

Third Party Evaluation Report 2018
Ministry of Foreign Affairs of Japan

Evaluation of Japan's ODA to Costa Rica and Nicaragua

March 2019

Koei Research & Consulting Inc.

Preface

This report, under the title of “Country Assistance Evaluation of Costa Rica and Nicaragua” was undertaken by Koei Research & Consulting Inc. entrusted by the Ministry of Foreign Affairs of Japan (MOFA) in fiscal year 2018.

Since its commencement in 1954, Japan’s Official Development Assistance (ODA) has contributed to the development of partner countries around the world and has contributed to building international solutions for their priority issues. Recently, in both Japan and the international community, implementing ODA is being held to an even higher standard of effectiveness and efficiency. MOFA has been conducting ODA evaluations every year, most of which have been conducted at the policy level focusing on two main objectives: to improve the management of ODA; and to ensure its accountability. The evaluations are conducted by third parties to enhance transparency and objectivity.

This evaluation study was conducted with the objectives of: 1) reviewing Japan’s overall policies on assistance to Costa Rica and Nicaragua, including the Country Assistance Policy for the both countries, 2) drawing on lessons from this review to make recommendations for reference in policy planning and its effective and efficient implementation of future assistance to Costa Rica and Nicaragua by the Government of Japan, and 3) ensuring accountability by making the evaluation results widely available to the general public.

Yasunaga TAKACHIHO, professor at North Asia University, served as a chief evaluator to supervise the entire evaluation process, and Tomomi KOZAKI, professor at Senshu University, served as an advisor to share his expertise on the country and region. They have made enormous contributions of this study both in Japan and in Costa Rica, we have benefited from the cooperation of MOFA, Japan International Cooperation Agency (JICA), and the local ODA Task Force, as well as government agencies in Costa Rica and Nicaragua, donors and non-governmental organizations (NGOs). We would like to take this opportunity to express our sincere gratitude to all who were involved in this study.

Finally, the Team wishes to note that the opinions expressed in this report do not necessarily reflect the views or positions of the Government of Japan.

March 2019

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Note: This English version is a summary of the Japanese Evaluation Report of “Evaluation of Japan’s ODA to Costa Rica and Nicaragua”.

Evaluation of Japan's ODA to Costa Rica and Nicaragua (Brief Summary)

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Target Period of the Evaluation:

Costa Rica: FY 2006– 2017

Nicaragua: FY 2007– 2017

Period of the Evaluation Study:

July 2018 – March 2019

Field Survey Country: Costa Rica

Note: Field survey was not realized in Nicaragua due to the social-political instability in the planned survey period.



Solar panels installed with the cooperation of Japan (Costa Rica)

Background, Objectives and Scope of the Evaluation

Since Japan established diplomatic relations with Costa Rica and Nicaragua in 1935, Japan has had a longstanding relationship with both countries except during World War II. The objectives of the evaluation are to obtain lessons and recommendations for formulating and implementing future ODA policy; and to contribute to the improvement of ODA, to enhance accountability.

I. Costa Rica

Evaluation Results

●Development Viewpoints

(1) Relevance of Policies (Rating A: Highly Satisfactory)

As a whole, relevance of policies is extremely high in terms of consistency with Japan's high-level ODA policy, priority areas of national development plan of Costa Rica, international priority issues, and complementarity with other donors' assistance.

(2) Effectiveness of Results (Rating B: Satisfactory)

A certain level of contribution was confirmed in general. Japan's contribution was significant in the area of "Responding to environmental problems" which coincided with high commitment of Costa Rica to greenhouse gases reduction. As for support for the socially vulnerable, Japan's ODA contributed to enact a law to protect rights of persons with disabilities. For the area of "Industrial promotion・Reduction of economic disparities", regardless of the favorable outcomes of each project, the degree of contribution toward set development issues is not clearly confirmed, as priority areas, development issues, assistance programs and projects were not logically sorted in the Rolling Plans of Japan's ODA policy for Costa Rica.

(3) Appropriateness of Processes (Rating B: Satisfactory)

The team deems that the overall processes of formulating and implementing Japan's ODA policy are appropriate in general. However, linkage between priority areas, development issues and assistance program, as well as position of the project in the program could have been examined more logically.

●Diplomatic Viewpoints

ODA to Costa Rica involves diplomatic significance in three aspects: 1) it functions to maintain and to develop good bilateral relationship between Japan and Costa Rica, 2) Japan could address global issues, namely climate change through providing assistance to Costa Rica, a country with high presence in environment protection in the international community, and 3) through ODA, Japan could promote regional integration in Central America, where Japan finds geopolitical importance. In terms of diplomatic impact,

Japan's ODA could promote the relations between the two countries, the presence of Japan in Latin America, and private investment between Japan and Central America.

Recommendations

(1) Continuation of the Cooperation for Climate Change Mitigation

Japan should continue the assistance in climate change mitigation, especially to reduce greenhouse gases emission. It is worthwhile to examine the possibility of Japanese cooperation to facilitate alternative public transportation, such as development of train system. However, financial difficulty which Costa Rica government confronts should be carefully analyzed before the formulation of the assistance.

(2) Cooperation to Vitalize Rural Areas

Taking good practices of the Japan's ODA against disparities between urban and rural area, extending the cooperation to enlarge the impacts nationwide is recommendable. Based on the past experience of cooperation, Japan could support the systematization of diffusing "Livelihood improvement approach", and also provide technical assistance for promotion of Micro, Small and Medium Enterprises (MSMEs) in rural areas.

(3) Making Use of the Experiences of Costa Rica for Better ODA Policy Elaboration for Other Middle-Income Countries

Costa Rica struggles with various problems which hinder it to become a developed country, such as financial crises, economic disparity among citizens, and educational inequity. Implementing a study to sort out and identify critical issues in Costa Rica as a middle-income country may enable specifying the relevant themes and means of ODA, and could address the common issues in middle-income countries.

(4) Promoting Triangular Cooperation with Costa Rica as a Partner

Japan could implement triangular cooperation with Costa Rica to other Latin American countries through technical training, particularly to environment-related sector such as geothermal development, in which Japan has comparative advantages, and Costa Rica has set as a priority area for cooperation. It could be beneficial for Japan in terms of smoother communication and cost reduction, and beneficial for Costa Rica to enhance the capacity of the cooperation.

(5) Targeting a Wide Range of Population for PR Strategies

As the population is not fully aware of Japan's ODA in general, it is necessary to develop a PR strategy to raise greater public recognition of the assistance. Sharing PR strategies with Costa Rican stakeholders, it is practical to involve them into PR activities. It may be also more effective to publicize the assistance by priority area or program rather than by each project. The regular use of social networking services or uploading videos to internet (e.g. YouTube) may facilitate reaching people of all ages.

II. Nicaragua

Evaluation Results

●Development Viewpoints

(1) Relevance of Policies (Rating A: Highly Satisfactory)

As a whole, relevance of policies is extremely high in terms of consistency with Japan's high-level ODA policy, priority areas of Nicaragua's national development plan, international priority issues, and in terms of complementarity with direction of other donors' assistance. Japan's ODA comprehensively covers all priorities areas of Nicaragua, and emphasizes bridge and road development, in which comparative advantages of Japan's technological capabilities appear.

(2) Effectiveness of Results (Rating B: Satisfactory)

A certain level of contribution is achieved in general. The contribution was significant in the area of "transport and urban infrastructure development" and especially bridge construction is known to be symbolic of Japan's ODA. Contributions in health, education,

energy and environment conservation sector are also confirmed. Yet the team could not confirm high satisfactory results in all elements as the field survey could not be conducted.

(3) Appropriateness of Processes (Rating B: Satisfactory)

The team deems that the overall processes of formulating and implementing Japan's ODA policy are appropriate in general. In the Rolling Plan of Japan's ODA policy for Nicaragua, relevance between Priority Issue and some cooperation projects were not clearly shown in some projects. Yet, the cooperation program and contents were reviewed and reorganized to clarify the direction of the country assistance strategy in 2017.

●Diplomatic Viewpoints

Japan's ODA to Nicaragua has diplomatic significance in two aspects: geopolitical importance and responding to global issues. Promoting socio-economic development in Nicaragua contributes to stable development in surrounding countries as Nicaragua is situated in the center of the region. As Japan takes initiative in disaster risk reduction, it is critical to address vulnerability of natural disasters worldwide as a member of the international community. As for diplomatic impact, it enhanced the presence of Japan in Nicaragua and strengthened the bilateral relationship. It is expected to facilitate creating the foundation of private investment between Japan and Central America in the long term.

Lessons learned

(1) Maximize the Impacts of Cooperation on “Disaster Risk Reduction” in Socially and Economically Vulnerable Countries

Socially and economically vulnerable people/area are generally even more vulnerable to natural disaster. To be able to promote disaster risk management effectively in those areas, it is necessary to improve the basic condition of their lives, to motivate them, and to enhance their capability to tackle the disaster risks and strengthen resilience. Hence, when implementing disaster risk management project targeting those, it would be useful to combine the elements of social development in the project.

(2) Effectiveness of Infrastructure Development Cooperation with Japanese Superior Technology

The assistance for infrastructure development is remarkably effective from both development and diplomatic perspective when it applies Japan's outstanding technology. Such cooperation brings a big impact for the recipient country's development. It could also enhance the presence of Japan and could extend business opportunities.

III. Lesson Learned from the Cooperation toward Both Countries

(1) Supporting the Initiative of the Recipient Country

Supporting the priority sectors of the recipient government is certainly effective for two reasons: the government takes the lead to strengthen the institutions to achieve the goal, and the government is more likely to sustain and enlarge the outcome of the cooperation.

(2) Collaboration with IDB in Latin American Countries

Collaboration with IDB may be effective because: 1) co-financing with IDB in Latin American Countries can produce greater impact by securing larger funding than relatively smaller scale projects on bilateral basis, 2) It can facilitate negotiation with the recipient government and the formulation and implementation of project, 3) it may reduce costs for investigations and other expenses.

(3) Strategic Inter-Scheme Combination to Achieve Synergy Effect

Combining relevant schemes available in Japan's ODA in one common program could generate synergy and greater impact than applying one scheme alone.

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Chapter 1 Implementation Policies for Evaluation

1-1 Background and Objectives of Evaluation

Japan and Costa Rica as well as Japan and Nicaragua have maintained a good relationship since the establishment of diplomatic relations in 1935 excluding during the World War II.

<Costa Rica>

Japan has been providing financial and technical cooperation for sustainable development in Costa Rica centering on the environmental sector since signing Agreement of Japan Overseas Cooperation Volunteers (JOCV) in 1973 and starting dispatching from the following year. Now that Costa Rica has succeeded in increasing foreign currency income by attracting foreign investment in addition to traditional primary product production, and nominal GDP per capita exceeds 10,000 USD, it was decided to carry out this evaluation as an opportunity to look back on ODA to Costa Rica.

