Development Impact Review Study of Triangular Cooperation in Latin America and the Caribbean

Final Report

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Summary

1. Overview of Study

1.1 Background and objectives

The basic policy for triangular cooperation was clearly established in the Official Development Assistance (ODA) outline approved by the Cabinet in 2003, which states that "Japan will actively promote south-south cooperation, working together with the more developed nations in Asia and other parts of the world." The Japan International Cooperation Agency (JICA) midterm plan (Phase 2) also states the following: "Give consideration to the significance and effectiveness of south-south cooperation in assistance to developing nations, and work to effectively implement south-south cooperation assistance projects."

Since its establishment in 1974, JICA has implemented third country group training, third country specialist dispatch, joint projects and other activities from a triangular cooperation approach, with the aim of promoting adaptive technologies in developing nations and from a cost-benefit perspective. There is a growing recognition that triangular cooperation is an effective assistance approach that promotes capacity development in developing nations and increases a sense of ownership. Moreover, many projects are implemented under a framework of Partnership Programs with triangular cooperation resource countries (hereafter, the countries with which Partnerships have been concluded will be referred to as "Partnership Program countries"), and these Partnership Programs are ensuring Japan's leadership role in the international community in promoting triangular cooperation.

However, triangular cooperation is also said to involve relatively high coordination costs for planning and implementation. Determining whether this is true or not and, if the coordination costs are actually found to be high, developing effective and efficient methods of employing triangular cooperation with a focus on minimizing costs is considered to be important when studying the future direction of triangular cooperation.

1.2 Target region for efforts

This study will focus on four Partnership Program countries in Latin America and the Caribbean (Argentina, Brazil, Chile and Mexico) in addition to three beneficiary countries (Paraguay, Bolivia and El Salvador). An impact review will be conducted of triangular cooperation in these countries. In addition, a site survey was conducted for Mozambique in order to review the assistance to Africa that is being implemented by Japan in cooperation with Brazil, something that has attracted notice as a new development in triangular cooperation.

The relevant institutions in partner countries that will be considered in this study are as follows.

- Partnership program countries: aid liaison institutions (Ministry of Foreign Affairs, International Cooperation Agency, etc.), triangular cooperation implementing organizations (government ministries, universities, etc.)
- Triangular cooperation beneficiary countries: triangular cooperation liaison institutions (Ministry of Foreign Affairs, International Cooperation Agency, etc.), accepting organizations (government ministries, universities, etc.)

Unless otherwise specified, in this report "Resource Country" will be defined as a developing country that serves as the entity for transferring and providing instruction regarding knowledge, expertise, and technology to other developing countries, and "Beneficiary Country" will be

defined as a developing country that receives knowledge, expertise, and technology from other developing countries and organizations.

1.3 Content of study

1.3.1 Approach to triangular cooperation in this study

According to the JICA "South-South Cooperation Assistance Guidebook (1st edition)," triangular cooperation is defined as "the implementation of cooperative projects jointly with other aid nations or aid organizations in a certain country in order to resolve development issues in that country." Up to now, in the "South-South Cooperation Assistance Guidebook (1st edition)" and "JICA "Issue-Specific Guidelines (South-South Cooperation) (January 2005)," etc., JICA has compiled the types of "south-south cooperation assistance" conducted by developed nations and international organizations for south-south cooperation, and triangular cooperation is considered to be a concept that is included in south-south cooperation assistance. The JICA "Issue-Specific Guidelines (South-South Cooperation)" lists the following five items as describing the functions and significance of south-south cooperation assistance:

- (1) Use of the human potential and resources of developing nations
- (2) Dissemination of Japan's cooperation achievements
- (3) Donor nation cooperation
- (4) Assistance for technical cooperation in developing countries (TCDC)
- (5) Assistance in becoming a donor nation

Types (1)-(3) are of assistance in which, in order to assist the end beneficiary country, initiatives on the Japanese side are conducted to reduce costs and ensure appropriate use of resources, or assistance is provided in cooperation with other developing nations to increase efficiency. Types (4) and (5) are of assistance in which assistance to the end beneficiary country is promoted indirectly or in a complementary manner through assistance to the partner developing country (which is in the process of becoming a true donor nation), and therefore these types of assistance have a different meaning from (1)-(3). In this study, triangular cooperation will be defined mainly as indicating projects with the functions and significance noted in (1)-(3), and the review will be conducted on that basis.

The following table shows some of the triangular cooperation (south-south cooperation assistance) projects implemented by Japan.

Table 1 Overview of Triangular Cooperation (south-south cooperation assistance)
Assistance in Japan

Activities	Specific Content	
Third country training	Activity introduced in 1975. Based on assistance from aid countries and organization a certain developing country accepts personnel from another developing country in order to achieve the transfer and dissemination of superior development experience, knowledge and technology.	
Third country specialist dispatch	Activity introduced in 1975. Based on participation from aid countries and organizations, a certain developing country dispatches personnel to another developing country in order to achieve the transfer and dissemination of superior development experience, knowledge, and technology.	

Activities	Specific Content	
Joint project	Projects jointly implemented by Japan and other aid nations (resource countries) for third countries, consisting of a combination of third country training, third country specialist dispatch, equipment provision, etc.	
Joint seminar	International seminars and workshops implemented jointly by Japan and resource countries. Includes wide-area seminars on specialized fields and issues held for the purpose of forming projects and confirming needs, seminars held for the purpose of sharing aid expertise for promoting triangular cooperation, etc.	
Partnership program	Comprehensive framework agreed upon by the Japanese government and the government of a certain developing nation to provide development assistance jointly to other developing countries and regions. Based on this framework, joint projects, third country training, third country specialists, joint seminars and so on are implemented.	
Holding of international conferences on triangular cooperation (south-south cooperation assistance)	South-South Cooperation Assistance Meeting (held in May 1998), JICA/UNDP Joint Symposium "21st Century Development Cooperation: Approach to South-South Cooperation Assistance" (held in October 2001), workshop at the World Summit on Sustainable Development (WSSD) (held in September 2002), Workshop on Improving the Quality of South-South Cooperation (held jointly by UNDP-JICA in December 2008), etc.	

Source: Prepared based on JICA "Issue-Specific Guidelines (South-South Cooperation)" (January 2005) as well as JICA website, local interviews, etc.

This study will review the third country training projects, third country specialist dispatch projects and joint projects implemented by Japan and Partnership Program countries in Latin America. Among the triangular cooperation projects are some in which a developing country other than the Partnership Program country serves as the resource nation for project implementation. However, this study will focus on projects in which the Partnership Program country acted as the resource nation, and the review will be conducted on that basis.

1.3.2 Study methods and study items

(1) Document review

In order to study the trends in triangular cooperation, a document review and web search was conducted with regard to the following points.

- Achievements of triangular cooperation by Japan
- Other donor trends
 - Policy trends with respect to triangular cooperation by international organizations and bilateral donors
 - Background to triangular cooperation projects in Latin America
 - Advantages and disadvantages of triangular cooperation
- Partnership Program country policies relating to triangular cooperation
 - Policies and planning relating to triangular cooperation on the part of Partnership Program countries
 - Budget, personnel organization, etc., relating to triangular cooperation on the part of Partnership Program countries

(2) Selection of eight case studies

In this study, past triangular cooperation projects in which the Partnership Program country acted as the resource nation were analyzed, and the impact of triangular cooperation on the beneficiary country and the Partnership Program country was reviewed. However, there are many different types of triangular cooperation. Each project is different and is manifested in a different form. Accordingly, for this study two projects from each Partnership Program country were selected, making a total of eight projects. These projects were examined as case studies in order to identify the advantages and issues that were common to all of the triangular cooperation projects. Table 2 shows the projects that were selected for study.

Table 2 8 Case Study Projects

	Project	Implementing Country	Beneficiary Country (countries in bold were visited in the site survey)	Scheme
1	Agroforestry Course	Brazil	Bolivia , Colombia, Ecuador, Peru, Venezuela	Third country training
2	Assistance for Diversification of the Beekeeping Industry (project to expand production of propolis, pollen, etc., and improve quality)	Brazil	Paraguay	Third country specialist dispatch (individual specialist dispatch)
3	Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation (group review target project) • Diagnose and study livestock diseases	Argentina	Argentina, Bolivia , Paraguay , Uruguay	Third country training, third country specialist dispatch, joint project
	Project to improve livestock hygiene in Paraguay			
	Project to improve livestock hygiene in Peru			
4	Preventive Management for Plant Viral Diseases	Argentina	Ecuador, Cuba, Colombia, Chile, Paraguay , Brazil, Venezuela, Peru, Bolivia	Third country training
5	Applicable Aquaculture Technologies	Chile	El Salvador	Third country training
6	Physically Challenged Rehabilitation Course Project in Chile (group review target project) Rehabilitation for physically challenged persons Improvement of early remedial	Chile	Costa Rica, El Salvador, Honduras, Nicaragua, Guatemala, Panama, Dominican Republic, Colombia, Venezuela, Ecuador, Peru, Uruguay, Argentina, Bolivia,	Third country training
	services at the JCPP Paraguay regional level		Paraguay	
7	Appropriate Management of Solid and Hazardous Wastes (group review target project) Solid waste treatment Solid waste treatment and waste management Hazardous waste treatment Comprehensive waste treatment based on the 3Rs	Mexico	Argentina, Uruguay, Ecuador, El Salvador, Cuba, Guatemala, Costa Rica, Colombia, Chile, Dominican Republic, Nicaragua, Panama, Paraguay, Venezuela, Peru, Honduras	Third country training
8	Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)	Mexico	El Salvador	Joint project

1.3.3 Site survey

In the course of this study, site surveys were conducted on two occasions to review the impact of triangular cooperation. In site work I, three the Partnership Program countries and beneficiary countries in Latin America were visited and interviews were conducted at relevant organizations in both Partnership Program countries and beneficiary countries. In site work II, in order to review triangular cooperation for Africa on the part of Japan and Brazil, which has attracted a great deal of attention in recent years, a site survey in Mozambique was also conducted.

In addition to the interviews in Partnership Program countries and beneficiary countries, interviewers went to the United States and conducted interviews at the Inter-American Development Bank, the World Bank and the UNDP in order to study trends in triangular cooperation by international organizations. The following items were studied in the site survey.

(1) Impact on beneficiary countries

- Number of third country training participants
- Improvement of organizational and individual capacity through triangular cooperation (Capacity building for implementing organizations, improvement in technical expertise of specialists in beneficiary countries [returning trainees, etc.])
- Scale of ultimate beneficiaries

(2) Impact on Partnership Program countries

- ① Improvement in capacity of aid liaison organizations in Partnership Program countries
 - Personnel: current state of employees in charge of triangular cooperation
 - Budget: current state of triangular cooperation budget
 - Project achievements: implementation of south-south cooperation and triangular cooperation projects
 - Project achievement capacity: improvement of capacity to implement international cooperation project (change in organizational structure, improvement of planning capacity [establishment of project plans, guidelines, etc.], improvement of work processes [holding of meetings, implementation of evaluation and monitoring, etc.])
 Et cetera.
- ② Improvement in capacity of project implementing organizations in Partnership Program countries
 - Personnel: improvement of capacity of staff involved in triangular cooperation (those in charge of assisting acceptance in third country training, specialists providing technical guidance to trainees, etc.)
 - Improvement of project management capacity: technical transfer from specialists in Japan, systematization of knowledge through projects, accumulation of the achievements of guidance provided in other countries Et cetera.

(3) Impact on Japan

- ① Efficiency: effectiveness in reducing investment on the Japan side (project costs, personnel)
- ② Effectiveness: strengthening relations between Japan and Partnership Program country and between Japan and beneficiary country (whether the assistance is such that Japan's presence is ensured, etc.)

1.3.4 Analysis of impact of triangular cooperation

Based on the results of the study described in (1)-(3), the impact of triangular cooperation was analyzed and the distinguishing characteristics, considerations, etc., were compiled. The perspective for the analysis was as follows.

- Characteristics of triangular cooperation as compared to bilateral cooperation
- Manifesting and inhibiting factors relating to the impact of triangular cooperation
- Fields in which Partnership Program country excels
- Issues and considerations

One of the issues targeted by this study was the theory that the coordination costs are higher for triangular cooperation than for bilateral cooperation and therefore it is difficult to ensure the efficiency of projects. In order to test this theory, as part of this study questionnaires were sent to the JICA office in the Partnership Program country to collect information on man/month investment by JICA office staff members at each stage from triangular cooperation project formulation through completion and assessment. This information was then analyzed to determine what coordination costs were produced in each phase, from the standpoint of personnel investment.

2. Summary of impact review of triangular cooperation

2.1.1 Impact on improving project development effectiveness

2.1 Impact on beneficiary countries

2.1 Impact on beneficiary countries

(1) Synergistic effect using appropriate technology

In triangular cooperation, technologies that have been transferred through bilateral cooperation from Japan to resource countries (Partnership Program countries, etc.), and which have developed in the resource countries to match the conditions in those countries, are then transferred to beneficiary countries. For this reason, compared to bilateral cooperation, it is easier to transfer more appropriate technologies that are a better fit for the situation in the beneficiary country. Accordingly, the advantage offered by triangular cooperation is that the technologies transferred from the Partnership Program country (the resource country) are better able to cope effectively with the problems that are specific to that region.

¹ For example, compared to bilateral cooperation, the number of participating countries is larger and the number of relevant parties is increased, and from this standpoint the coordination costs are said to be higher.

This is most noticeably seen primarily in assistance in agricultural fields, but it is also visible in fields relating to the building of social infrastructure such as disaster prevention and social systems.

(2) Commonalities between resource countries and beneficiary countries

If the Partnership Program country (the resource country) for triangular cooperation and the beneficiary country share the same language, communication goes more smoothly and superior results are ensured at each stage of the project, from formation to execution and follow-up.

In third country training conducted in Brazil, Portuguese is used, and problems are evident in some cases in terms of communication with some of the trainees who have come from Spanish-speaking countries in Latin America. According to the institution implementing the training in Brazil, however, during training the key words are translated into Spanish, or the instructor speaks slowly to ensure proper communication with the trainees.

(3) Formation of a region-wide network for problem resolution

Through triangular cooperation, a network is formed between the Partnership Program country and the beneficiary country, and this network can be used as an infrastructure for resolving regional problems. The impact of this type of network formation is particularly noticeable in the countries participating in third country training. In the site survey, it was confirmed that in some cases the trainees who had participated in third country training made an active effort to use the networks with the implementing agency in the Partnership Program country and neighboring countries after their return to their own countries. Following their return, trainees contact the implementing organization in the resource country as the need arises for assistance in resolving problems in their own country. In this way, these networks help to increase the capacity to resolve local problems. If trainees participate in region-specific group training in Japan, mutual networks are formed from the perspective of knowledge sharing and so on. In triangular cooperation (third country training), however, it is easier for instructors and trainees to maintain ongoing communication after the training ends due to the common language, cultural background and other characteristics. The ongoing communication between instructors and trainees by means of email, telephone and so on even after training has ended is thought to increase the effectiveness of the training.

(4) Increased awareness on the part of relevant entities in beneficiary country

In the interviews conducted for this study, it was confirmed that the trainees were able to broaden their horizons by coming into contact with advanced technologies outside their own country and through interchange with trainees from other countries, and that in some cases after their return the trainees go to study abroad or go on to graduate school in order to further improve their specialist expertise. In this way, third country training and third country specialist dispatch has increased awareness on the part of involved entities in the beneficiary country (trainees, etc.), and that even after the training ends there are many trainees who work to improve their skills in their own country.

Naturally, the effects noted above are not unique to third country training and third country specialist dispatch. The same effects can also be anticipated through training and specialist dispatch in bilateral cooperation. However, third country training and third country specialist dispatch can be said to play a role in expanding such opportunities.

(5) Improved project management capacity

The third country training projects that have been implemented in recent years include courses in project management using the Project Cycle Management (PCM) method, etc., for some of the programs, helping to improve the project management capabilities of the trainees. In addition, even trainees who have not received PCM training expressed the opinion that participation in third country training has increased their skill level with respect to planning, executing and conducting follow-up evaluations and the like for projects at their own organizations.

However, it is thought that the same effect can be obtained to some extent in bilateral cooperation, so this is not an effect that is unique to triangular cooperation.

2.1.2 Considerations for increasing development effectiveness in triangular cooperation

(1) Need for a mechanism for reflecting needs of beneficiary country (third country training)

One of the characteristics of triangular cooperation by Japan is the process by which the bilateral cooperation implemented in the past developed into triangular cooperation. In bilateral cooperation, projects are formed based on a request from a potential beneficiary country. However, in triangular cooperation, and particularly in third country training, in general the project is formed in the Partnership Program country and participants are invited from neighboring countries. For this reason, in some cases it is possible that the training content may not match the development needs of the beneficiary country. For this reason, particularly in third country training in which participants are invited from Partnership Program countries, a mechanism for reflecting the needs of the beneficiary country in particular is needed.

Moreover, it is thought that this type of mechanism can also be implemented within the existing JICA framework.

In addition, as there are increasing limitations on Japan's budget for technical cooperation in Latin America, one idea is to use the cooperation budget of the JICA office in the beneficiary country when trainees are dispatched for third country training, in order to form training projects that more closely match the needs of the region. It is thought that this type of system could be used within the existing framework of JICA as well. Efforts are currently underway among JICA offices in Latin America to build a mechanism for determining the needs of beneficiary countries, such as the implementation of a needs survey for integrated south-south cooperation in Latin America, and these efforts are helping to match needs and resources.

(2) Ensuring the quality of specialists in Partnership Program countries

In interviews conducted in beneficiary countries, it was pointed out that there are problems with the project management capabilities of the Partnership Program country specialists dispatched in third country specialist dispatch. Third country specialist dispatch is conducted for the purpose of transferring technologies and knowledge to a beneficiary country. While there is some debate about whether the project management capabilities of the specialist should always be an issue, to ensure that the project is executed smoothly and that effective technology and knowledge is transferred, it is thought to be important that the third country specialist himself be able to autonomously manage the progress of the project and coordinate with relevant entities and so on. Unlike Japanese specialist dispatch, in which the specialist is given training in project management before being dispatched, in the case of third country specialist dispatch it is difficult for the Japan side to increase the project management

capability of the specialist in advance, so as a result the success or failure of the project tends to be dependent on the capabilities of that individual. For this reason, when promoting triangular cooperation, assistance to help increase the project management skill of the third country specialist can also be provided in addition to increasing the sense of ownership on the part of the beneficiary country and so on. It is also possible to have the JICA office in the beneficiary country handle these project management tasks, but support for the project management capabilities of third country specialists will not only improve project efficiency but also help improve the capabilities of the third country specialists themselves. For this reason, this is thought to be consistent with the unique effect (albeit a secondary one) of triangular cooperation, that of improving the aid-implementing capabilities of the Partnership Program country.

(3) Ensuring that technologies take root (third country training)

There is a problem in that the technologies learned by triangular cooperation trainees (returning trainees, etc.) sometimes remain at the individual level and do not become established in the organization. As a result, if there are personnel changes or if the individual in question should leave the organization, there is a danger that the technologies obtained in third country training will be lost. In order to avoid such situations, a study should be made of the idea of dispatching a specialist from the Partnership Program country or, depending on the circumstances, from Japan as a follow-up activity following the conclusion of the training, in order to conduct proper follow-up.

This problem may also occur in bilateral cooperation, so it is not an issue specific to triangular cooperation.

2.2 Impact on Partnership Program countries

2.2.1 Improved capacity for aid liaison organizations

Triangular cooperation with Japan is thought to have had a significant impact on the aid implementing organizations in Partnership Program countries, in terms of changes to organizational structure, budget scale, and project expansion.

Strengthening the organizational structure means providing an organizational structure that will help triangular cooperation to be efficiently executed, such as by setting up a new department at the aid liaison institution to be in charge of triangular cooperation. In the site survey, it was confirmed that Brazil and Mexico had strengthened their organizational structure.

In Mexico, Argentina and Chile, south-south cooperation assistance projects are being implemented by JICA for the purpose of building up the capabilities of the aid liaison organizations. As direct assistance was provided to these countries to help them become donor nations, Japanese cooperation can be said to have strengthened the organizational structure of these Partnership Program countries.

Regarding the question of the exact degree to which the three factors discussed above — organizational structure, scale of budget, and changes in project expansion — are the result of triangular cooperation by Japan, a precise determination cannot be made, as it would be difficult to completely eliminate all external factors. However, in each of these countries, cooperation with Japan was a precursor for the development of south-south cooperation, and cooperation with Japan is thought to have contributed to a certain extent in the strengthening of the organizational structure in this regard. However, naturally the development assistance policy of the Partnership Program countries is determined based on the political situation and diplomatic policy and so on in those countries, and so it is thought that it would be difficult for Japan to

continue to exert an influence on structural enhancement and budget scale increases in terms of the development assistance of Partnership Program countries.

2.2.2 Capacity-building at implementing organization

(1) Improved capacity to implement technical cooperation (from "researcher" to "instructor")

By conducting triangular cooperation, the implementing agencies in Partnership Program countries have increased their ability to execute technical cooperation projects. In the site survey, it was confirmed that engineers who up to that time had conducted only specific activities such as research and studies had been able to increase their skill as instructors by providing technical instruction to trainees from neighboring countries. This is important from the standpoint of improving the aid-implementing capabilities in the Partnership Program country. Improving the technology transfer capabilities of the engineers at the implementing organization in the Partnership Program country will enable that implementing organization to play an important role in technology transfer, not only in triangular cooperation but also in bilateral cooperation implemented autonomously by the Partnership Program country.

(2) Establishment of aid implementation framework

Among the implementing organizations in the Partnership Program countries are some that have enhanced their organization for implementing international cooperation, for example by setting up a separate department to handle the acceptance of third country trainees. This type of enhancement of the aid implementation framework at implementing organizations is helping to ensure the efficiency of implementation not only for triangular cooperation but also for the international cooperation (south-south cooperation) activities conducted independently by the implementing organization. In this way, among the implementing organizations in Partnership Program countries are some that have developed sufficient capability to enable them to transfer technology to neighboring countries, and it is clear that this is due in no small part to the expertise and so on that they have acquired through triangular cooperation with Japan.

2.2.3 Barriers to triangular cooperation in Partnership Program countries

The barriers to triangular cooperation in Partnership Program countries include the fact that the systems for conducting triangular cooperation are not in place. In order to conduct triangular cooperation, systems are needed to select the implementing organization to serve as implementing entity for third country training by the aid liaison organization, and to dispatch Partnership Program specialists to third countries. However, these systems are not sufficiently established in Partnership Program countries, and as a result this is thought to be a barrier to participation by Partnership Program specialists in triangular cooperation.

2.3 Impact on Japan

2.3.1 Efficiency of Technical Cooperation

In triangular cooperation, the achievements of Japanese technical cooperation are disseminated through a Partnership Program country to neighboring countries. Compared to the direct dispatch of specialists from Japan and the direct acceptance of trainees for training in Japan, this method is generally recognized to enable costs to be reduced On the other hand, as a single project involves many countries and organizations, including Partnership Program countries and beneficiary countries, it has also been pointed out that considerable coordination costs are produced, such as the increased workload on the JICA staff members who conduct coordination.

For this reason, this study includes an analysis of these observations in an attempt to once again verify the efficiency of triangular cooperation.

(1) Reducing project expenses

Third country training

In third country training, the implementing organization in the Partnership Program country provides assistance for trainee acceptance, technical instruction, support for daily living expenses and so on. Accordingly, the burden on the Japan side is lessened as compared to training in Japan by means of bilateral assistance. In addition, in some cases the JICA office in the Partnership Program country bears the cost of trainee airfare, accommodation, daily allowance and so on, but as travel is limited to movement within the area, the cost burden borne by Japan is less than when trainees are dispatched to Japan.

2 Third country specialist dispatch

When a specialist from a Partnership Program country is dispatched to a third country, the personnel expenses for that specialist are borne by the Partnership Program country. This enables the personnel expenses borne by the Japan side to be reduced as compared to the dispatch of a Japanese specialist. Moreover, as in the case of third country training, the travel and accommodation expenses for third country specialist dispatch are borne by Japan in some cases, but as travel is limited to movement within the region, the cost burden is reduced as compared to cases in which a specialist is dispatched from Japan.

3 Joint projects (technical cooperation projects in third countries)

When technical cooperation projects are implemented in a third country, the necessary expenses are shared by Japan and the Partnership Program country. Compared to bilateral cooperation in which all of the expenses are borne by Japan, this method reduces Japan's cost burden.

The proportion of the cost burden differs depending on the project and the nature of the Partnership Program, but Chile covers 50% of the cost of all JCPP projects. In the case of Brazil, Japan covers 70% of project costs and Brazil covers 30%. However, these amounts do not include the personnel expenses for specialists, so if the personnel expenses for Brazilian specialists whose pay grade is comparatively high are assumed to be included in the project expenses, it is possible that Brazil may pay a higher proportion of the costs than 30%.

Table 3 Effectiveness of Triangular Cooperation in Reducing Japan Side Expenses

	Effectiveness in Reducing Expenses	
Third country training	Partnership Program country handles trainee invitation and selection, reducing JICA burden (reduction of personnel expenses)	
	Trainee travel, accommodation and daily allowance expense are reduced	
	Japanese personnel expenses are reduced through use of Partnership Program country resources	
Third country specialist dispatch	Japanese personnel expenses are reduced through use of Partnership Program country resources	
	Travel, accommodation and daily allowance expenses involved in specialist dispatch are reduced	
Joint project	JICA expense burden is reduced through cost sharing with Partnership Program country	

(2) Coordination costs (workload)

As the sample size was limited (only eight projects selected for study), it is not possible to come to any general conclusions. However, based on the information that was obtained from the individual JICA offices, there was a tendency for the coordination costs for triangular cooperation to be seen as the same as or smaller than those for bilateral cooperation. On the other hand, in the case of joint projects, the workload for both the beneficiary country and the resource country (Partnership Program country) tended to be greater. However, joint projects are those in which personnel and funds are invested by the government of the other country (Partnership Program country) as well, and the coordination costs are seen as necessary to draw out investment from the other side. In this way, by securing investment from resource countries, ultimately the overall cost burden on the Japan side for the project is reduced. Accordingly, it is also possible to view the coordination costs for joint projects as a necessity. In the beneficiary countries as well, there was a recognition that triangular cooperation allows personnel from the resource company to be used in fields in which there is a lack of Japanese specialists and therefore that coordination costs are necessary.

(3) Efficiency of triangular cooperation as compared to bilateral cooperation

The efficiency of triangular cooperation as compared to bilateral cooperation was analyzed from the perspective of both expenses and workload. As a result of the analysis, it was learned that the expense burden on the Japanese side was reduced in triangular cooperation. With regard to workload, on the other hand, in third country training the workload tended to be reduced in both the Partnership Program country and the beneficiary country. For joint projects, however, the workload tended to increase at the project discovery and formation phase and the project implementation, supervision, and monitoring phase. Looking at the average values for all of the projects considered in this study, however, there appears to be no significant difference in workload between bilateral cooperation and triangular cooperation. The above leads to the conclusion that triangular cooperation is more efficient than bilateral cooperation from the standpoint of direct expenses. From the standpoint of workload (coordination costs), however, it is difficult to reach a conclusion as to whether triangular cooperation or bilateral cooperation is always more efficient.

2.3.2 Achievement of assistance when Japanese resources are insufficient

In triangular cooperation, the resources of the Partnership Program country are used, making it possible for Japan to provide assistance that it would like to implement, as it is consistent with Japan's diplomatic strategy and assistance policy, but that would be difficult for it to implement independently. This is particularly noticeable in the triangular cooperation projects with Brazil.

Japan must actively promote assistance to Africa, based on Africa's great development needs and the discussion at TICAD4 and elsewhere. For implementation of assistance to the Portuguese-Speaking African Countries, however, Japan has a dearth of Portuguese-speaking specialists who are able to reside in Africa for extended periods of time. Conversely, Brazil has a large population of people of African descent, and Brazilian specialists have the ability to more easily adapt to African culture and customs, and they can also provide instruction in the common language of Portuguese. For these reasons, they have superior qualities in areas that are different from those of Japanese specialists, and by working together with Brazilian specialists for these projects it will be possible to execute projects both effectively and efficiently. With regard to technical aspects as well, Brazilian technology has many points in common with Africa in terms of technical level and environmental conditions and it is said to be easy to apply it to Africa, and this would enable technology transfer at a lower cost than that of modifying

Japanese technology to fit local conditions.² Both Japan and Brazil have a policy that emphasizes aid to Africa, and so working together would be in line with the diplomatic policy of both nations.

2.3.3 Maintaining friendly relations with Latin America

Common to all implementing organizations visited in the site survey were the expressions of deep gratitude to Japan and a feeling of closeness and trust with respect to Japan. These implementing organizations were also the beneficiaries of bilateral cooperation from Japan, and the relationship of trust fostered by many years of cooperation is a precious asset in implementing triangular cooperation as well.

Relationships of trust fostered by a long history of cooperation extending over many years are thought to be a particular characteristic of Japanese cooperation. Many of the aid liaison organizations and implementing organizations visited during the site survey raise this history of cooperation as something that differentiates Japan from other donors. For most of these institutions, their history of cooperation with Japan is the longest, and for many of them, the technical cooperation projects with Japan were their first experience with international cooperation. They are aware that Japan is their oldest partner and that their cooperative relationship with Japan is the factor that has promoted the internationalization of their country (the accumulation of experience in international cooperation). Moreover, triangular cooperation with other donors has in many cases begun due to political reasons (agreements signed during the visit of a head of state, etc.). In the case of Japan, however, technical cooperation conducted in the past developed into triangular cooperation, and there is seen to be little politics involved.

In this way, cooperative relationships that result from bilateral cooperation, and the triangular relationships that follow, make a major contribution to the building of ties of friendship on a grassroots level between Japan and resource countries, and it is no exaggeration to call these precious assets of Japan.

3.3.4 Increased presence in the international community as a leader in triangular cooperation

There has been increasing interest in recent years in south-south cooperation and triangular cooperation, due to the debate in the international community over ways to increase aid efficiency, the appearance of emerging donors and other factors. The World Bank and the Inter-American Development Bank, which were interviewed for this study, have indicated their intention to actively conduct triangular cooperation, and the World Bank in particular is planning to create a platform for promoting south-south cooperation. The World Bank is also studying the idea of creating a mechanism in the future that would enable ultimate beneficiary countries to select south-south cooperation and triangular cooperation partners themselves through an open recruitment system.

In the light of this situation, there has been great interest on the part of the international community in Japan's achievements in triangular cooperation. Japan is a pioneer in this area, having conducted triangular cooperation by means of third country training and third country specialist dispatch since the 1970s. To other donors that would like to begin implementing triangular cooperation, Japan's expertise in triangular cooperation contains a wealth of suggestions. Recently the sharing of information on south-south cooperation and triangular cooperation has been promoted through a variety of methods, such as international conferences and seminars on south-south cooperation, web-based informational exchanges such as

² Interview with Carlos Magno, former director of Embrapa.

"South-South Info" and so on, and Japanese efforts are frequently raised at these conferences and websites.

3.3.5 Increased awareness of Japanese assistance (is Japan's presence visible?)

There is a debate regarding whether Japan's presence is visible enough in triangular cooperation. Although there are no clear standards for determining visibility, if this is defined as "an awareness on the part of relevant entities in the beneficiary country that triangular assistance is assistance from Japan," then triangular cooperation is adequately recognized as Japanese assistance in the beneficiary country and is therefore functioning as "visible presence" assistance.

However, compared to bilateral cooperation, a strengthening of ties between JICA and the relevant institutions in the beneficiary country due to triangular cooperation could not be confirmed to the extent that this exists in bilateral cooperation. Without exception, trainees returning to the beneficiary country are aware that the training was provided through assistance from JICA, and they express deep gratitude to JICA while at the same time having a feeling of closeness to Japan. However, within the scope of information obtained in the interviews conducted during visits to beneficiary country institutions as part of this study, it is undeniable that this recognition goes no further than the individual level. A strengthening of relationships on an organization to organization level, such as that between JICA and the implementing institutions in Partnership Program countries, could not be confirmed.

The following table summarizes the impact of triangular cooperation and the considerations relating to triangular cooperation from the standpoint of the beneficiary country, Partnership Program country, and Japan as discussed above. The impact and constraining factors were common to joint projects, third country training and third country specialist dispatch.

Table 4 Impact and Constraining Factors Unique to Triangular Cooperation³

Country	Impact Unique to Triangular Cooperation	Factors Constraining Impact
Beneficiary Country	Ability to receiving technologies that match issues specific to the region	Need for a mechanism to ensure that needs of beneficiary country are reflected (because previously Partnership Program countries took the lead in project formation) Difficult to ensure the quality of third country specialists
Partnership Program Country	 Improved aid implementing capability on the part of aid organizations and implementing organizations Reduced project expenses (cost sharing with Japan) 	Employment system not set up by organization dispatching third country specialists (third country specialists are not able to maintain their employment contract, etc., with their employer and still be dispatched to beneficiary countries for extended periods)

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³ As discussed up to now, triangular cooperation in many cases includes impact that is identical or similar to that seen in bilateral cooperation. However, this table only lists the impact that is unique to triangular cooperation.

Country	Impact Unique to Triangular Cooperation	Factors Constraining Impact
Japan	Reduced project expenses (through cost sharing with Partnership Program country, reduced specialist personnel costs through use of Partnership Program resources, etc.)	Increased coordination costs for matching of beneficiary country needs with Partnership Program country resources (work time for local office staff)
	Cooperation is possible in fields in which Japanese personnel resources are lacking	More difficult to build cooperative relationships with relevant organizations
	Use of third country resources that make the Japanese presence visible through the use of specialists of Japanese descent	in beneficiary country than in the case of bilateral cooperation
	Dissemination of achievements of bilateral cooperation to neighboring countries	
	Maintenance and strengthening of friendly relations with Latin America	
	Improved presence in the international community as a leader in triangular cooperation	

3. Future direction of triangular cooperation

Based on the circumstances surrounding triangular cooperation as noted in the previous section, Japan should make the efforts described below from now on regarding triangular cooperation in Latin America.

3.1 Ongoing implementation of triangular cooperation projects

For this reason, compared to the case of bilateral cooperation implemented directly by Japan for neighboring countries, triangular cooperation is a tool that allows technologies that originated in Japan to be transferred at a lower cost (in terms of personnel expenses, transport costs, etc.), and in this sense it is an efficient assistance tool. Up to now, Japan has accumulated a wealth of achievements in bilateral cooperation in Latin America, and as a result a strong relationship of trust has been formed with the countries in the region. Moreover, Japan was ahead of many other donors in implementing triangular cooperation in particular, and it has experience and dominance unsurpassed by other organizations. Furthermore, as in the assistance for Africa implemented in cooperation with Brazil, in recent years Japan has also begun new triangular cooperation projects using its comparative dominance and that of the resource country.

Considering all of these factors together, triangular cooperation has become established as an effective approach for effectively implementing assistance in the same region as well as in Africa and other outside regions, working together with the resource countries of Latin America. Based on this background, triangular cooperation should be considered as one effective approach for Japan to provide assistance in Latin America, Africa, and other regions in which it is thought that assistance can be efficiently implemented in cooperation with resource countries in Latin America.

Considering triangular cooperation as one effective assistance approach means that triangular cooperation should be thought of not merely as something that adds to or complements bilateral cooperation but as a method that can replace bilateral cooperation. In view of the superior attributes of triangular cooperation as discussed in 1.2, another approach that can be considered is to start with bilateral cooperation and then shift to triangular cooperation for certain countries and fields when it is thought that triangular cooperation can be implemented more efficiently than bilateral cooperation.

3.2 Cooperation with international organizations

In an effort to conduct an analysis from elements further upstream in the process, Japan actively incorporates analytical work in South America in order to narrow down the fields for assistance and conduct appropriate project formation.

Other international organizations such as the IDB, UNDP, and the World Bank also have tight-knit networks in Latin America and are implementing cooperation activities.

Naturally Japan will continue to implement triangular cooperation in accordance with its policy. However, Japan should also study the possibility of implementing triangular cooperation in cooperation with international organizations in cases in which, based on the currents in aid coordination, this will enable cooperation that is more efficient and is in keeping with Japan's cooperation policy. An example is implementation by Japan of cooperation that meets the needs of beneficiary nations as determined by international organizations.

3.3 Selective implementation of triangular cooperation projects (entrance control)

As discussed earlier, triangular cooperation provides advantages for both the resource country and the beneficiary country. Accordingly, if assistance is implemented in response to requests from resource countries and beneficiary countries, it is possible that the number of projects to be implemented may expand of its own accord. For this reason, several important conditions should be kept in mind during the process of selecting projects.

In deciding what type of projects should be implemented in the form of triangular cooperation, it is not only the development needs of the beneficiary nation that should be considered. Guidelines like the ones listed below should be established, and triangular cooperation should be selectively implemented for only the projects that are in keeping with those guidelines.

- The project should be something that has significance in an area in which Japan is dominant.
- The project should be something for which a resource country can provide elements that Japan lacks.
- Use of previous bilateral cooperation should be kept in mind.
- Cooperation with international organizations and other cooperating organizations should be kept in mind.
- The diplomatic effect of implementing triangular cooperation should also be considered.

3.4 Progress control and exit control for triangular cooperation projects

Among the eight target projects for this study are some in which triangular cooperation was implemented on an ongoing basis, in several phases or over the course of many years. Among them were cases in which the implementing organization acquired the capabilities of a donor and, while implementing the triangular cooperation project, implemented a similar project by itself in another country

In such cases, serious consideration should be given to conducting project exit management. For projects whose implementation is already underway, a difficult decision is required when the resource country and/or the beneficiary country requests assistance for a new phase. In such cases, it is not easy for Japan to say "No" to the new request, especially if the project is going well because there is already a relationship with the implementing organizations in the resource

and beneficiary countries. However, even in such situations, when necessary it would be best to negotiate an end to the triangular cooperation with the implementing organizations.

3.5 Follow-up activities for triangular cooperation projects

Among the technologies transferred by Japan to countries in Latin America through bilateral cooperation and triangular cooperation are those that require even higher-level technology transfer in response to progress in those technologies. In such cases, follow-up should be conducted through the implementation of training in Japan and specialist dispatch on a small scale. In some cases, upgrading and repair of materials and equipment that have deteriorated and the replenishment of consumable items will be required. Follow-up is needed in these cases as well, based on the nature and status of the project.

These actions will make it possible to maintain the networks and relationship of trust with the other country, which are a major achievement of the projects implemented up to now, as well as the dissemination of Japanese technology and expertise.

Chapter 1 Implementation Policy for the Study

1. Background and objectives

1.1 Background and history

The basic policy for triangular cooperation was clearly established in the Official Development Assistance (ODA) outline approved by the Cabinet in 2003, which states that "Japan will actively promote south-south cooperation, working together with the more developed nations in Asia and other parts of the world." The Japan International Cooperation Agency (JICA) midterm plan (Phase 2) also states the following: "Give consideration to the significance and effectiveness of south-south cooperation in assistance to developing nations, and work to effectively implement south-south cooperation assistance projects."

Since its establishment in 1974, JICA has implemented third country group training, third country specialist dispatch, joint projects and other activities from a triangular cooperation approach, with the aim of promoting adaptive technologies in developing nations and from a cost-benefit perspective. There is a growing recognition that triangular cooperation is an effective assistance approach that promotes capacity development in developing nations and increases a sense of ownership. Moreover, many projects are implemented under a framework of Partnership Programs with triangular cooperation resource countries (hereafter, the countries with which Partnerships have been concluded will be referred to as "Partnership Program countries"), and these Partnership Programs are ensuring Japan's leadership role in the international community in promoting triangular cooperation.

However, triangular cooperation is also said to involve relatively high coordination costs for planning and implementation. Determining whether this is true or not and, if the coordination costs are actually found to be high, developing effective and efficient methods of employing triangular cooperation with a focus on minimizing costs is considered to be important when studying the future direction of triangular cooperation.

1.2 Purpose of study

In the light of the above, this study focuses on the Latin America region, in which there is more cooperation among countries in the region and in which triangular cooperation is being more actively deployed than in other regions. The study will determine and review the costs required for triangular cooperation, the development impact, the added value provided by triangular cooperation and so on in order to define the pros and cons of triangular cooperation and study the policies needed to minimize costs and maximize the development impact and added value.

1.3 Target region for efforts

This study will focus on four Partnership Program countries in Latin America and the Caribbean (Argentina, Brazil, Chile and Mexico) in addition to three beneficiary countries (Paraguay, Bolivia and El Salvador). An impact review will be conducted of triangular cooperation in these countries. In addition, a site survey was conducted for Mozambique in order to review the assistance to Africa that is being implemented by Japan in cooperation with Brazil, something that has attracted notice as a new development in triangular cooperation.

1.4 Relevant institutions in partner country

The relevant institutions in partner countries that will be considered in this study are as follows.

- Partnership program countries: aid liaison institutions (Ministry of Foreign Affairs, International Cooperation Agency, etc.), triangular cooperation implementing organizations (government ministries, universities, etc.)
- Triangular cooperation beneficiary countries: triangular cooperation liaison institutions (Ministry of Foreign Affairs, International Cooperation Agency, etc.), accepting organizations (government ministries, universities, etc.)

Unless otherwise specified, in this report "Resource Country" will be defined as a developing country that serves as the entity for transferring and providing instruction regarding knowledge, expertise, and technology to other developing countries, and "Beneficiary Country" will be defined as a developing country that receives knowledge, expertise, and technology from other developing countries and organizations.

2. Content of study

2.1 Approach to triangular cooperation in this study

According to the JICA "South-South Cooperation Assistance Guidebook (1st edition)," triangular cooperation is defined as "the implementation of cooperative projects jointly with other aid nations or aid organizations in a certain country in order to resolve development issues in that country." Up to now, in the "South-South Cooperation Assistance Guidebook (1st edition)" and "JICA "Issue-Specific Guidelines (South-South Cooperation) (January 2005)," etc., JICA has compiled the types of "south-south cooperation assistance" conducted by developed nations and international organizations for south-south cooperation, and triangular cooperation is considered to be a concept that is included in south-south cooperation assistance. The JICA "Issue-Specific Guidelines (South-South Cooperation)" lists the following five items as describing the functions and significance of south-south cooperation assistance:

- (1) Use of the human potential and resources of developing nations
- (2) Dissemination of Japan's cooperation achievements
- (3) Donor nation cooperation
- (4) Assistance for technical cooperation in developing countries (TCDC)
- (5) Assistance in becoming a donor nation

Types (1)-(3) are of assistance in which, in order to assist the end beneficiary country, initiatives on the Japanese side are conducted to reduce costs and ensure appropriate use of resources, or assistance is provided in cooperation with other developing nations to increase efficiency. Types (4) and (5) are of assistance in which assistance to the end beneficiary country is promoted indirectly or in a complementary manner through assistance to the partner developing country (which is in the process of becoming a true donor nation), and therefore these types of assistance have a different meaning from (1)-(3). In this study, triangular cooperation will be defined mainly as indicating projects with the functions and significance noted in (1)-(3), and the review will be conducted on that basis.

The following table shows some of the triangular cooperation (south-south cooperation assistance) projects implemented by Japan.

Table 1 Overview of Triangular Cooperation (south-south cooperation assistance)
Assistance in Japan

Activities	Specific Content
Third country training	Activity introduced in 1975. Based on assistance from aid countries and organizations, a certain developing country accepts personnel from another developing country in order to achieve the transfer and dissemination of superior development experience, knowledge and technology.
Third country specialist dispatch	Activity introduced in 1975. Based on participation from aid countries and organizations, a certain developing country dispatches personnel to another developing country in order to achieve the transfer and dissemination of superior development experience, knowledge, and technology.
Joint project	Projects jointly implemented by Japan and other aid nations (resource countries) for third countries, consisting of a combination of third country training, third country specialist dispatch, equipment provision, etc.
Joint seminar	International seminars and workshops implemented jointly by Japan and resource countries. Includes wide-area seminars on specialized fields and issues held for the purpose of forming projects and confirming needs, seminars held for the purpose of sharing aid expertise for promoting triangular cooperation, etc.
Partnership program	Comprehensive framework agreed upon by the Japanese government and the government of a certain developing nation to provide development assistance jointly to other developing countries and regions. Based on this framework, joint projects, third country training, third country specialists, joint seminars and so on are implemented.
Holding of international conferences on triangular cooperation (south-south cooperation assistance)	South-South Cooperation Assistance Meeting (held in May 1998), JICA/UNDP Joint Symposium "21st Century Development Cooperation: Approach to South-South Cooperation Assistance" (held in October 2001), workshop at the World Summit on Sustainable Development (WSSD) (held in September 2002), Workshop on Improving the Quality of South-South Cooperation (held jointly by UNDP-JICA in December 2008), etc. "Deepening Partnership between Africa and Asia: Good Practices in South-South and Triangular Cooperation," sponsored jointly by the UNDP and JICA (held May 2007), workshop on improving the quality of south-south cooperation, sponsored jointly by the UNDP and JICA (held December 2008), high-level meeting on south-south cooperation and triangular cooperation, sponsored jointly by the UNDP and the International Finance Corporation (IFC) (held December 2009), annual EPU-JICA meeting on south-south cooperation (held May 2009), etc.

Source: Prepared based on JICA "Issue-Specific Guidelines (South-South Cooperation)" (January 2005) as well as JICA website, local interviews, etc.

