Bed Nights

12.2.1 International tourist arrivals

JICA Study Team prepares for the forecast of international tourist arrivals until 2020 after the analyses of some scenarios in which the following aspects are considered.

- Shares in the world market and East Asia and the Pacific¹ market, etc. (Market share scenario),
- Growth rate of international tourist arrivals to Vietnam in recent years (Trend growth scenario),
- Proportion of Tourism Receipt from international tourists to Gross Domestic Products (GDP) (International Tourism Receipt scenario), and
- Development experience of Thailand, which is biggest destination country in the Southeast Asia, and has many similarities with Vietnam (Experience of Thailand scenario).

(1) Market share scenario

In this scenario, international tourist arrivals to Vietnam will keep current share in the world market and the Asia Pacific market. According to data from World Tourism Organization (WTO), the share of Vietnam is 0.27 percent in the world market in 2000, and 2.04 percent in East Asia & the Pacific in 2000. WTO also prepares for future tourism demand until 2020, and the JICA Study Team estimates international tourist arrivals in the assumption that the shares will keep the level in 1999.

Table 12.2.1 Market share scenario

(Unit: thou persons)

	2000	2005	2010	2015	2020	Remarks
World share	2,140	2213	2,716	3,383	4,215	0.27% in the world market
East Asia & the Pacific Share	2,140	2745	3,974	5,671	8,091	2.04% in Asia & the Pacific market

Note: *Italic* means estimations by the JICA Study Team
Source: JICA Study Team

The Table 1.2.1 shows the changes of international tourists arrivals until 2020. If the share were constant, international tourists arrivals will increase to 4.2 million in case of world market share. Annual average growth ratio is 4.1%, and it is very low level, compared with last five years, 9.6%. International tourist arrivals will increase to 8.0 million in case of East Asia and the Pacific market. Annual average growth rate is 7.1%, and reasonable level.

(2) Trend growth scenario

In this scenario, growth rate of international tourist arrivals will keep current growth rate, but it is impossible and unrealistic to keep high level of growth rate, 9.6% from the point of international tourist generation in the world (4.3%) and in

¹ East Asia & Pacific is defined by WTO.

East Asia and the Pacific (7.5%) until 2020, and development of facilities, infrastructures and human resources. That is why the JICA Study Team assumes that growth rate will keep 9.6% until 2010, and will change to 4.8%, the half level, from 2010 to 2020.

Table 12.2.2 Trend growth scenario

(Unit: thou persons)

	2000	2005	2010	2015	2020	Remarks
International tourists arrivals	2,140	3,390	5,369	6,794	8,296	Growth rate: 9.6% 2000-2010, and 4.8% 2011-2020

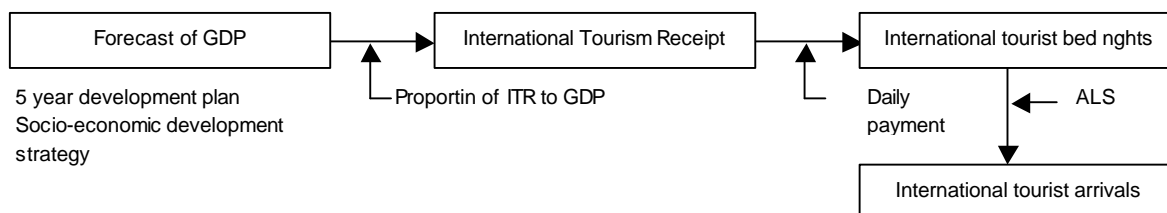
Source: JICA Study Team

The Table 12.2.2 shows international tourist arrivals under trend growth scenario until 2020. It will increase to 8.3 million persons in 2020. Annual average growth ratio will be 7.2%.

(3) International Tourism Receipt scenario

In this scenario, the proportion of Tourism Receipt from international tourists will increase gradually. That means tourism will play more important role in the economic activities than now. In 2000, the proportion was 2.50%, and the JICA Study Team assumes that the proportion will increase up to 3.0% in 2020. In this scenario, calculation process shown in the Figure 12.2.2, and another assumptions shown are needed.

Figure 12.2.1 Process to introduce international tourist arrivals



Source: JICA Study Team

Table 12.2.3 Assumptions in International Tourism Receipt scenario

Average Length of Stay (ALS)	Increase from 5.0 in 2000 to 5.6 in 2020, assumed by the JICA Study Team
Daily payment from international tourists	US\$75 per person per a day. Come from the output of the Airport Exit Survey in 2001.
Forecast of GDP until 2020	2001-2005: Follows 5 year development plan 2001-2005 (7.5%) 2005-2010: Follows socio-economic development strategy 2001-2010, The figure in 2010 is twice larger than it in 2000 (6.9%) 2011-2020: Assumed by the JICA Study Team (6.0%)

Source: JICA Study Team

The increase of international tourist arrivals until 2020 are shown in the Table 12.2.4. International tourist arrivals will arrive at 7.6 million persons under this scenario. Annual average growth rate will be 6.5%.

Table 12.2.4 International Tourism Receipt scenario
(Unit: thou persons)

	2000	2005	2010	2015	2020
International tourist arrivals	2,140	3,089	4,248	5,986	7,575

Source: JICA Study Team

(4) Experiences of Thailand scenario

Thailand is one of the successful countries for tourism development in the world, and is biggest country in Greater Mekong Sub-regions, from the point of international tourist arrivals.

Comparing Vietnam with Thailand, they have many similarities. They are located in the Southeastern Asia, and cultural tourism resource in Vietnam is as rich as that in Thailand. The Table 12.2.5 shows the development experience of Thailand during last 20 years. Annual average Vietnam has a potential to follow this experience.

In 1981, international tourist arrivals to Thailand are as same level as Vietnam in 2000, 2.02 thousand. And they arrived at eight million in 18 years. International tourist arrivals in Vietnam also have a potential to arrive at eight million around 20 years.

Table 12.2.5 Development of international tourist arrivals in Thailand
(Unit: thou persons)

	1979	1984	1989	1994	1999
International tourist arrivals	1,591	2,347	4,810	6,166	8,651

Source: Statistical Yearbook 1999, Tourism Authority of Thailand

According to four scenarios, the JICA Study Team set a forecast of international tourist arrivals until 2020, shown in the Table 12.2.6. International tourist arrivals will arrive at 4.2 million persons in 2010 and 8.00 million in 2020. The volume will increase twice in ten years, and four times in 20 years, and annual average growth rate will be 6.8%.

Table 12.2.6 International tourist arrivals to Vietnam until 2020
(Unit: percent)

	2000	2005	2010	2020
International tourist arrivals (thousand persons)	2,140	2,980	4,150	8,000
Share in the world	0.3	0.4	0.4	0.5
Share in East Asia and the Pacific	2.3	2.2	2.1	2.0

Source: JICA Study Team

The Table 12.2.6 also shows that the share of international tourist arrivals to Vietnam in the world will increase from 0.3 percent in 2000 to 0.5 percent in 2020. On the other hand, the share in East Asia and the Pacific² will decrease a little

² Eastern Asia the Pacific consists of 35 countries and economies such as Hong Kong, Taiwan, and Guam. It is defined by WTO

from 2.3 percent in 2000 to 2.0 percent in 2020.

