



JICA VIETNAM OFFICE

REPORT ON EX-POST EVALUATION STUDY

THE PROJECT OF VIETNAM INFORMATION TECHNOLOGY

TRAINING

HANOI, DECEMBER 2006

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PREFACE

During the period from March 1997 to March 2002, Japan International Cooperation Agency (JICA) assisted Vietnam in implementing the Project of the Vietnam Information Technology Training.

Three years after the project completion, JICA conducted an “Ex-post evaluation” to assess the impact and sustainability of the project through the Investment Consultancy and Technology Transfer Company (InvestConsult Group). This report has been finalized as a result of the study.

Taking this opportunity, I would like to express my sincere thanks for the cooperation of Investconsult Group, staff members of the Information Technonogy Institute (ITI) and the ex-trainees of the Vietnam Information and Technology Training Institute (VITTI) project. I hope this report would be of good reference for the implementation of future projects in this area.



Hiroaki NAKAGAWA
Resident Representative
JICA Vietnam Office

TABLE OF CONTENTS

ABBREVIATION.....	I
THIRD PARTY REVIEW BY EXTERNAL EXPERTS (1).....	II
THIRD PARTY REVIEW BY EXTERNAL EXPERTS (2).....	VI
EXECUTIVE SUMMARY.....	X
1 OUTLINE OF THE EX-POST EVALUATION STUDY	1
1.1 PROJECT OVERVIEW	1
1.2 OBJECTIVE OF THE STUDY	3
1.3 MEMBERS OF THE EVALUATION TEAM	3
1.4 SCHEDULE OF THE EX-POST EVALUATION STUDY	3
2 STUDY METHODS.....	3
2.1 SOURCE OF INFORMATION	3
2.2 STUDY METHODS	3
3 EVALUATION RESULTS.....	5
3.1 IMPACT OF THE PROJECT.....	5
3.1.1 <i>Impacts Attained at the Overall Goal level</i>	5
3.1.2 <i>Un-anticipated impacts</i>	11
3.1.3 <i>Analysis of factors</i>	13
3.2 SUSTAINABILITY.....	15
3.3 TECHNICAL ASPECT	15
3.3.1 <i>Organizational aspect</i>	18
3.3.2 <i>Financial aspect</i>	18
3.3.3 <i>Sustainability of Project Impacts</i>	20
3-3. <i>Analysis of factors of impact and sustainability</i>	20
4 CONCLUSION AND RECOMMENDATIONS.....	21
ANNEX 1: STUDY METHODS	
ANNEX 2: EVALUATION GRID	
ANNEX 3: LOGICAL FRAMEWORK	
ANNEX 4: DATA COLLECTED IN EVALUATION	

ABBREVIATION

C/P	Counterpart
ITI	Information Technology Institute
IT	Information Technology
JICA	Japan International Cooperation Agency
R/D	Record of Discussion
VNU	Vietnam National University
VITTI	Vietnam Information Technology Training Institute

THIRD PARTY REVIEW BY EXTERNAL EXPERTS (1)

EX-POST EVALUATION STUDY ON THE PROJECT OF VIETNAM INFORMATION TECHNOLOGY TRAINING

Comments:

It should be acknowledged that the Project of Vietnam Information Technology Training sponsored by the Japanese Government was considerable significant to Vietnam in the 1990s years. It was ideally for computer-like people to be able to attend to the Industrial-oriented IT courses such as provided by the Project in Vietnam in those years. The Project was very important to Vietnam not only in the manner of transferring the latest IT technology aspect (from a developed country such as Japan to a developing country with still low IT level as Vietnam); but also in the manner of giving new modern working style and new way of market-orientation designing of courses for Vietnamese Universities.

Concerning to the detailed successes of the project, it is very prominent that the project was successful since the building was constructed, the equipments were properly installed, and the training programs with several subjects were conducted widely to thousands of trainees. However, the sustainability of the project was relatively less promising, according to the report, due to the bureaucratic reform in Vietnam. On the other hand, part of the participants who were selected to join the training program were not qualified enough and/or were not in the same IT level with each other might also reduced the efficiency of the project in some extent. Then it seems that the project had rather emphasized on hardware/equipments than software/training. From my personal point of view, the project could be very successful if it would overcome the problems occurred from Vietnam side, which used to occur to almost Projects in Vietnam at those times. This could serve as a lesson for both Vietnamese and Japanese sides in implementing the similar project in Vietnam in the future. Nevertheless, it can be no double about the importance and relevance of implementation such kind of project for Vietnam, especially in its today conditions of WTO accession including the need of Vietnam to come on board with other countries in IT industry.

Concerning to the evaluation process, it is unquestionable that the evaluation process was conducted logically and objectively. The found result, conclusion, and recommendation were also reasonable.



Dr. Dau Duc Hai
Academic Director
HanoiCTT Company

Third Party Review by External Experts

Ex-Post Evaluation on the Project of Vietnam Information Technology Training

** This Third Party Review by External Experts is to examine the end-product (an evaluation report and a summary sheet) of ex-post evaluation of the above-mentioned project in light of its structure, verification procedure and overall consistency. It is to be noted that the review is not to question the validity of the evaluation results per se.*

** On the leftmost column of each item, choose the rating from A as 'excellent', B as 'good', C as 'acceptable' and D as 'unacceptable'.*

** When you choose D for an item, specify the reason in comment fields.*

** For more details of viewpoints for each item, refer to the corresponding page of 'JICA Project Evaluation Guideline' which is indicated on the rightmost column of each item.*

1 Evaluation Framework

Reference page No. of
'JICA Project Evaluation
Guideline'

	(1) Time Frame of Evaluation Study	97
Viewpoint B	Necessary field survey activities such as data collection and discussion with counterparts are appropriately set within the time frame of the evaluation study. Time frame also contains preparations such as distribution of questionnaires, and are appropriate in terms of timing, length and schedule of the evaluation study.	
	(2) Study Team	107
Viewpoint B	Team members are assigned on a impartial basis, and are with balanced specialty.	
Comment.		

2 Data Collection and Analysis

	(1) Evaluation Questions	51
Viewpoint B	Evaluation questions are in line with evaluation purposes and set properly in the evaluation grid. General questions as to the five evaluation criteria are narrowed down to more specific sub questions to identify necessary information/data to be collected.	
	(2) Data Collection	72
Viewpoint B	Data collection is conducted based on the evaluation grid, and is sufficient for obtaining answers for evaluation questions. Additional information are collected for unexpected and newly confronted questions during the process.	
	(3) Measurement of Results	61
Viewpoint C	Achievement level of overall goal is examined on the basis of appropriate indicators, being compared with targets.	
	(4) Examination of Causal Relationship	62
Viewpoint B	The causal relationships whether the effects for the beneficiaries resulted from the project is examined either in a qualitative or quantitative manner (i.e. Are the effects at the overall goal level caused by the project intervention?)	
Comment		

3 Evaluation Results

	(1) Impact	57, 85-86
Viewpoint B	Perspectives for evaluation of 'Impact' (e.g. achievement level of the overall goal, causal relationships between the outcome of the project and overall goal, ripple effects) are substantially covered. Grounds for judgment are clearly stated in a convincing manner.	
	(2) Sustainability	58, 85-86
Viewpoint C	Perspective for evaluation of 'Sustainability' (e.g. probability of activities to be continued and outcomes to be produced in terms of 1)policies and systems, 2) organizational and financial aspects, 3) technical aspects, 4) Society, Culture and environment and) are substantially covered. Grounds for judgment are clearly stated in a convincing manner.	
	(3) Factors Promoting Sustainability and Impact	85-86
Viewpoint B	Promoting factors on 'Impact' and 'Sustainability' are analyzed properly based on the information obtained through evaluation process.	
	(4) Factors Inhibiting Sustainability and Impact	85-86
Viewpoint B	Inhibiting factors on 'Impact' and 'Sustainability' are analyzed properly based on the information obtained through evaluation process.	
	(5) Recommendations	87-88
Viewpoint C	Recommendations are made thoroughly based on the information obtained through the process of data analysis and interpretation. Recommendations are specific and useful for feedbacks and follow-ups, preferably being prioritized with a time frame.	
	(6) Lessons Learned	87-88
Viewpoint C	Lessons learned are derived thoroughly based on the information obtained through the process of data analysis and interpretation. Lessons learned are convincing and useful for feedbacks, being generalized for wider applicability.	
Comment		

4 Structure of Report

	(1) Writing Manner	89,103
Viewpoint B	Logical structure and major points are clearly described in an easily understandable manner.	
	(2) Presentation of Primary Data and Utilization of Figures	89,103
Viewpoint C	Sufficient primary data such as on the target, contents and results of interviews and questionnaires are presented properly in the report. Figures and tables are utilized effectively to present statistics and analysis results.	
Comment		

5 Overall Review based on 'Criteria for Good Evaluation'

	(1) Usefulness	13-14
Viewpoint B	In light of the effective feedback to the decision-making of the organization, clear and useful evaluation results are obtained.	
	(2) Impartiality and Independence	13-14
Viewpoint A	Evaluation is impartially conducted in a neutral setting	
	(3) Credibility	13-14
Viewpoint B	In light of the specialties of evaluators, transparency of the evaluation process and appropriateness of the criterion of judgment, evaluation information are credible.	
	(4) Participation of Partner Countries	13-14

Viewpoint B	Partner countries' stakeholders participate actively in the process of evaluation, not just provide information.
Comment	

5 Overall Comment

In general the ex-post evaluation report is good regarding its structure, verification procedure and overall consistency. Overall comments content of points:

- The evaluation team worked independently with free discussions and neutral comments. The results of ex-post evaluation report, which were combined the data from different methods of study on various respondents, reflect faithful picture of the project.
- The ex-post evaluation report analyzed different factors which affected the impacts as well as the sustainability and clarified the strength and weakness of the project in VNU. The factor analysis would be of great benefit for the future similar projects, in Vietnamese conditions, from the lessons learned and the experiences view of point.
- The conclusion of the ex-post evaluation report had given good guidance/suggestions for current running ITI, however the evaluators also need to make it clear about the success of the project by balancing all the findings/results with comparison to the project's targets and highlighting the project effectiveness/ has good impact and sustainability.

Another minor point of the ex-post report could be the fact that some of qualitative questionnaires can be converted to measurable data (i.e. %, numeric. For example technical level of training courses can be scaled in metric 1 to 100) that will easy to show or compare in technical manner.

