| I. Outline of the Project                |                                  |  |  |  |  |
|--|----------------------------------|--|--|--|--|
| Country: Vietnam                         |                                  | Project title: Capacity Building of Ho Chi Minh city   |  |  |  |
|  |                                  | University of technology to strengthen                 |  |  |  |
|  |                                  | university-community linkage                           |  |  |  |
| Issue/Sector: Higher Education           |                                  | Cooperation scheme: Technical cooperation              |  |  |  |
| Division in charge : JICA Vietnam Office |                                  | Total cost: 290 Million Japanese Yen                   |  |  |  |
| Period of                                | From January 15, 2006 to January | Partner Country's Implementing Organization: Ho Chi    |  |  |  |
| Cooperation                              | 14, 2009                         | Minh City University of Technology (HCMUT)             |  |  |  |
|  |                                  | Supporting Organization in Japan: Toyohashi University |  |  |  |
|  |                                  | of Technology  |  |  |  |

# 終了時評価調査結果要約表(英文)

1. Background of the Project

The southern region of Vietnam is seen as one of the strategically important areas that should lead the country's economic and social development. In order to promote the regional development that can be accelerated by the development of agriculture, fishery and manufacturing industries it is requisite to develop human resources who have high-level of knowledge and experience of technical and engineering skills. HCMUT has functioned as the leading research and educational institution in southern Vietnam and has provided occasional R&D support and training in the region. However, due to a lack of an effective institutional mechanism of "university-community linkage" and insufficiency of experiences in R&D and its transfer that satisfies actual needs of local communities, efforts by HCMUT and their achievements were still limited. Under these circumstances, Vietnam and Japan agreed that technical cooperation project aiming at strengthening HCMUT's capability in university-community linkage would be implemented through the Japan International Cooperation Agency (JICA). Under the Project, several pilot projects in such two provinces as An Gian and Tien Giang have been implemented in order to develop and verify an effective institutional mechanism for university-community linkage by trying to establish a cycle of needs assessment, project design, research and development (R&D), field application and evaluation.

- 2. Project Overview
- (1) Overall goal

Experience and knowledge (i.e. know-how) on university-community linkage activities is thoroughly utilized in local community.

## (2) Project purpose

At HCMUT, experience and knowledge (i.e. know-how) on university-community linkage activities are examined, consolidated and institutionalized.