12.2.2 International tourist bed nights

The JICA Study Team estimated that Average Length of Stay (ALS) by market sources will change of international tourists is 5.0 nights in 2000, and forecast it will increase to 5.6 in 2020 gradually. And in order to introduce international tourist bed nights by source market and by regions/areas, JICA Study Team considered the following aspects:

- Share of source markets in international tourist arrivals,
- Average Length of Stay (ALS) by source market (Chinese, short haul and long haul),
- Distribution to regions (the North, the Central and the South) and areas (the North Central Coast (C1), the Central Coast (C2), the South Central Coast (C3) and the Central Highland (C4))

The JICA Study Team set the targets shown in the Table 12.2.7 and the Table 12.2.8. Such figures and shares are set future growth potential of each source market and future changes of tour route by markets.

Table 12.2.7 Share of source market and ALS

(Unit: Share percent, ALS nights)

	China		Short haul		Long haul		Average ALS
	Share	ALS	Share	ALS	Share	ALS	
2000	30.3	2.8	34.9	8.0	34.7	4.0	5.0
2010	40.0	3.4	28.0	8.5	32.0	5.0	5.3
2020	50.0	4.0	20.0	9.0	30.0	6.0	5.6

Source: JICA Study Team

Table 12.2.8 Distribution of tourist bed nights to regions and areas

(Unit: percent)

		North	Central	C1	C2	C3	C4	South
2000	Chinese	87.0	11.0	9.0	1.0	0.5	2.0	0.5
	Short	15.0	10.0	2.0	2.5	0.5	5.0	75.0
	Long	35.0	12.0	4.0	2.0	4.0	53.0	2.0
2010	Chinese	77.0	14.5	8.0	2.5	2.3	8.5	1.7
	Short	20.0	15.0	7.5	3.5	3.5	65.0	1.0
	Long	32.5	17.0	6.0	3.0	5.0	50.5	3.0
2020	Chinese	67.0	18.0	7.0	4.0	4.0	15.0	3.0
	Short	25.0	20.0	10.0	5.0	3.5	55.0	1.5
	Long	30.0	22.0	8.0	4.0	6.0	48.0	4.0

Source: JICA Study Team

The Table 12.2.9 shows international tourist arrivals. International tourists arrivals from China will arrive at 4.0 million persons in 2020, with an annual growth rate (AGR) of 9.5%. That from short haul will arrive at 2.4 million, with AGR of 6.0%, and from long haul will arrive at 1.6 million, with AGR of 3.9%.

Table 12.2.9 International tourist arrivals by markets
(Unit: thou persons)

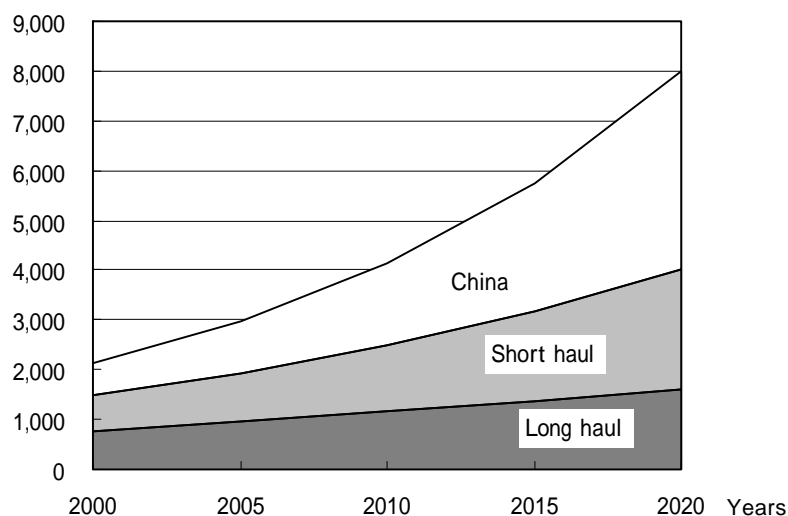
	2000	2010	2020	AGR (%)
China	648.6	1,660.0	4,000.0	9.5
Short haul	743.6	1,328.0	2,400.0	6.0
Long haul	747.8	1,162.0	1,600.0	3.9
Total	2,140.0	4,150.0	8,000.0	6.8

Note: AGR means annual average growth ratio from 2000 to 2020

Source: JICA Study Team

Figure 12.2.2 International tourist arrivals by markets

International tourist arrivals
(thou persons)



Source: JICA Study Team

Table 12.2.10 Distributions of international tourist bed nights

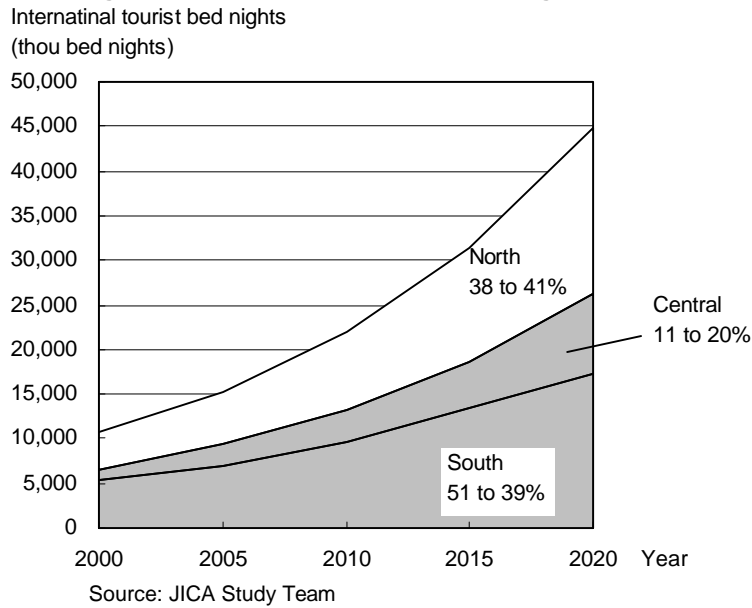
(Unit: thou bed nights)

		North	Central	C1	C2	C3	C4	South	Total
2000	Chinese	1,569	198	162	18	9	9	36	1,804
	Short	443	295	148	59	74	15	2,216	2,954
	Long	2,080	713	238	119	238	119	3,149	5,942
	Total	4,092	1,207	548	196	321	143	5,401	10,700
2010	Chinese	4,306	811	447	140	129	95	475	5,593
	Short	1,316	987	493	230	197	66	4,277	6,580
	Long	3,181	1,664	587	294	489	294	4,943	9,787
	Total	8,803	3,462	1,528	664	815	454	9,695	21,960
2020	Chinese	10,720	2,880	1,120	640	640	480	2,400	16,000
	Short	3,600	2,880	1,440	720	504	216	7,920	14,400
	Long	4,320	3,168	1,152	576	864	576	6,912	14,400
	Total	18,640	8,928	3,712	1,936	2,008	1,272	17,232	44,800

Source: JICA Study Team

The Table 12.2.10 shows international tourist bed nights by market and by regions/areas until 2020. In the year of 2020, international tourist bed nights will be 44.8 million bed nights. It is four times larger than the figure in 2000. And Figure 12.2.3 shows distributions of international tourist arrivals by regions/areas.

