# FOR CAPACITY BUILDING OF HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY TO STRENGTHEN UNIVERSITY-COMMUNITY LINKAGE (PHASE 2)

#### **INCEPTION REPORT**

**APRIL 2009** 

**KUMAMOTO UNIVERSITY** 

#### Technical Cooperation Project for Capacity Building of Ho Chi Minh City University of Technology To Strengthen University-Community Linkage (Phase 2)

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Appendix 1 Record of Discussions (R/D)

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Appendix 3 Work Flow of the Project

#### **ABBREVIATIONS**

C/P Counterpart Personnel

DOST Department of Science and Technology

GOJ Government of Japan

GOV Government of Socialist Republic of Vietnam

HCMUT Ho Chi Minh City University of Technology

JABEE Japan Accreditation Board for Engineering Education

JCC Joint Coordination Committee

JICA Japan International Cooperation Agency

M/M Minutes of Meeting

MOET Ministry of Education and Training

MOU Memorandum of Understanding

RBE Research Based Education

R&D Research and Development

R/D Record of Discussions

#### CHAPTER I BACKGROUND

Vietnam has implemented higher education reform since the introduction of *Doi Moi* in the 1980's and has made a notable success in improving the quantity and quality of higher education, contributing to the country's social and economic development. The government's five-year socio-economic development plan (2006-2010) envisages making Vietnam an industrialized country in the direction of modernization by 2020. However, in light of these rapid changes, the Vietnamese higher education institutions are yet to be fully capable of responding to the socioeconomic needs of the country. The Ministry of Education and Training (MOET) in 2005 approved a resolution entitled "Vietnam Higher Education Renovation Agenda (2006-2010)".

Regional development requires practical and effective responses to the issues that are unique to respective areas and regions, particularly in the field of engineering and technology. Ho Chi Minh City University of Technology (HCMUT) is the leading institution in southern part of Vietnam for engineering education and research. HCMUT has provided technical support to the local development needs; however the achievement has partly been constrained by the lack of systematic approach.

In view of the situation, upon the request from the Government of Vietnam (GOV), the Japan International Cooperation Agency (JICA) implemented the Project on Capacity Building of Ho Chi Minh City University of Technology to Strengthen University-Community Linkage (JICA-HCMUT Project)" (Phase 1) for three years since January 2006. Its final evaluation conducted in September 2008 observed as the outputs of the project the capacity improvement of HCMUT in (i) promoting university-community linkage; (ii) conducting research and development (R&D) to implement four pilot projects; and (iii) organizing workshops to promote the pilot activities.

In order for HCMUT to develop itself as the region's leading higher education and research institution in the field of engineering, a systematic and institutional setup that enables continuous R&D activities would be necessary. The GOV requested that the 2<sup>nd</sup> phase of Technical Cooperation Project be implemented to further strengthen university-community linkages at HCMUT. JICA made a detailed planning survey and discussed the contents of Phase 2 project with the Vietnamese counterparts, the result of which is compiled in the Record of Discussions (R/D) signed by both parties. In succession, implementation of the Project was entrusted to the Project Team of Kumamoto University in March 2009.

#### CHAPTER II PROJECT OBJECTIVES AND STRATEGIES

#### 2.1 Objectives of Project

The Project aims to improve the education and R&D capacity of Ho Chi Minh City University of Technology (HCMUT) to strengthen university-community linkage. The framework of the Project is shown below. The Project Design Matrix (PDM) and the Plan of Operation (P/O) are provided in Appendices 1 and 2 respectively.

#### Table 2.1 Project Framework

#### **Project Purpose**

Education and R&D capacity of HCMUT for promotion of university-community linkage is strengthened.

#### **Outputs**

- (1) Master course program of model faculties in HCMUT is transformed from classroom-learning based to research based education.
- (2) R&D capacity for university-community linkage is strengthened in HCMUT.
- (3) HCMUT has hub roles to promote academic cooperation for university-community linkage among higher education institutions and research institutions in the southern part of Vietnam.
- (4) Activities by HCMUT to promote local development in the southern part of Vietnam are well recognized.

#### **Activities**

Activities to achieve Output (1)

- HCMUT prepares overall implementation plan suitable for Master Course program by transforming classroom-learning based education to research based one.
- HCMUT holds awareness-raising seminar on research based education for the model faculties.
- HCMUT appoints model laboratories from the model faculties.
- HCMUT coordinates model laboratories to prepare each action plan.
- Each model laboratory implements each action plan.
- Model laboratories hold weekly seminar among research members.
- Model faculties develop guidelines to introduce research based education.
- Model faculties organize workshops to share experiences among laboratories within the faculties.

#### Activities to achieve Output (2)

- Model laboratories invite staff members involved in R&D activities from local institutions for research work.
- Graduate students in model laboratories are involved in the R&D activities.
- Model laboratories formulate R&D groups.
- R&D groups support the needs survey in the southern part of Vietnam with the support from

staff of the local institutions.

- R&D groups implement the R&D activities for the practical use.
- R&D groups hold regular meetings.
- Each of the R&D groups submits papers to journals or international/local conferences.
- Leaders of the R&D groups submit six-month activity reports.
- Some of the R&D groups apply for patent with support from R&D and project management office.
- R&D groups disseminate the outputs to local community.

#### Activities to achieve Output (3)

- Staff from the local member institutions is involved in joint R&D activities for local development conducted by HCMUT.
- HCMUT initiates inter-university committee to organize conferences at HCMUT or one of the local member institutions annually.
- HCMUT dispatches staff to other local member institutions through staff exchange program and R&D activities.
- HCMUT builds consensus clearly among people concerned on the intellectual property rights by the R&D activities before starting the activities.

#### Activities to achieve Output (4)

- HCMUT shares guidelines for university-community linkage with other local member institutions, local governments and communities.
- HCMUT updates the guidelines when necessary.
- HCMUT shares the information on staff members, the R&D topics, published papers for promotion of university-community linkage.
- HCMUT holds workshops for promotion of university-community linkage.

The four outputs expected under this Project are interlinked to contribute to the attainment of project purpose, as illustrated in Figure 2.1 below.

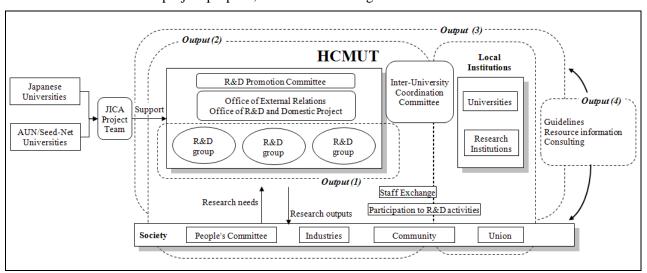


Figure 2.1 Overall Structure of the Project

#### 2.2 Basic Strategies to the Project

The basic strategy that underlies the Project is the establishment of sustainable system through triadic and synergetic effects of regional development, R&D and research based education (RBE) <sup>1</sup> that center on HCMUT. Therefore, the Project considers the activities of model laboratories to be the cornerstone for HCMUT's capacity improvement for university-community linkage, in which the R&D groups would integrally materialize RBE based on the needs survey and with the participation of local partners in the provinces. The Figure 2.2 depicts the concept of triadic strategy.

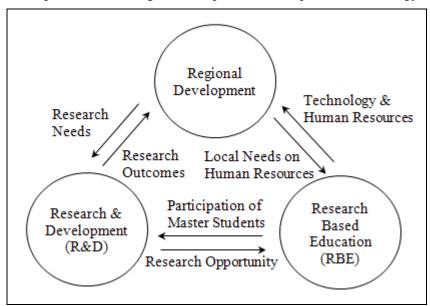


Figure 2.2 Triadic Strategy of the Project

#### 2.3 Target Area and Sector

Geographically, the Project targets the southern region of Vietnam, including Ho Chi Minh City, Tien Giang Province, An Giang Province, Lam Dong Province, Dong Nai Province, and Binh Duong Province.

The target sector of the Project is higher education in the field of engineering, including (but not limited to) chemical engineering, environmental engineering, mechanical engineering, and civil engineering.

<sup>1</sup> Research based education (RBE) is a style of education based on research activities at the "laboratory" supervised by a specific professor/lecturer/researcher. In this sense, RBE may also be called as "Laboratory based education" (LbE) in certain other places and/or academic fields.

#### CHAPTER III APPROACH TO THE PROJECT

Following is the basic approach to implementing this Project.

#### 3.1 Holistic Approach to Activities at the Model Laboratories

This Project, implemented as the second phase, is expected to suggest a substantial model where promotion of university-community linkage contributes to the country's development in general and industrialization in particular. The underlying idea is that the university-community linkage lies upon a range of activities including introduction of RBE, improvement of R&D capacity, and promotion of partnership with local institutions, that as a whole enables capacity improvement of HCMUT serving as a hub of university-community linkage activities in the region. The Project underlines the importance of enhancing HCMUT's institutional functions in identifying the needs and matching the technical seeds to them. The Project's holistic approach is illustrated in Figure 3.1.

