

Panel Discussion

Moderator: Prof. Aya Okada, Graduate School of International Development,
Nagoya University

Panelists: Prof. Tetsuya Soga , Graduate School of Engineering,
Nagoya Institute of Technology
Prof. Mikiko Abe, Executive Director, Kagoshima University
Prof. Kazuichi Hayakawa, Institute of Health and Medical
Science, Kanazawa University
Prof. Katsutoshi Arai, Faculty of Fisheries Sciences,
Hokkaido University

Mr. Kato (JSPS)

We'd like to start the panel discussion.

For this panel discussion, we have as a moderator Prof. Okada from Nagoya University. This JENESYS Program works to promote academic cooperation with ASEAN countries while contributing to research advancement. Another emphasis of the program is to foster talented researchers. Though I'm sure each of the participating universities has exchanges with counterparts in the west, in this discussion we'd like focus on your exchanges with ASEANS—what significance they have and how they work to foster young researchers. Over the past two years, we have been carrying out the Exchange Program for East Asian Young Researchers, now I'd like to ask you to comment on what future direction the program should take. In the course of the discussion, there will of course be various and differing viewpoints expressed. We'd like, now, to take an hour and a half for an active discussion among you.

Prof. Okada, please.

Prof. Okada

Thank you. I'd like to start the panel discussion for Part 3 of the Forum.

As was addressed in Part 1, the Japan-East Asia Network of Exchange for Students and Youths, JENESYS Program, had its beginnings in the second EAS summit held in the Philippines in 2007, in which then-Prime Minister Abe proposed an exchange project under which 6,000 young people from the participating countries would be invited to Japan each year over a 5-year period. Various activities have been carried out under the program with the cooperation of the member countries and participating institutions. The JSPS program Exchange Program for East Asian Young Researchers is

implemented as a part of the JENESYS Program. It has been entrusted to JSPS by the ASEAN Secretariat. It is carried out on the ground by many universities in mainly ASEANs, but also Australia, New Zealand and India. In fiscal 2008, eight research exchange projects, including one at Kagoshima University, were selected. In fiscal 2009, 18 projects were selected including ones at Kagoshima University, Nagoya Institute of Technology, and Nagoya University. A second round of calls in fiscal 2009 added 29 projects, including ones at Kagoshima University, Hokkaido University. Every year, more and more projects have been actively implemented.

This exchange program for young researchers has two basic objectives. One is to promote scientific cooperation and exchange with ASEAN countries, while directly advancing research and contributing to researcher development in ASEAN countries. The second is to strengthen further the relationship between Japan and ASEANs through this exchange initiative and advance regional collaboration.

Regarding the purpose of this panel discussion, two years have passed since we started this JSPS exchange program, which puts us at about the halfway point of the JENESYS Program, which is scheduled to run for five years. At this juncture, we'd like to confirm the results to date of this research exchange in light of its two objects and consider the form that exchange with ASEANs should take in the future. We'd like to invite your suggestions in this regard.

We'd like first to review the program's accomplishments, but before that may I ask Prof. Hayakawa of Kanazawa University and Prof. Arai of Hokkaido University to report briefly on their projects.

Prof. Hayakawa

Kanazawa University was selected for one project in fiscal 2008 and two in fiscal 2009, a component of which was to build a network of young researchers to focus on environmental protection in East Asia. The first project, between Thailand, Indonesia and Vietnam, was carried out by 10 members; the second, which added a few universities, by 12; and the third by 12. What is noteworthy about our program is that it interlinks environment and health and works to foster researchers who viewed them as being within the same arena.

Prof. Arai

Our program places emphasis on fostering young and female researchers who will shoulder the sustainability of fisheries science in Southeast Asia. As you know, Japan imports a large portion of its marine products from the Southeast Asian ocean region. In the past, the main technologies in the fisheries field have been for catching, growing and processing fish. Even as in 21st century industrial trends, sustainability has now become a key principle in education and research in the fisheries sciences. Our program aims to advance research cooperation on fisheries sustainability, especially in Southeast and East Asia. We are partnering with Katsesart University, Asian Institute of Technology, and Walailak University and the regional international agency SEAFDEC (Southeast Asia Fishery Development Center). Fourteen university lecturers, and also young research and graduate student are invited from them. Short-term joint research projects are held in various fisheries-related fields, and training is carried out. One international symposium was held in July and a final wrap-up seminar will be held in August on the campus of Katsesart University in Bangkok. A unique part of our program is the emphasis we place on female researchers. This is because we want to learn from especially East Asian universities, where female professors and researchers are playing very active roles. Learning from their experiences, we want to foster female researchers in Japan's fisheries science fields as well.