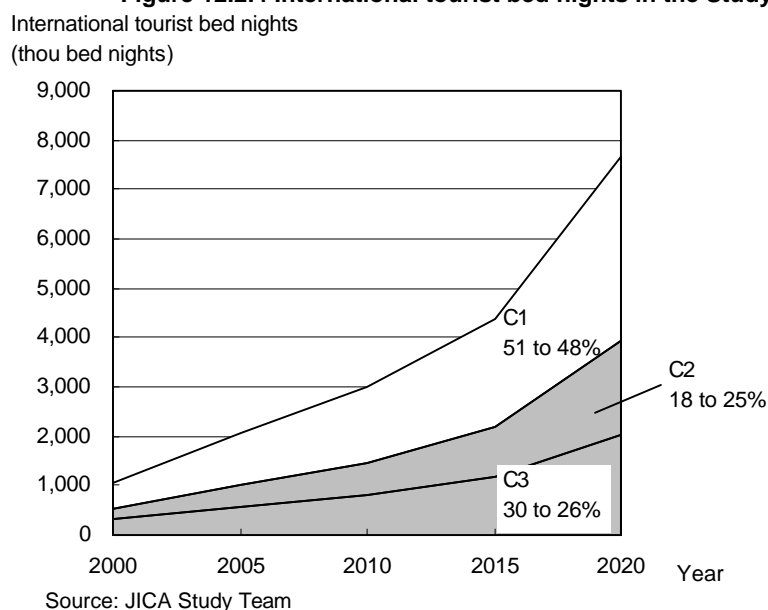
Figure 12.2.3 International tourist bed nights and distributions



The Figure 12.2.3 shows that international tourist bed nights in the Central will increase a lot from 11 percent in 2000 to 20 percent in 2020. More than 50 percent of international tourist bed nights are generated in the South now, but the share will decrease gradually to 39 percent in 2020. On the other hand, the shares of the North and the Central will increase. In the North, the share will increase to 41 percent in 2020.

The reason of the change of the top share from the South to the North is the rapid growth of Chinese tourists. The number of Chinese tourists has increased 10 times in last five years. Economic development of China and free foreign tour will promote international tourism from now on.

The Figure 12.2.4 shows international tourist bed nights in the Study Area. It will increase seven times in 20 years. The share of C1 will be almost the half during 20 years. The share of C2 will increase 18 percent to 25 percent, and the figure will increase 10 times in 20 years.

Figure 12.2.4 International tourist bed nights in the Study Area

12.2.3 Domestic tourist generations

Domestic tourist generations are forecasted as same process as a case of international tourist arrivals, by use of the following scenario analyses.

- Trend growth of domestic tourist generation (Trend growth scenario),
- The growth of Gross Domestic Products (GDP) per capita (GDP per capita growth scenario),
- The growth of Population (Population growth scenario), and
- The combination of the growth of GDP per capita and urban population (GDPC/UP scenario).

(5) Trend growth scenario

In this scenario, domestic tourist generations will increase in accordance with recent growth rate. According to data from VNAT, annual average growth rate (AGR) in recent five years is 10.1%. Therefore the JICA Study Team set AGR from 2000 to 2010 will be 10.1%, the same level, and will decrease 5.1%, the half of current level from 2011 to 2020.

The Table 12.2.11 shows domestic tourist generations in this scenario. It will be 43 million in 2020, with AGR of 7.0%.

Table 12.2.11 Domestic tourist generation in Trend growth scenario

(Unit: thou persons)

	2000	2005	2010	2015	2020	Remarks
Domestic tourist generations	10,000	16,213	26,286	33,667	43,119	AGR 10.1% from 2001-2010, 5.1% from 2011-2020

Source: JICA Study Team

(6) GDP per capita growth scenario

In this scenario, increase of domestic tourist generations will depend on the increase GDP per capita in Vietnam. The JICA Study Team conducted a regression analysis of the following formula:

$$DTR = a + b \text{ GDPC}$$

Where

DTR: domestic tourist arrivals, and

GDPC: GDP per capita.

The output of the regression analysis is shown in the Table 12.2.12.

Table 12.2.12 Output of regression analysis

	Coefficients	T-value
a	-7339.4498	-6.2446
b	5.2298	13.3167
Modified R square	0.9618	-

Source: JICA Study Team

The Table 12.2.13 shows the increase of domestic tourists in GDP per capita growth scenario. It will be 46 million in 2020, with AGR of 7.9%.

Table 12.2.13 Domestic tourist generation in GDP per capita growth scenario

(Unit: thou persons)

	2000	2005	2010	2015	2020
Domestic tourist generations	10,000	19,159	25,799	34,614	46,175

Source: JICA Study Team

(7) Population growth scenario

In this scenario, domestic tourist arrivals depend on the changes of population in Vietnam. And JICA Study Team set an assumption that the half of total population will go travel in average in 2020, though only 12.9% of population went travel in 2000. That is why the share of population who go travel will increase from 12.9% to 50.0% gradually.

The Table 12.2.14 shows the increase of domestic tourist generations in Population growth scenario. It will arrive at 48 million in 2020, with AGR of 8.1%.

Table 12.2.14 Domestic tourist generation in Population growth scenario

(Unit: thou persons)

	2000	2005	2010	2015	2020
Domestic tourist generations	10,000	14,793	21,907	32,509	47,881

Source: JICA Study Team

(8) GDPC/UP scenario

In this scenario, domestic tourist arrivals will depend on the increase of GDP per capita and urban population because almost domestic tourists are generated in the urban area.

In 2000, the share of urban population was 20.4%. And it is forecasted to increase 30.8% in 2020, according to the “Report on Results of Population Projections Viet Nam, 1999-2024”, published by General Statistical Office (GSO).

The JICA Study Team conducted a regression analysis of the following formula:

$$DTR = a + b \text{ GDPC} + c \text{ UPR}$$

Where

DTR: domestic tourist arrivals,

GDPC: GDP per capita, and

UPR: urban population rate.

The output of the regression analysis is shown in the Table 12.2.15.

Table 12.2.15 Output of regression analysis

	Coefficients	T-value
a	-22682.9450	-7.0239
b	5.3632	4.6796
b	63981.9940	2.1711
Modified R square	0.9929	-

Source: JICA Study Team

The Table 12.2.16 shows domestic tourist generations in GDPC/UP scenario. It will arrive at 52 million in 2020, with AGR of 8.6%.

Table 12.2.16 Domestic tourist generations in GDPC/UP scenario

(Unit: thou persons)

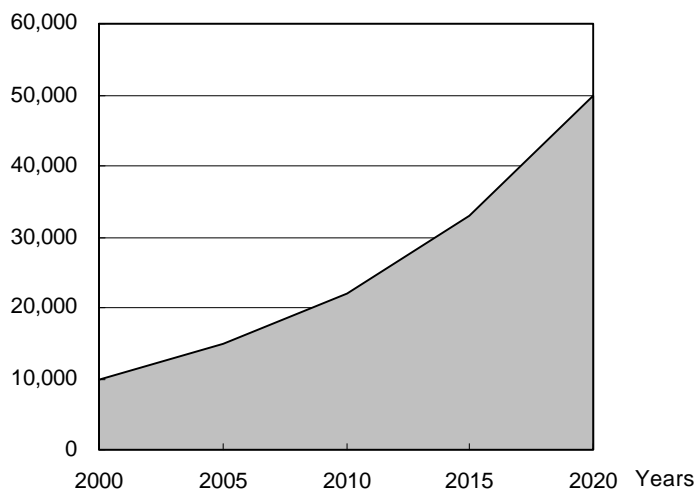
	2000	2005	2010	2015	2020
Domestic tourist generations	10,000	19,497	28,936	39,045	51,931

Source: JICA Study Team

(9) Setting of domestic tourist generations

Figure 12.2.5 Domestic Tourist Generations

Domestic tourist generations
(thou persons)



Source: JICA Study Team

From scenario analyses described before, JICA Study Team estimates that domestic tourist generations are about 10 million in 2000 from statistics of Vietnam National Administration of Tourism (VNAT) and General Statistical Office (GSO),³ and it will increase to 50 million in 2020 with annual average growth ratio of 8.4 percent.