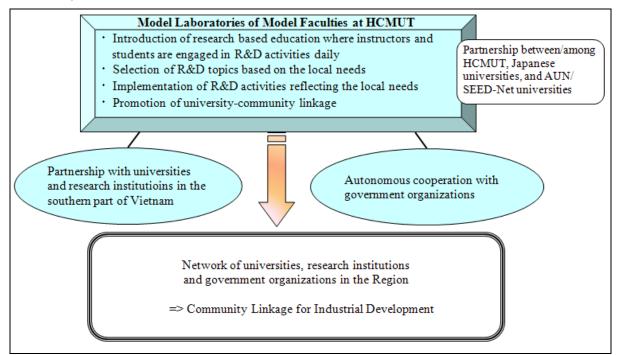


Figure 3.1 Holistic Approach to Activities at Model Laboratories

In the selected model laboratories, following activities are to be carried out comprehensively to encompass the Project's three key components, i.e., RBE, R&D activities, and community linkage for regional development.

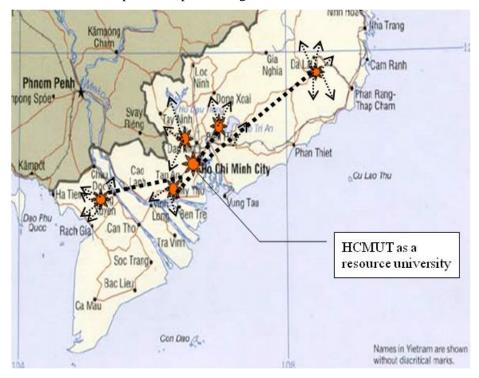
- (i) Select the research topics based on the results of needs survey
- (ii) Form R&D groups that include master's students as members
- (iii) Carry out R&D activities throughout the two-year master course program and complete a degree thesis on the research outcome

- (iv) Work with members from local institutions having the common technical needs and share the resources of HCMUT with them
- (v) Build up and maintain the network between/among local institutions through joint research

It is important to assure that RBE, through which model laboratories turn out skillful human resources to the society, would practically and substantially contribute to the development of local industries. Therefore, the Project should also take into account the HCMUT's role in monitoring the performance of degree holders after their graduation and reviewing the program based on the results.

#### 3.2 HCMUT as Resource University for the Network-Based Partnership

HCMUT is one of the resource universities where the government focuses its inputs of resources, and thus clearly is expected to spread its resources to the region. Through carrying out the activities of model laboratories, the Project intends to institutionalize the role of HCMUT to provide capacity building services to local partner institutions in respective target provinces so that they would in turn be a sub-resource to those others in further remote areas. Such network-based partnership would transfer the expertise of HCMUT to local institutions and the community. Most fundamental for it to work out well is the success of each project at each laboratory. Effective and sustainable network will be formed by accumulating knowledge and experience of projects, and it should not be considered as "the nominal network first and its context next". Figure 3.2 displays the network-based partnership centering around HCMUT as a resource university.



Source: Perry-Castañeda Library Map Collection

Figure 3.2 Network-Based Partnership centered around HCMUT

### 3.3 Development of Value Added Creativity and Problem Solving Skills through Research Based Education

RBE is aimed at training researchers to develop technology that can add value to the existing resources, or to identify and solve the problems of existing production system. In addition, R&D activities based on the local needs should take into consideration the availability of human and natural resources, environmental impact and global market trends. These types of abilities and competencies would correspond to those stipulated in the Japan Accreditation Board for Engineering Education (JABEE)'s criteria for accreditation of the master's degree programs, such as an ability to analyze engineering problems and to identify and solve problems, comprehensive knowledge and awareness of disciplinary and inter-disciplinary problems relevant to engineering practices, as well as communication and leadership abilities.

The model laboratories are expected to gain skills to solve problems and to create added-value through the process of selecting the research topics based on the results of needs survey and producing tangible outputs.

#### 3.4 Needs Survey as Communication for Community Linkage

Needs Survey is essential for university-community linkage to be established and recognized as worthwhile and to be institutionalized. In its implementation, survey would apply both quantitative and qualitative methods. Universities and industries generally have had few occasions for information exchange, and thus implementation of needs survey would have significance not only in the collected data on needs itself but also in the opportunity and practice of communication through survey activities.

Further, bearing in mind the possibility of bringing the research products into business, mutual confidence is indispensable. To foster confidence on both sides, face-to-face communication should be made from time to time while utilizing electronic means of communication as well.

#### 3.5 Practical User-Friendly Guideline for Research Based Education

Once RBE is introduced to and established at the model laboratories of model faculties at HCMUT, for it to be expanded to the whole university, firstly it is essential to accumulate success cases and to have them positively perceived by others. Then, a practical and user-friendly guideline would help them to start RBE.

In preparing the guideline for RBE, the Project will need to study the current situation while also taking into consideration the results of attitude survey and general exchange of ideas at seminars/meetings.

#### 3.6 Formulating the Incentives for Researchers

Researchers at universities have responsibilities to provide students with quality education and, at the same time, they are expected to keep updating their research outcomes so far as they are researchers. Taking into consideration the sustainability of research activities at HCMUT, systematic incentives, such as wider access to research

funds for the successful model labs whose research outcomes have been internationally recognized, are to be assured during the Project.

#### 3.7 Continuous Problem Identification and Solving through Monitoring

In education sector, it is only recent years that the importance of monitoring and follow-up started to receive proper attention. In project management too, monitoring is vital for effective implementation leading to expected results.

In the Project, the Research Guideline would set up a requirement for monitoring. The method of monitoring would include semiannual progress reporting as well as interviews with R&D group members, and by so doing, it is expected to raise awareness among stakeholders (including the R&D Promotion Committee members and researchers themselves) that early detection of problems leads to a success.

#### 3.8 Utilization of TV Conference and e-Learning

University-community linkage is based on human network, in which the principal means of communication is face-to-face interaction. However, considering various constraints such as time, manpower and resources, it would be efficient and effective to utilize communication infrastructure including TV conferences and on-line/off-line e-Learning. The Project will take advantage of such communication tools in joint research activities with Japanese and AUN/SEED-Net partner universities.

#### 3.9 Patent Strategy from Early Stage of R&D Activity

In international academic activities and business sector it is widely recognized that one must have the understanding of how to protect his/her own intellectual property rights as well as how not to violate those of others. The Project would promote HCMUT's institutional understanding and awareness toward intellectual property rights.

Normally in academic research activities, patent application is dependent on the results, while in private sector one of the keys to competitiveness is strategic R&D having a patent map in the first place. Each has its own benefits, and it is important to keep in mind that the purpose of seeking patent is not an immediate gain but long-term technology development; yet understanding and experiencing the private sector's patent strategy would be one of the ways to give impetus to continuous community linkage with the university.

#### 3.10 Information Sharing through Website

The Project will use its website to share information on the project activities and progresses, such as seminars and other events, forms and documents related to joint research. Although such type of information sharing may not be effective in some remote areas where access to internet is limited, it would provide the stakeholders with an opportunity to learn the mutual benefit of information sharing. It is also important to understand the basics of information management including protection of personal information.

#### 3.11 Project as Everyday Activity

During the Project, there will be a process of competition over the research fund that is limited. Success of model lab's activities would be determined by the progresses and outputs of R&D, which in turn lead to the next research fund to be granted. Accumulation of such experiences would enable the process to be institutionalized at HCMUT. In addition, R&D activities at the model laboratories should best be incorporated as everyday activities of HCMUT and its partner institutions, and not as special activities financed by the Project. Gradually it is expected that the R&D activities would become part of everyday practice, and part of culture at HCMUT.

# CHAPTER IV IMPLEMENTATION PROCESS AND METHODS

#### 4.1 Implementation Process

This Project will be implemented for 44 months from March 2009 to October 2012, as summarized below.

#### 1<sup>st</sup> Year (March 2009 – March 2010)

- · Preparation for project implementation
- · Discussion on Inception Report
- Needs Survey in five target provinces
- Joint research for the 1<sup>st</sup> year
- Introduction of RBE
- · Promotion of university-community linkage and inter- university coordination
- Counterpart Training in Japan

#### 2<sup>nd</sup> Year (April 2010 – March 2011)

- Needs Survey in five target provinces
- Joint research for the 2<sup>nd</sup> year
- · Introduction of RBE
- Promotion of university-community linkage and inter- university coordination
- · Counterpart Training in Japan

#### 3<sup>rd</sup> Year (April 2011 – March 2012)

- Needs Survey in five target provinces
- Joint research for the 3<sup>rd</sup> year
- · Introduction of RBE
- · Promotion of university-community linkage and inter- university coordination
- Counterpart Training in Japan

#### 4<sup>th</sup> Year (April 2012 – October 2012)

- Development of revised guideline on university-community linkage
- · Development of guideline on RBE
- · Organization of Final Seminar
- Preparation of Final Report

In addition to the above, the JICA plans to provide equipment required for joint research activities at HCMUT, for which the Project Team is to assist HCMUT in identifying and obtaining necessary information.

The overall work flow of the Project is shown in Appendix 3.

#### 4.2 Implementation Methods

Following are the methods of implementation for each activity planned during the Project period. [1-A] indicates a first year's activity in Japan; [1-a] a first year activity in Vietnam; [2-A] a second year activity in Japan; [2-a] a second year activity in Vietnam; and the rest proceeds likewise.

#### 4.2.1 First Year Activity: March 2009 – March 2010

#### [1-A] Development of Implementation Plan and a Draft Inception Report

The JICA Project Team is to develop an implementation plan based on the basic understanding of the current situation as well as the agreed R/D and M/M, and reports from Phase 1 Project. Technical and managerial approach, implementation method and schedule will be considered. Draft Inception Report is to be prepared.

