

Country Name	Project for Urban Development Master Plan for Managua City										
Republic of Nicaragua											
I. Project Outline											
Background	Managua City, the capital and the largest city of Nicaragua, had a population of 1,495,385 (2016), and its population was growing at an average annual rate of 3.87% from 2005. There were concerns that expansion of urban areas with low-density without an organized plan would bring about a decline in efficiency of urban functions through increasing fiscal burdens of development and operation and maintenance of urban infrastructure more time consuming transports and travels in the areas. There was a need for land use planning and urban planning, a review of urban transportation planning, and sustainable urban development including disaster prevention.										
Objectives of the Project	By formulating the urban development plan of Managua City, the project contributes to proper management of land use (regulation and guidance) based on the plan, and development of major urban infrastructure.										
	Expected Goals through the proposed plan ¹ : The proposed plan is used as the basic urban development plan of Managua City, so that land use is properly managed (regulated and guided) based on the plan, and major urban infrastructure is developed.										
Activities of the Project	<p>1. Project site: Managua City.</p> <p>2. Main activities: Situational analysis of the target sites, formulation of the future vision for the development including the development vision, basic policy and draft planning framework, implementation of the strategic environmental assessment, recommendations for the action plan and investment plan, capacity building of the implementing agency, etc.</p> <p>3. Inputs (to carry out above activities)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Japanese Side</td> <td style="width: 50%;">Nicaraguan Side</td> </tr> <tr> <td>1) Mission members: 6 persons</td> <td>1) Staff allocated: 16 persons</td> </tr> <tr> <td>2) Trainees in Japan: 9 persons</td> <td>2) Land and facilities: Office Space</td> </tr> <tr> <td>3) Equipment: equipment for the survey, etc.</td> <td></td> </tr> </table>			Japanese Side	Nicaraguan Side	1) Mission members: 6 persons	1) Staff allocated: 16 persons	2) Trainees in Japan: 9 persons	2) Land and facilities: Office Space	3) Equipment: equipment for the survey, etc.	
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Project Period	January 2016 to May 2017 (Extended period: May 2017)	Project Cost	(ex-ante) 424 million yen, (actual) 327 million yen								
Implementing Agency	Managua Municipality (Alcaldía de Managua: ALMA)										
Cooperation Agency in Japan	Kisho Kurokawa Architect & Associates, Nippon Koei Co., Ltd., International Development Center of Japan, Inc., Nippon Koei Latin America-Caribbean Co., Ltd.										
Related Projects:	None.										

II. Result of the Evaluation

1 Relevance
<p><Consistency with the Development Policy of Nicaragua at the time of Ex-Ante Evaluation></p> <p>The project was consistent with the development policy of Nicaragua at the time of ex-ante evaluation, as the Decree No. 90-2001, "General Policy for Land Use" included the aims, such as the balanced and controlled economic development while at the same time improving the living conditions of the people and strategic integration of disaster prevention and mitigation measures into the land use planning process.</p> <p><Consistency with the Development Needs of Nicaragua at the time of Ex-Ante Evaluation></p> <p>The population of Managua City was rapidly growing, and the expansion of the urban area with low-density declining the efficiency of urban functions. The project was consistent with the development needs of Nicaragua for development of the urban development plan of Managua City for appropriate land use management.</p> <p><Consistency with Japan's ODA Policy at the time of Ex-Ante Evaluation></p> <p>In the "Country Assistance Policy for Nicaragua" (2013), the basic policy was "stable economic growth through poverty reduction and disparity reduction," and one of the priority areas was set as the "social development for the poor people and areas." Thus, the project was consistent with Japan's ODA policy at the time of ex-ante evaluation.</p> <p><Evaluation Result></p> <p>In light of the above, the relevance of the project is high.</p>
2 Effectiveness/Impact
<p><Status of Achievement of the Objectives at the time of Project Completion></p> <p>The objectives of the project were achieved by the project completion. The "Urban Development Master Plan for Managua City" was formulated. ALMA officials were trained in Japan and through the on-the-job training, they improved capacity on the analysis, visioning, planning, and utilization of the urban plan and transport plan.</p> <p><Utilization Status of the Proposed Plan at the time of Ex-post Evaluation></p> <p>The proposed plan has been utilized at the time of ex-post evaluation. The "Urban Development Master Plan for Managua City for 2040" was approved in 2018 (Indicator 1). Among the 30 short-term priority projects proposed in the master plan, one project of transport</p>

¹ The degree of achievement of expected goals is not to be assessed in principle at the time of ex-post evaluation, since it is defined as the medium-to-long-term goals which will be attained as a result of crystallizing the proposed plan ("output" of the project).

development was in the design and tender stage, seven projects (urban planning, public transport, water supply, solid waste management, sewerage and wastewater disposal, disaster management, and flood management) were being implemented, and two projects of road development were completed, as of May 2021. Most of the projects have been planned and implemented with ALMA's resources, while one has been funded by the Central American Bank for Economic Integration (BCIE) and the European Investment Bank (EIB) (Indicator 2). The delay in execution of the master plan has been caused by some unexpected external factors. In 2018, there was a crisis that generated deterioration of security and the economy, and this caused financial repercussions in the following years. In 2020, the pandemic of COVID-19 severely affected the tourism and manufacturing sectors which further worsened the financial situation. Also, two hurricanes in November 2020 were hindering factors.