This study will review the third country training projects, third country specialist dispatch projects and joint projects implemented by Japan and Partnership Program countries in Latin America.⁴ Among the triangular cooperation projects are some in which a developing country other than the Partnership Program country serves as the resource nation for project implementation. However, this study will focus on projects in which the Partnership Program country acted as the resource nation, and the review will be conducted on that basis.

2.2 Study methods and study items

The following diagram shows the study procedure and the items considered in the study.

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⁴ In addition to the projects listed here, triangular cooperation also includes "joint training" in which there were no past achievements in Japanese technical cooperation and a cooperative project that achieved a 50:50 cost share were implemented. Joint training was formerly included in the content of the Japan Brazil Partnership Program, but since 2009 this has been reorganized as "third country training."

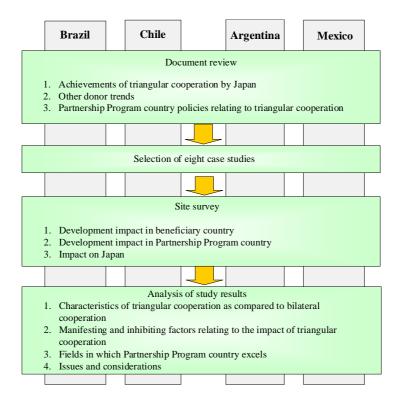


Fig. 1 Study procedure

2.2.1 Document review

To assess the impact of triangular cooperation in Latin America, first a review of documents was conducted in Japan. In the document review, references provided by JICA, documents relating to south-south cooperation and triangular cooperation, the JICA Knowledge Site, websites of aid liaison organizations in individual Partnership Program countries, websites of international organizations and other donor organizations and other Internet sites were consulted.

The items studied in the document review were as follows.

(1) Achievements of triangular cooperation by Japan

In order to determine triangular cooperation trends in the Latin American region, the trends and achievements in Japan's triangular cooperation in Latin America were compiled individually for third country training, third country specialist dispatch and joint projects.

(2) Other donor trends

In order to understand the international currents in triangular cooperation, the trends in triangular cooperation by U. N. agencies, the World Bank, the Inter-American Development Bank and other international organizations and bilateral donors were studied. The main items studied were as follows:

- Policy trends with respect to triangular cooperation by international organizations and bilateral donors
- Background to triangular cooperation projects in Latin America
- Advantages and disadvantages of triangular cooperation

(3) Partnership Program country policies relating to triangular cooperation

Triangular cooperation trends in Partnership Program country governments, aid liaison organizations and implementing organizations were studied. A particular focus was to confirm the effect of triangular cooperation with Japan on policies relating to triangular cooperation in each country. To do this, the study took into account the changes that became apparent following the start of triangular cooperation with Japan. The main items studied were as follows.

- Policies and planning relating to triangular cooperation on the part of Partnership Program countries
- Budget, personnel organization, etc., relating to triangular cooperation on the part of Partnership Program countries

(4) Selection of eight case studies

In this study, past triangular cooperation projects in which the Partnership Program country acted as the resource nation were analyzed, and the impact of triangular cooperation on the beneficiary country and the Partnership Program country was reviewed. However, there are many different types of triangular cooperation. Each project is different and is manifested in a different form. Accordingly, for this study two projects from each Partnership Program country were selected, making a total of eight projects, and these projects were examined as case studies to identify the degree of excellence and issues common to all of the triangular cooperation projects.

The eight case study projects were selected based on the following approach.

- Projects from all four Partnership Program countries in Latin America should be included.
- All three project types (third country training, third country specialist dispatch and joint project) should be included.
- With regard to beneficiary countries, care should be taken to ensure that the projects are not concentrated in specific countries or regions.
- Fields in which assistance is concentrated for triangular cooperation projects from Partnership Program countries should be selected (in other words, the field should be one in which the Partnership Program country excels).

In addition, whether or not one or more of the following projects was present was also taken into consideration.

- Among the many triangular cooperation projects, those whose scale is large and whose output is great
- Projects for which successive projects continue to be implemented even after the conclusion of the project
- Projects in which multiple project types are implemented on a cooperative basis
- Projects in a field that is a priority cooperation field under the Partnership Program country's assistance policy, etc.

- Fields in which Japanese technology and industrial competitiveness can be utilized
- Projects that contribute to a field whose goal is the resolution of an issue of global importance, the reduction of poverty, etc.
- A project that can be expected to disseminate initiatives that Japan intends to promote
- Project with great PR value
- Project whose final year will come as soon as possible, and in which a great deal of information can be obtained from the members participating in the project

First, a list of projects implemented in the Partnership Program country was prepared. Based on the approach described above, 15 to 20 projects were selected to form a shortlist of candidate projects. From the projects on this shortlist, the eight projects for study were selected.

Next, detailed information regarding the scale, content and other aspects of these candidate projects was gathered and analyzed to confirm the appropriateness of the project as a candidate project. After this was verified, the candidate projects were presented to the JICA local office and the views and requests of the local office were solicited.

Based on the views and requests from local JICA offices and a study of detailed information about the candidate projects, the 8 projects to be studied were selected through discussions with the JICA head office. The following diagram shows the selection process used to select the eight projects for study.

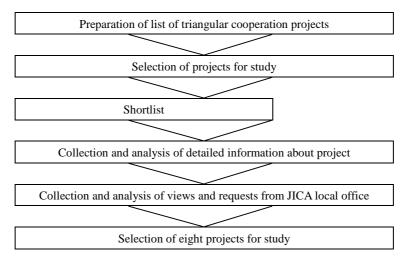


Fig. 2 Selection of eight case studies for study

2.2.2 Site survey

In the course of this study, site surveys were conducted on two occasions to review the impact of triangular cooperation. In site work I, three the Partnership Program countries and beneficiary countries in Latin America were visited and interviews were conducted at relevant organizations in both Partnership Program countries and beneficiary countries. In site work II, in order to review triangular cooperation for Africa on the part of Japan and Brazil, which has attracted a great deal of attention in recent years, a site survey in Mozambique was also conducted.

In site work I and site work II, interviews were conducted at relevant organizations in Partnership Program countries and beneficiary countries. The following table shows the organizations that were visited.

Table 2 Site survey destinations

Site Survey Visit	Partnership Program Country	Beneficiary Country	
Government organization	0	0	
Aid liaison organization	0	0	
Project implementation organization	0	0	
JICA local office	0	0	
International organization and other aid country overseas office	0	-	

In addition to the interviews in Partnership Program countries and beneficiary countries, interviewers went to the United States and conducted interviews at the Inter-American Development Bank, the World Bank and the UNDP in order to study trends in triangular cooperation by international organizations. The following items were studied in the site survey.

(1) Impact on beneficiary countries

To determine the impact on beneficiary countries of the eight triangular cooperation projects selected in step (2), returning trainees, etc., who had participated in third country training were interviewed in order to study the impact of third country cooperation. The major items studied were as follows.

- Number of third country training participants
- Improvement of organizational and individual capacity through triangular cooperation (Capacity building for implementing organizations, improvement in technical expertise of specialists in beneficiary countries [returning trainees, etc.])
- Scale of ultimate beneficiaries

(2) Impact on Partnership Program countries

A review was conducted of the impact of the eight projects on aid liaison organizations and implementing organizations in Partnership Program countries. Although there are triangular cooperation projects in which the emphasis is on improving the capabilities of Partnership Program countries (to help them become donors) and that therefore could be more appropriately called south-south cooperation projects, in general the more important objective of triangular cooperation (third country training, third country specialist dispatch and joint projects) is to resolve development issues in beneficiary countries. Moreover, as triangular cooperation is thought to lead indirectly to improving the capacity of aid liaison organizations and project implementing organizations in Partnership Program countries, the effect of this capacity improvement was also considered to be an impact of triangular cooperation for the purposes of this study, and a study was conducted primarily of the following items.

- ① Improvement in capacity of aid liaison organizations in Partnership Program countries
 - Personnel: current state of employees in charge of triangular cooperation

- Budget: current state of triangular cooperation budget
- Project achievements: implementation of south-south cooperation and triangular cooperation projects
- Project achievement capacity: improvement of capacity to implement international cooperation project (change in organizational structure, improvement of planning capacity [establishment of project plans, guidelines, etc.], improvement of work processes [holding of meetings, implementation of evaluation and monitoring, etc.]) Et cetera.
- ② Improvement in capacity of project implementing organizations in Partnership Program countries
 - Personnel: improvement of capacity of staff involved in triangular cooperation (those in charge of assisting acceptance in third country training, specialists providing technical guidance to trainees, etc.)
 - Improvement of project management capacity: technical transfer from specialists in Japan, systematization of knowledge through projects, accumulation of the achievements of guidance provided in other countries Et cetera.

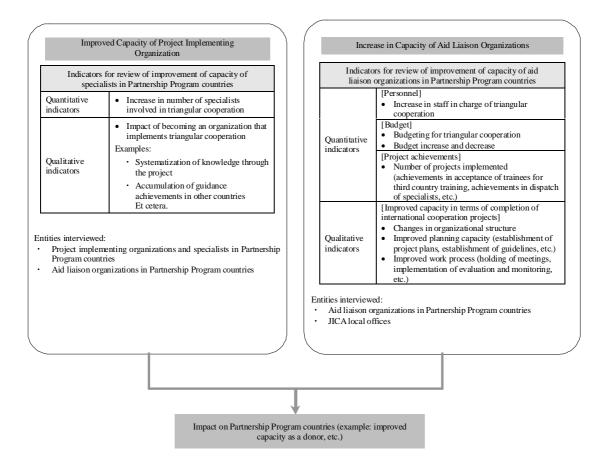


Fig. 3 Impact of triangular cooperation in Partnership Program countries: focus of analysis

(3) Impact on Japan (improvement of project efficiency, deepening of relationships among Japan, Partnership Program countries and beneficiary countries)

A review was conducted to determine the impact of triangular cooperation on improving the efficiency of Japanese technical cooperation projects and deepening relationships among Japan, Partnership Program countries and beneficiary countries. When conducting the analysis, differences with bilateral cooperation were identified in order to clarify the unique impact of triangular cooperation. The major items that were studied were as follows.

- Efficiency: effectiveness in reducing investment on the Japan side (project costs, personnel)
- Effectiveness: strengthening relations between Japan and Partnership Program country and between Japan and beneficiary country (whether the assistance is such that Japan's presence is ensured, etc.)

Table 3 shows the above study items for each of the Partnership Program countries and beneficiary countries visited.

 Table 3
 Content of interviews at organizations visited

	Partnership Program Country		Beneficiary Country		Japan Organization		70
Question	Aid liaison organization	Implementing organization	Aid liaison organization	Implementing organization	Japanese embassy	JICA	Other Donors
Policy trends regarding triangular cooperation in Partnership Program country and beneficiary country (1) Implementation organization for triangular cooperation (2) Recent policy trends regarding triangular cooperation (3) Budget for triangular cooperation (4) Triangular cooperation achievements	0	0	0	0	0	0	
2. Role of triangular cooperation in increasing aid-implementing capacity of Partnership Program country government (1) Has there been any change in the aid implementing capacity of the Partnership Program country when comparing before and after the implementation of triangular cooperation with Japan? (2) In what respects has triangular cooperation with Japan helped the capacity of the Partnership Program country to implement assistance?	0	0			0	0	
3. Details of individual projects (1) Increased project efficiency due to implementation of triangular cooperation (2) Effect of triangular cooperation (effectiveness) (3) Ability to promote projects independently	0	0	0	0		0	
4. Relationship-building with Japan through triangular cooperation	0	0	0	0	0	0	
 5. Comments regarding triangular cooperation by Japan (1) Advantages and disadvantages of Japanese triangular cooperation (2) Other comments, requests, etc., regarding Japanese triangular cooperation 	0	0	0	0			0
Overview of triangular cooperation implemented by other donors (comparison with Japan)	0	0					0
7. Policy significance of triangular cooperation							0

2.2.3 Analysis of impact of triangular cooperation

Based on the results of the study described in (1)-(3), the impact of triangular cooperation was analyzed and the distinguishing characteristics, considerations, etc., were compiled. The perspective for the analysis was as follows.

- Characteristics of triangular cooperation as compared to bilateral cooperation
- Manifesting and inhibiting factors relating to the impact of triangular cooperation
- Fields in which Partnership Program country excels
- Issues and considerations

One of the impacts of triangular cooperation is reducing project costs. This is based on the theory that the use of Partnership Program country resources will enable the project implementation burden on the Japan side to be reduced. In order to test this theory, this study compared triangular cooperation and bilateral cooperation to determine effectiveness in reducing project costs.

2.2.4 Analysis of coordination costs for triangular cooperation

One of the issues targeted by this study was the theory that the coordination costs are higher for triangular cooperation than for bilateral cooperation and therefore it is difficult to ensure the efficiency of projects.⁵ In order to test this theory, as part of this study questionnaires were sent to the JICA office in the Partnership Program country to collect information on man/month investment by JICA office staff members at each stage from triangular cooperation project formulation through completion and assessment. This information was then analyzed to determine what coordination costs were produced in each phase, from the standpoint of personnel investment. The main items that were studied are shown below.

- Man/month investment in target project by resource country (Partnership Program country) and beneficiary country
- Determination of specific nature of coordination costs:
 - ➤ Identification of tasks with great/small man/month investment by JICA office staff (target: resource country [Partnership Program country])
 - ➤ Identification of tasks with great/small man/month investment as compared to bilateral cooperation (target: beneficiary country)

2.2.5 Overall study schedule

The following table shows the overall schedule for the study and the specific work conducted at each stage.

⁵ For example, compared to bilateral cooperation, the number of participating countries is larger and the number of relevant parties is increased, and from this standpoint the coordination costs are said to be higher.

 Table 4
 Study schedule

Phase	Implementation Period	Content (Summary)		
Domestic work I	Early March-late May	Preparation of Inception Report		
		Collection and compilation organization of relevant information and selection of eight projects for study		
		Preliminary study of eight projects and preparation for interviews and opinion survey		
		Preparation of and agreement on draft schedule for site work I		
Site work I	Early June-early July	• Explanation of Inception Report to relevant entities in Partnership Program countries, beneficiary countries, etc.		
		Interviews and opinion survey		
		Preparation of and discussions regarding draft final report		
Domestic work II	Mid-July-early	Explanation of and agreement on draft final report		
August		Preparation of and agreement on draft schedule for site work II		
Site work II	Late August	Implementation of site work II		
		Explanation of draft final report and solicitation, and compiling of comments		
Domestic work September • Preparation of final version of draft final report		Preparation of final version of draft final report		
III		Submission of final report		

(1) Domestic work I

- A draft Inception Report was prepared.
- The JICA Knowledge Site and statistical references and so on were used to determine and compile the following items. Interviews were conducted as needed with participants both at home and abroad in an effort to efficiently gather information.
 - History and trends in triangular cooperation projects worldwide and in Latin America, and trends on the part of international organizations, other donors, etc.
 - History and trends of triangular cooperation policy by Japan and establishment of theories regarding the significance of triangular cooperation for Japan in terms of policy
 - Policy, planning, budget and personnel organization relating to triangular cooperation at government agencies, aid liaison organizations and implementing organizations in Partnership Program countries in Latin America
 - Trends in the achievements of triangular cooperation projects in Latin America (in terms of budget and number of projects)

(2) Site work I

- In the target countries for study in Latin America (Brazil, Argentina, Chile, Mexico, Bolivia, Paraguay and El Salvador), the incentive report prepared in Domestic work I as noted above was explained to participants at government agencies, aid liaison organizations, overseas offices, etc., in the Partnership Program countries and beneficiary countries.
- Interviews were conducted with participants at government agencies, aid liaison organizations, overseas offices, etc., in the Partnership Program countries and

beneficiary countries. Implementing organizations were those that were involved in the eight projects selected for study in Domestic work I.

(3) Domestic work II

• A draft final report was prepared reflecting the views of the relevant overseas offices.

(4) Site work II

A study of the triangular cooperation implementation status in Mozambique was conducted, with the emphasis on assistance to Africa by Japan and Brazil.

- In Mozambique, the Inception Report prepared in Domestic Operations I as noted above was explained to relevant agencies of the Mozambique government and to participants at the overseas office, etc.
- Interviews were conducted with participants at the Mozambique government, returning trainees, the overseas office, etc.

2.3 Issues studied

2.3.1 Comparison with bilateral cooperation

In this study, bilateral cooperation projects in the same field and of the same scale (in terms of monetary, etc., investment) as those implemented through triangular cooperation were envisioned, and a comparison with triangular cooperation was conducted to clarify the unique advantages and disadvantages of triangular cooperation. However, in the past most triangular cooperation projects have been conducted based on the achievements of bilateral technical cooperation projects conducted between Japan and Partnership Program countries, as well as based on the relationships of trust with implementing organizations that are the result of a cooperative relationship extending over many years, and so the manner in which these projects have come about is different from bilateral cooperation. For this reason, while focusing on the differences between triangular cooperation and bilateral cooperation, this study did not simply compare the modalities of these two project types that came about in such different ways; it also conducted interviews that took into consideration the process that led to the formation of triangular cooperation projects and the past cooperation between Japan and implementing organizations and so on.

2.3.2 Quantitative evaluation

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One of the issues targeted by this study was the theory that the coordination costs are higher for triangular cooperation than for bilateral cooperation, and therefore that it is difficult to ensure the efficiency of projects. In order to test this theory, as part of this study a review was conducted to determine the coordination costs that were produced at each stage: formulation of the triangular cooperation project, implementation of the project and post-completion evaluation. In this coordination cost review, as much information as possible was collected on the man/months required at each stage, and a quantitative evaluation of coordination costs was conducted. However, at present there is no clear delineation between triangular cooperation tasks and other tasks, and there are no records, etc., that were kept by those in charge at relevant organizations in their daily work tasks regarding the degree to which resources were allocated to triangular cooperation projects. For this reason, it is extremely difficult to quantify the extent of personnel costs produced in coordinating triangular cooperation. In order to conduct a more detailed determination of the coordination costs involved in triangular cooperation in the future, an analysis of records kept by

⁶ For example, in the case of third country training, a comparison of third country training and training in Japan was conducted, one that envisioned what kind of differences would be produced if training of the same scale and topics were to be implemented in Japan.

the participants in local JICA offices regarding how many hours each day were spent working on triangular cooperation projects during a set period of time (for example, one year) is needed.

With these limitations kept in mind, a comparison was made of the man/months produced at each stage from project formation through project implementation and up to post-completion evaluation, and the (assumed) man/months that may be produced at each stage of bilateral cooperation, in order to determine the unique coordination costs involved in triangular cooperation. Interviews were also conducted at each JICA office regarding the current state of triangular cooperation coordination costs. This was done to elicit case studies of the unique coordination conducted in triangular cooperation from the perspective of those who work on such issues on a daily basis, and to discover the perceptions regarding coordination costs of people at the site, which might not necessarily be clear from a quantitative evaluation alone.

Chapter 2 Policy Trends for Triangular Cooperation in Latin America

1. Triangular cooperation efforts in Partnership Program countries

1.1 Brazil

1.1.1 Overview of aid liaison organizations

The liaison organization for international assistance in Brazil is the Brazilian Agency for Cooperation (Agência Brasileira de Cooperação [ABC]). ABC is an organization established within the Ministry of Foreign Affairs in 1987 expressly to handle international assistance matters. The Brazilian government has used ABC as a liaison organization for providing technical assistance to more than 50 countries, principally to the countries of Latin America and the Portuguese-Speaking African Countries (Países Africanos de Língua Oficial Portuguesa [PALOPS]) and East Timor, but also including other countries where languages other than Portuguese and Western languages are spoken. In 1996, ABC was moved to the General Affairs Bureau of the Ministry of Foreign Affairs, where it functions as an implementing body that conducts coordination, negotiation, authorization, monitoring and evaluation of international assistance efforts by Brazil.8 ABC is made up of seven departments. The Bilateral Cooperation Acceptance Department serves as liaison for bilateral cooperation and triangular cooperation to Brazil from developed nation donors. In addition, the Cooperation Provision Department is in charge of south-south cooperation. Most of the international cooperation projects implemented by ABC are south-south cooperation (bilateral cooperation) projects, and the Cooperation Provision Department plays a central role in these efforts.

Table 5 ABC Organizations and Tasks

Organization Within ABC	Tasks Handled
Developing Country Technical Assistance Provision Department	Operates and manages cooperation projects between Brazil and other developing countries
(Coordenação Geral de Cooperação Técnica entre Países em Desenvolvimento : CGPD)	
Bilateral Cooperation Department (Coordenação Geral de Cooperação Técnica Recebida Bilateral [CGRB])	Handles technical cooperation project execution, monitoring, arrangements for bilingual conferences, etc.
Multilateral Cooperation Department (Coordenação Geral de Cooperação Técnica Recebida Multiateral: CGRM)	Management of projects designed to promote multilateral cooperation (training, seminars, conferences, short-term dispatch of specialists, etc.)
Agriculture, Energy, Bioenergy, and Environmental Cooperation Department (Coordenação-Geral de Cooperação em Agropecuária, Energia, Biocombustíveis e Meio-Ambiente : CGMA)	Participates in international conferences relating to agriculture, energy, bioenergy, and the environment and studies what kind of assistance Brazil should provide in these fields in the future, based on case studies from other countries
Information Electronic Management, Private Sector Safety, Urbanization and Transport Technology Cooperation Department (Coordenação-Geral de Cooperação em Tecnologia da Informação, Governança Eletrônica, Defesa Civil, Urbanismo e Transporte [CGTI])	Planning, drafting, operation, etc., when Brazil provides third country technical cooperation in the fields of information, electronic management, private sector safety, urbanization, and transport

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⁷ Overview of Japan-Brazil Partnership Program

⁸ Agência Brasileira de Cooperação website (URL: http://www.abc.gov.br/abc/historico.asp)

Organization Within ABC	Tasks Handled
Health, Social Development, Education and Specialist Training Technical Cooperation Department	Planning, drafting, operation, etc., when Brazil provides third country technical cooperation in the
(Coordenação-Geral de Cooperação em Saúde, Desenvolvimento Social, Educação e Formação Profissional : CGDS)	areas of health, social development, education, and specialist training fields
Project Planning Management Department	Project planning and management
(Coordenação Geral de Acompanhamento de Projetos e de Planejamento Administrativo [CGAP])	

Source: ABC website

1.1.2 Policy trends relating to triangular cooperation

The Brazilian government considers south-south cooperation to be one component of its foreign policy and has emphasized the promotion of south-south cooperation. The number of south-south cooperation projects implemented by Brazil has been increasing. In 2003, Brazil implemented only 23 such projects, but by 2009 that number had increased to 413 projects. Most of the south-south cooperation projects implemented by Brazil have been either for countries in Latin America and the Caribbean or in African countries, primarily the Portuguese-Speaking African Countries. However, Brazil has also implemented south-south cooperation projects in countries such as Sri Lanka, Bangladesh, Myanmar and other parts of Asia, and in European countries such as Albania, Azerbaijan, and Croatia.

Looking by sector at the priority fields for south-south cooperation by Brazil, agricultural assistance accounts for the largest percentage (22.6%), followed by health (16.6%) and education (12.62%).

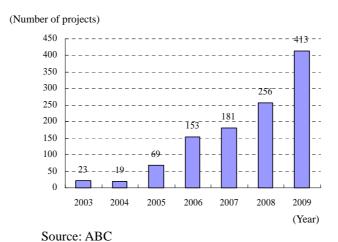
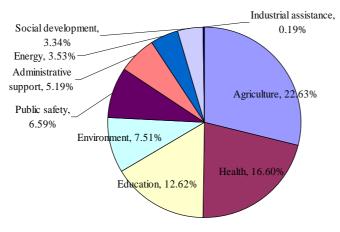


Fig. 4 South-South Cooperation Projects Implemented by Brazil



Source: ABC

Fig. 5 South-South Cooperation Projects Implemented by Brazil in Each Sector

Brazil actively conducts not only south-south cooperation but triangular cooperation as well. In addition to Japan, Brazil has implemented triangular cooperation with countries such as the United States, France, Germany, Italy, Canada, Israel and so on. Brazil has implemented triangular cooperation with Japan continuously since 1985 when it began conducting third country training. In 2000, the Japan Brazil Partnership Program (JBPP) was formed for the further promotion of triangular cooperation. Prior to 2007, only basic third country training had been conducted, but beginning in 2007 the "Training for Capacity Building of Josina Machel (JM) Hospital" project in Angola was conducted as the first joint project by Japan and Brazil, and joint projects were implemented for Latin America, Angola, Mozambique and other countries. ABC considers the triangular cooperation that it has conducted with Japan in these countries as pioneering efforts and considers its relationship with Japan to be important.

1.1.3 Triangular cooperation implementation organization (personnel makeup and budget)

The size of the ABC budget is increasing. In 2006 it was approximately BRL 18.66 million, and this increased dramatically to approximately BRL 52.56 million in 2010¹⁰. According to interviews conducted at ABC, approximately 90% of the ABC budget goes to south-south cooperation, and of this amount approximately 15% goes to triangular cooperation.¹¹

Table 6 Trends in ABC Budgets

 Unit: BRL

 Year
 2006
 2007
 2008
 2009
 2010

 Budget
 18,661,993
 20,000,000
 17,000,000
 32,050,001
 52,562,628

Source: ABC

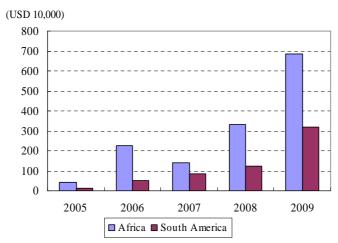
A look at the budget for south-south cooperation reveals that Africa accounts for the largest share, 50% of the total. In 2009, the budget for south-south cooperation was USD 683,540,000. Next largest was South America at 23% (USD 318,650,000), followed by Asia at 15% (USD 200, 840,000) and Central America and the Caribbean at 12% (USD 159,870,000). The increase in

⁹ ABC interview conducted June 9, 2010

¹⁰ Exchange rate as of the end of 2006: BRL 1 = JPY 54.86. Exchange rate as of the end of August 2010: BRL 1 = JPY 48.72.

¹¹ ABC interview conducted June 9, 2010. However, as the proportion of triangular cooperation projects in the budget differs depending on the year and the number of projects, the figure of approximately 15% is no more than a general guide.

south-south cooperation to Africa has been particularly noteworthy. In 2009, the figure jumped to approximately double the level of 2008. Moreover, although the scale is smaller than that of Africa, assistance to the other countries of South America increased 2.5 times over 2008 levels.



Source: ABC

Fig. 6 Trends in South-South Cooperation Achievements by ABC

1.1.4 Examples of projects implemented

The table below shows examples of triangular cooperation projects that have been implemented by Brazil with Japan since 2006¹².

Table 7 Triangular Cooperation Projects Implemented by Japan and Brazil

Year	Beneficiary Country	Project Name	Scheme	Description
2006-2010	Argentina, Angola, El Salvador, Guinea-Bissau, Sao Tome And Principe, Nicaragua, Panama, Honduras, Mexico, Mozambique	AIDS Opportunistic Infection Patient care	Third country training	Transfer of testing and treatment technologies for AIDS infection
2006-2010	Ecuador, Colombia, Venezuela, Peru, Bolivia	Agroforestry	Third country training	Theory of agroforestry systems, biophysics, socioeconomics, technology transfer methods, site visit to observe agroforestry systems in the Tome-Acu region, etc.
2006-2010	Argentina, Ecuador, El Salvador, Cabo Verde, Cuba, Guatemala, Costa Rica, Colombia, Sao Tome And Principe, Chile, Dominican Republic, Nicaragua, Panama, Paraguay, Peru, Bolivia, Mexico, Mozambique	Urban Management	Third country training	Urban zoning, land use, urban policy, transport networks, land management, historical structures, social and economic factors, introduction of unique and specific projects, data banks, GIS, urban management monitoring, case studies of organizational functions in the city of Curitiba, etc.

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¹² See 3.2.3 for the details of joint project.

Year	Beneficiary Country	Project Name	Scheme	Description
2006-2010	Angola, Cabo Verde, Guinea-Bissau, Sao Tome And Principe, Mozambique	Vegetable Production	Third country training	Training in vegetable growing technologies, major vegetable varieties and characteristics, disease and pest control, vegetable post-harvest etc., and the experience of and trends in Japan, and use of on-the-job training and site visits to give trainees a practical knowledge of vegetable production in Brazil
2007-2011	Angola, Cabo Verde, Guinea-Bissau, Sao Tome And Principe, Mozambique, East Timor	Comprehensive Development of Mandioka and Tropical Fruit Growing	Third country training	Introduction of technologies used to produce the Brazilian mandioka and other tropical fruits
2007-2011	Angola, Cabo Verde, Guinea-Bissau, Sao Tome And Principe, Mozambique, East Timor	International Course for Production, Processing and Use of Cassava and Tropical Fruits	Third country training	Teaching practical knowledge about tropical fruit production, processing and use in Brazil through theory, on-the-job training and site visits, covering technologies for growing cassavas and other tropical fruits, major varieties and characteristics, production systems, agriculture dissemination and research (basic concepts of farm management), etc.
2006-2010	Ecuador, El Salvador, Guinea-Bissau, Guatemala, Colombia, Sao Tome And Principe, Nicaragua, Paraguay, Brazil, Peru, Bolivia, Honduras	Tropical Medicine	Third country training	Major forms and symptoms of tropical diseases, data analysis, biological testing methods, etc.
2006-2010	Argentina, Angola, Ecuador, Colombia, Dominican Republic, Venezuela, Bolivia, Mexico, Peru, Mozambique	International Training Program on Inter-City Railway and Transport	Third country training	Theory, practical study and training trips to study the railway department, signaling mechanisms, car mechanism systems, ground systems, drive energy systems and operating cost systems, taught by instructors from the implementing agency, Japanese instructors and instructors from Argentina
2006-2010	Argentina, Uruguay, Ecuador, El Salvador, Colombia, Chile, Nicaragua, Venezuela, Peru, Mexico, Mozambique	International Course on Development of Immunobiologicals for Public Health	Third country training	Third country group training conducted jointly with the Butanta Institute from 1999 to 2003. Phase 2 began in 2006 with the aim of strengthening measures to deal with poisonous animal bites and preventing injuries from poisonous animals.
2007-2010	Angola	Training for Capacity Building of Josina Machel (JM) Hospital	Joint project	Training for nurses, training in hospital management, and training in the laboratory diagnosis and X-ray fields for health care personnel in Angola. More than 700 specialists were trained in the course of three years.
2008-2010	Madagascar	Project to Improve Maternal and Child Health Services in Republic of Madagascar	Joint project	Training of midwives, etc., in Madagascar regarding technologies transferred from Japan to Brazil in the 1990s

Year	Beneficiary Country	Project Name	Scheme	Description
2006-2011 (JBPP from 2008)	Mozambique	Project for Groundwater Development for Rural Water Supply in Zambezia Province	Joint project	Project implemented in area where hand-pump type deep wells were constructed through grant aid from Japan, in order to enhance the structure in which residents themselves maintain the wells that have been constructed, and to build sanitation facilities and improve hygienic habits
2007-2012 (JBPP from 2008)	Mexico/Vera Cruz	Improvement and Diffusion of Tropical Fruit Techniques for Small Scale Farmers	Joint project	Project implemented with the aim of constructing a framework for dissemination of sustainable agriculture technologies and to ensure that technologies disseminated by small farmers in the target region firmly take root
2009-2012	Paraguay	Assistance for Local Government Administration Capacity-Building	Joint project	Project to provide the Ministry of Finance and local government agencies with models to improve management capacity for handling royalties, and assistance in learning the process of planning, execution, and review
2009 -	Mozambique	Triangular Cooperation for Agricultural Development of the Tropical Savannah (ProSAVANA-JBM)	Basic research for joint project	Basic research for an agricultural development program to be implemented in the Nacara Corridor in the northern part of Mozambique. Research will form the basis for three activities (research capability strengthening project, demonstration research project, master plan).
2009 - 2011	Mozambique	Health Care Personnel Training Advisor Project	Basic research for joint project (long-term individual specialist dispatch)	With the Personnel Department of the Mozambique Ministry of Health as a counterpart, preparation of texts, manuals, etc., for joint training of health care personnel, improvement of the quality of capacity-building and supervision by health care personnel training schools, and consequently helping to improve the capabilities of health care personnel

Source: JICA website

1.2 Argentina

1.2.1 Overview of aid liaison organizations

In Argentina, the organization in charge of implementing and supervising international cooperation projects and the like is the International Cooperation Bureau (Dirección General de Cooperación Internacional [DGCIN]) attached to the Coordination and International Cooperation Agency (Secretaría de Coordinación y Cooperación Internacional) within the Argentine Ministry of Foreign Affairs (Ministerio de Relaciones Exteriores, Comercio Internacional y Culto).

The DGCIN plans and implements international technical cooperation policy in Argentina, based on the diplomatic strategy of Argentina and the national development plan. A robust network has been established between the DGCIN and diplomatic agencies both at home and abroad. 13

Within the DGCIN is a subsidiary organization made up of such departments as the Bilateral Cooperation Department (Dirección de Cooperación Bilateral), Multilateral Cooperation Department (Dirección de Cooperación Multilateral), FO-AR¹⁴ Coordination Team (Unidad de Coordinación del Fondo Argentino de Cooperación Horizontal), Technical Cooperation Committee (Comité de Cooepración Técnica) and External Funding Program Execution Team (Unidad Ejecutora de Programas con Financiamiento Externo). Table 8 shows the tasks handled by each of these departments

Table 8 Organization of International Cooperation Bureau and Tasks Handled

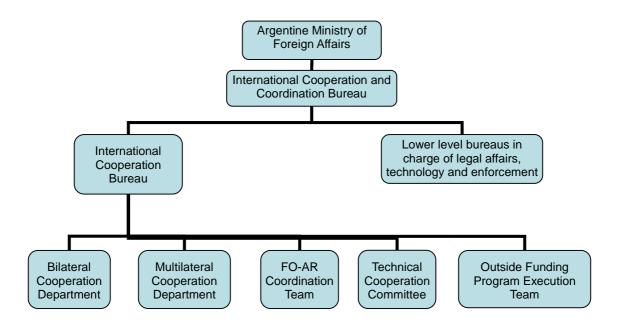
Internal Organization of International Cooperation Bureau	Tasks Handled
Dirección de Cooperación Bilateral	Technical cooperation between Argentina and other countries and coordination of scientific and technical cooperation
Dirección de Cooperación Multilateral	Coordination with international organizations affiliated with Argentina, the United Nations, the Organization of American States, etc. Supervision of scholarship programs.
Unidad de Coordinación del Fondo Argentino de Cooperación Horizontal	Management of south-south cooperation planning through FO-AR.
Comité de Cooepración Técnica	Review and approval of international technical cooperation plans relating to the Common Market of the South (Mercado Común del Sur [MERCOSUR])
Unidad Ejecutora de Programas con Financiamiento Externo	Coordination of "Project to Support Dialogue about Politics" (Proyecto de Apoyo al Diálogo sobre Políticas) and "Spain-Argentine Program on Political Power and Administration" (Programa Hispano-Argentino sobre Gobernabilidad y Administración)

Argentine Ministry of Foreign Affairs website Source:

(http://www.cancilleria.gov.ar/portal/seree/dgcin/organizacion.html)

In addition to the tasks handled by this subsidiary organization, the International Cooperation Bureau also manages the "Program for Argentine Ministry of Foreign Affairs Organization-Building by Means of Technical Assistance to the International Cooperation and Coordination Bureau" (Programa de Fortalecimiento Institucional del Ministerio de Relaciones Exteriores, Comercio Internacional y Culto a través de la Asistencia Técnica a la Secretaría de Coordinación y Cooperación Internacional) of the UNDP, and coordinates international technical cooperation relating to federal programs (Programa Federal) conducted by citizen and university related agencies. Below is an organizational diagram for the International Cooperation Bureau of the Argentine Ministry of Foreign Affairs

Argentine Ministry of Foreign Affairs website (http://www.cancilleria.gov.ar/portal/seree/dgcin/organizacion.html)
 Argentine Fund for Horizontal Cooperation



Source: Website of Public Management Bureau (Secretaría de Gestión Pública) in Argentine

Cabinet Office (Jefatura de Gabinete de Ministros)

(http://www.sgp.gov.ar/dno/Relaciones%Exteriores/Pdf/MRE-SCYCI.pdf)

Fig. 7 Position of International Cooperation Bureau in Argentine Ministry of Foreign Affairs

1.2.2 Policy Trends relating to Triangular Cooperation

The role of the International Cooperation Bureau is four-fold:

- 1) To draft policy for international cooperation that is consistent with Argentina's national policy and help build models for self-sustaining development on the part of Argentina and the international community
- 2) To cooperate with ODA actors to make bilateral cooperation more effective
- 3) To promote south-south cooperation and triangular cooperation and correct disparities in Latin America
- 4) To help the progress of regional integration in Latin America in accordance with MERCOSUR principles

International cooperation is considered to be "an indispensable component of Argentine diplomacy," ¹⁵ and the importance of Argentina as a donor nation and a Partnership Program country in triangular cooperation is increasing each year. ¹⁶

In particular as the old model of international cooperation – that of one-way assistance to developing countries – reaches its limits, Argentina is seeking to transition to a model in which the countries participating in international assistance can derive mutual benefit (horizontal cooperation with countries with the same degree of development or lower). In the background of the increasing interest in this type of horizontal cooperation lies the principle of "technical cooperation among

¹⁵ Argentine Ministry of Foreign Affairs website (http://www.mrecic.gov.ar/portal/seree/dgcin/introduccion.html)

Argentine Ministry of Foreign Affairs website (http://www.mrecic.gov.ar/portal/seree/dgcin/introduccion.html)

developing nations" (Cooperación Técnica entre Paises en Desarrollo), which was first clearly articulated in the Buenos Aires Plan of Action (Plan de Acción de Buenos Aires) adopted at the high-level United Nations conference in 1978.¹⁷ In this way, Argentina has a very strong awareness of its leading role in south-south cooperation in Latin America.

In international cooperation by Argentina to other countries as well, the emphasis tends to be on nurturing the potential of beneficiary countries as future donor nations. For example, in addition to "Join together to deal with the lack of infrastructure in developing countries and other problems through regional cooperation," the three pillars of international cooperation as enumerated by the Argentine Ministry of Foreign Affairs also include "improving the technical capabilities needed for international cooperation (such as the international cooperation that Argentina has provided to other countries) through the spread of education, science and technology" and "Improving the attitude of simply waiting for assistance from overseas and causing participatory measures to take root." In 1992, the Argentine Fund for Horizontal Cooperation (Fondo Argentino de Cooperación Horizontal) (FO-AR) was established, providing a financial base for south-south cooperation by Argentina.

However, Argentina has also expressed concern over the moves by the developed countries to reduce international assistance to midlevel developing countries like itself. Argentina has made an effort to expand the voice of midlevel developing countries at international organizations, while at the same time stating that if agreement with developed countries to "allocate 0.7% of the country's gross income by no later than 2015 and at least 0.5% no later than 2010 to ODA, with in particular 0.15-0.2% going to relatively underdeveloped countries (such as Argentina)" is not honored, it will be difficult to achieve the objectives of the United Nations Millennium Development Goals.²⁰

1.2.3 Organization implementing triangular cooperation (personnel organization and budget)

When cooperation is provided from Argentina to other countries, the airfare, accommodation costs and per diem allowance for specialists dispatched from Argentina is contributed by FO-AR. The personnel expenses for specialists and the securing of a post in the relevant organization is the responsibility of the specialist's implementing agency.

As FO-AR does not include specialist personnel expenses and clerical expenses for the implementing agency, many expenses are produced that are not included in the budget. As a result of the financial crisis that occurred at the end of 2001, Argentina had almost no budget for international cooperation prior to 2005, but since 2005 the budget has been increasing.

1.2.4 Examples of projects implemented

Triangular cooperation by Argentina began with the establishment of cooperative ties with Japan through the "Japan-Argentina Partnership Program (Partnership Programme Japan-Argentina [PPJA])" in 2001.²¹ Through the PPJA, whose goal is to "efficiently combine the personnel resources, technologies and funds of both countries (Japan and Argentina) for the economic and social growth of developing countries," assistance has been provided in various fields to Paraguay, Peru and Bolivia, and concrete results have been achieved. The average duration of each project is three years. Moreover, through the PPJA each year more than 80 engineers from Latin America are invited to Argentina for training.

¹⁷ Argentine Ministry of Foreign Affairs website (http://www.mrecic.gov.ar/portal/seree/dgcin/introduccion.html)

Argentine Ministry of Foreign Affairs website

⁽http://www.mrecic.gov.ar/portal/seree/dgcin/docs/argentina-y-la-coop-triangular.pdf)

Argentine Ministry of Foreign Affairs website (http://www.mrecic.bov.ar/portal/secin/dgcin/fo-ar.html)

²⁰ Argentine Ministry of Foreign Affairs website (http://www.mrecic.gov.ar/portal/seree/dgcin/introduccion.html)

²¹ Argentine Ministry of Foreign Affairs website (http://www.mrecic.gov.ar/portal/seree/dgcin/docs/argentina-y-la-coop-triangular.pdf)

In addition, beginning in 2005 the "Program for In-house Production of Perishable Foods (Programa PROHUERTA)" was implemented for Haiti in cooperation with Spain, Brazil, Canada, the International Fund for Agricultural Development (IFAD), the Inter-American Institute for Cooperation on Agriculture (Instituto Interamericano de Cooperación para la Agricultura [IICA]), and UNICEF. This project was coordinated by the International Cooperation Bureau and the Argentine Embassy in Haiti, setting up a cooperative organization for various agencies for the purpose of developing agricultural lands for families, schools, communities and so on in Haiti, with the aim of providing a more balanced supply of fresh foods and improving the quality of life in Haiti. The implementing agencies in Argentina are the Ministry of Social Development (Ministerio de Desarrollo Social) and the National Agricultural and Stock Raising Technology Institute (Instituto Nacional de Tecnología Agropecuaria). The counterpart in Haiti is the Ministry of Agriculture, Natural Resources and Rural Community Development (Ministerio de Agricultura, Recursos Naturales y Desarrollo Rural). In addition, the Program on Social Costs (Programa de Gasto Social) was implemented in cooperation with UNICEF, and projects are currently being planned for implementation in cooperation with Portugal, Spain, Colombia, Chile, Italy, the Pan-American Health Organization (PAHO), the World Health Organization (WHO), the United Nations Food and Agriculture Organization (FAO) and the United Nations Development Fund for Women (UNIFEM).