The proportion of domestic tourist generation to total population will increase 13.0 percent to 52.5 percent. That means the half of total population will go overnight trip on average in 2020.

Table 12.2.17 Domestic tourist generations in Vietnam

	2000	2005	2010	2020
Domestic tourist generations (thou persons)	10,000	15,000	22,000	50,000
Proportion to total population (%)	13.0	18.3	25.5	52.2

Source: JICA Study Team

12.2.4 Domestic Tourist Bed Nights

The JICA Study Team forecasted that ALS of domestic tourists would almost fix, and decrease a little from 1.7 to 1.5 because it seems that the more Vietnamese people go travel, the shorter days they spend in their destinations. Therefore domestic tourist bed nights will arrive at 35 million in 2010 and at 75 million in 2020.

Distribution of regions/areas are considered next. The Table 12.2.18 shows that, and percentages of bed nights will increase in the Central. That is why major source market of domestic tourists, the North and the South will go travel out of their regions when they can get money more.

Table 12.2.18 ALS and distribution of bed nights

(Unit: percent)

	ALS (nights)	North	Central	C1	C2	C3	C4	South
2000	1.7	35.0	11.0	3.0	0.5	4.5	3.0	54.0
2010	1.6	34.0	14.0	3.5	2.2	5.0	3.3	52.0
2020	1.5	33.0	17.0	4.0	4.0	5.5	3.5	50.0

Source: JICA Study Team

With accordance with the distributions mentioned above table, domestic tourist bed nights are shown in the Table 12.2.19, the Figure 12.2.6 and the Figure 12.2.7.

Table 12.2.19 Distributions of domestic tourist bed nights

(Unit: thou bed nights)

	North	Central	C1	C2	C3	C4	South	Total
2000	5,950	1,870	510	85	765	510	9,180	17,000
2010	11,968	4,928	1,232	774	1,760	1,162	18,304	35,200
2020	24,750	12,750	3,000	3,000	4,125	2,625	37,500	75,000

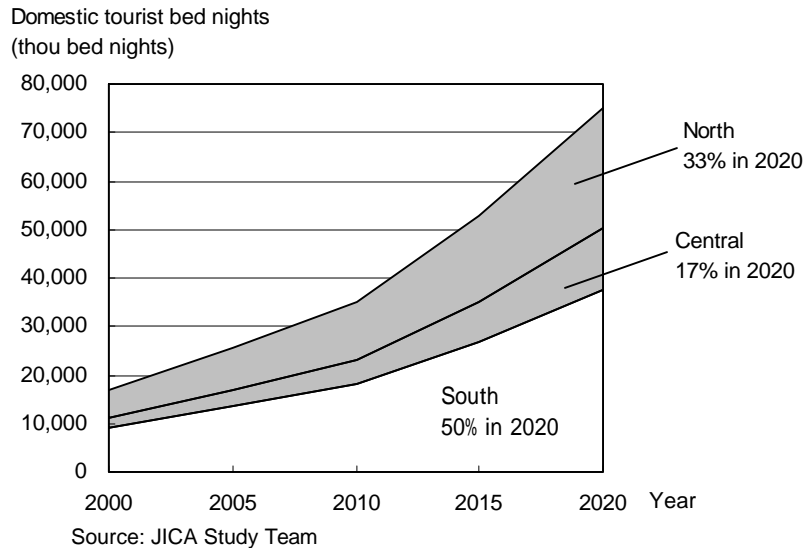
Source: JICA Study Team

The Figure 12.2.6 shows the domestic tourist bed nights by regions. It will increase more than four times from 17 million in 2000 to 75 million in 2020 though ALS of domestic tourists will decrease from 1.7 to 1.5 nights.

³ According to statistics of VNAT, domestic tourist generation is 11.2 million in 2000. Otherwise Statistics of GSO shows that the total number of Vietnamese hotel guest is only 7 million.

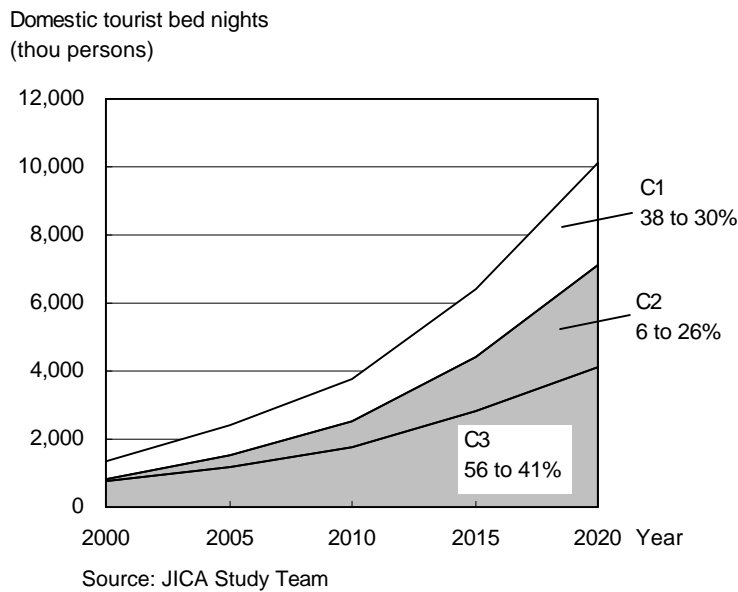
The share of the Northern and the Southern will decrease a little. On the other hand, the share of the Central will increase from 11 percent in 2000 to 17 percent in 2020.

Figure 12.2.6 Domestic tourist bed nights in Vietnam



The Figure 12.2.7 shows domestic tourist bed nights in the Study Area. It will increase seven times in 20 years, from 1.4 million to 10 million. C3 will have the biggest share until 2020, however it will decrease about 15 percent. Otherwise, the share in C2 will increase 20 percent.

Figure 12.2.7 Domestic tourist bed nights in the Study Area



ALS of domestic tourists will stay 1999 levels because ALS of domestic tourists in the national level will decrease a little in the national level from 1.7 nights in 2000 to 1.5 nights in 2020.

12.2.5 Total Tourist Bed Nights

The Table 12.2.20, the Figure 12.2.8 and the Figure 12.2.9 show the sum of bed nights in regions/areas. In regional level, it is estimated about 28 million in 2000 and it will increase more than four times to 120 million in 2020. The share of the Northern will keep 36 percent. Otherwise, the share of the Southern will decrease from 53 percent in 2000 to 46 percent in 2020. The share of the Central will increase from 11 percent in 2000 to 18 percent in 2020. Such consistent increase in the Central comes from stable increase of international tourist bed nights and domestic tourist bed nights in both region/area.