<Nicaragua>

Japan has been providing cooperation for stable economic growth, mainly through poverty reduction and income disparities. It has started with providing technical training for Costa Rican in 1964. The previous country assistance evaluation was conducted in FY2007. Ten years later, economic growth was relatively stabilized and social and economic conditions also developed. Based on the background described above, it was decided to carry out this evaluation as an opportunity to look back on ODA to Nicaragua.

This evaluation was conducted to achieve the following objectives.

- To obtain lessons and recommendations for formulating and implementing future ODA policy, through overall evaluation of Japan's ODA policy and performance for Costa Rica and Nicaragua.
- To consider the following issues for the cooperation with Costa Rica: i) further strengthening of environmental conservation in Costa Rica, ii) possibility for promotion of regional cooperation in the environmental sector in Central and South America, and iii) supports for middle-income countries.
- To compare common issues in Costa Rica and Nicaragua for the cooperation of environmental conservation and disaster risk reduction, and to list up relevant lessons.
- To fulfill accountability for the Japanese public by widely disseminating these evaluation results, to contribute to the improvement of ODA, and to feed the results back to the Government of Costa Rica, the Government of Nicaragua and to other donors as well as promotion of visualization through the evaluation.

1-2 Scope of Evaluation

This evaluation targets the overall policies associated with Japan's assistance for Costa Rica and Nicaragua. The period targeted by the evaluation general focused on the following periods; however, the evaluation team (hereinafter referred to as "the team") evaluated some existing and on-going projects, that they felt necessary.

【Costa Rica】 Japan's ODA policy and performance from FY2006 to FY2017.

【Nicaragua】 Japan's ODA policy and performance from FY2007 to FY2017.

In order to grasp the ODA policies to Costa Rica and Nicaragua, the team reviewed development cooperation policies and performances for both countries in the target periods. Based on the review, the team prepared a list of Japan's assistance performance to Costa Rica and to Nicaragua, and summarized the results in an objective framework in consideration of priority areas. This evaluation targeted basic policy, priority areas, development issues and programs in the objective framework as shown below.

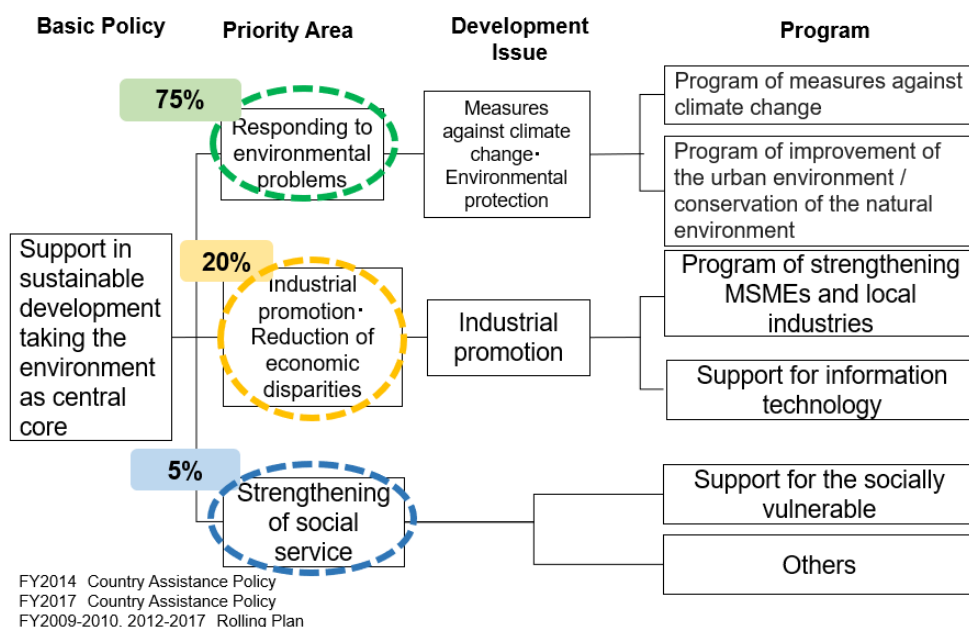


Chart 1: Objective Frame Work for Japan's ODA to Costa Rica

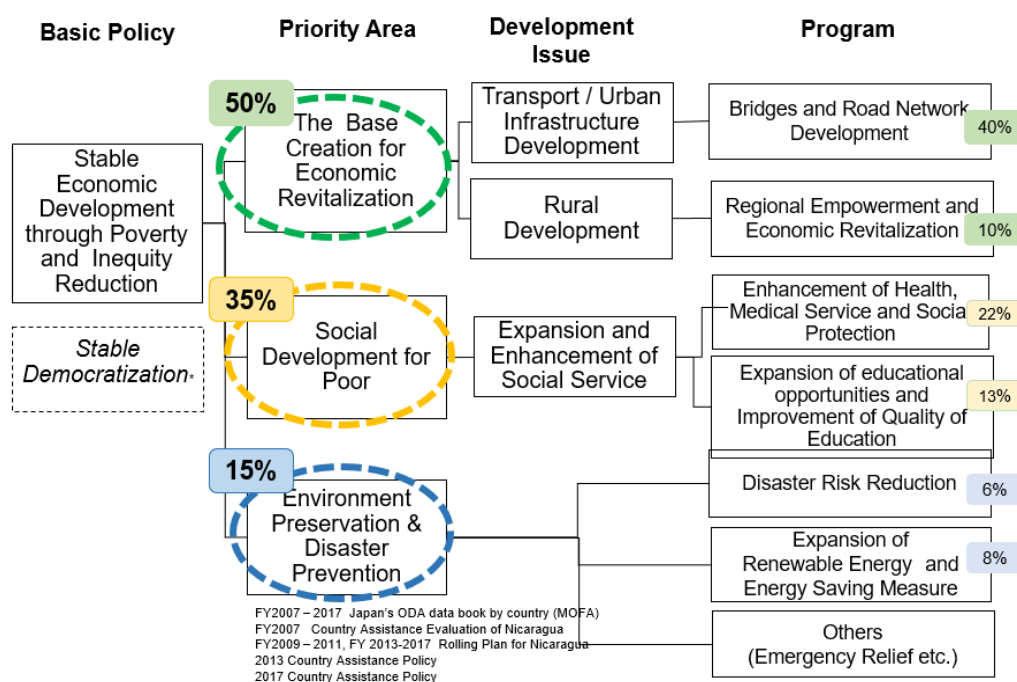


Chart 2: Objective Framework of Japan's ODA to Nicaragua

1-3 Evaluation Methods

Pursuant to MOFA's "ODA Evaluation Guidelines (11th edition)", the team first sorted out the assistance policies for Costa Rica and Nicaragua and evaluated them from two viewpoints: development and diplomatic viewpoints. To evaluate development effects, the team used three criteria: "relevance of policies", "effectiveness of results" and "appropriateness of processes". To show the result of each criteria, the team used ratings based on the reference table of ratings in MOFA's "ODA Evaluation Guidelines". As for evaluation from the diplomatic viewpoint, the team did not use ratings for two reasons: because external factors are large, and because it is difficult to prove direct cause and effect relationship between ODA and diplomacy.

As for Nicaragua, the field survey was not carried out due to the socio-political situation and security situation. For this reason, necessary information was collected by questionnaires from relevant ministries and project implementing agencies through the Embassy of Japan in Nicaragua. Review of existing information and interview with the related agencies in Japan were also conducted. Regarding trends of major other donors, the team collected information by questionnaires in addition to the review of existing information.

Chapter 2 Overview of Costa Rica and Development Trends

2-1 Overview of Costa Rica

Costa Rica is a small country with a population of 4.86 million (2016). The nominal

GDP per capita is over 10,000 USD¹ due to the increase of foreign currency revenue through foreign investment, ecotourism and medical tourism as well as traditional commodity production such as coffee and banana. The current Constitution, enacted in 1949, put an end to military coups, and the Heads of State have been elected by democratic elections, giving the country the reputation as the most democratic in Central America. The country has a strong presence in the fields of peace, human rights, and disarmament in the international community owing to the abolition of a standing army by the Constitution and the declaration to be an unarmed and neutral state in 1983. Costa Rica also has built a significant presence in the environmental field. For instance, the country promotes policies related to achieving carbon neutrality, including a proposal on the international mechanism REDD + ("Reducing Emissions from Deforestation and Forest Degradation in Developing Countries").

On the other hand, there is a disparity between urban and rural areas in Costa Rica: the poverty rate² in urban area is 15.7%, while about 30% in the Burunca region along the southern Panama border and Central Pacific region; Gini coefficient is also as high as 48.7³. Moreover, the public debt outstanding as a percentage of GDP reached 49% in 2017 due to large budget deficits, which is an urgent issue for the Costa Rican government⁴. Considering such circumstances, incumbent president Carlos Alvarado Quezada, inaugurated in May 2018, of the Civil Action Party declared policies of financial improvement, reduction of disparities, and the promotion of decarbonization.

2-2 Development Trends in Costa Rica

2-2-1 Costa Rica's Development Policy

In Costa Rica, where regime changes are taken place every four years, each administration formulates a development plan. Three development plans were formulated during target period of the evaluation between FY 2006 and FY 2017, basically prioritizing social development / poverty reduction, economic growth / strengthening competitiveness. The areas of emphasis in recent years are economic growth and innovation, infrastructure and transportation network development, human security, and regional development.

¹ Costa Rica Central Bank (2017)

² The poverty rate in Costa Rica is the proportion of the poor and the poorest households combined. As of October 2018, the poorest households are those with a monthly income of less than about USD 84 in urban areas and less than about USD 69 in rural areas. The poor households, on the other hand, earn more than the poorest households, and those with less than about USD 184 in urban areas and less than about USD 141 in rural area. (El Pais.cr 2018)

³ World Bank (2016)

⁴ OECD Economic survey Costa Rica (2018)

Chart 3: Transition of Costa Rica's National Development Plan

2006～2010	2011～2014	2015～2018	2019～2022
<ul style="list-style-type: none"> • Social policy • Productivity improvement policy • Environment•Energy•Communication policy • Institutional reform policy • Diplomatic strengthenment 	<ul style="list-style-type: none"> • Environmental protection and sustainable development • Social welfare • Strengthening competitiveness and innovation • Security Policy 	<ul style="list-style-type: none"> • Economic growth and employment expansion • Reduction of inequality and poverty reduction • Anti-corruption and the formation of a transparent and efficient nation 	<ul style="list-style-type: none"> • Innovation and competitiveness • Infrastructure, mobility and land maintenance • Human security • Health and social security • Sustainable development and education for coexistence • Stable economy and inclusive growth • Regional development

Source: Prepared by the evaluation team based on each development plan

2-2-2 Trend of Donors

Development cooperation to Costa Rica through bilateral relations and international organizations is less than that to other Central American countries because of being considered as middle-income country. Germany, the United States, France, and Spain as well as Japan mainly cooperate with Costa Rica through bilateral cooperation in the areas of the environment and support for the socially vulnerable. The total amount of Japanese cooperation during target period of the evaluation was 407.4 million USD, the largest portion among the donor countries, as a result of ODA loans for the construction of sewage treatment plants and geothermal development projects. Germany was the second largest donor country with 184.9 million USD, followed by the United States 114.5 million USD, France 76.2 million USD, and Spain 64.8 million USD. Recently, the Costa Rican government started providing technical cooperation to other countries under the South-South and Triangular Cooperation policy.