Table 9 Triangular Cooperation Projects Implemented by Japan and Argentina

Year	Beneficiary Country	Project Name	Scheme	Description
1991 - 2000	Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay, Venezuela	International Fishing Industry Seminar	Third Country Training	Provision of the opportunity for trainees from Latin America to improve their technical expertise and acquire new knowledge about the fishing industry, particularly in terms of knowledge and technology relating to navigational electronics, mid-depth trawling, and shipboard catch processing.
1993 - 2002	Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Mexico, Peru, Uruguay, Venezuela	Railroad Electrification and Modernization	Third country training	Lectures and hands-on training in knowledge and technologies, designed to teach trainees from Latin America the methods and technologies relating to planning, operation, and maintenance in order to promote railroad modernization (including electrification).
1996 - 2005	Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Mexico, Peru, Uruguay, Venezuela	Livestock Disease Diagnosis and Research	Third country training	Improvement of the level of research in the field of livestock disease in neighboring countries
1998-2007	Brazil, Colombia, Chile, Peru, Uruguay, Venezuela, Cuba	Plasma Treatment Technology	Third country training	Teaching of essential knowledge regarding plasma treatment, from the basics to application, and deepening understanding of technical development trends to enable the technology to be used in and expanded throughout the target countries
2000-2004	Brazil, Colombia, Chile, Mexico, Peru, Uruguay, Paraguay, Bolivia	Integrated Pest Control Management for Plant Viral Diseases	Third country training	Teach trainees from Latin America basic virology through virology experiments with various viruses to enable them to conduct diagnosis and identification, in order to increase the level of pathogen control technologies in plant pathology fields and improve crop productivity

Year	Beneficiary Country	Project Name	Scheme	Description
2002-2004	Paraguay	Animal Hygiene Improvement Project	Joint project	Establish disease control systems through the development of virus, parasite and bacteriological diagnosis technologies, preparation of reagents and antigens needed for diagnosis, review of biosecurity and quality systems, laboratory analysis of samples that is needed to study communicable disease epidemiology, disclosure of analysis results, etc.
2002-2006	Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Mexico, Peru, Uruguay, Panama, Venezuela	Evaluation of Marine Resource Management	Third country training	Teaching the basic techniques of fishery science to young fishery biology researchers from each country in order to improve research capabilities, by means of mutual research interchange between the implementing agency (INIDEP) and the coastal nations of Latin America
2003-2007	Brazil, Bolivia, Colombia, Chile, Paraguay, Peru, Uruguay	Population Statistics	Third country training	Teaching knowledge and technologies relating to work procedures at each step in the preparation of population statistics data, in order to improve the accuracy of population statistics in the target countries
2003-2006	Peru	Poverty Reduction Monitoring through Improved Socioeconomic Statistics	Third country training	Providing advice on strengthening the organizational structure and give guidance on the design, implementation, tabulation, etc., of socioeconomic opinion surveys and the dissemination of statistical data
2003-2006	Peru	Animal Hygiene Improvement Project	Joint project	Inspection of laboratory animal safety systems. Holding of evaluation sessions for laboratory diagnostic services. Implementation of animal hygiene dissemination services. Establishment of livestock disease monitoring, prevention and control systems.
2004-2007	Paraguay	Food Safety Hygiene and Nutrition Laboratory Improvement Project	Third country training	Technical assistance to laboratories including improving technician capabilities to enable Paraguay's National Institute of Technology and Standardization (INTN) food microorganism laboratories and nutrition laboratories to be acknowledged as having been certified by domestic reference laboratories and internationally
2004-2007	Paraguay	Container Testing Functions Improvement Project	Third country training	Assistance for examination and testing services for producers and users of containers and packaging by INTN, as well as enhancing the functions of containers and packaging departments with the aim of enabling the provision of technical assistance

Year	Beneficiary Country	Project Name	Scheme	Description
2005-2009	Brazil, Bolivia, Chile, Colombia, Cuba, Ecuador, Mexico, Honduras, Guatemala, Paraguay, Panama, Peru, Dominican Republic, Uruguay	Ranger Training	Third country training	Theory and practice relating to legal systems in nature reserves, the role of rangers, ethics, etc., planning of activities, environmental education, collaboration with residents, etc.
2005-2009	Brazil, Bolivia, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Mexico, Nicaragua, Guatemala, Paraguay, Panama, Peru, Uruguay, Venezuela	Improvement of Water Pollution Analysis	Third country training	Theory and practice of chemical analysis of water quality, pollution evaluation and water pollution treatment, in addition to an overview of cleaner production in the chemical and machine industries
2007 - 2012	Bolivia	Technical promotion "Poverty Reduction Monitoring System Improvement Project"	Joint project	Implementation of cooperation with the focus on improving production capacity of social demographic statistical data, with the four areas of education, health, access to basic services (drinking water, sewer systems, etc.) and employment opportunities as priority sectors.
2008-2008	Argentina, Bolivia, Colombia, Ecuador, Paraguay, Peru, El Salvador, Nicaragua, Honduras, Costa Rica, Haiti, Guatemala, Panama, Dominican Republic	Food Safety Assurance Program for Poor Populations (Program for In-house Production of Perishable Foods) (PROHUERTA)	Third country training	Promotion of the PROHUERTA program in countries in the region to increase the level of knowledge and technical expertise regarding the formulation of policies to provide safe food in the target countries

Source: JICA website

1.3 Chile

1.3.1 Overview of aid liaison organization

In Chile, the agency in charge of implementing international cooperation projects and the like is the Chilean International Cooperation Agency (Agencia de Cooperación Internacional de Chile [AGCI]), which is under the jurisdiction of the Chilean Ministry of Foreign Affairs (Ministerio de Relaciones Exteriores). The AGCI was established in 1990 as a government agency under the jurisdiction of the Chilean Planning and Cooperation Ministry (Ministerio de Planificación y Cooperación). In 2005, it was transferred to the Ministry of Foreign Affairs, and at present it serves as a major pipeline with Chilean embassies in other countries.²²

1.3.2 Policy trends relating to triangular cooperation

Up to now, the AGCI has cited the following three objectives for triangular cooperation:

- 1) To enable mutual use of the resources (technical, financial personnel, etc.) needed for development assistance and achieve qualitative and quantitative improvements in development assistance planning
- 2) To deepen ties between donor nations and Partnership Program countries

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²² AGCI website (<u>http://www.agci.cl/que-es-agci/ley-organica</u>)

3) To reduce the costs needed for development assistance planning through cooperation by donor nations and Partnership Program countries and reduce the cultural barriers to technology transfer, and to promote organization and personnel training in particularly high priority fields

The AGCI has also pointed out that the significance of Chile serving as a Partnership Program country in international cooperation projects conducted by donor nations and international organizations in Latin American countries is that "(since both Chile and the beneficiary country are located in Latin America) they share a similar culture and similar customs and a common language, so to both the donor nation and the international organization, Chile can be a "dependable colleague" in terms of plan execution and oversight capability as well as in the area of technical expertise."²³

Nevertheless, Chile's government changed in March of this year. In addition, due to the major earthquake that occurred at the end of February, the new government is faced with the need to promote reconstruction efforts and restore economic growth, and to take measures to deal with poverty and other urgent issues that need to be resolved. Accordingly, for this year only, Chile is considering foregoing the expansion that it has heretofore conducted of the south-south cooperation projects implemented by Chile independently or in cooperation with donor nations. However, as the new government has expressed its desire to strengthen ties with neighboring countries, this situation is expected to change in the following year and thereafter.

Moreover, other donors visited in the interview survey are also scrutinizing the policy trends of AGCI. Germany (GTZ) in particular, which has made a considerable effort to strengthen AGCI's organization, has ended its bilateral cooperation and intends to conduct triangular cooperation with AGCI, as a next step, an indication of its strong desire to convince the Chilean government of the need for international cooperation activities and the advantages of triangular cooperation working together with Japan, Spain (AECID), and other entities.

1.3.3 Organization implementing triangular cooperation (personnel organization and budget)

At present, AGCI has 96 employees and an annual budget of USD 12 million (2009, including personnel expenses). This includes the budget for triangular cooperation, which in 2009 was USD 7.3 million annually (approximately 60% of the total budget).

Table 10 and Figs. 2 and 3 show the trends in AGCI budget and personnel organization, according to the online database of the Chilean Ministry of Foreign Affairs. From 2006 to 2010, the organizational budget for AGCI increased 2.4 times from approximately CLP 2.732 billion (approximately USD 5 million) to CLP 6.435 billion (approximately USD 12 million), and the number of employees has been gradually increasing each year as well. This is an indicator that the importance in Chile of international cooperation is increasing each year.

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²³AGCI website (http://www.agci.cl/que-es-agci/ley-organica)

Table 10 Trends in Number of AGCI Employees and Budget (number of employees: persons/budget: CLP)

	2006	2007	2008	2009	2010
Number of employees* (*1)	57	61	66	72	78
Budget (*2)	2,731,992,000	2,959,253,000	4,327,179,000	5,582,668,000	6,434,821,000
Amount of budget provided for assistance (*3)	1,484,288,000	1,620,073,000	2,754,601,000	3,687,042,000	4,331,331,000

^{*1} Indicates maximum number of employees in initial budget and does not represent actual number of employees

Source: Chilean Ministry of Finance Budget Bureau online database

(http://www.dipres.cl/574/articles-16459_doc_pdf.pdf)

(http://www.dipres.cl/574/articles-21020 doc pdf.pdf)

(http://www.dipres.cl/574/articles-34636 doc pdf.pdf)

(http://www.dipres.cl/574/articles-42680_doc_pdf.pdf)

(http://www.dipres.cl/574/articles-42680 doc pdf.pdf)

1.3.4 Examples of projects implemented

In Chile, it is thought that the priority fields for triangular cooperation in which Chile is a participant should be "fields in which Chile has experienced success and in which sharing with other countries would be meaningful." The four priority fields for triangular cooperation are listed as "poverty measures," "improving health and sanitation," "improving the educational system," and "agriculture and food assistance." Table 11 shows issues in each of these priority fields.

Table 11 Priority Fields and Issues for Triangular Cooperation by Chile

Priority Field	Issues
Poverty measures	 Devising measures to identify the sources of poverty and resolve them Developing initiatives to combat poverty Sharing experiences regarding assistance to the poor
Improving health and sanitation	 Creating policy and institutional reform in the area of health and sanitation Improving programs relating to health and sanitation Improving nutrition status Providing medical care for infants and young children
Improving the educational system	 Creating policy and institutional reform in the area of education Educational methodology and curriculum reform Teacher training Introduction of new teaching technologies Initial education of young children prior to entering school
Agriculture and food assistance	 Creation of policy and programs to stimulate production Assistance for small-scale farmers Measures for diseases affecting agricultural and livestock products Forestry planning and river conservancy Development of aquaculture

Source: AGCI website

(http://www/agci.cl/coooperacion-internacional/tipos-de-cooperacion/triangular/areas-prioritarias)

^{*2 1} $\overline{\text{CLP}}$ = JPY 0.18, calculated at USD 1 = JPY 95

^{*3} Amount provided for assistance indicates expenditures for triangular cooperation

 $^{^{24} \} AGCI \ website \quad (\underline{http://www/agci.cl/coooperacion-internacional/tipos-de-cooperacion/triangular/areas-prioritarias})$

In accordance with these policies, Chile has implemented many triangular cooperation projects. Examples of projects implemented with a single donor nation include the project conducted with Sweden to strengthen international cooperation organizations and social and political cooperation in Guatemala, the project conducted with Finland to provide assistance to small and medium-sized furniture manufacturing companies in Nicaragua, and the project conducted with Belgium (Flemish Community) to create a regional government infrastructure in El Salvador.

Other projects in which the donor was an international organization include the consulting project for the Zambian government conducted with the United Nations Industrial Development Organization (UNIDO), dealing with modernization and privatization of the mining industry, the project conducted with the United Nations Development Program (UNDP) to disseminate Chile's experience with private sector management of the pension system, and the project conducted with the United Nations Food and Agriculture Organization to hold seminars and the like in Uruguay regarding crop and livestock disease control and export regulations relating to agricultural and livestock products.²⁵ Table 12 shows some examples of these and other triangular cooperation projects implemented by Chile.

Table 12 Case Studies of Triangular Cooperation Projects Implemented by Chile

Donor Nation / Organization	Beneficiary Country	Implemented	Description
Luxembourg	Nicaragua	1994-1997	Improvement of education in Nicaragua. Technical cooperation by Chilean Ministry of Education.
Germany	Guatemala Nicaragua	1995	Assistance for international cooperation project for Guatemala and Nicaragua.
	Latin America and Caribbean	2001-2005	Program to provide scholarships for graduate students, through cooperation with German Academic Exchange Service (Deutscher Akademischer Austausch Dienst [DAAD]).
	Latin America and Caribbean	2003-	Program to expand the development expertise of Chile to other countries in Latin America and the Caribbean.
	Peru	2005	Local seminar regarding microcredit, production stimulus measures and local development.
Denmark	Nicaragua	1995-1997	Program to develop local governments in Nicaragua. Assistance for institutional improvement and modernization of local governments in Nicaragua. The acting organization on the Chilean side was the Local Development and Administrative Secretariat (Subsecretaria de Desarrollo Regional y Administrativo [SUBDERE]) affiliated with the Ministry of Internal Affairs. The counterpart on the Nicaraguan side was the Nicaraguan Local Development Promotion Bureau (Instituto Nicaragüense de Fomento Municipal [INIFOM]).
Sweden	Guatemala	1998-1999	Assistance project to enhance the international cooperation organization in Guatemala and strengthen social and political cooperation. Advice and assistance were provided to the counterpart, the Planning Secretariat of the Office of the President of Nicaragua (Secretaría de Planificación y Programación de la Presidencia).
	Bolivia	-	Project to establish a special course in lumber technology at Universidad Privada de Santa Cruz de la Sierra in Bolivia. The project leader was the Swedish Institute for Wood Technology (TRATEK) at Linköping University in Sweden, and the University of Bio-Bio in Chile provided assistance.
United States	Latin America and Caribbean	-	Project to provide scholarships for students in Bolivia, Ecuador, Paraguay, Peru and countries in Central America and the Caribbean, to enable them to study at universities in Chile and receive specialist training.
	Costa Rica, El Salvador, etc.	-	Program to reform social policy through the cooperation of the Latin American School of Social Sciences (Facultad Latinoamericana de Ciencias Sociales [FLACSO]).

 $^{^{25} \} AGCI \ website \quad (\underline{http://www/agci.cl/coooperacion-internacional/tipos-de-cooperacion/triangular/programas-y-proyectos})$

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Donor Nation / Organization	Beneficiary Country	Implemented	Description
	El Salvador	2002-2003	Project to establish and in particular to train personnel for the Bureau of Debt Management in El Salvador (Servicio de Rentas Internas [SRI]). Promoted with the cooperation of the Chilean Taxation Bureau (Servicio de Impuestos Internos), with the participation of researchers at the University of Santiago.
Finland	Nicaragua	-	Project to assist the Nicaraguan Association of Small and Medium Size Furniture Manufacturers (Pequeña y Mediana Industria del Mueble de Nicaragua [NICAMUEBLE]). Implemented for the Nicaraguan Institute of Support for Small and Medium-sized Enterprises (Instituto Nicaragüense de Apoyo a la Pequeña y Mediana Empresa [INPYME]), through the assistance of the University of Bio-Bio in Chile, with the aim of increasing the competitiveness of wood furniture manufacturers.
Belgium (Flemish Community)	El Salvador	-	Project to establish local governments in El Salvador. Through the Local Government Association of Chile (Asociación Chilena de Municipalidades [ACHM]), assistance was provided to the Social Investment Fund for Local Development (Fondo de Inversión Social para Desarrollo Local [FISDL]) in El Salvador, the Committee of Municipalities of El Salvador (Corporación de Municipalidades de la República de El Salvador [COMURES]), and the Salvadoran Municipal Development Institute (Instituto Salvadoreño de Desarrollo Municipal [ISDEM]).
	El Salvador	2004	Seminar in El Salvador on local development and decentralization in Latin America and the Caribbean region. Japan also contributed.
	Nicaragua	-	Project to assist rural microbusinesses in Nicaragua. Through the Institute of Agricultural Development (INDAP) of Chile, assistance was provided to the Nicaraguan Institute of Support for Small and Medium-sized Enterprises (Instituto Nicaragüense de Apoyo a la Pequeña y Mediana Empresa [INPYME]).
Spain	Guatemala	2003	Seminar on international cooperation and diplomacy held in Guatemala and conducted by Spain, Mexico and Chile in order to disseminate the expertise in international negotiations with the EU.
	Colombia	2005	Seminar on the international negotiation process for the Andean Community (Comunidad Andina [CAN]) Vision and its realization. Featured discussion of the advantages and disadvantages of CAN formation.
South Korea	-	2003-2004	International training in aquaculture systems, held in Chile.
Japan	Multiple countries	2003-2005	Wide-area seminar for third countries, held through assistance from JICA. Held in Chile since 1995, featuring discussion of various fields.
	Multiple countries	-	Dispatch of Chilean specialists to third countries.
	Multiple countries	2003- 2006	"Improving the Fairness and Quality of Education" diploma course on improving teaching skills held through the cooperation of the Metropolitan University of Educational Sciences in Chile.
	Multiple countries	Up to 2005	Diploma course on international cooperation project negotiation and management, held through the cooperation of Pontificial Catholic University of Valparaíso in Chile.
Organization of American States (OAS)	-	-	Training Among Developing Countries Program (Cursos de Adiestramiento entre Países en Desarrollo [ADPD]) training course. Project implemented since the establishment of the International Cooperation Administration in Chile. Held in Chile with the participation of many organizations (in particular universities).
United Nations Industrial Development Organization (UNIDO)	Zambia	-	Consulting project on the modernization and privatization of the mining industry by the Zambian government, utilizing the expertise of Chile.

Donor Nation / Organization	Beneficiary Country	Implemented	Description
United Nations Development Program (UNDP)	-	1996-1999	Project to promote overseas investment and exports. From the Chilean side, cooperation from the Export Promotion Agency of Chile (Dirección de Promoción de Exportaciones [Pro Chile]), Association of Manufacturing and Service Industry Exporters (Asociación de Exportadores de Manufacturas y Servicios [ASEXMA]) and Santiago Chamber of Commerce [Cámara de Comercio de Santiago]. The Inter-American Development Bank (IADB) also participated.
	-	1997-1999	Project to disseminate the expertise of Chile in private sector management of the pension system. Participation by Japan as UNDP representative, in addition to countries in Central and Eastern Europe.
	Cuba	1997-2000	Project implemented from 1997 to 2000 to assist economic recovery in Cuba. Norway participated as UNDP representative, in addition to Mexico and Brazil.
Inter-American Development Bank (IADB)	-	1992 1995	Intra-regional technology cooperation program (Programa CT / INTRA). Various seminars were held on decentralization and community investment.
International Organization for Migration (IOM)	Kenya, Uganda, etc.	1994	Technical assistance regarding vegetable and fruit tree planting for Kenya, Uganda, Tanzania, and Ethiopia.
United Nations Food and Agriculture Organization (FAO)	Uruguay	2004	Seminar on crop and livestock disease control in Uruguay and export administration for agricultural and livestock products.
	Guatemala	2005-2007	(Volunteer) technical assistance for Guatemala relating to rural and agricultural development.

Source: AGCI website

(http://www/agci.cl/coooperacion-internacional/tipos-de-cooperacion/triangular/programas-y-proy

ectos)

1.3.5 Donor Nations and Beneficiary Countries in Triangular Cooperation by Chile and Donor Expenditures

(1) Donor nations and beneficiary countries

Table 13 shows the donor nations and beneficiary countries for triangular cooperation projects implemented by Chile. The 13 donor nations include Japan. The beneficiary countries comprise 15 Latin American countries and one community.

Table 13 Donor Nations and Beneficiary Countries for Triangular Cooperation Implemented by Chile

Donor Nations	Japan, South Korea, Germany, Spain, Sweden, Finland, Belgium (Flemish Community), France, Canada, Organization of American States (Inter-American Institute for Cooperation on Agriculture), Argentina, Brazil, and Mexico
Beneficiary Countries	Bolivia, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Nicaragua, Paraguay, Panama, Peru, Dominican Republic, Uruguay, and Caribbean Community (CARICOM)

Source: AGCI website

(http://www/agci.cl/coooperacion-internacional/tipos-de-cooperacion/triangular/paises-relaciona dos)

(2) Assistance provided by each donor nation

The following table shows the expenditures of each major donor from 2006 through 2009. The fact that AECID expenditures for 2009 stand out is because of expenditures made by the AECID in the form of the triangular cooperation fund.

One other characteristic of expenditures is the fact that expenditures by South Korea (KOICA) began two years ago. As noted in 1.3.5 (4), after third country training by Japan

ended, AGCI and the university that served as the implementing organization were approached about the idea of South Korea providing assistance, indicating a desire on the part of South Korea to actively conduct triangular cooperation with Chile.

Table 14 Amount of Assistance Provided by Each Donor Nation in Triangular Cooperation Implemented by Chile (2006-2009) (Unit: USD)

	2006	2007	2008	2009	Total
CANADA	-	-	8,352	46,356	54,708
GTZ	79,573	156,538	234,806	330,400	801,317
IICA	3,159	9,722	16,014	-	28,895
JICA	577,000	468,000	372,000	289,000	1,706,000
KOICA	-	ı	67,354	128,197	195,551
AECID	-	-	-	955,576	955,576

Source: Prepared based on Balance Agencia De Cooperaticion Internacional De Chiley

(3) Triangular cooperation fund with Germany

The AGCI-GTZ Triangular Cooperation Fund (Fondo de Triangulación AGCI-GTZ), popularly known as ChileCoopera, was established in 2003 based on an agreement between Chile (AGCI) and the German Society for Technical Cooperation (Gesellschaft für Technische Zusammenarbeit [GTZ]) in Germany, for the purpose of providing development assistance to Latin American countries. The purpose of the fund is to deploy the experience accumulated through more than 17 years of bilateral development cooperation projects by Chile and Germany in the other countries of Latin America. The advantages are that projects can be executed comparatively easily, as Germany had already set up international cooperation organizations and cooperation organizations within Chile, as well as that beneficiary countries are able to feel secure about accepting international cooperation projects that have a record of past successes.

Applications by potential beneficiary countries for assistance projects through this fund are reviewed by a committee made up of representatives from Chile and Germany. The review emphasizes such aspects as whether the people of the beneficiary country can expect great benefits from the project, whether there are any discrepancies with the relevant laws and policies of the countries participating in the project, and whether facilities and agencies that can serve as counterpart organizations exist in the beneficiary country. The assistance targets a wide range of fields, including alternate energy development, improved energy efficiency, ensuring proper sanitation in the manufacturing industry, forest management, residential policy, promotion of industrial fields with growth potential, training for small and medium-sized companies, training specialists to provide training for small and medium-sized companies, policy relating to youth, employment and job training, legal system reform, health and medical care system reform, consumer protection, multicultural coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and so on. The provide training for small coexistence and the provide training for small coexisten

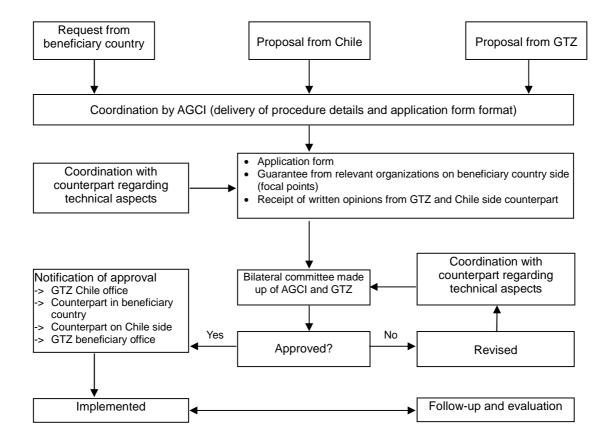
Figure 8 shows the review and approval process for cooperation projects under the AGCI-GTZ Triangular Cooperation Fund. Table 15 shows examples of projects that have been implemented under the fund.²⁸

(http://www.apci.gob.pe/archivos/triptico%20chile-alemania.pdf)

²⁶ AGCI website (http://www.agci.cl/docs/cooperacion triangular agci gtz.pdf)

²⁷ Peruvian Agency for International Development Aid (APCI) web site and archives

²⁸ As the Triangular Cooperation Fund does not provide financial assistance for consulting, the consulting consists only of consulting for a fact-finding survey by the counterpart on the beneficiary country side. (* Solo para efectos de conocer las contrapartes, ya que el Fondo NO financia Consultores.)



Source: Peruvian Agency for International Development Aid (APCI) web site and archives (http://www.apci.gob.pe/archivos/Formato_pre_aprobacion.doc)

Fig. 8 Review and Approval Procedures for Projects Conducted with the AGCI-GTZ Triangular Cooperation Fund

Table 15 Examples of Projects Implemented with the AGCI-GTZ Triangular Cooperation Fund

Beneficiary Country	Implemented	Project Description
Colombia	2006-2007	Assistance project for provinces (zoning) in the state of Antioquia (Departamento de Antioquía) in northern Colombia. Through assistance from GTZ, this project employed the expertise of a Chilean specialist who had conducted the same project in Chile.
El Salvador	2005-2008	Policy assistance project for residential policy. Assistance was provided for aspects such as analysis of the housing shortage situation, the home finance system, residential programs, review procedures for subsidy applications, social use and citizen participation in beneficiary country, etc. Participating in the project were the Chilean Ministry of Housing and Urban Affairs (Ministerio de Vivienda y Urbanismo), a Chilean specialist from a private sector institution, and specialists from GTZ. From El Salvador side, the Vice Minister for Housing and Urban Affairs (Viceministerio de Vivienda y Desarrollo Urbano), the Housing Fund (Fondo para la Vivienda Popular), the Social Fund for Housing (Fondo Social para la Vivienda), local governments and specialists affiliated with the Ministry of Finance.
El Salvador	-	Project to provide assistance for the consumer protection administration, implemented with the cooperation of the Chilean Consumer Bureau (Servicio Nacional del Consumidor) and the El Salvador Consumer Protection Bureau (Defensoría del Consumidor de El Salvador). The purpose of the project was to provide technology and expertise in order to firmly establish an organization for protecting the rights of consumers. The aim was also to improve the action policy and organizational capabilities of the Defensoría del Consumidor de El Salvador.

Source: Peruvian Agency for International Development Aid (APCI) website and archives (http://www.apci.gob.pe/archivos/triptico%20chile-alemania.pdf)

As an aside, in none of the specific projects implemented up to now using this fund has the contribution from the German side exceeded EUR 50,000 (approximately JPY 6 million).²⁹

1.4 Mexico

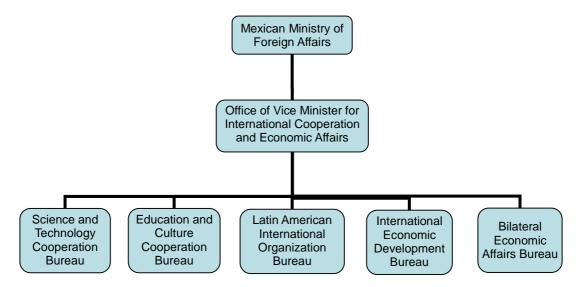
1.4.1 Overview of aid liaison organization

The liaison organization for international cooperation projects in Mexico is the Direction General of Technical and Scientific Cooperation (Dirección General de Cooperación Técnica y Científica [DGCTC]) affiliated with the Economic Relations and International Cooperation Unit (Unidad de Relaciones Económicas y Cooperación Internacional) in the Ministry of Foreign Affairs (Secretaría de Relaciones Exteriores).

The objective of the Direction General of Technical and Scientific Cooperation is to coordinate technical and scientific cooperation among Mexico and developed countries, midlevel developing countries, developing countries, and international organizations. The role of the Direction General of Technical and Scientific Cooperation is to coordinate between international cooperation organizations outside the country and domestic actors during the planning and implementation of international cooperation programs and projects. The relevant organizations with which the Direction General of Technical and Scientific Cooperation is involved during international cooperation efforts include ministries, the central administration, local government bodies, industrial associations, private sector organizations, universities, research institutions, private

 $^{^{\}rm 29}\,$ According to interview conducted at GTZ Chile office.

companies, and think tanks.³⁰ The following figure shows the organization of the Direction General of Technical and Scientific Cooperation of the Mexican Ministry of Foreign Affairs.



Source: Website of the Ministry of Foreign Affairs, Mexico

(http://www.sre.gob.mx/acerca/organigrama/organigrama.htm)

Fig. 9 Organization of Direction General of Technical and Scientific Cooperation, Ministry of Foreign Affairs

Exchange student programs, international joint research and some other international cooperation projects relating to education and scholarship are supervised by the International Scientific and Technical Cooperation and Policy Bureau (Dirección de Política y Cooperación Internacional en Ciencia y Tecnología) affiliated with the National Science and Technology Council (Consejo Nacional de Ciencia y Tecnología).³¹

1.4.2 Policy trends relating to triangular cooperation

International cooperation in Mexico is regulated by Chapter 3 (regulations relating to executive power), Article 89, Section 10 of the Political Constitution of the United Mexican States, which clearly states that "international cooperation for the purpose of development (la cooperación internacional para el desarrollo)" and "efforts to ensure international peace and international security (la lucha por la paz y la seguridad internacionales)" are the responsibility of the President.³²

In recent years, Mexico has experienced dramatic economic growth, and it is aware of its role as an emerging donor nation in keeping with its growth.³³ Mexico's gross domestic product is USD 893.054 billion, and its per capita income is USD 8,441 (as of 2008). It ranks 10th in terms of share of the regular budget among United Nations members, 8th in terms of share of the regular budget of the United Nations Industrial Development Organization, and 23rd in terms of peacekeeping

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³⁰ DGCTC web site (http://dgctc.sre.gob.mx/html/dgctc.html)

³¹ CONACYT website (http://www.conacyt.gob.mx/Cooperacion/index_cooperacion.html)

³² National Autonomous University of Mexico website and Sistema Económico Latinoamericano (SELA) website

³³ Mexican Ministry of Foreign Affairs, Economic Relations and International Cooperation Unit website (http://portal2.sre.gob.mx/enlace/images/STORIES/locales/seminario/maximo.pdf)

activities. Moreover, the Mexican government regards international cooperation for other countries as a form of diplomacy that increases its position in the international community.³⁴

As of 2008, approximately 80% of Mexico's technical cooperation projects were for countries in the Central American isthmus region. Approximately 12% were for countries in the Caribbean, and approximately 8% were for other countries in Latin America. Nevertheless, it has been pointed out that the fact that Mexico has limited funds for cooperation projects and in many cases the projects are lacking in consistency, for example with no consideration given to the possibility of a return on investment and no establishment of a complementary organization through multiple funding sources, Mexico's position as a donor nation is still fragile, and it still does not have a large presence as a beneficiary nation.³⁵

In addition, as the conventional international cooperation model in which assistance is provided by donors is being reduced in Latin America with regard to countries such as Japan and Germany, and as internationally there is an increasing emphasis on the independence of the beneficiary country and the role of regional characteristics, language and so on in increasing the effectiveness and efficiency of assistance, there is a strong recognition in Mexico as well of the effectiveness of triangular cooperation.³⁶ Providing assistance in the form of triangular cooperation makes it easier for donor nations to impart technologies and knowledge and enables emerging nations to obtain funds, and this is thought to expand the pathways through which developing nations can obtain international assistance.³⁷ Three main types of international cooperation are cited: "free financial aid (food assistance, emergency assistance, and humanitarian support)" "scientific and technical cooperation (joint research and technological innovation)," and "technical cooperation (joint development in specific fields, regional and local joint development, specialist exchange, specialist training, personnel training, and informational exchange)."³⁸

Japan has implemented capacity-building for the aid liaison organizations in Mexico on an ongoing basis. For example, when the Mexican Institute for International Cooperation (Instituto Mexicano de Cooperación Internacional [IMEXCI]), the precursor to DGTCG, was established in 1998, Japan dispatched specialists in south-south cooperation assistance to IMEXCI in an active effort to transfer organization-building methods and expertise. Moreover, between 2000 and 2003, south-south cooperation assistance involving the dispatch of teams was conducted.

In the area of recent international cooperation in Mexico, a new law regarding international cooperation entitled "Law Regarding International Cooperation for Development (Ley General de Cooperacion Internacional para el Desarrollo)" was approved by the upper house of the Mexican Congress on April 13, 2010 and subsequently re-approved by the lower house on April 29, 2010. There have been repeated calls for the need for this law to clarify the legal position of international cooperation in Mexico and to establish a framework for evaluation, supervision, recording, and information dissemination with regard to cooperation projects. ³⁹ Under this law, an International Cooperation and Development Agency is expected to be established, and the Triangular Cooperation Department is expected to be transferred to this agency. ⁴⁰

(http://www.sela.org/DB/ricsela/EDOCS/SRed/2009/09/T023600003744-0-La_cooperacion_internacional_para_el_desarroll o_de_Mexico.pdf)

³⁴ Sistema Económico Latinoamericano (SELA) website

³⁵ Observatorio de la Cooperación Internacional para el Desarrollo en México website (http://www.observacoop.org.mx/TemasEstrategicos.php?q=11)

³⁶ DGCTC website (<u>http://dgctc.sre.gob.mx/html/coop_int_mex.html</u>)

Observatorio de la Cooperación Internacional para el Desarrollo en México website

⁽http://www.observacoop.org.mx/TemasEstrategicos.php?q=11)

³⁸ DGCTC website (http://portal2.sre.gob.mx/enlace/images/STORIES/locales/seminario/maximo.pdf)

However, as of the time that the site survey was conducted, the law had not yet gone into effect.

⁴⁰ According to an interview at DGCTC.

Triangular Cooperation Implementation Organization (personnel makeup and budget) 1.4.3

According to interviews conducted at the Direction General of Technical and Scientific Cooperation, a special department for triangular cooperation was established in 2010. It has six staff members, each of whom is in charge of different countries and regions.

Table 16 shows the budget trends for the past three years for the Direction General of Technical and Scientific Cooperation and its affiliated organization, the International Economy and International Cooperation Department. When viewed in terms of organizational budget, the budget for the International Economy and International Cooperation Department fluctuates considerably each year, while in contrast the budget for the Direction General of Technical and Scientific Cooperation is generally constant at the same level.

Table 16 Trends in Budget of International Economy and International Cooperation Department and Direction General of Technical and Scientific Cooperation

(Unit: MXN)

		2007	2008	2009
International	Initial budget	92,185,240.00	24,856,416.00	60,885,740.00
Economy and International	Revised budget (*1)	11,802,815.23	19,701,304.43	16,676,465.38
Cooperation Department	Budget scheduled for execution (*2)	11,797,722.41	13,267,861.67	9,371,012.76
Direction	Initial budget	15,541,207.00	15,037,583.00	17,962,421.00
General of Technical and	Revised budget (*1)	9,732,484.15	28,045,311.31	32,204,925.70
Scientific Cooperation	Budget scheduled for execution (*2)	9,732,484.35	20,946,747.55	29,424,715.15

Of the initial budget amount, the budget for January-August

Unit: Mexican peso (MXN 1 = JPY 8.3) (as of July 2010) "Annual Activity Report, Ministry of Foreign Affairs, Mexico" from Direction General of Technical and

Scientific Cooperation website

(http://dgctc.sre.gob.mx/pdf/1er_inf_lab07.pdf) (http://dgctc.sre.gob.mx/pdf/2informe.pdf)

(http://dgctc.sre.gob.mx/pdf/Informe_Anual_SRE_2009.pdf)

Examples of projects implemented 1.4.4

Source:

Table 17 shows the international cooperation projects implemented in Mexico in the past three years. As the table shows, the number of international cooperation projects is increasing.⁴¹

Trends in the Number of International Cooperation Projects Table 17 mplemented in Mexico

	2007	2008	2009
Number of international cooperation projects	407	529	649
Of those projects, the number of triangular cooperation projects (*1)	11	5	6

^{2007:} There were 10 triangular cooperation projects with Japan and one with Germany. The beneficiary countries were Central American companies in each case.

2008: Triangular cooperation with Japan and Germany (number of projects for each country

2009: There were six triangular cooperation projects with Japan and three with Germany.

Prepared based on "Annual Activity Report, Ministry of Foreign Affairs, Mexico" for 2006, Source: 2007 and 2008, from Direction General of Technical and Scientific Cooperation website

The execution amount for the months up to June, combined with the budget scheduled for execution for the months of July and August

⁴¹ Table 17 shows the total of the number of projects for which Mexico was a donor and the number of projects for which Mexico was a beneficiary country (no distinction is made in the annual reports).

The major donors for triangular cooperation projects in which Mexico was involved included developed nations (Germany, Spain, France, the EU, Japan, the United States, etc.), as well as international organizations including the United Nations Industrial Development Organization (UNIDO), the United Nations Development Program (UNDP), the Organization of American States (OAS), the Iberoamerican General Secretariat (SEGIB), the Latin American Economic System (Sistema Económico Latinoamericano [SELA]), the EuropeAid Cooperation Office, and the Organization for Economic Co-operation and Development (OECD), as well as bilateral donors that include JICA, AGCI, the Brazilian International Cooperation Agency (Agencia Brasileira de Cooperação [ABC]), the United States Agency for International Development (USAID), the Spanish International Cooperation Agency (Agencia Española de Cooperación Internacional [AECI]), and GTZ.

In triangular cooperation implemented by Mexico, the central donors are Japan and Germany (GTZ). Of these, the joint project with GTZ entitled "Formation of a Network for Comprehensive Management of Solid Wastes (Gestión Integral de Residuos Sólidos [GIRESOL])" is a large-scale project in terms of both personnel and project duration. (See 2.2.1 for details.)

2. Trends for other donors

2.1 Bilateral donors

2.1.1 Germany

(1) Policy relating to triangular cooperation

Germany established project plans based on the Paris Declaration in 2005 and is promoting efforts to achieve the objectives specified in the Paris Declaration for achievement by 2010. These project plans contain regulations for assistance plans by the German government that are designed to replace project plans established in 2005, and they define seven activity fields. One of these, "Cooperation with all development actors," specifies the promotion of triangular cooperation and south-south cooperation. In order to promote more effective participation and south-south cooperation, the German government is working to strengthen its participation and cooperation structure for anchor countries and middle-income countries. ⁴²

The German government lists the following four items as objectives for implementing triangular cooperation. 43

- To serve as a bridge for north-south and south-south cooperation through mutual learning
- To effectively combine the expertise, technologies and achievements of Germany and the partner country in order to provide assistance for capacity development in the partner country
- To contribute to the financial resource expenditure needed for development
- To promote regional cooperation and development

In addition, the German government has established an "anchor country strategy" for implementing assistance. An anchor country was strategically defined in 2004 by the Federal Ministry for Economic Cooperation and Development (BMZ) as a middle-income country

⁴² Plan of Operations for Implementing the Paris Declaration of 2005 and the Accra Agenda for Action of 2008 to Increase Aid Effectiveness (March 2009)

⁴³ "Triangular Cooperation from a German Perspective – Opportunities and Challenges"

that possesses great economic and political influence in each region. The BMZ has established 15 anchor countries as indispensable partners when dealing with issues relating to poverty elimination, climate and environment protection, peacekeeping, etc. Germany is conducting development assistance in cooperation with nine of these countries (Egypt, Brazil, China, India, Indonesia, Mexico, Nigeria, Pakistan, and South Africa). 44 All four of the first partner countries with which Germany conducted triangular cooperation (Mexico, South Africa, Brazil and Chile) were Latin American countries.⁴⁵

The anchor country is a concept created to legitimize assistance to countries that have developed in the same manner as Mexico. In response to mounting criticism in Germany regarding the continued provision of aid to the aid recipient nations that have continued to develop (for example, Mexico is now counted as a member of the G20 and is also a member of the OECD), from 2004 to 2005 BMZ selected countries in each region that were comparatively developed in historical, societal, and economic terms and designated these countries as anchor countries.

(2) Recent trends relating to triangular cooperation by Germany

\bigcirc Brazil

Since 2004, Germany has used triangular cooperation to provide assistance as a means of communicating Brazil's development experience that has been implemented in Africa and Latin America as part of its south-south cooperation efforts in the areas of HIV/AIDS eradication, forest protection and job training. 46

South Africa

To promote regional development in southern Africa, Germany has implemented triangular cooperation with South Africa since 2006. Through triangular cooperation, Germany is able to more effectively provide advice and support to the government of South Africa, and this is also effective in strengthening networks with certain countries with which South Africa has relations. For these reasons, triangular cooperation projects with South Africa are expanding, and a fund totaling EUR 5 million has also been created.⁴⁷

Israel

In January 2010, Germany and Israel agreed to expand triangular cooperation. Since that time, they have exchanged information regarding programs and projects currently being promoted by Germany for Africa, and are expected to begin studying the possibility of providing cooperation in areas that include personnel training. Table 18 shows the major triangular cooperation projects being implemented by Germany.

Table 18 Major Triangular Cooperation Projects Implemented by Germany

Assistance Partner	Project	Field	Beneficiary Country
Brazil	Institutional Strengthening of INNOQ (Metrology and Quality Control)	Political and civil society	Mozambique

⁴⁴ BMZ website (http://www.bmz.de/en/countries/partnercountries/ankerlaender/index.html)

^{45 &}quot;Anchor Countries- Partners for Global Development"

⁴⁶ BMZ website (http://www.bmz.de/en/countries/partnercountries/brasilien/zusammenarbeit.html,)

⁴⁷ BMZ website (http://www.bmz.de/en/countries/partnercountries/suedafrika/zusammenarbeit.html)

⁴⁸ BMZ website (http://www.bmz.de/en/press/pm/2010/january/pm_20100118_09.html)

Assistance Partner	Project	Field	Beneficiary Country
Tunisia	Setting up the Audit commission of Mauritania by training 30 magistrates in Tunisia and appointing Tunisian experts and consultants for institutional support	Political and civil society	Mauritania
Brazil	Technological Center for the Environment	Multi-sector	Paraguay
Brazil	AIDS-fighting in Latin America and the Caribbean (e.g. Argentina, Chile, Paraguay, Peru and Uruguay)	Population policy and reproductive health	Latin America
Colombia	Community-based rural tourism	Tourism	Costa Rica
Mexico	Municipalities' Solid Waste Integral Management	Water supply and sanitation	Guatemala
Mexico	Municipalities' Solid Waste Integral Management	Water supply and sanitation	Dominican Republic
Brazil	Triangular schemes for fostering South-South Co-operation	All	Haiti
Chile	Fund for triangular co-operation aiming to share the Chilean development experience with other Latin American countries (Examples: consumer protection (El Salvador), promoting local economies (Paraguay) or land use planning (Colombia))	All	Latin America

Source: Items related to Germany excerpted from OECD website (URL:http://www.oecd.org/dataoecd/62/54/44652734.pdf)

(3) Trends in Latin America

This section covers the latest trends for GTZ activities in target countries, based on interviews held at the local GTZ offices.

① Mexico

a. German aid organization in Mexico

The German Governmental Cooperation Bureau and the Mexican government agreed upon guidelines for triangular cooperation policies in 2006. Among the requirements stated in these guidelines is that, in project selection and execution, the theme of the project should be one whose achievements have already been demonstrated in bilateral cooperation, and that Mexico and Germany should contribute equally to the project (although the contribution of the beneficiary country need not necessarily be equal).

Four German development assistance organizations are conducting activities in Mexico: GTZ (technical cooperation), CIM (dispatch of specialists to organizations in beneficiary countries), KfW (international cooperation bank), and Inwent (capacity development and training organization)

These four organizations work on priority issues established by the Mexican and German governments. Specifically, these issues are in the areas of sustainable energy (renewable energy and sustainable energy) and environmental management (targeting cities, industrial areas and nature reserves called "green areas").

Of these, the Mexican counterpart organization for sustainable energy is the Energy Ministry. The counterpart organizations for environmental management are the Ministry of

Environment and Natural Resources and state governments and municipalities. For green areas, the counterparts are the National Commission for Knowledge and Use of Biodiversity (CONABIO) and the National Commission of Natural Protected Areas (CONANP) within the Ministry of Environment and Natural Resources.

Among the environmental management issues, for the field of solid wastes and contaminated soil treatment in particular, GTZ has established a comprehensive solid waste management network (Red Gescion Integral Residuo Solido [Red GIRESOL]) to serve as a liaison organization for triangular cooperation in this area.

The GIRESOL project, which helped to form this network, began as a bilateral cooperation project in 2004 with Mexico as the beneficiary country. In 2006, the project was expanded to a triangular cooperation project with Mexico as a partner country. With the cooperation of the German Ministry of Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung), the Mexican Ministry of the Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales) became the main counterpart, and the project was implemented with the aim of training waste disposal specialists in Latin American countries.

As of 2009, some 140 waste disposal specialists in Ecuador, El Salvador, Guatemala, and the Dominican Republic have been trained by means of training programs and workshops. In Guatemala, these specialists have trained 136 Environment Ministry employees, 122 environmental researchers, 543 local government employees, and 900 private citizens. As a result, the GTZ calls this project a "flagship" example of technical triangular cooperation. 51

b. Verification of effectiveness of triangular cooperation

As quantitative verification of effectiveness is even more difficult for triangular cooperation than it is for bilateral cooperation, the German Policy Cooperation Bureau has explained to the German people using the logic that, in the case of Mexico, cooperation with Mexico has been conclusively shown to be a success, and that the achievements rooted in the community are being transferred to countries in the surrounding area, and that GTZ successes in the area of technical cooperation are being more effectively employed.

c. Standards and implementation methods for triangular cooperation by Mexico and Germany

Moreover, Germany and Mexico implement triangular cooperation jointly for the beneficiary country based on the triangular cooperation policy guidelines established in 2006. The airfare and accommodation costs for specialists from Mexico are provided by the Mexican Ministry of Foreign Affairs, while the implementing agency bears the personnel costs. For Germany as well, airfare and accommodation costs for specialists from Germany are provided by the German Ministry of Foreign Affairs, while the personnel costs are borne by the implementing agency.

As a rule, specialists from Mexico are used as triangular cooperation specialists. This is because, as triangular cooperation is conducted only for topics with a record of achievement in bilateral cooperation, Mexican personnel who have been trained through past cooperation must be secured. However, as the GTZ Chile office handles topics for which there is no bilateral cooperation experience, in some cases specialists are dispatched from Germany.

⁵⁰ GTZ web site (http://www.gtz.de/en/weltweit/latinamerika-karibik/mexiko/28290.htm)

51 GTZ web site (http://gtz.de/de/dokumente/Red-Giresol-Network-2009.pdf)

⁴⁹ GTZ web site (http://gtz.de/de/dokumente/Red-Giresol-Network-2009.pdf)

d. Assistance relating to solid wastes in Latin America

The major organizations for assistance in the field of solid wastes in urban and industrial areas are the Instituto Nacional del Econologia (INE) and CENICA. Cooperation was initiated in 2006 and 2007, and CENICA is participating in Red GIRESIOL. Triangular cooperation projects with Guatemala, the Dominican Republic, and Ecuador in the area of solid wastes are always accompanied by the CENICA supervisor. However, accompaniment on a long-term basis is difficult due to staff limitations on the part of CENICA.

Assistance in the area of solid wastes began some 10 to 15 years ago. Germany has provided assistance to Mexico since around 1975, but since 1990 the main emphasis has been on environmental projects. In the 1990s, atmospheric pollution measures were implemented for the Valley of Mexico (in collaboration with the World Bank and JICA) and since the end of the 1990s eco-efficiency of small and medium-sized factories has become a major topic. The Chamber of Commerce, which specializes in the processing industry, served as counterpart for small and medium-sized factory projects. In the past five years, there has been an increasing demand for energy-related assistance (in triangular cooperation, beneficiary countries include Guatemala, Ecuador, the Dominican Republic, etc.). For this reason, starting in 2010, Mexico and Germany have provided assistance not for individual countries but for the region as a whole. In the near future, GTZ is expected to sign an agreement establishing a cooperative framework with the Committee on Sustainable Development of the Environment in Central America (Comite Inter-Americano de Desarrollo Ambiental [CADA]) within the Central American Integration System (SICA). Under this agreement, CADA is expected to conduct triangular cooperation policy and implementation acceptance.

This year (2010), the INE purchased life cycle management software called Umwelt in order to conduct analysis of life cycle management and promote recycling of packaging materials. Software training and database construction were handled by the German agency (EFAU).