#### [1-a] Discussion on Inception Report and its Revisions

The JICA Project Team is to discuss with the Counterpart members at HCMUT and JICA Vietnam Office the Draft Inception Report, revise it as necessary, and obtain basic agreement.

#### [1-b] JCC Meeting

The first meeting of Joint Coordination Committee (JCC) will be held, where the Inception Report and annual implementation plan will be explained for members' agreement. Minutes will be prepared and signed.

#### [1-c] Inception Report Seminar (April 2009)

Inception Report Seminar is to be organized, with the participation of representatives from HCMUT, People's Committee and partner institutions of the target provinces, and related industries. The objective of the Seminar is to present the plan and share the information about the Project at its launch.

#### [1-d] Preparation for utilizing TV Conferences

The JICA Project Team plans to utilize TV conference facilities, which is to be installed through AUN/SEED-Net Project, for the purpose of monitoring the project progresses and regular meetings. The Team will suggest the ways of synchronous/asynchronous, audio and video communications using the TV conference facilities.

#### [1-e] Preparation of Implementation Plan for RBE

The JICA Project Team will assist HCMUT to develop by August 2009 the implementation plan for introduction of RBE at each model faculty. The method of introduction should be such that a drastic and immediate change will not be required. Where possible, introduction of credit system and revision of curriculum may be considered. The JICA Project Team is to provide ideas and information on the implementation system, strategy and approach, posting of teaching staff, and preparation of research facilities and equipment.

#### [1-f] Seminar on Research Based Education

The Project will organize a series of seminars on RBE intended for instructors and students of each model faculty, where their implementation plan for introduction of RBE will be presented and shared.

#### [1-g] Development of Action Plan of RBE

The selected model laboratories of each model faculty is to develop an action plan for RBE, in due consideration of the facilities and resources available. The plan should include promotion of university-community linkage activities and expansion of R&D activities to partner institutions, through which master students would be able to acquire research management skills as well.

#### [1-h] Implementation of RBE at Model Laboratories

Model laboratories will implement RBE based on their plan. The JICA Project Team is to support each laboratory through monitoring.

#### [1-i] Establishment of R&D Promotion Committee at HCMUT

The R&D Promotion Committee is to be established at HCMUT, which will be responsible for the selection of research topics, screening of research proposals, monitoring and evaluation of R&D activities. The Committee will include members from the Offices of External Relations and R&D and Domestic Projects as well as faculty members who have sufficient knowledge and experience on the relevant fields of research. The JICA Project Team will assist the Committee to develop its activity plan.

#### [1-j] Implementation of Needs Survey at Five Target Provinces

Needs Survey is to be conducted in the Project's five target provinces. The JICA Project Team will provide support to the HCMUT's related offices and faculties, i.e., the Office of External Relations, Office of R&D and Domestic Projects, as well as the Faculty of Industrial Management, in the survey process including preparation of survey forms, implementation, data collection and analysis. It is important to understand that HCMUT should be able to assist respective provincial authorities in conducting effective needs survey by studying their methods and schedules prior to the implementation.

In parallel to the Needs Survey, the Team will provide awareness raising and technical assistance regarding patent maps for the potential topics of research. Accordingly the results of Needs Survey and the findings from patent maps should be shared promptly with the stakeholders in order that they may be utilized in the selection of research topics.

#### [1-k] Selection of R&D Topics and Groups

R&D topics and groups will be selected through an open call for application. A total of seven topics (four from each of four model faculties and three from the whole university) will be chosen. The R&D Promotion Committee, with support from the

JICA Project Team, will develop the format for research proposal, research guideline, and selection criteria, which will be made available on the website in June 2009.

Listed below are the preliminarily proposed items to be included in the research proposal.

- (P1) Research topic
- (P2) Summary of research contents (Leader, research summary, research needs, contribution to community)
- (P3) Previous achievement of members (research papers, lectures, publications, patents)
- (P4) Availability of resources and facilities relevant for the topic
- (P5) Major aspects of the topic (advantage over the existing technology, marketability, response to international academic needs and/or local development needs)
- (P6) Research partner in the province
- (P7) Expectation for the research partner from Japan and/or AUN/SEED-Net member countries

The research guideline would furnish details on the composition of group members, requirement of technical transfer to other laboratories, universities and industries, financial management, method of training in Japan, and so on.

The selection criteria would cover not only the contents of proposal itself but also other elements that are important for actual R&D activities, such as leadership of the group leader, motivation and enthusiasm of the group members, and teamwork with the local partners.

The JICA Project Team is to assist the R&D Promotion Committee in screening the proposals submitted by R&D groups and selecting from them the research topics and groups for the first year in accordance with the selection criteria. Selection will be made by the end of July 2009, and the first batch activity will commence in August 2009.

As potential research topics for the first batch, several have been identified through previous studies. In addition to them, newly identified topics should also be considered in selecting the topics.

#### [1-1] Monitoring of R&D Activities

The selected research groups are expected to develop detail plan for R&D jointly with their research partners and to obtain approval from the R&D Promotion Committee. The JICA Project Team will assist them through monitoring the progresses regularly and advising on coordination with research partners, financial management and the required bi-annual reporting to the R&D Promotion Committee.

#### [1-m] Establishment of Inter-University Coordination Committee

Participation of members from partner universities and industries is required in the joint R&D activities of the selected groups. In order to further promote the coordination and collaboration among those institutions, the Inter-University Coordination Committee is to be established in June 2009, having members from at least one higher education institution or research institution in each target province, including the An Gian University of An Gian Province, the Tien Gian University of Tien Gian Province, and the Da Lat University of Lam Dong Province. The Committee is to develop its activity plan by July 2009 and have regular meetings to review and revise it annually thereafter.

The Project Team will support HCMUT in establishing partnership with motivated universities in the provinces and exchanging Memorandums of Understanding (MOUs) with them.

#### [1-n] Counterpart Training in Japan

Among those engaged in the selected topics of R&D activities, four (4) members will be selected for a month-long training to be conducted in Japan. The main objective of the training are (i) to carry on the joint research activities; (ii) to prepare for submission of papers to international conferences/journals; and (iii) to obtain first-hand experience on RBE. The trainees will work at the laboratories of their joint research partners in Japanese universities including Kumamoto University.

#### [1-o] Staff Exchange Program

The Project plans to organize a staff exchange program for the duration of about a month, through which staff members of partner universities and institutions would have an opportunity to participate in and experience the joint research activities at HCMUT with researchers from Japan and other countries.

# [1-p] Promotion of Guideline on University-Community Linkage prepared in Phase 1 The Project is to promote the Guideline on University-Community Linkage prepared by the phase 1 project through workshops and monitoring. The experience and information obtained through the phase 2 project should also be added to the guideline as needed to make a revised version of the guideline.

#### [1-q] Follow-up of the Four Pilot Projects undertaken in Phase 1

The four pilot projects undertaken in the Phase 1 project will be followed up by HCMUT assisted by the JICA Project Team. Based on the results of follow-up monitoring, the ones that have attained preliminary outcomes can be selected as the topics of R&D in phase 2 to carry on their activities. For the ones that are yet to see results, the JICA Project Team will suggest alternatives or possible ways for fund raising.

#### 4.2.3 2<sup>nd</sup> Year Field Activities (April 2010 – March 2011)

#### [2-A] Preparation for 2<sup>nd</sup> year activity

The achievements from 1<sup>st</sup> year activities will be reviewed in preparation for the 2<sup>nd</sup> year.

#### [2-a] JCC Meeting

JCC meeting is to be held at the beginning of the second year, where the annual activity plan will be discussed.

#### [2-b] Research Forum

In order to share the outputs and experience of R&D activities of the first year, a Research Forum will be organized. The R&D groups will present their research results, demonstrate the experiments, and share the technical and managerial challenges faced and the means they have taken to overcome them. The Forum is expected to provide an opportunity for exchange of opinions among researchers and other stakeholders.

#### [2-c] Preparation of Research Report by R&D Groups

The R&D groups of the first year are to submit their final report to the R&D Promotion Committee. The reports should contain the record of R&D activities at HCMUT as well as of the joint activities with research partners in Japan and ASEAN countries, research outcomes such as datasets and software programs, papers presented at international conferences and journals, application and registration of patents, prospect for mass production and marketability, and so on. The reports' website version would be made available electronically through the internet with due considerations to patent and commercialization.

#### [2-d] Preparation for Patent Application

The R&D groups are to continually update the patent map, and in consultation with JICA Vietnam Office and the JICA Project Team, to file for a patent. The JICA Project Team would coordinate with research partners in Japan and ASEAN countries and support patent application within six months from the presentation at an academic conference. In principle, patent application would be made in Vietnam and its cost be borne by HCMUT. Following the application, the R&D groups and HCMUT, together with the JICA Project Team, would discuss the examination request, registration and maintenance, and develop the subsequent strategy. In case where the patent is registered, partition and grant of intellectual property right would be determined within the research group based on the contributions of each member to the relevant research outcomes.

#### [2-e] Implementation of R&D Activity

The R&D Promotion Committee is to select the R&D topics and groups for the second year. The Committee, with support from the JICA Project Team, would need to assess

the R&D activities carried out in the first year to determine their go or no-go based on their outputs (to be) achieved.

