

Republic of Honduras
La Union Biological Corridor Project for Sustainable Use
and Conservation of Biodiversity
Jan. 2016 – Jan. 2021

Proyecto Corredor Biológico La Unión (CBLU), para el Uso Sostenible
y Conservación de la Biodiversidad
ラ・ユニオン生物回廊プロジェクト

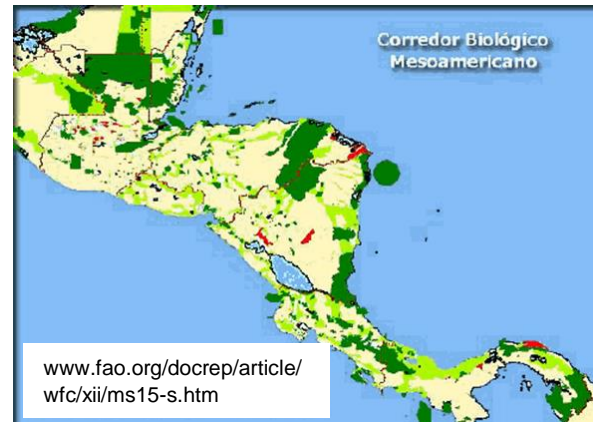


Primary school in Changüte Sur, Yuscarán



Mesoamerican Biological Corridor (MBC)

Wildlife usually inhabit in habitat networks of local populations. The habitats of wildlife have been divided into small scattered areas through land use changes of forests and natural vegetation into agricultural areas, towns and roads. The reduce and division of the wildlife habitats have degraded water resources and ecosystem services which are necessary for our life. Biological corridor (BC) program is conducted in the world to restore the wildlife habitat divided. In Central America, the Mesoamerican Biological Corridor (MBC/ CBM (Spanish)) program was accepted by the summit of Central American Integration System (SICA, Spanish) in 1997 for restoration of wildlife habitat and provision of environmental goods and services to the people in the area. The MBC area from Panama to Mexico covers 768,900 km² and occupies only 0.5% of global land area, however, 7% of species on the world occur in the area (World Resource Institute, 2001)¹. About 550 protected areas in the MBC area are connected by the program. The MBC program intends to cover more than half area of forests under the MBC concept by 2025.



Biological Corridor Plan in Honduras

Honduras locates center area of Central America, so that a key place of the MBC program. Honduras is a member of the SICA and carries out biological corridor (CB) program in the country. The law of forest, protected areas and wildlife in 2007 indicates definition of CB, and made a map of BC which connects protected areas in the country. "Strategy of BC in Honduras"² was published in 2013, and "the Regulation for BC in Honduras"³ was enacted in 2015, and "the Internal Regulation of National Committee for Biological Corridor in Honduras (CONACOBH)"⁴ was approved by the congress in 2017. ICF (National Institute of Forest Conservation and Development, Protected Areas, and Wildlife) and MiAmbiente (Ministry of Energy Office, Natural Resources, Environment and Mining) manage jointly the BC in Honduras.



¹ http://pdf.wri.org/mesoamerica_english.pdf

² https://acchonduras.files.wordpress.com/2014/07/estrategia-consolidacion-corredoresbiologicos_icf_2013.pdf

³ https://www.jica.go.jp/project/spanish/honduras/004/materials/c8h0vm0000bk9y9y-att/materials_01.pdf

⁴ http://transparencia.scgg.gob.hn/descargas/Acuerdo_Ejecutivo_No_013_Autorizacion_para_Allanamiento.pdf

La Union Biological Corridor

Four municipalities, Yuscarán, Güinope and Oropolí in El Paraiso Department and San Antonio de Oriente in Francisco Morazán Department locate about 80 km southeast of Tegucigalpa. The area of the 4 municipalities lies near the capital city, however, preserves good nature environment and traditional life style. The 4 towns recognized as municipality in 18th century. Yuscarán keep traditional streets and houses, which are designated as a national monument.