2-2-3 Overview of Japan's ODA to Costa Rica

Country Assistance Policy in 2012 and Country Development Cooperation Policy in 2017 were formulated during the target period of evaluation based on high-level policy such as the ODA Charter established in 2003 and the Development Cooperation Charter in 2015. Both policies consistently focus on environmental protection and industrial promotion under the basic policy: namely, "support in sustainable development taking the environment as central core". During the target period of the evaluation from FY 2006 to FY 2017, Japan's ODA for Costa Rica took various forms including technical cooperation, Grant Aid, and ODA Loan. The total

Chart 4: Amount of Aid by Type (FY2006-FY 2017)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
ODA Loan (billion Yen)	150.01	0	0	0	0	0	0	0	168.1	0	0
Grant Aid (billion Yen)	2.6	1.7	1.4	17.2	1.6	1.0	1.2	0.8	0.3	0.2	3.4
Technical Cooperation (billion Yen)	7.7	5.1	5.3	6.6	5.1	5.2	3.4	5.1	4.5	3.7	4.7

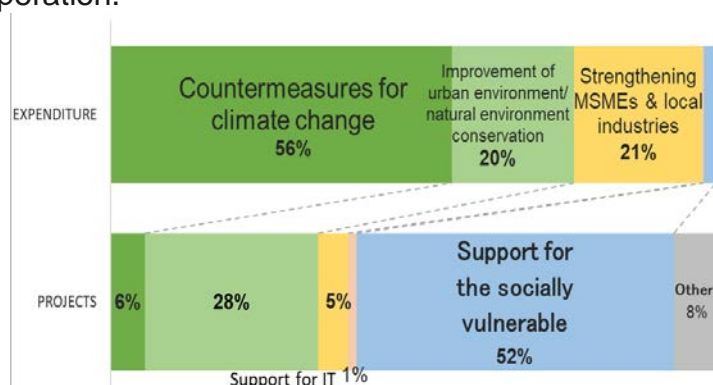
Note: Grant Aid for general projects and loan fiscal year are E/N base, Technical Cooperation is fiscal year Expenditure base

Source: all elaborated by Evaluation Team based on the resource as follows;

Japan's ODA Data by Country from MOFA (FY2006—2012):

amount of the cooperation was approximately 66.6 billion yen, comprising 57.8 billion yen of ODA Loan (exchange of note amount), 3.1 billion yen of Grant Aid, and 5.6 billion yen of technical cooperation.

Chart 5 shows 76% of the expenditure is in environmental field, due to the prominent amount of ODA Loan for geothermal development, with 56% of measures against climate change, and 20% of Program of improvement of the urban environment / conservation of the natural environment.



Source: Prepared by Evaluation team bases on data obtained from JICA

Chart 5: Percentage of each program in expenditure and the number of projects

Chapter 3. Summary of the Evaluation (Costa Rica)

3-1 Development Viewpoints

3-1-1 Relevance of Policies (Rating A: Highly Satisfactory)

Japan's assistance policy to Costa Rica is consistent with Japan's high-level ODA policy, Costa Rica's development plan, and international priorities. Policy formulation has also taken Japanese comparative advantages into account. The relevance of policy, therefore, is rated as "A: Highly Satisfactory". The details are described below.

(1) Consistency with Japan's High-Level Policies on ODA

As Japan's high-level ODA policies, two Charters were formulated during target period of the evaluation: ODA Charter in 2003 and Development Cooperation Charter in 2015. Both Charters have basic policies to support self-help efforts of developing countries through dialogue and collaboration based on the experience of Japan. In general, the Charters focus on the following areas: high-quality growth, poverty eradication and building a sustainable international society through efforts to global issues. Therefore, basic policy of Japan's development cooperation policy to Costa Rica and priority areas have high consistency with such high-level ODA policies.

(2) Consistency with Costa Rica's Development Policy

Each of the three national development plans of Costa Rica formulated during target period of the evaluation upholds the following priority areas: social development, poverty reduction and economic growth, and reinforcement of competitiveness. Additionally, responding to the environment and energy problems is positioned as a sectoral strategy to solve these priority issues. Therefore, it can

be said that the priority areas in Japan's assistance policy to Costa Rica are consistent with the priority issues of Costa Rica's development plan.

(3) Consistency with International Priority Issues

The team compared the following international efforts to Japan's priority areas of cooperation to Costa Rica: Millennium Development Goals (MDGs) adopted in September 2000, Sustainable Development Goals (SDGs) adopted in 2015 as a successor of the MDGs, and other international initiatives related to Japan's ODA priority areas. The team finds that Japan's priority areas such as to overcome environmental problems, to achieve sustainable economic growth, and to reduce socio-economic disparities are consistent with both MDGs and SDGs. Therefore, priority areas in Japan's ODA have high consistency with these international initiatives.

(4) Consistency with Other Donors Cooperation and Japan's Comparative Advantages

Major donors in Costa Rica are cooperating mainly in the field of environmental conservation and energy, poverty reduction, and support for the socially vulnerable, which have high consistency with priority areas of Japan's ODA. For example, the German Agency for International Cooperation (GIZ) and the Global Environment Facility (GEF) cooperate mainly in the fields of biodiversity conservation and energy. The Spanish Agency of International Cooperation for Development (AECID), on the other hand, focuses on cooperation specialized in supporting the socially vulnerable such as women, immigrants, and border area residents. Moreover, Inter-American Development Bank (IDB) has provided cooperation in a wide range of fields from environment and energy, fiscal management, to security measures. Japan has been cooperated with IDB through co-financing program in geothermal development. Such co-financing program shows high mutual complementariness between Japan and IDB because of its own clear role when conducting the program, using the knowledge and experience of both sides.

Additionally, the team concludes that Japan's ODA to Costa Rica has been formulated in consideration of Japan's comparative advantages, in that Japan has set an area of focus within its wealth of its knowledge and experience on development issues, such as geothermal development. It could be also highly regarded that the people centered approach by JOCV and experts in technical cooperation, which is Japan's strength, in the field of supporting the socially vulnerable, was also appropriate to bring about the outcomes.

3-1-2 Effectiveness of Results (Rating B: Satisfactory)

Looking at the effectiveness of results of Japan's ODA to Costa Rica, the team confirms a certain level of effect to development issues although the degree of effect

was different depending on the priority area. Among the priority areas of cooperation, the team finds that the degree of effect in the environmental sector was particularly high due to the largest input. The team also highly regards the effect of Japan's support for the socially vulnerable, such as enacting the law on independence of persons with disabilities.

On the other hand, the team cannot confirm causal relation of how the effects of each program made positive changes in the priority area to which the programs belong. Therefore, the effectiveness of the result is rated "B: highly Satisfactory". The following sections describe the details.

(1) Contribution to “Responding to Environmental Problems”

In this area, the team assessed the performance and achievements of Japan's assistance on two development issues: measures against climate change (7 projects, approximately 46.1 billion yen) and improvement of the urban environment / conservation of the natural environment (42 projects, approximately 16.5 billion yen).



Solar panels installed with the cooperation of Japan

(a) Countermeasures of Climate Change

Renewable Energy Development

As for renewable energy development, Japan provided ODA Loan to two geothermal development projects, Borinquen I and Las Pailas II, in the province of Guanacaste with the amount of 42.8 billion yen. Yet, it was too early to confirm the concrete result of the project as these two geothermal power plants were still under construction during the evaluation. According to the Institution of Electricity in Costa Rica (ICE), however, the power generation capacity of both plants is expected to account for approximately 40% of that of Costa Rica's geothermal power generation. In addition, the annual reduction in GHGs emissions of Las Pailas II is estimated to be 320,000 tons and 295,000 tons for Borinquen I. This will account for about 10% of the Costa Rica's target for GHGs reduction by 2030. Additionally, Japan's ODA to construct these facilities, also involved human resources development such as environmental impact assessment of geothermal development, which led to enhancement of the technical capabilities on geothermal power generation to such an extent that Costa Rica is able to technically cooperate with other countries in the same field.

In addition to the ODA on geothermal development, assistance was expanded to provide Japanese next-generation vehicles with Grant Aid in 2018 in cooperation with the Costa Rican government's efforts to reduce GHGs. Although it is too early

to confirm the degree of contribution of this cooperation to reduction of carbon dioxide emission at this point, this cooperation is highly expected to promote GHGs reduction in the urban transportation and to improve awareness of next-generation vehicles, receiving high praise from Costa Rica's government officials.

Disaster Risk Reduction

Looking at disaster risk reduction, Japan has been implementing regional cooperation in six Central American countries including Costa Rica since 2007 to promote community disaster risk management in each country. Although it is premature to confirm the effect of the project as it is ongoing at this point, the team confirms that the project has contributed to establishment of the disaster risk management system by collaboration between residents and local government in the pilot area where there is a risk of landslides.

In addition, approximately 300 Costa Rican were trained and registered as disaster risk management leaders through the Project. These leaders play roles in monitoring disaster risk and its management in collaboration with local governments. This leader program is expected to continue to increase the number of leaders.

(b) Improvement of the Urban Environment and Conservation of the Natural Environment

In regard to Improvement of the Urban Environment, Japan provided 15 billion yen of ODA Loan for the development of a sewage treatment plant in San Jose metropolitan area. The nationwide sewage treatment rate increased from 4.2% in 2014 to 14.4% in 2017, partly due to the project contribution. Japan also conducted trainings and activities and assisted to implement installment payment system through a technical cooperation project in order to promote the effective operation of the constructed plant. The team confirms that such cooperation helps the facility operate well, fostering the understanding of the local residents about the plant.

Regarding Conservation of the Natural Environment, Japan has conducted three technical cooperation projects to promote participatory biodiversity conservation from 2002 to 2018. The team confirms effects in raising awareness of the community people living in the conservation area, which contributed to help conservation of the flora and fauna; such as relieving the pressure on the forest by the rotation management of farmland and the grazing land.