Last but not least, as a beneficiary from Technical cooperation program, implemented by Japanese Government with Vietnam, I would like to express my sincere thank to that useful help to our country in general and to myself in particular. The IT trainings, organized by Japanese programs/projects, that I had have in Vietnam and in Japan displayed important influence to my strength and successes in IT.

Date
Dec. 06, 2006

Name of the Third Party
Dr. Dau Duc Hai

Designation
Academic Director

Name of the Institution
HanoiCTT Com.

THIRD PARTY REVIEW BY EXTERNAL EXPERTS (2)

EX-POST EVALUATION STUDY ON THE PROJECT OF VIETNAM INFORMATION TECHNOLOGY TRAINING

Comments:

Concerning to the significance of the project, it is clear that this project responded to the demand to the partner country, which needed IT for the regular activities and organizational management to improve the productivity in both governmental and private organizations. The Overall Goal of the project is to foster IT specialists for promoting market economy. The projects aims to operate and manage IT training and seminar sustainably based on needs of the industry.

Concerning to success of the project, it is clear that the project was successful since the institute operation system was established (project made base of the ITI,...), the institute facilities and IT equipment was installed and operated, IT instructors and planers of counterparts were upgraded, training courses were implemented based on needs of industry in this time, new skills were introduced to IT insdustry through seminars. Moreover, the project has some factors inhibiting the achievement of the impacts: teachers are lack of practice, courses' attendants could be in different groups,..

Concerning to the evaluation process, it is unquestionable that the evaluation process was conduced logically and objectively. The found result, conclusion and recommendation were also reasonable.

Date
2006-12-14



Name of Third Party
DANG VAN CHUYET

Designation
Dean of the Faculty of IT

Name of the Institution
HANOI UNIVERSITY OF TECHNOLOGY, HANOI, VIETNAM

Third Party Review by External Experts

Ex-Post Evaluation on *Project on Vietnam Information Technology Training Institute (VITTI)*

* This Third Party Review by External Experts is to examine the end-product (an evaluation report and a summary sheet) of ex-post evaluation of the above-mentioned project in light of its structure, verification procedure and overall consistency. It is to be noted that the review is not to question the validity of the evaluation results per se.

* On the leftmost column of each item, choose the rating from A as 'excellent', B as 'good', C as 'acceptable' and D as 'unacceptable'.

* When you choose D for an item, specify the reason in comment fields.

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1 Evaluation Framework

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of 'JICA Project
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B	(1) Time Frame of Evaluation Study	97
Viewpoint	Necessary field survey activities such as data collection and discussion with counterparts are appropriately set within the time frame of the evaluation study. Time frame also contains preparations such as distribution of questionnaires, and are appropriate in terms of timing, length and schedule of the evaluation study.	
B	(2) Study Team	107
Viewpoint	Team members are assigned on a impartial basis, and are with balanced specialty.	
Comment		

2 Date Collection and Analysis

B	(1) Evaluation Questions	51
Viewpoint	Evaluation questions are in line with evaluation purposes and set properly in the evaluation grid. General questions as to the five evaluation criteria are narrowed down to more specific sub questions to identify necessary information/data to be collected.	
B	(2) Data Collection	72
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Viewpoint	Achievement level of overall goal is examined on the basis of appropriate indicators, being compared with targets.	
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Viewpoint	The causal relationships whether the effects for the beneficiaries resulted from the project is examined either in a qualitative or quantitative manner (i.e. Are the effects at the overall goal level caused by the project intervention?)	
Comment		

3 Evaluation Results

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Viewpoint	Perspectives for evaluation of 'Impact' (e.g. achievement level of the overall goal, causal relationships between the outcome of the project and overall goal, ripple effects) are substantially covered. Grounds for judgment are clearly stated in a convincing manner.	
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Viewpoint	In light of the specialties of evaluators, transparency of the evaluation process and appropriateness of the criterion of judgment, evaluation information are credible.	
B	(4) Participation of Partner Countries	13-14
Viewpoint	Partner countries' stakeholders participate actively in the process of evaluation, not just provide information.	
Comment		

6. Overall Comment

In Vietnam, it is urgent task to introduce IT for the regular activities and organizational management to improve the productivity of many organization both governmental and private. Under this situation, the master plan “IT2000” is announced in April 1995 aimed at “Information Society” and human resource development in this field was prioritized in the plan. The project on Vietnam Information Technology Training Institute was responded to the this demand to the Vietnames country. The Overall Goal of the project is to foster IT specialists for promoting market economy. It aims to operate and manage IT training and seminar sustainably based on needs of the industry. The expected outputs of this project are: Institute operation system will be established; Institute facilities and IT equipment will be provided/installed/operated/maintained properly; Technical capability of counterparts will be upgraded as IT instructor and planner; Training courses will be implemented based on the needs of industry and New skills and technology will be introduced to IT industry through seminars and publications.

According to the “IT Ex-post Evaluation Final Report” on this project, it is clear that the project was successful. The Institute operation system was established (project made base of the ITI; The activities: allocate necessary personel, make plans od activities, bugege plan and execute properly, establish and operate managemnet system). The Institute facilities and IT equipment was installed and operated (Activities: make facilities refurbishment plan and implement as planned, provide and install machinery and equipment, operate and maintain machinery and equipment properly). The IT instructors and planers of counterparts were upgraded (Activities: make Technical Cooperation Program, Implement technology transfer to C/P, monitor and evaluate the technology transfer to the c/p). The Training courses were implemented based on needs of industry in this time (activities: implement needs study for It in industry, make implementation plans of training courses, prepare IT training curriculum and teaching materials, implement/ monitor/evaluate the training courses). The new skills were introduced to IT insdustry through seminars (make imlement plans of seminars and publications, prepare the seminars and publications, implemet/monitor/evaluate the seminars and mailing of publications). However, the project has some factors inhibiting the achievement of the impacts: teachers are lack of practice, courses’ attendants could be in different groups,..

Concerning to the evaluation process, it is unquestionable that the evaluation process was conduced logically and objectively (After the source of information used, study methode used). The found result, conclusion and recommendation were also reasonable.

Date
2006-12-14



Name of Third Party
DANG VAN CHUYET

Designation
Dean of the Faculty of IT

Name of the Institution
HANOI UNIVERSITY OF TECHNOLOGY, HANOI, VIETNAM

EXECUTIVE SUMMARY

1. Outline of the Project	
Country: <i>Vietnam</i>	Project title: <i>Project on Vietnam Information Technology Training Institute (VITTI)</i>
Issue/Sector:	Cooperation scheme: <i>Project-type Technical Cooperation</i>
Division in charge: <i>JICA Vietnam Office</i>	Total cost: <i>192,517,000 yen</i>
Period of Cooperation	<i>March 1997 to March 2002</i>
	Partner Country's Related Organization(s): <i>Vietnam National University (VNU)</i>
	Supporting Organization in Japan: <i>N/A</i>
Related Cooperation	<i>N/A</i>
<p>1-1. Background of the Project</p> <p>Vietnam announced the IT related Master Plan (IT 2000) in April 1995 aimed at an "Information Society", in which human resource development was prioritized. Thus, it is urgent task to introduce IT for the regular activities and organizational management to improve the productivity in both governmental and private organizations.</p> <p>In this context, the Government of Vietnam (GOV) requested to the Government of Japan (GOJ) for the necessary technology transfer for the operation and management of IT training and seminars in VITTI which was established under VNU in order to foster IT specialists for promoting market economy.</p> <p>GOJ responded to the request and R/D of the project on Vietnam Information Technology Training Institute was then signed on 21 March 1997. Accordingly, the project was launched in March 1997 and ended in March 2002.</p> <p>1-2. Project Overview</p> <p>(1) Overall Goal</p> <p>To foster IT specialists for promoting market economy. The projects aims to operate and manage IT training and seminar sustainably based on needs of the industry.</p> <p>(2) Project Purpose</p> <p>VITTI is able to sustainably operate and manage IT training courses and seminars based on needs of the industry.</p> <p>(3) Outputs</p> <ol style="list-style-type: none"> i) The institute operation system was established ii) The institute facilities and IT equipment was provided, installed, operated and maintained properly iii) Technical capability of counterparts was upgraded as IT instructors and planners iv) Training courses were implemented based on needs of the industry v) New skills and technology were introduced to IT industry through seminars and publications. <p>(4) Inputs (as of the Project's termination)</p> <p>Japanese side:</p> <ul style="list-style-type: none"> - Long-term Expert: 10 or 5 or 9 (there are some conflicts in the figures on the long term experts in the Final Evaluation Report, page 90-91. Thus it is proposed that JICA HDQ carefully check this figure) - Short-term Expert: 14 - Trainees received: 17 - Equipment (FY 1997-2001): 146,808 thousand Yen <p>Vietnamese Side:</p> <ol style="list-style-type: none"> 1. Allocation of counterpart personnel <ul style="list-style-type: none"> - Full-time technical C/P: 18 - Part-time technical C/P: 4 - Administrative staff: 12 2. Provision of Building and facilities with the area of 725m² 3. Provision of machinery and equipment and their maintenance with the amount of VND 1.9 billion 4. Local Cost: VND 8.3 billion 	