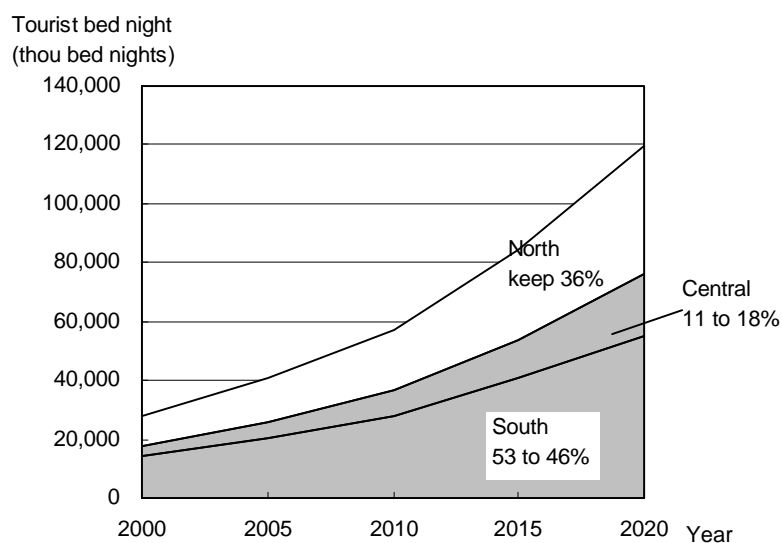
Table 12.2.20 Total tourist bed nights

(Unit: thou persons)

		North	Central	C1	C2	C3	C4	South	Total
2000	Intl	4,092	1,207	548	196	321	143	5,401	10,700
	Dom	5,950	1,870	510	85	765	510	9,180	17,000
	Total	10,042	3,077	1,058	281	1,086	653	14,581	27,700
2010	Intl	8,803	3,462	1,528	664	815	454	9,695	21,960
	Dom	11,968	4,928	1,232	774	1,760	1,162	18,304	35,200
	Total	20,771	8,390	2,760	1,438	2,575	1,616	27,999	57,160
2020	Intl	18,640	8,928	3,712	1,936	2,008	1,272	17,232	44,800
	Dom	24,750	12,750	3,000	3,000	4,125	2,625	37,500	75,000
	Total	43,390	21,678	6,712	4,936	6,133	3,897	54,732	119,800

Source: JICA Study Team

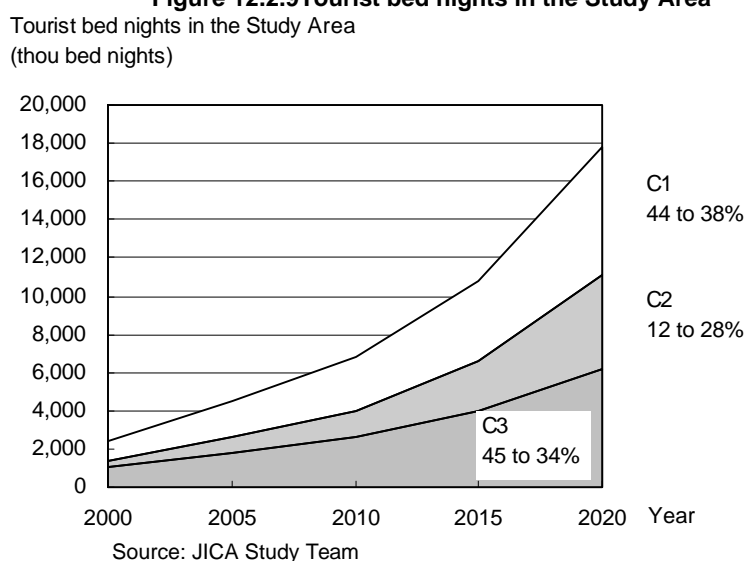
Figure 12.2.8 Total tourist bed nights



Source: JICA Study Team

The Figure 12.2.9 shows total of international tourist bed nights and domestic tourist bed nights in the Study Area. It will increase seven times, from 2.5 million to 18 million in 20 years. The share of the Study Area in Vietnam will increase from nine percent in 2000 to 15 percent in 2020.

The shares are 38 percent in C1, 28 percent in C2, and 34 percent in C3, respectively. C1, C2 and C3 will be able to achieve more equitable benefit from tourism development in the future.

Figure 12.2.9 Tourist bed nights in the Study Area

12.2.6 International Tourist Arrivals by Regions/Areas

International tourist arrivals by regions/areas can be introduced by dividing international tourist bed nights by ALS of each region/area. The Table 12.2.21 shows ALS of each region/area. The figures in 2000 are estimated from the statistics of GSO, and those in 2010 and 2020 are set by the JICA Study Team.

Table 12.2.21 ALS by regions/areas

(Unit: nights)

	North	Central	C1	C2	C3	C4	South	Average
2000	2.1	2.0	1.9	1.9	2.3	1.7	2.3	2.2
2010	2.2	2.0	2.1	2.0	2.4	1.8	2.3	2.2
2020	2.4	2.2	2.5	2.1	2.5	2.0	2.3	2.3

Note: ALS of the Central and the Average are introduced by the calculation.
Source: JICA Study Team

The Table 1.1.22 shows international tourist arrivals by regions/areas.

Table 12.2.22 International tourist arrivals by regions/areas

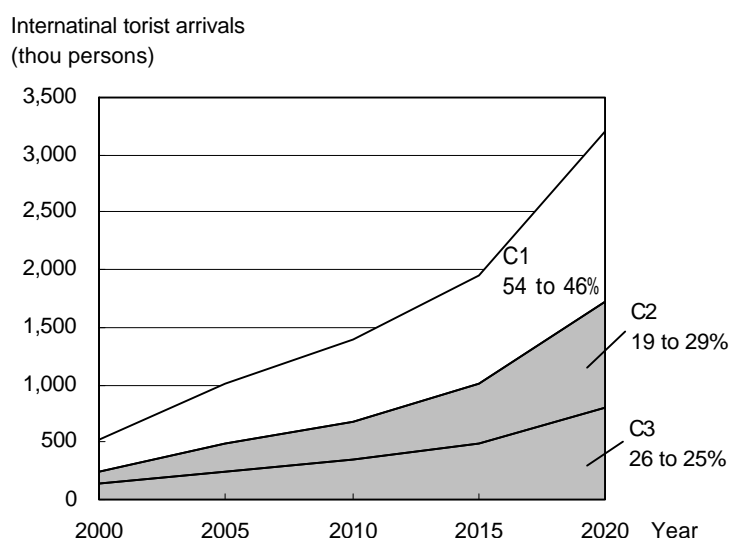
(Unit: thou arrivals)

	North	Central	C1	C2	C3	C4	South	Total
2000	1,949	615	288	103	139	84	2,348	4,912
2010	4,002	1,652	728	332	340	252	4,215	9,868
2020	7,767	3,846	1,485	922	803	636	7,492	19,105

Source: JICA Study Team

As shown in the Figure 12.2.10, tourist arrivals in the Study Area will increase six times, from 530 thousand to 3 million. The share of international tourist arrivals in C1 the North Central Coast will increase from 19 percent to 29 percent. Even in C3, which will have the lowest share in 2020, international tourist arrivals will be about six times larger than in 2000.

Figure 12.2.10 International tourist arrivals in the Study Area



Source: JICA Study Team

12.2.7 Domestic Tourist Arrivals by Regions/Areas

Domestic tourist arrivals by regions/areas are also introduced as same process as the introduction of international tourist arrivals. JICA Study Team set the ALS by regions/areas shown in the Table 12.2.23.