#### [2-f] Introduction of RBE

The JICA Project Team conduct monitoring on the introduction of and system for RBE at model laboratories. Progresses of master thesis on the topics of joint research will be monitored through bi-annual reports and interviews. Workshops will be organized in order to share the experience among and beyond the model laboratories.

#### [2-g] Revision of Guideline on University-Community Linkage

Revisions of the Guideline on University-Community Linkage are to be made as needed by HCMUT with support from JICA Project Team.

[2-h] Development of Database on University-Community Linkage and R&D Activity Database is to be established, containing the information on the HCMUT's intellectual resources such as research groups' contacts and major topics, papers and publications, conference presentations, patents applied, equipments available, and any other reference materials that are available. The JICA Project Team will support HCMUT's administration departments to develop and maintain the database.

#### [2-i] Workshop on University-Community Linkage

With the objective of promoting university-community linkage activities, a series of workshops will be organized every year from 2010. Various programs such as presentations, laboratory tour, shows and exhibitions, demonstrations of experiments, and introduction of TV conference system, would be planned in order to show to the public the university's research environment and outputs. The Workshop would contribute to improving HCMUT's publicity and visibility as a leading research institution with international standard and to further promoting its recognition among the industries and community. The program could include lectures by Japanese researchers using TV conferences.

#### [2-j] Promotion of Research Outcomes to Community

The research outcomes achieved though the joint R&D activities should be put into practical use by the local researchers and technicians. In case where additional improvement is required, researchers of HCMUT should be prepared to support them. In order for HCMUT's administration departments to provide incubation services to potential entrepreneurs, the JICA Project Team would give advice based on the experience of Japanese universities and local governments.

#### [2-k] Presentation at Academic Conferences and Journals

The R&D groups are expected to present their research outcomes at least once at an international conference or a referee journal. The JICA Project Team will provide advice in cooperation with research partners in Japan and the third countries.

#### [2-1] Follow-up of Four Pilot Projects undertaken in Phase 1

Follow-up of the four pilot projects undertaken in the phase 1 project should be continued, with more attention to their spillover effects on industrial development. The outcomes of pilot project may further suggest potential R&D topics.

#### 4.2.4 Third Field Activities (April 2011 – March 2012

#### [3-A] Preparation for third year activity

The achievements from  $2^{nd}$  year activities will be reviewed in preparation for the  $3^{rd}$  year.

#### [3-a] JCC Meeting

JCC meeting is to be held at the beginning of the third year, where the annual activity plan will be discussed.

#### [3-b] Preparation of Research Report

(same as [2-c])

#### [3-c] Implementation of R&D Activity

(same as [2-e])

#### [3-d] Introduction of RBE

(same as [2-f])

In preparation for final compilation of the guideline, interviews may be organized in order to collect candid opinions of instructors and students facing challenges in practicing RBE.

#### [3-e] Development of Guideline on RBE

Based on the experience of introducing RBE, HCMUT is to develop a guideline for introducing RBE at the master's level model laboratories. Upon approval of the R&D Promotion Committee, the guideline will be released by August 2011. The guideline should be practical, user-friendly, showing standardized steps so that any institutions within their existing resources and environment could pursue RBE.

#### [3-f] Workshop on Research Based Education

Using the guideline developed in [3-e], a series of workshops on RBE is to be held at each model laboratory. The objective is to share the experience and lessons learned through introduction of RBE and to further expand it to other laboratories and faculties.

#### [3-g] Revision of Guideline on University-Community Linkage Activity

(same as [2-g])

# [3-h] Development of Database on University-Community Linkage and R&D Activity (same as [2-h])

[3-i] Workshop on University-Community Linkage Activity

(same as [2-i])

[3-j] Promotion of Research Outcomes to Community

(same as [2-j])

[3-k] Presentation at Academic Conferences and Journals

(same as [2-k])

[3-1] Application and Registration for Patent

The R&D groups, in consultation with the JICA Project Team, are to continue with application and registration of patents for their research outcomes.

#### 4.2.5 4th Year Field Activities (April 2012 – October 2012)

[4-A] Preparation for Fourth Year activity

The achievements of the third year activities will be reviewed in preparation for the fourth and last year.

[4-a] JCC Meeting

JCC meeting is to be held at the beginning of the fourth year, where the annual activity plan will be discussed.

[4-b] Preparation of Research Report

(same as [2-c] and [3-b])

[4-c] Implementation of R&D Activity

(same as [2-e] and [3-c])

In consideration for sustainability of activities after the period of JICA's cooperation, more focus is to be placed on institutionalization of R&D and university-community linkage activities.

[4-d] Introduction of RBE

(same as [2-f] and [3-d])

[4-e] Development of Guideline on Research Based Education

(same as [3-e])

[4-f] Workshop on Research Based Education

(same as [3-f])

[4-g] Revision on the Guideline on University-Community Linkage Activity

(same as [2-g] and [3-g])

[4-h] Development of Database on University-Community Linkage and R&D Activity

(same as [2-h] and [3-h])

# [4-i] Workshop on University-Community Linkage Activity (same as [2-i] and [3-i])

# [4-j] Promotion of Research Outcomes to Community (same as [2-j] and [3-j])

- [4-k] Presentation at Academic Conferences and Journals (same as [2-k] and [3-k])
- [4-1] Application and Registration for Patent (same as [3-1])

#### [4-m] Final Seminar

The Final Seminar is planned in October 2012 to share the experience, outputs and lessons learned from the Project with universities, institutions and industries that have and have not participated in the Project. The topic of seminar should include how to sustain the R&D activities and to introduce RBE to other universities in the country. The seminar program will include shows and mini-exhibitions as well as presentations.

#### CHAPTER V ORGANIZATION AND STAFFING

#### 5.1 Organizational Framework

The executing agency of this Project is the Vietnam National University Ho Chi Minh City, and the counterpart agency is the Ho Chi Minh City University of Technology (HCMUT).

There are 11 faculties at HCMUT, among which the Faculties of Chemical Engineering, Environmental Engineering, Civil Engineering, and Mechanical Engineering will be the four model faculties in introduction of RBE. In promotion of university-community linkage activities, all faculties including those other than the above four will be involved. The Offices of External Relations and R&D and Domestic Project, along with the Faculty of Industrial Management, will be playing coordinating role internally and externally, in particular for the needs survey.

#### 5.2 Project Team

The JICA Project Team headed by the Team Leader Prof. Usagawa of Kumamoto University, consists of the following twelve experts as listed in Table 5.1. The assignment of experts for Research Instruction is subject to adjustment depending on the requirement as the project progresses. The assignment schedule of the experts (as of March 2009) is given in the Figure 5.1.

Table 5.1 JICA Experts

	Field of Expertise	Name of Expert
1	Team Leader	Prof. Tsuyoshi Usagawa
2	Deputy Team Leader / University-Community Linkage Activities	Mr. Toru Ishibashi
3	Deputy Team Leader / Research Based Education	Ms. Kyoko Nakano
4	Socio-Economic Survey	Ms. Yoko Satomi
5	Intellectual Property	Prof. Norio Iriguchi
6	Joint Research (Environmental Engineering)	Prof. Kenji Furukawa
7	Joint Research (Civil Engineering)	Prof. Yoshito Kitazono
8	Joint Research (Chemical Engineering)	Prof. Pas-Aga D.Gaspillo
9	Joint Research (Chemical Engineering)	Prof. Kenji Kida
10	Joint Research (Mechanical Engineering)	Prof. Naoki Uchiyama
11	Joint Research (Mechanical Engineering)	Prof. Satryo Soemantri
12	Joint Research (Mechanical Engineering)	Prof. Yoshifumi Chisaki



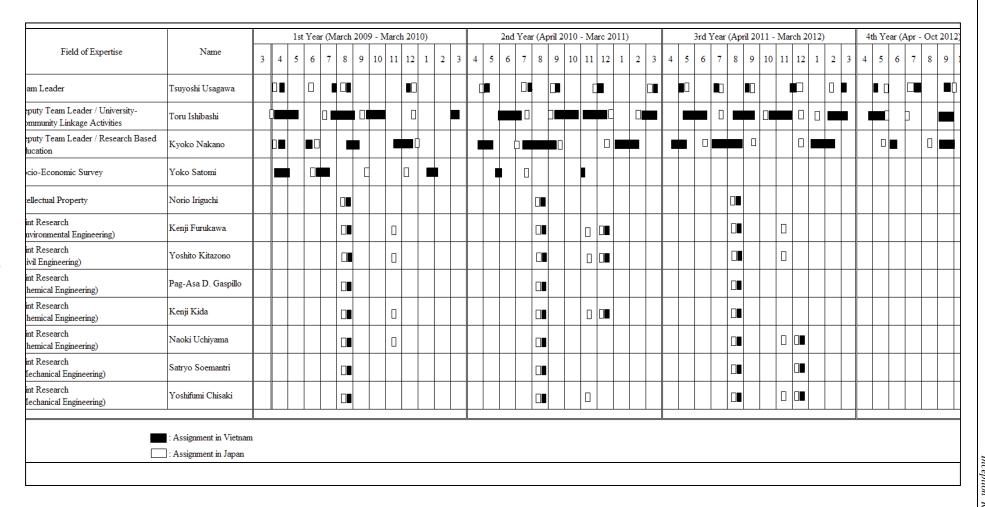


Figure 5.1 **Assignment Schedule** 

#### CHAPTER VI REPORTS TO BE SUBMITTED

The following reports will be submitted during the course of the Project.