2. Evaluation Team		
Members of Evaluation Team	Investconsult Group: <ul style="list-style-type: none"> - Ms. Ho Ngoc Lam, Team Leader - Ms. Nguyen Thuy Nhi, Sub-team Leader for semi-structured interview - Mr. Nguyen Linh Tuan, researcher for semi-structured interview - Mr. Nguyen Chau Thanh, Sub-team Leader for case study - Mr. PhamTri Trung, researcher for case study 	
Period of Evaluation	26 January to 16 February 2006	Type of Evaluation: Ex-post Evaluation
3. Results of Evaluation		
3-1. Summary of Evaluation Results		
(1) Impact		
<ul style="list-style-type: none"> - The Project made a base for the ITI in general and training activities in particular; enhanced the status of the Institute as well as trained human resources for the Institute - The VITTI modules gave a new orientation for their ex-participants in IT related activities - Most of trainees have applied their knowledge/skills gained from the VITTI training courses into their work to reduce time, labor, expense and to increase work's effectiveness. - Promotion of courses' ex-participants at work - The courses positively affected the opinions of the ex-participants and their employers on IT application - Benefits for ex-participants' colleagues and other related persons - Name of the Institute for afterward training programs is a "precious asset" that remains after the project ended - Not-anticipated impacts: (1) the establishment of VNU-net, (2) contribution to the establishment of IT Faculty of Technology College under VNU, (3) orientation of training under the Program No.112 and (4) skills for trainees to do other things than for their work 		
(2) Sustainability		
* Technical aspects:		
<ul style="list-style-type: none"> - Method of lecture preparation is the prominent factor of the project which sustains - VITTI got much training technology transferred by Japanese experts according to which training organization procedures must be strictly followed although they can not keep exactly the transferred Japanese standard - Infrastructure (computers, network, etc) supported by the project is now backward, but it is the infrastructure background for VITTI - VITTI has been trying to continuously carry out training activity in the post project duration and with the aim of intensifying it, some modification has been made 		
* Organizational aspects:		
<ul style="list-style-type: none"> - The project created premise for establishment of ITI 		
* Financial aspects		
<ul style="list-style-type: none"> - Financial mechanism for trainees during project duration is not appropriate with current conditions of ITI - Financial support from VNU is not so much but rather enough - Other earnings of ITI are increasing 		
3-2. Factor(s) that have promoted project		
<ul style="list-style-type: none"> - Lecturing and working styles is one of the project objectives that sustains 		
3-3. Factors that have inhibited project		
<ul style="list-style-type: none"> - Key staff of the project left leading to a big problem of sustainability of transferred technology 		
3-4. Conclusion		
<ul style="list-style-type: none"> - ITI is weak in demand analysis and marketing - ITI needs accredited/valuable certificate to improve the attractiveness of its courses - The attendants were not at the same level, therefore it was difficult for lecturers to prepare appropriate lectures - The lecturers were theoretical. 		

3-5. Recommendations

- In the technology transferred by the Japanese experts to VITTI' staff, there should be marketing method and skills so that ITI can continue enrolling new students for their own courses
- In the project design, the project should introduce VITTI to cooperate with international or Japanese training organization(s) which could award a diploma with international prestige so that after the project ended, VITTI could further cooperate or seek for such cooperation
- The project should help VITTI with a method of intake clarification in order to select trainees at the same level of acquirement for each course
- The project should design training courses with experts who had practical experience (e.g.: from IT companies) as invited guests in order to complement the capacity of VITTI's trainers who have mainly pedagogic experience and skills

3-6. Lessons learnt:

In general, a lot of technology fields are advancing at rapid pace in Vietnam, and in particular, information technology shows remarkable advancement in line with the market-oriented economy. It is often the case that roles information technology plays and expectation for the training organizations are different between the project inception stage and the project completion stage in case that training course focuses on practical level rather than basic skill/technology. Although it is not easy to predict future perspectives of the advanced fields, ideally it is necessary to formulate framework of project or program with mid/long term perspective based on the rapid pace of information technology field in Vietnam which is closely relevant to market-oriented economy

3-7. Follow-up Situation: N/A

1 Outline of the Ex-post Evaluation Study

1.1 Project Overview

Vietnam has announced the IT related master plan "IT 2000" in April 1995 aimed at "Information Society" and human resource development in this field was prioritized in the plan. In many organizations both governmental and private, it is urgent task to introduce IT for their regular activities and organizational management to improve the productivity.

Under this situation, Vietnam Information Technology Training Institute (VITTI) was established under Vietnam National University, Hanoi (VNU) in order to foster IT specialists for promoting market economy, and the Vietnamese Government requested to the Japanese Government for the necessary technology transfer to make VITTI operate and manage IT training and seminar.

In response to the request, the Government of Japan, through Japan International Cooperation Agency (JICA), dispatched the Preliminary Study Team (September 1996), and the Implementation Study Team (December 1996) to discuss and agree with the Vietnamese authorities concerning the framework of the Project implementation. The Record of Discussions (R/D) was then signed on 21 March 1997.

In accordance with the R/D, the Project on Vietnam Information Technology Training was launched in March 1997 and ended in March 2002, after 5 years of implementation.

The project's overall goal is to foster IT specialists for promoting market economy. The projects aims to operate and manage IT training and seminar sustainably based on the needs of industry. The expected outputs of this Project are: (1) Institute operation system will be established, (2) Institute facilities and IT equipment will be provided/installed/operated/maintained properly, (3) Technical capability of counterparts will be upgraded as IT instructor and planner, (4) Training courses will be implemented based on the needs of industry an (5) New skills and technology will be introduced to IT industry through seminars and publications. In order to achieve the Project's purpose and Overall goal in general and those outputs in particular, the Project realized following activities:

Output	Activities
1. Institute operation system will be established	Allocate necessary personnel, make plans of activities, make budget plan and execute properly, establish and operate management system
2. Institute facilities and IT equipment will be	Make facilities refurbishment plan and and implement as planned, provide and install machinery and equipment, operate and maintain machinery and

provided/installed/operated maintained properly	equipment properly
3. Technical capability of counterparts will be upgraded as IT instructor and planner	Make Technical Cooperation Program, Implement technology transfer to the C/P, monitor and evaluate the technology transfer to the C/P
4. Training courses will be implemented based on the needs of industry	Implement needs study for IT in industry, make implementation plans of training courses, prepare IT training curriculum and teaching materials, Implement/monitor/evaluate the training courses
5. New skills and technology will be introduced to IT industry through seminars and publications	Make implementation plans of seminars and publications, prepare the seminars and publications, implement/monitor/evaluate the seminars and mailing of publications

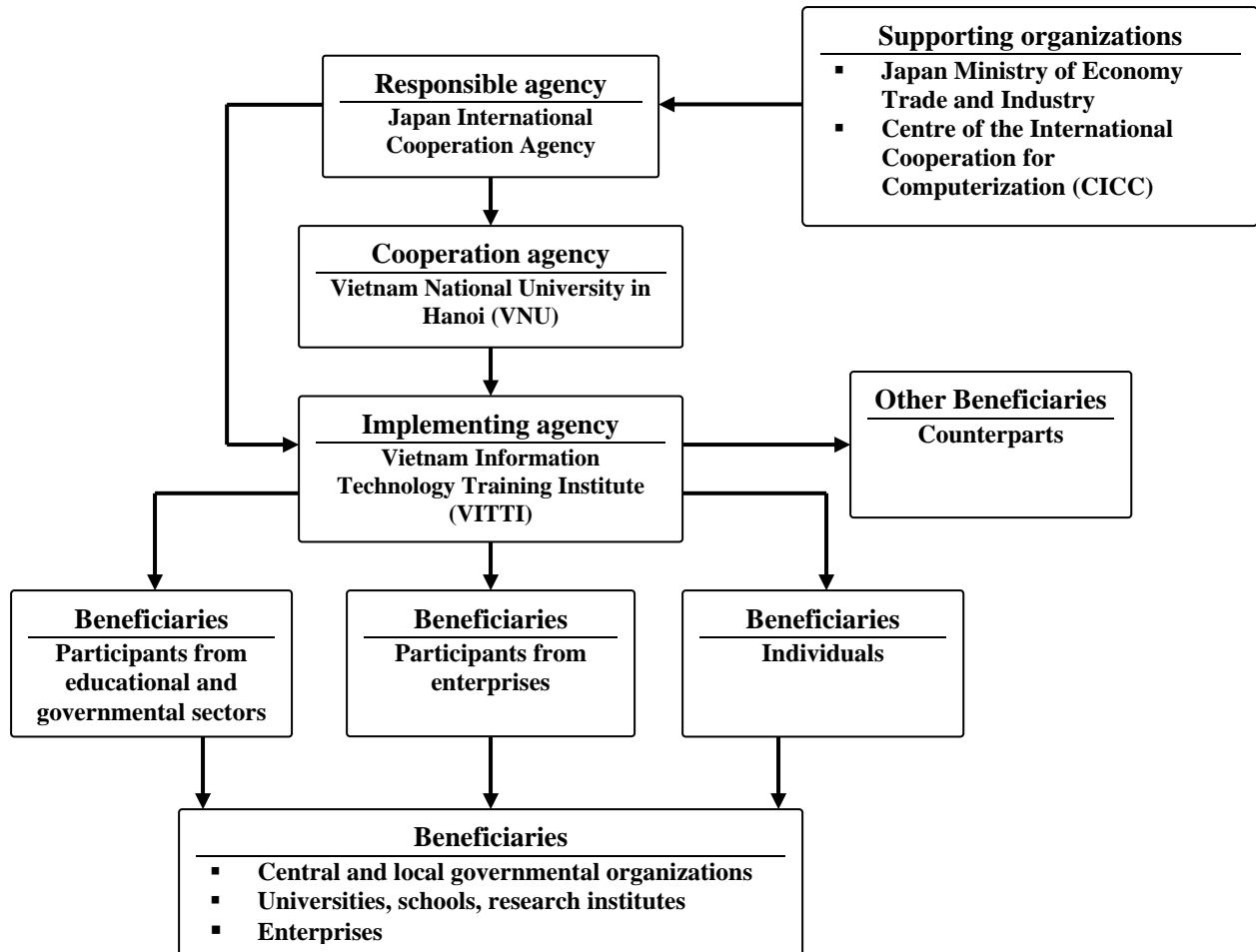


Figure1: Structure of the Project

1.2 Objective of the Study

The objectives of this ex-post evaluation are 1) to extract lessons-learned and recommendations to improve future JICA planning and, implementation capacity of the implementation Agencies, 2) to meet the accountability to the Japanese tax payers. These two objectives will be achieved respectively through evaluating mainly the impact and the sustainability of the project.

1.3 Members of the Evaluation Team

The Evaluation Team consists of 1) the sub-team for in-depth and 2) the sub-team for case study. The concrete members are as follow:

Ms. Ho Ngoc Lam	The Team Leader
Ms. Nguyen Thuy Nhi	Sub-Team Leader for semi-structured interview
Mr. Nguyen Linh Tuan	Researcher for semi-structured interview
Mr. Nguyen Chau Thanh	Sub-Team Leader for case study
Mr. PhamTri Trung	Researcher for case study

All of those members are taking part in information collection and report preparation.

1.4 Schedule of the Ex-post Evaluation Study

The Study was carried out during the period from 26 January to 16 February 2006.

2 Study Methods

2.1 Source of Information

The Team has collected and stored multiple sources of evidence comprehensively and systematically. The data collection was carried out on the basis of the following forms:

1. Documents
2. Interviews
3. Observations

2.2 Study Methods

The study has been carried out on the basis of three methods: 1) Literature survey, 2) Semi-structured interview and 3) Case study.