On the other hand, ALMA has advanced with four projects proposed in the mid- and long-terms. They are the Urban Planning Capacity Building Project, the New Bypass Project, the Urban Parke Development Project, and the Project on Structural Measures for Sediment Management in Cauce Basins.

<Status of Achievement for Expected Goals through the Proposed Plan at the time of Ex-post Evaluation>

The Expected Goal has not been achieved. The regulations on zoning and land use of Managua City have not been updated since 2004, and they have not been effective in the current situations where the city has been horizontally expanded much and then it would need to be vertically developed. ALMA has been in the process of updating a new land use regulation. According to ALMA, the terms of reference for hiring a consultant in zoning has been coordinated with JICA. ALMA expects to formulate a new Zoning Regulation, taking into account the land use map by 2040 developed by the master plan and the incoming advisory from Japan. On the other hand, ALMA has already carried out some projects for urban infrastructure development (Indicator 2).

<Other Impact at the time of Ex-post Evaluation>

Several positive impacts have been confirmed at the time of ex-post evaluation. First, gender mainstreaming has been promoted by the project. Most of the members of the technical team for developing the master plan were women. Also, the Steering Committee of the project which had many women's participation has been transformed into the Executive Committee for the master plan follow-up. According to ALMA, this gender structure has allowed them to move forward rapidly and uninterruptedly in the execution of projects, as most of the female staff have remained in the position. Second, the implemented projects have followed the mandatory regulations for urban infrastructure construction, which have secured the accessibility of the citizen who has different needs. For example, the pedestrian bridges with elevators have enabled them to provide easy and safe access to the other side of the street. Also, public lavatories have been adapted for persons with limited mobility.

No negative impacts on the natural environment and socially vulnerable people by the project have been caused by the project.

<Evaluation Result>

In light of the above, the effectiveness/impact of the project is high.

Utilization of the Proposed Plan

Aim	Indicators	Results
(Status of achievement of the Objectives)	1. Urban development plan of Managua City for 2040.	<u>Status of achievement: Achieved.</u> (Project Completion) - The Urban Development Master Plan for Managua City was formulated.
	2. Capacity development of Managua Municipality on urban planning and management.	<u>Status of achievement: Achieved.</u> (Project Completion) - ALMA officials improved capacity on the analysis, visioning, planning, and utilization of the urban plan and transport plan.
(Utilization Status of the Proposed Plan) 1. The proposed urban development plan is formalized through the prescribed approval process in Nicaragua. 2. Preparations are underway in a concrete way for the implementation of the proposed projects in the urban development plan.	1. The proposed urban development plan is formalized through the prescribed approval process in Nicaragua.	<u>Status of achievement: Achieved</u> (Ex-post evaluation) - The Urban Development Master Plan for Managua City for 2040 was approved by the Municipal Council through Municipal Ordinance N°02-2018 in March 2018.
	2. Preparations are underway in a concrete way for the implementation of the proposed projects in the urban development plan.	<u>Status of achievement: Achieved</u> (Ex-post evaluation) - Among the 30 priority projects for the short term (2017-2020) which were proposed for the Master Plan, the following projects have been either prepared, implemented, or completed. [Being prepared: design and tender] 1) Urban Mass Transit Project (Juan Pablo II Line) [Being implemented] 2) Public Awareness Project for Compact City Planning 3) Old and Vulnerable Pipeline Replacement Project 4) Expansion of the Sewerage Coverage in Managua Project 5) Equipment for Collection and Transportation Procurement Project 6) Project for Establishment of Permanent Offices and Staff for Disaster Management with Training Program 7) Project for Update of Hazard Map and Dissemination to Citizen for Understanding/ Community-based Risk Reduction 8) Structural Improvement of Priority Cauces Project [Completed] 9) Overpass and Intersections Project 10) Road Improvement and Road Extension Project
(Expected Goals through the proposed plan) 1. The proposed plan is used as the	1. Land use is properly managed (regulated and guided) based on the plan.	<u>Status of achievement: Not achieved.</u> (Ex-post Evaluation) - The land use regulations have not been formulated yet.