Table 12.2.23 ALS by regions/areas

(Unit: nights)

	North	Central	C1	C2	C3	C4	South	Average
2000	1.7	1.9	1.7	1.5	1.7	2.5	1.5	1.7
2010	1.7	1.8	1.7	1.5	1.7	2.5	1.4	1.5
2020	1.7	1.8	1.7	1.5	1.7	2.5	1.3	1.5

Note: ALS of the Central and the Average are introduced by the calculation.

Source: JICA Study Team

The Table 12.2.24 shows domestic tourist arrivals by regions areas.

Table 12.2.24 Domestic tourist arrivals by regions/areas

(Unit: thou arrivals)

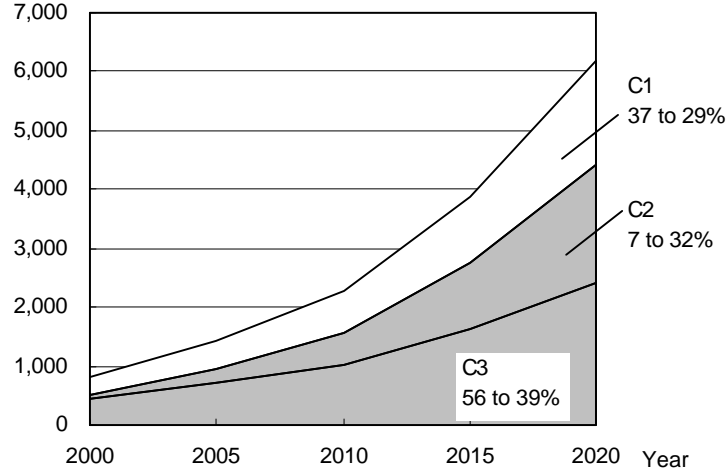
	North	Central	C1	C2	C3	C4	South	Total
2000	3,500	1,011	300	57	450	204	6,120	10,631
2010	7,040	2,741	725	516	1,035	465	13,074	22,855
2020	14,559	7,241	1,765	2,000	2,426	1,050	28,846	50,646

Source: JICA Study Team

The Figure 12.2.11 shows domestic tourist arrivals in the Study Area. It will increase more than seven times, from 0.8 million to sin million. The share of C2 will increase from 57 thousand, seven percent in 2000, to 2 million to 32 percent in 2020. Even in C1, which will have lowest share in 2020, the increase of domestic tourist arrivals will be nearly six times

Figure 12.2.11 Domestic tourist arrivals in the Study Area

Domestic tourist arrivals
(thou persons)



Source: JICA Study Team

12.2.8 Total of Tourist Arrivals

The Table 1.1.25 shows total of tourist arrivals by regions/areas.

Table 12.2.25 Total of tourist arrivals by regions/areas

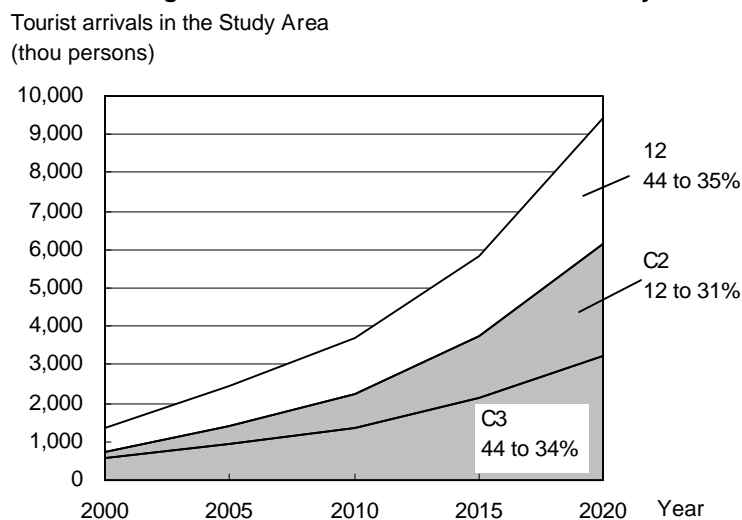
(Unit: thou arrivals)

	North	Central	C1	C2	C3	C4	South	Total
2000	5,449	1,625	588	160	589	288	8,468	15,542
2010	11,042	4,393	1,452	848	1,375	717	17,289	32,724
2020	22,325	11,087	3,250	2,922	3,230	1,686	36,338	69,751

Source: JICA Study Team

The Figure 12.2.12 is the sum of international tourist arrivals and domestic tourist arrivals in the Study Area. Tourist arrivals will increase seven times in the Study Area, and the share each area of the Study Area will be 1/3 in 2020. However the share in C2 is only 12 percent in 2000, tourist arrivals will increase 18 times in 20 years.

Figure 12.2.12 Tourist arrivals in the Study Area



Source: JICA Study Team

12.3 Tourism Receipt and Value Added

12.3.1 Forecast of Tourism Receipt

It is possible to forecast Tourism Receipts, which is generated by tourism activity from the forecast of bed nights. JICA Study Team assumed that the level of real⁴ daily expense, paid by international tourists, and domestic tourists, would be constant. Therefore international tourists will pay US\$75 per day, and domestic tourists will pay VND525,000 per day until 2020. Because the share of Chinese tourists, who pay less than other international tourists will increase to 50 percent in 2020, and payment for tourism by Vietnamese has already arrived at high level in their income. The Table 12.3.1 shows tourist bed nights and Tourism Receipt.

Table 12.3.1 Tourist bed nights and Tourism Receipt

	Intl bed nights	Intl TR (US\$ mill)	Intl TR (VND bill)	Dom bed nights	Dom TR (VND bill)	Total TR (VND bill)
2000	10,700	803	12,038	17,000	8,925	20,963
2005	15,330	1,150	17,246	25,500	13,387	30,634
2010	21,960	1,647	24,705	35,200	18,480	43,185

Note: Intl International, Dom domestic, and TR tourism receipt
Source: JICA Study Team

12.3.2 Introduction of multiplier

Value added which is generated from tourism activities are introduced by the use of Tourism Receipt and multiplier for generate value added.

The multiplier can be introduced the following formula.

$$Y = C + I + G + X - M \quad (1)$$

This is a basic formula which explains the demand side of the national

⁴ "real daily expense" means that the increase of payment by inflation aren't into considered.

macro-economy. Where,

Y: Gross Domestic Products,

C: Consumption,

I: Investment,

G: Government expenditure,

T: Tax,

X: Export of goods and services, and

M: Import of goods and services.

And C, I, and M are explained the following formula,

$$C = a + c DY \quad (2)$$

$$I = b + i DY \quad (3)$$

$$M = d + m DY \quad (4)$$

Where,

DY: Disposable income of private sector, which is almost same as Y, GDP.

c: Marginal propensity to consume, $0 < c < 1$

i: Marginal propensity to investment, $0 < i < 1$

m: Marginal propensity to import, $0 < m < 1$

The volume C and M is introduced from the level of DY. And the volume of I is also introduced by DY in the long-term perspective.

The formula (1) is transformed the following formula (5), by use of (2), (3), and (4).

$$Y = a + c Y + b + i Y + G + X - (d + m Y)$$

$$(1 - c - i + m) Y = A$$

$$Y = A / (1 - c - i + m) \quad (4)$$

Where

$$A = (a + b + G + M - d).$$

$(1 - c - i + m)$ is multiplier of value added, and If we multiply that and Tourism Receipt, we can get the value added generated from tourism activities.