The *literature survey* was applied to collect the data available in official sources at various levels. The *semi-structured interviews* were realized with key informants from project agencies in Hanoi, i.e. Director, Chief of Divisions and Lecturers. The interviews mainly aimed at obtaining the

updated specific information, awareness, and opinions of those subjects on the situation. The number of interviewed people is mentioned in the following table:

Table 1: Number of in-depth interview

<i>No</i>	<i>Organization</i>	<i>Interviewees</i>	<i>Number of interviewees</i>
1	VNU	Deputy Headmaster	1
2	VITTI	Ex- Director of VITTI	1
3		Deputy Director of VITTI	1
4		Chief of Department	1
5		Lecturers	3

The *case study* was conducted in order to gain an in-sight into the impacts of the project on the beneficiaries, i.e. IT specialist and their employing organizations. The objective of case study is to examine the issue of whether or not the IT training is beneficial in some way to the trainees as well as their organizations. The Research Team had classified the trainees into groups and then identified and selected the cases. The cases are the trainees and organizations, both ones, which achieved/obtained significant skills and the ones that were also trained and the obtained skills/knowledge are not as expected and there are many obstacles hindering them to gain the expected results. The number of cases is mentioned in the following table:

Table 2: Number of interviews for case study

<i>No</i>	<i>Interviewees</i>	<i>Number</i>
1	Trainees	10
2	Chiefs	3

The collected data were analyzed on the basis of methods of 1) Comparison and 2) Description. The comparison method was used to compare the actual indicators and planned indicators etc. The description will demonstrate the history of project implementation, its performance and effects. It aims to investigate the contributing factors, inhibiting factors for impact and sustainability.

Detail of study methods are attached in Annex 1.

3 Evaluation Results

3.1 Impact of the Project

3.1.1 Impacts Attained at the Overall Goal level

1. The Project made a base for the ITI in general and training activities in particular; enhanced the status of the Institute as well as trained human resources for the Institute

With the assistance from the Project, the VITTI (now ITI) as an organization was established to provide IT training activities as the measures to achieve the overall goal of the Project.

The next impact for VITTI was the technology transfer. This is unexpected impact from the point of view of Project receiving side, but it is an expected impact for the sponsors and donors, because the technology transfer is the base of sponsored projects.

The project with the cooperation of Japanese experts is the chance for Vietnamese staff to approach with standard working style and advanced knowledge. The Japanese experts set up there a professional and effective approach of work. The officers and lecturers learnt many things from those experts. Up to now, the working style learnt in the project duration has been maintained and become the orders of current ITI.

The Project has also built a good base for its activities in both the training and research ones. During the period of the Project, the research component was not developed, only the training component. The project gave skills to analyze and arrange training courses. At present, all activities of the training component are carried out on the basis of the framework during the Project, i.e. organization of the courses, enrolling trainees etc. The ITI now, especially the training component has inherited much from the Project.

The Project trained young officers of VITTI, enhanced their professional qualification. There were training courses in Japan as well as in Vietnam for the lecturers. The experts also arranged small competitions of lecturing for the lecturers, where they got suggestions on lecturing skills from the experts. Up to now, the staff from the Project are the people with great ability at the ITI. The prestige of the Institute has been enhanced much. At the time, the systematical and methodical organization of VITTI made it much better than other IT training centers. The relationship with other organizations has also become much better. Thus, despite the fact that the period after the Project has not been concentrated on the training activity, there has been contract

training for some organizations such as Bach Mai Hospital, Ministry of Fisheries, Airports organization etc. The Institute has also cooperated with others in training such as ICDL Organization.

2. The modules of VITTI gave a new orientation for their ex-participants in IT related activities (see Table 3)

The training courses at VITTI included many themes but were too short. Therefore the contents of the courses have character of general, basic and systematic information. A course with such contents saves time for people without IT knowledge to read books and for people with concrete knowledge, it will have the character of systematization. However after attending the courses, many ex-participants proved that the information (knowledge) from the course had given them a suggestion (new idea) in IT application and after deeper self-study, they could utilize the gained knowledge in their following work. That also means that the course gave raise to the participants' demand of deeper IT training to develop their own work.

Table 3: Assessment on the training courses by trainees and their IT chiefs.

<i>No</i>	<i>Assessment on the training courses</i>	<i>Agree</i>	<i>Disagree</i>	<i>No comment</i>	<i>Total</i>
1.	Too much knowledge in such a short time that the course only introduce systematical and basic knowledge	12	0	1	13
2.	Training course organization is good	10		3	13
3.	Material and facilitates are good	10	1	2	13
4.	Teachers are good (but some are lack of practical experiences)	7	3	3	13
5.	The courses orient IT application and further study of trainees	12	1	0	13

Furthermore at that time, the general Vietnam IT level was not so high and the contents of the courses were relatively new in the IT sector in Vietnam. Thus, that caused interest of the ex-participants in the issues at the courses and made them desire to study more to apply in work. This impact can be illustrated by the case of Mr. Cao Cu Tu - the Director of Information Technology Center of the Committee for Ethnic Minority Affairs (CEMA). The training course oriented the establishment of website, LAN, database of ethnic minority affairs and human training to serve the IT development of the center.

3. Most of trainees have applied their knowledge/skills gained from the VITTI training courses into their work to reduce time, labor, expense and to increase work's effectiveness. (see Table 4)

This can be considered as the main impact of the VITTI training courses. Despite of the fact mentioned in the 2nd impact that the VITTI training course only supplied a frame of knowledge for further study by the trainees, the trainees coming back from the training courses have used their knowledge and skills effectively to apply in their work.

Table 4: Application of learned knowledge/skills and benefits from IT application.

No	Questions	Agree	Disagree	No comment	Total
1.	The trainees can apply knowledge/skills they learned in the work	11	2	0	13
2.	IT application helps to save time	9	0	2	11
3.	IT application helps to save labour	9	0	2	11
4.	IT application helps to save expenses	9	0	2	11
5.	IT application increases the work's effectiveness	9	0	2	11

The simplest example of IT application is that trainees can use the basic skill of computer after they attended the special course of VITTI. Mr. Nguyen Thanh Binh is a staff of Department of Accounting of Bach Mai Hospital. The training course was highly appreciated because his computer skills were upgraded and it helped him more skillful and faster in daily computer acts. Time for work on PCs was reduced.

The users who had no IT background could become IT experts and applied their knowledge gained from the training course to their work. Mr. Phan Huy Toan from Department of Information and Net of Ministry's Department of Grassroots Culture and Information is an example. Being a technical expert without any knowledge of IT, after the training course, Mr. Toan became an IT expert and now Chief of Department of Information and Net of of Ministry's Department of Grassroots Culture and Information. He could effectively use what he learned and himself built LAN and website for his department, making the contribution to reduce time for information exchange, especially in remote areas.

With knowledge and skills gained from the training course, the trainees who are IT experts applied IT in their work to reduce time, labor and expenses. The IT application not only facilitated the trainees' work but also improve the effectiveness of their organizations' functions.

Mr. Le Xuan Cau is an example. He is the Deputy Chief of Hydrological Department of Hydro-Meteorological Data Center. He has done M.Sc. in IT in Hydrography in Netherlands. He attended two training courses of internet/intranet and IT project management at VITTI. After the training course, he chaired and managed the design of software for input of freshwater data and establishment of freshwater database. This database can reduce much time and labor for supplying data to serve the research and plan of water resources in comparison with data in hard copy in previous stage.

Thanks to the skills and knowledge from the training courses, both users and IT experts have applied what they learnt to their work to increase labor efficiency and work's effectiveness, facilitated not only their functions but also the others to enhance the cooperation between the individuals and organizations.

4. Promotion of courses' ex-participants at work (see Table 7)

The fact that the ex-participants applied their knowledge gained from the courses has helped them not only at work but also enhanced their social status at their organizations. Their work has been prosperous for the whole organization as well as other officers. The work at the organizations became more comfortable. That positively affected their position at the organization.

Table 5: Promotion of ex-participants.

No	After the training courses, the trainees...	Agree	Disagree	No comment	Total
1.	feel self-confident in work	11	0	2	13
2.	'social status are enhanced	9	0	4	13
3.	participate in IT project/ are in charge in IT field of other projects.	9	0	4	13
4.	are assigned to higher position	4	0	9	13

This impact is clearly demonstrated in the case of Mr. Phan Huy Toan from the Bureau of Culture and Information. Mr. Phan Huy Toan was a technical engineer and had no IT knowledge. After the training course, he proposed some project on IT application and training in his department and now is the Chief of Network Information Department. Next is the case of Mr. Cao Cu Tu and Mr. Cao Cuong from the Committee for Ethnic Minority Affairs. Before the course, Mr.Tu was the Deputy Director and now, and thanks to his efforts in IT application, he is

the Director of the IT Center of CEMA. As Mr. Cao Cu Tu realized the new orientation in IT application, he sent Mr. Cao Cuong for a deeper IT study. After extension of the LAN network of CEMA, Mr. Cao Cuong is now the administrator of this network. The case of Mr. Le Tuan Khanh from the Information Center of Military Technical Academy is also a typical example demonstrating this impact. Receiving a project from the Ministry of Defense, he attended the course. As he joined the Military Technical Academy, he had little IT knowledge. The course was very useful for him. He said that the knowledge was still associated with his work. He is now the Deputy Chief of the Center. He was appointed for this position thanks to his efforts in IT application. Another example is the case of Mr. Le Xuan Cau, Deputy Chief of Hydrological Division of the Hydro-Meteorological Data Center (HMDC). His ability could be demonstrated by the successful building of software for freshwater zones data processing. Thanks to his contribution to the IT at his organization, despite he is not an IT officer, his social status inside and outside the Center has been much enhanced. Thus, he was invited to take part in the Project of Building National Water Resources Information Framework”, sponsored by Australia. His role in this project is consultant for information system and as hydrological data provider. And just thanks to the participation in that project, he persuaded the management of the project to sponsor the computers to his division. All the present computers at his division were just sponsored by the project.

5. The courses positively affected the opinions of the ex-participants and their organization’s management on IT application. (see to Table 5)

After attending the courses, ex-participants started to apply their gained knowledge in work. As mentioned above, the general Vietnam IT level was not so high at the project time. The officers at leading levels were not so active in IT issues. They had relatively hesitating approach to the IT. The fact that the ex-participants of the courses had applied gained knowledge to work and had concrete effects attracting the attention of the management and made them to change their opinions on IT issues positively. The management has realized that the IT application brought them benefits at their work. At the beginning, there were also some barriers for management to accept this approach. Just the benefits at work persuaded them to improve the IT situation in their organization. The ex-participants of the courses naturally changed their opinions (orientation) on the IT application, especially those that had little or no knowledge of IT before attending the

courses. They said that they couldn't work without computer at this moment. They realized that the application of IT to work had improved the work efficiency.