Prof. Okada

Now, we'd like to talk about the research-exchange achievements of this program under JENESYS. As time is limited, I'd like to evaluate these achievements from five different perspectives.

The first is the relationship between Japan and Asian countries amidst globalization. That is, what significance has your universities derived from exchanges with Asia, especially ASEANs?

The second has to do with what has been achieved by your projects. Looking at the research topics selected for the young researcher exchanges, most prominent are the environment, biodiversity, energy, infectious diseases, health, natural disasters, and sustainable development—each being of shared importance within the Asian region. I believe each of your projects reflected the unique characteristics of your universities. From that perspective, what kind of results have you obtained? Also, what kind of results has been obtained in relation to other projects your universities have undertaken?

The third regards researcher development. Among your projects' results, what contribution has been made by your projects to fostering young researchers, especially those who will shoulder the mantle of exchange and/or who will shoulder the advancement of science in the future?

The fourth concerns Japan's position as a preferred venue for East or Southeast Asian researchers. Amidst intensifying global competition, both the academic and research sectors are becoming increasingly competitive. Concurrently, we're seeing the advent of knowledge-based societies and an attendant transition to a knowledge-based global economy. These are making the acquisition of talented people all the more important. Within this environment, what incentives is Japan providing for excellent young researchers to come here? In what fields is Japan uniquely strong? In what fields or domains can Japan attract talented people?

And the fifth is whether there are cases of new exchanges spinning off the JENESYS Program. If so, what forms do (or can) they take? It was reported that some projects sought to link this exchange with other programs. Did those linkages bud into or provide seeds for new exchanges?

Prof. Soga

Carrying out an exchange via research requires the creation of friendly relations with one's counterparts. Such close relationships are very important. Our university receives a great many exchange students from Asia. When they graduate and return to their countries, many become assistant professors and then professors. We use our networks with these people in carrying out projects, including this one. Much can be accomplished by making good use of these networks.

Prof. Okada

What do you think, Prof. Abe?

Prof. Abe

Our program is centered on biodiversity. Geographically, Kagoshima is not that close to Southeast Asia; however, we have several commonalities. At Kagoshima University, here are many Asian researchers doing work in biodiversity-related fields. After such researchers receive their degrees, they return to their countries and actively pursue

research in responsible positions, in which they further develop their relationships with our university. The continuation of such exchange is one of the meaningful aspects of this exchange program.

Prof. Okada

That parallels what Prof. Soga said: the human ties formed with students who have studied at our universities and then assume important positions in their home countries play an important role in enhancing exchange. The same is true with my university.

Next, Prof. Hayakawa, please.

Prof. Hayakawa

Kanazawa University is located on the Japan Sea, which geographically places it very close to the Asian continent. Even in our charter, it's stated that the university will serve as an East Asian knowledge hub that disseminates information from the Hokuriku district to the world. Rooted in that concept, the university is working to internationalize its operation. In the past, we had not necessarily put sufficient effort into this process, but are recently placing strong emphasis on international activities. Over the past year, we have increased number of foreign students by 150 to about 500. Students from Asia make up the greatest percentage. This JENESYS exchange program is included among our efforts to promote exchange with young researchers from ASEAN countries.

Universities are not places for just selling technology; their most important mission is to foster excellent human resources who will go on to play active roles within society. This does not only apply domestically to Japan, but also extends to Asia. In that sense, this exchange JENESYS program is very meaningful.

Prof. Okada

Prof. Arai, please.

Prof. Arai

I agree, universities are not places for just selling technologies. Hokkaido University is located on the northern tip of Japan. So our surrounding situation is quite different from universities in the western part of Japan. We have few things in common, particularly regarding marine resources, with the ocean-bordering countries of Southeast Asia. So at our university, there isn't much research that will yield quick

results or technological developments for invited researchers from that region. However, as the paradigm of the 21st century shifts to sustainability, I think that short-term training stints in Hokkaido, which cannot offer immediate technology transfer, should be very beneficial for young East Asian researchers as it gives them a chance to study salmon and other different fish species in light of marine sustainability. Overseas students tend to want to study techniques they can use as soon as they return home. Whereas our exchange program doesn't give them that kind of training, it does give them an opportunity to study the fundamentals of fisheries science, such as basic classifications, evolution paths, and diversities of fish species. This has been a very meaningful aspect of the JENESYS program at our university.