| (3) Output                     |  |                                |   |  |  |
|--------------------------------|--|--------------------------------|---|--|--|
| 1) HCM                         | IUT has sufficient capability to m   | anage pilot pr                 | ojects on university-community linkage by   |  |  |
| accu                           | mulating experiences and knowledg  | e (i.e. know-ho                | ow).  |  |  |
| 2) Staff                       | of HCMUT has practical skills and  | d knowledge o                  | n promoting pilot research and development  |  |  |
| (R&I                           | D) for local community.  |                                |   |  |  |
| 3) Staff                       | of HCMUT has practical skills and knowledge on promoting training for local communities. |                                |   |  |  |
| (4) Input                      |  |                                |   |  |  |
| Japanese sid                   | de:  |                                |   |  |  |
| Long-term Expert : 2           |  | Equipment: 380,000 US dollars  |   |  |  |
| Short-term Expert : 9          |  | Local cost: 432,653 US dollars |   |  |  |
| Trainees received in Japan: 19 |  | Others                         |   |  |  |
| Vietnamese                     | side:  |                                |   |  |  |
| Counterp                       | art: 22 persons  | Local Cost: 4                  | ,300 Million Vietnamese Dong                |  |  |
| Land and                       | Facilities: Project offices in HCMU  | T                              |   |  |  |
|                                | Land for pilot plant of ex   | tracting oils fr               | om tram trees                               |  |  |
| II. Evaluation                 | Team   |                                |   |  |  |
| Members of                     | f(1)Team Leader:   |                                |   |  |  |
| Evaluation                     | Mr. Yasuhiro Tojo, senior deputy   | y representativ                | e, JICA Vietnam office                      |  |  |
| Team                           | (2)Higher Education / Community Linkage  |                                |   |  |  |
|                                | Mr. Hiroshi Shirakawa, visiting senior advisor, JICA                                     |                                |   |  |  |
|                                | (3)Cooperation Planning and Mana   | agement                        |   |  |  |
|                                | Mr. Masakatsu Okumoto, techr   | nical and high                 | er education division, human development    |  |  |
|                                | department, JICA   |                                |   |  |  |
|                                | (4)Project Implementation Management   |                                |   |  |  |
|                                | Ms. Nobuko Wada, deputy resid  | lent representat               | tive, JICA Vietnam office                   |  |  |
|                                | (5)Evaluation analysis   |                                |   |  |  |
|                                | Mr. Nobuhisa Iwase, consultant,  | , IMG Inc.                     |   |  |  |
| Period of                      | f August 25, 2008 – September 9,   | , 2008                         | Type of Evaluation : Final evaluation       |  |  |
| Evaluation                     |  |                                |   |  |  |
| III. Results of                | Evaluation   |                                |   |  |  |
| 1. Result of c                 | cooperation  |                                |   |  |  |
| (1)Achieveme                   | nts of output  |                                |   |  |  |
| The achieve                    | ement level of Output 1 is high, ju  | dging from in                  | dicators such as the number of planning of  |  |  |
| pilot projects,                | setting up of taskforces, frequence  | ey of visit loca               | al areas and so on. Lecturers and staff of  |  |  |
| HCMUT unde                     | erstood the management university -  | – community l                  | inkage activities and also gained knowledge |  |  |
| by carrying o                  | out the pilot projects, while succe  | ess of the pro                 | ject was mainly due to Japanese experts'    |  |  |
| monogoment                     | The aphiovement level of Output  | ) is also high a               | inco good prograss has been made in 4 milet |  |  |

projects. The achievement level of Output 3 is high enough with satisfaction of individuals who participated in pilot projects related training provided by HCMUT.

## (2)Project purpose achievements

Having results of achievement of Outputs at the time of the Final evaluation, the level of achievement of the Project purpose is fair. In the remaining period, HCMUT needs to examine, consolidate and institutionalize its experience and know how of university-community linkage.

# (3)Overall goal achievements

At the time of the final evaluation, some signs that would contribute to the achievement of the Overall goal were emerging.

2. Summary of evaluation results

(1) Relevance

# The Project is evaluated as having very high relevance.

Project goals are relevant with the country's 10-Year Strategic plan toward 2010 and the 5-Year Plan for Socio-Economic Development (2006-2010) which put priorities in promoting the development of the southern region as well as reforming higher education and promoting sustainable development of science and technology. Also, the Project is evaluated to be consistent with the Japan's ODA policy to Vietnam.

The needs of the main target group, HCMUT faculty and staff, were confirmed to be high, because HCMUT now considers the "university-community linkage" that promotes practical technological development and its application in the southern region as the third pillar of the organization's mission after "education" and "research", but an integrated approach to tackle with important technological development issues based on local, urgent needs was not taken in the past.

Indirect target groups has been set as local government officials, university staff and other technology/engineering related people in such two provinces as An Giang and Tien Giang. The needs and expectations of the indirect target group for HCMUT's increasing efforts for scientific research, development and application that meet with their local, urgent needs were also confirmed to be very high by both the Questionnaire survey conducted by the Project and the Questionnaire/Interview surveys at the Final Evaluation.