Table 6: Changes of opinion in IT application.

No	Questions	Agree	Disagree	No comment	Total
1.	The awareness of trainees on IT application positively changed	8	3	2	13
2.	The attitude of leaders on IT application was good before the training course.	6	1	6	13
3.	If not, the attitude of leaders on IT role and IT application positively changed.	6	0	7	13
4.	The factors contributing to the changes				
	- IT knowledge	3	0	3	6
	- Success of IT application	4	0	2	6
	- Ability to persuade of trainees	3	0	3	6

The case of Mr. Phan Huy Toan can clearly illustrate this impact. Despite the fact that his professional work did not need IT so much, however in 2001, he prepared the project of LAN for the Bureau and it was approved by the Ministry of Culture and Information. That makes the interest of the management more serious. With clearer vision on IT application, the Management of the Bureau has decided to establish Network Information Department and Mr. Phan Huy Toan was assigned to be its head. Mr. Le Xuan Cau with the case study mentioned above also persuaded his leaders to invest to the freshwater database and the project brought clear results and changes in work effectiveness, raised the leaders' awareness in IT application.

6. *Benefits for ex-participants' colleagues and other related persons (see Table 6)*

Except the application to work by the ex-participants themselves after IT training at VITTI, their knowledge from the courses was also transferred to other members of their employing organizations. Many ex-participants have transferred their gained knowledge from the courses at VITTI to their colleagues in many forms such as direct training or indirectly through daily work at the organizations. Many other colleagues have also gained the approach of the ex-participants to the work. The fact that the knowledge of ex-participants was devolved on the other people of their organizations has saved the time for them to attend IT courses. The work efficiency by better IT application also means time, work saving etc. for those colleagues.

Table 7: “Domino impact”.

<i>No</i>	<i>Questions</i>	<i>Yes</i>	<i>No</i>	<i>No comment</i>	<i>Total</i>
1.	Has your knowledge be transferred to others?	9	2	2	13
2.	By which methods?				
3.	- At work	6		3	9
4.	- By training courses	2		7	9
5.	- Through teaching activities	4		5	9

There are some illustrations as follows. Mr. Phan Huy Toan mentioned above has been also in charge of the IT training at the Bureau. He wrote training materials and organized training courses on internet for about 140 staff of his department. Mr Luu Van Lam - Deputy Director of the Center of Irrigation University – after attended the course on IT project management wrote some articles of IT project management in the University’s magazine as guidance and guided his students in graduation works. Both he and his students can use it as an effective tool for their work and studies. Mr. Le Tuan Khanh - Deputy Chief of the Information Center of Military Technical Academy – after the training courses and further self study, now tries to retrain other persons in forms of monthly courses for the people interested in IT issues.

7. Name of the Institute for afterward training programs is a “precious asset” that remains after the project ended.

Another point that especially contributed to the success and existence of the project is the name and prestige of VITTI (ITI) in the market. This is the biggest inheritance that ITI gets from the project and is the premise for ITI to be selected by individuals and agencies for other training assignments. Taking the program 112 for example, this is a big and important program in the context of administration reform and IT development in Vietnam. With the qualification, experience, name and prestige that ITI got from the project, ITI had confidence to get such assignment.

3.1.2 Un-anticipated impacts

Beyond the foreseen impacts, the project also has some un-anticipated ones in both positive and negative trends. They can naturally originate from the achievements of the project, as well as subjective and objective factors of the project. We can consider such impacts in two aspects, the first is the impact with VITTI and other institutions and the second is the impact with trainees.

Firstly, the establishment of VNU-net is considered as the not anticipated impact of the project. It was established in 1998 with the support of Japanese IT experts of the project. The VNU-net was constructed in form of intranet with limitation of capacity. In 2001, with the lease line, the VNU-net developed as a network of Vietnam National University of Hanoi (VNU) which is now connecting 6 colleges and organizations under VNU. Currently ITI plays the role of internal ISP. This network effectively facilitates the operation of VNU and now becomes an essential part in VNU's daily work.

Secondly, the VITTI made the contribution to human resource preparation for establishment of the IT Faculty of Technology College. Some staff of the faculty was trained by VITTI and became it key persons. It can be considered the not anticipated impacts in promoting the relations between the VITTI and others in VNU and enhancing quality of teaching in the Technology College.

Thirdly, the VITTI training courses and seminars play an important role in orientation of training under the Program No.112¹ of the Government and made the necessary bases for the program. The seminars held by VITTI in the years of 2000 and 2001 on computerizing administrative management with the participants from the Ministries, and Provinces made a strong impression on computerization trends, the needs and methods of computerization. It made influences on awareness of key leaders to establish the Program No.112. The project has made contribution to the policies making as well.

In the project duration, so many leaders of provinces, provincial departments, who have decisive votes in IT application in their provinces, attended the training courses in VITTI and after coming back to their work, started their computerization in administration management in all aspects: facilities of software and hardware, human resource training and organization. Currently, after the project, the ITI continues to support Program No. 112 in three works: consultation for Steering Committee of program, preparation of training materials and training teachers for the program. It is considered as the most prominent un-anticipated impact of the project.

Fourthly, with the trainees, beyond the foreseen impacts, the training courses of VITTI supplied a wide range of knowledge and skills which helped trainees to do many things that they wanted

¹ That is a program of computerization of state administration according to the Decision No. 112/2001/QĐ-TTg dated 25 July 2001 by the Prime Minister, approving the Project of Computerization of State Administration for period 2001 – 2005.

other than application in their work. The case study of Nguyen Thi Yen Trang will show many interesting un-anticipated impacts of the training courses.

Fifthly, staff who has been working for VITTI during the project has left after the finish of the project, and made huge contribution to the development of new organizations/working place by using knowledge and skills obtained through training organized by VITTI/the project. This is one of un-anticipated positive impact.

It can be said that the Project achieved its expected impacts but also the un-anticipated ones. The impacts attained at the overall goal level are impacts could be classified as (1) impacts on the VITTI (establishment of VITTI, working style at VITTI, base for organizing training activities, training for staff of VITTI and the status of itself), (2) impacts on trainees (orientation in IT application and development, own application, promotion of ex-participants) and (3) impacts on organizations and the society (change of opinions, benefits for other people).

Un-anticipated impacts of the Project are (1) the establishment of VNU-net, (2) contribution to establishment of IT Faculty of Technology College, (3) orientation of training under the Program No.112 and (4) skills for trainees to do other things than for their work.

3.1.3 Analysis of factors

The achievement of impacts mentioned above was affected by various factors. There are some factors, which positively affected the achievement of the impacts and the ones that negatively affected this achievement.

i) Factors contributing to the achievement of the impacts

Facilities and training contents

As we know, the facilities such as computers were transferred from Japan, thus the VITTI had one of the best facilities base at that time. Most of questioned ex-participants proved that in comparison with other IT training centers, at that time, the courses at VITTI were provided with the best facilities. Furthermore, training contents of the courses were relatively actual for that time as training contents were suitable with the real needs. Thus, these two factors contributed much to the achievement of impact that *the courses gave a new orientation for their ex-participants in IT related activities and the application of the knowledge/skills gained from the VITTI training courses into their work.*

The activeness and initiative of the trainees

This factor play a very significant role in achievement of the *application of the knowledge/skills to work* and *benefits for ex-participants' colleagues*. Resulting from real needs, the trainees went to attend the courses, thus, they wanted to get real knowledge and actively participated the course to get the maximum of knowledge and skills. After the course, from their own initiative, the ex-participants has imparted to other colleagues from their organizations.

Support by ex-participants' organization management

In order to *apply* the maximum of *knowledge/skills*, the ex-participants need the understanding of their management as well as its support. The fact that the management of ex-participants' organizations supports the IT application and development in their organization in term of IT development programs as well as investment to IT makes more easy for ex-participants to apply their knowledge/skills from the course. And finally, the successful IT application leads to the *promotion of courses' ex-participants*.

ii) Factors inhibiting the achievement of the impacts

Teachers are lack of practice

From the point of lecturers, those had good qualification. The teachers were well trained and had high pedagogical qualification. They were enthusiastic to the attendants. But according to some questioned attendants, the teachers were too theoretical. Resulting from the reality, there were some practical problems that the attendants wanted to know, but the teachers could not explain. This is a very significant point of the courses, because it arose from the practical needs of attendants. That negatively affected the quality and lively characters of the courses. And that affects the knowledge/skills and its application by the ex-participants, when they have practical problem to solve.

The courses' attendants

This is a very important factor. Good identification of attendants contributes much to the success of the courses. According to Ms. Nguyen Thi Tham, the attendants of courses at VITTI could be divided into 2 groups, i.e. users and developers. The level of IT knowledge of attendants before attending the course was not equal. The reason to attend the courses was also different. Thus, the lecturers have to correct their teaching methods during the course. That means the lecturers must choose the most suitable teaching method for all participants. That affects the expected effects, respectively the impact of the course i.e. the knowledge/skills for the ex-participants to apply.

The contact between VITTI and trainees after the course

This is a significant factor to keep the impact of training courses. 9 of 13 interviewees said that there should be a contact from VITTI to trainees after course finished, because trainees need to solve some practical problem during application of the knowledge/skills to their work and thus, a consultancy from the VITTI could serve. Furthermore, if there is a contact after the course and the ex-participants could know further activities of VITTI, the ex-participants can themselves or send their colleagues to attend further courses.

Impact related to Overall Goal ‘IT specialists are fostered for promoting market economy’ is achieved totally. The JICA project created basis for development of VITTI. VITI plays important role of human resources development of IT field as well as IT technology in Vietnam, and had influenced over social impact through establishment of Program 112.

3.2 Sustainability

The sustainability is looked over through the aspects of technical, organizational, financial ones and factors impacting the sustainability were analyzed.

3.3 Technical aspect

1. Method of lecture preparation is the prominent factor of the project which sustains.

According to all key interviewed stakeholders among which many are lecturers who used to participate in the training activities of the project, what they got not much from the project was the method of lecture preparation, not the professional knowledge as they already studied since their college time. Presently, they still use such method to prepare lectures for training courses afterward. Far from that, these lectures are the background for many materials developed by the trainees for their own internal training courses in their agencies. This is shown evidentially by Case 3 of Phan Huy Toan.