(2) Chile

a. Trends in bilateral cooperation with Germany

As of the end of 2010 or the beginning of 2011, bilateral cooperation in Chile by Germany will end with the exception of environmental projects being implemented by the German Environment Agency. In their place, 12 specialists from Germany will begin providing assistance to Chile. They will receive salaries from Chile; in the event that this is insufficient to cover the amount of the salary they receive in Germany, Germany will make up the difference. The specialists will come from various entities including public agencies, private companies, NGOs, the German Chamber of Commerce and so on. However, their fields of activity will be limited to fields that are approved by the German government in the area of preservation development such as protection of primeval forests.

b. Criteria for project creation by means of triangular cooperation in Germany

The determination as to whether or not to make an activity a triangular cooperation project will be based on the following criteria.

- Activity for which there will be a request from a potential beneficiary country
- Activity for which the Chilean government and AGCI agree to provide project assistance
- Activity for which the German government can play a role in some capacity
- Activity for which the Chilean government can provide cost sharing

c. Germany's triangular cooperation cost allocation, expenditure methods and expected role in Chile

At present, the German contribution for triangular contribution in Chile has not exceeded EUR 50,000 (approximately JPY 6 million) for any projects. Moreover, this sum of EUR 50,000 is not simply handed over to Chile; it is managed by GTZ and provided as needed. For Chile, it is difficult to provide unanticipated expenses (expenditures that were not included in the budget), and both the Chilean government and AGCI are happy with this scheme.

The Chilean and German sides share the cost burden on a 50:50 basis. However, as the remuneration to specialists is not included in the 50% on the Chilean side, in practice the Chilean side pays more. Nevertheless, more important than this cost-sharing allocation is the need to conduct planning, preparations, supervision, and monitoring. Even on the German side, specialists sometimes go to beneficiary countries, but since as a rule specialist dispatch is conducted by Chile, in that sense supervision is important.

d. Types of impact of German triangular cooperation in Chile and awareness of impact measurement

It is possible to divide the impact of German triangular cooperation in Chile into three main types: impact on beneficiary country, impact on AGCI, and impact on Chilean government ministries and agencies. However, GTZ acknowledges that measuring these is extremely difficult.

e. Deployment of German triangular cooperation in other countries

An application for the budget for triangular cooperation is made to the home country several months prior to implementation. Current plans call for environmental triangular cooperation to be implemented with Costa Rica, famous worldwide in the area of environmental education, as the Partnership Program country, with and Nicaragua, El Salvador and other countries as beneficiary countries.

However, the budget in Germany for triangular cooperation is extremely low. For example, in the case of Latin America, the entire budget for technical cooperation in Latin America is EUR 75 million (approximately JPY 9 billion). Of that amount, the budget for triangular cooperation accounts for only EUR 3 million (JPY 360 million) or 4%.

2.1.2 Spain

(1) Policy regarding triangular cooperation

① Priority regions for international cooperation by AECID

According to the Master Plan for International Cooperation by Spain 2009-2012 (Plan Director de la Cooperación Española 2009-2012)), priority regions for international cooperation by AECID are divided into three categories based on criteria such as economic development indicators for each country, past achievements in international cooperation by Spain, sustainability of target country, development potential of cooperating countries, and relationship with other donor countries.

a. Category A (multi-sector cooperation)

Countries with low income and a low level of development. Countries in which a long-term cooperative relationship can be established and for which the project is expected to be very effective. Up through 2012, at least 85% of Spain's ODA budget is scheduled for allocation to Category A and Category B countries, and of that amount 2/3 is for Category A countries. In Latin America, Honduras, Nicaragua, El Salvador, Guatemala, Haiti, Paraguay, Bolivia, Peru, Ecuador, and the Dominican Republic are in this category.

b. Category B (cooperation in specified fields)

The criteria are the same as for Category A, but rather than overall cooperation the focus is on one specific field or several fields that concern a single topic, for the reason that in these countries this approach will enable the project to have a greater effect. In Latin America, Colombia is in this category.

c. Category C (cooperation to ensure development)

Countries in which development assistance should be provided by establishing participatory policies or promoting south-south cooperation and triangular cooperation and so on. In Latin America, Costa Rica, Brazil, Mexico, Venezuela, Panama, Argentina, Uruguay, and Cuba are in this category.

According to the Plan Director de la Cooperación Española (2009-2012), triangular cooperation in Spain is expected to be implemented on a priority basis during the period of this Master Plan (2009-2012). In addition, the middle income countries categorized in Category C are considered by Spain to be "intermediary countries" for international cooperation, and in addition the countries in this category are provided with assistance to enable them to become new donor nations.

The AECID and the countries in Category C cooperate to provide assistance to the countries in Category A. Table 19 shows the specific projects implemented in Argentina, Brazil and Chile.

Table 19 Triangular Cooperation Implemented by AECID with Argentina, Brazil and Chile (Beneficiary country: Category A)

Intermediary Company (Category C)	Beneficiary Company (Category A)	Description of Project
	Haiti	In-house production of perishable foods
Argentina		Humanitarian support
	Guatemala	Stabilization of food supply
	Haiti	Vegetation restoration and management
	Haiti, Honduras	Humanitarian assistance for hurricane damage
Brazil	Bolivia	Sanitation management for water resources
	Uruguay	Establishment of prosecutorial system
	Paraguay	Local development
Chile	Paraguay	Public employee supervision and training

Source: Prepared based on references at the workshop held by AECID entitled "The European Union's Triangular Cooperation in the Context of Aid Effectiveness" (March 2010, held in Madrid)

(2) Trends in Latin America

This section summarizes the findings of interviews conducted at the AECID Chile office.

a. Reason for initiating triangular cooperation in Chile

The emphasis on a cooperative framework with AGCI and the desire to implement third country projects were the reasons that AECID initiated triangular cooperation. Chile was considered advantageous by Spain in the Latin American and Caribbean region in geographical terms, and the fact that Chile needed assistance from Spain to achieve its 2015 development targets (MDG) of "child health and health improvement" and "strengthening international cooperation (strengthening of relationship with AGCI: to ensure its position on the world stage)" provided the background for the start of triangular cooperation.

b. Triangular cooperation projects in Chile

At present, there is only one triangular cooperation project underway in Chile/. The budget for this project, which began in 2009, is approximately EUR 300,000 (approximately JPY 36 million). The beneficiary country is Paraguay, and the purpose of the project is to strengthen the organizational capacity of the Ministry of the Interior. As this project is being implemented using a fund⁵² set up through contributions from both countries, the cost burden ratio for each country has not been established. In this project, the government of Paraguay requested assistance from the government of Chile, knowing of Chile's excellence in the area of civil service management departments. However, among the items requested were some for which Chile was unable to secure personnel (such as women's equality). Accordingly, the Chilean government requested assistance from the government of Spain and the project was realized in the form of triangular cooperation.

On the Chilean side, the AGCI and the Citizen Registration Bureau within the Ministry of the Interior are in charge of the project. The liaison on the Paraguay side is the jurisdictional organization of the Ministry of the Interior. Spain's mission is to dispatch specialists to provide Spain's views and expertise on women's equality and other issues. Meanwhile, Chile's mission is to cover selection methods in civil servant hiring. Four specialists from Spain will be dispatched during a two-year period, and in each case the specialist will be dispatched for a period of one to two weeks. The specialist is not the same person in all four cases; four different persons are dispatched. The method of securing specialists in Spain is firstly to search for civil servants engaged in the same type of work and then to confirm whether that person can do the work at the destination. If no suitable candidate can be found, a private consultant is engaged to locate a suitable person.

As this was the first time for the AECID to implement triangular cooperation in Chile in planning that extended to creating a project, some difficulties were encountered before the stage of implementation was reached.

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⁵² Fund established by governments of Spain and Chile, with the Spanish government providing EUR 1 million (approximately JPY 120 million) and the Chilean government providing EUR 300,000 (approximately JPY 36 million) to an account set up in Chile. This amount of EUR 1.3 million can be used as a common basket (the proportion contributed by Spain and Chile varies depending on the project and is not a factor) at the stage at which the entire amount has been deposited. Decisions regarding fund use and contributions are studied by a four-member committee comprising of representatives from the Chilean Ministry of Foreign Affairs, AGCI, the Spanish Embassy, and AECID (this organization). The term of implementation for the current triangular cooperation project is two years, after which a project evaluation will be conducted.

(3) Future issues⁵³

As the transition from north-south cooperation to south-south cooperation progresses, while triangular cooperation is considered to be an effective model for international cooperation, the concept that can be used to distinguish triangular cooperation from south-south cooperation is unclear. Moreover, there are no standards for use in standardizing the division of roles of the three countries participating in triangular cooperation and methods of project management and so on, and improvement is needed in this area.

Moreover, the institutions in the emerging nations involved in triangular cooperation have some serious weaknesses that have not yet been resolved, such as insufficient funds for activities of the liaison organization and weak organization, and these must be resolved through the provision of funding and expertise from developed countries.

In addition, it is not clear what kind of synergistic effect in technical areas can be anticipated through triangular cooperation. A thorough study of advantages in terms of costs is needed as well.

2.2 International organizations

2.2.1 World Bank

On October 11, 2008, the World Bank established the "South-South Experience Exchange Facility (SEETF), a multi-donor trust fund whose purpose is to exchange knowledge and specialist technologies relating to the reduction of poverty in developing nations. SEETF operates based on the recognition that solutions to the problem of poverty can be shared by other countries and regions that are facing the same development issues, and its goal is to promote information sharing among developing nations. China, India, Mexico, Denmark, the Netherlands, Spain and the United Kingdom have announced that they will provide financial support to the fund, and USD 10 million in contributions is expected to be received during the three-year period beginning in 2008.

At present, the Indian government is employing SEETF to provide technical assistance in the area of dairy farming to the government of Tanzania. This assistance is based on Operation Flood Project, which was conducted by India to increase its domestic milk production. Dairy farmers from Tanzania, Uganda and Ethiopia, countries that have received assistance from SEETF, visited India to receive technical assistance.

(1) Purpose of SEETF⁵⁵

The main purpose of SEETF is to promote knowledge sharing among developing countries. Knowledge is essential to reduce poverty, and SEETF was established based on the recognition that sharing knowledge and learning from the experience of others will lead to solutions to development issues. It will function as a mechanism to encourage cooperation among countries that are facing or have faced similar issues, thereby increasing the effectiveness of assistance.

(2) SEETF organization

At the time of its establishment, SEETF was provided with funds from six countries: Mexico, China, the United Kingdom, Denmark, Spain, and the Netherlands. The contributions to the fund totaled USD 4.35 million.

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^{53 &}quot;The European Union's Triangular Cooperation in the context of aid effectiveness"

World Bank website http://go.worldbank.org/5AH40BUOA0

⁵⁵ http://siteresources.worldbank.org/EXTSEETF/Resources/SouthSouthRBZtalkingpoints.pdf

In order to receive grants from SEETF, countries prepare a letter of application to the World Bank. Upon receiving the letter of application, the SEETF secretariat conducts a review to determine whether the application is in keeping with the development issues faced by the country, and decides whether or not to provide the grant. As of this writing, 30 venues for exchange have been formed, of which 22 projects are currently underway and 8 have already been completed. Plans call for USD 10-15 million to be accumulated each year up through FY 2013. The upper limit for each grant is USD 150,000.

(3) SEETF projects⁵⁶

Examples of grants provided using SEETF include the following:

- Multilateral conference and discussion on the education of young people in the Caribbean region
- Inspection tour to enable a delegation of African policymakers and business leaders to learn about business process outsourcing and IT services in India
- Exchange of information on special economic zones in East Asia (Africa-China)
- Exchange of experiences regarding the export of hydroelectric power from Laos (Tajikistan)
- Exchange of experiences relating transport in China and the Philippines (South Caucasus)

94% of the projects included a study tour, and 58% included workshops, training, videoconferencing and so on.

2.2.2 UNDP

(1)

.2.2 ONDI

As a result of the Buenos Aires Plan of Action in 1978, the United Nations Development Program (UNDP) came to play a major role in promoting south-south cooperation at the United Nations. The UNDP recognized south-south cooperation as an important means of achieving the Millennium Development Goals and other development objectives, and the strategic plan for 2008-2011 ranks the promotion of south-south cooperation as a key policy

Currents in UNDP south-south cooperation assistance and triangular cooperation

issue. Every three years, the UNDP also establishes the Cooperation Framework for South-South Cooperation as a framework for promoting south-south cooperation and triangular cooperation.

The unit at the UNDP that is in charge of policy relating to south-south cooperation is the Special Unit for South-South Cooperation. The primary mission of this unit is to report on south-south cooperation projects implemented during the past two years at the high-level United Nations committee meeting held every two years. The unit also compiles issues relating to south-south cooperation and compiles the Secretary-General's Report on south-south cooperation. Furthermore, the unit also conducts studies, etc., aimed at promoting south-south cooperation and triangular cooperation. In 2009, the unit released a report on the current state of and good practices relating to triangular cooperation and south-south cooperation, entitled "Enhancing South-South and Triangular Cooperation." This report summarized the advantages and issues relating to triangular cooperation as shown below.

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 $^{^{56}\} http://www.impactalliance.org/ev_en.php?ID=49508_201\&ID2=DO_TOPIC$

Table 20 Advantages and issues in UNDP triangular cooperation

	Advantages	Issues
From donor country perspective	Use of experience and expertise of resource country Scale of effectiveness can be increased by past assistance	 Coordination costs come along with long-term planning and establishment of cooperation framework While many international institutions have coordination structures for promoting triangular cooperation, guidelines for implementing triangular cooperation are not yet in place
From resource country perspective	Assistance for improving technical cooperation expertise Assistance to strengthen policy-related and institutional framework for south-south cooperation, and for improving the level of expertise regarding international cooperation Improved reliability and visibility for beneficiary country	Donor policies and priorities tend to take precedence over those of beneficiary country
From beneficiary country perspective	Promotion of communication and formation of network with resource country Improved reliability for specific south-south cooperation through partnership formation Provision of additional technical assistance from donor country	

Source: UNDP, Enhancing South-South and Triangular Cooperation, 2009

(2) South-south cooperation assistance in special south-south cooperation units

South-south cooperation assistance implemented by special south-south cooperation unit of the UNDP includes the following:

- ① Global South-South Development Academy: Collection of knowledge on south-south cooperation and building of a knowledge bank that member nations can access
- ② Global South-South Development Expo: Exhibition at high-level forums of good practices for south-south cooperation assistance being conducted at development assistance locations. The Expo serves as a venue for peer learning by practitioners implementing south-south cooperation gather to share issues and good practices relating to south-south cooperation. Started in 2008; JICA has participated since 2009.
- ③ South-South Global Asset and Technology Exchange (SSGATE): Framework for facilitating exchanges of developing nation technologies among developing nations. Began as a pilot program in 2007, and after two years as a pilot program it has been conducted on a full-fledged basis beginning in 2010. An NGO has been set up in Shanghai to support SSGATE, and this NGO is providing assistance for developing nation technology exchange.

Moreover, at UNDP field offices, capacity building of aid liaison organizations in resource countries (Brazil, Argentina, etc.) is being conducted as one part of triangular cooperation. According to the UNDP Brazil office, in addition to improving the effectiveness of assistance in beneficiary countries, one of the objectives of UNDP triangular cooperation in Brazil is to build up the capacity of the Brazilian Agency for Cooperation (Agência Brasileira de Cooperação: ABC).⁵⁷ The UNDP considers one of the objectives of triangular cooperation to be helping

⁵⁷ Interview at UNDP Brazil office conducted

emerging donors to be able to provide assistance independently in the future. In that sense, it is similar to the south-south cooperation assistance being conducted by Japan.

2.2.3 IDB

In 2004, the Inter-American Development Bank (IDB) started the Regional Public Goods Program as a scheme for promoting south-south cooperation in the Latin American and Caribbean region. Through this program, the IDB provides assistance to countries in Latin America and the Caribbean to enable them to deal jointly with issues that cut across regions, such as biodiversity, public safety and rural development. The IDB provides the program with funding as well as technical assistance and assistance for project execution. Unlike international cooperation in which technical assistance is provided through the introduction of third parties and outside consultants, in this program the projects are formed by the beneficiary countries themselves, which then request assistance from the IDB. It is thought that this leads to a greater sense of ownership on the part of beneficiary countries.⁵⁸

The RPG program is made up of the following six main elements:

- Activities through cooperation among nations: The nations involved cooperate with one another
 at all stages of the project (issue identification, proposal submission, project formation, project
 implementation, confirmation of project sustainability).
- Governance by beneficiary countries themselves: The project is managed not by the IDB and relevant institutions but by the beneficiary countries themselves.
- Demand-driven: The beneficiary countries identify development issues in their own country and select solutions and the partners who will implement those solutions. Ultimately projects must be based on the needs of beneficiary countries.
- Bottom-up approach: The provision of technical solutions for development issues is emphasized.
- South-south cooperation: The project learns from and references the good practices in other projects being implemented in the region or in other regions.
- Cooperation with strategic partners: Execution of the project through strategic cooperation with private companies, civil society, etc.

The table below shows the achievements of assistance conducted from 2005 through 2008. Since the program was started in 2004, the number of projects has continued to increase, and 15 projects were approved in 2008. The amount of assistance money is stable at around USD 9 million. The amount of assistance per project ranges from USD 200,000 to around USD 2 million, with most projects involving less than USD 1 million in assistance money.

Table 21 Achievements of IDB Regional Public Goods Program

Year	Number of projects (approved)	Assistance amount (unit: USD)
2005	8	8,800,000
2006	11	9,700,000
2007	12	9,750,000
2008	15	9,650,000

ource: IDB (2009) "Regional Public Goods: Promoting Innovative Solutions for Latin America and the Caribbean".

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⁵⁸ IDB (2009) "Regional Public Goods: Promoting Innovative Solutions for Latin America and the Caribbean"

2.2.4 UNFPA

The United Nations Population Fund (UNFPA) is the UN agency that has been involved in south-south cooperation for the longest time, and it considers triangular cooperation to be a mandate of the organization.⁵⁹ According to the representative at the UNFPA Brazil office (who is also the Argentine office representative), a great deal of international attention is currently being focused on south-south cooperation. Particularly in Latin America, emerging nations that have achieved economic growth are becoming new donors, and the importance of south-south cooperation that resulted in the involvement of these countries is expected to continue to increase in the future. At the same time, the UNFPA intends to deploy in Latin America the south-south cooperation by such emerging nations, as a new modality for triangular assistance supported by developed nations.

The countries of Latin America share a common history of development after having gained independence from colonial rule, and they have also faced many issues such as being under military rule, economic crisis and so on. They have many similarities in terms of political mechanisms as well, making this a region in which it is comparatively easy to implement south-south cooperation based on a common background.

At present, UNFPA is establishing a regional strategy for the promotion of south-south cooperation in Latin America. This will be a permanent mechanism for promoting south-south cooperation in the region, with the UNFPA Brazil office representative serving as representative. The objective of this regional strategy is to improve the capabilities of institutions in each country and share information. UNFPA will utilize the wide-ranging network of UN agencies to identify needs in beneficiary countries and match those needs with a country whose good practices can meet them. Moreover, although UNFPA has established a global strategy for south-south cooperation, Latin America is the first region for which a regional strategy has been established. According to UNFPA, while UN agencies have a wealth of assistance expertise, they have few assistance resources of their own, so they are able to expand assistance by complementing their resources with those of bilateral donors and vice versa. Triangular cooperation is also thought to be an effective way of avoiding the duplication of assistance among donors.

3. Achievements in triangular cooperation by Japan

3.1 Policy relating to triangular cooperation

Japan's Official Development Assistance Charter was approved by the Cabinet in 2003. In September of 2004, in a policy address on diplomacy in Latin America in the city of Sao Paulo, Brazil, then Prime Minister Koizumi spoke of "A Vision for a New Japan-Latin America Partnership." This new vision was based on the two main pillars of cooperation and exchange, and it aimed to revitalize the economic relationship between Japan and Latin America, deal with various issues affecting the international community, and promote mutual understanding and person-to-person exchanges. Among these goals, the most emphasis was on revitalizing the economic relationship.

This vision is made up of five parts:

- Enhanced dialogue including at the summit level
- A strengthening of the integrated public-private approach
- Preparation of a framework to help stimulate economic relations (EPA, etc.)
- Stepped-up efforts to expand business opportunities

⁵⁹ Interview at UNFPA Brazil office conducted

- Enhanced cooperation between regional institutions and the international community

Triangular cooperation (south-south cooperation) was one of the things specified in the category of "stepped-up efforts to expand business opportunities."

As a framework for promoting triangular cooperation, Japan has concluded Partnership Programs with four countries in the Latin American region: Brazil, Argentina, Chile, and Mexico. The following table presents an overview of each of these Partnership Programs and when they were concluded.

Table 22 Content of Partnership Programs in Individual Countries and Date Concluded

Target Country	Content of Partnership Program and Date Concluded	
Brazil	Began in 2000. Priority regions are Portuguese-Speaking African Countries (Angola, Mozambique, etc.) and Latin America. In October 2007, the first Japan-Brazil joint project (first dispatch of Brazilian specialist to Africa under this Partnership Program) was realized.	
Argentina	Signed in 2001. A joint survey was conducted of countries in the surrounding region in order to confirm needs, and third country training and other projects are being implemented primarily in the field of agriculture.	
Chile	Began in 1999. Third country group training, third country specialist dispatch, international seminars, project type projects and so on have been implemented for Latin America. In February 2003, an evaluation was conducted and an agreement for an upgraded JCPP was concluded at that time.	
Mexico	Signed in October 2003 (third country training and other projects had been implemented prior to that time). Third country group training, third country specialist dispatch, and joint projects are being implemented for Latin America.	

Source: JICA reference

3.2 Achievements for each scheme

3.2.1 Third country training

The following table shows the fields in which third country training was implemented in four Partnership Program countries from 2005 through 2008. With regard to Brazil, Argentina and Chile, assistance has increased in the field of agriculture, forestry, and fisheries. Compared to the other Partnership Program countries, Brazil is implementing a great deal of training in the fields of health and medical care and public sector and public welfare projects. Moreover, there is a comparatively large amount of training being conducted by Argentina and Mexico in the mining field.

Table 23 Achievements in Third Country Training in Each Field (number of projects implemented 2005-2008)

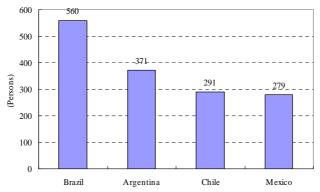
Field	Brazil	Argentina	Chile	Mexico
Mining	2	5	2	4
Agriculture, forestry, and fisheries	8	6	6	1
Planning and administration	4	4	3	2
Social welfare	1	1	-	2
Health and medical care	6	-	1	1
Commerce and tourism	-	-	1	1
Public sector / public welfare projects	4	-	-	4
Personnel	-	-	-	1
Other	1	2	2	1
Total	27	18	15	16

Notes

- 1 Does not include continuing projects that span multiple fiscal years (new projects only).
- 2 Cases in which there are two or more categories for a single project number are categorized as "Other."
- 3 These figures include bilateral technical cooperation projects in which Third Country Training was included as part of the project.

Source: References from JICA Latin America Department

Of the Partnership Program countries, Brazil accepted the largest number of trainees — 560 persons — in third country training projects implemented from 2005 to 2008. Next came Argentina with 371 persons, followed by Chile with 291 persons and Mexico with 279 persons.



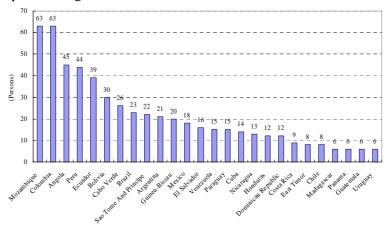
Note: Includes trainees dispatched in bilateral technical cooperation projects in which Third Country Training was included as part of the project.

Source: References from JICA Latin America Department

Fig. 10 Number of Researchers Involved in Third Country Research by Country (2005-2008)

(1) Brazil

The beneficiary countries for third country training implemented in Brazil from 2005 through 2008 are shown below. Third country training in Brazil is characterized by many trainees from Latin America as well as from Portuguese-Speaking African Countries such as Mozambique and Angola.



Notes

Does not include continuing projects that span multiple fiscal years (new projects only).

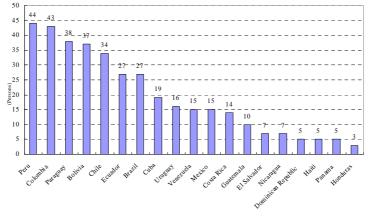
Includes trainees dispatched in bilateral technical cooperation projects in which Third Country Training was included as part of the project.

Source: Prepared based on references from JICA Latin America Department

Beneficiary Countries for Third Country Training in Brazil and Number of **Participants (2005-2008)**

(2) Argentina

The beneficiary countries for third country training implemented in Argentina from 2005 through 2008 are shown below. Peru accounts for the largest number of trainees, followed by Colombia, Paraguay, and Bolivia. According to the Argentine Ministry of Foreign Affairs, the priority beneficiary countries for Argentina are Bolivia, Paraguay, and Haiti, and this matches the countries from which the third country trainees come. The number of third country training participants from Haiti is small, but it plays a major role as a target for assistance through the FO-AR.



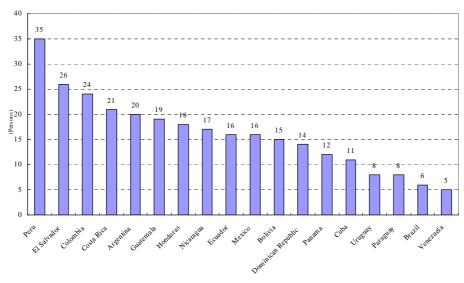
Notes Does not include continuing projects that span multiple fiscal years (new projects only).

Includes trainees dispatched in bilateral technical cooperation projects in which Third Country Training was included as part of the project.

Fig. 12 Beneficiary Countries for Third Country Training in Argentina and **Number of Participants (2005-2008)**

(3) Chile

The beneficiary countries for third country training implemented in Chile from 2005 through 2008 are shown below. Peru accounts for the largest number of participants, followed by El Salvador, Colombia and Costa Rica. Unlike Brazil and Argentina, many of the participants come from Latin America.



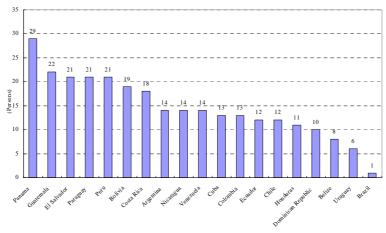
- Notes
- 1 Does not include continuing projects that span multiple fiscal years (new projects only).
- 2 Includes trainees dispatched in bilateral technical cooperation projects in which Third Country Training was included as part of the project.

Source: Prepared based on references from JICA Latin America Department

Fig. 13 Beneficiary Countries for Third Country Training in Chile and Number of Participants (2005-2008)

(4) Mexico

The beneficiary countries for third country training implemented in Mexico from 2005 through 2008 are shown below. Panama accounts for the largest number of participants, followed by Guatemala, El Salvador and Paraguay.



- Notes
- 1 Does not include continuing projects that span multiple fiscal years (new projects only).
- 2 Includes trainees dispatched in bilateral technical cooperation projects in which Third Country Training was included as part of the project.

Fig. 14 Beneficiary Countries for Third Country Training in Mexico and Number of Participants (2005-2008)

3.2.2 Third country specialist dispatch

The fields for the dispatch of specialists to third countries from the four Partnership Program countries from 2006 through 2008 are shown below. Partnership Program specialists numbering 148 were dispatched as third country specialists during this period.

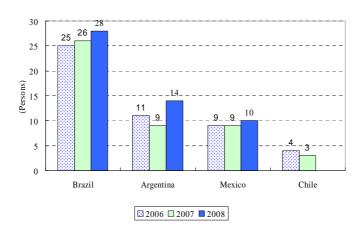
Brazil accounted for the largest number of dispatched specialists at 79, followed by Argentina at 34, and Mexico at 28. Chile dispatched 7 specialists, and in 2008 it did not send any new specialists. By field, agriculture, forestry, and fisheries accounted for the largest number of specialists from Brazil and Argentina, indicating that, as in the case of third country training, these countries have strong capabilities in the field of agriculture, forestry, and fisheries. Mexico dispatched many specialists in the area of public sector and public welfare projects.

Table 24 Achievements in Third Country Specialist Dispatch in Each Field (number of specialists dispatched in 2006-2008)

Field	Brazil	Argentina	Chile	Mexico
Mining	2	10	-	1
Agriculture, forestry, and fisheries	34	13	5	2
Planning and administration	20	8	1	2
Health and medical care	10	3	-	-
Commerce and tourism	-	-	-	7
Public sector and public welfare projects	6	-	-	16
Personnel	6	-	1	-
Other	1	-	-	-
Total	79	34	7	28

Note: Figures are for new specialist dispatch only, based on international agreements. As specialists dispatched by means of Resident Project Enhancement Funds are not included, figures may differ from those kept by individual resident offices.

Source: Prepared based on references from JICA Latin America Department



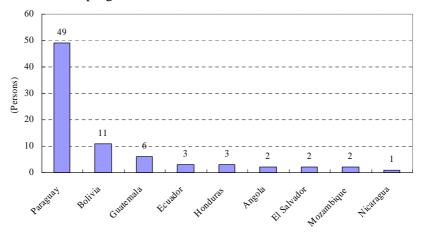
Note: Figures are for new specialist dispatch only, based on international agreements. As

specialists dispatched by means of Resident Project Enhancement Funds are not included, figures may differ from those kept by individual resident offices.

Fig. 15 Achievements in Third Country Specialist Dispatch by Year and Field

(1) Brazil

The destinations for third country specialist dispatch from Brazil in the years 2006 through 2008 are shown below. Paraguay accounted for the largest number at 49, followed by Bolivia and Guatemala. Specialists were dispatched to Paraguay primarily through the "Assistance for Diversification of the Beekeeping Industry (to expand production of propolis, pollen, etc., and improve quality)" project. 12 specialists each were dispatched to Paraguay in 2006 and 2007 under this program.



Note: Figures are for new specialist dispatch only, based on international agreements. As

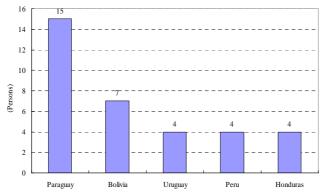
specialists dispatched by means of Resident Project Enhancement Funds are not included, figures may differ from those kept by individual resident offices.

Source: Prepared based on references from JICA Latin America Department

Fig. 16 Number of specialists Dispatched to Third Countries by Brazil (2006-2008)

(2) Argentina

The destinations for third country specialist dispatch from Argentina in the years 2006 through 2008 are shown below. Paraguay accounted for the largest number at 15, followed by Bolivia and Uruguay. Specialists were dispatched to Paraguay primarily through the "Project to Enhance Container Inspection and Certification Functions," as well as the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation."



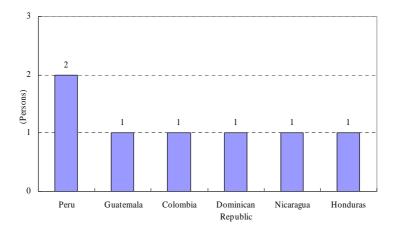
Note: Figures are for new specialist dispatch only, based on international agreements. As specialists dispatched by means of Resident Project Enhancement Funds are not

included, figures may differ from those kept by individual resident offices.

Fig. 17 Number of specialists Dispatched to Third Countries by Argentina (2006-2008)

(3) Chile

The destinations for third country specialist dispatch from Chile in the years 2006 through 2008 are shown below. As noted earlier, the scale of specialist dispatch from Chile is comparatively small in relation to the other three Partnership Program countries, and only seven specialists in all were dispatched during the period.



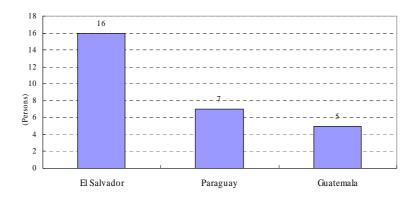
Note: Figures are for new specialist dispatch only, based on international agreements. As specialists dispatched by means of Resident Project Enhancement Funds are not included, figures may differ from those kept by individual resident offices.

Source: Prepared based on references from JICA Latin America Department

Fig. 18 Number of specialists Dispatched to Third Countries by Chile (2006-2008)

(4) Mexico

The destinations for third country specialist dispatch from Mexico in the years 2006 through 2008 are shown below. Ecuador accounted for the largest number at 16, followed by Paraguay and Guatemala. The view was expressed that specialist dispatch is difficult because it is hard for Mexico to send civil servants for extended periods of time.



Note: Figures are for new specialist dispatch only, based on international agreements. As specialists dispatched by means of Resident Project Enhancement Funds are not included, figures may differ from those kept by individual resident offices.

Fig. 19 Number of specialists Dispatched to Third Countries by Mexico (2006-2008)

3.2.3 Joint projects

(1) Brazil

In Brazil, technical cooperation projects under the JBPP framework began in 2007. Most of the joint projects with Brazil are triangular cooperation projects in the Portuguese-Speaking African Countries. Full-fledged assistance to Africa is being conducted through projects such as the "Triangular Cooperation for Agricultural Development of the Tropical Savannah (ProSAVANA-JBM)" project in Mozambique and the "Training for Capacity Building of Josina Machel Hospital" project in Angola.

Table 25 Joint Projects Implemented by Brazil and Japan

Period	Beneficiary Country	Project Name	Field
2006-2011*	Mozambique	Project for Groundwater Development for Rural Water Supply in Zambezia Province	Water resources and disaster prevention: regional water supply
2007-2010	Angola	Training for Capacity Building of Josina Machel Hospital	Health and medical care
2007-2010*	Madagascar	Project to Improve Maternal and Child Health Services in Republic of Madagascar	Health, medical care and maternal & child health: reproductive health
2007-2012*	Mexico	Improvement and Diffusion of Tropical Fruit Techniques for Small Farmers	Agricultural and rural development: agricultural development
2009-2011	Mozambique	Health Care Personnel Training Advisor Project	Health and medical care
FY 2009	Mozambique	Follow-up Cooperation for Vegetable Production Course	Agriculture, forestry, and fisheries
FY 2009	Mozambique	Follow-up Cooperation for International Course for Production, Processing, and Use of Cassava and Tropical Fruits	Agriculture, forestry, and fisheries
FY 2009	Mozambique	Triangular Cooperation for Agricultural Development of the Tropical Savannah (ProSAVANA-JBM	Agriculture, forestry, and fisheries
3 years starting January 2009	Paraguay	Assistance for Local Government Administration Capacity-Building	Governance: local administration
2009-2011	Honduras	Project to Support Local Police Activities	Governance: public safety
Expected to begin FY 2010	Bolivia	Added Value Agriculture Project to Improve Livelihood of Small Farmers in North La Paz	Agricultural and rural development: Agricultural development
Expected to begin FY 2010	Angola	Job Training	Personnel
2010-2010	Guatemala	Enhancement of Guatemala City and Urban Planning Functions	Urban development and regional development: urban development

Period	Beneficiary Country	Project Name	Field
2008-2010	Paraguay	Project to Assist Environmental Administration Through Decentralization**	Environmental management: general environmental administration
2007-2012	Colombia	Natural Forest Management and Sustainable Use Project**	Preservation of natural environment: sustainable use of natural resources
2003-2010	Bolivia	Project to Improve the Quality of School Education**	Education: primary education
2005-2010	Bolivia	Agriculture and Livestock Technology Center and General Agricultural Testing Center Project**	Agricultural and rural development: Agricultural development
2008-2013	Nicaragua	Project to Disseminate Sustainable Farming Technologies for Small Farmers	Agricultural and rural development: Agricultural development
2009-	Guatemala	Blood Bank**	Health and medical care

^{*} Started from FY 2008 as JBPP project.

Source: Prepared based on JICA website and references provided by JICA Latin America Department

(2) Argentina

In Argentina, joint projects are being implemented in the fields of agriculture, forestry, and fisheries and industrial technology enhancement, etc.

Table 26 Joint Projects Implemented by Argentina and Japan

Period	Beneficiary Country	Project Name	Field	
2004-2007	Paraguay	Project to Enhance Container Inspection and Certification Functions	Private sector development industrial technology	
			23	
2004-2007	Paraguay	Food Safety Hygiene and Nutrition	Other	
		Laboratory Improvement Project		
2002-2006	Paraguay	National Animal Hygiene Improvement Project	Agricultural and rural development	
2008-2011	Honduras	Development of Human Resources to Monitor the Poverty Reduction Strategy in Honduras	Government statistics	
2005-2010	Paraguay, Bolivia and Uruguay	Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation	Agricultural and rural development	
2007-2008	Bolivia	Poverty Reduction Monitoring System Improvement Project	Government statistics	
2009-2012	Paraguay	Aquaculture Industry Improvement Project	Fisheries aquaculture	

^{**} Implemented outside JBPP framework.

(3) Chile

Projects implemented in Chile include the "Physically Challenged Rehabilitation Course Project" and the "Export Promotion Function Capacity-Building Project."

Table 27 Joint Projects Implemented by Chile and Japan

Period	Beneficiary Country	Project Name	Field
2006-2011	Costa Rica	Physically Challenged Rehabilitation Course Project	Social security assistance for disabled persons
2007-2009	El Salvador	Export Promotion Function Capacity-Building Project	Private sector development: trade promotion
2008-2012	Paraguay	Project to Improve Early Remedial Teaching at the Department Level in Paraguay	Social security: social welfare
2009-2013	Colombia	Shellfish Cultivation Technology Project	Fisheries: aquaculture

Source: Prepared based on references provided by JICA Latin America Department

(4) Mexico

Joint projects implemented in Mexico were primarily in the field of earthquake-resistant technologies, waste treatment and other technical fields.

Table 28 Joint Projects Implemented by Mexico and Japan

Period	Beneficiary Country	Project Name	Field
2003-2008	El Salvador	Enhancement of the Construction Technology and Dissemination System of the Earthquake-Resistant "Vivienda Social" in El Salvador	Water resources and disaster prevention-earthquake disaster measures
2008-2011	El Salvador	Enhancement of the Construction Technology and Dissemination System of the Earthquake-Resistant "Vivienda Social" in El Salvador-Phase 2	Water resources and disaster prevention-earthquake disaster measures
2009-2012	Paraguay	Project to Strengthen Production of Sesame Seeds for Small Farmers in Paraguay	Agricultural and rural development
2009-2012	Guatemala	Waste Treatment Management Administration Capacity-Building Project	Environmental management-organizational improvement

Chapter 3 Impact Review of Triangular Cooperation by Japan

1. Eight cases studied

Using the method described in Section 1 of Chapter 1, eight projects to serve as case studies were selected, two for each of the four Partnership Program countries. The following table shows the eight projects that were selected.

Table 29 8 Case Study Projects

	Project	Implementing Country	Beneficiary Country (countries in bold were visited in the site survey)	Scheme
1	Agroforestry Course	Brazil	Bolivia , Colombia, Ecuador, Peru, Venezuela	Third country training
2	Assistance for Diversification of the Beekeeping Industry (project to expand production of propolis, pollen, etc., and improve quality)	Brazil	Paraguay	Third country specialist dispatch (individual specialist dispatch)
3	Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation (group review target project) Diagnose and study livestock diseases Project to improve livestock hygiene in Paraguay Project to improve livestock hygiene in	Argentina	Argentina, Bolivia , Paraguay , Uruguay	Third country training, third country specialist dispatch, joint project
4	Peru Preventive Management for Plant Viral Diseases	Argentina	Ecuador, Cuba, Colombia, Chile, Paraguay, Brazil, Venezuela, Peru, Bolivia	Third country training
5	Applicable Aquaculture Technologies	Chile	El Salvador	Third country training
6	Physically Challenged Rehabilitation Course Project in Chile (group review target project) Rehabilitation for physically challenged persons Improvement of early remedial services at the JCPP Paraguay regional level	Chile	Costa Rica, El Salvador, Honduras, Nicaragua, Guatemala, Panama, Dominican Republic, Colombia, Venezuela, Ecuador, Peru, Uruguay, Argentina, Bolivia, Paraguay	Third country training
7	 Appropriate Management of Solid and Hazardous Wastes (group review target project) Solid waste treatment Solid waste treatment and waste management Hazardous waste treatment Comprehensive waste treatment based on the 3Rs 	Mexico	Argentina, Uruguay, Ecuador, El Salvador, Cuba, Guatemala, Costa Rica, Colombia, Chile, Dominican Republic, Nicaragua, Panama, Paraguay, Venezuela, Peru, Honduras	Third country training
8	Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)	Mexico	El Salvador	Joint project

Moreover, in order to conduct an impact review of triangular cooperation in areas other than Latin America and the Caribbean, a study was conducted for Mozambique, one of the Portuguese-Speaking African Countries in which Japan is implementing triangular cooperation with Brazil. The projects for study in Mozambique were as follows.

	Project	Implementing Country	Beneficiary Country (countries in bold were visited in the site survey)	Scheme
1	Vegetable Production Course Project	Brazil	Angola, Mozambique, Sao Tome And Principe, Guinea-Bissau, Cabo Verde, East Timor, Bolivia, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Cuba	Third party training
2	International Course for Production, Processing and Use of Cassava and Tropical Fruits	Brazil	Angola, Cabo Verde, Guinea-Bissau, Sao Tome And Principe, Mozambique , East Timor	Third party training
3	Health Care Personnel Training Advisor Project	Brazil	Mozambique	Third party specialist dispatch

2. Review of each project (case studies)

2.1 Brazil

2.1.1 Agroforestry

(1) Project overview

This was a third country training project being implemented from April 2006 through March 2011. The implementing organization is the National Center for Agroforestry Research of the Easter Amazon within the Brazilian Agricultural Research Corporation (Embrapa CPATU). The following is a brief overview of the project.

To promote agriculture and livestock farming in the Amazon, the migration of small farmers and large-scale agricultural development by private companies has been promoted as a national policy in the Amazon region since the 1960s. However, development proceeded without sufficient consideration for the environment, and by 1988 forests covering 460,000 km² or 1.2 times the area of Japan had been destroyed. This led to an emphasis in the 1990s on preserving the tropical forests in the Amazon region, and a shift in agriculture was needed from ranchland development and slash-and-burn agriculture to sustainable agriculture and livestock farming methods that did not place such a great burden on the tropical forests. The method that began to attract a great deal of attention was agroforestry. As its name (a combination of "agriculture" and "forestry") implies, this is a method of conducting agriculture while at the same time creating forests. Trees are planted on arable land, and in between these trees rice, cacao, pepper, acai and other tropical crops with different harvest

seasons are planted. The income earned from harvesting these crops is distributed in the medium to long term. This method is characterized by enabling farmers to avoid the risk of sickness or a drop in the market that may occur with a single crop. Originally, this was a method of agriculture that was developed in a trial-and-error process by the Japanese immigrants who were settled mainly in the Tome-Acu region of the eastern Amazon. Agroforestry is now attracting a great deal of interest worldwide as a method of agriculture that can coexist with forests. JICA is working with the National Center for Agroforestry Research of the Easter Amazon within the Brazilian Agricultural Research Corporation (Embrapa CPATU) to train researchers and disseminate agroforestry techniques in neighboring countries such as Venezuela, Colombia, Peru, and Bolivia.

Table 30 Achievements in Implementation of Third Country Training

Fiscal Year	Number of Trainees Sent (and dispatching countries)
FY 2006	14 (Ecuador, Colombia, Venezuela, Peru, Bolivia)
FY 2007	13 (Ecuador, Colombia, Venezuela, Peru, Bolivia)
FY 2008	13 (Ecuador, Colombia, Peru)
FY 2009	15 (Bolivia, Peru, Ecuador, Colombia, Venezuela)

(2) Impact on capacity-building of implementing organization in Partnership Program country

This was the first time that Embrapa CPATU, the agency implementing the project, had served as the implementing agency for a third country training project. The opinion was expressed that, as a result of the four training sessions, not only the individual capabilities of the staff members but the organization capabilities of Embrapa CPATU as a whole were improved. Specifically, skills were improved in areas such as the following:

- (1) Simplification of procedures for training implementation
- (2) Smoother flow of project funds
- (3) Accumulation of information on tropical agriculture in neighboring countries
- (4) Improved planning capabilities for project content

In addition, based on its experience in third country training, a "mini third country training project (Mini -TCTP)" for Brazilian engineers is being planned as a project of Embrapa CPATU. In this project, Brazilian engineers in the country who are not eligible for third country training will be provided with training under the same program as JICA third country training, through funding provided by Embrapa CPATU. Embrapa CPATU considers that the training of domestic engineers will one day lead to technology transfer to neighboring countries such as Peru and Bolivia. The agency wants to continue to conduct training both at home and abroad in order to preserve the forests in the Amazon region, for which region-wide cooperation will be indispensable.

(3) Impact on improvement of development effectiveness in beneficiary country (Bolivia)

Interviews were conducted with three returning trainees from the Tropical Agriculture Research Center (Centro de Investigación Agrícola Tropical [CIAT]) in Bolivia who had participated in the third country training in Brazil. These interviews confirmed the following impact of participation in third country training.

⁶⁰ The following agroforestry-related bilateral cooperation projects have been implemented.
Project for Sustainable Agriculture Development Planning in the Eastern Amazon (March 1, 1999-February 29, 2004)
Project for Forest Conservation and Environmental Education in the Eastern Amazon (January 15, 2004-January 14, 2007)
Project for Sustainable Use of Forest Resources in Estuary Tidal Floodplains in Amapa (November 2, 2005-May 1, 2009)

① Start of agriculture technology courses for domestic producers

After returning from the training, the trainees began teaching courses in agricultural technology for small farmers. The framework for the courses had been established prior to their participation in training, but based on the content of the training in Brazil, they created courses designed for small farmers. Currently CIAT is implementing the following courses for small farmers.