Prof. Okada

Let's go to the second topic. The uniqueness of each university has been reflected in your respective project activities, but what achievements have been derived from such uniqueness? Prof. Arai, please.

Prof. Arai

As I said, our program centers on fisheries science. We sent out our call for applications to many countries in Southeast Asia, but only Thailand met the application conditions, so we received 14 young Thai researchers. I believe their stay was very meaningful as it gave them an opportunity to learn new concepts in a completely different environment. Our exchange program just completed its first year. Like other universities, we are carrying it out in conjunction with a COE project. We started these projects believing that, to be meaningful, exchange must continue over a long term. We are happy with the JENESYS exchange program as it can be advanced in diverse ways.

Prof. Okada

Prof. Hayakawa, please.

Prof. Hayakawa

Our university is also carrying out this exchange with a COE project at its base. Under this COE project, launched in 2006, we are advancing technologies used to measure minute chemical substances in the environment of the Japan Sea. Excellent researchers in this field work at Kanazawa University, situated on the rim of the pan-Japan Sea region. So, we are placing emphasis on this field in our JENESYS exchange program.

We have linked environment to the health because we cannot improve the environment without considering it in the context of health. Human health, including infectious diseases, is closely interrelated with the environment. So we decided to place weight on these two key words, which has given our program an interdisciplinary nature by combining the science and engineering of environmental research with medical and pharmaceutical research. This has strengthened our exchange program, while opening the door to a new cross-departmental research domain within the university.

Prof. Okada

Japan's new administration emphasizes "green innovation" and "life innovation" in its New Growth Strategy. Kanazawa University appears to be focusing on these two important areas. Next, Prof. Abe, please.

Prof. Abe

Under our program, we have continued receiving students from East Asia in the field of ecology, especially biodiversity. Having received a solid number of researchers through this East Asian program, we have been able to pass on to them knowledge and methodologies cultivated at our university. In this sense, one unique characteristic of our program is the perfect match it provides between the project's technical aspects and the fostering of young researchers.

Prof. Okada

So, a long-term methodology is being effectively applied to cultivating human resources in Asia. Prof. Soga, please.

Prof. Soga

As Prof. Arai stated, universities are not a place for just selling technologies. Nevertheless, our counterparts in Southeast Asian countries are eager to learn state-of-the-art technologies. For that reason, we have established a joint experimental facility to advance research on nanotechnology with the Technological Institute of Mara. It is the desire of Southeast Asian countries to study and train researchers in such advanced fields as the nanotechnologies and biotechnologies. As our university is carrying forward research in these fields, only naturally we are able to pass such leading-edge technologies on to our international students. We can either teach the students ourselves or invite researchers to Japan and give them the knowledge with

which to foster human resources back in their countries.

However, teaching various technologies requires long-term objectives beyond the mere technologies themselves. For that reason, the university is carrying out its program with sights set on such long-term targets as the environment and energy in Asia.

Prof. Okada

Thank you, everybody. Now, let's move on to the third topic. What fruits have your projects produced in terms of fostering young researchers who can contribute to the future advancement of sciences? Prof. Arai, please.

Prof. Arai

International exchange is not a one-way street; it requires a partner. It's a process of mutual exchange. Visiting universities in Asian nations, something occurred to me that was very impressive. When I was a student studying fisheries science, I can remember reading an academic pamphlet that said "female students are not well suited for studying this field of science." But, that was some 40 years ago. Now, the number of female students studying science in Japan has greatly increased; however, there are still few who have become researchers. In contrast, when you go to Southeast Asia you find so many prominent female professors and senior researchers. Using this project as an opportunity, we wanted to learn from their example. This is why we included the expression "Female Researchers" in our project theme. Under the project, we have held a seminar on the topic "gender-equal society," and invited female researchers from Southeast Asia to speak at it. The seminar also included small group discussions between undergraduate and graduate students of our university and young female researchers from Southeast Asia. I think it had a big impact as participating in such an inter-cultural exchange of views when one is young can bud and bear fruit in the future.