2. VITTI got much training technology transferred by Japanese experts according to which training organization procedures must be strictly followed. However, they can not keep exactly the transferred Japanese standard.

Technology transfer is one of the project activities carried out by Japanese experts. The transferred technology will remain even when the project ended. In order to provide training courses, the following steps were taken:

- + Conducting preliminary surveys of actual demands;
- + Analyzing actual demands to decide training modules;

- + Developing contents for training courses (e.g.: lectures, etc);
- + Conducting training courses: inviting trainees and organizing courses;
- + Evaluating training results;

These steps were strictly followed during the project duration and lead to success of the project. However, at present, such steps as analyzing actual demands and evaluating training results are not taken as seriously as before. Although ITI acknowledge the importance of this step as it can help ITI to assure training quality by adjusting relating factors, they can not carry out such steps due to insufficient ability and budget to analyze market demand. Lacking knowledge and skills in doing marketing to attract more freelance trainees is the reason why they can not enroll many new trainees for their own organized courses without support from the project.

3. Infrastructure (computers, network, etc) supported by the project is now backward, but it is the infrastructure background for VITTI

According to the Deputy Director of VNU, the infrastructure of the project was not used for the project activities only, but for practical exercises of other universities under VNU also. Although most of the infrastructure is now backward compared with current technology standard except for the network, the project created a background of infrastructure for VITTI and its activities afterwards. All the backward equipment is replaced and improved immediately for continuous usages with the finance funded by VNU (see Table 9). If there was not such infrastructure funded by the project, it was difficult for VITTI to be newly equipped with such complete one. Observing some technical rooms of ITI, the acknowledgement is that equipment like computers, host computer and the network are rather modern and the environment for such equipment is quite standard. This shows a careful concern of ITI with maintenance and preservation of the infrastructure.

4. ITI has been trying to continuously carry out training activity in the post project duration and with the aim of intensifying it. some modification has been made.

After the project ended, VITTI was converted into the Information Technology Institute (ITI) with two functions: training and researching. After the project ended, freelance trainees are quite few, but the training cooperation agreements with other agencies (especially state ones) have been increasing. However, this is caused by the relation between ITI and other agencies. Training

courses for the administration reform program 112 can be taken as an evidence for this. In 2004, ITI opened 14 courses for around 280 trainees under this program and responses from the trainees were quite good. Most of the trainees were satisfied with the provided courses (duration, content of lectures, etc). And this result was also assessed as “*satisfied*” by the Ministry of Home Affairs. Currently, ITI and this ministry are discussing the continuance of providing such courses. The below figure and summary data in Annex 4 showed the continuity of the training activity that ITI carried out after the project ended except that the in-country training courses were conducted with financial support of JICA.

Table 8: Summary of IN-COUNTRY training courses provided by ITI From 2002 to 2004

Unit: person

Course	State agencies	SOE	Private owned enterprise	Other	Total
1	16	6	46	22	90
2	25	28	18	23	94
3	24	15	15	31	85
4	38	10	15	37	100
5	28	10	11	28	77
6	20	16	18	20	74
7	26	16	18	21	81
8	45	10	8	21	84
9	25	6	20	31	82
Total	247	117	169	234	767

The modification of training activity is shown by two aspects: (i) the contents of training courses are developed consistently with “*clients’ demand*” and the procedures of conducting courses are now more simply with a view to making training activities in appropriateness with ITI’s ability; and (ii) ITI does not carry out many direct training activities, but cooperate with other training organizations such as PT and CISCO in which ITI carries out standard testing and examination procedures to students trained by such training agencies and organizations. This is a new direction of ITI to intensify its operation, and in fact this direction helps ITI to obtain a large amount of earnings.

In general, the project created the technical backbone for VITTI to further develop. The standard transferred by Japanese experts can not be kept strictly as it was designed and this is a shortcoming of those who received and run training activities in the post project duration. However, with the mentioned modification of training cooperation, ITI somewhat proved its prestige of training activities thanks to the transferred technology.

3.3.1 Organizational aspect

5. The project created premise for the establishment of ITI.

Actually, the establishment of ITI was based on this project. VITTI was firstly established with the purpose of receiving and implementing JICA's project. After the project ended, VNU was aware of VITTI's role in IT development process in Vietnam in general and expansion of Hanoi Natural Science University in particular. Given such awareness, ITI was born with as large investment from VNU for ITI's infrastructure and operation as the project did. New function of ITI are i) researching tasks assigned by VNU and ii) researched on high applications in cooperation with other Vietnamese and international research institutes.

Regarding the organizational aspect, current human resource of the project can afford the training activity with basic technical standard transferred by the project. However, if ITI does not pay attention to train their staff to improve their knowledge and skills while the market demand is changing and developing day by day, ITI will not be able to attract more skillful and professional staff for their further stable operation in the future.

3.3.2 Financial aspect

6. Financial mechanism for trainees during project duration is not appropriate with current conditions of ITI.

The project provided training courses for two kinds of attendants: special courses for *staff of state agencies* and courses for *freelance trainees*. Staff of state agencies attended these courses with tuition funded by the project, while freelance trainees had to pay tuition on their own. If the project succeeded, in some context it was because the project used an appropriate financial mechanism.

It is impossible for ITI to continue such training activities after the project ended, as for staff of state agencies, if there is no subsidy of tuition, they will not be desirous of attending these courses. Meanwhile for freelance attendants, the reason is absolutely different. Freelance attendants have identified purposes, so they are willing to pay tuition. However, the training contents must meet the demand of this object.

7. Financial support from VNU is not so much but rather enough.

After the project ended, with the advocacy of establishing ITI under VNU, VNU provided ITI with financial support annually. The financed items are the same for each year, however, the amount may change, especially the amount for research projects, as it depends on the projects proposed by ITI.

Table 9: Financial support from VNU in 2005

<i>No.</i>	<i>Item</i>	<i>Amount (USD)</i>
1.	Salary for regular staff	16,500
2.	Research projects (01 basic research project and 07 research projects under National University)	16,670
3.	Capacity building (infrastructure and training activities for staff)	63,000
4.	Small repairs	12,500
	Total	108,670

The financial support from VNU is not as much as that from the project, however, it is enough to maintain the existence and activities of ITI.

8. Other earnings of ITI are increasing.

Beside the financial support from VNU, ITI has additional earnings from other activities such as training, doing researches and examining trainees trained by other training institutions. And these earnings are increasing more and more and become even bigger than financial support from VNU.

In 2004, the earning from training activity was 500 mil. VND (31,500 USD) and in 2005, it was 1,200 mil. (75,500 USD). These amounts show a break-through development of this activity after the project ended and are considered one of the two main earnings of ITI.

Beside such earnings mentioned above, ITI also has other earnings from other activities such as doing researches under contracts with other institutions, examining trainees trained by other training institutions under cooperation with such organizations. Earning from examining trainees

trained by other training institutions is quite big compared with that from doing researches – around 1,300 mil. (81,700 USD).

Thus, it can be concluded that financial earning from training related activities holds the majority and training is still the strength of ITI. Such earnings somewhat show the self-financing of ITI's operation after project.

3.3.3 Sustainability of Project Impacts

9. Change of awareness of policymakers on IT application and development.

VITTI provided training courses for local authority leaders and these courses, in return, had effect on local authority leaders' awareness and attitude on IT. With the changed mind on IT, IT application and development would have chances of improvement. This is one of the project's objectives and it showed a rather strong pervasion of the project. This impact is also sustainable as it had effect on the source of policy development. Today, it is difficult to recognize this sustainability as IT has become more popular than that by the time of the project. However, it is this project that plays the role as the premise for IT development.

10. Impacts of the project will sustain provided that ITI's leaders must strictly keep standard.

As mentioned above, the working style, training course organization procedures and teachers' knowledge and skills transferred by Japanese experts during the project duration are those that sustain, in order to keep such sustainability, ITI's leaders must strictly keep the standard.

11. Non-project objects are indirect beneficiaries of the project.

Being trainees, those who used to attend VITTI's courses became trainers in their working places when they got back to work and the knowledge obtained from VITTI's courses was continuously imparted and spreaded to non-project objects.

Similarly, left staff with the trained working skills and experience achieved from the project will be those who bring and spread the working skills and style to other agencies.

3-3. Analysis of factors of impact and sustainability

3-3-1. Factors promoting Impact and Sustainability

1. Lecturing and working styles is one of the project objectives that sustains.

This finding was already mentioned as an impact, and it is also a sustainable factor of the project due to many interviewees' responses, especially from young lecturers who commended that new lecturing and working style is very important and contributed much to their "growth".

3-3-2. Factors inhibiting Impact and Sustainability

1. Key staff of the project left leading to a big problem of sustainability of transferred

The project, in some context, created human resource with professional skills for VITTI. And VITTI, thence, has been providing training courses to staff of other agencies or individuals who demand. In principle, this method seems to be the best way to develop sustainability of VITTI's training activities in post project duration. However, most of those who used to participate in and/or be trained by Japanese experts during the project have left with the trained skills and experience and are not replaced by similar staff. In the project period, there were 40 staffs in the VITTI. After the project ended, there are only 30 left. The 10 persons who left were key persons who participated as lecturers. According to responses from most of interviewees from ITI, the main reason leading to the leaving of so many key persons was the opportunity to be trained, not the salary as there is no change of salary for ITI' staff after the project ended compared with that in the project period.

Newcomers who do not have opportunities to approach full technology, skills and contents of the project can not carry out training activities with quality as high as before. However, this can be regarded as a shortcoming of ITI after the project ended. According to some responses from the in-depth interviews, ITI's present staff is not trained with the knowledge and skills transferred by the project, thus they can not conduct training activities with the project' standard.

ITI does not continue frequent training for its staff to improve their knowledge and skills to maintain qualified training activities for ITI' students. Besides, being trained is what ITI' staff feels attractive about their work for ITI. If ITI can do this well, their staff (even those who used to participate in the project) will not leave for other jobs.