Table 31 Courses for Small Farmers Implemented by Returning Trainees from CIAT (Bolivia)

Course	Designed For	Description
Coffee cultivation course	350 persons (small farmers)	Instruction in forest management methods for growing coffee
Mango and tangerine cultivation course	65 persons (small farmers)	Practical training in agroforestry (mixed fruit tree planting)
Natural fertilization making course	150 persons (small farmers)	Course for female small farmers. Instruction in how to make natural fertilizer using coffee bean skins and earthworms
Farming course for small farmers	200 persons (small farmers)	Made up of five courses on fruits, agroforestry, fertilizer, environmental management (forest planting) and livestock production (small animals: chickens, sheep, and goats)

Source: CIAT interviews

As the courses for small farmers at CIAT were started between 2008 and 2009 after the person in charge had participated in third country training in Brazil, concrete achievements (increase in cash income, etc.) have yet to become apparent. However, training is currently being implemented and technical guidance is being provided to small farmers. In addition, new courses for small farmers are also scheduled to begin from July 2010.⁶¹ The new courses will be on five topics, and each course is expected to have around 40 participants (making a total of 200 trainees). As a result, the ultimate number of persons receiving training is increasing.

Technical instruction for farmers (1)



Technical instruction for farmers (2)



Source: CIAT

⁶¹ As of CIAT interview (June 28, 2010).

② Improvement of fruit production technology

According to the person in charge of providing instruction in fruit growing technology at CIAT, it was previously thought that fruit could only be harvested once a year in Bolivia. Through the practice of agroforestry, however, it was learned that different products can be harvested several times a year. Agroforestry therefore provides significant economic advantages to small farmers, and it is also good for the environment. As a result, CIAT has begun conducting independent research into agroforestry. Among these efforts is an agroforestry project using the achachairu fruit, a Bolivian specialty. As the achachairu has great nutritional value and can also be used in pharmaceuticals, the use of the achachairu in this effort has focused attention on it as a possible export crop. Moreover, the vacant space produced beneath the achachairu trees can be used effectively by planting food crops such as corn and tomatoes. However, as mixed cultivation is only suitable for a period of five years after the achachairu trees have been planted (since after that time all of the nutrition in the soil will have been absorbed by the trees), tests are now being conducted to determine what type of combination is ideal.

Achachairu tree



Agroforestry farming being implemented in Bolivia



Source: CIAT

3 Sharing of information within organizations

After the return of the CIAT trainees from Brazil, the achievements of training were reported to all of the engineers at CIAT. In addition, a system was set up in which the trainees provided instruction on what they had learned in Brazil to each of the CIAT engineers located in various regions, and the CIAT engineers in turn passed on this information to farmers in their area. In addition, the agriculture and livestock farming engineers stationed in each municipality were also given instruction to enable them to provide assistance to producers.

4 Study of co-op organization

From the returning trainees, the opinion was expressed that they had learned a lot from studying the co-op organization in Brazil. These trainees had the impression that the Cooperativa Agrícola Mista de Tomé-Açu (CAMTA) cooperative in Tome-Acu, Brazil not only provided technical assistance to producers but also secured their access to markets and thereby helped farming households to increase their income. At present, a

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⁶² In 1990, when JICA conducted a technical cooperation project with CIAT, a study of fruit trees in Bolivia with great potential, and the achachairu was selected as a the most promising fruit tree.

study is underway in Bolivia to see whether an agricultural co-op like CAMTA can be established there as well. For example, farms in the Santa Cruz area produce many tangerines, but under present circumstances 100 tangerines net only BOB 3 (approximately JPY 20), so the producers are unable to cover their costs and cannot ship their products to market. Applying the lessons learned from CAMTA, however, CIAT has begun discussions with the municipal agriculture authorities and is requesting that the Santa Cruz departmental government purchase equipment that would enable farmers to switch from growing tangerines to producing jam.

(4) Issues

① Follow-up for returning trainees

As the biggest issue relating to the project, the person in charge of training at Embrapa cited insufficient follow-up for the returning trainees once the training has ended. The effect of the training is only tested after the trainees have returned to their own countries, and even though the returning trainees face various doubts when moving to put the training content into practice, the existing third country training framework does not include assistance measures to provide follow-up for these trainees. As a result, in some cases ongoing project execution has become difficult. For this reason, Embrapa is unable to determine how trainees are actually putting agroforestry into practice in the beneficiary countries and to provide appropriate assistance. An Embrapa specialist noted that the opinion had been expressed that a remote guidance system using the Internet and videoconferencing systems were needed for returning trainees, and that there is a great need to record the training content in video form and prepare review texts. Embrapa hopes that JICA will provide follow-up assistance for returning trainees and emphasized that follow-up efforts are also needed to improve the effectiveness of training.

2 Methods for implementing training

When third country training began, Embrapa had had no experience in providing instruction to engineers from other countries, and so it went through a trial-and-error process in order to find out what type of content at what depth should be taught. As a result, the content of the training varied considerably, and there were complaints from trainees to the effect that they were unable to fully understand the training content. Currently, the training content is being reviewed based on the experience from previous years and the method of instruction has been improved, for example to ensure that only the most essential items are taught. However, meeting the needs of trainees at different levels within a limited period of time is a major problem for Embrapa.

In addition, as training in Brazil is conducted in Portuguese, some of the trainees from Spanish-speaking countries experienced a language barrier at the outset of training. However, for the trainees who could speak neither Portuguese nor English, Embrapa staff members reviewed the training content and then arranged to translate and explain the indispensable key words and so on, with the result that the language barrier did not become a significant problem.

(5) Summary

When the survey results in (1) through (4) are compared in terms of the five evaluation items, they can be summarized as follows.

From the standpoint of effectiveness, agroforestry is beginning to be put into practice in Bolivia in accordance with the content of the third country training, and the trainees are

having an effect to a certain degree. Moreover, training and technical instruction mainly by the returning trainees is being conducted for farmers, and the content of the third country training is being used for this training as well.

In terms of appropriateness, this project can be said to be consistent with Japan's policy for assistance to Bolivia. Japan considers social development with the goal of reducing poverty to be a priority field, and assistance to the agricultural sector which is the target of this third country training project will help increase the income of small farmers in Bolivia. Therefore, it is in line with Japan's policy toward Bolivia and is appropriate.

In terms of efficiency, compared to the same type of training implemented in Japan, implementing the training in a third country was effective in reducing costs. As the personnel costs for instructors from the organization implementing the training (Embrapa) were borne by the Brazil side, and as a result of cost sharing with the Brazilian government, the cost burden borne by Japan was reduced. Accordingly, compared to implementing the training independently in Japan, third country training was effective in reducing project costs.

In terms of impact, capacity-building of the implementing organization in the Partnership Program can be cited. As noted in (2), the training planning, implementation, follow-up and other capabilities of the Embrapa staff were improved as a result of implementing the training. This was not established as one of the initial objectives of the project and is a benefit unique to triangular cooperation.

Finally, with regard to the project's sustainability, Embrapa plans to implement the same type of training within its own framework, and it is very likely that training will continue to be implemented even after the JICA assistance ends. Accordingly, it is thought that sustainability has been ensured. On the other hand, as noted in (4), a mechanism for follow-up activities in the beneficiary country is needed to ensure the effectiveness of the project.

3.1.2 Assistance for Diversification of the Beekeeping Industry (project to expand production of propolis, pollen, etc., and improve quality)

(1) Project overview

This was a triangular cooperation project in which a Japanese-Brazilian specialist was dispatched for a bilateral technical cooperation project⁶³ that Japan was implementing for Paraguay. As the dispatch of this specialist was not done through the Brazilian International Cooperation Agency, it can be considered to be triangular cooperation outside the framework of the JBPP. The following is an overview of this project.

JICA technical cooperation for the beekeeping industry in Paraguay began with the dispatch of a beekeeping survey mission in 1968. During the 20 years from 1970 to 1990, six specialists were sent for long periods of time. Cooperation was provided in five main areas:

- (1) Introduction of good quality queen bees and improved breeds
- (2) Introduction of royal jelly milking and production technology
- (3) Instruction in making beekeeping equipment and standardization
- (4) Instruction in establishing draft regulations for beekeeping methods
- (5) Improvement of research center at Beekeeping Department in Agriculture and Livestock Farming Ministry

Related projects that have been conducted in the past for Paraguay by Japan are as follows: Dispatch of Beekeeping Local Survey Group (November-December 1968) Long-term Dispatch of Beekeeping Specialists (Total of 6) (1970-1990) Japan Overseas Cooperation Volunteers (beekeeping) (May 1978-May 1981, April 2003-April 2005)

According to statistics, when beekeeping specialists were first dispatched in 1970, the industry was centered on small-scale family operations, with some 50 families engaged in beekeeping with a total of 4,000 beehives. In 1980, those figures had increased to 555 families with 10,250 beehives. In 1990, they increased further to 2,200 families and 26,100 beehives, and by 1999 they had increased again to 6,500 families and 40,250 beehives. Statistics in 2003 found 7,000 families and more than 45,000 beehives. These statistics attest to the success of JICA technical cooperation in this field since the 1970s.

Nevertheless, as there are no staff members in the research laboratory of the Beekeeping Department in the Agriculture and Livestock Farming Ministry who are skilled enough to provide instruction in the integrated hygiene and quality standards established in recent years for the Mercosur region, and as almost all of the beekeeping households are small farms that focus only on honey production, the production technology to diversity the beekeeping industry (to include propolis, pollen, etc.) and increase added value is not yet mature and has not resulted in improved lifestyles. As a result, the Agriculture and Livestock Farming Ministry has asked Japan to provide new technical cooperation with a view to improving regional beekeeping committees and the beekeeping production departments at agricultural cooperatives.

Based on the results of this study, JICA implemented the cooperation in the form of the "Project to Support Diversification of the Beekeeping Industry," a technical cooperation project.⁶⁴

(2) Impact on improvement of development effectiveness in beneficiary country

In this project, technical instruction was provided to 60 selected producers in the four regions. In each province, a committee made up of a representative and around ten10 members was set up in an effort to increase the effectiveness of the technical instruction. As the purpose of the project was to secure the income of the small farmers in farming communities, the producers were selected not from companies and the like but from among small farmers who have limited means of obtaining loans.

In 2005, after a propolis specialist was dispatched from Brazil, a Japanese-Brazilian specialist was stationed in Paraguay for around 15 days each month to provide beekeeping farmers in Paraguay with instruction in the complete process from bee handling methods to product creation. In addition, this project was originally expected to continue only until March 2007, but it was extended for a year until March 2008. Since 2008, when the period of cooperation ended, JICA volunteers have been dispatched to the target regions of the project to continue assistance in diversification of the beekeeping industry.

The honey and propolis that have been produced are sold directly to the market in Asuncion, providing the farmers with cash income. Moreover, in the future there are plans to expand the business to include pollen, honey wine, propoleo caramel, honey in small packets and other related products, and procedures are being initiated for research and purchase for this purpose. The products will be packaged using a method that meets Mercosur standards, and activities are being conducted with the idea of eventually expanding to manufacture for export. Thanks to guidance from the Brazilian specialist, it is now possible to produce green propolis, which formerly was produced only in Brazil, in Paraguay as well (although it is not yet being sold). In this way, the project also aimed to provide the organizational capacity-building needed for market creation.

⁶⁴ Even after the end of the assistance period for this project in 2008, volunteers have been dispatched and are continuing to provide assistance for the diversification of the beekeeping industry.

⁵⁵ DIPA (Paraguay) interview

⁶⁶ Achievements from bilateral cooperation include expanded number of producers and increased production. In the initial stages of the project, there were only around 100 producing households in Paraguay, but at present there are 11,000, and the

(3) Issues

According to interviews in Paraguay, one of the issues with this project was the importance of selecting the third country specialist. As in this project it is necessary to contact beekeeping families directly to promote the project, a specialist capable of conducting both technical instruction and project management was needed. Moreover, at the execution stage, the purchase of equipment for quality control and other items agreed upon in the initial plan were not realized, as the content changed to that of a project focused on beekeeping production. Moreover, at the time of project formation, the Chaco Province with many poor farmers and indigenous people was included in the target regions for the project, but ultimately for various reasons it was excluded from the target areas for the project.

(4) Summary

When the survey results in (1) through (3) are compared in terms of the five evaluation items, they can be summarized as follows.

From the standpoint of effectiveness, based also on the results of the project implemented in Paraguay in the past, the number of beekeeping farmers was increased from 100 households to 11,000 households, while at the same time the production was expanded from honey only to include propolis as well, helping to increase the cash earnings of the farmers. For these reasons, the project can be said to have been highly effective. Moreover, this kind of assistance to small-scale farmers also helps to reduce poverty in Paraguay, and so it can be considered to be consistent with Japan's policy for assistance to Paraguay.

In terms of efficiency, the dispatch of the Brazilian specialist enabled the project costs to be reduced as compared to sending a specialist from Japan. Moreover, this project involved the simultaneous promotion of bilateral Japan-Paraguay cooperation and triangular cooperation, and this is thought to have been effective in ensuring project efficiency.

In terms of impact, efforts were conducted to expand the effect of the project, such as by beginning efforts to market not only domestically but with a view to exporting as well. Moreover, with regard to the sustainability of the project, since the end of the period of cooperation, JICA volunteers have continued to provide assistance aimed at diversifying the beekeeping industry, and an organization is being built to promote independent efforts by Paraguay.

3.1.3 Vegetable Production Course Project (Third Country Training) (2006-2010)

(1) Project overview

This was a third country training project with the National Center for Vegetable Research (Centro Nacional de Pesquisa de Hortalicas [CNPH]) in the Brazilian Agricultural Research Corporation (Embrapa) serving as implementing organization. The project was formed based on the "Vegetable Research" and "Vegetable Research Follow-up" bilateral cooperation projects implemented by Japan and Brazil from 1987 through 1994. It was implemented for the purpose of transferring vegetable production technologies transferred through bilateral cooperation to engineers from other Latin American countries and the Portuguese-Speaking African Countries.

In Phase 1 of the project, implemented from 1995 through 1999, third country training in "Vegetable Production" was implemented. Subsequently, Phase 2 of the project was implemented from 2000 through 2004. In December of 2005, an agreement was signed to implement a "Vegetable Production Course Project (2006-2010)" as Phase 3 of the project, and training was implemented beginning in 2006. From Mozambique, one of the countries visited in the site survey, trainees are being dispatched from the Ministry of Agriculture, etc. The purpose of the project is to conduct technology transfer to trainees in the following areas, and to form a trainee network.

- Specialist technologies relating to vegetable growing technology
- Knowledge of major vegetable varieties and characteristics
- Theory and methods of major vegetable disease and pest control
- Practical knowledge of vegetable production technologies taught through observation and practical training
- Ability to help improve production capacity in each country

(2) Impact on improvement of development effectiveness in beneficiary country

In the site survey of Mozambique, interviews were conducted with returning trainees (Ministry of Agriculture employees) who had participated in training in 2008 regarding the achievements of training. The interviewees said that the impact of this third country training included the formation of follow-up projects.

The returning trainees in the Mozambique Ministry of Agriculture who were interviewed applied to JICA for follow-up projects in order to disseminate the vegetable production and processing technologies that they had acquired in Brazil throughout Mozambique, and the project was approved in FY 2009. This project is currently being implemented as a Vegetable Production Course Follow-up Project. As one part of the project, equipment for processing vegetables is scheduled to be delivered to the Moamba District located 70 km from the capital of Maputo.⁶⁷

In the Moamba District that is the site of the follow-up project, primarily tomatoes, cabbage, lettuce, green peppers, chili peppers and other vegetables are cultivated. All of these vegetables are grown for the domestic market, and they are not exported to neighboring countries. In 1999, an agricultural cooperative was established, forming a association made up of producers, but cooperative marketing and the like is not being conducted; vegetable production and sale is being conducted on the individual farming household level. The cooperative has no equipment for processing vegetables, and brokers who come from Maputo to conduct stocking sell harvested vegetables without packaging. For this reason, the vegetables are generally sold at a low price, and the price decreases particularly during harvest season when there is an oversupply. The equipment delivered to the Moamba District in the third country training follow-up project consisted of refrigerators, vegetable cleaning equipment, packaging equipment, instruments, tomato bottling, and packaging equipment and so on. Use of this equipment would enable the vegetables to be packaged in plastic containers and refrigerated and then shipped in a scheduled manner. Moreover, the packaged vegetables could also be shipped to high-end restaurants and large hotels in Maputo as added value products, which would lead to increased income for farming households. Furthermore, the Moamba District is near (approximately 30 km from) South Africa and is also close to

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 $^{^{67}}$ As of the end of August 2010, the equipment was being managed by the Ministry of Agriculture and had not been provided to the Moamba District.

Maputo, and the idea of producing vegetables for export to South Africa in the future is currently being studied. Plans call for the equipment to be managed primarily by the agricultural cooperative. Delivery of this equipment is expected to enable the farmers themselves to establish vegetable cultivation plans on their own initiative.

Another of the achievements in the Moamba District that was cited is the agricultural training for farmers. This was started by returning trainees, and so far two training sessions have been held, on vegetable production and business planning. As a program to follow these training sessions, training in vegetable processing is expected to be implemented. According to the returning trainees coordinating the project, currently the Brazilian government is being sounded out about the idea of dispatching a Brazilian specialist. One of the farmers in the Moamba District who had received training in vegetable production reported that the training had enabled him to improve the method of fertilizer application, resulting in increased crop yield. Moreover, 25 persons from among the members of the agricultural cooperative participated in the training session on business planning, and the training focused on how to provide increased added value to agricultural products.

In general, after trainees return to their home countries, starting new projects in their own country has been a major issue, and for that reason the formation of follow-up projects such as in this case is extremely important to enable the technologies to take root in the beneficiary country. JICA is holding workshops and the like in Mozambique on how to apply for follow-up projects, and it would be best if assistance in starting up projects by returning trainees were to be continued through efforts such as these.

Refrigerator provided in JICA follow-up project



Vegetable field in the Moamba region



Source: MRI photographs

(3) Issues

In the follow-up project for the third country training implemented in the Moamba District, which was visited in the survey, equipment for processing vegetables had been purchased, but the equipment was being stored by the Ministry of Foreign Affairs in a warehouse in Maputo, and as of the time of the site survey it had not been delivered to the site. According to the person in charge at the Ministry of Agriculture, the major reason that the provision of equipment has been stalled is that repairs to the warehouse in which the equipment will be installed have been delayed. However, at the time the project was planned, repair costs for the warehouse were not anticipated, and it is difficult to secure additional money in the budget for this purpose. In this way, although follow-up projects are being started up as

initiatives started by returning trainees, in some cases projects are not being executed smoothly due to the consensus-forming process on the part of government agencies at the site, as well as budgetary control and so on.

(4) Summary

This project has helped to improve the level of vegetable production and processing technology in Mozambique and the level of agricultural technology on the part of small farmers, and it can be said to have been very effective. Moreover, as farming technologies that are easy to apply to the natural environment in Mozambique can be transferred from Brazil, assistance that is more suited to the needs of Mozambique can be achieved as compared to bilateral cooperation. The agricultural assistance for Mozambique is consistent with the agricultural assistance that is one facet of "accelerating growth" which is one of the policies for Japanese aid to Africa, and it is also consistent with assistance designed to achieve the Millennium Development Goals. Accordingly, it can be said to be highly appropriate.

In addition, implementing training in Brazil enables instruction to be given in Portuguese, with the result that it is excellent in terms of efficiency as well. In terms of the sustainability of the project, follow-up projects have been initiated, and the project is expected to be implemented on an ongoing basis, based on initiatives from the Mozambique side.

However, within the scope of the interviews conducted during the site visit, the impact of the project could not be confirmed.

3.1.4 International Course for Production, Processing and Use of Cassava and Tropical Fruits (Third Country Training) (2007-2011)

(1) Project overview

This is an ongoing project relating to the "Comprehensive Development of Mandioka and Tropical Fruit Growing Course" third country training project implemented from 2001 through 2005. It is becoming clear that cassavas and tropical fruits are a valuable crop that can accommodate the low technology cultivation methods practiced by small farmers in developing countries, and can also serve as a valuable source of nutrition for both people and livestock. Moreover, through processing they can also increase the income from the farming business. In addition, the technologies developed by the Brazilian Agricultural Research Corporation (Embrapa) have great utility in the Portuguese-Speaking African Countries (Países Africanos de Língua Oficial Portuguesa [PALOPS]), East Timor and other Latin American countries whose climatic and geographical environments are very similar to those of Brazil. Accordingly, it is thought that conducting technology transfer to these regions in cooperation with Brazil will lead to an improvement in the level of technology of small farmers and an increase in income.

For this reason, based on the achievements of the "Comprehensive Development of Mandioka and Tropical Fruit Growing Course" third country training project, the "International Course for Production, Processing and Use of Cassava and Tropical Fruits" was initiated as a new third country training project.

(2) Impact on improvement of development effectiveness in beneficiary country

In the site survey in Mozambique, interviews regarding the effect of the training were conducted with returning trainees who had participated in the "Comprehensive Development of Mandioka and Tropical Fruit Growing Course" and "International Course for Production, Processing and Use of Cassava and Tropical Fruits" third country training projects. The returning trainees expressed the opinion that, in general, the training content had proven useful in activities following their return to their country.

① Start-up of new projects

Returning trainees affiliated with the International Potato Center participated in the "Comprehensive Development of Mandioka and Tropical Fruit Growing Course" third country training project in 2003. After returning to their country from Brazil, they started up a project designed to increase cassava production, working in cooperation with an international NGO (the CARE Mozambique office). The project involved giving instruction to farmers in cassava production methods using grafting technology. Technical instruction is conducted at four technical centers in Inhambane Province.

After the completion of their training, the returning trainees visited Brazil again to purchase equipment in order to implement the joint project with CARE. The equipment purchase was funded independently by the International Potato Center (Centro Internacional de la Papa [CIP]), and the project has received no financial assistance from either JICA or the Brazilian government. The equipment purchased in Brazil has been installed at the technical centers and is being managed by a local farmer's organization.

2 Technical instruction for farmers

In the course of utilizing the information they had obtained in third country training, the returning trainees affiliated with the Mozambique National Agricultural Research Center (Instituto Investigação Agrária de Moçambique [IIAM]) prepared a manual on cassava production and processing, and this is being used for instruction to farmers. IIAM has set up technology dissemination centers (stations) in various locations to provide technical instruction to small farmers in rural areas, and is providing advice on the production, processing, etc., of agricultural products. Brazilian technologies relating to the plant breeding and production and processing is being transferred to farmers in Mozambique at these technical dissemination centers. According to the returning trainees at IIAM, the quality of the cassavas cultivated in Mozambique has improved as a result of the instruction provided by IIAM, and there is also an abundance of different types of cassava products. Moreover, the availability of cassava related products is also increasing.⁶⁸ At present, cassavas are being produced and sold primarily for the domestic market, but due to the large demand from other countries as well, in the future IIAM would like to conduct production and processing with a view to exporting products as well. For this purpose, they said they would like JICA to provide equipment for processing products for export, as well as technologies for producing products that meet the standards of overseas markets and so on.

(3) Issues

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One of the issues relating to this third country training project was said to be that a network was not formed with the implementing institution. Some of the returning trainees also said

⁶⁸ Interview with returning trainees from IIAM

that, following their return to Mozambique, they asked Embrapa (the institution implementing the training) some questions regarding cassava varieties and research, but there was no response, and they were dissatisfied with the fact that they were unable to receive assistance. Within the scope of the interviews conducted in the site survey, none of the returning trainees had regular exchanges with Embrapa following their return to Mozambique.

Moreover, with regard to the training content, even though the training was conducted for a very brief period of time (one month), it included a variety of different content, and it was pointed out that it was difficult to grasp all of the training content. These returning trainees expressed the opinion that it would be best to have specialized training on production, processing, breeding and other topics for which the need is great.

Finally, project formation and management expertise is needed for the trainees to actually implement the technologies they have learned in the form of start-up projects, and the view was expressed that the final week of training should be spent on training to acquire project management expertise. Some of the trainees expressed the view that this type of assistance was needed to ensure the sustainability of the research achievements.

(4) Summary

As in the case of the Vegetable Production Course Project, the project is helping to increase the income of small farmers in Mozambique, and so its effectiveness and appropriateness can be said to be high. Moreover, as follow-up projects are being promoted, the sustainability of the project has been secured.

3.1.5 Health Care Personnel Training Advisor Project (Third Country Specialist Dispatch) (2009-2011)

(1) Project overview

In order to assist in the achievements detailed in the PARPA II (the Mozambique version of a Poverty Reduction Strategy Paper [PRSP]) and Health Sector Strategic Plan prepared by Mozambique's Ministry of Health, Japan implemented the "Health Care Personnel Training Organization Capacity-Building Project" from 2005 through 2008 to assist in the training of health care personnel in Mozambique. In order to follow up on the recommendations obtained in the survey conducted as part of the project, the "Health Care Personnel Training Advisor" third country specialist dispatch project was implemented beginning in 2009. In this project, at the request of the Government of Mozambique, Dr. Lucy Ito, who had been sent from Brazil as a short-term specialist in the "Health Care Personnel Training Organization Capacity-Building Project" project, was sent again as a long-term specialist. This project marks the first time that a long-term specialist was sent from a third country other than Japan, and it has great significance in that it constitutes a new form of triangular cooperation.

(2) Impact on improvement of development effectiveness in beneficiary country ⁶⁹

According to Dr. Ito, Mozambique has no university to train doctors and nurses, and since 2008 medical care personnel have been trained at vocational schools only. At present, the Ministry of Health in Mozambique has 13 Personnel Training Centers, and each year 1,500 nurses, pharmacists, researchers and other personnel graduate from these centers. Dr. Ito's role is to establish a curriculum and prepare textbooks in order to improve the health care

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⁶⁹ As this project started in October 2009, it is difficult to assess the development effectiveness in Mozambique at this time. This section will discuss the contributions of the project involving Dr. Ito as expressed in the site survey in Mozambique.

personnel training programs at these Personnel Training Centers, and she is currently working to establish the curriculum based on her experience as a short-term specialist in the project during the previous fiscal year. Moreover, one of the problems facing the Personnel Training Centers is an insufficiency of teachers. A different approach is needed for teacher training as compared to the specialist training such as that needed for doctors and nurses, and Dr. Ito is also working to address the teacher-training situation.

The Ministry of Health in Mozambique has almost no staff members who can speak English, and daily work is conducted exclusively in Portuguese. There are 15 staff members in the personnel training sections within the Personnel Department of the Ministry of Health which serves as Dr. Ito's counterpart organization, but all of these staff members conduct work exclusively in Portuguese. Dr. Ito, who is able to give instruction in Portuguese, can communicate with the counterpart organization with great ease, and this is helping greatly to improve work efficiency. Moreover, because Mozambique and Brazil are both located in the subtropics, the types of disease afflicting both countries are similar, and Dr. Ito is utilizing her wealth of knowledge about such diseases while establishing the curriculum. In this way, it is thought that the combination of Dr. Ito's wealth of experience and expertise in the area of health care personnel training, her ability to conduct work in Portuguese, and her knowledge of diseases has increased the effectiveness of the project.

On the other hand, Dr. Ito also maintains an awareness of the differences between Mozambique and South America as she implements the project. In the past, Dr. Ito has had experience conducting health care personnel training in Peru and Paraguay, and she says she refers to the experience gained at those times while implementing the project, while at the same time acknowledging that new approaches are needed to deal with specific issues in Mozambique. For example, there is an almost compete lack of medicine-related statistical data in Mozambique, so the preparation of teaching materials and reference must begin with data collection. Even if information existed, however, the reliability would be low, and so data would have to be gathered again. For this reason, Dr. Ito is working with NGOs and international institutions that collect their own statistical data in order to gather basic information. In this way, Dr. Ito recognizes that the project in Mozambique is starting from zero, and she is promoting the project in accordance with the circumstances in Mozambique.

(3) Issues

Long-term dispatch of a third country specialist is a new initiative, and no systems have been established within the Brazilian ABC to deal with specialists and to guarantee their status after they return to their home countries and so on. In the case of Dr. Ito, the University of Sao Paulo with which she is affiliated gave her a two-year leave of absence and allowed her to engage in activities in Mozambique as a JICA specialist, so there were no issues involving the guarantee of status upon her return. However, on the assumption that there will be other long-term specialists dispatched from Brazil in the future, there is a need to create systems for the treatment of long-term specialists both at the Brazilian ABC and at JICA.

(4) Summary

This project was designed as to match the health personnel training strategy of the Government of Mozambique, and a comparison of the development issues in Mozambique and the development plan for Japanese assistance to Mozambique reveals it to be appropriate. In terms of effectiveness, impact, sustainability and efficiency, only a few months has passed since the project was initiated, so it is difficult to conduct a proper review. However, since the third country specialist has a wealth of knowledge regarding this field as well as the capacity to execute the project in Portuguese, the project is expected to be executed both efficiently and effectively.

2.2 Argentina

2.2.1 Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation

(1) Project overview

This was a wide-area joint project conducted from August 2005 through July 2010. The Faculty of Veterinary Science at the National University of La Plata in Argentina served as the implementing institution, and assistance was provided to Bolivia, Paraguay and Uruguay. The following is an overview of the project.

In the southern part of South America, efforts are underway to promote trade liberalization in the region, centering on the countries of the Common Market of the South (Mercado Común del Sur [MERCOSUR]). As one part of this effort, a free trade agreement (FTA) was concluded in 2003 with neighboring the Andean Community. In this way, economic ties are increasing in terms of both scope and depth. These moves are related to stimulating the livestock industry, one of the main industries in the region. At the same time, the circulation of livestock and livestock products across international borders has become very active, and the risk that livestock diseases will also cross borders and propagate is increasing as well.

Once the outbreak of a livestock disease occurs, it does not merely result in the loss of livestock and affect only the economy of farming households. The outbreak of foot-and-mouth disease in Uruguay in 2001 and in Argentina in 2001 and 2003 resulted in import bans being imposed by many other countries. As this example shows, such incidents have the potential to do serious damage to the national economy.

Among the countries in the southern part of South America, which have increasingly robust economic ties, this project centered on Argentina, a country has a Partnership Program cooperation agreement with Japan, and was conducted for Uruguay, Paraguay and Bolivia, countries in the MERCOSUR economic sphere in which there is an active livestock industry.

The major common problems facing these four countries in terms of livestock disease measures are twofold:

- 1) Apart from the training of people who want to go into the teaching or research professions, there is no postgraduate education system for practicing veterinarians, and so diagnoses in clinical settings tend to be made not on a scientific basis but based on individual experience and subjective opinion.
- 2) There is not adequate technology or networks relating to the preparation and dissemination of epidemiological information resources, and information at the point of production is not adequately reflected in disease control measures on the local and national level.

(2) Impact on capacity-building of implementing organization in Partnership Program country

① Improved capacity to implement technical cooperation projects

Technical cooperation projects with Japan have been conducted at the Faculty of Veterinary Science at the National University of La Plata since 1989 in an effort to improve the level of livestock hygiene technology. The first third country training at the Faculty of Veterinary Science at the National University of La Plata was conducted from 1996 through 2000. Subsequently, a follow-up technical cooperation project for

the technical cooperation project conducted starting in 1989 was implemented. In this way, technical cooperation was promoted in a manner that flexibly combined third country training and bilateral cooperation. Through this type of cooperative relationship with Japan, the Faculty of Veterinary Science at the National University of La Plata was able to accumulate expertise as an implementer of technical cooperation projects, while at the same time it moved to establish a structural framework for promoting international cooperation. In 1992, a department to handle international cooperation was established in the Faculty of Veterinary Science, and in 2004 this department was expanded and now takes up an entire floor. Currently there are three staff members at the Faculty of Veterinary Science at the National University of La Plata who are in charge of international cooperation, of which one is of Japanese ancestry. The procedures for dispatching specialists at the Faculty of Veterinary Science at the National University of La Plata overseas, within the third country specialist dispatch framework, are conducted by clerical staff other than the three staff members mentioned above. International cooperation projects impose a considerable burden in terms of the clerical procedures involved, and at the start of training the clerical procedures required a considerable period of time. Now, however, the staff members have gained experience in this area, so compared to the start of training, the time required for the procedures has been reduced.

In addition to triangular cooperation with Japan, the Faculty of Veterinary Science at the National University of La Plata also conducts technical cooperation for neighboring countries. When implementing such bilateral cooperation (south-south cooperation) projects as well, the expertise in technical cooperation learned through its cooperative relationship with Japan plays an important role.

② Strengthening of ties with Japan

The parties involved at the National University of La Plata consider the cooperative relationship with Japan that has been in place for many years as being extremely important, and they recognize the importance of continuing the cooperative relationship on an ongoing basis. In particular, the teaching staff members who have been involved with projects ever since technical cooperation projects began in 1989 stated that they are concerned that, in the case of third country training, the Japanese presence will become invisible and the relationship with Japan will end. They expressed their desire to always work together with Japan in conducting projects, not from the position of the recipient of technologies and financial assistance but out of the hope that it would prevent any disruption in the cooperative relationship with Japan, in which they have worked together as partners.

Furthermore, as there are some countries in the region that still do not know about the manner in which Japanese style projects proceed, some countries still do not have a clear understanding of Japan's approach to projects. However, as the Faculty of Veterinary Science at the National University of La Plata is thoroughly familiar with the way in which Japan promotes international cooperation projects, the view was expressed that it will be able to act as an intermediary with these countries. In this way, it was confirmed that expanding from bilateral cooperation to triangular cooperation fosters a relationship of trust between Japan and the implementing institution in the Partnership Program country.

Column: Effect of Technical Cooperation Projects by Japan on the National University of La Plata

Technical cooperation projects with Japan (bilateral cooperation) have had a major impact on the National University of La Plata. The table below shows the differences between 1989, when technical cooperation projects were first implemented, and now (2010). (In each case, figures are for the Faculty of Veterinary Science only.)

Differences between 1989 and 2010

	1989	2010
Number of publications and papers (annually)	6	130
Number of full-time research staff members	10	120
Content of activities	Only research implemented (activities for third parties not conducted)	More than 30 services provided (disease diagnosis, etc.) to entities outside the university (producers, etc.)

Naturally, not all of these effects are from technical cooperation projects with Japan. However, in interviews it was mentioned that Japanese cooperation had made a major contribution to the growth of the university in this manner.

In addition, it should be mentioned that 90% of the researchers participating in research in this country remain at the National University of La Plata after their training ends in order to conduct research at the university, increasing the knowledge stocks of the university.

(3) Impact on improvement of development effectiveness in beneficiary country

(1) Bolivia

In Bolivia, interviews regarding the impact of triangular cooperation were conducted with relevant persons at Gabriel René Moreno University (UAGRM), the staff of Veterinary Investigation and Diagnostic Laboratory (Laboratorio de Investigacion y Diagnostico Veterinario [LIDIVET]), and returning trainees affiliated with the Departmental Association of Poultry Farmers in Cochabamba (Asociación Departamental de Avicultores Cochabamba) and private laboratories. The major impact in Bolivia was as follows.

a. Dissemination of technology within the country

• Enhancement of instructional content at the university (Gabriel René Moreno University)

The trainees who participated from Gabriel René Moreno University were instructors at the Faculty of Veterinary Science, and they reorganized the curriculum of the courses in the Faculty of Veterinary Science to reflect the new knowledge and technologies that they had learned in the training. Moreover, in 2001 the university received assistance from Pedro de Valdivia University in Chile to establish a graduate school, and participation in third country training at National University of

La Plata in 2001 enabled the formation of a network with National University of La Plata. Assistance in putting together a curriculum for the graduate school was also provided by specialists from National University of La Plata.⁷⁰

Preparation of textbook (Gabriel René Moreno University)

After the instructors at Gabriel René Moreno University (note: they were instructors at the time of the third country specialist dispatch project; now they work at a private laboratory) participated in third country training, they published a textbook on veterinary science based on the technologies they had learned in the training. The first edition was published in 2001, and a second edition was published in 2008. Funds to cover the costs involved in publishing the first edition were provided by JICA, but the returning trainees who wrote the textbook provided the funds themselves to publish the second edition.

• Instruction for other engineers (LIDIVET)

In addition to passing on what they have learned in the training to other researchers working at the same laboratory, returning trainees have also participated in government-sponsored seminars as instructors, given lectures on rabies measures and so on. Moreover, they have also prepared a teaching curriculum for engineers in other provinces, based on the curriculum of the third country training project itself. They say that, when engineers with varying levels of knowledge participate in training using this curriculum, they decide how to organize the curriculum based on their own experiences in participating in third country training.

b. Opening of private laboratory

After his return, one trainee opened a private laboratory and is conducting diagnosis of and research into livestock hygiene. The private laboratory is the only individually run laboratory to be approved by the Bolivian government, and it sends data on the results of livestock diagnoses to the National Service of Food Health and Safety of Bolivia (SENASAG) for use nationwide as basic data on livestock diagnosis.

The laboratory also plans to conduct joint research with private research organizations in Argentina. This can be considered to be a case in which the network that has been cultivated through third country training in Argentina is being used to maximum effect.

c. Improved capacity for diagnosis of rabies (LIDIVET)

The research conducted at the National University of La Plata extended to all aspects of livestock hygiene, but a period of approximately one week was spent on the subject of rabies. According to trainees from LIDAVET who participated in the rabies training held in Bolivia, they learned about techniques for testing for rabies in the third country training held in 2004, and as a result the diagnostic capability for rabies improved. After the trainees returned to their own country, it became possible to conduct many more diagnoses for rabies. The following table shows the achievements in rabies testing.

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Pedro de Valdivia University in Chile is also a university that has received technical cooperation assistance from JICA. Instructors from Gabriel René Moreno University participated in the JICA third country training that was conducted at Pedro de Valdivia University, resulting in the formation of a network with Pedro de Valdivia University and leading to the assistance for establishment of the graduate school. (However, there is no direct connection between the JICA project and the fact that Pedro de Valdivia University provided assistance for the establishment of the graduate school at Gabriel René Moreno University.) Triangular cooperation also helped in the establishment of the graduate school at the Faculty of Veterinary Science of Gabriel René Moreno University.

Table 32 Number of Rabies Tests at LIDIVET

Year	Approximate Number of Tests
2004	400/year
2005	1,300/year
2006-2009	700/year

Note: Participation in third country training in 2004

Source LIDIVET interview

The reason for the sudden increase in 2005 was that the general public became very aware of problem of rabies, and this led to an increase in the number of requests for rabies diagnosis. Since 2006, the number has been constant at approximately 700 per year. The fact that trainees learned diagnostic technologies in Argentina and became able to conduct accurate diagnoses quickly is thought to have led to the increase in the number of rabies diagnoses. The view was also expressed that the increase in the number of diagnoses has also helped to increase confidence in LIDIVET within Bolivia.

d. Participation in government committees

A trainee who had participated in the third country training at the National University of La Plata (and who is currently an instructor at Gabriel René Moreno University as a bird specialist) learned technologies for diagnosing bird diseases in the third country training, and in 2008, during the outbreak of avian flu, held seminars throughout Bolivia on measures to protect against avian flu. The seminars were held for chicken farmers, engineers, military personnel, medical care workers, university students and so on, and they provided instruction in measures to take in the event of an outbreak of avian flu as well as sharing with those involved the expertise in diagnostic methods learned at the National University of La Plata.

In 2008, with assistance from USAID, the returning trainee participated as a specialist in a government committee meeting on human beings and the avian flu, sponsored by the Ministry of Health and the Ministry of Agriculture. At this committee meeting, discussions on measures that should be taken in the event of an outbreak of avian flu were discussed by doctors, researchers, military and police personnel, livestock specialists and so on.

e. Formation of a local area researcher network

The thing that all returning trainees have in common is that, even after their return to their own countries, they keep in contact with other returning trainees and with people at the National University of La Plata. For example, after their return, LIDIVET staff have consulted National University of La Plata specialists regarding brucellosis, a cattle disease, and received advice on how to deal with this disease. Brucellosis outbreaks occur every year in Bolivia, and knowledge regarding the disease existed in Bolivia as well, but one time there was a very large outbreak in a certain region, and the LIDIVET staff thought there must be a method for diagnosing the disease more quickly and accurately, so they consulted the National University of La Plata. In other cases as well, returning trainees and researchers at the National University of La Plata have contacted one another on a regular basis, enabling them to resolve problems that occur in their day-to-day activities. Moreover, the LIDIVET third country training has also provided the opportunity that has led to active joint research and information exchanges with neighboring countries.

2 Paraguay

In Paraguay, interviews were conducted with returning trainees from the National University of Asuncion, and the following impact was confirmed. The National University of Asuncion has participated in third country training since 1996.

a. Improvement in the level of university services

Participants in third country training were instructors at the Faculty of Veterinary Science, researchers, and dissemination and service personnel. The content learned in the training is being reflected in the university curriculum. The Faculty of Veterinary Science at the National University of Asuncion is divided into five departments, and there are 2,100 students in all. Each course has provided instruction to approximately 1,200 students over a 10-year period. Accordingly, since the third country training began in 1996, the content of third country training has been provided as feedback for more than 6,000 students.

Moreover, the National University of Asuncion has a veterinary hospital where 23 veterinarians, specialists and other personnel work. The specialists also double as instructors. Participation by these specialists in the training program has led not only to knowledge being communicated to students but also to an improvement in the services provided at the veterinary hospital.

b. Network formation

Through participation in third country training, networks have been formed with the National University of La Plata. The National University of Asuncion and National University of La Plata share common problems, and they consult one another in the course of conducting research and diagnosis. There have also been cases in which the National University of La Plata becomes interested in diseases that are only found in Paraguay and conducts research into those diseases.

These networks have also expanded to form a network that links veterinary hospitals affiliated with universities in Paraguay and Argentina, and the idea of establishing a university-affiliated veterinary hospital association based on this network is currently being studied. Currently the study is being conducted only in the two countries, Paraguay and Argentina, but it is being conducted with a view to expanding the association to all of the Mercosur countries in the long term.

Furthermore, based on the human network created by triangular cooperation, ties with universities in Chile, Bolivia, Venezuela and other countries have also been strengthened, as shown by cases such as that in which students at the National University of La Plata have gone to study abroad in the doctoral course of the National University of Asuncion. Thanks to the experience of conducting triangular cooperation with Japan, when the same type of training is conducted at universities in other countries such as Chile, Brazil and Peru, the National University of Asuncion is an enthusiastic participant and is able to widen its circle of contacts, helping to make it a more international university.

c. Holding of seminars for farmers

Based on the experience gained from third country training, seminars were held at the National University of Asuncion for farmers and domestic livestock specialists. The National University of Asuncion has a department that provides technical assistance to

farmers, and it teaches courses that last three to five days and provide instruction to 20-25 students per course. Seven to ten courses are held each year, and the technologies obtained in triangular cooperation are reflected in this training for farmers as well.

③ Peru (PROMESA)

According to interviews at the National University of La Plata, stimulation of the livestock industry through improved livestock hygiene technology was cited as an example of the impact of the livestock hygiene project (PROMESA) that was implemented jointly in Peru by Japan and the National University of La Plata.

Previously, the National University of La Plata had provided assistance to Peru for the establishment of a laboratory for livestock disease diagnosis through a loan from the Inter-American Development Bank. Subsequently, triangular cooperation for Peru was initiated within the framework of the PPJA. The impact of this project on Peru's economy was considerable as well. As capacity-building was conducted for the National Service of Agrifood Health and Quality (Servicio Nacional de Sanidad Animal [SENASA]) in the Peru project, it has become possible to export chickens produced in Peru, providing a major impact in economic terms as well.

Those in charge at the National University of La Plata say that one of the reasons for the success of this project is the fact that there was a laboratory in Peru right from the start of the project. Because technologies were introduced to a place that already had an infrastructure in place, it was possible to efficiently train Peruvian specialists.

Although the PROMESA project has ended, the National University of La Plata has been told by Peru that it would like to continue to implement the same type of project with the National University of La Plata. However, as the National University of La Plata wants to conduct projects jointly with JICA as before, the university will conduct a careful study regarding assistance by the National University of La Plata alone.

(4) Issues

The returning trainees from the National University of La Plata cited follow-up for returning trainees as one of the issues relating to this third country training project. The view was expressed that it would be best if the National University of La Plata had a structure that could provide assistance when trainees apply the technologies they have learned in their training in actual practice in their home country, and that continued assistance from JICA was also needed.

Beneficiary countries expressed the view that a clearer division of roles for the participants in triangular cooperation was needed. In Paraguay, the allocation of expenses, etc., for the purchase of equipment and materials was not clear, and this led to confusion during project execution.

Furthermore, returning trainees from beneficiary countries expressed the opinion that a requirement of participation in third country training should be that, after the trainees return to their countries following the training, they have to remain in their affiliated institution and provide feedback to the organization regarding the content of training. Among the returning trainees are some who leave their affiliated organization for a variety of reasons and transfer to another organization, and in such cases the achievements that they have gained from the training do not remain in the organization. In order to ensure that technology transfer through training does not stop at the

individual researcher level, a request was made for JICA to impose the aforementioned condition on affiliated institutions.⁷¹

(5) Summary

This was a wide-area cooperation project that was promoted simultaneously in several beneficiary countries, and in the sense that it dealt with issues common to the region, its effectiveness can be said to be high. Moreover, the implementation of this project resulted not only in capacity-building of the implementing institutions in each beneficiary country but also in the strengthening of a mechanism for solidarity among the beneficiary countries, and this is thought to have led to regional capacity-building in the field of livestock hygiene.