Community group which started ecotourism for resident participatory nature protection

In this manner, the team concludes that the appropriate participatory approach to

biodiversity conservation as such has been established. The team also highly regarded the cooperation contributed to the creation of a system that allows such knowledge to be shared and managed nationwide.

(2) Contribution to “Industrial Promotion・Reduction of Economic Disparities”

In this priority area, Japan provided ODA for two development issues: Strengthening Micro, Small and Medium Enterprises (MSMEs) and Local Industries (7 projects, approximately 17.4 billion yen) and Support for Information Technology (2 projects, approximately 1.2 hundred million).

(a) Achievements by Japan’s ODA in “Strengthening MSMEs and Local Industries”

Strengthening Local Industries

Japan cooperated in the construction of the Pilis hydroelectric power plant by ODA Loan for the purpose of contributing to the stable supply of electricity which is essential for revitalizing the local industries (cooperation amount of 16.4 billion yen). Chart 6 shows that the amount of power generated by the plant has been stable since commencement of the operation in 2012. According to the Costa Rican Electricity Institute (ICE), the share of the Pilis hydroelectric power plant in the national power system is 8.3% contribution to Costa Rica's electricity supply. It also plays a role as a backup power supply that can promptly respond to dry season and sudden changes in power demand in the country⁵. The team views this as a valuable contribution to the stable supply of electricity in the region, which is essential for the promotion of regional industries.

Chart 6 Pirris Hydroelectric Power Plant Annual Power Generation Amount

Year	Power generation amount
2012	499,200
2013	446,179
2014	481,669
2015	291,606
2016	415,460
2017	543,804

Source: Data provided by Costa Rican Electricity Institute (ICE)

Support for MSMEs

Japan has continued technical cooperation to spread the Japanese quality management and productivity improvement methods in Costa Rica, with the aim of strengthening the capability of MSMEs personnel. Through the cooperation Japan has given trainings to a total of 85 Costa Ricans to be a management consultant and an instructor for human resource development in MSMEs and to about 480 companies since 1992. In addition, Japan’s ODA contributed to the human resources development that forms the foundation for MSMEs in other Central American countries. For example, the Costa Ricans, who were trained by Japan’s ODA, provided trainings to spread Japanese methods for other Latin American

⁵ “Pirris hydroelectric power development project” Ex-post evaluation report

countries, where a total of 340 people participated.

Reduction of Economic Disparities

Japan has conducted technical training in Japan for 12 years to participants from Latin America/ Caribbean Region, including Costa Rica to convey Japan's experience and approach of "livelihood improvement movement" to encourage people in rural communities to think, learn, and solve issues independently with their own will to improve their quality of life. For the participants from Costa Rica, Grassroots Technical Cooperation was also implemented to follow-up on the activities of the former trainees⁶. The team confirms various effects of capacity development from community to country levels. For example, some communities achieved to secure safe water by construction of a bio-garden to filter sewage under the initiative of the local communities, using local resources. At municipality level, one municipality stipulated the promotion of "livelihood improvement movement" in the city's administrative policy. Recognizing the significance to inspire the community with this movement, the concept is now stated in the new development plan of the Ministry of Agriculture and Livestock.

(3) Contribution to "Strengthening of Social Service"

As for the priority areas, Japan conducted the cooperation on Support for the Socially Vulnerable (75 projects 1.7 billion yen) and others (11 projects, 5.9 hundred million yen).

Strengthening of Social Service

Japan implemented technical cooperation which had impact from the individual level to the national level for contributing to eliminate social injustice against persons with disabilities in Costa Rica through various activities and movements to empower them and to enlighten the society. According to the National Rehabilitation and Special Education Council (CONAPDIS), for instance, although the concept of the rights and empowerment of the persons with disabilities had not been common in Costa Rica before the project, Japan's technical cooperation promoted the concept of inclusive development that can benefit all people, which resulted in increasing self-reliant living among those with disabilities, who had previously secluded themselves at home. Another predominant result is that the "Law for the Promotion of the Personal Autonomy of Persons with disabilities" was enacted in 2016, for which CONAPDIS recognizes Japan's contribution to the



Center for persons with disabilities rebuilt by Grassroots Grant and its owner

⁶ Ministry of Agriculture and Livestock: "Plan Estratégico de MAG 2015-2018"

awareness change of Costa Rican people. The team evaluates that these outcomes have been emerged not only with a project alone, but also the impact of other grassroots assistance by ODA, such as construction of rehabilitation facilities by Grassroots Grant Aid, promotion of education, health and social welfare services in various regions by JICA volunteers.

The knowledge and experience extracted from these series of achievements are shared among eight countries in Central and South America through implementation of third-country training. Thus, further ripple effects outside Costa Rica can be expected in the future.

3-1-3 Appropriateness of Processes (Rating B: Satisfactory)

Through interviews with government officials in Japan, it is confirmed that the Country Assistance Policy for the Republic of Costa Rica was formulated through appropriate discussions. Although both governments recognize formulation of a cooperation project as time consuming, they have been coordinating well to design projects with careful consideration of their conditions. However, linkage between priority issues, assistance program, projects could be sorted more logically in order to appropriately assess each effect of policies and programs. Therefore, appropriateness of the processes is rated “B Satisfactory)”. The following sections describe the details.

(1) Formulation Process of the Country Assistance Policy in Costa Rica

The policy consultations on economic cooperation between Japan and Costa Rica were held biannually as the political situation and the development needs had been rather stable. The ODA Policy was formulated through sufficient discussions and information sharing, and the Rolling Plan attached to the policy was revised annually by appropriate coordination.

(2) ODA Implementation Process

The implementation process of development assistance was evaluated from appropriateness of the four aspects: implementation system, process from formulation to implementation, methodology of assistance scheme selection, as well as coordination with other donors. All four aspects were appropriately implemented as described in the following section.

(a) Implementation System of Development Assistance

In the Japanese Government, the MOFA formulates a development assistance policy, and JICA, following to the policy, implements the assistance projects. In Costa Rica, the Embassy of Japan and JICA organize an ODA Taskforce to hold monthly meetings on policy development, and project formulation and monitoring. Regarding ODA Loan projects, JICA Panama Office is responsible for supervising the projects,

communicating closely with the executing agencies.

(b) Process from Formulation to Implementation of a Development Assistance Project

The team does not find any critical problem in the process in general. Stakeholders in Costa Rica appreciated Japan's explicit process from formulation to adoption of a technical cooperation project, while it is time consuming. Japanese stakeholders, on the other hand, also have pointed out that it takes time to process plans in the Costa Rican side, due to the necessity of the Congress approval and complicated administrative procedures. However, in the end, the team evaluates that there was no critical issue because both sides take into consideration such a situation in order to formulate projects.

Regarding the ODA Loan project, some approaches were taken to deal with such conditions to commence the project promptly: for instance, Guanacaste Geothermal Development adopted sector loan scheme to minimize the administrative process in Japan.

(c) Methodology of Assistance Scheme Selection

As selecting ODA scheme, knowledge and skill transfer to the neighboring countries was also taken in consideration in projects such as assistances for persons with disabilities and productivity improvement of MSMEs. In those projects, trainers who have improved their skills and knowledge through Japan's ODA were dispatched to the neighboring countries for organizing trainings and seminars. The team finds it as a good example where the stakeholders were considering the efficient scheme in the region. Additionally, it corresponded to the intention of the government of Costa Rica to actively implement South-South Cooperation and Triangular Cooperation.

(d) Coordination with Other Donors

Japan has been actively coordinating with IDB. For instance, Japan and IDB have co-financed for Guanacaste Geothermal Development and for a sewage treatment plant construction project. Co-financing produced higher effectiveness and efficiency than individual cooperation, which led reduction of administrative cost and workload for realizing the project.

(3) Regular Monitoring on Policy Implementation

Policy implementation is regularly monitored through field visit by ODA Taskforce, discussions with concerned agencies and internally evaluated at the MOFA. Evaluation and monitoring of each JICA project have been implemented in accordance with the designated guidelines. Grant Assistance for Grass-Roots Human Security Projects (GGP) are also monitored and evaluated according to the

MOFA's designated guidelines. MOFA uploads lists of GGP in the website, and continues to monitor progress of those which need improvement.

(4) Public Relations

The Embassy of Japan in Costa Rica provides press releases for local media and the official website, when they have a signing ceremony of GGP. The relevant articles were published in the national newspapers ten times per year on average. Thus, Japan is disseminating information about Japan's ODA to people in Costa Rica in some extent. The embassy also organized press tours for local media to show Japan's ODA in 2015 and 2016. In these tours, various forms of development assistance were presented such as technical cooperation for environment and renewable energy sector, overseas cooperation volunteers, as well as technical experts.

3-2 Diplomatic Viewpoints

The team confirms that it is important for Japan to continue ODA in Costa Rica from the viewpoint of diplomatic significance and diplomatic impact. With regard to diplomatic significance, Japan's ODA seems to be the foundation for establishing a favorable bilateral relationship. The ODA is also significant to promote solutions to environmental issues occurring on a global scale under the collaboration with Costa Rica. Regarding the diplomatic impacts, the team confirms that Japan's ODA has strengthened the relations between the two countries. It also enhanced the presence of Japan in Latin America. Moreover, the cooperation is expected to promote private investment between Japan and Central America. From the above, Japan's assistance to Costa Rica is considered to have high diplomatic importance and diplomatic impact. The details are described below.

3-2-1 Diplomatic Significance

(1) Maintenance and Development of Good Bilateral Relationships

During target period of the evaluation, mutual visit of dignitaries between Japan and Costa Rica was frequent. Such mutual visits, in particular, have been active in the environment sector. For example, Costa Rica's Environment and Energy Minister has visited Japan three times in last ten years. From Japan side, the Japanese Vice Minister of the Environment visited Costa Rica in 2016 and five members of the House of Representatives on Environment Committee in 2017. Additionally, the Costa Rican Trade Minister visited Japan five times, and announced when coming to Japan in April 2018 that Costa Rica would start negotiations for an investment agreement with Japan. This has led to the conclusion that economic cooperation between the two sides will be strengthened in the future.

Although it is difficult to determine the cause-and-effect relationship between these mutual visits of dignitaries and the impact of Japan's ODA, Japan's ODA

seems to be a foundation for the establishment of a good bilateral relationship. The team, therefore, finds it significant to continue Japan's ODA to Costa Rica in order to maintain and strengthen such relations.