The 3 municipalities, Yuscarán, Güinope, Oropolí and the are of the Yuscarán biological reserve in San Antonio de Oriente, have 720 km² area, and 28,000 population (Table 1). Major activity of the area is agriculture, and cultivation of coffee, fruits, maize, beans and grazing. Onion in Güinope and melon in Oropolí are famous local products. Yuscarán biological reserve (6,000 ha) lies center of the area. A part of buffer zone of the biological reserve extends to San Antonio de Oriente in Francisco Morazana Department. High altitude area (>1.800 ma) of the reserve is designated as clouded forests protection area. There are 3 micro watersheds declared by ICF in Güinope. La Union Biological Corridor project aim to list the whole area of the 3 municipalities and area of Yuscaran biological reserve in San Antonio de Oriente to the first biological corridor according to the regulation for BC in Honduras.

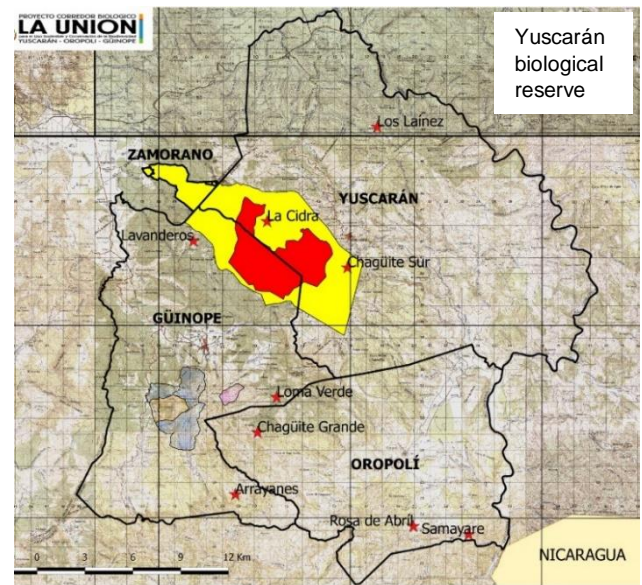
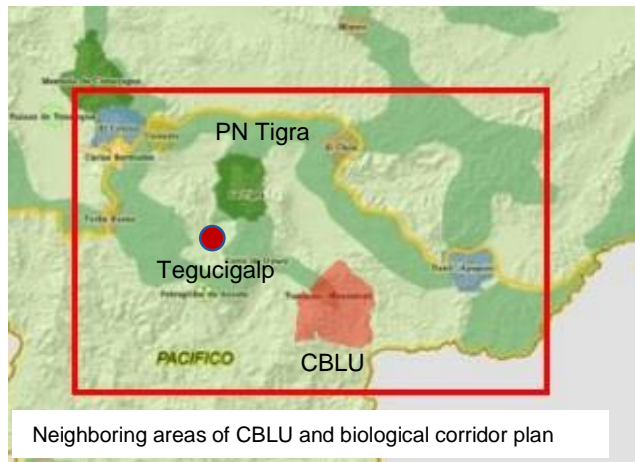


Table 1 CBLU area nominated

Department	Municipals	Area (km ²)
El Paraíso	Yuscarán	348.9
El Paraíso	Güinope	204.0
El Paraíso	Oropolí	158.9
Francisco Morazán	San Antonio de Oriente	7.3
	Total	719.1



Nature Environment in CBLU

Elevation of the CBLU area ranges between 300 m to 2,000 m asl. Chain mountains in central area is old volcanos and there is a hot spring site in Oropolí. Honduras has 3 major ecoregions, Central America (CA) Atlantic moist forests, CA pine-oak forests, and CA Pacific dry forests (World Bank, 1995). The CBLU area ranges in two ecoregions, from the CA pine-oak forests to CA Pacific dry forests. Mixed broadleaf forests also distribute in the Yuscarán biological reserve. Forest cover rate in the CBLU is 59%, which is 11% higher than the average rate (48%) of the country. The forest vegetation contains 60% of pine forest, 33% of dry forest and 7% of remained forest types. These forest areas provide habitats for various species of wildlife, and supply ecosystem services such as water resources to local communities. Sub-corridor of forest is planned for inter connection of protected areas in the CBLU.