In terms of the efficiency of the project, this is a case in which Japanese technology was efficiently transferred to countries in the surrounding region, with Argentina as the home country. Moreover, through cooperation with the National University of La Plata, at which a cooperative framework for serving as a counterpart in bilateral cooperation had been previously established, it was possible for instruction to be efficiently conducted for surrounding countries as well.

With regard to the impact of the project, capacity-building of the National University of La Plata (the implementing institution in the Partnership Program country) can be cited. As noted in (2), the capability for implementing assistance on the part of the National University of La Plata was increased, and this helped to strengthen its capabilities as a donor. One of the ways to ensure the sustainability of the project would be for the National University of La Plata to provide the beneficiary country with assistance for conducting follow-up activities.

2.2.2 Preventive Management for Plant Viral Diseases

(1) Project overview

This was a third country training project implemented as an extension of the "Plant Viral Disease Diagnosis and Identification" third country training project (2000-2004), which was implemented as a third country training project following the "Plant Virus Research Planning" project type technical cooperation project (1995-2000). Based on an R&D agreement signed in February 2000, the "Plant Viral Disease Diagnosis and Identification" third country training project was implemented for five years, and 52 trainees were accepted from neighboring countries. The results of the evaluation study conducted when implementation ended in FY 2003 confirmed that most of the former trainees were utilizing and disseminating the technologies and knowledge that they had mastered by holding seminars, providing services to third parties and so on at their affiliated organizations. Moreover, there was a strong desire on the part of the trainees' affiliated organizations to continue the same training project, and so the training is being implemented again from April 2006 until the end of March 2011 in response to a formal request from the implementing organization, the National Institute for Agricultural Technology (Instituto Nacional de Tecnología Agropecuaria [INTA]).

⁷¹ As these issues may arise in bilateral cooperation as well, they are not issues unique to triangular cooperation. However, as they were pointed out by numerous returning trainees, they have been included in this study.

Table 33 Number of Persons Dispatched for Third Country Training

Year	Number of Persons Dispatched (Dispatching Country)
FY 2006	9 (Ecuador 1, Cuba 1, Colombia 1, Chile 2, Paraguay 1, Peru 1, Bolivia 2) + Argentina 3
FY 2007	7 (Ecuador 1, Colombia 1, Chile 1, Brazil 1, Venezuela 1, Peru 1, Bolivia 1) + Argentina 6
FY 2008	7 (Ecuador 1, Cuba 1, Colombia 1, Chile 1, Paraguay 1, Venezuela 1, Peru 1) + Argentina 6
FY 2009	9 (Mexico 1, Colombia 3, Chile 1, Venezuela 1, Peru 1, Bolivia 1, Uruguay 1) + Argentina

(2) Impact on capacity-building of implementing organization in Partnership Program country

From researchers to instructors

Through third country training, the technical instruction capabilities of the INTA researchers has been improved. Researchers who had only conducted research up to that time have mastered the techniques of teaching through the process of providing instruction to trainees, growing from researchers to instructors.

Moreover, the implementation of third country training has also led to awareness-raising within INTA, engendering an awareness on the part of researchers of their role in providing technical cooperation to neighboring countries as a donor. This is also seen in the increase in bilateral cooperation (south-south cooperation) projects.

2 Deployment in bilateral cooperation

INTA has implemented bilateral cooperation for Venezuela since 2009. Using its abundant funds obtained from oil income, Venezuela has asked INTA to provide technical cooperation. The country is paying more than USD 5 million per year, and INTA is conducting 70 courses per year for specialists in Venezuela. However, INTA has not determined how the knowledge obtained through these courses is being applied within Venezuela.

Equipment and technologies introduced through technical cooperation projects (bilateral cooperation) with Japan is being used for these training efforts. In addition, the expertise in training program operation learned in JICA third country training projects is being employed as well. INTA is now planning to implement Phase 2 of the training that it implemented in 2009, and plans to include instruction in disease management in addition to the courses in Phase 1.

(3) Impact on improvement of development effectiveness in beneficiary country

(1) Bolivia

In Bolivia, interviews were held with representatives at PROINPA Cochabamba, the Patino Foundation and Gabriel René Moreno University, institutions that participated in the training at INTA-IFFIVE. The principal achievements of training as expressed in these interviews were as follows.

a. Activities for dissemination within the country (PROINPA and Gabriel René Moreno University)

As the content of the third country training conducted by IFFIVE had proven to be very useful, in 2005 IFFIVE specialists were invited to conduct training at PROINPA for two

to three weeks. 10-15 PROINPA staff members and researchers from other research institutions participated in the training, for which the same content used for the third country training implemented by IFFIVE was provided. The costs were borne by PROINPA. Researchers from the Patino Foundation also participated in the training, and the technologies learned in the training are being employed in Patino Foundation laboratories.

Moreover, as one of the researchers that had participated in the third country training was a university professor, the achievements of the training are being passed on to students in university classes. The professor also provides advice to students on writing papers. In these and other ways, the achievements of the training are being disseminated throughout the country.

b. Network formation

One of the things cited as a major achievement of third country training by all of the researchers that were interviewed was the fact that, through participation in third country training, a network was formed with INTA-IFFIVE. As a result, a cooperative framework has been built in which, even after the end of training, trainees are able to consult INTA-IFFIVE when some kind of problem arises and obtain advice on solutions. There is also a network linking researchers who have participated in third country training, and exchanges of information are being conducted through this network. According to the trainees, prior to participation in the training program there was no researcher network with other countries, and they had no idea what kind of research was being conducted in other countries. Now, however, by determining which researchers are conducting research in which countries on what topic (relating to plant viruses), the achievements of research can be shared efficiently. This makes it possible to avoid duplication of research within the region.

2 Paraguay

In Paraguay, interviews were conducted with returning trainees affiliated with the National Plant and Seed Quality and Health Service (Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas [SENAVE]), the government agricultural research institution. The principal achievements of training as expressed in these interviews were as follows.

a. Improvement of diagnostic capabilities

Prior to participation in the training program, the trainees had little knowledge of plant viral diseases, and they did not even have adequate lists, etc., of what plant viral diseases existed. As a result of participation in the training, however, their diagnostic capabilities were improved. References prepared by INTA-IFFIVE are being employed regularly even in day-to-day activities and have proven to be useful.

Moreover, the technologies learned in Argentina are also being used to conduct research at workshops on research techniques that are held between Mercosur countries. In this way, receiving instruction from a country (Argentina) whose technical level is more advanced in the region is promoting the sharing of knowledge and research techniques for diseases in the region.

b. Network formation

In Paraguay as well as in Bolivia, the opinion was expressed that the researcher networks formed as a result of third country training are extremely valuable. Even after

returning to their country, the trainees keep in contact with one another by email, telephone and so on, and there is active exchange of information relating to quick resolution of problems, research achievements, etc.

(4) Colombia

According to interviews at INTA, after the trainees who had participated in third country training in Colombia returned to their countries, in some cases they went to study abroad in Brazil, Mexico, Spain and other countries and eventually became top level researchers in their own country, and are now teaching at universities. As there is no doctoral program in plant viral diseases in Colombia, in some cases people contact JICA directly to request assistance in the form of equipment purchasing. Colombia has a great interest in third country training. At present, a request has been received from Colombia asking to have the same type of training implemented by INTA, and reportedly Colombia is currently at the stage of seeking financing for this project.

(4) Issues

According to interviews at INTA-IFFIVE, one of the issues relating to third country training is that differences in the capabilities of the trainees were evident. Depending on the participating country in particular, in some cases there are few people who want to participate in the training, and researchers with insufficient capabilities end up being selected. However, not allowing people to participate in the training because their level is too low will result in even greater disparity within the region, so maintaining a balance between the quality of the training and fairness is a problem. In addition, with regard to the procedures for implementing training, it was pointed out that the criteria for participation in third country training should be made stricter. This is also related to ensuring the quality of trainees as mentioned earlier. The content of the current application form for third country training is too general, making it impossible to properly determine the applicant's qualities and therefore difficult to appropriately conduct a review. One trainee commented that the JICA Tokyo head office and the JICA office in Argentina should impose stricter conditions on trainees and take their time in selecting trainees.

Furthermore, ensuring that the achievements of training take root is also an issue. Particularly in South America, in many cases when the government changes, the head of the national research institution changes as well, and this makes it difficult to conduct ongoing projects. As almost all researchers are dispatched from national research institutions, they tend to be affected by a change in administration. In this sense as well, follow-up is important to ensure that the knowledge learned by returning trainees is used, and there is a recognition that an organization needs to be established to ensure that knowledge and experience are accumulated by the organization and not just by individuals.

(5) Summary

This project, like the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation," can be said to have been highly effective in that it dealt with issues common to the region. Moreover, in that a network of third country training participants has been formed and a framework for cooperation is being built within the region, it was also highly successful in terms of effectiveness and sustainability as well.

With regard to efficiency, compared to training in Japan, the third country training was effective in reducing project costs.72 Moreover, implementing the project for several years

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⁷² See 3.3.1(1).

made it possible to efficiently determine the needs of the beneficiary country and establish training content.

With regard to impact, one example of the impact of this project is capacity-building of INTA-IFFIVE, the implementing organization in the Partnership Program country. As noted in (2), the assistance-providing capacity of INTA-IFFIVE was increased, and the project helped to strengthen the capabilities of INTA-IFFIVE with regard to its ability to independently implement technical cooperation in other countries.

2.3 Chile

2.3.1 Rehabilitation Project for Persons with Disabilities (third country training)

(1) Project overview

① Background to the project

Based on guidelines established by the Pan American Health Organization (PAHO), various efforts are underway in Latin America to assist disabled persons as one facet of measures to combat poverty. In almost all of the countries in the region, however, basic issues relating to maternal and child health (health and malnutrition) and so on are given priority, and at present there are not adequate policies and service frameworks in place to assist the disabled.

As part of the "Rehabilitation for Persons with Disabilities" technical assistance project that was implemented for five years beginning in August 2000, a rehabilitation assembly for countries in Latin America was held in September 2004 and attended by representatives from government-related rehabilitation organizations for persons with disabilities from 11 countries in Latin America, and the current situation of rehabilitation for persons with disabilities in each country and problems that need to be resolved were clarified. This third country training effort was requested by Chile with the objective of utilizing the experience gained in the aforementioned project and the achievements of the Latin American general assembly to ensure the participation of persons with disabilities in society in each country and help to improve their quality of life, through a rehabilitation policy for persons with disabilities, a service framework, promotion of regional rehabilitation, and instruction in medical treatment technologies by the Chilean Ministry of Welfare and the Pedro Aguirre Cerda Rehabilitation Center.

2 Project details

The following lectures, practical training sessions and workshops were implemented in the project.

- Disabled person support policy
- Development of legal systems
- Models for rehabilitation and inclusion of persons with disabilities
- Regulation and operation
- Formation of network of welfare organizations
- Family health and rehabilitation
- Inter-agency cooperation network
- Physical rehabilitation based on a neurological development approach
- Complementary treatment
- Preparing action plans
- Follow-up (dispatch of follow-up specialist)

(2) Impact on capacity-building of implementing organization in Partnership Program country

Based on the results of the site survey, the impact on capacity-building of the implementing organization in the Partnership Program country can be summed up as follows.

Through the third country training that has been conducted since 2006, the training participants are able to gain sufficient knowledge regarding laws and policies for physical disability prevention and rehabilitation, technologies for operation and management of physical disability prevention and rehabilitation, capacity for providing rehabilitation services, and capacity for developing projects relating to physical disability prevention and rehabilitation. Moreover, for returning trainees who apply the achievements of training in their own countries, a follow-up specialist is dispatched to provide additional instruction, and this has improved the rehabilitation service capacity of the target countries. In addition, to enhance the training content, since 2007 an effort has been made to work with international institutions to improve the training content, and PAHO (WHO) has provided three to four instructors each year. From an operational standpoint, this not only results in major economic support, but it also a sign that the project is highly regarded by WHO. In addition, the project is also highly rated by trainees who have participated in the training. Out of a total of seven possible points, the average rating of the project is 6.7 points.

The joint project conducted by means of triangular cooperation in Costa Rica ended in 2009, but it is still being implemented in Paraguay. In Bolivia as well, the project will be implemented from 2011 to 2013. In this sense, the project achieved not only capacity-building for the implementation of training but also the capability to provide concrete assistance to beneficiary countries.



Source: Chile Ministry of Welfare presentation reference

Fig. 20 Countries Participating in Third Country Training

(3) Impact on improvement of development effectiveness in beneficiary country

Based on the results of the site survey, the impact on improving development effectiveness in the beneficiary countries of Paraguay and Bolivia was as follows.⁷³

The public institution conducting rehabilitation in Paraguay ([PRODEPA]) received third country training in Chile in 2006 and 2007. The content learned in the training is now being implemented in the same type of services in the 17 departments of Paraguay and in the city of Asuncion.

Nevertheless, when services actually began, it was learned that there were insufficient personnel to enable services to be provided. For this reason, the person in charge at the Chilean Ministry of Welfare was invited to provide instruction in the methods for training the personnel needed to provide services, and third country training was conducted in Chile for relevant personnel at the Paraguay Ministry of Welfare, Ministry of Education and so on, which are the ministries involved in rehabilitation services. As a result, the number of persons able to provide rehabilitation services within Paraguay has gradually increased.

It was pointed out that one of the advantages of triangular cooperation is that, because it was implemented for neighboring countries, the parties share common problems and a common culture, and they have a positive attitude toward problem resolution.

With regard to Bolivia, it has been only a little over a year since the training was implemented, so the impact is still limited. Nevertheless, the trainees have begun studying the approach to activities at their own organizations, based on information on efforts in neighboring countries obtained through exchanges of views with trainees from other countries who participated in the third country training. In addition, trainees have visited other trainees in Peru who participated in the same training, further deepening their knowledge and expanding the human network. In this way, efforts have begun in Bolivia to achieve the participation of disabled persons in society.

(4) Issues

① Issues as seen from Partnership Program country

It was pointed out that, while it is important to provide assistance in completely new fields, a scheme by which aid is provided and then new assistance is provided after sustainability is confirmed should be studied from the perspective of both infrastructure and systems. The implementing organization feels that, as the foundation is already there in terms of resources and expertise, in the next phase a considerable ripple effect can be achieved with a smaller budget. The organization also hoped that more of an effort will be made to present triangular cooperation as an achievement of Japan.

② Issues as seen from beneficiary country

As the participants in the third country training project were not limited to doctors, there was a request to be aware of the level of specialist knowledge of participants when using specialist terminology. However, reportedly when subsequent technical cooperation was received, the Chile side appeared to be aware of the problem and was

⁷³ El Salvador also participated in the third country training, but at the time that the interview survey was conducted, one of the two trainees who had participated in the program had resigned (and was studying abroad in Spain), and the other was on a business trip, so it was not possible to interview them directly. Accordingly, this section is based on the interviews conducted in Paraguay.

making an effort to explain technical vocabulary, so an effort is already being made to resolve this problem.

The rehabilitation field is a highly specialized one. However, from the standpoint of providing comprehensive assistance for children with disabilities that combines both education and rehabilitation, some countries felt that the program could have been better.

It was noted that conducting follow-up activities by the implementing organization following the conclusion of training would enable the beneficiary country not only to communicate the achievements of the training but to maintain the connection that allows former trainees to ask questions that have arise in actual practice.

2.3.2 Shellfish Cultivation Technology Project (third country training)

(1) Project overview

① Background to the project

The development of aquaculture in Latin America is not only extremely significant in economic terms but also in terms of its major contribution from the standpoint of environmental preservation, reducing overfishing and so on. Moreover, in the sense of producing food that is high in protein and acquiring foreign currency through export, aquaculture is considered to be very important by many countries in Latin America. On the other hand, as the countries in Latin America share many common elements, in many ways the progress of aquaculture is dependent on the technical development and research efforts of researchers in each country.

In the light of this background, the Universidad Católica del Norte (Catholic University of the North) used the achievements of grant aid and long-term specialist dispatch from Japan, training in Japan and so on to implement third country training over a 15-year period through the "Shellfish Cultivation project (1988-1999) and "Shellfish Cultivation Technology" project (1998-2002).

Subsequently, utilizing the achievements of the aforementioned projects, the university conducted technical instruction in applicable shellfish cultivation technologies from 2003 through 2008, with an emphasis on practical methods for cultivation of the varieties of shellfish that inhabit the countries of Latin America.

② Project details

The project was divided into two parts: a theory course and a practice course. The following items were implemented.

Theory course

Biological perspective for the design of cultivation technologies

Design and technologies for marine farming facilities

Marine farming in controlled environments

Circulating water management (treatment and recirculation of both influent and effluent)

Practice course

Formation of cultivation technologies and selection of equipment

Establishment of hatching laboratory

Breeding laboratory for egg laying and young shellfish

Production of cultivation feed

(2) Impact on capacity-building of implementing organization in Partnership Program country

Implementation of the JCPP project helped to promote technology transfer in the area of shellfish cultivation in Latin America. At the Catholic University of the North, it was not a single specialist who was engaged in the project but the university as a whole, with 14 staff members.

In general, the main activities of a university are education, research and the dissemination of information. Triangular cooperation projects cannot only improve the academic aspects but also are capable of disseminating research achievements. Accordingly, for the university, participation in this project is seen as having tremendous significance.

(3) Impact on improvement of development effectiveness in beneficiary country

Based on the results of the site survey, the impact on improving development effectiveness in the beneficiary country of El Salvador was as follows.

The implementing institution for the Shellfish Cultivation Technology Project was the Center for Fisheries and Aquaculture Development (Aquaculture and Centro de Desarrollo de la Pesca y la Acuicultura [CENDEPESCA]), which is under the jurisdiction of the Ministry of Agriculture of El Salvador. The purpose of the project was to improve the livelihood of small fishermen in the eastern coastal region of El Salvador — an area that has seen a catastrophic decline in shellfish resources in recent years due to indiscriminate fishing by shellfish gatherers — through the development of artificial seedling production technologies and the introduction of aquaculture using artificial seedlings. By applying the shellfish cultivation technologies they had learned in third country training in Chile to the development of arch shell seedling production technologies, trainees from El Salvador were able to produce artificial seedlings. Moreover, effective dissemination of shellfish cultivation technology that employs artificial seedlings would have been difficult for CENDEPESCA alone, but dissemination of the technology was conducted through comprehensive cooperation from JICA that included the dispatch of village development dissemination staff and other volunteers, and with active participation from local NGOs and small fishermen.

Although the duration of the training itself was short, the trainees learned technologies for phytoplankton cultivation, so the production efficiency of the institution as a whole was also improved. The cultivation methodology learned in the training was passed on to colleagues at the workplace, improving the level of knowledge of all employees.

In addition, the trainees keep in email contact with the other people who participated in the training, helping each other out with regard to aquaculture-related problems. Moreover, actually being able to visit the country and see the work up close was very educational.

(4) Issues

① Issues as seen from Partnership Program country

The Catholic University of the North implements not only third country training but also technical cooperation in shellfish cultivation for countries in Latin America that include Peru, Colombia and El Salvador. It functions as the nucleus for Japan's technical cooperation in the area of aquaculture in Latin America. Moreover, Although at present 20 countries in Latin America have applied for participation in third country training, as a strategy for producing achievements in third country training, the quota of 16 persons in 16 countries deployed up to now has been changed to 12 persons in 8 countries.. The reason that there is such a great need for shellfish cultivation in Latin America is that aquaculture is helping measures to resolve the problem of poverty in Latin America, which is seen as a major problem in the region. This fact was also confirmed in the interviews conducted in El Salvador.

Nevertheless, the training equipment at the Catholic University of the North was provided by JICA in 1985, and it has aged considerably. Moreover, it is becoming difficult for the countries participating in the training to procure the equipment used for training.⁷⁴

As a result of these circumstances, based on the current cultivation needs of the beneficiary countries and the wishes of the Catholic University of the North, the implementing institution, Japan should study the idea of upgrading the Catholic University of the North equipment and provide technologies relating to its use.

There is great interest in the high level of technical expertise of the Catholic University of the North on the part of other countries as well. South Korea has made specific inquiries to the Catholic University of the North and AGCI regarding its desire for third country training and the like in cooperation with South Korea as soon as the current JCPP third country training project ends. In this case, the Catholic University of the North declined the South Korean inquiry. However, if further problems arise with the implementing environment for third country training, it is entirely possible that the policy of the Catholic University of the North may change. For this reason, Japan should move forward quickly with the study regarding upgrading equipment and providing relevant technology.

Moreover, the Catholic University of the North is very interested in expanding the scope of its technical cooperation to include not only Latin American countries but countries in Africa as well. Accordingly, it is thought that the Catholic University of the North can play a major role in the field of aquaculture when Japan provides assistance to Africa as well.

2 Issues as seen from beneficiary country

Participants from El Salvador who had previously participated in third country training expressed opinions such as "shellfish cultivation is a very large topic, so I think the training period should be longer to enable people involved in the aquaculture industry to tackle a variety of topics" and "a forum for more detailed discussion of methodologies for cultivating individual species is needed."

Moreover, in interviews at the Catholic University of the North, there were a variety of requests from the countries participating in third country training, including "the

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⁷⁴ Interview at Catholic University of the North (Chile).

achievements of shellfish cultivation require a long period of time, so we would like you to provide assistance not only in the form of third country training but continuing assistance that includes technical guidance for cultivation," "we would like you to provide assistance not only for cultivation technologies but also for the infrastructure aspects that require high-level technologies for water tanks and water supply and so on," "to get the kind of seawater needed for cultivation, laws pertaining to aquaculture must be in place, and we would like assistance in this area as well," and "we would like you to implement training for fish as well as shellfish."

Cultivation facility at Catholic University of the North





Source: MRI photographs

(5) Summary

When the survey results in (1) through (4) are compared in terms of the five evaluation items, they can be summarized as follows.

From the standpoint of effectiveness, cultivation of arch shell shellfish based on the content of the third country training has begun in El Salvador, and therefore results from the training are evident to a certain degree. Moreover, the returning trainees are playing a central role in passing on the training content to their colleagues at the same research institutions, and so the content of third country training is being utilized.

In terms of appropriateness, this project can be said to be consistent with Japan's assistance policy to Latin America. Japan considers aquaculture to be one of the key fields making a contribution to policies aimed at resolving the problem of poverty, considered to be one of the most important problems in Latin America. Accordingly, assistance for the field of marine resources in the form of third country training helps to increase the income of small fishermen and is appropriate in terms of Japan's policy for aid to Latin America.

In terms of efficiency, third country training is effective in reducing costs as compared to implementation of the same training content in Japan. The reason is that the personnel expenses for the instructors of the institution implementing the training (the Catholic University of the North) are provided by Chile. In addition, the cost burden on the Japan side is reduced due to cost sharing with the Chilean government. For these and other reasons, compared to Japan implementing the training independently, third country training is effective in reducing project costs.

With regard to impact, capacity-building through interchange on the part of the people who participated in the training can be cited. Through the implementation of the training, the participants exchange emails with one another and help each other out with problems

relating to aquaculture. Having the opportunity to actually visit the country and see the work at close hand enables both sides to improve their capabilities. This type of impact was not established as one of the initial objectives of the project and is a benefit unique to triangular cooperation.

Finally, in terms of the sustainability of the project, it is highly likely that the Catholic University of the North will continue to implement third country training, and so the sustainability of the project is ensured. If for this reason JICA assistance were to end, it is possible that South Korea would promote triangular cooperation with the Catholic University of the North in Japan's place. However, as it is possible that cutting off cooperation with an institution that possesses Japan's outstanding aquaculture technology might become a major negative for Japan in terms of competition with South Korea and other fishing nations in future international cooperation in Latin America as well as in Africa (as is being considered by the Catholic University of the North), the evaluation of sustainability should be conducted with care.

2.4 Mexico

2.4.1 Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)

(1) Project overview

① Background to the project

The earthquakes that occurred successively in El Salvador in January and February of 2001 caused major damage in that country, primarily large-scale collapse of hillsides and collapse of and damage to houses and other buildings. According to a report from the Housing and Urban Development Agency of the Ministry of Public Works, of the total number of 1,362,163 ordinary homes in the country, 107,787 or approximately 8% were damaged and 163,866 or 12% were destroyed. Moreover, 60% of the damaged residences were homes of poor people with an income of less than double the minimum wage.

Following the earthquake, an earthquake disaster prevention seminar and Project Cycle Management (PCM) workshop for Japan-Mexico south-south cooperation projects were held in cooperation with the JICA Mexico office from March 20 to 28, 2001. From El Salvador, representatives from the Housing and Urban Development Agency, the Housing Agency, NGOs, universities and other entities, and, from Mexico, earthquake and disaster mitigation specialists and representatives from the Mexican Ministry of Foreign Affairs (at the time, the Mexico International Development Cooperation Agency [IMEXCID]) participated in the workshop and conducted an analysis of the problem. The central issues were confirmed to be the following:

- 1) Improvement of earthquake resistance of popular housing and private homes in which low-income families live
- 2) Improvement of organization and programs of disaster mitigation agencies
- 3) Establishment of monitoring and prediction functions
- 4) Improvement of urban planning and social infrastructure from the standpoint of disaster mitigation
- 5) Establishment of disaster mitigation organization for residents

In order to resolve these development issues, the government of El Salvador centralized the monitoring and prediction departments that had previously been distributed among various ministries and agencies into the newly established National Service of Territorial Studies (Servicio Nacional de Estudios Territoriales [SNET]) in the Ministry of the Environment, and worked to strengthen the organization of disaster mitigation agencies and upgrade prediction functions. SNET also has a department to provide integrated disaster mitigation services for residents in order to improve the disaster mitigation organization for residents.

With the aim of enhancing its monitoring functions, JICA provided SNET with strong-motion seismographs. Nevertheless, El Salvador had neither the personnel nor the facilities to improve the earthquake-resistance of popular housing and private homes in which low-income families live. This led to the request for implementation of "demonstration of earthquake-resistance performance," "improvement of earthquake-resistant building technology," and "component-style technology dissemination" projects for low-income popular housing by Japan, which has an excellent reputation for its cooperation in this field.

② Project details

The project was made up of five components:

- Provision of the equipment needed for earthquake-resistance tests of popular housing and establishment of a testing facility framework
- Teaching of earthquake-resistance testing technologies to researchers and engineers at the implementing institution and improvement of the dissemination capabilities of dissemination personnel
- Completion of an earthquake-resistant popular housing model
- Establishment of a system for dissemination of the earthquake-resistant popular housing model
- Promotion of the construction of earthquake-resistant popular housing by low-income households

(2) Impact on capacity-building of implementing organization in Partnership Program country

Based on the results of the site survey, the impact on capacity-building of the implementing organization in the Partnership Program country can be summed up as follows:

① Updating of specialist knowledge and achievement of new technical development

Although the National Center for Prevention of Disasters (Centro Nacional de Prevención de Desastres [CENAPRED]) is an organization whose role is to provide knowledge, it was possible for the organization to receive updated knowledge from Japanese specialists by means of triangular cooperation. In addition, out-of-plane stress tests were devised and disseminated jointly by Mexico and El Salvador. These tests are excellent in that they can be applied not only for earthquakes but for wind as well. Moreover, normally test results and knowledge tend to remain at the individual researcher level, but in this case the achievements of research were shared through documentation, publicity and so on.

② Formation of earthquake resistance network

This project provided the opportunity to promote the establishment of an earthquake resistance network within Mexico. Once universities located in earthquake-afflicted states in Mexico found out about the achievements of CENAPRED, they made both official and unofficial requests for cooperation and exchange of views. These included private universities, among them some with laboratories.

Other examples of impact that were pointed out was that "the El Salvador earthquake-resistant residence project was selected as a Best Practices project by the Japan-UNESCO Earthquake Resistance Working Group, and the entire group that participated in the project was selected as members of that workshop." In addition, it is possible that the achievements of this project will be reflected in the building standards for cities in Mexico. In this way, information on Japanese earthquake-resistant structures has been documented and is having an impact on standards and laws in Mexico.

(3) mpact on improvement of development effectiveness in beneficiary country

Based on the results of the site survey, the impact on improving development effectiveness in the beneficiary country of El Salvador was as follows

① Implementation of training in earthquake-resistant building technology research

Training received in Japan and Mexico has played a major role in the success of triangular cooperation. Many people at the counterpart institution in El Salvador have received training in Japan (for example, a one-year course in earthquake resistance engineering at the University of Tsukuba), and they have become able to conduct tests by themselves. In addition, the capability to disseminate the technologies that they have learned has been improved due to the dispatch of specialists from CENAPRED and training in Mexico.

Moreover, the fact that the Mexican specialist at CENAPRED has maintained close ties with Japanese specialists is also a major factor. This made it possible to teach not only technology in Mexico but the latest technology from Japan as well. The Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN) project was a major success due to the combination of the high level of technical expertise of Japanese specialists and the similarities between Mexico and El Salvador (in terms of home building materials, soil, topography, earthquake movements, and building standards). Through triangular cooperation, it was possible to use knowledge possessed by Mexico to transfer knowledge at the site.

2 Verification and improvement of earthquake-resistance of popular housing and preparation of popular housing models

The entities involved in the TAISHIN project played a leading role in dissemination activities to people on three levels:

- 1) Directors of agencies involved with popular housing
- 2) Housing specialists and students
- 3) The community at large

For each level, original texts and pamphlets and the like were prepared and distributed during training, at earthquake safety fairs and other venues.

Moreover, as one of the achievements of training in Japan is knowledge of the importance of educational activities to the community, which is the ultimate beneficiary, FUNDASAL has been active in holding TAISHIN forums and seminars for students at industrial high schools. In addition, 200,000 pamphlets have been distributed to elementary school students with the aim of teaching them about earthquake resistance.

At FUNDASAL the goal is to accept 400 trainees per year, and so far 882 trainees have been accepted. Trainees are accepted not only from house manufacturers and specialists but also people working in the plastering industry who actually build houses, in order to increase awareness.

3 Establishment of pilot program for improvement of popular housing in cooperation with FONAVIPO (housing fund) and other related institutions

A coalition of universities, FUNDASAL and other relevant domestic organizations worked to review the building code in El Salvador that had been left almost unchanged since it was established in Acapulco, Mexico in 1965.

In addition, the following types of impact were confirmed in El Salvador.

At Central American University, the Ministry of Education provided a budget in 2009 for earthquake resistance research (research into concrete blocks) for the first time. As the university also provided a budget in that same year, it was possible to replenish the research equipment that had been used in Phase 1. This assistance made possible stand-alone research into earthquake resistance at the university.

The University of El Salvador has been a pioneer in El Salvador in the area of structural testing. In addition, while public and private universities in El Salvador, public organizations, and NGOs such as FUNDASAL formerly did not link up and conduct research on the same problem, through the TAISHIN project they were able to conduct practical research on this topic.

(4) Issues

① Issues as seen from Partnership Program country

The fact that there were many requests for assistance from international aid organizations and it was impossible to accommodate all of the requests was mentioned (this issue arose because, in accordance with the purpose of the establishment of CENAPRED, priority must be given to domestic requests). In addition, the number of staff members at the Center is not sufficient to accommodate long-term dispatch of personnel, so at present requests from international aid organizations can be accommodated only with a maximum duration of ten days for personnel dispatched overseas. Moreover, with regard to this project, it was pointed out that medium- to long-term efforts are needed not only in terms of technical assistance but also to secure a continued investment budget for the project and so on.

② Issues as seen from beneficiary country

Although this is not an issue with this project, in the future there are expected to be opportunities for El Salvador to provide assistance to neighboring countries, so a desire for "instruction in the spirit of providing assistance to other countries" and "provision of knowledge and expertise regarding earthquake resistance in the future as well" was expressed in order to prepare for that time.

Joint project conducted on Central American University campus

(Left: Test equipment in laboratory for the study of earthquake-resistant architecture technology / Right: Work shirt for training room staff bearing "Earthquake-Resistance" logo)





Source: MRI photographs

Testing facility at University of El Salvador

(Left: Seismic testing facility / Right: Bricks used in earthquake-resistant residence tests)





Source: MRI photographs

(5) Summary

When the survey results in (1) through (4) are compared in terms of the five evaluation items, they can be summarized as follows:

From the standpoint of effectiveness, creation of a model earthquake-resistant residence and education of the general public in El Salvador based on the content of third country training were conducted, and a certain level of achievements are evident. In addition, the returning trainees played a leading role in conducting training and educational activities for not only the general public but for the people who are actually engaged in building homes. For this and other reasons, the project can be considered to have been effective.

In terms of appropriateness, this project is consistent with the policy of Japan with respect to assistance to El Salvador. Japan considers water resource and disaster mitigation including earthquake disaster mitigation measures to be a key area. Assistance for the field of disaster mitigation and earthquake disaster measures helps to improve the living environment in El Salvador and is appropriate in terms of Japan's policy with respect to El Salvador.

In terms of efficiency, compared to implementation of the same training content in Japan, joint project and third country training is effective in reducing costs. The reason is that the personnel expenses for the instructors of the institution implementing the training (CENAPRED) are provided by Mexico. In addition, the cost burden on the Japan side is reduced due to cost sharing with the Mexican government. For these and other reasons, project costs can be reduced as compared to Japan implementing the training independently.

With regard to impact, capacity-building of the implementing organization in the Partnership Program country can be cited. Fundamentally, CENAPRED staff members play the role of providing knowledge to beneficiary countries. In triangular cooperation, however, they are able to receive updated knowledge from specialists from Japan, which improves their own level of specialist knowledge. This type of impact was not established as one of the initial objectives of the project and is a benefit unique to triangular cooperation.

Finally, with regard to the sustainability of the project, CENAPRED is establishing a framework that will enable it to implement the same content as the training in El Salvador in the future as well, so the sustainability of the project is thought to have been ensured.

2.4.2 Appropriate Management of Solid and Hazardous Wastes (third country training)

(1) Project overview

Background to the project

In Mexico, research into ways to reduce the generation of solid and hazardous wastes and management of solid and hazardous wastes through cooperation and division of responsibilities among various entities concerned with wastes (federal government, local governments, general public, private companies, etc.) is being conducted based on assistance from Japan.

The National Center for Environmental Research and Training (Centro Nacional de Investigación y Capacitación Ambiental [CENICA]), which is playing a central role in this research, is the agency charged with conducting research and analysis of environmental issues in Mexico. Accordingly, the agency disseminates information and research achievements in the field of solid and hazardous wastes relating to research achievements in the management of solid and hazardous wastes, in addition to air and soil pollution, atmospheric monitoring, scientific hazardous substances and biosecurity, in the form of third country training.

CENICA also conducts personnel training on the aforementioned topics and functions as the reference laboratory for Latin America, and also conducts capability transfer to Latin American countries.

2 Project details

In third country training, training is implemented for the following content:

- Solid waste treatment methods
- Toxicity of dioxin
- Environmental education (efforts and education)

(2) Impact on capacity-building of implementing organization in Partnership Program country

Through this third country training, CENICA, which served as the implementing agency, was able to enhance its reputation. As expressed in its founding objectives, it is important to CENICA to continue to demonstrate leadership with regard to environmental issues in Latin America and the Caribbean, and to work on capacity development in this region. In this sense, third country training achieved a sufficient impact.

At last year's UN Climate Change Conference, CENICA was approved as a reference agency for volatile organic compounds (VOC) in the atmosphere. As a result, CENICA will continue to be responsible for providing technical assistance in the Central American and Caribbean region.

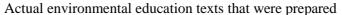
In the wake of this five-year third-country training program, a "Sustainable Waste Management" third-country training program based on the 3Rs is being implemented due to the great needs regarding waste on the part of overseas countries.

(3) Impact on improvement of development effectiveness in beneficiary country

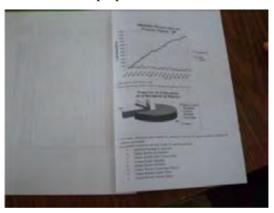
Interviews were conducted with the staff of the Salvadoran Municipal Development Institute (Instituto Salvadoreño de Desarrollo Municipal [ISDEM]) and the Anamoros city hall, which participated in third country training in 2006. As a result of these interviews, the following types of impact were confirmed:

① Education of elementary school students

Together with the JICA overseas cooperation team that had come from Japan, environmental education texts were prepared and distributed to 30 elementary schools in the city in an effort to educate the students.







Source: MRI photographs

② Garbage sorting

Formerly, garbage was all mixed together and disposed. As a result of receiving third country training, garbage that will become a producing source of dioxins is separated out of consideration for the toxicity of dioxins.

③ Recycling of plastic garbage

Great interest was shown in the 3Rs (Reduce, Reuse, Recycle), particularly recycling, during training. Upon the return of trainees to their own country, a mechanism was created in which the city buys plastic garbage produced within the city and sells it at the same price to a processing company.

④ Enactment of Waste Ordinance and construction of landfills in accordance with the ordinance

A waste-related ordinance was created. Specifically, the ordinance specifies what kinds of garbage can be taken to final disposal sites (for example, it requires that wastes produced at hospitals be processed separately). After the ordinance was created, a sanitary landfill was constructed in Santa Rosa de Lima.

Moreover, interviews with Bolivan (SOBOCE) staff members who had received the same training in Mexico confirmed the following impact:

Two Environment Ministry employees who had participated in the third country training conducted in Mexico in 2003 participated as advisors, and in around 2005 they began drafting laws relating to the treatment of wastes in Bolivia. With the Mexican waste treatment law as a reference, a draft law for solid waste treatment in Bolivia was formulated. This law is expected to contain detailed regulations regarding waste sorting, the agencies with jurisdiction over waste treatment (sharing of responsibilities), the construction of final disposal sites and so on. In all of these respects, the new draft law uses the Mexican law as a reference.

Furthermore, in the "Appropriate Management of Solid and hazardous wastes" ex-post facto assessment⁷⁵, following four points were cited as the impact of this project:

- More than 4,000 texts were distributed.
- These texts were used for capacity-building of 4,031 persons.
- 67% of training recipients are using or plan to use the knowledge they have learned in actual practice. This is evidence of the value of the knowledge obtained in the course.
- The project helped to improve hazardous waste management technology and processes in Latin America.

(4) **Issues**

① Issues as seen from Partnership Program country

As a mechanism was created entirely from scratch, preparation of the training program required a considerable amount of time. In addition, as the program stressed implementation methods, not enough follow-up and monitoring activities were conducted, and the impact on the beneficiary countries could not immediately be confirmed.

⁷⁵ Informe de la Evaluación de los Cursos Internacionales "Sistemas Integrados de Tratamiento de Aguas Residuales y su Reúso para un Medio Ambiente Sustentable" y "Manejo Adecuado de Residuos Sólidos y Peligrosos", 2007

In addition, an issue that was pointed out relating to the countries that participated in the training program was that this field is characterized by frequent rotations of personnel. Due to the political situation in Latin America as well, even if a trainee receives training, it may not be possible for the organization to accumulate the expertise as a result of personnel changes.

2 Issues as seen from beneficiary country

It was pointed out that when a third country training course is implemented, the training content should reflect a bit more of the circumstances of the countries participating in the third country training.

Specifically, in the case of El Salvador and Mexico, El Salvador is completely different in terms of the quantity of solid waste that is produced annually, so the specifications for Mexican facilities were not much help when considering the scale of facilities in the trainees' own country. The third country training trainee who made this comment, who was an employee of an agency that conducts training for the local government staff, said that it was not possible to provide information on the facility specifications when passing on the achievements of the training to local governments.

In addition, one trainee had wanted to conduct a site inspection to get a clearer picture of the facilities, but because there were so many classroom lectures, this was not possible. The trainee said that the training would be improved if more site inspections were included.

(5) Summary

When the survey results in (1) through (4) are compared in terms of the five evaluation items, they can be summarized as follows:

From the standpoint of effectiveness, solid and hazardous waste treatment and management activities are starting in El Salvador, etc., based on the content of the third country training, and therefore a certain level of results from the training are evident. Moreover, the returning trainees are playing a central role in environmental education activities at local elementary schools in cooperation with JICA volunteers, and the content of the third country training is being used in these activities as well.

In terms of appropriateness, the project can be said to be consistent with Japan's policy for aid to Central America. Japan considers improvement of the environmental management system to be a key field, and assistance for the environmental management field that was the focus of the third country training is designed to help improve the living environment in Central American countries. Accordingly, the project is consistent with Japan's policy toward Central America.

In terms of efficiency, third country training is effective in reducing costs as compared to implementation of the same training content in Japan. The reason is that the personnel expenses for the instructors of the institution implementing the training (CENICA) are provided by Mexico. In addition, the cost burden on the Japan side is reduced due to cost sharing with the Mexican government. For these and other reasons, compared to Japan implementing the training independently, third country training is effective in reducing project costs.

With regard to impact, capacity-building of the implementing institution in the Partnership Program country can be cited. Through implementation of the training, the ability of CENICA staff to plan and implement training content and conduct follow-up activities and

the like was improved. This was not established as one of the initial objectives of the project and is a benefit unique to triangular cooperation.

Finally, in terms of project sustainability, CENICA is currently implementing training together with JICA, but in the future, it is highly likely that CENICA will continue to implement training even after JICA assistance is ended. Accordingly, the sustainability of the project is thought to have been ensured.

Summary of impact review of triangular cooperation

3.1 **Impact on beneficiary countries**

Impact on improving project development effectiveness⁷⁶ 3.1.1

(1) Synergistic effect using appropriate technology

In triangular cooperation, technologies that have been transferred through bilateral cooperation from Japan to resource countries (Partnership Program countries, etc.), and which have developed in the resource countries to match the conditions in those countries, are then transferred to beneficiary countries. For this reason, compared to bilateral cooperation, it is easier to transfer more appropriate technologies that are a better fit for the situation in the beneficiary country. Accordingly, the advantage offered by triangular cooperation is that the technologies transferred from the Partnership Program country (the resource country) are better able to cope effectively with the problems that are specific to that region.

This is most noticeably seen primarily in assistance in agricultural fields, but it is also visible in fields relating to the building of social infrastructure such as disaster prevention and social systems.

In agricultural fields, the "Triangular Cooperation for Agricultural Development of the Tropical Savannah (through Japan-Brazil cooperation) (ProSAVANA-JBM)" project that is currently being implemented within the JBPP framework is a good example. In this project, the Japan-Brazil project for agricultural development of the Brazilian cerrado, implemented by Japan from 1979 to 2001, was used as a base to build a sustainable agricultural development model that considered environmental preservation for the tropical Savannah region of Mozambique, with the goal of achieving a competitive agriculture industry with an awareness of the market in addition to rural community and regional development. As a result of Japan-Brazil cooperation extending over approximately 20 years, the capabilities of Embrapa, the implementing agency on the Brazil side, were greatly enhanced, and knowledge on tropical savannah agricultural development technologies and environmental preservation was accumulated in Brazil. 77 74 Combining this technological capability and knowledge with Japan's expertise in agricultural development assistance in developing countries made it possible for Japan and Brazil to implement a project that would have been difficult for either of them to conduct independently.

Examples can be found in fields other than agriculture as well. For example, in the "Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)" conducted for El Salvador with Mexico as the resource country, the

⁷⁶ This chapter discusses the impact of triangular cooperation as confirmed in the site survey. It should be noted that this impact is not necessarily unique to triangular cooperation and may include in no small measure impact that is also seen in bilateral cooperation.

⁷⁷ In the interview, Carlos Magno, the former director of Embrapa, noted that the capabilities of the Brazilian engineers were greatly improved through cerrado development by Japan.

combination of Japan's high-level expertise in the area of disaster mitigation technologies and the similarities between Mexico and El Salvador (in terms of housing materials, soil, topography, earthquake movements, and building code) resulted not only in the development of earthquake-resistant popular housing models and awareness-building on the part of local residents, house construction companies and other entities but also in the receipt of requests for cooperation from Nicaragua and other neighboring countries. To Moreover, in the "Local Police Activities Support Project" implemented in Central America with Brazil as the resource country, the Japanese *koban* (police box) system, which Brazil had adapted in unique ways to meet the circumstances of that country, is currently being deployed through south-south cooperation by the Brazilian government as an effective system to ensure societal safety in Central America.

In this way, each of these technologies has been transferred from Japan to the resource country, but subsequently they have evolved to match the circumstances in the resource country. Together with assistance from Japan, transferring these technologies to beneficiary countries that are very similar to the resource country would produces a synergistic effect that could not be gained from bilateral cooperation.

Column: "Triangular Cooperation for Agricultural Development of the Tropical Savannah (through Japan-Brazil cooperation) (ProSAVANA-JBM)

• Evaluation of key people for triangular cooperation in Mozambique and Brazil

Dr. Ventura Macamo, advisor to the Minister of Agriculture of Mozambique, praises triangular cooperation as "a revolutionary scheme that enables each of the countries of Japan, Brazil and Mozambique to utilize its comparative predominance to create a synergistic effect." Dr. Macamo has high hopes for this project. Carlos Magno, former head of Embrapa and implementer of the project in Brazil, also calls triangular cooperation an "innovative assistance scheme" that builds win-win relationships in which both Japan and Brazil can utilize the superior points of both countries.

Moreover, Dr. Macamo also said that a major advantage is that technical cooperation is possible based on the results of cerrado development in Brazil, enabling the past experience of Japan and Brazil to be utilized. Carlos Magno, who was involved with the cerrado development project from the beginning, said that the transfer of Brazil's achievements to Mozambique based on this experience might make it possible for Mozambique to achieve the results obtained in Japan over a period of 40 years in only half that time. On the other hand, Dr. Macamo also pointed out that there are great differences between Brazil and Japan in terms of the agricultural production system, the scale of farming households, the literacy rate of farmers and so on, and so it would be essential to introduce technology dissemination staff and so on.