<p>basic urban development plan of Managua City, so that land use is properly managed (regulated and guided) based on the plan, and major urban infrastructure is developed.</p>	<p>2. Major urban infrastructure is developed.</p>	<p><u>Status of achievement: Partially achieved.</u> (Ex-post Evaluation) - Several infrastructure projects have been implemented as part of the proposed projects, including development of the Bus Rapid Transit, replacement of pipelines, and road improvement and extension. - ALMA has improved the land use of the shores of Lake Managua and part of the traditional and heritage areas in the City. - The new baseball stadium was constructed which meets the international standards in 2017, and the nearby areas were improved including the drainage system to solve flooding issues.</p>
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(Source) Project Completion Report, and questionnaire survey with ALMA.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 77%), the project period slightly exceeded the plan (ratio against the plan: 107%). Outputs were produced as planned. The project period was extended because some project activities were suspended due to general elections. Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

Urban development in Managua City has been prioritized in the “Managua Municipal Development Plan” (2013-2028),” as well as its “Institutional Development Plan” and “Sustainable Managua Action Plan.”

<Institutional/Organizational Aspect>

ALMA has maintained the same organizational structure for implementing the proposed master plan. In addition, as an internal communication mechanism, ALMA has established the Executive Committee responsible for the follow-up of and feedback to the master plan. At the time of ex-post evaluation, the General Directorate of Environment and Urbanism, which has a specific Urban Planning Department with five members, only three of them are dedicated to implementing the masterplan, and the number has not been sufficient, according to ALMA. ALMA has proposed to include more technicians who have the same educational background or those who were trained in JICA courses on similar topics, in order to work on future activities of the master plan. The environmental impact assessment has been carried out in accordance with national and municipal environment laws and regulations.

<Technical Aspect>

ALMA has sustained sufficient skills and knowledge to implement the proposed master plan. The technicians who participated in the elaboration process of the plan have been strengthened in topics of the geographic information systems (GIS) for the map presentation, data analysis, and management of urban regulations. Since the time of project completion, a total of 33 members have participated in 10 training courses. Training topics have included transport demand analysis, GIS, urban management, cost and budget of civil works, hygiene, and industrial safety, etc. These courses have been conducted by JICA, the National Engineering University of Nicaragua, other donors such as Korea International Cooperation Agency, Union of Ibero-American Capital Cities, etc.

<Financial Aspect>

ALMA has secured a sufficient budget for implementing the proposed master plan. ALMA has had its revenues and also external funds from the Inter-American Development Bank and BCIE.

Budget of ALMA (million Cordoba)

	2018	2019	2020	2021 (plan)
Revenue	4,515	3,962	5,252	6,705
Expenditure	4,396	3,685	4,938	6,705

(Source) ALMA.

<Evaluation Result>

In light of the above, slight problems have been observed in terms of the institutional aspect of the implementing agency. Therefore, the sustainability of the effectiveness is fair.

5 Summary of the Evaluation

In the project, the “Urban Development Master Plan for Managua City for 2040” was prepared. After the time of project completion, the plan was officially approved and some projects have been implemented. As a result of the implemented projects, some infrastructure facilities have been developed. Regarding sustainability, the number of technicians has not been sufficient for implementing the master plan, but ALMA has conducted technical training for the existing members and made the proposal to assign more members to the responsible section. Concerning efficiency, the project period slightly exceeded the plan.

Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

- It is recommended to ALMA to conduct further capacity building of the General Directorate of Environment and Urbanism on urban planning to accelerate the implementation of the proposed projects and formulation of the new regulations on land use and zoning, by organizing an interinstitutional working committee to plan seminars for sharing experiences of those members of other organizations who were trained in relevant topics in Japan. Also, ALMA could contact the Japan Alumni Nicaraguan Association (ANEJA) to invite lecturers and exchange opinions online with Japanese municipalities to learn their experiences in urban development, including good practices and challenges.
- It is recommended to the Executive Committee responsible for the follow-up of the master plan to record the progress of the proposed projects, including those projects which are carried out by other institutions. By recording the achievements and issues through bi-annual reports, ALMA could not only make its own institutional memory but also share them with JICA and other donors so that they could understand which kind of support would be necessary and effective.

Lessons Learned for JICA:

- The project period was extended for one month during the general election period. When the general election is planned during the project period, the project should be designed with some additional time so that planned activities would be completed in the planned period.

- If it is found the need of capacity building for land use and zoning regulations, an introductory training component on land use and zoning regulations should be included for an effective implementation of the masterplan.



Alexis Arguello Sports Center and the Michelle Richardson Swimming Pool Complex constructed by the Urban Park Development Project



South-North view of the overpass "Las Piedrecitas"