(2) Contribution to Climate Change Mitigation

Costa Rica, known as an environmentally advanced country, has been working to cope with global warming such as its declaration for achieving carbon neutrality by 2030 and the joint proposal with Papua New Guinea on international mechanism to curb climate change through measures against deforestation and forest degradation. Furthermore, Costa Rica's Christiana Figueres, a founder of Paris Agreement of 2015, was the Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC) from 2010 to 2016. These points show a significant presence of Costa Rica in the environment sector in the international community. Thus, Japan's ODA to Costa Rica and its collaborative work with the country in the environment field will convey Japan's contribution to combat climate change to the international community, which has significant importance.

(3) Geopolitical Importance

Central America, including Costa Rica, has geopolitical importance as it is located between the Pacific Ocean, the Atlantic Ocean and the North and South American continents. It has also economic potential with a population of 58 million people in the region. These Central American countries are promoting regional economic integration and strengthening of extra-regional trade relations through the Central American Integration Organization (SICA). Japan finds it important to promote regional integration through SICA and to strengthen the relationship based on the development cooperation with each country in the region. From this viewpoint, the implementation and continuation of ODA to Costa Rica, one of the participating countries of SICA, has high diplomatic significance.

3-2-2 Diplomatic Impact

(1) Strengthening Costa Rica- Japan friendship

Since an agreement to dispatch JOCV was signed in 1973, ODA has enhanced bilateral relations between Costa Rica and Japan in both public and private sectors. At the grassroots level, constant dispatch of JOCV and Senior Volunteers (SV) for more than 45 years has promoted not only technology transfer, but also cultural exchanges and sharing experiences amongst local populations. In addition, through training programs more than 1,000 Costa Rican were sent to Japan over the past ten years, which helped them gain knowledge and improve skills as well as learn about Japanese culture. The participants of those programs are more likely to feel a special tie with Japan.

Moreover, Grassroots Technical Cooperation as well as training programs held in Japan have encouraged the development of citizen diplomacy and reactivation of regional Japan. For instance, Matsukawa, a small town in Nagano prefecture, has developed a special friendship with Costa Rica. Having been hosting JICA trainees from all over the world including Costa Rica, Matsukawa town is now starting a dispatch program of residents to Costa Rica from March 2019. The town also achieved to become an official host town for Costa Rican athletes in Tokyo Olympic and Paralympic in 2020. These examples show that ODA program triggered the reinforcement of friendship both in private and public sectors, which can be a foundation of a mutually trusting relationship of the countries.

Additionally, stable and continuous cooperation is especially appreciated and effective for strengthening relationship with Costa Rica as a middle-income country, where less assistance is provided from other donors.

(2) Enhancing Japan's Presence in Latin America

Japan's assistance to Costa Rica contributes to enhancing Japan's presence in Latin America, by having Costa Rican transfer what they have learnt from Japan to other countries in Latin America. For instance, Japan's continuous assistance helped Costa Rican to accumulate knowledge and skills in the areas of cooperation, such as environment, support of persons with disabilities, among others. Costa Ricans have hosted trainees from neighboring countries and have been sent as trainers to share their knowledge and skills acquired through Japan's ODA. Consequently, Japan's assistance in those development areas not only seemed to contribute to solve the problems in Costa Rica, but also to address the problems of the region, and eventually made cooperation more notable in other Latin America countries.

(3) Promotion of Private Investment between Japan and Central America

The study reveals that Costa Rica truly appreciates the application of high technologies and techniques in the assistance, which are well-known as Japan's comparative advantage, such as provision of next generation vehicles and development of geothermal energy plant. Direct impact to Japanese companies is not confirmed through the evaluation; however, it can be said that broader and better recognition of technological and technical capabilities of Japan was achieved in Costa Rica as well as in Latin America through ODA which can facilitate the business expansion of Japanese companies in the area and could contribute to strengthen economic partnership in the long term.

3-3 Recommendations

Recommendation1 : Continuation of the Cooperation for Climate Change

Mitigation

Based on this study, the team recommends for Japan to continue the assistance in climate change mitigation, particularly when it contributes to reduction of GHGs, which is a priority of Costa Rican policy. As the result of the Costa Rican government efforts, GHGs generated from energy sector has been significantly controlled, and Costa Rica has successfully achieved 99% generation of electricity from renewables. The biggest GHGs source at present is specified in the transportation sector, particularly urban transport; therefore, the reduction of GHG in urban transport sector is regarded as high priority in the country.

The Costa Rican government has employed various countermeasures such as: promotion of the use of next generation vehicles, decrease of automobile use, utilization of clean energy for public transportation, and so forth. Considering such government policy, it is worth to examine the possibility of Japan's ODA toward alternative public transportation facilities such as development of train system which could contribute to notable reduction of GHGs using Japan's technology and experiences of cooperation in other countries. Additionally, considering that the Costa Rican government is facing serious financial difficulty, it is inevitable to examine the comprehensive feasibility to confirm the progress of reconstruction of the economy as well as its needs.

Recommendation2: Cooperation to Vitalize Rural Areas

Japan's ODA has cooperated in vitalization of rural areas of Costa Rica, aiming at narrowing the economic disparity which is one of the serious issues in the country. Having the example of good practice of Japan's ODA against disparities through promotion of "livelihood improvement approach" which is a technique developed to improve the lives of rural population in Japan, the Ministry of Agriculture and Livestock of Costa Rica has included the approach in their present development policy to expand the technique to nationwide. Since the results so far are limited to pilot areas, it is recommended to support the systematization of its distribution to nationwide.

Alternatively, for vitalization of rural areas, it is also recommended to conduct technical assistance for improving the competitiveness of MSMEs in rural areas, based on the experiences of MSMEs support projects in urban areas by Japan's ODA. MSMEs in rural areas tends to face similar challenges in their business such as improvement of production technology, strengthening marketing ability, access to credit and so on. To contribute to solving these issues, it is recommended to provide technical cooperation to reinforce the government function to support MSMEs, utilizing human resources developed through the past technical cooperation.

Recommendation3: Making Use of the Experiences of Costa Rica for Better ODA Policy Elaboration for Other Middle-Income Countries

It is essential to deeply analyze the economic and social condition of the country to be able to elaborate the relevant ODA policy, aiming at sustaining and expanding the outcome of the cooperation. Analyzing the economic condition of Costa Rica, it was found that the country at present is facing a critical situation in their social welfare system, by accumulating enormous risks that could generate social unrest such as financial crises, gap between poor and rich, education gap, among others. Accordingly, analyzing the situation and its causes in detail during the formulation of country assistance policy for Costa Rica may enable to secure the effectiveness and sustainability of the outcome of the cooperation.

In addition, other middle-income countries may also confront the same kind of situation. Analysis of the situation, its causes and countermeasures for social instability in Costa Rica as a case study may help to identify issues and tendencies which middle-income countries tend to struggle. These exercises may also clarify the direction of Japan's ODA in middle-income countries, which could also enhance the understanding of Japanese citizens about the support for such countries.

Recommendation 4: Promoting Triangular Cooperation with Costa Rica as a Partner

It is beneficial to promote triangular cooperation in partnership with Costa Rica to other Latin American countries, such as inviting stakeholders of the target country of assistance to Costa Rica or dispatching Costa Rican experts to other countries for seminars and workshops. First of all, involving Costa Rican experts facilitates communication with other Latin American countries, because of the use of same language and similarity in cultures. Particularly, participation of the Costa Ricans who have acquired their skills and knowledge through Japanese programs could create synergy and foster effective transfer of skills and knowledge. In addition, it could be more cost effective for Japan than implementing bilateral cooperation throughout the Latin American area. Moreover, it is in line with the international cooperation policy of Costa Rican Government in which more and more emphasis is being placed on Triangular and South-South Cooperation in order to accelerate the shift to be a donor country.

Japan could implement triangular cooperation to environmental sector, specifically geothermal development by means of providing technical training. This could be a good place to start since environmental protection is one of the priority areas of Costa Rican triangular cooperation, and Japan has shown high performance which is highly appreciated and the comparative advantages of Japan's assistance are well-known.

Recommendation 5: Examining PR Strategies Targeting a Wide Range of Population

Although Japan's ODA is well-known among persons involved in the assistance, its recognition is limited among the general population. Therefore, it is necessary to develop PR strategies to generate greater exposure of the assistance and raise public awareness. For example, it is recommended to examine regular publicity of the progress and achievement of each priority area or programs. Publicizing the assistance by priority areas or programs in the Rolling Plan could be more notable and impressive than PR by projects, since it could present the larger impacts and covers more dimension compared to a single project. It is also necessary to include PR strategies the concerned personal of Costa Rica, such as implementers and beneficiaries in order to mutually collaborate and develop the promotional activities. Regular use of social network systems and uploading video to internet (e.g., YouTube) can make information more accessible to people of all ages.

Chapter 4 Overview of Nicaragua and Development Trends

4-1 Overview of Nicaragua

Nicaragua is the largest country in the Central American isthmus, located in the center of the region. Although it has experienced stable economic growth for years, which helped it to reach GNI per capita 2,000 USD in 2015⁷, Nicaragua is still the second poorest country among Latin America and Caribbean regions, and approximately 40% of the population live below the national poverty line. Also, Nicaragua is often hit by natural disasters such as hurricanes and earthquakes, which impede development of the nation⁸.

Nicaragua's Human Development Index (HDI) value for 2017 is 0.658, positioning it at 124 out of 189 countries and territories⁹. As the HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: namely, a long and healthy life, access to knowledge and a decent standard of living. This indicates that Nicaragua still requires great improvement in health and education, as well as in economic aspects.

Regarding the political aspect, the socialist party, the Sandinista National Liberation Front (FSLN), has been a ruling party since 2007, a year after FSLN won the general election in 2006 against liberal parties which had been in power after Civil War. FSLN emphasizes social policy and programs which prioritize the impoverished population and regions. International pressure has been mounting on

⁷ World Bank (2016)

⁸ Global Climate Risk Index (2018)

⁹ Briefing note for countries on the 2018 Statistical Update Nicaragua, UNDP

Nicaragua since the nationwide protest has spread in April 2018 and left more than 300 dead.

4-2 Development Trends in Nicaragua

4-2-1 Government Development Policy

Nicaragua's political administration is based on National Development Plan (NDP) and National Plan for Human Development (NPHD) formulated by the ruling party at the time. During the target period of evaluation (FY2007-2017), there were three Plans which stemmed from Strengthened Growth and Poverty Reduction Strategy (SGPRS) issued in 2002. All NDP and NPHD prioritize growth and stability of the macro-economy for poverty reduction. Their priority areas can be classified into three groups: (1) poverty reduction and economic growth, (2) public welfare and social welfare, and (3) climate change adaptation and disaster risk reduction.