Prof. Okada

Are there such opportunities at Hokkaido University for interaction between young Japanese female researchers and the young researchers invited under this project?

Prof. Arai

Actually, a conscious effort needs to be made to create such opportunities. Within our department, there are only two female members out of a 90-member faculty. We asked them to play a central role in setting up this project. We've made a deliberate effort to

hold a seminar on a gender-equality theme and to invite female students of the university to participate in the project's joint-training and joint-research activities. Hokkaido University has an office for supporting female researchers. We've asked it to introduce us to speakers for the project's seminars.

Prof. Okada

Prof. Hayakawa, please.

Prof. Hayakawa

Many of the faculty members engaged in this program have probably already had experience in conducting an international joint research. As mentioned earlier, many past students from overseas have returned to prominent positions in their home countries. They have, in turn, sent young researchers from their countries to participate in our project. In this way, the project offers the merit of advancing joint research while further developing cooperative ties. This leads naturally to our following up on past exchange students from ASEAN countries.

Among the invited young researchers who have come to the Kanazawa University for about one month under this project, there have already been some who came back to the university as long-term graduate students. We feel that the JENESYS Program could take on such a character in the near future.

I'd like to make just one additional comment about the impact that the program has had on the Japanese students. As you know, Japanese students tend to be quite shy, so they don't readily speak English. Being no exception, our university has many such shy students. In contrast, the students from ASEAN and other countries are relatively fluent in English. Japanese students were very timid when first encountering the Asian students, but within a month or so they gradually got better at communicating with them in English. The Japanese students received stimulation through this experience of studying together with the overseas students. At the very least, they became less "allergic" to English.

Prof. Okada

We've also had students who came back to our university after participating in the JENESYS program. One very intelligent graduate student won a MEXT scholarship and returned to our university to earn a doctoral degree. Thanks to this program,

overseas students can have an opportunity to study in Japan for a longer period. It was very interesting to hear about the program's impact on Japanese students at Kanazawa University. Next, Prof. Abe, please.

Prof. Abe

I'd like to touch upon something a little different. Be it scientific conferences or seminars, there are very few routes via which Asian researchers can disseminate information to the West. We will use the importunity provided by this JENESYS project to hold an international congress on nitrogen fixation with Asian countries. It will be on par with scientific conferences held in the West, and aimed at instilling young researchers with confidence in giving presentations at international conferences. Whereas many young Asian researchers claim they have ample opportunities to participate in international conferences, it's been our observation that they do not have ample skills when it comes to making good presentations. We need to teach these techniques to them.

Prof. Okada

Prof. Soga, please.

Prof. Soga

A lecturer from the Institute of Technology in Malaysia stayed at our university. After returning home, he became professor and brought 14 students to Japan under our project. So, what started with one lecturer has grown into 14 students. When asked, they all said that they'd like to come back to Japan. While here, they are expanding their circles of friends and colleagues. There are some cases that these networks brought them back to do research in Japan for longer periods in the future.

Prof. Okada

Let's now move to the fourth point. Universities throughout the world are competing with each other to acquire high-caliber students. What incentives are there to attract such students to Japanese universities? In what fields can Japanese universities display the kind of strengths that will attract such students?

Let me say in passing that our university invited a young teacher from National University of Singapore. He said that at his university they rarely ever hire Singaporeans. They almost always hire foreigners. The university is eager to acquire

high-caliber professors, whose research results are evaluated much more severely than in Japanese universities. I've heard that such new professors need to demonstrate good performance for their first three to five years. Otherwise, the universities will dismiss them. I'm interested to hear about the areas in which Japanese universities can display their strengths.

May I ask Prof. Abe to go first.

Prof. Abe

Japan is a very safe place to conduct research. Looking at overseas students studying in Japan, they have strong wishes as to what they want to do. Japanese researchers are attentive to their wishes, such as through “heart-to-heart” communication. I think this is one of Japan's strengths.

As to the incentives for attracting high-quality people to Japan, it's up to the host institutions to have the kind excellent research in which they take pride—that is, research at a world level and on subjects of high potential. That, I think, would be the greatest incentive they could offer.

Prof. Okada

Prof. Hayakawa, please.