Flora and Fauna

The Yuscarán biological reserve provides habitats for many species, especially mountainous birds and plants. The following species are recorded in the reserve and surrounding areas.

- Plants: 81 family, 209 genus, 310 species (including, 14 rare species of IUCN Red List and/ or CITES Appendix)
- Small invertebrates: Arthropod 1,497 species, Coleoptera 21 species
- Reptiles and amphibian: 13 species
- Fresh water fishes: 4 species (Río Choluteca)
- Birds: 98 species (13% of species which recorded in whole Honduras)
- Mammals: 19 species

White tailed deer (*Odocoileus Virginianus*) (national mammals of Honduras), northern tamandua (*Tamandua mexicana*), and resplendent quetzal (*Pharomachrus mocinno*), also inhabit in the reserve.



Community Life

Most of people in the CBLU area live in rural area. There are 45 villages as local administration unit, and 270 hamlets under the villages. Diverse agriculture activities are carried out in the rural areas. Cultivation of coffee, fruits and vegetables are dominant in high land > 1,000 m asl. In the dry forests in southeastern part of CBLU, animal keeping is major livelihood, and melon is produced in where enough irrigation water are available. Most of farmers also grow maize for their home consumption. The communities keep traditional culture. Dance of giant puppet and festival of mango in Yuscarán and festival of orange in Güinope are famous events. Special products in the areas are sprits (rum) of Yuscarán, wine and sweets of Güinope, and melon of Oropolí.



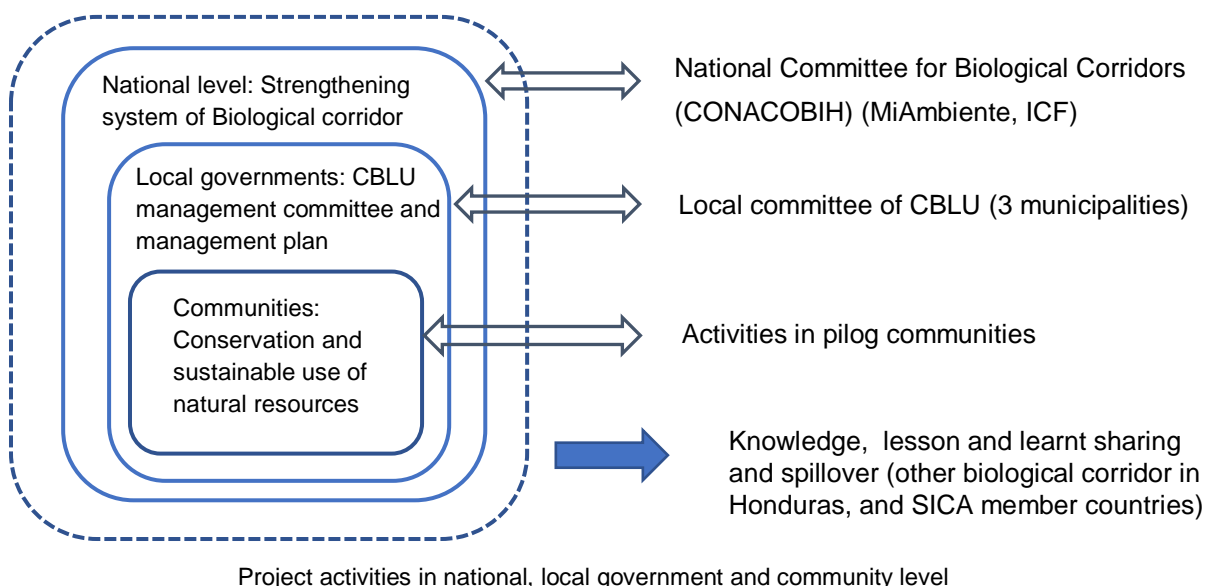
Sustainable use of natural resources

The communities in the CBLU area conduct various voluntary activities for sustainable use of natural resources. Drinking water supplies and conservation of watershed are most important activity. Most of communities use spring water which flow from the Yuscarán biological reserve and neighboring mountain forests. A part of forests of watershed is declared as micro watersheds (micro cuenca, Spanish) by ICF. There are several community watershed forests which are not yet declared by ICF.