Chart 7: Transition of Nicaragua's National Development Plans

Strengthened Growth and Poverty Reduction Strategy (SGPRS) 2002 ~	National Development Plan (NDP) (Second PRSP) 2005~2009 the Bolaños Administration (2002-2006) :	National Plan for Human Development (NPHD) 2009~2011 the Ortega Administration (1st term : 2007~) :	National Plan for Human Development (NPHD) 2012~2016 the Ortega Administration (2nd term : 2012~) :
<ul style="list-style-type: none"> • Broad-based economic growth and structural reform • Investment in the human capital of the poor • Better protection for vulnerable groups • Good governance and institutional development • Greater social equity • Improvement in environmental vulnerability • Decentralization of decision making and service delivery 	<ul style="list-style-type: none"> • Poverty reduction through production development • Formation of human capital and efficient social spending (Hanger eradication, Education and Health) • Investment in productive and social infrastructure • Strengthening governance system 	<ul style="list-style-type: none"> • Poverty reduction through macroeconomic growth and stability (Increased investment and improved access to external markets) • Improvement of agricultural productivity and food production • Fostering social services (Education, Health) • Improvement in basic infrastructure (Energy, Transportation, Production) • Strengthening Governance (Democratization, Citizen security and participation) • Environmental sustainability and Disaster prevention and mitigation • Caribbean Coast Development 	<ul style="list-style-type: none"> • Poverty reduction, Economic growth and macroeconomic stability with increased employment and reduction in poverty and inequity • Production sector prioritized in family, community and cooperative economy with food sovereignty and security • Improving Social services (Education, Health) • Improvement in basic infrastructure (Energy, Transportation, Production and Communication) • Governance (Democratization, prevention of narcotics and organizational crimes, fostering Citizen security and participation) • Environment protection and climate change adjustment • Science, technology innovation and entrepreneurship • Integrated development in Caribbean Coast

Source: Prepared by the evaluation team based on each development plan

4-2-2 Trend of Donors

According to OECD, total amount of ODA Nicaragua received from 2007 to 2016 (DAC stats base) is approximately 3,248 million USD by bilateral aid and 2,704 million USD by multinational aid agencies. Approximately 40% of the total bilateral aids are provided by Spain and United States although the total amount is decreasing due to a global economic stagnation, withdrawal of financial assistance from multiple European countries caused by the suspicion of fraud in Nicaraguan municipal election in 2008. Financial aid from Venezuela exceeded the sum of bilateral aid from all DAC countries between 2010 and 2015, until their political and economic disruption became severe. As for multinational assistance, the top donor is IDB, followed by the World Bank and EU institutions. IDB has a large presence in Nicaragua, as it accounts for over 50% of total multinational aid.

4-2-3 Overview of Japan's ODA to Nicaragua

Three Country Assistance Policies for Nicaragua were applied during the target period of evaluation (published in 2002, 2013, then 2014). Although small modifications are recognized, the basic policy has always been “stable economic development through poverty and inequity reduction”, and its priorities are categorized in three areas: the base creation for economic revitalization, social development for poor, and environmental preservation and disaster prevention. Under those three areas, the Government of Japan has provided programs related to transport and urban infrastructure development, rural development, expansion and enhancement of social service such as education and health, as well as environment conservation and disaster risk reduction mainly by means of technical cooperation and Grant Aid. During ten years between FY 2007 and FY 2017, Japan has implemented 298 projects equivalent to nearly 27.9 billion yen in total. Among them, Grant Aid, including GGP accounts for the biggest number of the cooperation with 268 projects equivalent to 1.57 billion yen in total. The projects contributed not only to provide numerous social infrastructure improvement such as construction of hospitals and bridges, but also supported the basic infrastructures in remote areas of the country mainly in health and education sectors through provisions of ambulances, construction/reconstruction of schools, construction of rural roads, among others.

Two projects were implemented through ODA loans: one for construction of bridges and another for renewable energy. On average, two to three technical cooperation projects (750 million - 1,250 million yen) have commenced every year throughout target period of the evaluation. In addition, Japan has continuously promoted capacity development which resulted to dispatch of 233 volunteers, 350 experts and acceptance of 1,072 technical trainees between FY2007 and FY2017.

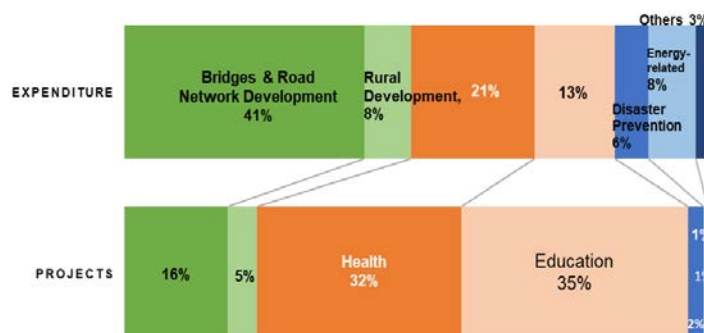
Chart 8: Amount of Aid by Type (FY2007-2017)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ODA Loan (100 million Yen)	0	0	0	0	0	0	14.96	0	0	0	49.4
Grant Aid (100 million Yen)	20.55	27.03	22.91	8.41	19.29	21.48	6.55	16.73	15.38	7.37	7.37
Technical Cooperation (100 million Yen)	9.62	9.7	9.79	8.26	7.4	10	8.63	7.56	10.44	12.48	12.48

Note: Grant Aid for general projects and loan fiscal year are E/N base, Technical Cooperation is fiscal year Expenditure base

Source: all elaborated by Evaluation Team based on the resource as follows;
Japan's ODA Data by Country from MOFA (FY2007 – 2015):

As Chart 9 shows, bridge and road network development accounts for largest ratio in expenditure, while health and education programs account for more than 60% of the projects.



Source: Prepared by Evaluation team bases on data obtained from JICA

Chart 9: Percentage of Each Program in Expenditure and the Number of Projects

Chapter 5 Summary of the Evaluation (Nicaragua)

5-1 Development Viewpoints

5-1-1 Relevance of Policies (Rating A: Highly Satisfactory)

Japan's ODA policy for Nicaragua is consistent with Japan's high-level ODA policy, Nicaragua's development plan, and international priorities. Policy formulation has also taken Japanese comparative advantages into account. Therefore, the relevance of policy is rated "A: Highly Satisfactory". The details are as follows.

(1) Consistency with Japan's High-Level Policies on ODA

As Japan's high-level ODA policies, two Charters were formulated during the target period of evaluation: ODA Charter in 2003 and Development Cooperation Charter in 2015. The basic policy of both Charters is promotion of human security and collaboration in international community, which is included in the basic policy of Japan's development cooperation policy to Nicaragua. Additionally, priority areas of the Charters include efforts to solve global issues such as environment problems and poverty reduction through high-quality growth, which is consistent with the priority area of Japan's assistance to Nicaragua. Therefore, Japan's development cooperation policy to Nicaragua has high Consistency with the high-level ODA policies.

(2) Consistency with Nicaragua's Development policy

NPHD, formulated during the target period of valuation, raises the following issues: (1) Poverty reduction and economic growth; (2) Public benefit, social security and social inequality; (3) Responding to climate change and total management of disaster risk. Priority area of Japan's assistance policy to Nicaragua has high Consistency with these priority issues of the National Plan. In particular, one of the priority areas, the Base Creation for Economic Revitalization such as poverty reduction and infrastructure maintenance, has high consistency with the national development plan.

(3) Consistency with International Priority Issues

The team assessed the consistency of priority area of Japan's ODA to Nicaragua with international initiatives such as MDGs and SDGs. Both MDGs and SDGs set the following goals: poverty eradication, reduction of infant mortality, spread of high-quality education, and environment sustainability. Japan's ODA is also working on infrastructure maintenance for economic revitalization, strengthening of social services such as health and education, and environment conservation and disaster prevention. Therefore, priority areas of Japan's ODA to Nicaragua has high consistency with the goals and policy of these international initiatives.

(4) Consistency with Other Donors' Cooperation and Japan's Comparative Advantages

Main donors formulate cooperation policy toward Nicaragua to deal with issues on social service, maintenance of basic infrastructure, strengthening governance, environment conservation and disaster prevention presented in PNDH that are formulated by the Nicaragua government. For instance, Japan's development cooperation policy comprehensively covers these development issues, particularly focusing on maintenance of basic infrastructure. This is because Japan has comparative technical advantages in maintenance of transport infrastructure and thus the team concludes that the policy formulation was made in consideration of these advantages. On the other hand, AECID focuses on social security, gender, education, inclusive economic activities, while USAID sets priority on democracy, education, and Caribbean development. IDB prioritizes the following four areas: transport, energy, health, and comprehensive early childhood care. Japan and IDB have co-financed programs in basic infrastructure facilities as well as in the energy field, compartmentalizing works based on prior consultation between the two sides and each strength. It can be said, therefore, that Japan's ODA is formulated taking into account comparative advantages and shows mutual complementarity with other donors in Nicaragua.

5-1-2 Effectiveness of Results (Rating B: Satisfactory)

Looking at the effectiveness of results in three priority areas, a certain level of contribution to the development of Nicaragua is achieved in general as far as confirmed. The greatest contribution of Japan's ODA was bridge construction, which is highly recognized and well distinguished among both the Government, citizens and other donors in Nicaragua. Japan has also contributed to enhancement of social service in health sector and education sector. Moreover, it is confirmed that the approach of technical assistance to cultivate local human resources coincided with the needs of Nicaragua to empower community, which helped the sustainability of project.

It should be noted that the evaluation is limited in its methodology, since it does not involve field survey due to the nationwide protest in Nicaragua during the investigation. Thus, the team cannot judge if all elements have highly satisfactory results. Given the situation, effectiveness of results is rated B Satisfactory.

(1) Contribution to “The Base Creation for Economic Revitalization”

In this area, Japan’s ODA tackled two developmental issues: transport/urban infrastructure development (52 projects, approximately 13.15 billion yen) and Rural Development (15 projects, approximately 2.51 billion yen).

(a) Transport / Urban Infrastructure Development

Japan’s ODA has been dedicated mainly to construction/ reconstruction of bridges and road pavement for the infrastructure development. The team finds that the contribution of constructing bridges was particularly significant to shorten the traveling time, which facilitated the flow of goods to revitalize economic activities. Chart 10 shows examples of impacts of bridge construction by Japan’s ODA.

