

Country Name	The Project for Improving Higher Education Institutions through University-Industry-Community Links (Hi-Link) in Gadjah Mada University
Indonesia	

I. Project Outline

Project Cost	317 million Yen	
Project Period	April, 2006 – March, 2009	
Implementing Agency	Director General of Higher Education (DGHE), Gadjah Mada University (UGM), and Research and Community Service Center (LPPM: an internal institution of UGM)	
Cooperation Agency in Japan	Kyushu University and IC Net Limited	
Related Projects	-	
Background	<p>Indonesian higher education institutions had issues of (1) insufficient capacity of faculty members in terms of (a) providing guidance to those who respond to the social needs and therefore contribute to economic and industrial growth and (b) insufficient research skills, and of (2) education and research activities that had not fully met the needs of society. In addition, activities of higher education institutions had not sufficiently contributed to the economic and social development as the intellectual properties, i.e. research results, had not been fed back to the society systematically.</p> <p>Gadjah Mada University (UGM) is an autonomous university and one of the priority universities of Japanese aid policy on Indonesian higher education. Its fundamental research capability is high as they have the large number of young faculty members who have a master's degree or doctorate, and UGM has a clear policy on enhancing University-Industry-Community (U-I-C) links, however, activities for U-I-C links had been hardly implemented systematically due to lack of an effective implementation mechanism to organize university activities that meet social needs.</p> <p>Given the background above, the government of Indonesia requested the government of Japan to help establish effective and comprehensive interaction among U-I-C and to enhance roles of the universities in Indonesian society.</p>	
Inputs	Japanese side	Indonesian side
	<ol style="list-style-type: none"> Experts (Short term) : 11 (44.88MM) Trainees Received: 13 (20.5MM) Equipment: 11.2 million yen Local Cost: 75.2 million yen 	<ol style="list-style-type: none"> Staff allocated: 13 Land and facilities provided: a project office Local Cost: 23 million yen
Project Objectives	Overall goal	
	Roles of universities in meeting needs of industry and communities are improved.	
	Project Objective	
	Research relevance is improved through U-I-C collaboration system in UGM.	
Project Objectives	Outputs	
	Output 1: The capability of researchers to execute research related to U-I-C collaboration in the field of engineering in UGM is improved	
	Output 2: Cooperative interaction among U-I-C is strengthened by research implementation teams in the field of engineering in UGM.	
	Output 3: Organizational capacity of liaison window for U-I-C collaboration in UGM is strengthened.	
		Output 4: Functions of liaison window for U-I-C collaboration in UGM are enhanced.

II. Result of the Evaluation

Summary of the Evaluation
<p>UGM had several internal organizations which acted as a focal point of U-I-C collaboration. This project aims to strengthen the function of Research and Community Service Center (LPPM) as UGM's core liaison organization of U-I-C collaboration by developing practical capacities of LPPM through enhancing staff capacity at LPPM, developing a research plan for U-I-C collaboration and others.</p> <p>This project has mostly achieved the project purpose "Research relevance is improved through U-I-C collaboration system in UGM". The number of contracts for research collaboration LPPM has been awarded is more than 80, and the number has continuously increased since the project completion. At the time of ex-post evaluation, the number of patent filings is five, and the number of research results practically applied in industry and communities are more than 10, among which some have already become commercial products.</p> <p>The project has somewhat achieved overall goal "Roles of universities in meeting needs of industry and communities are improved." 15 technologies which were developed by U-I-C collaboration were supported by businesses and there are five technologies newly traded in markets. However, impact of the project is somewhat limited since no initiatives for expanding a network with partner universities or other universities has been taken. As for sustainability, this project has no problem in policy background, institutional, technical and financial aspects of the implementing agency.</p> <p>For relevance, the project has been highly relevant with Indonesia's development policy, development needs as well as Japan's ODA policy. For efficiency, the project cost slightly exceeded the plan.</p> <p>In the light of above, this project is evaluated to be satisfactory.</p>

1 Relevance

This project has been highly relevant with Indonesia's development policies "enhancement of research capacity of the universities and their increased contribution to society as set in the mid-term plan (2005-2009) and the long-term strategy of higher education (2003-2010)", development needs "enhancement of U-I-C collaboration", as well as Japan's ODA policy "capacity development for industry related human resources at higher education institutions" at the time of both ex-ante evaluation and project completion.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

This project has mostly achieved the project purpose "Research relevance is improved through U-I-C collaboration system in UGM". After the project, internal organizations of UGM which previously carried out U-I-C activities individually have liaised with LPPM, and the function of LPPM as a focal point has been strengthened. LPPM is able to provide support for survey and research for U-I-C collaboration, manage intellectual properties, and carry out training for industry and communities. LPPM's Internal regulation on technology licenses also has been approved. In addition, UGM (the Faculty of Engineering) has taken initiatives to approach industry for promoting collaborations. By the time of project completion, the number of contracts for research collaboration LPPM has been awarded is more than 80, and the number has continuously increased since the project completion. At the time of ex-post evaluation, the number of patent filings is five, and the number of research results practically applied in industry and communities are more than 10, among which 10 cases have already become commercial products. Some researchers still engage in U-I-C researches individually (without liaising with LPPM), however, many U-I-C research proposals are constantly made through LPPM and the technologies made by those proposals are applicable to practical use.