r		No. of copies		ing the course of the Froject.
Year	Report	GOV	JICA	Contents and Timing of Submission
	(1) Incontion Papart		01011	Background
	(1) Inception Report	2	3	Objectives and approach
	English	25	5	• Implementation process and method
	Vietnamese	23		Organization and schedule
	Japanese (summary)	-	2	(May 2009)
	(2) Progress Report I			Progresses of activities conducted
	English	2	3	Outputs achieved
ear	Vietnamese	25	5	• Next steps
1st Year	Japanese (summary)	-	2	(September 2009)
1	(3) Progress Report II			Progresses of activities conducted
	English	2	3	Outputs achieved
	Vietnamese	25	5	•Next steps
	Japanese (summary)	-	2	(March 2010)
	(4) 1 <sup>st</sup> Year Completion			• Implementation method and outputs
	Report			Minutes of meetings
	Japanese	-	2	(March 2010)
	(1) Progress Report III			Progresses of activities conducted
	English	2	3	Outputs achieved
	Vietnamese	25	5	• Next steps
	Japanese (summary)	_	2	(September 2010)
ear	(2) Progress Report IV			Progresses of activities conducted
2 <sup>nd</sup> Year	English	2	3	Outputs achieved
$2^{n}$	Vietnamese	25	5	Next steps
	Japanese (summary)	-	2	(March 2011)
	(3) 2 <sup>nd</sup> Year Completion			Implementation method and outputs
	Report			Minutes of meetings
	Japanese	-	2	(March 2011)
	(1) Progress Report V			Progresses of activities conducted
	English	2	3	Outputs achieved
	Vietnamese	25	5	•Next steps
	Japanese (summary)	-	2	(September 2011)
ear	(2) Progress Report VI			Progresses of activities conducted
3 <sup>rd</sup> Year	English	2	3	Outputs achieved
	Vietnamese	25	5	• Next steps
	Japanese (summary)	-	2	(March 2012)
	(3) 3 <sup>rd</sup> Year Completion			• Implementation method and outputs
	Report			Minutes of meetings
	Japanese	-	2	(March 2012)
Ye	(1) Final Report			Outputs of activities
\	English	2	3	• Implementation schedule (record)

#### Inception Report

Vietnamese	25	5	•Inputs to the project (record)		
Japanese (summary)	-	2	• Lessons learned		
CD-ROM	-	5	•PDM and minutes of JCC meetings (October 2012		
(3) 4 <sup>th</sup> Year Completion			•Implementation method and outputs		
Report			•Minutes of meetings		
Japanese	_	2	(October 2012)		

# CHAPTER VII UNDERTAKINGS OF THE GOVERNMENT OF SOCIALIST REPUBLIC OF VIETNAM

In accordance with the R/D and M/M agreed and signed by the Ministry of Planning and Investment, Vietnam national University Ho Chi Minh City, Ho Chi Minh City University of Technology, and JICA, the Government of the Socialist Republic of Vietnam will accord privileges, exemptions and other assistance to the JICA Project Team and will take necessary measures to facilitate the smooth implementation of the Project, including the following.

#### (1) Appointment of counterpart and administrative personnel

A team of counterpart and administrative personnel, headed by the President of Vietnam National University Ho Chi Minh City as the Project Director, would be assigned to work with the JICA Project Team throughout the project duration.

#### (2) Allocation of office facilities at HCMUT

Office facilities, including the project office and meeting room equipped with internet facility and necessary furniture, as well as a vehicle, are to be allocated for the JICA Project Team at HCMUT.

#### (3) Facilities for issuance/application of visa

For the experts requiring staying in Vietnam for consecutive 15 days or more, the Government of Vietnam will be asked to extend necessary facilities for issuance of visa. In addition, for the Vietnamese researchers selected to participate in international conferences, assistance from the Government would be needed for smooth visa procedure.

#### (4) Provision of data and information

Necessary data and information related to the implementation of the Project are to be provided.

Appendix 1

Record of Discussions (R/D)

#### RECORD OF DISCUSSIONS

#### BETWEEN

#### JAPAN INTERNATIONAL COOPERATION AGENCY

AND

#### AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM ON JAPANESE TECHNICAL COOPERATION PROJECT

**FOR** 

#### "CAPACITY BUILDING OF HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY TO STRENGTHEN UNIVERSITY-COMMUNITY LINKAGE-PHASE 2"

In response to the request of the Government of Vietnam, the Government of Japan has decided to cooperate Japan-Vietnam Technical Cooperation Project for "Capacity Building of Ho Chi Minh City University of Technology to Strengthen University-Community Linkage" (hereinafter referred to as "the Project") in accordance with the Agreement on Technical Cooperation between the Government of Japan and the Government of Vietnam, signed on October 20, 1998 (hereinafter referred to as "the Agreement") and the Embassy of Japan's note No. J. D. 53/2005 dated April 19, 2005.

Accordingly, Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the Technical Cooperation program of the Government of Japan, will cooperate with the authorities concerned of the Government of Vietnam for the Project.

JICA and the Vietnamese authorities concerned had a series of discussions on the framework of the project. As a result of the discussions, JICA, Vietnam National University- Ho Chi Minh city, Ho Chi Minh City University of Technology, agreed on the matters referred to in the document attached hereto.

Hanoi, December 12th, 2008

Mr. TSUNO Motonori

Chief Representative

Japan International Cooperation Agency

Vietnam Office

Dr. Phan Thanh Binh

President

Vietnam National University - Ho Chi Minh city

Vietnam

Mr. Nguven Xuan Tien

Deputy Director General

Foreign Economics Relations Department

Ministry of Planning and Investment

Vietnam

Dr. Phan Dinh Tuan

Vice Rector

Ho Chi Minh City University of Technology

Vietnam

#### ATTACHED DOCUMENT

# I. COOPERATION BETWEEN THE GOVERNMENT OF JAPAN (REPRESENTED BY JICA) AND THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM

- 1. The Government of the Socialist Republic of Vietnam will implement the Project for "Capacity Building of Ho Chi Minh City University of Technology to Strengthen University—Community Linkage Phase 2" (hereinafter referred to as "the Project") in cooperation with JICA.
- 2. The Project will be implemented in accordance with the Master Plan, which is given in Annex-I.

#### II. MEASURES TO BE TAKEN BY JICA

In accordance with the laws and regulations in force in Japan and the provisions of Article III of the Agreement, JICA as the executing agency for the Technical Cooperation by the Government of Japan, will take, at its own expense, the following measures according to the normal procedures of its technical cooperation scheme.

#### 1. DISPATCH OF JAPANESE EXPERTS

JICA will provide the services of the Japanese experts as listed in Annex–II. The provision of Article III of the Agreement will be applied to the above-mentioned experts.

#### 2. PROVISION OF MACHINERY AND EQUIPMENT

JICA will provide such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex–III. The provision of Article VIII of the Agreement will be applied to the Equipment.

#### 3. TRAINING OF VIETNAMESE PERSONNEL IN JAPAN

JICA will receive the Vietnamese personnel connected with the Project for technical training in Japan.

# III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM

- 1. The Government of the Socialist Republic of Vietnam will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through full and active involvement in the Project by all related authorities, beneficiary groups and institutions.
- 2. The Government of the Socialist Republic of Vietnam will ensure that the technologies and knowledge acquired by the Vietnamese nationals as a result of Japanese technical cooperation will contribute to the economic and social development of the Socialist Republic of Vietnam.

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- 3. In accordance with the provisions of Article VI of the Agreement, the Government of the Socialist Republic of Vietnam will grant in the Socialist Republic of Vietnam privileges, exemptions and benefits to the Japanese experts referred to in II-1 above and their families.
- 4. In accordance with the provisions of Article VIII of the Agreement, the Government of the Socialist Republic of Vietnam will take the measures necessary to receive and use the Equipment provided by JICA under II-2 above and equipment, machinery and materials carried in by the Japanese experts referred to in II-1 above.
- 5. The Government of the Socialist Republic of Vietnam will take necessary measures to ensure that the knowledge and experience acquired by the Vietnamese personnel from technical training in Japan will be utilized effectively in the implementation of the Project.
- 6. In accordance with the provision of Article V-(b) of the Agreement, the Government of the Socialist Republic of Vietnam will provide the services of Vietnamese counterpart personnel and administrative personnel as listed in Annex–IV.
- 7. In accordance with the provision of Article V-(1)-(i) of the Agreement, the Government of The Socialist Republic of Vietnam will provide the buildings and facilities as listed in Annex-V.
- 8. In accordance with the laws and regulations in force in The Socialist Republic of Vietnam, the Government of The Socialist Republic of Vietnam will take necessary measures to supply or replace at its own expense machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the Equipment provided through JICA under II-2 above.
- 9. In accordance with the laws and regulations in force in The Socialist Republic of Vietnam, the Government of The Socialist Republic of Vietnam will take necessary measures to meet the running expenses necessary for the implementation of the Project.