## (2) Effectiveness

# The Project is evaluated as having relatively high effectiveness.

Having achievements in the past two and a half years, the Project has a high potential to achieve its Project Purpose. The achievement of the expected 3 outputs has successfully been appearing with an appropriate

implementation of various Project activities defined on PDM. It is evaluated that the ongoing 4 pilot projects were designed and implemented based on the urgent needs of the two local provinces. Several progress reports in relation to the implementation of the 4 pilot projects were formulated in preparation for developing an integrated operational guidelines and/or manuals for university-community linkage. PMC has been organized as a responsible unit for the Project at HCMUT with a sufficient number of necessary personnel, budget and appropriate level of project management. Project activities have brought about several concrete, new scientific research and development results that was introduced and examined in the implementation of the 4 pilot projects.

HCMUT exchanged official agreements with the two provinces regarding the implementation of university-community linkage activities. As shown in the fact that all the related people in the two provinces actively participated in various activities and the two local governments supplied a certain amount of budget and necessary land/space for pilot project implementation, the important assumption to achieve the Project purpose is very likely to satisfy. Moreover, this fact as well as a strong commitment and ownership of HCMUT largely contributed to increasing the effectiveness of the Project.

## (3) Efficiency

## The Project is evaluated as having a relatively high efficiency.

Two (2) long-term Experts and 9 short-term Experts in 13 occasions in both Higher Education and various R&D fields in relation to the 4 pilot projects were dispatched from Japan. Quality, specialty and timing of dispatched experts are evaluated to be appropriate enough to contribute to achieving the outputs of the Project.

Currently, 21 C/Ps including Project Manager, PMC members, pilot projects' members and administrative staff are allocated and receive technical transfer. Almost all C/Ps are very well motivated and have high level of commitment to the Project, because they feel that the Project is the first-ever large-scale international cooperation program for HCMUT and the first-ever trial in order to formulate an integrated, effective university-community linkage. HCMUT has established PMC that has 9 members including a Vice Rector in responsible for R&D and External Relations as a Project Manager, Deans of 3 related faculties and several heads of management/administrative-related departments. In the two provinces where the 4 pilot projects are implemented for university-community linkage, 7 people have been nominated from Tien Giang and 5 do from An Giang as indirect C/Ps, and they have actively participated in both the Project activities and the PMC meetings that were periodically organized once almost every 2 months. As for C/P training in Japan, ten (10) HCMUT faculty members and 9 indirect C/Ps from the two provinces received trainings, and two more HCMUT faculty members is scheduled to receive training in Japan in the remaining period.

Those inputs described above with an appropriate level of equipment and budget provided by the both sides

were necessary for the efficient technical transfer during the Project implementation in order to bring about satisfactory level of achievement of outputs. Considering a wide scope of the Project that aims at increasing the management capability of HCMUT as well as implementing 4 pilot projects, it is considered that those inputs by the both sides were efficiently converted to bring about the achievement of both the outputs and purpose of the Project.

#### (4) Impact

## The Project is evaluated as having a potential to bring about a large scale of impact in the future.

HCMUT has intention to promote university-community linkage activities by carrying out research and development on the subject of southern areas so that overall goal is likely to be achieved in the future.

Since 4 pilot projects are still in the stage of R&D, on-site experiment or technical transfer to local community by provision of training and promotion activities, there is no clear indicator to measure the degree of economical impact of the Project. However, all the assignments in the 4 pilot projects are related with such important industrial sectors in the region as agriculture and fisheries, which have a high potential to contributing to the increase in yield ratio, productivity and product quality in each technological field. In this respect, the Project has a high potential to bring about a large scale of economical impact in the future.

## (5) Sustainability

## The Project is evaluated as having a medium-scale of sustainability.

PMC's positioning, organizational and functional roles have clearly been defined by the HCMUT's decision. On the other hand, PMC is planned to dissolve by the Decision when the JICA assistance terminates. Considering the importance of the "university-community linkage" as the third pillar of the university's mission after "education" and "research", HCMUT reorganized the former "Department of R&D and International Relations" into such 2 departments as "Department of R&D and External Relations" and "Department of International Relations" at the beginning of 2008. Given this positive sign, it is highly expected that the Department of R&D and External Relations would be responsible for continuing university-community linkage activities when JICA assistance terminates.