The Table 1.1.2 shows macro-economic figures and multiplier. The multiplier will decrease last five years from 3.7 to 2.3 gradually because of the increase of saving rate.

Table 12.3.2 Economic figures and multiplier

	1995	1996	1997	1998	1999	Remarks
Population (thou persons)	71,996	73,157	74,307	75,456	76,597	
GDP (VND bill)	228,892	272,036	313,623	361,016	399,942	
Consumer Disposal Income (VND bill)	178,307	211,916	244,312	281,231	311,555	77.9% of GDP
Private Consumption (VND bill)	168,492	202,509	225,084	255,921	272,619	
Investment (VND bill)	58,187	71,597	83,734	97,551	101,658	
Imports (VND bill)	95,925	141,016	160,706	188,281	199,473	
Multiplier	3.7	2.7	2.5	2.4	2.3	

Source: JICA Study Team

12.3.3 Tourism Receipt and value added

The first row of the Table 12.2.3 is tourism receipt from international tourists. It will increase twice until 2010, and arrive at US\$1.6 billion in 2010. The figures also mean the foreign currency earnings, and the figure in 2000 is larger than the export of coffee. Tourism Receipt from international tourists will continue keeping an important role for foreign currency earnings.

The third row of the Table 12.2.3 is the sum of Tourism Receipt from international tourist and it from domestic tourists. It will also double in 10 years from VND21 trillion to VND43 trillion.

Table 12.3.3 Tourism Receipt and value added generated by tourism

	Unit	2000	2005	2010
Tourism Receipt from international tourists	US\$ mill	803	1,150	1,657
Tourism Receipt from domestic tourists	VND bill	8,925	13,388	18,480
Total of Tourism Receipt	VND bill	20,963	30,634	43,185
Value added from tourism	VND bill	48,214	70,458	99,326
Share in GDP*	%	10.9	11.1	11.2
Tax revenue from tourism	VND bill	7,232	10,569	14,899

Note: Forecast of GDP will follow "Socio-economic development strategy until 2010"

Source: JICA Study Team

The fourth row of the Table 12.3.3 is value added which is generated by tourism, and the fifth row is the share in GDP. Value added will increase from VND48 trillion to VND99 trillion. The share of value added in the GDP will increase gradually from 10.9 percent to 11.2 percent.

Tax revenue accounts for 15 percent of GDP in Vietnam in 1999. If the proportion will be constant, tax revenue will almost double to VND15 trillion in 2020.

As same as the analysis in the national level, it is possible to forecast Tourism Receipt and Value Added, which are generated by tourism activities.

Table 12.3.4 Tourism Receipt and value added in the Study Area

	Unit	2000	2005	2010
Tourism Receipt by international tourists	US\$ mill	80	155	226
Tourism Receipt by domestic tourists	VND bill	714	1,258	1,977
Total of Tourism Receipt	VND bill	1,911	3,588	5,361
Value added by tourism	VND bill	4,396	8,253	12,329
Share in GRDP*	%	11.0	14.4	15.4
Share in VA in Vietnam	%	9.1	11.7	12.4
Tax revenue from tourism	VND bill	659	1,238	1,849

Note: * GRDP will be 9% of GDP, the same level in 1999.

Source: JICA Study Team

The Table 12.3.4 shows Tourism Receipt, Value Added which is generated by tourism, tax revenue from tourism. Tourism Receipt from international tourists and total of Tourism Receipt will triple in ten years. Tourism Receipt from international tourists will reach US\$226 million, and total of Tourism Receipt will be VND5.3 trillion in 2010.

Value Added by tourism will also triple, and be about VND12 trillion in 2010. The share in GRDP will increase 11.0 percent to 15.4 percent. The figure is larger than it in the national level (11.2 percent in 2010), and tourism will play more important role for the regional economy than it will play in the national level. The share in Value Added by tourism in Vietnam will increase from 9.1 percent to 12.4 percent. Tax revenue will arrive at VND1.8 trillion in 2010.

12.4 Employment in Tourism

12.4.1 Direct Employment

As same as the analyses of tourism receipt and value added in the previous section, the employment generation can be forecasted by use of tourist bed nights. In the section, employment generation of Direct Employment, which means hotel industry, and Direct & Indirect Employment, which consists of hotels, tour companies, and restaurants for international tourists, are considered.

Direct Employment is forecasted from the following assumptions;

- Employment of classified hotel will be 1.5, the same level in 2000, per room, and
- Employment of unclassified hotel will be 0.8, the same level in 2000, per room.

The Table 12.4.1 shows tourist bed nights and direct employment.

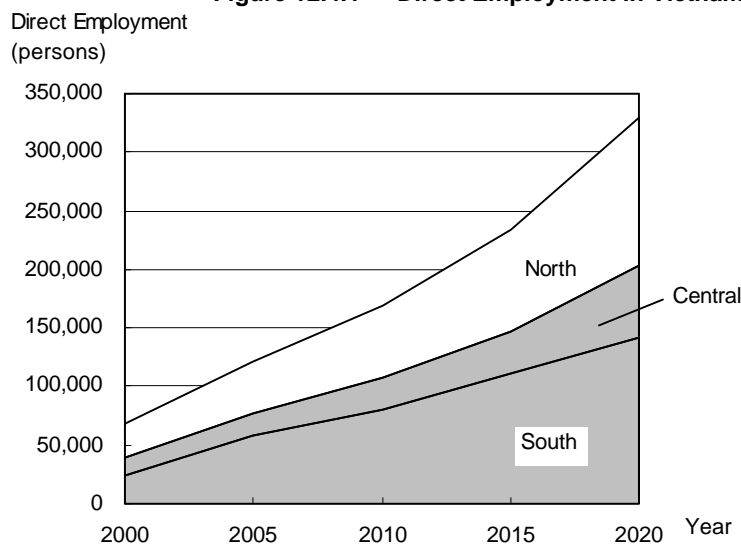
Table 12.4.1 Direct employment by kind of accommodations and regions/areas
(Unit: persons)

Region/Areas	Category	2000	2005	2010
North	Classified	9,635	22,500	33,000
	Unclassified	18,852	21,600	28,800
	Total	28,487	44,100	61,800
Central	Classified	7,878	9,900	14,250
	Unclassified	8,101	8,560	12,000
	Total	15,979	18,460	26,250
C1	Classified	1,505	4,500	6,000
	Unclassified	1,627	2,400	3,200
	Sub-total	3,132	6,900	9,200
C2	Classified	2,166	2,250	3,000
	Unclassified	1,342	1,360	1,600
	Sub-total	3,508	3,610	4,600
C3	Classified	2,622	1,500	3,000
	Unclassified	2,754	3,200	4,000
	Sub-total	5,376	4,700	7,000
C4	Classified	1,586	1,650	2,250
	Unclassified	2,378	1,600	3,200
	Sub-total	3,964	3,250	5,450
South	Classified	11,760	25,500	36,000
	Unclassified	11,849	32,800	44,800
	Total	23,609	58,300	80,800
Total	Classified	29,273	57,900	83,250
	Unclassified	38,802	62,960	85,600
	Total	68,074	120,860	168,850

Source: JICA Study Team

The Figure 12.4.1 shows Direct Employment until 2020. It will increase five times, from 68 thousand to 329 thousand. Direct Employment in the Central Region will increase four times, from 16 thousand to 62 thousand.