#### IV. ADMINISTRATION OF THE PROJECT

- 1. President of Vietnam National University-Ho Chi Minh city, as the Project Director, will bear overall responsibility for the administration and implementation of the Project.
- 2. Vice Rector of Ho Chi Minh City University of Technology, as the Project Manager, will be responsible for the managerial and technical matters of the Project.
- 3. The Japanese Chief Advisor will provide necessary recommendations and advice to the Project Director and the Project Manager on any matters pertaining to the implementation of the Project.
- 4. The Japanese experts will give necessary technical guidance and advice to the Vietnamese counterpart personnel on technical matters pertaining to the implementation of the Project.

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5. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee whose functions and composition are described in Annex-VI will be established.

#### V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by JICA and the Vietnamese authorities concerned, during the last six months of the cooperation term in order to examine the level of achievement.

#### VI. CLAIMS AGAINST JAPANESE EXPERTS

In accordance with the provision of Article VII of the Agreement, the Government of the Socialist Republic of Vietnam undertakes to bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Socialist Republic of Vietnam except for those arising from the willful misconduct or gross negligence of the Japanese experts.

#### VII. MUTUAL CONSULTATION

There will be mutual consultation between the JICA and the Government of the Socialist Republic of Vietnam on any major issues arising from, or in connection with this Attached Document.

#### VIII. MEASURES TO PROMOTE UNDERSTANDING AND SUPPORT FOR THE PROJECT

For the purpose of promoting support for the Project among the people of the Socialist Republic of Vietnam, the Government of the Socialist Republic of Vietnam will take appropriate measures to make the Project widely known to the people of the Socialist Republic of Vietnam.

#### IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under this Attached Document will be three and a half (3.5) years, starting from 2009.

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#### LIST OF ANNEX

ANNEX - I	MASTER PLAN
ANNEX - II	LIST OF JAPANESE EXPERTS
ANNEX - III	LIST OF MACHINERY AND EQUIPMENT
ANNEX - IV	LIST OF VIETNAMESE COUNTERPART AND ADMINISTRATIVE PERSONNEL
ANNEX - V	LIST OF BUILDINGS AND FACILITIES
ANNEX - VI	JOINT COORDINATING COMMITTEE

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#### ANNEX - I MASTER PLAN

#### 1. Project Title:

Project for Capacity Building of Ho Chi Minh City University of Technology (HCMUT) to Strengthen University-Community Linkage – Phase 2

#### 2. Objectives of the Project

2-1. Overall Goal

HCMUT becomes the core University to promote local development in the southern part of Vietnam.

#### 2-2. Purpose of the Project

Education and R&D capacity of HCMUT for promotion of University - Community linkage is strengthened.

#### 3. Outputs of the Project

- 3-1. Master course program of model faculties in HCMUT is transformed from classroom learning based to research based education.
- 3-2. R&D capacity for University Community Linkage is strengthened in HCMUT
- 3-3. HCMUT has hub roles to promote academic cooperation for university-community linkage among higher education institutions and research institutions in the southern part of Vietnam (hereinafter referred to as "the local member institutions")
- 3-4. Activities by HCMUT to promote local development in the southern part of Vietnam are well recognized.

#### 4. Activities of the Project

- 4-1-1. HCMUT prepares overall implementation plan suitable for Master course program by transforming classroom-learning based education to research-based one.
- 4-1-2. HCMUT holds awareness-raising seminar of research-based education for the model faculties.
- 4-1-3. HCMUT appoints model laboratories from the model faculties.
- 4-1-4 HCMUT coordinates model laboratories to prepare each action plan.
- 4-1-5. Each model laboratory implements each action plan.
- 4-1-6. Model laboratories hold weekly seminar among research members.
- 4-1-7. Model laboratories develop guidelines to introduce research-based education.
- 4-1-8. Model faculties organize workshops to share experiences among laboratories within the faculties
- 4-2-1. Model laboratories invite staff members relating research & development activities (hereinafter referred to as "the R&D") from local institutions for research work.
- 4-2-2. Graduate students in model laboratories are involved in the R&D activities.
- 4-2-3. Model laboratories formulate the R&D groups.
- 4-2-4. The R&D groups support to survey needs in the southern part of Vietnam with the support from staff of the local institutions.
- 4-2-5. The R&D groups implement the R&D activities for practical use.
- 4-2-6. The R&D groups hold meeting regularly.
- 4-2-7. Each of the R&D groups submits papers to journals or international / local conferences.
- 4-2-8. The leaders of the R&D groups submit the R&D six-month activity reports.
- 4-2-9. Some of the R&D groups apply for patents with support of R&D and Project Management Office.
- 4-2-10. The R&D groups disseminate the outputs to local community.

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- 4-3-1. Staff from the local member institutions are involved in joint R&D activities for local development conducted by HCMUT.
- 4-3-2. HCMÛT initiates inter-university committee to organize conference at HCMUT or one of the local member institutions annually.
- 4-3-3. HCMUT dispatches staff to other local member institutions through staff exchange program / the R&D activities.
- 4-3-4. HCMUT builds consensus clearly among people concerned on the intellectual property rights by the R&D activities before starting the activities.
- 4-4-1. HCMUT shares guideline for the university –community linkage with other local member institutions, local governments and communities.
- 4-4-2. HCMUT updates the guideline when necessary.
- 4-4-3. HCMUT shares the information on staff members, the R&D topics, published papers for promotion of university-community linkage.
- 4-4-4 HCMUT holds workshops for promotion of university-community linkage

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# ANNEX - II LIST OF JAPANESE EXPERTS

- 1. Experts, who will be in charged of the following fields, will be dispatched:
  - 1-1. Chief Advisor
  - 1-2. Coordinator
  - 1-3. Expert / Research based education
  - 1-4. Expert / Needs survey
  - 1-5. Expert / Intellectual Property
  - 1-6. Expert / Research advisor
- 2. Other Experts in specific fields would be dispatched if necessary upon mutual agreement.

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# ANNEX - III LIST OF MACHINERY AND EQUIPMENT

- 1. Machinery and equipment for the implementation of the project are as follows:
- Equipment for research activities.
- 2. Other machinery, equipments, tools, materials and their spare parts may be provided if necessary upon the basis of mutual agreement.

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# ANNEX - IV LIST OF VIETNAMESE COUNTERPART AND ADMINISTRATIVE PERSONNEL

- 1. Project Director is to be the President of Vietnam National University-Ho Chi Minh city
- 2. Project Manager is to be the Vice Rector of Ho Chi Minh City University of Technology.
- 3. Key personnel for the Project are as follows;
  - Head of Department of External Relations, HCMUT
  - Head of Department of R&D and Domestic Projects, HCMUT
  - Head of Department of Finance and Planning, HCMUT
  - Head of Department of Graduation Study, HCMUT
  - Head of Department of Equipment & Facilities, HCMUT
  - Dean of Related Academic Faculties, HCMUT
  - Personnel connected with the Project to be dispatched by the Project Manager.

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# ANNEX - V LIST OF LAND, BUILDING AND FACILITIES

The following will be prepared by the Government of the Socialist Republic of Vietnam for the implementation of the Project.

- 1. The land, building and facilities necessary for the implementation of the Project, including electricity, water supply, telephones, furniture and air conditioning facilities. The principal facilities, which are necessary to implement the Project, are as follows:
  - 1-1. Project Offices/room/other necessary facilities for the Japanese experts at Ho Chi Minh city University of Technology
  - 1-2. Meeting room
  - 1-3. Rooms for the preservation of the provided equipment
  - 1-4. Other facilities mutually agreed upon as necessary

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#### ANNEX - VI JOINT COORDINATING COMMITTEE

#### 1. Functions

The Joint Coordinating Committee will convene at least once a year and whenever necessity arises. The Joint Coordinating Committee shall function as follows:

- 1-1. To authorize an annual work plan of the Project based on the plan of operations within the framework of R/D.
- 1-2. To monitor and evaluate the progress of the Project and the results of the annual work plan
- 1-3. To discuss and advise on major issues those arise during the implementation period of the Project.

## 2. Compositions

The Joint Coordinating Committee shall be composed of;

- 2-1. Chairperson: President, Vietnam National University Ho Chi Minh city
- 2-2. Members:
- 2-2-1. Vietnamese side:
  - Vice Rector of HCMUT
  - Director(s) of related departments of VNU-HCM
  - Director(s) of related departments of HCMUT
  - Dean(s) of related faculties of HCMUT
  - Personnel connected with the Project to be dispatched by Chairperson.

#### 2-2-2. Japanese side:

- Project experts
- Chief Representative of JICA Vietnamese Office
- Personnel connected with the Project to be dispatched by JICA.

#### 2-3. Observers:

Director General of Foreign Economic Relations Department, Ministry of Planning and Investment, Official(s) of the Embassy of Japan, Official(s) of the related ministries may attend the Committee sessions as observers.

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Appendix 2

Minutes of Meeting (M/M)

#### MINUTES OF MEETINGS

#### **BETWEEN**

#### JAPAN INTERNATIONAL COOPERATION AGENCY

AND

AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM ON JAPANESE TECHNICAL COOPERATION PROJECT

**FOR** 

"CAPACITY BUILDING OF HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
TO STRENGTHEN UNIVERSITY-COMMUNITY LINKAGE – PHASE 2"

Japan International Cooperation Agency (hereinafter referred to as "JICA") and the Vietnamese authorities concerned (hereinafter referred to as "the Vietnamese side") had a series of discussions for the purpose of working out the details of the Technical Cooperation Project for Capacity Building of Ho Chi Minh city University of Technology – Phase 2 (hereinafter referred to as "the Project").