Chart 10: Change in traveling time by vehicle and the volume of traffic level

Bridges	Time of Traveling Time by Vehicle		Increase in Traffic	
	Project Impacts	%	Project Impacts	%
Reconstruction of Principal Bridges in NIC-7	Between Boaco and Chontales Before : 3 H 28 M After : 2 H 19 M	-33%	2006: 1,843 vehicles /day 2017: 3,266 vehicles/day	+77%
Construction of the Santa Fe Bridge	To cross San Juan river Before : 15 minutes by boat or ship After : 16 seconds by vehicle	-98%	2009: 480 vehicles /day 2017: 745 vehicles/day	+55%
Reconstruction of Bridges on Managua El Rama Road	—	—	2009: 2,493 vehicles/ day 2017: 4,003 vehicles/ day	+61%
Construction of Paso Real Bridge	Before : Average speed 16.7 km/h, Average traveling time 2 hours After : Average speed 60 km/h, Average traveling time 1 hour	-50%	2014: 1,241 vehicles / day 2017: 1485 vehicles / day	+20%

Source: Questionnaire answer from Ministry of Transportation and Infrastructure, Nicaragua

The cooperation for construction/reconstruction of bridges was highly evaluated in general as various perspectives were taken into consideration throughout the program, such as appropriateness of the target location, application of new technologies resistant to disasters, among others. The high recognition of Japan’s bridge technologies brought a loan agreement for other bridges and road construction projects in 2017, under the scheme called Special Terms for Economic Partnership (STEP)¹⁰, which is applied for the first time in Latin America. Based on the examples, Japan’s assistance remarkably contributes to the development of transport and urban infrastructure in Nicaragua.

¹⁰ STEP refers to special assistance terms for promoting the visibility of Japanese aid through a transfer of outstanding Japanese technology and expertise to developing nations. The main agreement is Japan tied and subcontracting is general untied. Although the main agreement allows a joint venture with the borrowing country, a Japanese company must be the leading partner in such an arrangement.

(b) Rural Development

In the field of rural development, the team finds that Japan's ODA has contributed to some extent to rural development mainly through improvement of cattle production technologies, diffusion of the sustainable agricultural technology, as well as community development and capacity development for local government. For example, the team finds that textbooks and teaching materials elaborated through "Vocational training improvement project in agricultural and livestock sector" are now official textbooks in all agriculture-related subjects provided in National Technology Institute, which has the role of agricultural training across Nicaragua. Moreover, Japan's assistances strengthened the competency of Nicaraguan Institute for Municipal Promotion by creating guidelines, training programs and training materials for municipalities to formulate their own Municipal Plan for Human Development, which is the five-year development plan of each municipality.

(2) Contribution to "Social Development for Poor"

In this area, Japan has been implementing support for expansion and enhancement of social service, specifically during the period in two programs: Enhancement of health, medical service, and social protection (103 projects, approximately 6.75 billion yen) and Expansion of educational opportunities and Improvement of Quality of Education (114 projects, approximately 4.36 billion yen).

(a) Enhancement of Health, Medical Service and Social Protection

Japan has been comprehensively addressing health related issues such as reproductive health, maternal and child health care, infection control and prevention of violence. The application of Grant Aid and technical cooperation programs contributed to the improvement in those fields, especially by strengthening service to population and local health care system. For instance, there is a significant increase in the proportion of health facilities in two departments supported by Japan, which comply with standard regulations/protocols of services during delivery and neonatal care (59.5% in 2014; 94.1% in 2017). Japan provided technical assistance for those two to improve medical service for expectant mothers and children less than 2 years of age, in addition to support for community activities related to maternal and child health. As for reproductive health, the study finds that HIV infection rate of adolescents in two departments before they received Japan's assistance for reproductive health was less than the national average (Granada 2.4, Boaco 5.15, national average 16.6 persons per 100,000 persons).

(b) Expansion of Educational Opportunities and Improvement of Quality of Education

Japan has been carrying out assistance to Nicaragua's education sector by schemes of technical cooperation and Grant Aid. The greatest contribution to this field is in mathematics education through the elaboration of Nicaragua's very first national mathematics textbooks for students and mathematics guidebooks for teachers, as well as

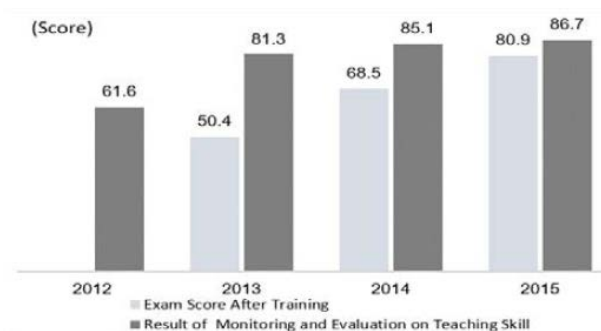


Chart 11: Transition of Test Score after Training and Teaching skill

cultivation of human resource related to mathematics education and dissemination of Japanese style problem solving approach. The teaching guidelines and the textbooks for primary schools are now acknowledged as national teaching materials and distributed throughout the country.

Furthermore, Japan supported to enhance the teaching competency and capacity in Teacher Training Colleges. For instance, 14,700 textbooks have been distributed to 8 national Teacher Training Colleges, which allowed students to receive classes with actual materials in their hand. Based on monitoring results, teaching skills after the assistance from Japan increased by 25%, while test score after the assistance increased by 30.5% compared to the skills and test scores before the cooperation. According to Ministry of Education in Nicaragua, Japan's assistance to mathematics is highly appreciated and widely known both at governmental and population levels.

(3) Contribution to “Environment Preservation and Disaster Prevention”

In this area, Japan has been running two programs: Disaster Risk Reduction (6 projects, approximately 1.84 billion yen) and Expansion of Renewable Energy and Energy Saving Measure (2 projects, approximately 2.58 billion yen) for 10 years.

(a) Disaster Risk Reduction

Japan has been diligently supporting the enhancement of community-based disaster risk management and citizen's participation for mitigating vulnerability to natural disasters. For example, BOSAI projects assisted to develop educational materials in order to establish disaster risk management system in Nicaragua, and supported to enhance educational programs of disaster prevention, which are currently expanded to schools across the nation.

The characteristics of Japan's ODA to Nicaragua for disaster risk reduction is that it combines other aspects of development to disaster risk management, such as

“community development” and “improvement in housing”. “Rural community development project for vulnerability reduction against natural disasters at municipality of Villa Nueva”, for instance, did not only aim community-based disaster risk reduction activities, but also involved other social development activities, such as literacy education as well as sanitation activities - construction of latrines and wells. This approach facilitated to improve social infrastructure for impoverished area and populations and promoted social development, which eventually led to capacity building of population for disaster prevention and risk management.

(b) Expansion of Renewable Energy and Energy Saving Measure

The main contribution in this field was the implementation of “National sustainable electrification and renewable energy project (PNESER)” through the Frameworks of Co-financing for Renewable Energy and Energy Efficiency with IDB. The project contributed to save up to 25,000 MWh of energy from 2015 to 2018. Another contribution is construction of a solar plant through Grant Aid, which was the largest solar plant in Central America, when the work was completed in 2014. This plant generates 1.38 MWh annually, and provides electricity to approximately 1,100 households

Chart 12:

Proportion of Renewable Energy

Power Production Source	2007	2017
Thermal	73.8%	46.2%
Hydraulic	10.4%	11.1%
Wind	0.0%	15.4%
Geothermal	7.6%	16.7%
Solar	0.0%	0.3%
Biomass	8.2%	10.2%
Renewable Energy (Total)	26.2%	53.8%

Source :Questionnaire answer from Ministry of Energy and Mine

During the target period of evaluation, proportion of renewable energy in total power production in Nicaragua doubled from 26.2% (2007) to 53.8% (2017).¹¹ Though the exact portion of power generation provided through Japan’s assistance is not identified, the contribution of Japan can be acknowledged to some extent.

5-1-3 Appropriateness of Processes (Rating B: Satisfactory)

Through interviews with government officials in Japan, it is confirmed that the Country Assistance Policy for Republic of Nicaragua was formulated through appropriate discussions among stakeholders. Also, its position in National Development Plan of the government of Nicaragua has been clearly identified. Because the priority areas of Japan’s ODA to Nicaragua were diverse and interrelated, some projects could not explicitly explain the relevance to the priority areas until 2017, when the cooperation program and contents were reviewed and reorganized to clarify the direction of the country assistance strategy. Therefore, appropriateness of the processes could be rated “B Satisfactory”. The following sections describe the details.

¹¹ Ministry of Energy and Mine, Nicaragua

(1) Formulation Process of the Country Assistance Policy

Policy consultations on economic cooperation between Japan and Nicaragua were held almost annually to confirm assistance needs and directions of both countries. According to the Department of Cooperation of the Ministry of Foreign Affairs of Nicaragua, the Department well understands the strategy and priority areas of the Country Assistance Policy for Nicaragua and appreciate that these are in line with the priority issues of the country. It can be attributed to sufficient dialogues and information sharing between Japan and Nicaragua.

(2) Implementation Process of Development Assistance

(a) Implementation System of Development Assistance

In the Japanese Government, MOFA formulates a development assistance policy. JICA, following to the policy, implements assistance projects. In 2016, JICA prepared “Nicaragua Country Analysis Paper” to analyze effective cooperation. In Nicaragua, the Embassy of Japan and JICA organized ODA Taskforce to hold monthly meetings on policy and project formulation, as well as frequent information exchanges and discussions.

The Government of Nicaragua determines in the National Development Plan that assistances of bilateral donors and international organizations are essential resources for the country’s development. For the period from 2012 to 2015, “Plan for the management strategy of ODA” was prepared to clarify the strategy to accept external development assistances. Also, the government presents strong ownership to coordinate concerned donors in some sectors such as infrastructure development and energy development.

(b) Process from Formulation to Implementation of a Development Assistance Project

In Nicaragua, technical cooperation projects approved by Japanese Government are required to be authorized by the National Assembly in order to include them in the state budget. This secures transparency on the aid funds. According to interviews to Japanese stakeholders, the above process does not require any complicated procedures nor extra time and is appreciated for its transparency. According to the Ministry of Foreign Affairs of Nicaragua, Japan’s process from project formulation to approval is clear enough and there is no request for further improvement. According to stakeholders, the policy had been implemented in a top-down manner in administration of Nicaragua during the target period of the evaluation. Therefore, projects which are in line with the aims of the central government tended to be rapidly formulated and implemented. Also, the necessary system was timely developed regarding the projects. Therefore, positive effects and impacts of such projects were more likely to be appeared. The Japanese

Government carefully takes consideration to ensure neutrality and fairness. Through the survey, no issues on fairness were pointed out. However, it should be reminded that there are limitations to the survey due to the constraints on questionnaire survey targets.

(c) Methodology of Assistance Scheme Selection

Efficient linkage of ODA schemes (technical cooperation, dispatch of volunteers and training programs) was strategically applied to the assistance in Nicaragua to create greater impact. For assistance in mathematics education, for instance, development of student textbooks and teacher guidebooks was supported by technical assistance, before the utilization and distribution of the materials supported by volunteers who worked in local schools. Such combination assures complementary support in both administration and the field level to bring further impact.