Figure 12.4.1 Direct Employment in Vietnam



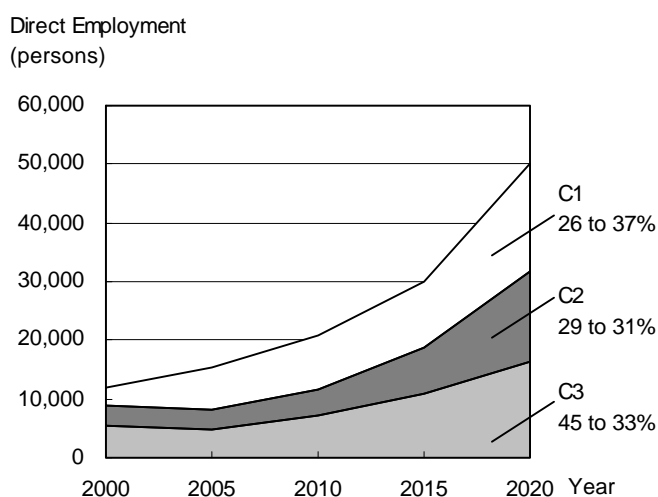
Source: JICA Study Team

Employment generation generated by tourism activities in the Study Area can be

forecasted as same as the analysis of the national level.

The Figure 12.4.2 shows Direct Employment in the Study Area until 2020. It will increase four times, from 12 thousand to 50 thousand. The share of C1, C2 and C3 will be almost the same level in 2020. The decrease of the share of C2 comes from the mismatch of tourist bed nights and number of hotel rooms in 2000.

Figure 12.4.2 Direct Employment in the Study Area



Source: JICA Study Team

12.4.2 Direct & Indirect Employment

Direct Employment is forecasted from the following assumptions;

- Direct and Indirect Employment will be 2.6, the same level in 2000, per room.

The Table 12.4.2 shows Direct & Indirect Employment

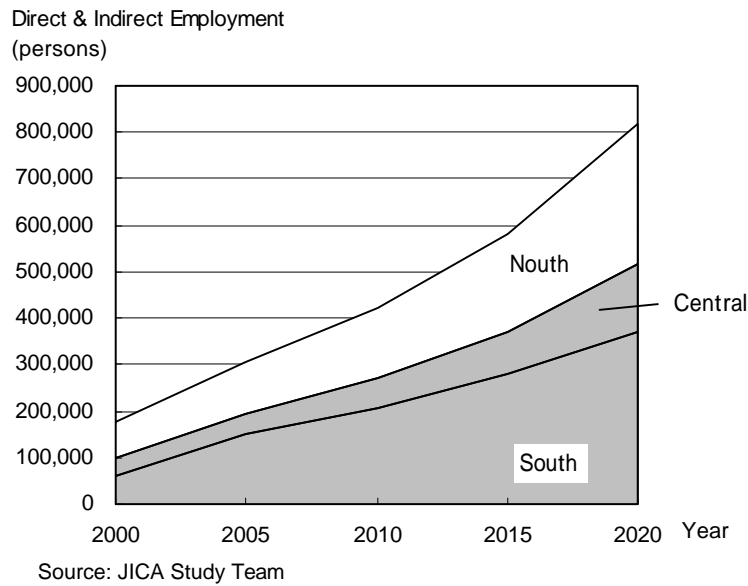
Table 12.4.2 Direct & Indirect Employment
(Unit persons)

Regions/areas	2000	2005	2010
North	77,969	109,200	150,800
Central	39,983	44,980	63,700
C1	7,896	15,600	20,800
C2	8,115	8,320	10,400
C3	13,494	13,000	18,200
C4	10,478	8,060	14,300
South	58,893	150,800	208,000
Total	176,844	304,980	422,500

Source: JICA Study Team

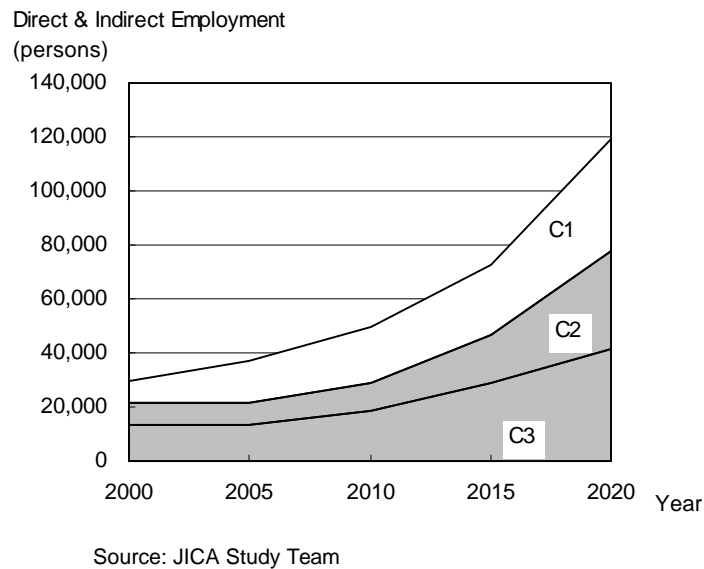
The Figure 12.4.3 shows Direct & Indirect Employment until 2020. It will arrive at 800 thousand in 2020. Direct & Indirect Employment in the Central will be 150 thousand at that time. The share in population of work ages, which is population from 15 to 59 will increase 0.4 percent to 13 percent.

Figure 12.4.3 Direct & Indirect Employment



The Figure 12.4.3 shows Direct & Indirect Employment in the Study Area. It will increase from 30 thousand to 120 thousand. The share in populating of work ages, which is population from 15 to 59, will increase from 0.5 percent to 1.4 percent.

Figure 12.4.4 Direct & Indirect Employment in the Study Area



12.4.3 Employment of Tour Guide in the Study Area

Employment of tour guide in the Study Area, especially in C1 and C2 are forecasted the following assumptions:

- Percentage of hiring tour guide is 30% for Chinese tourists, and 50% for short haul tourists and long haul tourists,

- The size of group is 30 for Chinese tourists and 15 for short haul and long haul tourists, and
- Workdays of guides are 180 days in average.

The Table 12.4.3 shows tourist bed nights and number of tour guide.

Table 12.4.3 Tourist bed nights and number of tour guide
(Unit: persons)

		Bed nights in C1 and C2	Guide workdays	No of guide
2000	China	180,379	1,804	10
	Short haul	206,799	6,893	38
	Long haul	356,516	11,884	66
	Total	743,695	20,581	114
2005	China	320,297	3,203	18
	Short haul	477,664	15,922	88
	Long haul	706,269	23,542	131
	Total	1,504,230	42,667	237
2010	China	587,245	5,872	33
	Short haul	723,775	24,126	134
	Long haul	880,867	29,362	163
	Total	2,191,888	59,361	330

Source: JICA Study Team

Table 12.4.4 Employment of tour guide by market
(Unit: persons)

	2000	2005	2010	2020
Chinese	10	18	33	98
Short haul	38	88	134	400
Long haul	66	131	163	320
Total	114	237	330	818

Source: JICA Study Team

The Table 12.4.4 shows employment of tour guide by source market. The figures are calculated from tourist bed nights in C1 and C2, which have historical tour resources and need guide services. In 2000 tour guides estimated to be about 114 persons, and it will increase seven times to about 800 persons. The share of guides for short haul market, which include Japan, Taiwan and Korea, will occupy almost half of total guide.