La Union Biological Corridor Project

La Union Biological Corridor (CBLU) Project was carried out as a JICA technical cooperation project for biodiversity conservation and sustainable development in Honduras. The project aims to support 3 level activities, national, local government and community level, for the biological corridor planning and management, and knowledge sharing obtained through the project.



La Union Biological Corridor Project (11 Jan. 2016 – 10 Jan. 2021, 5 years)

- **Project Purpose:** A management model* of biological corridors based on the “Regulations of Biological Corridors in Honduras” is established in La Union Biological Corridor.
(* A package of establishment and operation of a management committee, zoning based on study on natural resources and socio-economic study in La Union Biological Corridor and formulation of management plan for each zone, identification and promotion of environment-friendly production activities in the buffer zone, monitoring of natural resources and socio-economic status, revision of the management plan based on monitoring. The Project aims to prepare guideline compiling these procedures and have official endorsement on it.)
- **Output 1:** National institution for biological corridor is enhanced.
- **Output 2:** An institution and management plan** for La Union Biological Corridor is established.
(** Management plan of La Union Biological Corridor: including strategy for conservation and rural development, objectives, zoning, regulations in the protected areas, activities (management of production activities, environmental education, PES, etc.)
- **Output 3:** In the selected pilot communities, sustainable use and conservation plans *** are formulated based on the management plan of La Union Biological Corridor and the implementation of the activities under the plan is promoted.
*** Sustainable use and conservation of natural resources: Activities for conservation of natural resources taking into account of natural and social environment, e.g. forest conservation in watershed for stable irrigation, control of farming on steep slope and terrace farming to avoid soil erosion, shade-grown coffee farming for forestation and production of high-valued coffee, community based ecotourism, conservation of SATOYAMA landscape, etc
- **Output 4:** The knowledge and experience concerning biological corridors are shared with the stakeholders inside and outside of La Union Biological Corridor.

Implementation of project

The following organizations join and implement the project.

- DiBio (Department General of Biodiversity), MiAmbiente (Ministry of Energy Office, Natural Resources, Environment and Mining)
- ICF (National Institute of Forest Conservation and Development, Protected Areas, and Wildlife)
- DICTA (Department of Science and Technology of Agriculture and Livestock), SAG (Ministry of Agriculture and Livestock)
- CONACOBH (National Committee for Biological Corridors)
- Three municipalities in CBLU area
- JICA (Japan International Cooperation Agency)

The project support following activities to achieve the outputs including plan in future after June 2018.

1. National institution for biological corridor is enhanced: Meeting of CONACOBH and development of internal regulation.
2. An institution and management plan for La Union Biological Corridor is established: Establishment of local committee and regulation, review of boundary of Yuscarán biological reserve
3. Sustainable use and conservation plans are formulated in selected pilot communities: See, below
4. Knowledge and experience concerning biological corridors are shared: Participation in national and international meetings and presentation of the project.

Implementation of community activities for sustainable use and conservation

Project supports community conservation activities such as prevention of water pollution (improvement of toilet and water facilities), garbage control, water resource management, and designation of watershed forest. Mapping and development of nursery for reforestation are also conducted. For income generation, several activities are carried out such as diversification of crops, introduction of a improved race of avocado "Hass" to some of communities, establishment of model farming areas, and providing of training course. These activities were identified and planned by the people of the communities with the methodology of participatory development.





La Union Biological Corridor Project

Project información

Web (español):

<https://www.jica.go.jp/project/spanish/honduras/004/index.html>

Web (japonés):

<http://www.jica.go.jp/project/honduras/004/index.html>

<https://www.jica.go.jp/oda/project/1400414/index.html>

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