Both Dr. Macamo and Carlos Magno said that this project would be an example to the world of a new model agricultural project for sub-Saharan Africa, and they have great confidence as they work to promote the project.

(2) Commonalities between resource countries and beneficiary countries

If the Partnership Program country (the resource country) for triangular cooperation and the beneficiary country share the same language, communication goes more smoothly and

⁷⁸ According to interviews with FUNDASAL and the University of El Salvador.

⁷⁹ For example, Guatemala is introducing mobile police boxes, using Brazil's efforts as a reference. In addition, Brazil's Sao Paulo Military Police is playing an advisory role in El Salvador, Nicaragua and Honduras to promote regional police activities.

superior results are ensured at each stage of the project, from formation to execution and follow-up.

In third country training conducted in Brazil, Portuguese is used, and problems are evident in some cases in terms of communication with some of the trainees who have come from Spanish-speaking countries in Latin America. According to the institution implementing the training in Brazil, however, during training the key words are translated into Spanish, or the instructor speaks slowly to ensure proper communication with the trainees. Returning trainees who had participated in third country training in Brazil also stated that they thought there had been no particular communication problems. Even though Spanish and Portuguese are different languages, they share many common aspects, and it has been possible to implement training without any particular need for an interpreter or the like.

(3) Formation of a region-wide network for problem resolution

Through triangular cooperation, a network is formed between the Partnership Program country and the beneficiary country that can be used as an infrastructure for resolving regional problems. The impact of this type of network formation is particularly noticeable in the countries participating in third country training. In the site survey, it was confirmed that in some cases the trainees who had participated in third country training made an active effort to form a network with the implementing agency in the Partnership Program country and neighboring countries after their return to their own countries. Following their return, trainees contact the implementing organization in the resource country as the need arises for assistance in resolving problems in their own country. In this way, these networks help to increase the capacity to resolve local problems.

For example, a Bolivian trainee who participated in the "Elimination of Plant Viruses" third country training project conducted in Argentina has continued to maintain contact with INTA-IFFIVE, the implementing agency on the Argentine side, for a period of 10 years since his return to his own country, receiving advice and gathering information on the latest documents, academic papers and so on. He also frequently exchanges information with a plant specialist in a neighboring country who had participated in training during the same period, obtaining assistance from neighboring countries regarding problems that cannot be resolved in Bolivia. In this way, the networks formed through third country training are being used as tools for resolving problems.

These examples show how specialist networks formed in Latin America through triangular cooperation are making a major contribution to ensuring that technologies are applied and take root in beneficiary countries.

(4) Increased awareness on the part of relevant entities in beneficiary country

In the interviews conducted for this study, it was confirmed that the trainees were able to broaden their horizons by coming into contact with advanced technologies outside their own country and through interchange with trainees from other countries, and that in some cases after their return the trainees go to study abroad or go on to graduate school in order to further improve their specialist expertise. In this way, third country training and third country

⁸⁰ Even after the training ends, communication between instructors and trainees continues through email, telephone and other means, enhancing the effectiveness of the training. In triangular cooperation, based on similarities in language, culture and so on, it is easy to establish ongoing communication between instructor and trainees following the end of training, and in actuality it was confirmed in this survey that this kind of communication is helping to improve the capabilities of the trainees. In triangular cooperation, if the relevant entities in the resource and beneficiary countries participated in region-specific group training in Japan, mutual networks would be formed from the standpoint of knowledge sharing and the like. However, it is thought that the effect produced would be different from the effect that can be anticipated from the networks formed through the aforementioned relationship between instructor and trainees.

specialist dispatch has increased awareness on the part of involved entities in the beneficiary country (trainees, etc.), and that even after the training ends there are many trainees who work to improve their skills in their own country.

In actuality, most of the trainees who have participated in third country training and the organizations that accept the dispatch of specialists to third countries have only had the experience of conducting activities in their own country, and third country training and third country specialist dispatch are a valuable opportunity to interact with researchers from other countries. In the interviews, trainees said their horizons were broadened by coming in contact with advanced technologies in other countries and through interchange with researchers from other countries, and they provided examples of studying abroad and going on to graduate school after their return to their country in order to increase their level of specialist expertise. Among these were some researchers who participated in JICA third country training several times in order to improve their level of specialist expertise, indicating that third country training is effective in increasing the desire for self-improvement on the part of researchers (trainees) in the beneficiary country. Through participation in triangular cooperation, these beneficiary country entities also learn about career formation through the use of assistance. They actively search for training opportunities from Japan and other donors, and this also helps to increase the sense of ownership on the part of the beneficiary country.

In this connection, it is thought that the same effect can be obtained to some extent in bilateral cooperation. In the case of third country training, however, even after their return to their own countries, trainees actively exchange information amongst themselves, and such informational exchanges lead to the opportunity for advancement on the part of the returning trainees.

(5) Improved project management capacity

The third country training projects that have been implemented in recent years include courses in project management using the Project Cycle Management (PCM) method, etc., for some of the programs, helping to improve the project management capabilities of the trainees. In addition, even trainees who have not received PCM training expressed the opinion that participation in third country training has increased their skill level with respect to planning, executing and conducting follow-up evaluations and the like for projects at their own organizations.

However, it is thought that the same effect can be obtained to some extent in bilateral cooperation, so this is not an effect that is unique to triangular cooperation.

3.1.2 Considerations for increasing development effectiveness in triangular cooperation

(1) Need for a mechanism for reflecting beneficiary country needs (third country training)

One of the characteristics of triangular cooperation by Japan is the process by which the bilateral cooperation implemented in the past developed into triangular cooperation. In bilateral cooperation, projects are formed based on a request from a potential beneficiary country. However, in triangular cooperation, and particularly in third country training, in general the project is formed in the Partnership Program country and participants are invited from neighboring countries. For this reason, in some cases it is possible that the training content may not match the development needs of the beneficiary country. While there are some beneficiary countries such as Bolivia in which the government determines its own development needs and establishes an order of priority, and then decides the third country training project to which it will send trainees, triangular cooperation tends to be "supply-driven" in that there is a greater possibility than with bilateral cooperation that the

Partnership Program country will take the lead in project formation. For this reason, particularly in third country training in which participants are invited from Partnership Program countries, a mechanism for reflecting the needs of the beneficiary country in particular is needed.

Moreover, it is thought that this type of mechanism can also be implemented within the existing JICA framework. For example, efforts are underway to build a mechanism for determining the needs of beneficiary countries, such as the implementation of a needs survey for integrated south-south cooperation in Latin America, and these efforts are helping to match needs and resources. Moreover, to ensure that the requested projects have been adequately studied by Japan, the resource country (Partnership Program country, etc.) and the beneficiary country, if there are expenses related to triangular cooperation (for example, expenses for increasing the capability of resident specialists, expenses for beneficiary projects, etc.), these can be used to conduct advance preparations — for example, in which involved entities from the beneficiary country visit the country implementing the cooperation to conduct need and resource matching, discuss the content of the project, etc. Even if the project is not adopted, this type of process will greatly increase the mutual understanding of each other's situation, and it is possible that this will be reflected in the investigation of the next request. Moreover, providing this kind of opportunity to determine needs may also lead to technical cooperation (south-south cooperation) between the resource country and the beneficiary country.

In addition, as there are increasing limitations on Japan's budget for technical cooperation in Latin America, one idea is to use the cooperation budget of the JICA office in the beneficiary country when trainees are dispatched for third country training, in order to form training projects that more closely match the needs of the region. Currently, if there is an offer for third country training from a resource country, it is assumed that the JICA office in the beneficiary country sometimes dispatches the trainees even if the training content is not in a field related to the key development field of the beneficiary country. However, adopting the approach that this should be the responsibility of the beneficiary country will cause the training content to be further refined, and this will help ensure the formation of projects that are in line with the needs of the beneficiary country.

(2) Ensuring the quality of engineers in Partnership Program countries

In interviews conducted in beneficiary countries, it was pointed out that there are problems with the project management capabilities of the Partnership Program country specialists dispatched in third country specialist dispatch. Third country specialist dispatch is conducted for the purpose of transferring technologies and knowledge to a beneficiary country. While there is some debate about whether the project management capabilities of the specialist should always be an issue, to ensure that the project is executed smoothly and that effective technology and knowledge is transferred, it is thought to be important that the third country specialist himself be able to autonomously manage the progress of the project and coordinate with relevant entities and so on. Unlike Japanese specialist dispatch, in which the specialist is given training in project management before being dispatched, in the case of third country specialist dispatch it is difficult for the Japan side to increase the project management capability of the specialist in advance, so as a result the success or failure of the project tends to be dependent on the capabilities of that individual. For this reason, when promoting triangular cooperation, assistance to help increase the project management skill of the third country specialist can also be provided in addition to increasing the sense of ownership on the part of the beneficiary country and so on. It is also possible to have the JICA office in the beneficiary country handle these project management tasks, but support for the project management capabilities of third country specialists will not only improve project efficiency but also help improve the capabilities of the third country specialists themselves. For this reason, this is thought to be consistent with the unique effect (albeit a secondary one) of triangular cooperation, that of improving the aid-implementing capabilities of the Partnership Program country.

(3) Ensuring that technologies take root (third country training)

There is a problem in that the technologies learned by triangular cooperation trainees (returning trainees, etc.) sometimes remain at the individual level and do not become established in the organization. As a result, if there are personnel changes or if the individual in question should leave the organization, there is a danger that the technologies obtained in third country training will be lost. In order to avoid such situations, a study should be made of the idea of dispatching a specialist from the Partnership Program country or, depending on the circumstances, from Japan as a follow-up activity following the conclusion of the training, in order to conduct proper follow-up.

This problem may also occur in bilateral cooperation, so it is not an issue specific to triangular cooperation.

3.2 Impact on Partnership Program countries

3.2.1 Improved capacity for aid liaison organizations

In terms of the impact on Partnership Program countries, increasing the capacity of aid liaison organizations can be cited, in addition to strengthening the organizational structure for executing triangular cooperation, increasing the relevant budget, and establishing ties with other donors.

(1) Strengthening the organizational structure

Strengthening the organizational structure means providing an organizational structure that will help triangular cooperation to be efficiently executed, such as by setting up a new department at the aid liaison institution to be in charge of triangular cooperation. In the site survey, it was confirmed that Brazil and Mexico had strengthened their organizational structure.

In Brazil, the present aid liaison organization, ABC, had not yet been established in the 1970s when third country training was first implemented, making it also necessary to procure airplane tickets for trainees and provide other logistics support. However, through the implementation of triangular cooperation with Japan, ABC gained experience in implementing third country training. Moreover, in 2007, ABC implemented a joint technical cooperation project with JICA, and it was able to accumulate expertise in the execution of technical cooperation projects in such areas as preparing Product Data Management (PDM) materials and implementing product assessments. ABC is currently studying the idea of setting up a department to be in charge of technical cooperation.

Moreover, beginning February 2010 a new department to be in charge of triangular cooperation (Dirección para cooperación triangular, regional con Centroamérica y países del Cono Sur) has been established at the Direction General of Technical and Scientific Cooperation, the aid liaison organization in Mexico. Comprising of six employees including a secretary and a regional project director, this department is tasked with the execution of triangular cooperation.

In Mexico, Argentina and Chile, south-south cooperation assistance projects are being implemented by JICA for the purpose of building up the capabilities of the aid liaison organizations. As direct assistance was provided to these countries to help them become donor nations, Japanese cooperation can be said to have strengthened the organizational structure of these Partnership Program countries.

Table 34 Sample Projects Implemented to Improve Capabilities of Aid Liaison Organization in Partnership Program Country

Country	Description
Mexico	In the "South-South Cooperation Improvement Project," assistance in project operation and project management was provided to strengthen the organization in the Scientific and Technical Cooperation Agency of the Ministry of Foreign Affairs and assist south-south cooperation.
Argentina	Through the implementation of the "Argentina South-South Cooperation Assistance" JICA country-specific training project over a ten-year period from 1996 through 2005, assistance including PCM training, etc., was provided to help countries become donors.
Chile	From March 2002 to January 2009 (projected), long-term specialist dispatch was conducted to strengthen the capabilities of AGCI and JCPP.
	 From September 2003 through August 2006, a "JCPP strengthening" technical cooperation project was implemented.

(2) Increase in budget for south-south cooperation and triangular cooperation

Secondly, the increase in the budget for south-south cooperation and triangular cooperation can be cited. When achievements in triangular cooperation accumulate and efforts are made to strengthen the organization, the budget for triangular cooperation tends to increase as well.

In Argentina, the scale of the budget for the Argentine Fund for Horizontal Cooperation (FO-AR) used to implement south-south cooperation is increasing. Although in Brazil there is not a budget specifically confined to south-south cooperation and triangular cooperation, the ABC budget is increasing, and it has risen rapidly from approximately BRL 18.66 million in 2006 to BRL 52.56 in 2010. According to interviews at ABC, approximately 90% of the ABC budget goes to south-south cooperation. Of that amount, approximately 15% constitutes the budget for triangular cooperation. 81

(3) Expansion of south-south cooperation and triangular cooperation projects

Through triangular cooperation with Japan, the capabilities of the aid liaison organization in the Partnership Program country as a donor are increased, leading to expanded south-south cooperation and triangular cooperation with other donors.

For example, since it concluded a Partnership Program agreement with Japan, Argentina has accumulated experience in triangular cooperation, and since 2007 it has concluded agreements for the implementation of triangular cooperation with seven organizations (including bilateral donors). In addition to Japan, Chile has implemented or is considering implementing triangular cooperation with countries that include Germany, France, Spain, Canada, Sweden, and Norway. Brazil is also actively establishing cooperative relationships with other donors and international organizations.

The view was expressed that, in each of these countries, the triangular cooperation currently being conducted between Partnership Program countries and other countries and institutions is based on a history of cooperation with Japan. And, in fact, when Mexico conducts south-south cooperation and triangular cooperation with other countries, it uses techniques relating to project formation and assessment that were introduced from Japan. This also

⁸¹ ABC interview conducted June 9, 2010. However, as the proportion of triangular cooperation projects in the budget differs depending on the year and the number of projects, the figure of approximately 15% is no more than a general guide.

shows the major contribution made by triangular cooperation with Japan on the promotion of south-south cooperation and triangular cooperation by Partnership Program countries.

Regarding the question of the exact degree to which the three factors discussed above — organizational structure, scale of budget, and changes in project expansion — are the result of triangular cooperation by Japan, a precise determination cannot be made, as it would be difficult to completely eliminate all external factors. However, in each of these countries, cooperation with Japan was a precursor for the development of south-south cooperation, and cooperation with Japan is thought to have contributed to a certain extent in the strengthening of the organizational structure in this regard. However, naturally the development assistance policy of the Partnership Program countries is determined based on the political situation and diplomatic policy and so on in those countries, and so it is thought that it would be difficult for Japan to continue to exert an influence on structural enhancement and budget scale increases in terms of the development assistance of Partnership Program countries.

3.2.2 Capacity-building at implementing organization

The following points can be made with regard to capacity-building at the implementing organizations in Partnership Program countries:

(1) Improved capacity to implement technical cooperation (from "researcher" to "instructor")

By conducting triangular cooperation, the implementing agencies in Partnership Program countries have increased their ability to execute technical cooperation projects. In the site survey, it was confirmed that engineers who up to that time had conducted only specific activities such as research and studies had been able to increase their skill as instructors by providing technical instruction to trainees from neighboring countries. This is important from the standpoint of improving the aid-implementing capabilities in the Partnership Program country. Improving the technology transfer capabilities of the engineers at the implementing organization in the Partnership Program country will enable that implementing organization to play an important role in technology transfer, not only in triangular cooperation but also in bilateral cooperation implemented autonomously by the Partnership Program country.

For example, at INTA-IFFIVE in Argentina, it was noted that, when accepting third country trainees, the person in charge established training programs and determined the implementation policy for training, leading to capacity-building as an implementer of assistance as opposed to someone conducting research activities. A researcher who normally conducts research into plant viral diseases, by moving to the training instructor side, came to discuss the division of responsibilities within the organization, the conditions for selecting trainees and so on, in the course of checking the training content, studying teaching methods, deciding what researcher should teach what topics and so on. In this way, a complete change in the researcher's thinking was evident, from "receiving" assistance to "implementing" assistance. Moreover, expertise was also accumulated in the area of logistics, such as arranging for plane tickets and accommodation for trainees, and it was noted that efficiency has increased each time training has been implemented. This kind of increase in the capacity for implementing technical training can be seen as the unique impact of triangular cooperation that is implemented by the implementing organization in the Partnership Program country.

However, in general, the effectiveness of technology transfer by a specific implementing organization decreases after the assistance has continued for a certain period of time. Seen from the other direction, this is evidence that technical cooperation has had a suitable effect and there has been progress in improving the capabilities of the implementing organization.

This can also function as one indicator for use when determining the exit point for triangular cooperation.

(2) Establishment of aid implementation framework

Among the implementing organizations are some that have enhanced their organization for implementing international cooperation. For example, the National University of La Plata in Argentina has established a department to handle international cooperation, and three dedicated staff members serve as the secretariat for implementing international cooperation projects (primarily triangular cooperation). This international cooperation office was set up to serve as the liaison for a livestock hygiene project that has been in progress since the 1980s, but at present it coordinates third country training projects.

This type of enhancement of the assistance implementation structure at implementing organizations is also making a contribution to the international cooperation activities of the implementing organization itself. The aforementioned National University of La Plata conducts technical cooperation activities in neighboring countries as bilateral cooperation. In addition, INTA-IFFIVE, the agency implementing the "Preventive Management for Plant Viral Diseases" project, also in Argentina, has received USD 5 million per year from the Venezuelan government to provide 70 technical cooperation courses. In this way, among the implementing organizations are some that have developed sufficient capability to enable them to transfer technology to neighboring countries, and it is clear that this is due in no small part to triangular cooperation with Japan.

3.2.3 Barriers to triangular cooperation in Partnership Program countries

The barriers to triangular cooperation in Partnership Program countries include the fact that the systems for conducting triangular cooperation are not in place. In order to conduct triangular cooperation, systems are needed to select the implementing organization to serve as implementing entity for third country training by the aid liaison organization, and to dispatch Partnership Program specialists to third countries. However, these systems are not sufficiently established in Partnership Program countries, and as a result this is thought to be a barrier to participation by Partnership Program specialists in triangular cooperation.

For example, in Mexico, the Ministry of Foreign Affairs has only limited authority to select the organization to implement projects, and cooperation must be requested through the ministry that has jurisdiction over the implementing organization. Moreover, as the income guarantee and status guarantee and so on that are needed to dispatch specialists on a long-term basis are not in place, it is difficult to dispatch specialists from Mexico on a long-term basis. In the interviews, it was said that Mexican specialists could be dispatched for no more than two weeks; any longer would be difficult. A similar situation was confirmed to exist in Brazil. For Partnership Program countries that do not yet have much experience as donors, there are still many problems that remain with regard to establishing an organizational structure for conducting international cooperation.

3.3 Impact on Japan

The sections up to now have focused on the impact of triangular cooperation on beneficiary countries and Partnership Program countries. This section will discuss the impact of triangular cooperation on Japan.

3.3.1 Efficiency of technical cooperation

In triangular cooperation, the achievements of Japanese technical cooperation are disseminated through a Partnership Program country to neighboring countries. Compared to the direct dispatch of specialists from Japan and the direct acceptance of trainees for training in Japan, this method is generally recognized to enable costs to be reduced On the other hand, as a single project involves many countries and organizations, including Partnership Program countries and beneficiary countries, it has also been pointed out that considerable coordination costs are produced, such as the increased workload on the JICA staff members who conduct coordination. For this reason, this study includes an analysis of these observations in an attempt to once again verify the efficiency of triangular cooperation.

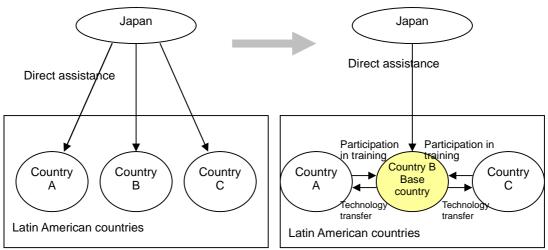


Fig. 21 Expansion of Japanese technology used in triangular cooperation

In analyzing the efficiency of technical cooperation, the investment (costs) and effect (effectiveness and impact) must be identified to examine whether the investment in cooperation is efficient as compared to the effect that has been derived.

In all eight of the projects examined in this study, the dissemination to beneficiary countries of technologies transferred from Japan to Partnership Program countries through bilateral cooperation could be seen. ⁸² Moreover, in addition to these eight projects, there were other examples of the effective deployment in third countries of Japanese technologies, such as the "Triangular Cooperation for Agricultural Development of the Tropical Savannah (ProSAVANA-JBM)" project conducted by Japan and Brazil as a triangular cooperation project.

Some of these triangular cooperation projects are based on bilateral cooperation, while others are not. Moreover, there is not a single case in which the same type of project was implemented for the same beneficiary country as a bilateral cooperation project. For this reason, it was difficult to determine the degree to which these projects produced achievements by comparing them with the achievements of the same project in bilateral cooperation to determine which method produced greater achievements. Therefore, in the following study, it is assumed that the expected achievements for each project were achieved and that they are the same as those that would be produced through bilateral cooperation. Accordingly, below it is assumed that the target triangular cooperation project produced exactly the same achievements as would be produced by a similar bilateral cooperation project, and the degree of efficiency is determined by whether the expenses and workload involved in triangular cooperation is greater or less than that for bilateral cooperation.

⁸² See 3.2 for an impact review of each project.

⁸³ As the workload for triangular cooperation on the part of employees at JICA offices in Partnership Program countries cannot be compared with that involved in bilateral cooperation, it will be compared with day-to-day workload.

(1) Reducing project expenses

This section will verify the effect of implementing triangular cooperation in reducing the project expense burden on the Japan side. The effectiveness in reducing expenses will be considered for third country training, third country specialist dispatch and joint projects.

Third country training

In third country training, the implementing organization in the Partnership Program country provides assistance for trainee acceptance, technical instruction, support for daily living expenses and so on. Accordingly, the burden on the Japan side is lessened as compared to training in Japan by means of bilateral assistance. In addition, in some cases the JICA office in the Partnership Program country bears the cost of trainee airfare, accommodation, daily allowance and so on, but as travel is limited to movement within the area, the cost burden borne by Japan is less than when trainees are dispatched to Japan.

The following table shows a cost comparison between third country training (using "Agroforestry" and "Preventive Management for Plant Viral Diseases" as examples) and the assumed costs of bilateral cooperation for the same duration, content and scope (training in Japan).

Table 35 Cost Comparison Between Third Country Training and Training in Japan (estimated) (example: agroforestry)

Breakdown of Expenses		Third Country Training (actual)		Training in Japan (estimated)		
		BRL	JPY	JPY	Notes	
(1) Direct expenses	Trainees	Travel costs (airfare)	49,500.00	2,475,000	15,000,000	Assuming normal round-trip economy class airfare between Narita and Sao Paulo
		Accommodation	36,360.00	1,818,000	3,000,000	Assuming JPY 10,000/night, 20 nights/person x 15 persons
		Daily allowance	19,089.00	954,450	945,000	Assuming JPY 3,000/day, 21 days/person x 15 persons
		Insurance, etc.	7,474.00	373,700	373,700	Assuming same level as third country training
	Outside	Travel costs (airfare)	8,902.72	445,136		Assuming that training is
	instructors	Accommodation	2,630.08	131,504		provided by Japanese instructors only
		Daily allowance (personnel expenses)	20,194.77	1,009,739		instructors only
	Training expenses	Rental vehicles, conference room, consumables, etc.	21,125.76	1,056,288	1,056,286	Assuming same level as third country training
	Subtotal		165,276.33	8,263,817	20,374,986	
		Of this amount, JICA share	112,387.90	5,619,395	20,374,986	JICA share is 68% of third country training expenses
(2) Personnel expenses	In-house instructors	Personnel expenses	8,400	420,000	2,352,000	Assuming estimated cost No. 3 personnel, hourly rate JPY 14,000/hour x 21 days (assuming 8 hours per day)
Total	(1) + (2)		173,676.33	8,683,817	22,726,986	
Total JICA share	е		76,423.77	5,619,395	22,726,986	

Source: Prepared by MRI

Table 36 Cost Comparison Between Third Country Training and Training in Japan (estimated) (example: Preventive Management for Plant Viral Diseases)

Breakdown of Expenses			Third Country Training (actual)	Training in Japan (estimated)		
			JPY	JPY	Notes	
(1) Direct expenses	Trainees	Travel costs (airfare)	3,085,000	32,000,000	Assuming normal round-trip economy class airfare between Narita and Sao Paulo	
		Accommodation	7,243,000	45,760,000	Assuming JPY 10,000/night, 143 nights/person x 32 persons	
		Daily allowance	3,026,000	14,496,000	Assuming JPY 3,000/day, 151 days/person x 32 persons	
		Insurance, etc.	-	-		
	Training expenses		3,000,000	3,000,000	Assuming same level as third country training	
	Subtotal		16,354,000	95,256,000		
		Of this amount, JICA share	13,354,000	95,256,000		
(2) Personnel expenses	In-house instructors	Personnel expenses	3,416,000	16,912,000	Assuming estimated cost No. 3 personnel, hourly rate JPY 14,000/hour x 151 days (assuming 8 hours per day)	
Total	(1) + (2)		19,770,000	112,168,000		
Total JICA share			13,354,000	112,168,000		

Notes - Numbers in red indicate expenses borne by Partnership Program country government.

- Total amount of expenses for four triangular cooperation projects implemented 2006-2009.

Source: Prepared by MRI

2 Third country specialist dispatch

When a specialist from a Partnership Program country is dispatched to a third country, the personnel expenses for that specialist are borne by the Partnership Program country. This enables the personnel expenses borne by the Japan side to be reduced as compared to the dispatch of a Japanese specialist. Moreover, as in the case of third country training, the travel and accommodation expenses for third country specialist dispatch are borne by Japan in some cases, but as travel is limited to movement within the region, the cost burden is reduced as compared to cases in which a specialist is dispatched from Japan.

③ Joint projects (technical cooperation projects in third countries)

When technical cooperation projects are implemented in a third country, the necessary expenses are shared by Japan and the Partnership Program country. Compared to bilateral cooperation in which all of the expenses are borne by Japan, this method reduces Japan's cost burden.

The proportion of the cost burden differs depending on the project and the nature of the Partnership Program, but Chile covers 50% of the cost of all JCPP projects. In the case of Brazil, Japan covers 70% of project costs and Brazil covers 30%. However, these amounts do not include the personnel expenses for specialists, so if the personnel expenses for Brazilian specialists whose pay grade is comparatively high are assumed to

be included in the project expenses, it is possible that Brazil may pay a higher proportion of the costs than 30%.

Table 37 Effectiveness of Triangular Cooperation in Reducing Japan Side Expenses

	Effectiveness in Reducing Expenses
Third country training	Partnership Program country handles trainee invitation and selection, reducing JICA burden (reduction of personnel expenses)
	Trainee travel, accommodation and daily allowance expense are reduced
	Japanese personnel expenses are reduced through use of Partnership Program country resources
Third country specialist dispatch	Personnel expenses for specialist dispatch are borne by the implementing agency in the Partnership Program country, so the cost burden on JICA is lower than when specialists are dispatched from Japan.
Joint project	The expenses for specialist dispatch, training and so on are borne by the Partnership Program country, so the cost burden is lower as compared to when JICA conducts these activities independently.

(2) Coordination costs (workload)

One of the problems considered by this study concerns the theory that, because of the larger number of countries involved (beneficiary country, resource country, Japan) as compared to bilateral cooperation, triangular cooperation involves relatively high coordination costs, making it difficult to guarantee project efficiency. In order to test this theory as part of this study, questionnaires were sent to the JICA offices in the Partnership Program country and beneficiary country to collect information on man/month investment by JICA office staff members and the workload for triangular cooperation projects at each stage, from triangular cooperation project formation through completion and assessment. This information was then analyzed to determine what coordination costs were incurred in each phase from the standpoint of personnel investment. The main items that were studied are shown below.

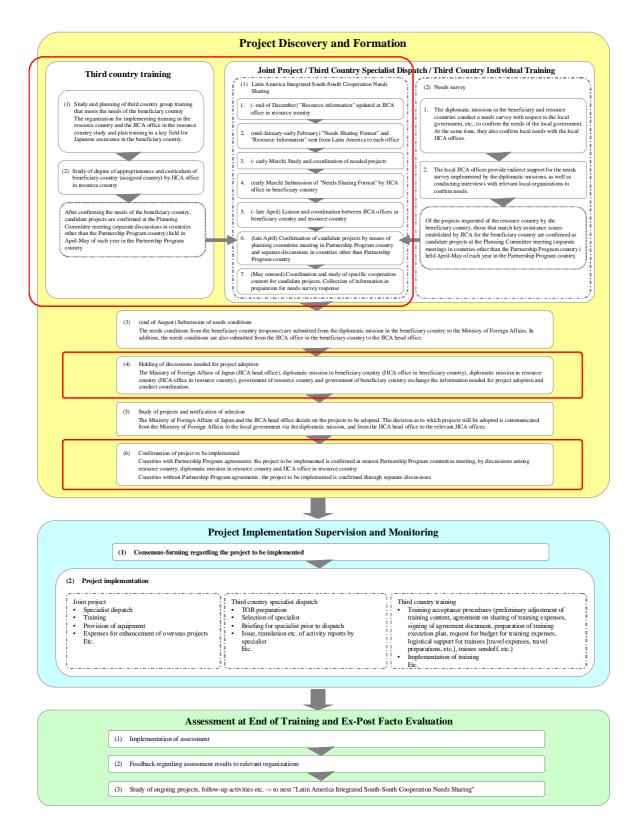
• Man/month investment for triangular cooperation as compared to bilateral cooperation

A comparison is made of the man/months invested by the beneficiary country for triangular cooperation, and the man/months assumed to be produced by the implementation of a technical cooperation project of the same scale in terms of money, time and field by means of bilateral cooperation, in order to determine the scale of personnel investment for triangular cooperation.

• Determination of specific coordination costs

The process from project discovery and formation through completion is divided into the following phases, and the division of work tasks in each phase by the JICA office staff in the resource country (Partnership Program country) and beneficiary country is determined.

The figure on the below page shows the triangular coordination process from project formation through completion. The red boxes show the coordination processes specific to triangular coordination.



Source: Prepared by MRI from various references

Fig. 22 Work Flow for Triangular Cooperation Projects

This work process was simplified and a study of the workload in the following phases was conducted.

Table 38 Type of Work Conducted in Each Phase of Triangular Cooperation

Phase	Work Involved in Triangular Cooperation
Phase 1	Determination of needs for project formation
Project discovery and formation	Implementation of needs survey for integrated south-south Cooperation in Latin America
	Matching of needs and resources by beneficiary country, resource country, and JICA
	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country
	5. Request to and discussions with Ministry of Foreign Affairs and JICA head office
	6. Confirmation of projects to be implemented
Phase 2 Project implementation, supervision and monitoring	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office
	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)
	3. Project implementation, supervision and monitoring
Phase 3	1. Implementation of assessment
Project conclusion assessment and ex-post facto assessment	

This questionnaire survey was conducted for seven countries in Latin America and dealt with the investment of man/months and the workload for triangular cooperation for the eight projects targeted by this study. It is limited by its small sample size. For this reason, the results of the study should be seen as case studies indicating the status of some of the triangular cooperation projects being implemented in Latin America, and the fact that the study does not represent a comprehensive analysis of the coordination costs in all relevant countries must be taken into consideration.

Moreover, triangular cooperation differs from bilateral cooperation, in which project formation is implemented through a dialogue between the governments of the two countries. In general, in triangular cooperation projects are formed based on past bilateral cooperation. For this reason, some think that it is inappropriate to simply compare triangular cooperation and bilateral cooperation in terms of the determination of needs and so on at the project discovery and formation stage. In addition, the determination of workload will depend greatly on the staff organization at that office, the experience of the staff in charge including national staff, the degree to which staff must handle other tasks, the presence or absence of achievements in bilateral cooperation in the same field and so on.

In this study, these considerations will be kept in mind when determining the coordination costs specific to triangular cooperation, in order to compare triangular cooperation and bilateral cooperation.

① Results of survey of beneficiary countries

a. Man/month investment for triangular cooperation as compared to bilateral cooperation

A comparison was made of the man/months invested in triangular cooperation and the man/months assumed to be produced by the implementation of bilateral technical cooperation for a project of the same scale in terms of money, time and project sector. In the case of third country training, the man/months invested for triangular cooperation tended to be less than that for bilateral cooperation. Judging from the responses to the questions to beneficiary country offices, even in triangular cooperation in different fields and with different project scales, overall the man/month investment was lower than the (assumed) level for bilateral cooperation. Even in terms of individual phases, in all stages—project discovery and formation, project implementation, supervision and monitoring, project conclusion assessment and ex-post facto assessment—the investment tended to be less (although only slightly) for bilateral cooperation as compared to triangular cooperation.

Table 39 Comparison of Man/month Investment for Triangular Cooperation and (assumed figures for) Bilateral Cooperation (third country training)

Beneficiary Country	Project	Phase	Man/months for Triangular Cooperation (actual)	Man/months for Bilateral Cooperation (estimated)	Triangular Cooperation - Bilateral Cooperation
Paraguay	Preventive	Project formation	0M/M	0.1M/M	▲ 0.1M/M
	Management for Plant Viral Diseases (third country training)	Project implementation, supervision and monitoring	0.2M/M	0.4M/M	▲0.2M/M
		Project conclusion assessment and ex-post facto assessment	0.2M/M	0.1M/M	0.1M/M
		Total	0.4M/M	0.6M/M	▲0.2M/M

Beneficiary Country	Project	Phase	Man/months for Triangular Cooperation (actual)	Man/months for Bilateral Cooperation (estimated)	Triangular Cooperation - Bilateral Cooperation
El	Chile	Project formation	0M/M	1M/M	▲ 1M/M
Salvador	Rehabilitation Course for Persons with Disabilities (third country	Project implementation, supervision and monitoring	0.1M/M	1M/M	▲0.9M/M
	training)	Project conclusion assessment and ex-post facto assessment	0.05M/M	0.2M/M	▲0.15M/M
		Total	0.15M/M	2.2M/M	▲2.05M/M

Beneficiary Country	Project	Phase	Man/months for Triangular Cooperation (actual)	Man/months for Bilateral Cooperation (estimated)	Triangular Cooperation - Bilateral Cooperation
Bolivia	Chile	Project formation	0.1M/M	0.15M/M	▲0.05M/M
	Rehabilitation Course for Persons with Disabilities (third country training)	Project implementation, supervision and monitoring	0.1M/M	0.15M/M	▲0.05M/M
tra		Project conclusion assessment and ex-post facto assessment	N/A	N/A	N/A
		Total	0.2M/M	0.3M/M	▲ 0.1M/M

With regard to joint projects, different trends were seen in triangular cooperation and bilateral cooperation man/month investment depending on the project. For example, with regard to the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation" implemented with Argentina as the resource country, the Paraguay office feels that there was less man/month investment for triangular cooperation as compared to bilateral cooperation, particularly at the project discovery and formation stage. This is considered to be because the JICA office in the resource country (Partnership Program country) took the lead in conducting project formation, and this reduced the project discovery and formation burden on the JICA office in the beneficiary country.

On the other hand, the Bolivia office responded that the man/month investment for triangular cooperation was greater than in bilateral cooperation, although only slightly, for the project discovery and formation phase and the project implementation, supervision and monitoring phase. This is thought to be mainly because time was required for the Needs Survey for Integrated South-south Cooperation in Latin America and for coordination between Japan and resource country representatives. The same opinion was expressed by the El Salvador office. When the TAISHIN project was compared to a bilateral cooperation project (assumed) of the same scale, there was a recognition that coordination would be needed among Japan, the resource country and the beneficiary country for all phases of triangular cooperation, and that therefore man/month investment would tend to increase, mainly at the project discovery and formation phase and the project implementation, supervision and monitoring phase. Moreover, the view was also expressed that the workload would increase because the exchanges in Spanish between the resource and beneficiary countries would need to be shared in Japanese with the Japan representatives when necessary.

Table 40 Comparison of Man/month Investment for Triangular Cooperation and (assumed figures for) Bilateral Cooperation (joint project)

Beneficiary Country	Project	Phase	Man/months for Triangular Cooperation (actual)	Man/months for Bilateral Cooperation (estimated)	Triangular Cooperation - Bilateral Cooperation
Paraguay	Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation (joint project)	Project formation	0.5M/M	1.5M/M	▲1.0M/M
		Project implementation, supervision and monitoring	2.5M/M	3.0M/M	▲0.5M/M
		Project conclusion assessment and ex-post facto assessment	0.25M/M	0.2M/M	0.05M/M
		Total	3.25M/M	4.7M/M	▲1.45M/M

Beneficiary Country	Project	Phase	Man/months for Triangular Cooperation (actual)	Man/months for Bilateral Cooperation (estimated)	Triangular Cooperation - Bilateral Cooperation
Bolivia	Project to Train	Project formation	2M/M	1.8M/M	0.2M/M
	Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation (joint project)	Project implementation, supervision and monitoring	2M/M	1.8M/M	0.2M/M
		Project conclusion assessment and ex-post facto assessment	0.2M/M	0.18M/M	0.02M/M
		Total	4.2M/M	3.78M/M	0.42M/M

Beneficiary Country	Project	Phase	Man/months for Triangular Cooperation (actual)	Man/months for Bilateral Cooperation (estimated)	Triangular Cooperation - Bilateral Cooperation
El	Enhancement of	Project formation	10M/M	8M/M	2M/M
Salvador	Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project) (joint project)	Project implementation, supervision and monitoring	25M/M	20M/M	5M/M
		Project conclusion assessment and ex-post facto assessment	0.5M/M	0.5M/M	0M/M
		Total	35.5M/M	28.5M/M	7M/M

b. Studies of details of coordination costs

When respondents were asked to compare the workload for bilateral cooperation and triangular cooperation in each project phase, the tendency was for there to be a perception that triangular cooperation could be executed with a workload that was generally the same or less than that for bilateral cooperation.

With regard to project scheme, in the case of the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation)" joint project, the Paraguay office expressed the view that the workload tended to be lower for "Determination of project needs" and "Matching of needs and

resources by beneficiary country, resource country and JICA" at the project discovery and formation stage.

Conversely, the Bolivia office expressed the view that the workload tended to be greater than bilateral cooperation, particularly for "Implementation of needs survey for integrated south-south cooperation in Latin America" and "Matching of needs and resources by beneficiary country, resource country and JICA" at the project discovery and formation stage. In the "Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)" in which El Salvador was the beneficiary country as well, there was a comparatively large workload at the project discovery and formation stage for matching the needs of participants and holding discussions regarding project formation. These are additional tasks that are not produced in the case of bilateral cooperation, and they are recognized as being coordination costs specific to triangular cooperation. Moreover, according to the Bolivian office, although additional coordination costs are produced in triangular cooperation, they have the advantage of being able to resolve issues that cannot be resolved in bilateral cooperation, without having to depend on Japanese personnel resources, and for this reason these coordination costs are recognized as being necessary.

Table 41 Perceived Workload at Each Stage of Triangular Cooperation as Compared to Bilateral Cooperation (Joint Project 1)

Project Name: Project to T Cooperation	rain P	Personnel to Improve Livestock Hygiene in the Southern F	Part of South A	merica throug	gh Wide-Area
Phase	W. I. J. I. T. J. C. C.	Beneficiary Countries		A	
Phase		Work Involved in Triangular Cooperation	Paraguay	Bolivia	- Average
Phase 1	1.	Determination of needs for project formation	1	3	2.0
Project discovery and formation	2.	Implementation of needs survey for integrated south-south cooperation in Latin America	2	4	3.0
	3.	Matching of needs and resources by beneficiary country, resource country, and JICA	2	4	3.0
	4.	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country	3	4	3.5
	5.	Request to and discussions with Ministry of Foreign Affairs and JICA head office	3	3	3.0
	6.	Confirmation of projects to be implemented	3	3	3.0
Phase 2 Project implementation, supervision and monitoring	1.	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office	2	3	2.5
g	2.	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)	2	3	2.5
	3.	Project implementation, supervision and monitoring	4	3	3.5
Phase 3 Project conclusion assessment and ex-post facto assessment	1.	Implementation of assessment	2	3	2.5
	1	Overall average	2.4	3.3	2.9



Table 42 Perceived Workload at Each Stage of Triangular Cooperation as Compared to Bilateral Cooperation (Joint Project 2)

Phase	Work Involved in Triangular Cooperation	El Salvador
Phase 1	1. Determination of needs for project formation	4
Project discovery and formation	Implementation of needs survey for integrated south-south cooperation in Latin America	3
	Matching of needs and resources by beneficiary country, resource country, and JICA	4
	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country	4
	Request to and discussions with Ministry of Foreign Affairs and JICA head office	3
	6. Confirmation of projects to be implemented	3
Phase 2 Project implementation,	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office	4
supervision and monitoring	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)	4
	3. Project implementation, supervision and monitoring	4
Phase 3	Implementation of assessment	4
Project conclusion assessment and ex-post facto assessment		
	Overall average	3.7

Legend
Compared to bilateral cooperation, workload for triangular cooperation is
1. Extremely small 2. Small 3. About the same 4. Large 5. Extremely large

In the case of third country training, the workload at the project discovery and formation stage is generally the same as for bilateral cooperation, but the workload for "Matching of needs and resources by beneficiary country, resource country and JICA" tended to be greater. This is thought to be because, in the case of third country training, the formal call for trainees is issued through the resource country embassy in the beneficiary country, so the JICA office in the beneficiary country is not directly involved, but in actuality there are cases in which the JICA office in the beneficiary country assists with procedures, submission of documents and so on relating to trainee dispatch. Moreover, as in the case of the Paraguay office, the JICA office selects and recommends candidates in some cases in order to give priority for participation in third country training to the personnel engaged in projects currently being implemented in that country. In this way, to conduct proper follow-through for the aid liaison organization in the beneficiary country, the workload is thought to be greater for triangular cooperation than in the case of bilateral cooperation.

Table 43 Perceived Workload at Each Stage of Triangular Cooperation as **Compared to Bilateral Cooperation (Third Country Training)**

			Bene	ficiary Cou	ntries	
Phase		Work Involved in Triangular Cooperation	Paraguay	Bolivia	El Salvador	Average
Phase 1	1.	Determination of needs for project formation	2	2	2	2.0
Project discovery and formation	2.	Implementation of needs survey for integrated south-south cooperation in Latin America	3	4	2	3.5
	3.	Matching of needs and resources by beneficiary country, resource country, and JICA	4	2	4	3.0
	4.	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country	3	4	2	3.5
	5.	Request to and discussions with Ministry of Foreign Affairs and JICA head office	3	3	2	3.0
	6.	Confirmation of projects to be implemented	3	3	2	3.0
Phase 2 Project implementation, supervision and monitoring	1.	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office	2	3	2	2.5
	2.	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)	2	3	2	2.5
	3.	Project implementation, supervision and monitoring	2	2	2	2.0
Phase 3 Project conclusion assessment and ex-post facto assessment	1.	Implementation of assessment	2	NA	2	2.0
	1	Overall average	2.6	2.9	2.2	2.7

Compared to bilateral cooperation, workload for triangular cooperation is

1. Extremely small 2. Small 3. About the same 4. Large 5. Extremely large

(2)Results of survey in Partnership Program countries

When the Partnership Program countries were asked about the amount of work involved in triangular cooperation as compared to other day-to-day work, the response was that, other than for joint projects, in general the amount of work was the same or possibly slightly less than other day-to-day work.⁸⁴ In the case of joint projects (specifically, the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation"), the response was that the workload had increased due to discussions with related countries and so on.

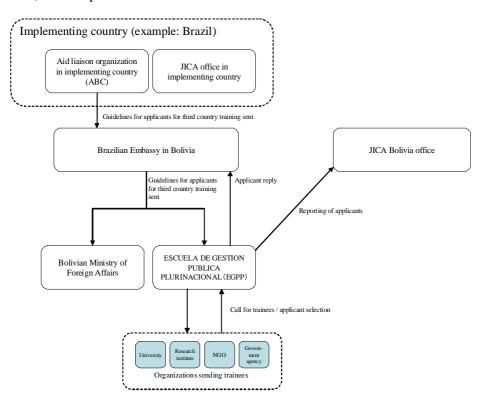
With regard to the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation" joint project, for which Argentina

⁸⁴ In the case of resource countries (Partnership Program countries), the JICA office in the resource country is not involved when the same type of project conducted using triangular cooperation is implemented bilaterally, and for that reason a comparison with bilateral cooperation is unsuitable. Accordingly, respondents were asked about the amount of work involved in triangular cooperation as compared to day-to-day work tasks.

was the resource country, the amount of work tended to increase from project formation through project implementation, supervision, monitoring, and ex-post facto assessment. This is because this project was a wide-area cooperation project conducted in four countries simultaneously, and workshops had to be planned and implemented several times, in addition to coordinating the participation of representatives from four countries and discussing the project content in the PDM and so on. Moreover, the JICA office in Argentina provided assistance and advice for the people in charge at the JICA office in the beneficiary country who did not have sufficient experience in south-south cooperation, and as a result there was a relative increase in the amount of work.

On the other hand, for third country training, the amount of work at the Partnership Program country (the resource country) was about the same or less than that for bilateral cooperation.