From the organizational and managerial point of view, planning, managerial and administrative functions of the Project still rely largely on the Japanese inputs such as Experts and administrative staff paid by JICA expenses. According to the Questionnaire/Interview Surveys at the Final Evaluation, there were several voices that HCMUT should allocate more managerial and administrative personnel to the university-community linkage, preferably full-time staff, in order to increase the sustainability of the Project. Although the Vietnamese government properly allocated necessary budget for the Project's implementation, there is no clear sign that the government is ready to continue or even increase the budget for HCMUT's university-community linkage activities. However, the Ministry of Science and Technology (MOST) is said to increase its budget allocation to local areas for R&D activities based on local needs through its organizational branches at local governments such as Department of Science and Technology at the People's Committee in each Province. Given several success stories in university-community linkage under the Project, awareness of the importance of the issue among relevant government organizations is expected to increase.

From the technical point of views, there is a high possibility for the university faculty and staff that received technical transfer to stay in the university except their having further opportunities of learning abroad. Many other faculty members are seen as having high interests in the Project and there will also be periodical move of human resources inside the university. These observation shows that transferred knowledge and skills are highly expected to accumulate and to increase inside HCMUT.

#### 3. Promoting factors

#### (1) Factors related to planning

The project was well designed with an approach to regional development, in which the focal point was a university, not provincial government.

#### (2) Factors related to implementation process

The active participation and strong ownership from the counterparts could be a major success factor of the Project.

## 4. Hampering factors

In the first year, counterpart budget was not allocated for the project due to delays in Vietnamese government approval. Also, some of the activities of pilot projects had to be postponed because of delays in procurement of equipments. In September 2007, when a new rector was appointed, some of the core project members left and PMC activities were suspended for 6 months. These problems might have burdened both Japanese experts and counterparts.

#### 5. Conclusion

The evaluation team concluded that Project has made remarkable progresses and the Project Purpose is about to achieve by the end of the Project.

HCMUT will develop a basic capacity and a foundation of its institutional framework for continuing various university-community linkage activities that meet with the very urgent needs of local communities and contributes to promoting the social and economic development in the southern Vietnam. However, this is still the first step for a further development of HCMUT's more efficient, continuous provision of R&D activities that are highly expected by the people of local communities. For the fulfillment of this expectation, the guideline and manuals for the university-community linkage should be urgently completed. HCMUT and the relevant Vietnamese government organizations in both central and local areas are required to show clear

commitment and put additional efforts in ensuring HCMUT's institutional, financial, organizational, and technical sustainability for the newly-developed university-community linkage.

## 6. Recommendations

- 1) To strengthen its activities for local community based on its goodness of universities.
- To make consensus clearly on the intellectual property rights born by R&D activities before starting the activities.
- To change the conventional ratio of theoretical study and practical study to implement the practical R&D smoothly.
- 4) To have the leadership to enhance the local R&D related people.
- 5) To strengthen the linkage with local universities to promote regional development.
- To increase budget for regional development based on universities R&D activities is expected by Vietnamese government.

## 7. Lessons Learned

There are merits and demerits of carrying out pilot projects when the university – community linkage activities are implemented.

## (1)Merits

- When the university-community linkage activities are organized as pilot projects, it is easy to develop strong ownership and commitment of beneficiary groups so that substantial progress in cooperation can be achieved.

- Beneficiary groups such as farmers can participate in pilot project activities and benefit from training and so on, to a certain extent even for a short period of time.

# (2)Demerits

- Projects members tend to be eager to carry out pilot projects and it is easy to forget that pilot project is means to achieve project purpose. Project should be more focused on original purpose that is institution and mechanism building.

- When developed technologies are adapted to local conditions, or when they are disseminated, it was difficult to tell to what extent Project should provide technical assistance to local technicians, officers and beneficiary groups such as farmers. As a result, some of the technology transfer activities were unfinished.