Prof. Hayakawa

To follow up on what Prof. Abe said, there are various problems in Asia, in particular environmental problems, caused by the region's remarkable economic and industrial development. These Asian environmental problems have attracted the attention of researchers around the world, particularly in the West. It is said that in Japan, there are many researchers who have excellent achievements in this field, even more advanced than western researchers. So, I believe such Japanese researchers can play an instrumental role in fostering Asian human resources.

In the past, Japan has provided various forms of support to developing countries, including ODA. Such assistance has come back to benefit Japan in various ways. Particularly between Japan and ASEANs, there's a close geographical proximity of just a 4-hour flight. In advancing joint research through fieldwork, this makes it easy to come and go between Japan and ASEAN countries, giving Japan an advantage over the West.

Prof. Okada

Prof. Arai of Hokkaido University, please.

Prof. Arai

This is linked to how invited researchers are thinking about their futures. Do they really want to become professional researchers or do they want to work in industry or in government? Young people who want to become researchers desire to stay at an excellent research institution, which publishes in eminent scientific journals in their fields. Students who want to become an administrator or a government official or want to work in a private company are interested in other aspects. Therefore, we are trying to provide information about our faculty members including their various research achievements on the university's website. As we're sure young Asian researchers will look for excellent research opportunities, we are continually working to improve the university's record of achievements.

Inside the university's research environment, overseas researchers can communicate with Japanese students in English. But, when they go off campus, it may be difficult for them to communicate in English. For example, if they get sick or are accompanied by children. I think we will also need to improve the off-campus environment for them. Our university is located in the small provincial city of Hakodate, where there is only one faculty. So, we are trying to involve community people in our events held for overseas students.

Prof. Okada

It is important to provide an environment conducive to comfortable living for overseas students. Next, Prof. Soga, please.

Prof. Soga

I don't know how they view Japan in Singapore, but in other countries they probably view Japan as the leading country in Asia. In that sense, both universities in Japan and Southeast Asian countries are concerned about their rankings. The Southeast Asian universities want to collaborate with Japanese universities that have joint research projects like this JSPS-administered one or that have researcher exchange programs so as to improve the relative ranking of their universities. Individual researchers also want to collaborate with Japan to build a record of research achievements and more

easily advance their research in the future.

Prof. Okada

Chinese universities are also very sensitive about their international rankings. Various organizations are publicizing world rankings of universities, and Asian universities are becoming more and more sensitive about them. I think that's a very interesting point.

Now, let's move on to the fifth point. Through the JENESYS Program, what sort of new exchanges can you expect in the future? Starting with Prof. Hayakawa, please.

Prof. Hayakawa

Both this program and the role of the universities are to develop human resources. It's our hope that the young researchers from ASEANs will become future leaders. The reason we've put "network building" at the end of our project's title is because it aims to promote effective networking; that is, advancing exchanges, development and networking of young researchers. That's our wish. We, of course, expect to advance joint research and enter inter-university agreements as important outcomes; what, however, will be the greatest asset gained by young Japanese researchers is the networks they form through the program with colleagues in ASEANs and beyond to a wider Asia, Africa, and, thence, western countries.

Prof. Okada

At our university, too, close person-to-person networks are formed through this exchange program for young researchers. What we've found interesting is that students from countries like India and Pakistan, which are engaged in conflicts and don't have good cross-national relationships, can on a personal level create very close friendships. For example, we've seen Pakistani and Indian students invite each other to their homes. Next, Prof. Arai, please.

Prof. Arai

Through the JENESYS exchange, inter-university agreements may be one directional, but in our case, we would rather first concluding inter-faculty agreements. Base on them, we have been inviting young researchers through a regular flow of exchange. We're focusing on Thailand in our project, as it is a center for fisheries science in Southeast Asia. Thai universities are accepting students from Laos and Myanmar. That is also one future direction of our JENESYS Program, under which exchanges may

spread throughout ASEAN countries and on across the Bay of Bengal to Bangladesh and Pakistan as well. I feel that such networking may be the next step in our future program expansion.

Prof. Okada

Now, Prof. Abe, please.

Prof. Abe

Through ITP and this exchange program for East Asian young researchers, an alumni network has been formed between graduates of Kagoshima University and overseas students who have completed the course. We are working to strengthen and expand this network. Looking at Southeast Asia as a grouping of countries, some have very highly developed economies. Japan has provided assistance to fostering young people in them. But from now, I think we can carry out exchanges with them on a more equal footing. That is, in Japan, JSPS and other agencies can provide funding to Japanese universities and research institutions, while in these Southeast Asian countries, counterpart institutions can receive funding from their government agencies. In this way, we can make a transition to a fairly equilateral mode of exchange.