(d) Coordination with Other Donors

Since 2007, Nicaraguan Government had not been favor coordination among donors. Therefore, no regular donor meetings and donor coordination led by the government have been held.

On the other hand, as mentioned above, the government took the initiative for alignment of international cooperation for the large-scale projects and programs such as infrastructure and energy development. Through such coordination, each donor played the role corresponding to its advantage. For instance, in energy sector, co-financing of Japanese government and IDB for PNESER accelerated improvement of energy and the electric power situation in the whole country. Such collaboration is highly appreciated as a good practice to implement assistance corresponding to needs of the recipient government efficiently.

(3) Regular Monitoring on Policy Implementation

Progress of assistance policy implementation is monitored through ODA Taskforce meetings. Monitoring and evaluation of each project are implemented in accordance with the designated guidelines. Grant Assistance for GGP are monitored and evaluated according to “GGP Guidelines”. GGP which required improvement based on the results of the evaluation were published on MOFA website and it monitored progress of improvement efforts. Among GGP ever implemented in Nicaragua, only one was identified as a project requiring further improvement.

(4) Public Relations

The Embassy of Japan in Nicaragua provides press releases for local media upon opportunities such as a signing of the Exchange of Notes (E/N), a groundbreaking ceremony, etc. The relevant articles were published in the national newspapers more

than ten times per year on average. In addition, JICA Nicaragua Office disseminates information through social media and organizes annual press tours for the local media. Such public relation activities have contributed to extend recognition of the presence of Japanese development assistance to the general population. Nicaraguan Government also appropriately publicizes Japan's ODA. It is noted that a memorial postage stamp of cooperation for bridge construction is quite popular among people in Nicaragua.

5-2 Diplomatic Viewpoints

5-2-1 Diplomatic Significance

(1) Geopolitical Importance

Japan's ODA to Nicaragua has diplomatic significance from the point of regional economic potential and geopolitical importance in the region. The Central American countries are promoting regional economic integration and strengthening of extra-regional trade relations through SICA, having economic potential of 58 million population. Japan finds it important to promote such regional integration through SICA and to strengthen the relationship based on the development cooperation with each country in the region. From this point, implementation and continuation of ODA to Nicaragua, one of the member countries of SICA, has high diplomatic significance. Moreover, Nicaragua is a key point of human and goods mobility at the center of Central America. Therefore, promotion of poverty reduction, correction of social inequality and growth of social economy through Japan's ODA in Nicaragua are expected to contribute to stable development in the neighboring countries.

(2) Responding to Global Issue

Japan has responsibility to address global issues as a member of the international community. The Japanese government especially places importance on alleviating vulnerability to natural disasters such as hurricanes, earthquakes and tsunamis for its international contribution, as demonstrated in the Sendai Framework for Disaster Risk Reduction. The team finds that Japan, as a member of international community, can contribute not only to the resolution of urgent issues in Nicaragua, greatly affected by climate change, but also to the creation of society more resistant to disasters. This can be enabled by cooperation to Nicaragua by utilizing the knowledge and technology of Japan as an advanced disaster risk reduction country. Such cooperation through disaster risk management support for Nicaragua and the neighboring countries adds to the appeal of Japanese technology and contribution in the environment area to the international community, which will lead to the enhancement of Japan's presence.

5-2-2 Diplomatic Impact

(1) Enhancing Presence of Japan and Strengthening Nicaragua – Japan

Friendship

The team finds that ODA has enhanced friendship between Nicaragua and Japan and strengthened Japan's presence in Nicaragua. The study revealed that the way of Japanese experts and volunteers work, respecting local norms, cultures and the ownership of the stakeholders left good impressions and images of "Japan" in general in addition to the results. Careful dedication to the country's development for many years has created friendly feelings toward Japan in general, which strengthened the friendships between the two nations.

In fact, JICA was awarded Ruben Darío Order of Cultural Independence by the Government of Nicaragua as the first international aid organization to receive it. This proves that Japan's ODA has contributed to strengthen the relationship among two cultures, since the highest honor is given to an individual or group that contributes to social development and strengthens relations between Nicaragua and the country. It is also worth noting that Friendship Day Nicaragua-Japan was established in 2017 to celebrate their friendship. Hence, it is regarded that ODA enhanced the presence of Japan in Nicaragua and promotes stronger tie between Nicaragua and Japan.

(2) Creating the Foundation of Private Investment between Japan and Central America

The team finds several cases that ODA created a business opportunity in Nicaragua for Japanese companies. Construction of bridges and roads supported by Japan was highly appreciated for its quality and resistance to hurricanes, which greatly enhanced the reputation of Japan's technological capabilities in general. As a result, a loan agreement with the special assistance term of applying outstanding Japanese technology was signed upon the request of Nicaragua. In addition, this study confirms the case of a road development project in a rural municipality that led to an order of construction machinery from the municipality to the Japanese company, counting on the quality of products and after service. Such case shows that the constant implementation of ODA projects can play the role of creating business opportunity and establish the foundation of business partnership.

Furthermore, three bridges constructed in 2013 through Japan's Grant Aid for example, drastically simplified the mobilization from the Pacific side to Caribbean side of the country, as well as from northern part to southern part of Central America because they are located along international roads. Although the direct impact to Japanese economy cannot be verified in the short term, the activation of logistics and distribution in Central America would accelerate regional integration, which could make the region more favorable and even stimulate the business sector in both countries.

Nonetheless it should be noted that the political and social stability of the nation

is a crucial condition of Japanese companies to start the business with Nicaragua.

5-3 Lessons Learned

(1) Maximize the Impacts of Cooperation on “Disaster Risk Reduction” in Socially and Economically Vulnerable Countries

When promoting disaster risk management targeting socially and economically vulnerable people/area, it would be useful to combine the elements of social development in a project, rather than focusing on disaster risk management alone. Socially and economically vulnerable people are generally even more vulnerable to natural disaster. Hence, it can be more efficient to promote social development for the population, to improve the basic condition of their lives, to motivate them, and to enhance their capability to tackle the disaster risks and strengthen resilience. For example, Nicaragua has been devastated by natural disasters which have set back the country's social and economic progress. In consideration of such situation, Japan's projects in Nicaragua were designed not only to promote disaster risk management capability, but also to integrate social development activities such as improvement of hygienic conditions by constructing sanitary facilities, adult literacy education, and so forth. These activities have contributed to strengthening the prevention ability of the community, motivating the people including socially vulnerable to acquire the basic knowledge of disaster prevention and to collaborate for the disaster prevention activities by local government.

(2) Effectiveness of Infrastructure Development Cooperation with Japanese Superior Technology

Japan's Assistance for infrastructure development is remarkably effective for both development and diplomatic perspective. Among the ODA provided in Nicaragua over the years, the most well-known project throughout population was bridge construction. From a development viewpoint, such cooperation contributed to facilitate the basic infrastructure for industry development as well as vitalization of rural areas, by enlarging the transportation network and activation of physical distribution. In addition, as the high quality of Japanese bridges has been appreciated among the population, the reliability of Japan's technology has been widely spread in the country and led the high presence of Japan in the sector. Continuation in cooperating in infrastructure development is also effective from the diplomatic viewpoint.

Chapter 6 Lessons Learned from cooperation toward Both Countries

6-1 Supporting the Initiative of the Recipient Country

It is certainly effective to support the priority sectors which the government of the recipient country takes the initiative in leading its development for the following

reasons: the government takes the lead to strengthen the institutions to bring about the outcome effectively, and there is high probability that the government commits to sustain and enlarge the outcome acquired through the cooperation. The following are good examples confirmed from the results of the evaluation.

(Example1 - Nicaragua)

The government of Nicaragua has the policy to promote the use of renewable energy and saving energy. The objective is not only to mitigate negative impacts on climate change, but also to reduce the financial expenses for thermal power generation which has been increasing due to the rise in crude oil prices. The dependency on thermal power generation has been notably decreasing, owing to the promotion of National Program for Sustainable Electrification and Renewable Energy (PNESER), to which the Japan's ODA has also contributed. As the program was initiated by the Nicaraguan government with its urgent needs and high prioritization in its development policy, the government demonstrated high commitment to the project, which led to remarkable increase in the use of renewable energy.

(Example 2 – Costa Rica)

Costa Rica actively promotes the national program to become a carbon neutral country by 2021. In order to do so, the Costa Rican government has been particularly promoting the use of renewable energy. Supporting the government effort, the Japan's ODA has contributed to construct the geothermal power generation stations. Thanks to the government efforts with international cooperation the part of which is from Japan's ODA, renewable energy come to account for 99% of the total energy composition of the nation. As the strong initiative of the Costa Rican government to climate change and its countermeasure is well known for international society, the achievement will likely to be publicized in international society. Providing assistance to such effort could accelerate the reduction of GHGs in the country, and eventually could promote to diffuse a good practice to other countries, which could be expected to contribute for solving global priority issue.

6-2 Cooperation Approach Common for the Both Countries

(1) Collaboration with IDB in Latin American Countries

Japan's ODA on infrastructure development and energy sector toward the both countries have strategically collaborated with IDB, particularly through co-financing in construction of bridge, road, sewage disposal plant, as well as of geothermal energy generation. The effectiveness of its collaboration is confirmed by the following two reasons. Firstly, co-financing with IDB could produce greater development impacts by securing larger fund scale than implementing relatively small-scale projects on bilateral basis. Secondly, IDB is influential and has close relationship with the Latin America and Caribbean countries from their establishment

history. Hence, collaboration with IDB makes it easier to negotiate with recipient government in the region through project formulation and its implementation, comparing to implementing the project by Japan's ODA alone.

It is also efficient for JICA and IDB to collaborate from project formulation stage, because it enables to reduce the cost for feasibility study and other administrative costs of both agencies as well as the recipient government.

(2) Strategic Inter-Scheme Combination to Achieve Synergy Effect

Combining relevant ODA schemes in one project could improve its effectiveness and efficiency. Among ODA toward Costa Rica and Nicaragua, there were various good practices and outcomes generated by combining relevant schemes flexibly. For improving the productivity of MSMEs in Costa Rica, for example, Japan firstly provided the Grant Aid for constructing the training center for industrial development, then dispatched the experts and volunteers to the center in order to promote capacity development of MSMEs. In this example, the comprehensive cooperation facilitated to maximize the results of cooperation.

In Nicaragua, as another example, mathematic textbooks and teachers' guidebook were developed through the technical cooperation project in collaboration with Ministry of Education, then they were utilized and diffused by JOCVs collaborating with the school teachers. This combination made it possible to provide assistance from governmental level to grass roots level in one theme, which led to the sustainable use of the materials. Based on those examples, it is efficient and effective to combine various schemes under one project.