As a result of the discussions, both sides agreed to summarize the matters referred to in the document attached hereto as a supplement to the Record of Discussions signed at Hanoi on December 12<sup>th</sup>, 2008.

Hanoi, December 12th, 2008

Mr. Motonori TSUNO

Chief Representative

Japan International Cooperation Agency

Vietnam Office

Dr. Phan Thanh Binh

President

Vietnam National University – Ho Chi Minh city

The Socialist Republic of Vietnam

Mr. Nguyen Xuan Tien

Deputy Director General

Foreign Economics Relations Department Ministry of Planning and Investment

The Socialist Republic of Vietnam

Dr. Phan Dinh Tuan

Vice Rector

Ho Chi Minh city University of Technology

The Socialist Republic of Vietnam

#### THE ATTACHED DOCUMENT

#### I. Project Design Matrix

The Project Design Matrix (hereinafter referred to as "PDM") was elaborated through discussion by JICA and the Vietnamese authorities concerned. Both sides agreed to recognize PDM as the implementation tool for project management, and the bases of monitoring and evaluation of the Project. The PDM will be utilized by both sides throughout the implementation of the Project. The PDM is shown in Annex – I. The PDM will be subject to change within the framework of the Record of Discussions when necessity arises in the course of implementation of the Project by mutual consent.

#### II. Plan of Operations

The Plan of Operations (hereinafter referred to as "P/O") has been formulated according to the Record of Discussions, on condition the necessary budget will be allocated for the implementation of the Project by both sides. The P/O includes of timetable and responsible persons as well as planned inputs of the Project. The schedule is subject to change within the scope of the Record of Discussions when necessity arises in the course of implementation of the Project. The P/O is shown in Annex–II.

### III. Project Implementation Structure of the Project

Both Vietnamese side and Japanese side have confirmed the implementation structure of the project, including:

- Project Framework for University-Community Linkage as shown in Annex -III.
- Players of related Activities by the Project as shown in the Annex IV.
- Image of University-Community linkage Cycle by the Project as shown in Annex-V.

#### IV. Measures to be taken in the smooth implementation of the Project

- (1) For the smooth implementation of the project, both Vietnamese side and Japanese side will elaborate to create common recognition and understanding at any occasions with mutual respect.
- (2) Regarding the usage of the budget allocated by JICA, Vietnamese side shall follow the regulation of JICA.

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# ANNEX - I

PROJECT DESIGN MATRIX (as of 12th December 2008)

Project Title: Capacity Building of Ho Chi Minh City University of Technology (HCMUT) to Strengthen University-community linkage (Phase 2) Japanese Implementing Agency: JICA Counterpart Agency: HCMUT Duration: Three and half years Target Group: Staffs and students of HCMUT and other universities in the southern part of Vietnam

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
(Overall goal) HCMUT becomes the core university to promote local development in the southern part of Vietnam.	<ul> <li>At least one of the local member institutions of each province in the southern part of Vietnam and HCMUT have certain roles to promote local development.</li> <li>University-community linkage activities are carried out in a wider scale in terms of the number of university-community linkages (more than 5(five)) and/or the number of cooperating local provinces/communities in the southern part of Vietnam.</li> <li>Local related people recognize that HCMUT and related local member institutions promote local development in the southern part of Vietnam.</li> </ul>	Statistics of HCMUT Statistics of patents, international journals and local journals	
(Project Purpose) Education and R&D capacity of HCMUT for promotion of university-community linkage is strengthened.	<ul> <li>Requests from local provinces in the southern region to solve their technical problems are annually collected.</li> <li>At least 5 topics related to the above requests every year are selected in HCMUT and concerned local member institutions for promotion of local development.</li> <li>More than 30% of R&amp;D activities carried by researchers from HCMUT and related local member institutions have relation to local development activities.</li> <li>Number of patents applied increases.</li> <li>Number of R&amp;D related papers/reports published in international/local journals increases.</li> </ul>	Project monitoring and evaluation report	
(Output)  1. Master course program of model faculties in HCMUT is transformed from classroom-learning based to research based education.	<ul> <li>Introduction plan and guideline for research-based education is authorized by HCMUT executives and introduced in the whole university.</li> <li>Awareness-raising seminar is held once a year.</li> <li>The action plan is prepared after awareness-raising seminar.</li> <li>At least two (2) graduate students are involved in the research activities of each model laboratory.</li> </ul>	Project monitoring and evaluation report	Decision on establishment of HCMUT remains unchanged.

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Project monitoring and evaluation report		Project monitoring and evaluation report		Project monitoring and evaluation report	
<ul> <li>At least two (2) seminars for sharing experiences among laboratories in model faculties are conducted.</li> <li>R&amp;D related needs survey for university-community linkage is conducted every year.</li> <li>An annual R&amp;D activity report related to the above needs survey from each of the R&amp;D groups in model faculties is prepared.</li> </ul>	<ul> <li>prepared.</li> <li>At least one (1) R&amp;D paper/report from each R&amp;D group in model faculties is presented at international/local level conference or journal every year.</li> <li>At least one (1) patent is applied for registration by model faculties by the end of the project period.</li> </ul>	<ul> <li>At least two (2) staff from the local member institutions become members of joint R&amp;D activities every year.</li> <li>Five (5) R&amp;D results from HCMUT and the local member institutions are presented at conference organized by HCMUT every year.</li> </ul>	<ul> <li>At least one (1) conference about R&amp;D related to local development is held at HCMUT or one of the local member institutions every year.</li> <li>At least one (1) staff exchange program between HCMUT and the local member institutions for short term is organized every year.</li> </ul>	<ul> <li>Guideline and manuals for university-community linkage is updated when necessary.</li> <li>Database and homepage of related R&amp;D resources are constructed.</li> </ul>	<ul> <li>At least five (5) services for promotion of university-community linkage to local people are provided every year.</li> <li>At least five (5) companies and government agencies participates university-community linkage activities.</li> </ul>
2. R&D capacity for university-community linkage is strengthened in HCMUT.		3. HCMUT has hub roles to promote academic cooperation for university-community linkage among higher education institutions and research institutions in the southern part of Vietnam (hereinafter referred to as "the local member institutions").		4. Activities by HCMUT to promote local development in the southern part of Vietnam are well recognized.	

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(INPUTS) 1. Vietnamese side	a. Offices and other facilities necessary for the project management.      b. Laboratory space for joint researches c. Assignment of necessary number of counterpart personnel d. Assignment of academic and administrative staff for project management.	e. Expenses necessary for activities by project management. f. Expenses for participants to attend conferences, workshops and training programs.  g. Special manner for teaching/technical staff from the local member institutions to join graduate programs by HCMUT h. Provision of fund necessary for the implementation of the R&D activities.  i. Expenses for publication to international/local journals j. Expenses for publishing the R&D papers k. Expenses for patent registration  2. Japanese side:	<ul> <li>a. Dispatch of JICA experts for project management and the related R&amp;D activities for university-community linkage.</li> <li>b. Training of counterpart personnel in Japan.</li> <li>c. Provision of equipment.</li> <li>d. Provision of fund necessary for the implementation of the R&amp;D activities.</li> <li>e. Expenses for the R&amp;D activities and university-community linkage participants to attend conferences, workshops and training programs</li> </ul>
(Activities) 1.1. HCMUT prepares overall implementation plan suitable	for Master course program by transforming classroom-learning based education to research-based one.  1.2. HCMUT holds awareness-raising seminar of research-based education for the model faculties.  1.3. HCMUT appoints model faboratories* from the model faculties.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R&D activities.  2.3 Model laboratories formulate the R&D groups.  2.4 The R&D groups support to survey needs in the southern part of Vietnam with the support from staff of the local institutions.  2.5 The R&D groups implement the R&D activities for practical use.  2.6 The R&D groups hold regular meeting.  2.7 Each of the R&D group submits papers to journals or international/local conferences.  2.8 The leaders of the R&D groups submit the R&D sixmonth activity reports.  2.9 Some of the R&D groups apply for patents with support of R&D and project management office.  2.10 The R&D groups disseminate the outputs to local community.

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3.1 Staff from the local member institutions are involved in			
joint R&D activities for local development conducted by HCMUT.	•		
3.2 HCMUT initiates inter-university committee to organize			
conference at HCMUT or one of the local member			
institutions annually.			
3.3 HCMUT dispatches staff to other local member			
institutions through staff exchange program/ the R&D			
activities.			_
3.4 HCMUT builds consensus clearly among people			
concerned on the intellectual property rights by the R&D			
activities before starting the activities.			
4.1 HCMUT shares guidelines-for the university-community			
linkage with other local member institutions, local			
governments and communities.			
4.2 HCMUT updates the guidelines when necessary.		•••	
HCMUT shares the information on staff members, the			
R&D topics, published papers for promotion of university-			
community linkage.			
4.4 HCMUT holds workshops for promotion of university-			
community linkage.			

\*Model laboratories consist of resources such as research group members, space, equipment etc. community linkage.