Prof. Okada

I personally share your view. In the project presentations of Part 2, reference was made of a flying-geese model of development. Some presentations conjectured that the technical level of Asian countries is about 20 years behind Japan. But, through this exchange program for East Asian young researchers, I have come in contact with many excellent young Asian researchers and doctoral students. Watching them in discussions with our own students, I've felt that a shift is taking place from a vertical to more equal or horizontal relationship. In some fields, I've felt researchers from the developing countries have even become superior to Japanese students.

Now, let's use the remaining time to discuss future challenges and future directions. I'd like to go around the table, starting with Prof. Hayakawa.

Prof. Hayakawa

The next thing we'll have to think about is how to connect this program to the next level. That will be a challenge. It's a question that we'll need to pose to the JENESYS Program, to ourselves, and to young researchers from Asia. We need to think concretely

about how to open new paths that will give Asian researchers fresh hope about what might follow after their participation in this program.

Prof. Okada

Prof. Arai, please.

Prof. Arai

No universities want to withdraw from internationalization. Asian students want to stay at our universities to pursue a master's degree or go on to doctoral course—thus deepening their studies and widening the scope of their research. To enable this, we will need to provide continuing programs. Projects should not be just standalone, but should be offered in a sustained, multi-layered program. If we stop this effort, the progress made so far will be set back. Therefore, our greatest challenge will be achieving ongoing sustainability.

Prof. Okada

I agree with you. This should not be a standalone, single project. Researcher networks should be long lasting. So, the program should not be completed in single year. If it were to end in one year, it would be a waste. Financial support will be necessary in establishing a system that can sustainably advance the program's activities. Prof. Abe, what do you think about this?

Prof. Abe

In Japan, many universities have implemented similar programs, and are working in their own ways to elevate the quality of Asian human resources. Of course, information on these universities can be collected by JSPS and other organizations. What I would like to see is it used to break down the barriers between these universities. Young Asian researchers should be able to choose from among them. In other words, we might want to create more flexibility within the programs itself.

Prof. Okada

So that would entail creating a consortium of universities for receiving East Asian students. That's a very valuable suggestion. Now, Prof. Soga, please.

Prof. Soga

Many researchers are continuing their research in Asian universities after having

started it in Japan 10-15 years ago. What they need to advance is state-of-the-art technology. It is important for us to find ways of providing them with advanced technology or have them come to Japan to receive instruction in it.

Prof. Okada

We'd like to take the remaining time for questions. Please identify yourself when asking a question.

Prof. Nomachi (Osaka University)

Our program involves radiation-related physical measurement. When we talk about the transfer of latest technology, there are restrictions on its transfer and export. This makes it very troublesome to do the processing required to accept students coming from what are called "grey countries." We have a follow-up program; it is, however, difficult to transfer much of the university's old experimental equipment to Vietnam, because doing so would violate the export control on items listed as weapons-related technologies. This is very perplexing to us. In Europe, for example, this transfer problem can be cleared through such agencies as UNESCO if the technology is to be used for basic research. We wonder whether JSPS could take the lead in doing this in Japan. If the latest technologies are tied to basic research and certain not to be abused, then we should implement a system that allows their transfer.

Prof. Okada

Thank you very much for a valuable suggestion. Does anybody have additional questions?

Prof. Kokugan (Tokyo Institute of Agriculture and Technology)

There's been much said about state-of-the-art technologies, but my feeling is that rather than learning directly from Nobel laureates, students want to carry out their own practical experiments at a stage before advanced technologies are needed. Many students come to our university from Indonesia. The top universities in Indonesia, as you know if you've been to them, have great equipment. Many of them are state of the art. We should provide these students with an environment where they can easily give expression to their ideas—translate them into practical experiments. This doesn't need to require state-of-the-art technologies and equipment. It'd be great if we could provide such equipment, but together with the East Asian students, we can easily implement simple experiments of a kind that will be practical and cause them to want to come back

and work with us again. It would be nice if JSPS could launch such a program, which shouldn't be supplementary to the COE program, but be new and separate program.

Prof. Okada

Basic technology in addition to state-of-the-art technology is important. Are there any other questions?