For example, when third country training is implemented, the Partnership Program country takes the lead in issuing the call for and selecting trainees, so the Japanese workload for this process is lessened. When third country training is implemented in Brazil, for example, information about the training is conveyed from ABC in Brazil through the Brazilian embassies in neighboring countries to relevant organizations in each country, and the call for trainees and selection of candidates are conducted by the organizations in charge in the beneficiary country, with the result that the workload on the Japan side (at the JICA local offices) for this process is lessened.⁸⁵



Source: Prepared by MRI based on site interviews

Fig. 23 Example of selection process of trainees for Third Country Training Program

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⁸⁵ The final selection of trainees is determined through discussions between the JICA office in the Partnership Program country and the Partnership Program country supervisor. However, in the interviews at the local JICA office, no one expressed the opinion that the trainee selection process was too great a burden.

Table 44 Perceived Workload at Each Stage of Triangular Cooperation as Compared to Bilateral Cooperation (Argentina)

Phase	Work Involved in Triangular Cooperation	Target Proje	ect for Study
Filase	work involved in Thangulai Cooperation	Р3	P4
Phase 1	Determination of needs for project formation	2	1
Project discovery and formation	Implementation of needs survey for integrated south-south cooperation in Latin America	4	1
	Matching of needs and resources by beneficiary country, resource country, and JICA	3	1
	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country	1	1
	5. Request to and discussions with Ministry of Foreign Affairs and JICA head office	1	1
	6. Confirmation of projects to be implemented	1	1
Phase 2 Project implementation, supervision and	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office	4	1
monitoring	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)	4	2
	3. Project implementation, supervision and monitoring	4	2
Phase 3 Project conclusion assessment and ex-post facto assessment	Implementation of assessment	4	2
	Overall average	2.8	1.3

Legend 1

- P1 Agroforestry Course
- P2 Assistance for Diversification of the Beekeeping Industry (project to expand production of propolis, pollen, etc., and improve quality)
- P3 Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation
- P4 Preventive Management for Plant Viral Diseases
- P5 Applicable Aquaculture Technologies
- P6 Rehabilitation Course for Persons with Disabilities
- P7 Appropriate Management of Solid and Hazardous Wastes
- P8 Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)

Legend 2: Triangular cooperation execution

- 1. Extremely small man/month investment
- 2. Small man/month investment
- 3. Intermediate level
- 4. Large man/month investment
- 5. Extremely large man/month investment

In the case of Brazil as well, there were no results showing a particular increase in the amount of work or the like, either for third country training or third country specialist dispatch. According to the JICA office in Brazil, there was a comparative increase in the amount of man/months needed for the signing of participating country agreements to guarantee investment from Brazil, or to set up new systems such as procedures relating to long-term specialist dispatch under the JBPP. However, these coordination costs were expected to be reduced as achievements were accumulated.

Table 45 Perceived Workload at Each Stage of Triangular Cooperation as Compared to Bilateral Cooperation (Brazil)

Phase	West Involved in Triangular Commention	Target Proje	ect for Study
Phase	Work Involved in Triangular Cooperation	P1	P2
Phase 1	Determination of needs for project formation	3	2
Project discovery and formation	Implementation of needs survey for integrated south-south cooperation in Latin America	0	0
	Matching of needs and resources by beneficiary country, resource country, and JICA	3	3
	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country	0	0
	5. Request to and discussions with Ministry of Foreign Affairs and JICA head office	3	0
	6. Confirmation of projects to be implemented	1	1
Phase 2 Project implementation, supervision and	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office	3	0
monitoring	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)	3	0
	3. Project implementation, supervision and monitoring	3	3
Phase 3 Project conclusion assessment and ex-post facto assessment	1. Implementation of assessment	4	3
	Overall average	2.3	1.2

Legend 1

- P1 Agroforestry Course
- P2 Assistance for Diversification of the Beekeeping Industry (project to expand production of propolis, pollen, etc., and improve quality)
- P3 Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation
- P4 Preventive Management for Plant Viral Diseases
- P5 Applicable Aquaculture Technologies
- P6 Rehabilitation Course for Persons with Disabilities
- P7 Appropriate Management of Solid and Hazardous Wastes
- P8 Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)

Legend 2: Triangular cooperation execution

- 1. Extremely small man/month investment
- 2. Small man/month investment
- 3. Intermediate level
- 4. Large man/month investment
- 5. Extremely large man/month investment

Note:

With regard to "Diversification of Beekeeping Industry," as this project was outside the scope of the Partnership Program, the items relating to discussions with Partnership Program countries do not apply and are indicated by a zero.

In Chile, there was a recognition that the workload was lower at the project discovery and formation stage of third country training projects. In the "Shellfish Cultivation Technology" third country training project, the implementing organization for the third country training had past experience in implementing third country training and had determined the needs of neighboring countries, and had already formed ties with relevant organizations in the beneficiary country. For these and other reasons, the amount of new work that was generated was reduced.

Moreover, in the "Rehabilitation Course for Persons with Disabilities" third country training project, prior to the end of the bilateral cooperation "Rehabilitation Course for Persons with

Disabilities" project between Japan and Chile, Japan worked with the Chilean Ministry of Welfare and the Pan American Health Organization to hold international seminars targeting Lain American countries, at which they confirmed the needs of neighboring countries. As a result, the workload for needs determination and coordination did not increase at the project discovery and formation stage of third country training.

In each of these project, the staff of the local JICA office did not consider implementation, supervision, and monitoring in triangular cooperation to be a burden, and the workload for accomplishing triangular cooperation was not thought to be very different from other tasks.

Table 46 Perceived Workload at Each Stage of Triangular Cooperation as Compared to Bilateral Cooperation (Chile)

Phase	Work Involved in Triangular Cooperation	Target Proje	ect for Study
Filase	work involved in Thangulai Cooperation	P5	P6
Phase 1	Determination of needs for project formation	1	2
Project discovery and formation	Implementation of needs survey for integrated south-south cooperation in Latin America	0	1
	Matching of needs and resources by beneficiary country, resource country, and JICA	0	1
	Confirmation of candidate projects through discussions between relevant organizations in Partnership Program country and beneficiary country		1
	5. Request to and discussions with Ministry of Foreign Affairs and JICA head office	3	3
	6. Confirmation of projects to be implemented	2	2
Phase 2 Project implementation, supervision and	Finalization of content of cooperation through discussions among relevant organizations in Partnership Program country and beneficiary country and JICA head office	3	3
monitoring	Signing of bilateral agreement (between local JICA office and governments of beneficiary company and Partnership Program country) (including discussions)	3	3
	3. Project implementation, supervision and monitoring	2	3
Phase 3 Project conclusion assessment and ex-post facto assessment	Implementation of assessment	3	0
	Overall average	1.8	1.9

Legend 1

- P1 Agroforestry Course
- P2 Assistance for Diversification of the Beekeeping Industry (project to expand production of propolis, pollen, etc., and improve quality)
- P3 Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation
- P4 Preventive Management for Plant Viral Diseases
- P5 Applicable Aquaculture Technologies
- P6 Rehabilitation Course for Persons with Disabilities
- P7 Appropriate Management of Solid and Hazardous Wastes
- P8 Enhancement of Technology for the Construction of Earthquake-Resistant Popular Housing (TAISHIN project)

Legend 2: Triangular cooperation execution

- 1. Extremely small man/month investment
- 2. Small man/month investment
- 3. Intermediate level
- 4. Large man/month investment
- 5. Extremely large man/month investment

Note: As these tasks did not arise, the workload is noted as zero.

3 Period of time required to study triangular cooperation needs

As is also noted in the considerations in the "South-South Cooperation Assistance Guidebook" published in 2004 by the Task Force on Issues in the Field of South-South Cooperation, consideration must be paid to matching the technologies and personnel of the resource country with the needs of the beneficiary country when triangular cooperation is implemented. In the triangular cooperation conducted up to now, in many cases the projects were implemented in the form of an expansion of the technical cooperation provided in bilateral cooperation. In this environment, there is a possibility that project formation will proceed without adequately reflecting the development needs of the beneficiary country.

Recently in Latin America, "Latin America Integrated South-South Cooperation Needs Sharing" is being conducted as a mechanism for sharing information on south-south cooperation among local JICA offices, in order to match the resources of resource countries with the needs of the beneficiary countries. Under this mechanism, information on the resources that the Partnership Program country is able to provide and the needs of the beneficiary country is shared between the local JICA offices on a regular basis. This has the advantage of enabling the needs of the beneficiary country to be systematically accommodated during project formation. Moreover, the beneficiary country (for example, Bolivia) also provides information not only on its own needs but also on the resources that it can provide.

While such efforts are playing an effective role in preventing a mismatch between resources and needs from being produced during the formation of triangular cooperation projects, it cannot be denied that they produce the need for additional coordination time. For example, in the case of bilateral technical cooperation, a request for a new project is made from the local JICA office to the head office at the end of August, and coordination is conducted between the JICA head office and the Ministry of Foreign Affairs from September to March of the following year (coordination period approximately seven months). In the case of third country training, however, coordination among the offices in the Latin American country is needed before the request is sent up to the JICA head office, so normally coordination starts from January. In other words, a coordination period that is eight months longer than that required for bilateral cooperation assistance is needed, and the increased work during this period and the resulting increase in man/months can be called a cost specific to triangular communication. However, based on the interview responses, there was no great increase in man/months for these coordination tasks, and in general the workload is perceived to about the same as for bilateral cooperation.

4 Summary of analysis of coordination costs

In this study, an attempt was made to determine the personnel investment and workload for the coordination costs relating to triangular cooperation. As the sample size was limited, it is not possible to come to any general conclusions. However, based on the information that was obtained, there was a tendency for the coordination costs for triangular cooperation to be seen as the same as or smaller than those for bilateral cooperation. On the other hand, in the case of joint projects, the workload for both the beneficiary country and the resource country (Partnership Program country) tended to be relatively high. However, joint projects are those in which personnel and funds are invested by the government of the other country as well, and the coordination costs are seen as necessary to draw out investment from the other side. In this way, by securing investment from resource countries, ultimately the cost burden on the Japan side for the overall project is reduced. Accordingly, some feel that the coordination costs for joint projects are a necessity. In the beneficiary country as well, in triangular cooperation personnel from the resource company can be used in fields in which there is a lack of Japanese specialists, so there was a recognition that coordination costs are necessary.

In the opinion survey, each of the local offices was asked, "Do you ever feel that the coordination costs for triangular cooperation are relatively high?" All of the offices that provided responses to the survey said "No." For third country training in particular, there are few additional coordination costs, and there is perceived to be little difference in coordination costs, even as compared to bilateral cooperation. At local JICA offices, there appears to be no feeling that the implementation of triangular cooperation is a major burden.

(3) Summary

Based on the above analysis, the following can be said with regard to the efficiency of triangular cooperation as compared to bilateral cooperation. Firstly, in triangular cooperation, the expense burden on the Japan side is reduced. Conversely, for third country training, the workload tended to be reduced for both Partnership Program countries and beneficiary countries, but in the case of joint projects the workload tended to increase for the project discovery and formation phase and the project implementation, supervision and monitoring phase. Considering all of the projects studied in this survey on average, there was little difference in workload between bilateral cooperation and triangular cooperation. Based on the above, the conclusion is that triangular cooperation is more efficient than bilateral cooperation from the standpoint of direct expenses. From the standpoint of workload (coordination costs), however, it is not possible to conclude whether triangular cooperation or bilateral cooperation is always more efficient.

3.3.2 Implementation of projects which faces the constraint of Japanese resources

In triangular cooperation, the resources of the Partnership Program country are used, making it possible for Japan to provide assistance that it would like to implement, as it is consistent with Japan's diplomatic strategy and assistance policy, but that would be difficult for it to implement independently. This is particularly noticeable in the triangular cooperation projects with Brazil.

Japan must actively promote assistance to Africa, based on Africa's great development needs and the discussion at TICAD4 and elsewhere. For implementation of assistance to the Portuguese-Speaking African Countries, however, Japan has a dearth of Portuguese-speaking specialists who are able to reside in Africa for extended periods of time. Conversely, Brazil has a large population of people of African descent, and Brazilian specialists have the ability to more easily adapt to African culture and customs, and they can also provide instruction in the common language of Portuguese. For these reasons, they have superior qualities in areas that are different from those of Japanese specialists, and by working together with Brazilian specialists for these projects it will be possible to execute projects both effectively and efficiently. With regard to technical aspects as well, Brazilian technology has many points in common with Africa in terms of technical level and environmental conditions and it is said to be easy to apply it to Africa, and this would enable technology transfer at a lower cost than that of modifying Japanese technology to fit local conditions. Both Japan and Brazil have a policy that emphasizes aid to Africa, and so working together would be in line with the diplomatic policy of both nations.

Through more strategic implementation of triangular cooperation in the future, the range of Japan's assistance is expected to expand. The Partnership Program countries in Latin America in particular have a high level of technical capability as donors, and they are increasing their presence in the international community as emerging donors. Combining the superior attributes of both Japan and the Partnership Program countries as equal partners in assistance will make it possible to implement assistance that would be difficult to implement by Japan alone.

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⁸⁶ Interview with Carlos Magno, former director of Embrapa.

3.3.3 Maintaining friendly relations with Latin America

Common to all implementing organizations visited in the site survey were the expressions of deep gratitude to Japan and a feeling of closeness and trust with respect to Japan. These implementing organizations were also the beneficiaries of bilateral cooperation from Japan, and the relationship of trust fostered by many years of cooperation is a precious asset in implementing triangular cooperation as well.

For example, the National University of La Plata in Argentina, which is the implementing organization for the "Project to Train Personnel to Improve Livestock Hygiene in the Southern Part of South America through Wide-Area Cooperation," saw its research technologies improved greatly as a result of the technical cooperation project that has been implemented by Japan since 1989, and it is now an implementing organization for third country training. When conducting training, however, it always takes care to make trainees aware of the presence of Japan. In particular the team of instructors (now professors at the dean level) who have had the experience of conducting projects together with Japan ever since the start of the bilateral cooperation project think of Japan as an important partner for international cooperation, and they hope to maintain an ongoing cooperative framework with Japan.⁸⁷

Moreover, in the "Local Police Activities Support Project" of Brazil, the Sao Paulo Military Police agency is conducting technical cooperation for third countries based on bilateral cooperation from Japan. The budget for these technical cooperation projects is borne entirely by Brazil, so it is not considered to be triangular cooperation with Japan. However, when the Sao Paulo Military Police agency conducts technical cooperation for third countries, it always makes a point of communicating to the ultimate beneficiaries that Japan is the basis for the expertise in local police activities.⁸⁸

Relationships of trust fostered by a long history of cooperation extending over many years are thought to be a particular characteristic of Japanese cooperation. Many of the aid liaison organizations and implementing organizations visited during the site survey raise this history of cooperation as something that differentiates Japan from other donors. For most of these institutions, their history of cooperation with Japan is the longest, and for many of them, the technical cooperation projects with Japan were their first experience with international cooperation. They are aware that Japan is their oldest partner and that their cooperative relationship with Japan is the factor that has promoted the internationalization of their country (the accumulation of experience in international cooperation). Moreover, triangular cooperation with other donors has in many cases begun due to political reasons (agreements signed during the visit of a head of state, etc.). In the case of Japan, however, technical cooperation conducted in the past developed into triangular cooperation, and there is seen to be little politics involved.

In this way, cooperative relationships that result from bilateral cooperation, and the triangular relationships that follow, make a major contribution to the building of ties of friendship on a grassroots level between Japan and resource countries, and it is no exaggeration to call these precious assets of Japan.

3.3.4 Increased presence in the international community as a leader in triangular cooperation

There has been increasing interest in recent years in south-south cooperation and triangular cooperation, due to the debate in the international community over ways to increase aid efficiency, the appearance of emerging donors and other factors. The World Bank and the Inter-American Development Bank, which were interviewed for this study, have indicated their intention to actively conduct triangular cooperation, and the World Bank in particular is planning to create a

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⁸⁷ Interview at National University of La Plata, conducted June 18, 2010.

⁸⁸ Interview at Sao Paulo Military Police, conducted June 14, 2010.

platform for promoting south-south cooperation. The World Bank is also studying the idea of creating a mechanism in the future that would enable ultimate beneficiary countries to select south-south cooperation and triangular cooperation partners themselves through an open recruitment system. As emerging nations increase their presence as new donors, south-south cooperation is expected to become even more active from this point on. At the same time, triangular cooperation, in which traditional donors (Development Assistance Committee member countries) are expected to work together with emerging donors to provide assistance to ultimate beneficiary countries, is also expected to increase.

In the light of this situation, there has been great interest on the part of the international community in Japan's achievements in triangular cooperation. Japan is a pioneer in this area, having conducted triangular cooperation by means of third country training and third country specialist dispatch since the 1970s. To other donors that would like to begin implementing triangular cooperation, Japan's expertise in triangular cooperation contains a wealth of suggestions. Recently the sharing of information on south-south cooperation and triangular cooperation has been promoted through a variety of methods, such as international conferences and seminars on south-south cooperation, web-based informational exchanges such as "South-South Info" and so on, and Japanese efforts are frequently raised at these conferences and websites.

3.3.5 Increased awareness of Japanese assistance (is Japan's presence visible?)

There is a debate regarding whether Japan's presence is visible enough in triangular cooperation. Although there are no clear standards for determining visibility, if this is defined as "an awareness on the part of relevant entities in the beneficiary country that triangular assistance is assistance from Japan," then triangular cooperation is adequately recognized as Japanese assistance in the beneficiary country and is therefore functioning as "visible presence" assistance.

However, compared to bilateral cooperation, a strengthening of ties between JICA and the relevant institutions in the beneficiary country due to triangular cooperation could not be confirmed to the extent that this exists in bilateral cooperation. Without exception, trainees returning to the beneficiary country are aware that the training was provided through assistance from JICA, and they express deep gratitude to JICA while at the same time having a feeling of closeness to Japan. However, within the scope of information obtained in the interviews conducted during visits to beneficiary country institutions as part of this study, it is undeniable that this recognition goes no further than the individual level. A strengthening of relationships on an organization to organization level, such as that between JICA and the implementing institutions in Partnership Program countries, could not be confirmed.

Steps that could be taken to ensure that Japan's presence is visible through triangular cooperation include the following:

- Intensified PR efforts for the local media: efforts to communicate information to the general public in the beneficiary country by and approaching the media and issuing press releases at the time of project startup and for each milestone
- Intensified PR efforts by the JICA office in the country targeting high officials in the local government
- Creation of project programs: forming a large-scale project and also implementing related projects (such as the "Triangular Cooperation for Agricultural Development of the Tropical Savannah (through Japan-Brazil cooperation) (ProSAVANA-JBM)" project) in order to more widely publicize Japan's presence to the government and general public in the beneficiary country. Moreover, during this type of flagship project, dispatching Japanese staff will also lead to a strengthening of organizational ties with the organization implementing the project.

• Some projects are already underway. However, in ongoing third country training activities, the trainees should be given an introduction to the basic framework of third country training (including the roles of the Partnership Program country and Japan, etc.) before classes in specialist fields are held, and a section should be included to ensure that trainees are clearly aware that the training is being conducted as a result of cooperation with Japan.

3.3.6 Considerations

However, when transferring Japanese technologies to neighboring countries, a careful study is needed to determine whether the technology to be provided meets the needs of the beneficiary country. Among the bilateral cooperation projects implemented up to now are some for which deployment to neighboring countries was not included in the initial objectives, and when attempting to deploy these technologies through triangular cooperation, they may not necessarily form projects that originate from the needs of the beneficiary country. For this reason, studies are needed from the bilateral cooperation project formation stage onward that consider the possibility of deployment (triangular cooperation) after the project ends.

In this way, in order to strategically deploy triangular cooperation while responding to the needs of the beneficiary country, assistance fields that match the key development fields and key development issues in the beneficiary country must be identified and projects related to those fields should be implemented intensively. This will enable the formation of triangular cooperation projects that are well-conceived to some degree.

The following table summarizes the impact of triangular cooperation and the considerations relating to triangular cooperation from the standpoint of the beneficiary country, Partnership Program country, and Japan as discussed above. The impact and constraining factors were common to joint projects, third country training and third country specialist dispatch.

Table 47 Impact and Constraining Factors Unique to Triangular Cooperation⁸⁹

Country	Impact Unique to Triangular Cooperation	Factors Constraining Impact
Beneficiary Country	Ability to receiving technologies that match issues specific to the region	 Need for a mechanism to ensure that needs of beneficiary country are reflected (because previously Partnership Program countries took the lead in project formation) Difficult to ensure the quality of third country specialists
Partnership Program Country	Improved aid implementing capability on the part of aid organizations and implementing organizations Reduced project expenses (cost sharing with Japan)	Employment system not set up by organization dispatching third country specialists (third country specialists are not able to maintain their employment contract, etc., with their employer and still be dispatched to beneficiary countries for extended periods)

⁸⁹ As discussed up to now, triangular cooperation in many cases includes impact that is identical or similar to that seen in bilateral cooperation. However, this table only lists the impact that is unique to triangular cooperation.

Country	Impact Unique to Triangular Cooperation	Factors Constraining Impact
Japan	Reduced project expenses (through cost sharing with Partnership Program country, reduced specialist personnel costs through use of Partnership Program resources, etc.)	Increased coordination costs for matching of beneficiary country needs with Partnership Program country resources (work time for local office staff)
	Cooperation is possible in fields in which Japanese personnel resources are lacking	More difficult to build cooperative relationships with relevant organizations in
	Use of third country resources that make the Japanese presence visible through the use of specialists of Japanese descent	beneficiary country than in the case of bilateral cooperation
	Dissemination of achievements of bilateral cooperation to neighboring countries	
	Maintenance and strengthening of friendly relations with Latin America	
	Improved presence in the international community as a leader in triangular cooperation	

3.4 Comments received by JICA from participants in Partnership Program countries and beneficiary countries

In addition to the impact of triangular cooperation, this study also solicited comments regarding JICA from the aid liaison organizations and implementing organizations in the Partnership Program countries and beneficiary countries. The comments on JICA that were received from these organizations are discussed below.

Both Partnership Program countries and beneficiary countries expressed deep appreciation to JICA for the opportunity to participate in training. The aid liaison organizations in the Partnership Program countries praised the long history of cooperation between JICA and the Partnership Program countries. It was pointed out that, while triangular cooperation with other donors often results from political circumstances such as negotiations on the head of state level or the like, triangular cooperation with JICA is the result of a cooperative relationship going back many years in the form of bilateral technical cooperation projects and the like, and for this reason it is more sustainable. The implementing organizations in the Partnership Program countries were also aware that past JICA technical cooperation projects had brought about great progress in their organization, and that technical cooperation based on these past projects was contributing to capacity-building of the implementing organization.

In the beneficiary countries as well, there was high praise for triangular cooperation by JICA. The returning trainees in particular who had participated in third country training said that JICA assistance had contributed greatly to improvement of their technical capabilities, and they expressed their appreciation.

On the other hand, with regard to issues pertaining to triangular cooperation with JICA, the decision-making process between the Tokyo head office and the local office was cited. Some of the Partnership Program country aid liaison organizations commented that even though discussions involving triangular cooperation project formation were held between the Partnership Program country aid liaison office and the local JICA office, the decisions were made at the JICA head office in Tokyo, so the views of people in the local area were not necessarily reflected accurately in the decision. Moreover, it was also noted that, as time is required for decision-making, there is a

Many of the trainees from developing countries that participate in JICA training in Japan are grateful not only for the opportunity to receive training but also for receiving the expenses needed to come to Japan. On the other hand, in comparison to the opportunity to receive training in Japan, the trainees interviewed for this study did not express gratitude for third country training so much as for the opportunity to receive training due to assistance from JICA.

lack of flexibility in responding quickly to situations with a high level of urgency such as disaster assistance.

In the site interviews, the view was expressed that it was difficult for the Partnership Program country to effectively transfer technologies to beneficiary countries due to restrictions on the procurement of equipment and materials. For example, it was pointed out that it was difficult to provide adequate instruction due to aging of the equipment that had been provided by Japan to the Partnership Program country in bilateral technical cooperation and other factors. In addition, there were cases in which the Partnership Program country was unable to accommodate the beneficiary country needs for consumables. 91 o

Furthermore, among the implementing organizations in the Partnership Program countries there were some that expressed a desire for technical cooperation from Japan to be conducted again. The reason was that it was difficult for them to update the technologies transferred from Japan through bilateral assistance by themselves, and in triangular cooperation instruction in new technologies would be provided. For this reason, when updating these technologies would match the development needs of neighboring countries, the idea of implementing bilateral cooperation concerning new technologies for Partnership Program countries, as cooperation designed to supplement triangular cooperation, can be studied.

With regard to what was needed from JICA from this point on, one thing that was citied was updating of the technologies transferred by means of technical cooperation projects conducted by JICA in Partnership Program countries up to now, at the same time as triangular cooperation is being conducted. While the technologies acquired by Partnership Program countries through past technical cooperation projects are in use within the Partnership Program country, in many cases they are in the same state as when they were transferred from Japan. For example, the Chilean International Cooperation Agency noted that the technologies that had been transferred from Japan had not been updated within Chile, and that it was possible that they may be unable to accommodate the needs of beneficiary countries in the future, and so they need continued assistance from Japan. Similar comments were heard from the National University of La Plata and INTA-IFFIVE, the two institutions implementing the projects in Argentine that were examined in this study. As these comments show, among the implementing organizations in Partnership Program countries are many that would like to obtain state-of-the-art Japanese technology through JICA.

⁹¹ Basically, these issues are considered to be issues that should be resolved by the Partnership Program country itself or the Partnership Program country and beneficiary country sharing the burden; here it is simply noted that this type of opinion was expressed.

Chapter 4 The Future Direction of Triangular Cooperation

1. Significance and issues relating to past triangular cooperation in Japan

1.1 Significance of triangular cooperation

This study has focused primarily on eight triangular cooperation projects implemented by Japan. The implementing organizations in both the Partnership Program country and the beneficiary country were visited and detailed interviews were conducted regarding the status of implementation. The achievements produced by triangular cooperation can be summarized as follows.

- In the bilateral cooperation that preceded triangular cooperation, Japanese technologies are being transferred in a precise manner. Triangular cooperation using these achievements is being efficiently and effectively implemented for neighboring countries with similar problem situations.
- The implementation of triangular cooperation helps to improve the technical capabilities of the beneficiary country, improve industrial production, protect industry, ensure social safety, create employment and so on, in accordance with the specific objectives of the project.
- The implementing organizations in the Partnership Program country have worked earnestly to implement triangular cooperation, and this has led to capacity-building on the part of the implementing organization.
- There has been an improvement in the awareness level and capacity of the direct beneficiaries in the beneficiary country, as well as in organizational capabilities.
- Triangular cooperation has also led to a recognition of the technological capabilities and
 international cooperation activities of Japan. All of the locations visited in the study expressed
 their appreciation with respect to Japan as well as a desire for continued cooperation in the
 future.
- Japan has a long history of cooperation in the countries of Latin America. The accumulation of these efforts has fostered a sense of trust in Japan and the formation of human networks with the partner countries, leading to the formation of strong ties with Japan.

Firstly, as triangular cooperation is implemented between countries that share similar backgrounds in terms of language, culture, geographical conditions and so on, it offers the following advantages from the standpoint of efficient implementation of assistance.

- The common language and culture means that communication from the resource country to the beneficiary country can be conducted smoothly.
- As the resource country has the same regional situation as the beneficiary country, it is quick to understand the status of problems.
- As the aid is being conducted between participants that share the same regional characteristics, the exact technology that is appropriate for those characteristics can be transferred.

Moreover, triangular cooperation is also advantageous from the standpoint of improving the efficiency of assistance in terms of the following aspects that go beyond simple linguistic, cultural, and geographical similarities.

- The achievements of bilateral cooperation implemented up to now by Japan can be used to
 enable technologies to be efficiently and effectively disseminated in neighboring countries with
 similar needs.
- It is possible to resolve wide-area issues that extend across multiple countries.
- The technologies and expertise of the resource country can be used.
- Use of the personnel and financial resources of the resource country enables personnel, transport and other costs to be reduced as compared to bilateral cooperation.

Another advantage is that triangular cooperation may take many forms — third country training, third country specialist dispatch, joint projects and so on — and project formation can be done flexibly in accordance with the situation.

In recent years, there has been a debate at the Development Assistance Committee regarding the use of "untied" technical cooperation, and there are undoubtedly concerns on the part of some who feel that, if technical cooperation using a resource country is possible, there is no need for "tied" technical cooperation that is limited to specialists and consultants within Japan.

However, in the triangular cooperation that has been implemented by Japan, the resource country selects fields in which it is superior in terms of the region, sector and so on, and implements cooperation. For this reason, even if the OECD established a rule to the effect that all technical cooperation including triangular cooperation should be untied, and the selection of resource countries in triangular cooperation were implemented in an untied fashion, Japan would not be forced to make major changes to the method it has used up to now to implement triangular cooperation. Moreover, if the point of untied technical cooperation is to improve efficiency from the standpoint of the costs and benefits of technical cooperation, and to promote entry into the technical cooperation market on the part of developing countries, it is thought that in triangular cooperation the "tied" selection of a specific developing country as a resource country should be permitted as an exception.

Furthermore, triangular cooperation is implemented when the resource country can utilize its superior attributes in terms of specialities, regional characteristics and so on, as compared to Japan directly implementing bilateral cooperation. A look at the technical cooperation by Japan in recent years reveals that there are still many fields in which Japan must directly provide technical cooperation because the technologies do not exist in developing countries. In this sense, there is thought to be no contradiction between promoting triangular cooperation and the continued implementation of "tied" technical cooperation.

1.2 Trends and issues relating to triangular cooperation

As discussed in 1.1 above, triangular cooperation has many positive effects and significances, but on the other hand the trends in Japan and the world surrounding triangular cooperation are changing rapidly. The following changes in the environment have occurred that require a consideration of the approach to triangular cooperation by Japan in the future.

- With the increasing trend in which there are limits to Japan's total expenditures for international cooperation, international cooperation projects need to become even more efficient, to focus on key areas and so on.
- Among the countries to which Japan has provided assistance in the past are some that have experienced economic growth and are expanding their capacity and desire to become donors.
- There is increasing interest in and desire to implement triangular cooperation on the part of international organizations and developed nations.

In addition, the interviews conducted at the local JICA offices, Partnership Program countries and beneficiary countries were limited primarily to eight target projects, but the following issues were identified.

- Triangular cooperation projects implemented by Japan are tailored to the unique situation, needs, history etc. in each target area. As a result, the fields and content for which cooperation projects are implemented vary widely, and the direction of Japan's overall triangular cooperation in Latin America in terms of fields and methods is unclear.
- Studies of cooperation and coordination with international organizations and other aid agencies in developed nations have not always been properly conducted.
- Unlike bilateral cooperation in which there are only two participants, JICA and a single beneficiary country, in triangular cooperation there are many participants: a resource country (Partnership Program country) is also involved, and there may be two or more beneficiary countries. As a result, a great deal of effort is needed at the project formation stage to determine the needs of the beneficiary country and link these with "seeds" (resource country, implementing organization, and resource country specialists that have both the specialist expertise and the desire to provide assistance). For this reason, the JICA offices work to determine beneficiary country needs and share those needs among local offices, in order to conduct liaison and coordination from an earlier point than in the case of bilateral communication. These activities increase the triangular cooperation workload at each office, and as a result costs are produced in terms of the increased work hours of the staff at local JICA offices.
- For Japan, triangular cooperation enables necessary expenses to be reduced as compared to bilateral cooperation, and for the resource country it is advantageous in terms of reducing the financial burden. For the beneficiary country as well, it is advantageous in enabling assistance to be received from a resource country with similarities in terms of language, culture and geographical conditions. In this sense, triangular cooperation is a method with strong "win-win-win" aspects. 92 However, for this reason, if the requests of the resource and beneficiary countries are simply accommodated, the number of projects to be implemented may simply expand needlessly. 93 In order to prevent this from happening, entrance and exit management must be firmly exercised.
- There is debate as to whether Japan's presence is clearly apparent in the case of triangular cooperation as compared to bilateral cooperation. In the interviews conducted with returning trainees, etc., who had participated in triangular cooperation, it was learned that local JICA office staff had also participated during the implementation of triangular cooperation projects, so there was a thorough awareness that the triangular cooperation was being implemented through assistance from Japan. However, compared to bilateral cooperation, there are fewer opportunities to receive instruction directly from and communicate with Japanese specialists, so it is unavoidable that Japan will have slightly less of a presence.

⁹² As discussed in Chapter 3 and other sections of this report, triangular cooperation, as in the case of bilateral cooperation, has both advantages and constraints and the like. For this reason, it goes without saying that the decision as to whether to conduct a triangular cooperation project should be made based on an overall comparison of advantages and constraints, and after a comparison with conducting the project through bilateral cooperation and so on to reach a final decision. Here it should be pointed out that, regardless of the objective assessment by Japan, there are additional aspects such as that the participants other than Japan (meaning the Partnership Program countries and beneficiary countries) tend to find it easy to see the advantages, and that, compared to bilateral cooperation, there is more than one country involved, which tends to increase the pressure involved in requesting assistance.

⁹³ The same can be said for bilateral cooperation as well; if the requests of countries seeking assistance are simply accepted, the number of projects for implementation may expand. Here the point is not to say that bilateral cooperation offers more advantages than triangular cooperation and that a shift in terms of the number of projects may occur from bilateral cooperation to triangular cooperation.

2. Future direction of triangular cooperation

Based on the circumstances surrounding triangular cooperation as noted in the previous section, Japan should make the efforts described below from now on regarding triangular cooperation in Latin America.

2.1 Ongoing implementation of triangular cooperation projects

For this reason, compared to the case of bilateral cooperation implemented directly by Japan for neighboring countries, triangular cooperation is a tool that allows technologies that originated in Japan to be transferred at a lower cost (in terms of personnel expenses, transport costs, etc.), and in this sense it is an efficient assistance tool. Up to now, Japan has accumulated a wealth of achievements in bilateral cooperation in Latin America, and as a result a strong relationship of trust has been formed with the countries in the region. Moreover, Japan was ahead of many other donors in implementing triangular cooperation in particular, and it has experience and dominance unsurpassed by other organizations. Furthermore, as in the assistance for Africa implemented in cooperation with Brazil, in recent years Japan has also begun new triangular cooperation projects using its comparative dominance and that of the resource country.

Considering all of these factors together, triangular cooperation has become established as an effective approach for effectively implementing assistance in the same region as well as in Africa and other outside regions, working together with the resource countries of Latin America. Based on this background, triangular cooperation should be considered as one effective approach for Japan to provide assistance in Latin America, Africa, and other regions in which it is thought that assistance can be efficiently implemented in cooperation with resource countries in Latin America.

Considering triangular cooperation as one effective assistance approach means that triangular cooperation should be thought of not merely as something that adds to or complements bilateral cooperation but as a method that can replace bilateral cooperation. In view of the superior attributes of triangular cooperation as discussed in 1.2, another approach that can be considered is to start with bilateral cooperation and then shift to triangular cooperation for certain countries and fields when it is thought that triangular cooperation can be implemented more efficiently than bilateral cooperation.

2.2 Cooperation with international organizations

In an effort to conduct an analysis from elements further upstream in the process, Japan actively incorporates analytical work in South America in order to narrow down the fields for assistance and conduct appropriate project formation.

Other international organizations such as the IDB, UNDP, and the World Bank also have tight-knit networks in Latin America and are implementing cooperation activities.

Naturally Japan will continue to implement triangular cooperation in accordance with its policy. However, Japan should also study the possibility of implementing triangular cooperation in cooperation with international organizations in cases in which, based on the currents in aid coordination, this will enable cooperation that is more efficient and is in keeping with Japan's cooperation policy. An example is implementation by Japan of cooperation that meets the needs of beneficiary nations as determined by international organizations.

Moreover, in order to widely disseminate information about the achievements of Japan's triangular cooperation in Latin America and, as a pioneer in this area, to take the initiative in the discussion in the international community regarding triangular cooperation, Japan could also actively utilize the frameworks of international organizations, such as by participating in the UNDP Global

South-South Development Academy and Global South-South Development Expo, and by introducing Japan's activities relating to the World Bank's South-South Cooperation Trust Fund. Japan's experience will be a valuable source of information for other donors, and communicating the experience and expertise gained by Japan through past triangular cooperation to the international community will help promote triangular cooperation internationally. At the same time, Japan's position as a leader in triangular cooperation will enable it to play a leading role in the debate on triangular cooperation in the international community. For this reason as well, Japan should sum up its past achievements and experience and make an active effort to communicate this information.

Moreover, in order ensure Japan's presence in international organizations, it will be important to secure the posts that have been set up at the SSC Unit in the UNDP. The Partnership and Resource Mobilization Unit within UNDP-SSC is a post that has been continuously headed by a Japanese up to now. Providing personnel in this way so Japanese are posted at international agencies will play an effective role in strategically publicizing Japan's triangular cooperation activities.

Furthermore, cooperation with these international organizations need not be limited to information sharing and communication. The idea of cooperating to achieve triangular cooperation projects through these international organizations should also be studied.

2.3 Selective implementation of triangular cooperation projects (entrance control)

As discussed earlier, triangular cooperation provides advantages for both the resource country and the beneficiary country. Accordingly, if assistance is implemented in response to requests from resource countries and beneficiary countries, it is possible that the number of projects to be implemented may expand of its own accord. For this reason, several important conditions should be kept in mind during the process of selecting projects.

In deciding what type of projects should be implemented in the form of triangular cooperation, it is not only the development needs of the beneficiary nation that should be considered. Guidelines like the ones listed below should be established, and triangular cooperation should be selectively implemented for only the projects that are in keeping with those guidelines.

[The project should be something that has significance in an area in which Japan is dominant.]

- The focus for implementing triangular cooperation should be narrowed down to those fields and projects in which Japan is dominant as compared to other countries, for which the resource country has sufficient technical capability to be an implementing country (for example, industrial cooperation), and for which there is great significance to Japan's implementation (for example, projects that will lead to investment in Japan's private sector companies). For this reason, one idea is for Japan to turn the fields for implementing triangular cooperation into major programs, for example the field of agriculture or aid to Africa.
- The purpose of triangular cooperation is to transfer and disseminate technologies in which Japan is dominant as well as expertise relating to their application and dissemination, as well as outstanding and uniquely Japanese systems and so on. For this reason, while also taking into consideration the relationship to the resource country, extreme care must be taken in the implementation of triangular cooperation for which the main objective is to improve the general organizational capabilities of aid organizations and implementing organizations in the resource country, and to train personnel for this purpose. However, this is not the case for triangular cooperation in which the main objective is to disseminate technology and provide technical cooperation for the beneficiary country, whose implementation may incidentally produce achievements in the area of personnel training and improved organizational capacity on the part of the aid organizations and implementing organizations in the resource country. In addition, when this kind of request has been received from a country that is not a resource country but that wants to conduct donor type activities in the future, out of consideration for future relations

with that country, it will be necessary to shift to cooperation whose purpose is capacity-building as a donor.

[The project should be something for which a resource country can provide elements that Japan lacks.]

• Triangular cooperation should be implemented for projects that have great significance to Japan but for which Japan lacks the personnel resources, and that could be more easily implemented through triangular cooperation that enabled it to work with a resource country and to use the technologies and expertise of that country, particularly when there is great significance in implementing the project as a triangular cooperation project. (Example: working with Brazil to conduct triangular cooperation for Africa)

[Use of previous bilateral cooperation should be kept in mind.]

• When a technical cooperation project is implemented on a bilateral basis and the same type of issues and needs exist in neighboring countries, and when there is significance in disseminating that technology throughout a wide area, the possibility of implementing a triangular cooperation project should be incorporated into the bilateral project plan in advance, and a triangular cooperation project should be implemented in that case.

[Cooperation with international organizations and other cooperating organizations should be kept in mind.]

• In recent years, the Inter-American Development Bank (IDB) and other international organizations have also become interested in triangular cooperation. For this reason, when determining the need for a triangular cooperation project by Japan, it is possible that making use of the information possessed by these international organizations, etc., to determine needs or leaving the assistance up to them may be an option in the future.

[The diplomatic effect of implementing triangular cooperation should also be considered.]

• In some cases, triangular cooperation is implemented with the aim of strengthening the diplomatic ties between the resource country and the beneficiary country, for example if there is a desire to strengthen diplomatic ties with Brazil or another emerging nation. In recent years, the triangular cooperation being implemented in Africa is being done partly with the aim of strengthening diplomatic ties with African countries. In selecting triangular cooperation projects, the diplomatic effect must be taken into consideration in addition to the points raised above.

2.4 Progress control and exit control for triangular cooperation projects

Among the eight target projects for this study are some in which triangular cooperation was implemented on an ongoing basis, in several phases or over the course of many years. Among them were cases in which the implementing organization acquired the capabilities of a donor and, while implementing the triangular cooperation project, implemented a similar project by itself in another country

The implementation status of triangular cooperation should be managed, and the project should end once the initial objectives have been achieved. If implementation is to be continued for a similar project, the need for this should be confirmed thoroughly. Moreover, if the project is to be curtailed or terminated in mid-execution, a flexible approach should be studied, such as allocating the resources to a new triangular cooperation project.

In exit management for projects whose implementation has already begun, a difficult decision is required when the resource country and/or the beneficiary country requests assistance for a new phase. In such cases, it is not easy for Japan to say "No" to the new request, especially if the project is going well because there is already a relationship with the implementing organizations in the resource and beneficiary countries.

However, even in such situations, it would be best to negotiate an end to the triangular cooperation with the implementing organizations in cases such as the following:

Firstly, for projects in which the dispatch of specialists from Japan and the provision of equipment are not needed and the project is continuing with only the burden of funds from the Japan side, an end Japan's financial assistance either immediately or in stages should be negotiated. The lack of a need for dispatch of specialists from Japan and the provision of equipment is an indication that, in terms of the content of the assistance, the resource country is capable of implementing the assistance by itself. In order to further promote the independence of the resource country as well, financial assistance from Japan should be terminated.

In addition, even when the target area needs assistance and continued technology transfer from Japanese specialists and equipment provision are judged to be necessary, this should not extend to an agreement between the resource country and the beneficiary country that is based on long-term ongoing assistance. The goal of development assistance should always be independent development, and triangular cooperation should also work in stages toward a transition in which the resource country and the beneficiary country are able to conduct cooperation independently. From this perspective, even when the continued investment of personnel and materials from Japan is judged to be needed, as the assistance itself continues, it should be kept in mind that the provision of personnel, materials and funding from Japan will come to an end in the next phase, and efforts needed for the necessary technology transfer and cost-bearing should be conducted in the next phase of the assistance.

2.5 Follow-up activities for triangular cooperation projects

Among the technologies transferred by Japan to countries in Latin America through bilateral cooperation and triangular cooperation are those that require even higher-level technology transfer in response to progress in those technologies. In such cases, follow-up should be conducted through the implementation of training in Japan and specialist dispatch on a small scale. In some cases, upgrading and repair of materials and equipment that have deteriorated and the replenishment of consumable items will be required. Follow-up is needed in these cases as well, based on the nature and status of the project.

These actions will make it possible to maintain the networks and relationship of trust with the other country, which are a major achievement of the projects implemented up to now, as well as the dissemination of Japanese technology and expertise.

3. A final word

The authors would like to express their deep appreciation to the JICA offices in Latin America, the cooperating and implementing organizations in the Partnership Program countries in Latin America, and the cooperating organizations, beneficiary organizations and beneficiaries in beneficiary countries for their sincere and courteous response in the interview survey that was conducted in connection with this study.

This study was limited to eight triangular cooperation projects and was implemented on a very tight schedule in which seven countries were visited in a one-month period. For this reason, it is possible that there are inadequacies in terms of the scope and depth of the study, and for this the authors ask for your understanding.

However, even judging only from the results of this limited site survey, we were able to understand that Japan and all of the parties involved who are conducting activities in the region are working seriously to implement triangular cooperation with firm conviction and intent, and that, as a result of these efforts, they have gained a tremendous amount of trust and gratitude from all of the countries involved, resulting in extremely significant achievements for the beneficiary countries.

It is hoped that this study will serve as the opportunity for Japan to implement, on an ongoing basis, activities such as the following that are thought to be needed with respect to triangular cooperation.

- The same type of survey should be conducted for the triangular cooperation implemented by Japan in regions other than Latin America (for example, Asia) in order to make a comprehensive determination of the current state and issues pertaining to the triangular cooperation being implemented in Japan, and to study the future approach to triangular cooperation in Japan.
- An interview survey for everyone involved in triangular cooperation projects and a study of the
 project process from determination of needs to the conclusion of the project should be
 implemented, in order to conduct a detailed determination and analysis of the state of triangular
 cooperation projects.
- A database of triangular cooperation achievements and content should be created to publicize
 and therefore help promote triangular cooperation throughout the world. In addition, as a world
 leader in triangular cooperation, Japan should play a central role in promoting case research and
 theoretical research into triangular cooperation, working in cooperation with international
 organizations and the like.

Clarifying the current state of triangular cooperation activities and publicizing triangular cooperation to the rest of the world through these activities will promote an understanding of triangular cooperation and can be expected to achieve even more effective and efficient cooperation. Moreover, as interest in triangular cooperation on the part of the international community continues to increase, it will be necessary for Japan to clearly indicate its future policy toward triangular cooperation, based on the aforementioned efforts and the like.

In the future, Japan should conduct more in-depth studies of triangular cooperation and actively employ it as a tool for international cooperation. This will maintain and develop the relationships of trust that Japan has built with countries in Latin America and the rest of the world, and will enable Japan to fulfill its important role in the international community.