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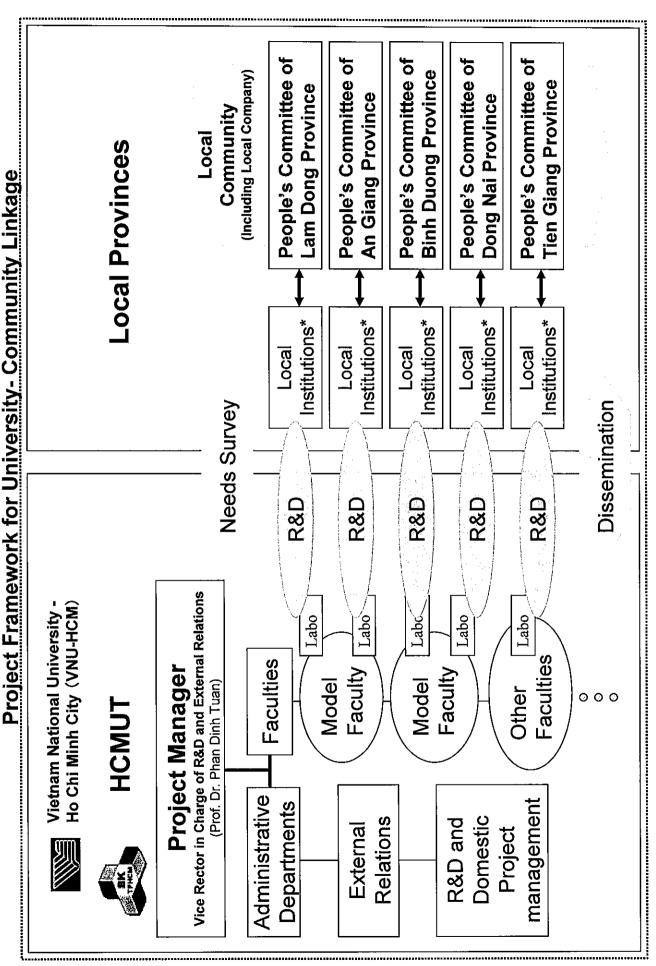
Plan of Operation for the Project (as of December 12, 2008)

		1st Year(JFY) 2nd Year	3rd Year 4th Year	ar Responsaible
			VI	ŀ
Pro	Project Period			
Omt	Output 1 Master course program of model faculties in HCMUT is transformed from classroom-learning based to research based	ansformed from classroom-learning ba	sed to research based education.	
	HCMUT prepares overall implementation plan suitable for Master course program by transforming classroom-learning based education to research-based one.			Vice Rector
2	HCMUT holds awareness-raising seminar of research-based education for the model faculties.			Vice Rector
3	HCMUT appoints model laboratories* from the model faculties.			Deans
4	HCMUT coordinates model laboratories to prepare each action plan.			Deans
5	Each model laboratory implements each action plan.			Deans
9	Model laboratories hold weekly seminar among research members.			Head of Departments
^	Model faculties develop guidelines to introduce research-based education			■ Vice Rector & Deans
∞	Model faculties organize workshops to share experiences among laboratories within the faculties.			Vice Rector & Deans
Ö	Output 2 R&D capacity for university-community linkage is strengthened in HCMUT	ened in HCMUT.		
-	Model laboratories invite staff members relating research and development activities (hereinafter referred to as "the R&D") from local			Deans & Heads of
<del>-</del>	institutions for research work.			Departments
7	Graduate students in model laboratories are involved in the R&D activities.			Deans & Heads of Departments
3	Model laboratories formulate the R&D groups.			Deans & Heads of Departments
4	The R&D groups support to survey needs in the southern part of Vietnam with the support from staff of the local institutions.			Deans & Heads of
	The R&D groups implement the R&D activities for practical use.			
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		-	preparation	curain indoc
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Plan of Operation for the Project (as of December 12, 2008)

		1st	Year(JFY	(JFY)		2	2nd Year	ar		3	3rd Year	ar	4	4th Year	r Responsaible	ble
· -·	1				<u> </u>				N	I	II   I	$\Pi \mid \Pi$	IV		Personnel	16
Pr	Project Period					-	╂			-	-	╂				
9	The R&D groups hold regular meeting.				III	<b>#</b>	1		<u>=</u>	<b></b> _		<u> </u>	<b>=</b>		Deans & Heads of Departments	ids of tts
7	Each of the R&D group submits papers to journals or international/local conferences.					l ild	publishing			 publishin	hing			publishi	Deans & Heads of	ids of tts
∞	The leaders of the R&D groups submit the R&D six-month activity reports.														Deans & Heads of Departments	ids of its
6	Some of the R&D groups apply for patents with support of R&D and project management office.														Deans & Heads of Departments	ids of tts
10	The R&D groups disseminate the outputs to local community.							<b></b>				_ 	_ 	■ 	Deans & Heads of Departments	ids of tts
On the	Output 3 HCMUT has hub roles to promote academic cooperation for univ the southern part of Vietnam (hereinafter referred to as "the local member	univ nber	ersity institu	ersity-commu institutions").	munit "").	y link	age a	mong	high	er edu	catio	n inst	itutio	ns and	rersity-community linkage among higher education institutions and research institutions in institutions").	tions in
<u> </u>	Staff from the local member institutions are involved in joint R&D activities for local development conducted by HCMUT.				<u> </u>								,		Vice Rector & Deans	Deans
7	HCMUT initiates inter-university committee to organize conference at HCMUT or one of the local member institutions annually.														Vice Rector & Deans	Deans
ω	HCMUT dispatches staff to other local member institutions through staff exchange program/ the R&D activities.														Deans & Heads of Departments	ds of tts
4	HCMUT builds consensus clearly among people concerned on the intellectual property rights by the R&D activities before starting the activities.						-							#	Vice Rector & Deans	Deans
ő	Output 4 Activities by HCMUT to promote local development in the south	outhe	rn pe	urt of	ern part of Vietnam are well recognized.	am ar	e wel	l reco	gnize	g.			<u> </u>			
	HCMUT shares guidelines for the university-community linkage with other local member institutions, local governments and communities.					-									Vice Rector & Deans	Deans
7	HCMUT updates the guidelines when necessary.			] 								_			Deans	
3	HCMUT shares the information on staff members, the R&D topics, published papers for promotion of university-community linkage.				<u> </u>		<b>=</b>	<b>=</b>		<b>I</b>					Vice Rector & Deans	Deans
4	HCMUT holds workshops for promotion of university-community linkage.														Vice Rector & Deans	Deans
	16															

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\*"Local institutions" means Local member Higher education institutions/research institutions.

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**ANNEX-IV** 

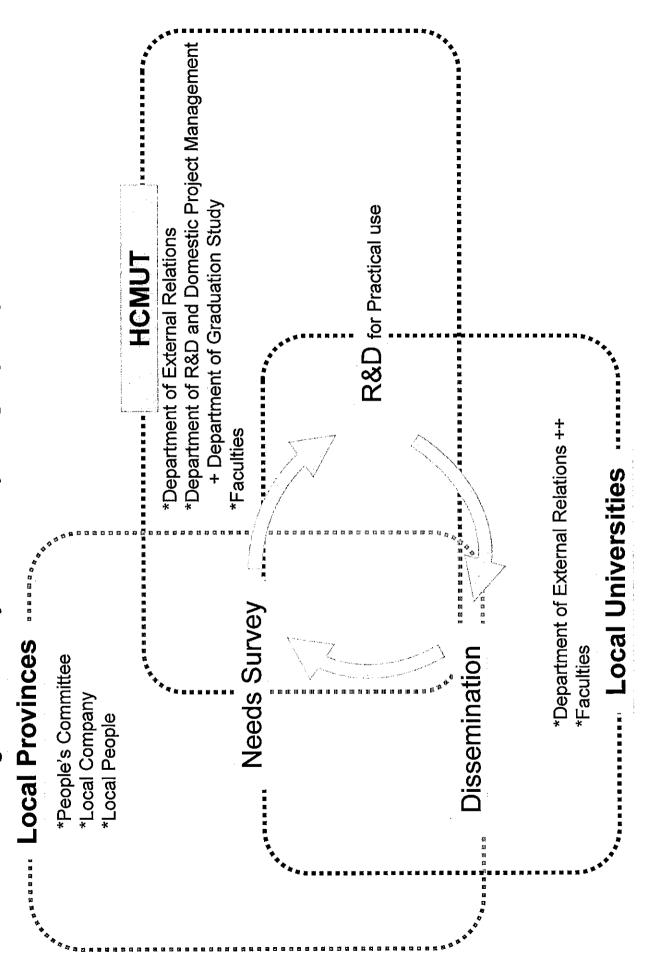
Players of related Activities by the Project

	1	Time     Tim	1 1 0	<b>↑</b>		Players in HCMUT	HCMUT
Activities	Academic Year	Academic Year	: Year	▼	Academic Year	Main	Support
Needs Survey (with support of local People's committee and local Higher Education Institutes)						Administrative Department *	Faculties
R & D Theme Selection					,	Faculties	Administrative Department *
Studies & Investigation						Faculties (Students)	Faculties (Supervisors)
Consultation						Faculties	Administrative Department *
Dissemination (mainly to local Higher Education Institutes)	_		<b></b>	<u> </u>		Faculties	Administrative Department*

\* Collaborative work between "Department of External Relations" and "Department of R&D and Domestic Project Management"

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Image of University- Community linkage Cycle by the Project



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# Appendix 3

**Work Flow of the Project** 

**Work Flow** 