The project has somewhat achieved overall goal "Roles of universities in meeting needs of industry and communities are improved." 15 technologies which were developed by U-I-C collaboration have been supported by businesses and there are five U-I-C technologies newly traded in markets. On the other hand, although it was anticipated that UGM's U-I-C model is applied to other universities and therefore the U-I-C collaboration in areas those universities are located is enhanced, impact on this respect is limited since no initiatives for expanding such network with partner universities or other universities has been taken. No information was obtained on the indicator 2 (rating of participating universities in accreditation) and indicator 4 (number of universities establishes liaison windows for U-I-C collaboration).

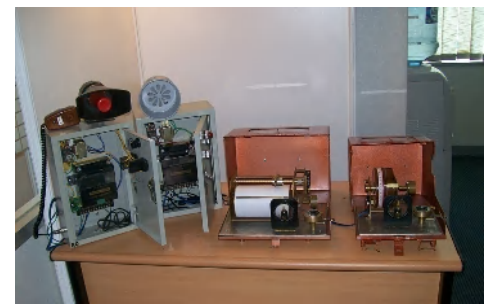
Therefore, effectiveness/impact of this project is fair.



Gama-Melon (developed and commercialized through research by U-I-C collaboration)



Plates for reconstructing fractured bones
(A commercialized product)



A landslide early alarming system (utilized at companies and communities)

3 Efficiency

While the inputs were appropriate for producing the outputs of the project and the project period was within the plan (ratio against the plan: 100%), the project cost was slightly higher than the plan (ratio against the plan: 105%).

Therefore, efficiency of the project is fair.

4 Sustainability

This project is consistent with the Ministry of National Education's mid-term plan (2010-2016) "the enhancement of the research capacity of the universities and their increased contribution to society". While the structure of implementing agency has been partially changed from the implementation period, it is considered appropriate for continuity of project effectiveness. The Senior Vice Rector of UGM has become the head of LPPM, and furthermore, it is currently discussed that national universities become "State-Owned Higher Education Legal Entity*" and that a part of LPPM is placed under the direct rule of the Senior Vice Rector. Nonetheless, the implementing agency has sufficient number of staff, and considering the active utilization of LPPM's branch office in Jakarta and the allocation of budget within UGM as discussed below, UGM's direction for further enhancing U-I-C collaboration will be unchanged. The implementing agency has no technical problem. The faculty members and staff whose capacities are developed by the project continue working at UGM, and there is technical staff who maintain the equipment including a TV conference system used for meeting with the LPPM Jakarta branch and business partners. In addition, LPPM carries out training courses on U-I-C collaboration to researchers on its own. There is no financial problem since UGM's financial condition is good and UGM secures certain size of budget on research for U-I-C collaboration with subsidies from DGHE and UGM's own budget.

As stated above, this project has no problem in policy background, institutional, technical and financial aspects of the implementing agency. Therefore, sustainability of the project effect is high.

*In line with the government regulation 61 in 1999, the status of Government-Owned Legal Entity was given to selected universities including UGM, and therefore, autonomy was given to these universities to some extent. However, since commercialization of university was severely criticized (rise of tuition fee, decrease of access by the poor, and others), Higher Education Law in 2012 stipulated that these universities become "State-Owned Higher Education Legal Entity" within

2 years and manage its finance based on regulations the government creates separately. The regulation is being drafted and it is expected that universities' discretion on financial management is limited.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency:

If UGM become a "State-Owned Higher Education Legal Entity" based on the Higher Education Law, it might be difficult to obtain the financial source for U-I-C collaboration. Therefore, UGM needs to secure more internal financial source in the future.

Lessons learned for JICA:

Overall goal of this project "Roles of universities in meeting needs of industry and communities are improved." is too ambitious to achieve in three years after project completion, since the project supported UGM only during project implementation and did not actively approach other universities and Ministry of Education and Culture. When a similar project is planned in the future, JICA needs to set a more feasible overall goal by focusing the target university's contribution to local industry and communities. On the contrary, if JICA aims to apply the model nationwide, JICA needs to clarify, from the planning stage, how to disseminate the model to other universities and needs to reach an agreement with an implementing agency on what component should be included on this respect.