Prof. Onishi (Kyoto University, Economic Dpt.)

We have a 2-year program for inviting students from Vietnam and Laos. Vietnam and Laos are working on developing market economies. In this process, they want to learn from Japan's economy. So in developing future leaders who can create market economies, our emphasis is more on education than directly on research. From that perspective, I would hope to see more project opportunities in the social sciences. However, looking at JSPS program menu, most of its programs are labeled "natural sciences." We'd like to ask JSPS to make more projects available in the social sciences.

Prof. Okada

We have a list of the adopted projects. Most are in natural sciences, with only two exceptions for the second call in 2009. I agree with you. I hope JSPS will give this consideration. Any other comments or questions?

Prof. Yamada (Yamaguchi University)

There are a lot of regulations and limitations, the biodiversity convention on microbes being one of them. We have many researchers and young researchers we'd like to invite to Japan, but are impeded by such regulations. Though we know that some regulations are necessary, we'd like to see them minimized on the government level.

Prof. Okada

Relaxing regulations by the government is a very important issue.

Anybody else? If not, we would like to close the panel discussion. I thank you all for your participation.

Closing remarks

Mr. Hisashi Kato, Director, International Program Department, JSPS

Thank you all for your participation in this discussion. Now, I'd like to offer a short summary and some closing comments.

Concerning the JENESYS Program, its aim is to advance research, particularly on shared issues, through active exchanges with ASEAN countries. I believe it's been confirmed that the relationship between Japan and ASEANs, particularly the scientific relationship, has been strengthened by fostering young researchers through this exchange program. JSPS mainly supports postdocs, but also has programs to support doctoral students. Concurrently, this JENESYS Program targets master's course students as well. This is a unique characteristic of the JENESYS Program.

As Prof. Hayakawa of Kanazawa University said, exchange among Japanese and overseas students, particularly those in master's courses, has a positive impact on improving the language skills of the Japanese students, which leads to networking among them. I believe that such accomplishments are in large part possible due to the youthfulness of the program participants. Though we do not know how many of these students will on to become full-fledged scientists, we think it is meaningful for all of them to become familiar with Japan at an early stage of their careers.

We have been conducting this program over the period between last October through this September. JSPS is eager to continue this program, but at this point we must wait for a judgment by the Ministry of Foreign Affairs. So, we are still uncertain as to whether we can actually move forward in implementing the program. As Prof. Arai of Hokkaido University said, continuity or continuation is very important. Over the past two years, with the cooperation of each university in Japan, we have been able to implement this exchange with ASEAN countries. So, we are eager to continue it, and ask for your support in that effort.

Now, I'd like to offer answers to a couple of the question broached in the Q&A session. It was said that social sciences, often in combination with the humanities, receive less support from JSPS than other disciplines. Under this program, all fields are covered. Applications are submitted in eight categories: the humanities, social sciences, mathematics and physical sciences, chemistry, engineering, biology, agriculture, and

medical, dental and pharmaceutical sciences. When screening the applications, approximately the same selection ratio is applied to number received in each of these categories. The reason, therefore, that there were not many projects selected in the social sciences was that not many applications were submitted in that category. It is JSPS's basic stance to support projects in all the categories; we have not placed any priority on science over social science in this ASEAN exchange program.

Regarding the issue of deregulation and technological transfer raised by Prof. Nomachi of Osaka University, the question is probably related to the End User List published by the Ministry of Economy, Trade and Industry. It is JSPS's policy not to support research related to military affairs. The User List regulates the invitation of people from organizations related to research connected with nuclear development and weapons of mass destruction. It is JSPS's screening policy not to select research applications related to military affairs, even if the research topic is not included on the User List. That said, JSPS would like to do what it can to facilitate the pure transfer of technology used in dedicated scientific exchanges. However, JSPS does not itself have the capacity to influence regulation on the governmental level. Within our limited capacity, we will try to reflect the opinions of leading researchers within our programs. I apologize if this explanation is not sufficiently concrete to satisfy the question.

In the government-program screening/streamlining review held last year, a decision was made to severely cut the budget for JSPS's invitation programs. We also expect to face very stringent conditions in making this year's budget request, and would appreciate the support of researchers and university faculty throughout the country. We will do all in our power to advance basic research in Japan, and, again, would like to ask for your support in this endeavor.

Thank you.