4 Conclusion and Recommendations

<i>No.</i>	<i>Conclusions</i>	<i>Recommendations</i>
1.	ITI is weak in demand	In the technology transferred by the Japanese experts to VITTI'

	analysis and marketing	staff, there should be marketing method and skills so that ITI can continue enrolling new students for their own courses.
2.	ITI needs more accredited certificate to improve the attractiveness of its courses.	In the project design, the project should introduce VITTI to cooperate with international or Japanese training organization(s) which could award a diploma with international prestige so that after the project ended, VITTI could further cooperate or seek such cooperation.
3.	The attendants were not at the same level, therefore it was difficult for lecturers to prepare appropriate lectures for all such attendants.	The project should help VITTI with a method of intake clarification in order to select trainees at the same level of acquirement for each course.
4.	The lecturers were theoretical.	The project should design training courses with experts with practical experience (e.g.: from IT companies) as invited guests in order to complement the capacity of VITTI's trainers who have mainly pedagogic experience and skills.

5. Lessons

In general, a lot of technology fields are advancing at rapid pace in Vietnam, and particularly, information technology shows remarkable advancement in line with market-oriented economic. It is often the case that roles Information technology plays and expectation for the training organizations are different between the project inception stage and the project completion stage in case that training course focuses on practical level rather than basic skill/technology. Although it is not easy to predict future perspective of the advanced fields, ideally it is necessary to formulate framework of project or program with mid/long term perspective based on the rapid pace of information technology field in Vietnam which is closely relevant to market-oriented economy.

ANNEX 1: STUDY METHODS

Literature survey

The literature survey is applied to collect the secondary data available in official sources at various levels. Relevant documentation, information and data were collected and analyzed for establishing a solid base of background information. Collected information can be classified in the following contents:

- *Information on the project context:* IT status and development in and after the duration of project, IT strategies, IT plans.
- *Information on the project:* project establishment and implementation, available evaluations, training courses and seminars, number and kinds of trainees in and after the projects.
- *Information on trainees and their organizations:* their IT development and application.

Kinds of documents collected.

- List of trainees of courses
- Legal documents and strategies/policies/plans;
- Project documents in the stage of VITTI establishment and other plans in and after the project;
- Available reports, evaluations of JICA, VITTI on the project;
- Other available data/ documents/dossiers

Semi-structured interview

Semi-structure interviews were realized with key informants from project agencies in Hanoi, i.e. VNU and VITTI. The interviews mainly aimed at obtaining the updated specific information, awareness, and opinions of those subjects on the situation. Contents of those interviews strictly followed the points mentioned in the Evaluation Grid.

Implementation of semi-structured interview

The interview guide for different group of interviewees (VNU, VITTI) were developed together with interview manual, which helped the interviewers to follow the same way of interview and information recording.

The collected information were processed and analyzed by experts by using qualitative research analyses methods. This analysis was a part of the evaluation report.

Case study

The case study was conducted in order to gain an in-sight into the impacts of the project on beneficiaries, i.e. IT specialists and their employing organizations. The objective of case study was to examine the issue of whether or not the IT training was beneficial in some way to the trainees as well as their organizations. The followings are steps of the case study:

Classification of potential cases

After receiving the list of trainees from VITTI, the Research Team (the Team) classified those trainees into groups according to the criteria such as type of IT course, sector of work etc.

Cases identification and selection

On the basis of the classification mentioned above, the Team selected several representatives of those groups to contact through telephone in order to gain preliminary information about the trainees. This information contains basic characteristics of those objects such as willingness, communication skill etc., as well as significance or representative of the case. Then the Team

analyzed this preliminary information of potential cases. On the basis of this analysis, the Team selected trainees and chiefs of their employing organizations for study. Those objects were selected by the following criteria:

- They participated in the IT courses provided by VITTI and now they are applying the gained skills in their job;
- The organizations are also the ones that have their staff trained in an IT training courses by VITTI.
- Representing all 7 IT training courses provided by VITTI. However, due to lack of database supplied by VITTI on the training course and list of trainees so the representative of trainees who attended the IT instructor course could not be chosen.
- Representing different sectors (educational, governmental, business etc.). However, because the limitation of database on trainees for selection and the small number of trainees from enterprises, the representative of business sector could not be interviewed.
- The trainees and organizations to be selected were both the ones which achieved/obtained significant skills and the ones that were also trained and the obtained skills/knowledge are not as expected and there were many obstacles hindering them from to gain the expected results.

The collected data were analyzed on the basis of methods of 1) Comparison and 2) Description. The comparison method was used to compare the actual indicators and planned indicators etc. The description demonstrated the history of project implementation, its performance and effects. It aimed to investigate the contributing factors, inhibiting factors for impact and sustainability.

ANNEX 2: EVALUATION GRID

The following Evaluation Grid organizes the points of the evaluation work and information collection methods. This will clarify the matters concerning evaluation study.

Evaluation Criteria	Evaluation Question		Achievement Criteria/Measures	Information/Data Needed	Information/Data Source	Data Collection Method ⁹⁾
	Main Question	Sub question				
Impact	<i>Specify “What” is to be investigated. Focus on the points should be clarified through the Evaluation survey.</i>	<i>Breakdown the main questions into details questions. (What should be studied for each main question?)</i>	<i>Decide “How” to answer sub-questions.</i>	<i>Specify “What” information/data is to be collected to answer sub-question.</i>	<i>Specify from “Where” the data is to be collected</i>	<i>Identify “How” the data/ information is to be collected.</i>
	With equipment provided and technique transferred to VITTI, to what extent had the Project contributed to fostering IT specialists for promoting market economy?	Does the project contribute to achieving the goals of the Master Plan IT 2000 , and furthermore, the Decision No. 81/2001/QD-Ttg of the Prime Minister on fostering the IT application in the stage of 2001-2005?	Calculating the percentage of project results on IT human resource development (number of participants) in the target numbers mentioned by the two documents.	- Target number of IT specialists which must achieved mentioned in the two documents - Project’s result number of participants in training courses.	- Legal documents - VITTI– Reports on implementation	Literature review
		Does the actual number of participants in training course and seminars increase in comparison with the planned one?	Comparison of actual implementation number and planned number	- Planned number of participants in training courses and seminars - Project’s result number of participants in training courses and seminars	- VITTI – Reports on implementation	Literature review
		Does the actual number of training course and seminars increase in comparison with the planned one?	Comparison of actual implementation number and planned number	- Planned number of in training courses and seminars - Project’s result number of in training courses and seminars	- VITTI– Reports on implementation	Literature review
		How is the annual demand increase of the training courses and seminars?	Comparison of number of training courses, seminars, and participants in years	Number of training courses, seminars, and participants in years	- VITTI– Reports on implementation	Literature review
		In what field and who does the project impact? What have the participants become after the course? Do their positions impact IT planning and application in their organizations?	Totalizing number of participants in each field (administration, education, health care, enterprises, etc.) and their position in their organization (Chief of organization, IT manager, staff, etc.) before and after training courses?	- Matrix of fields and positions of participants - Change of their positions in their organizations	- VITTI - Participants and their organization’s chiefs	- Literature review - Case -study

	In what works have the participants applied their training knowledge after training courses?	Listing kinds of work, which are applied the IT (Application only, administrative and financial management, network building, promotion and presentation, etc.)	- Answers of interviewees	- Participants and their organization's chiefs	- Case study
	What percentage of work load has been applied IT?	Calculating the percentage of work load which have been applied IT	- Answers of interviewees	- Participants and their organization's chiefs	- Case study
	What are the benefits from IT application in works?	Ranking the benefits from IT application in works (human resource saving, time saving, accuracy of work, product/result quality increasing, etc)	- Answers of interviewees	- Participants and their organization's chiefs	- Case study
	What are the differences between the work requirement or expectation of participants on knowledge/skills supplied by training courses and the knowledge they received?	Comparison (calculating the percentage) between the work requirement or the expectation of participants on knowledge/skills supplied by training courses and the knowledge/skills they received	- Answers of interviewees	- Participants and their organization's chiefs	- Case-study
	How many percentages of knowledge and skills received from the training courses have been applied in the works of participants?	Comparison between the things they gained from courses and the things they applied in works	- Answers of interviewees	- Participants and their organization's chiefs	- Case-study
	Is there any change in the point of view of participants/ their organization's chief in IT and role of IT in their works?	- Qualitative data. Survey the change of point of view at 3 time moment: before the course, after the course and after the implementation of IT application	- Answers of interviewees	- Participants and their organization's chiefs	- Case study
	Have the knowledge/skills of participants been transfer to others in their organizations/institutions? (domino impact)	Estimating the number of persons who have been transferred knowledge/skills	- Answers of interviewees	- Participants and their organization's chiefs	- Case study
	Is knowledge in VITTI seminars useful with participants?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs	- Questionnaire survey

What are factors which contributed to the achievement of the project overall goal?	Is there any (internal and/or external) factor that facilitates the establishment and operation of VITTI?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Semi-structured interview
	Is there any (internal and/or external) factor that makes the increase of number of participants/facilitate participants to attend the training course?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any (internal and/or external) factor that contributes to the quality of training courses and seminars?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any (internal and/or external) factor that facilitates the IT application in the participants' organization after the training course?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case -study - Semi-structured interview
If the Project has not produced expected impact, what were inhibiting factors?	Is there any (internal and/or external) factor that hinders the establishment and operation of VITTI?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Semi-structured interview
	Is there any (internal and/or external) factor that hinders the attendance of participants (even the reason that they do not know VITTI)?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any (internal and/or external) factor that obstructs to the quality of training courses and seminars?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any (internal and/or external) factor that obstructs the IT application in the participants' organization after the training course?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
Besides expected positive impacts, what unexpected positive/negative impacts had the Project brought to the beneficiaries?	Is there any impact on policies?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any economic impact on target society, project implementation agencies, and the beneficiary?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview

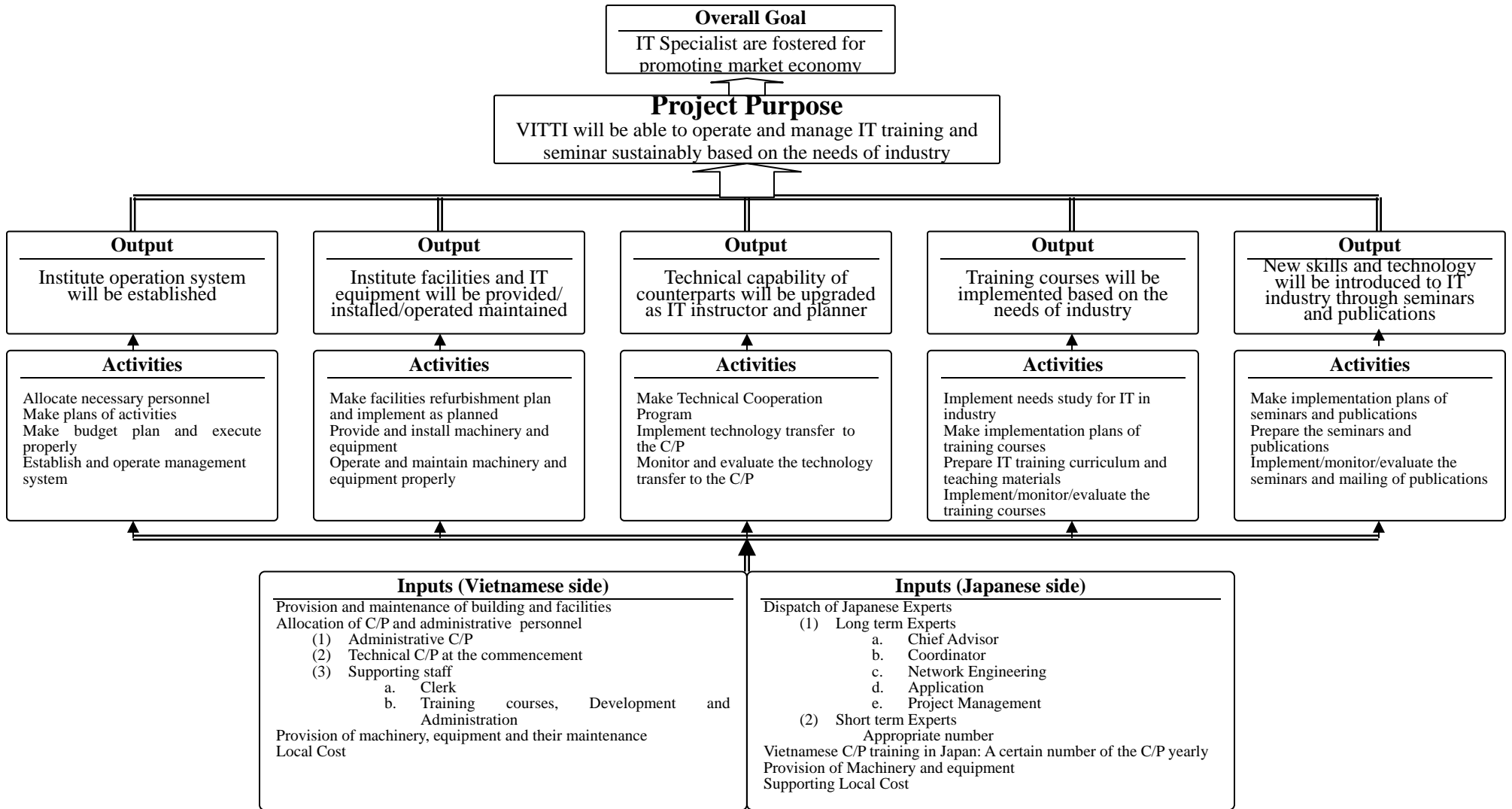
	Is there any impact on the organization, related regulations and legal system arrangement?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any impact on technology innovation in participants' organizations?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any impact in narrow the digital division between the provinces?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any impact in gender equality?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any impact in related institutions and organizations of the project implementation?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
What should JICA and counterpart agencies take into consideration to enhance the effectiveness of the project? What should JICA and counterpart agencies take into consideration to prevent negative impact of the Project, if any?	Is there any institutional/policy measure that should be done?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any external relation/cooperation with other organizations/institutions that should be done?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any personnel measure that should be done?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any technical/professional measure that should be done?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is there any financial measure that should be done?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
Sustainability In general point of view, can the Project produce sustainable impact?	Is the policy/strategy on IT promotion in Vietnam enhanced and does it have clearer route for develop?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Is the awareness of authorities, enterprises, and others in society on IT application enhanced? Did they aware of urge on the digital gap between Vietnam and the world?	- Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Do more and more people know about VITTI?	- Comparison numbers of persons who know VITTI in the periods - Qualitative data	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview

		Is there an increasing demand on the IT training courses and kinds of IT specialists that are trained in VITTI?	- Comparison and estimation of demand		- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Questionnaire survey - Semi-structure interview
From organizational viewpoints, can the Project produce sustainable impact?		Is the role of VITTI promoted by the governmental authorities?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is the current VITTI organizational structure suitable and strong enough to serve the existing demand on IT training?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		How flexible can the VITTI structure change for serving the much larger volume of training and more complicated requirements of profession?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		What is the current shortcoming of VITTI organization structure? Can it resolve in a certain time?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Have the financial source for VITTI be maintained after the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
From financial viewpoints, can the Project produce sustainable impact?		Is there any commitment on financial support for VITTI?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is there any regular budget for machinery and equipment upgrade?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is there any regular budget for lecturers' further training and upgrade?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Have the VITTI revenue made by training courses been enough to serve the operation and earned profit? Have it increased?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		How the participants' organizations assess the appropriateness of training fees?	- Calculating the percentage of ranking answers on appropriateness of training fees. - Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview

	Can the participants' organizations invest to apply IT in their works?	- Calculating the percentage of ranking answers on appropriateness of training fees - Qualitative data.	- Answers of interviewees	- Participants and their organization's chiefs - Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
From technical viewpoints, can the Project produce sustainable impact?	Have the actual capability of counterparts been able to manage and develop training course and seminars?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have the training modules, curriculums and other prints been updated and upgraded to serve the further requirements on trainings?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have the counterparts been further trained?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Has the technical staff of VITTI been able to manage and upgrade training facilities and the network?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
What are contributing/inhibiting factors in producing sustainable impact of the Project?	Have policies/ regulations contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have external relations contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have institutional factors contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have financial factor contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have personnel factor contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
	Have technical factor contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview

		Have capacity (professional and financial) of participants and their organizations contributed/inhibited the sustainable impact of the project?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
What should JICA and counterpart agencies take into account in order to ensure the sustainability of the Project?		Is there any institutional/policy measure that should be done?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is there any external relation/cooperation with other organizations/institutions that should be done?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is there any personnel measure that should be done?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is there any technical/professional measure that should be done?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview
		Is there any financial measure that should be done?	- Qualitative data.	- Answers of interviewees	- Stakeholders from VUNH, VITTI	- Case study - Semi-structured interview

ANNEX 3: LOGICAL FRAMEWORK



ANNEX 4: DATA COLLECTED IN EVALUATION
Summary of training courses outside of State budget funded projects

1. Training course of "LINUX Operation System Management "

Agencies delegating staff: Informatic Training Center, Post and Telematic Academy 1

Brief training content:

- Introducing and installing Operation System RedHat Linux
- Using draw up program, mc utility and basic commands
- Managing files and folders
- Using XWindows and StarOffice
- Filing data back up
- Introducing and practicing Shell program design
- Installing and managing Web Server
- System security and errors debug

Course: 02 courses, total: 80 trainees.

- 1st course from 23/06/2003 to 01/07/2003
- 2nd course from 07/07/2003 to 15/07/2003

2. User training course of "Computer basic skills "

Agencies delegating staff: Northern Area Airport Station Group

Brief training content:

- Basic concepts on information technology
- Using MS-Windows
- Using MS-Word
- Using MS-Excel
- Using Internet and E-mail

Course: 02 courses, total: 77 trainees.

- 1st: from 15/07/2003 to 26/09/2003 (4 classes/1 week=48 hours), with 39 trainees.
- 2nd: from 28/10/2003 to 09/01/2004 (4 classes/1 week =48 hours), with 38 trainees.

3. User training course of "Computer basic skills "

Agencies delegating staff: Hanoi Foreign Trade College

Brief training content:

- Basic concepts on information technology
- Using MS-Windows
- Using MS-PowerPoint
- Using Internet and E-mail

Course: 02 courses, total: 40 trainees.

- from 09/12/2003 to 30/12/2003

4. User training course of "Computer basic skills "

Agencies delegating staff: Danang Teaching College

Brief training content:

- Basic concepts on information technology
- Using MS-Windows
- Using MS-Word
- Using MS-Excel

- Using Internet and E-mail

Course: 01 course, total: 36 trainees.

- 2 implementation periods: period 1 from 26/04/2004 to 30/04/2004, period 2 from 31/05/2004 to 07/06/2004

5. User training course of "Computer basic skills"

Agencies delegating staff: Nutrition Institute-Health Ministry

Brief training content:

- Basic concepts on information technology
- Using MS-Windows
- Using MS-Word
- Using Internet and E-mail

Course: 01 course, total: 22 trainees.

- from 05/01/2005 to 30/01/2004 (4 classes/week)

6. User training course of "International Office Informatic "

Agencies delegating staff: Ministry of Aquiculture

Brief training content: including 7 modules under program standard of ICDLAP-United Kingdom.

- Basic concepts on information technology
- Using MS-Windows
- Using MS-Word
- Using MS-Excel
- Using MS-PowerPoint
- Using MS-Access
- Using Internet and E-mail

Course: 02 courses, total: 64 trainees.

- from 01/05/2004 to 30/05/2005 (2 classes/week)

Tabulator: Ton That Nhat Khanh – Chief of Science Technology and Training Section

INFORMATION TECHNOLOGY INSTITUTE – HANOI NATIONAL UNIVERSITY

SUMMARY OF TRAINING COURSES FOR STAFF UNDER PROGRAM 112CP- 2004

Name of subjects	Time		Courses
	From	To	
1. LAN, WAN designing and construction 2. Network and network equipment management 3. WinNT, 2000 Operating System 4. Unix, Linux network Operating System	15/03/2004	29/05/2004	4
1. E-mail system formulating 2. Website and Portal formulating and management	07/06/2004	27/07/2004	3
1. WinNT,2000 Operating System 2. Unix, Linux Operating System 3. E-mail system formulating 4. Website và Portal formulating and management	02/08/2004	27/08/2004	1
1. Formulating and managing Lotus Notes Domino	06/09/2004	19/09/2004	2
1. The role of IT in administration reform and IT application in administration management. 2. Analysing, designing and formulating information management system 3. Analysing, designing and formulating database system 4. Managing and organizing IT projects implementation 5. Safety and security of information system.	4/10/2004	18/12/2004	4

Total courses: 14

Total trainees: around 280 (around 20 trainees/1 course)

Hanoi, 14 March, 2006

Implementer: Ton That Nhat Khanh