

Colombia

FISHING AS AN ENGINE FOR PEACE BUILDING IN THE PACIFIC REGION OF COLOMBIA

Pacifico Nariñense Project

- Investment Forum - FAO Rome - October, 2024 -



Colombia

Country of Beauty



Colombia is the **4th largest economy** in Latin America and the Caribbean with a **population of 52 million people**.

7.2% are Afro-Colombian and 4.7% are indigenous.

Strategic geopolitical location: With coasts on the Pacific and Atlantic Oceans. With easy access to the countries of the Americas, Asia Pacific and Europe.

2nd country in the world in biodiversity. The Pacific coast is part of the Biogeographic Choco



26.1% Moderate/severe national food insecurity and 29.7% for Nariño (FIES/DANE, 2023)



33% national monetary poverty, 36.1% in Nariño (DANE, 2023).



445,858 Victims of the armed conflict in Nariño, 27.3% of the total population (Indepaz, 2024).



Nariño is the **enclave with the largest surface of coca cultivation in Colombia** with **59,746 hectares** (UNODC, 2023).

Pacífico Region



13.2% of GDP

Population: **8,440,852**



Fishing activity potential is estimated at **450,000 tons per year**.



The Pacific Region has an extension of 83,170 Km² (7% of the national territory). Its coastline is 1,300 km long, stretching from the border with Panama to the border with Ecuador.

Nariño Pacific Coast: it has a length of **1,300 km** and is made up of seven (7) municipalities, with a population of **366,150 inhabitants**.



BUILDING PEACE ON SOCIAL AND ENVIRONMENTAL JUSTICE: A CHALLENGE FOR THE COUNTRY

The Peace Agreement with the FARC EP, November 24, 2016.

Point 1. Integral Rural Reform:

- Access to Land
- Development Program with Territorial Focus (**PDET**) for territories excluded and mostly affected by violence and illegalized economies, including the seven municipalities of the Pacific Coast of Nariño.
- Closing socio-economic gaps between the rural-urban sectors.

Government Priorities



Total and comprehensive peace: Fulfillment of the peace agreement with the FARC, new negotiation processes with illegal actors, transformation of territories affected by violence and illicit economies.



Land use planning around water and environmental justice



Human security and social justice for the benefit of excluded territories and populations.



Colombia is an **agri-food powerhouse**



Fair, safe, reliable and efficient **energy transition.**

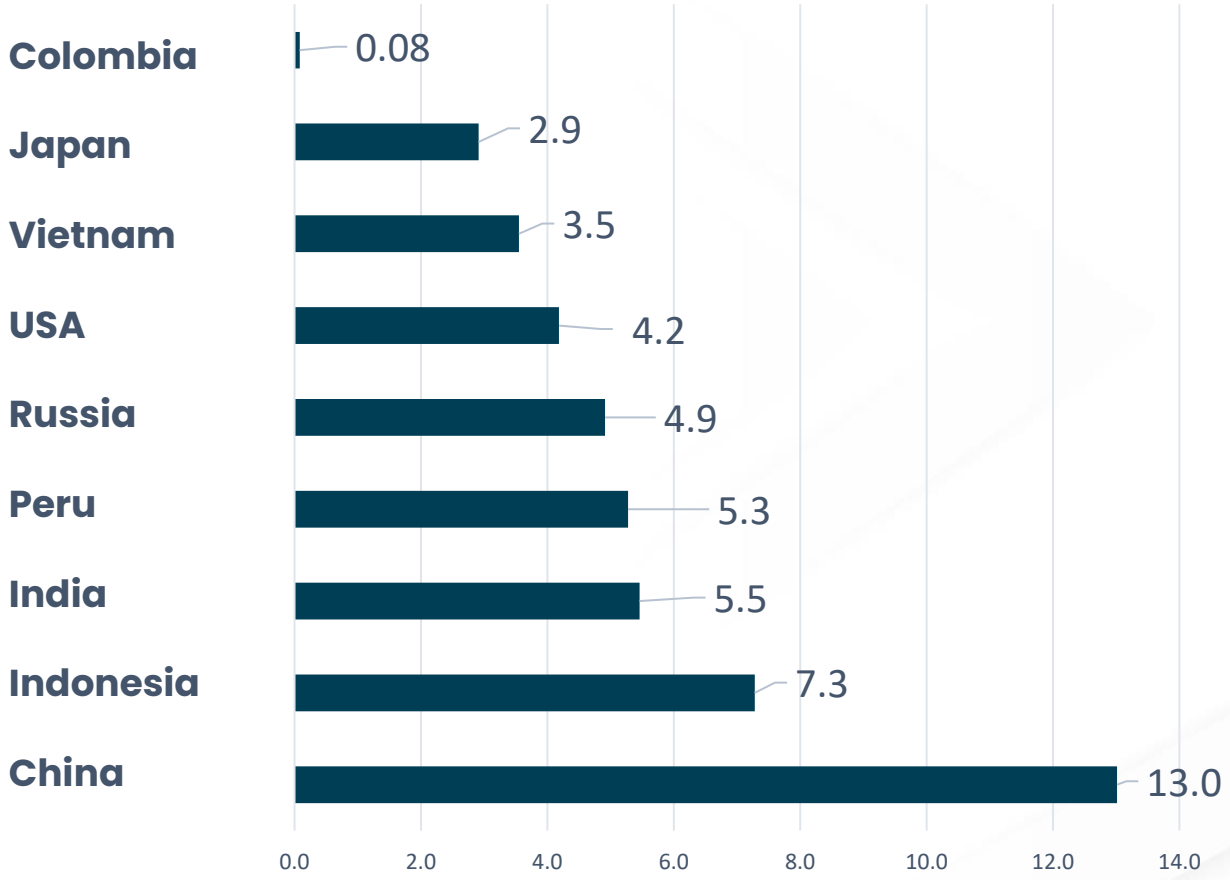


Climate action, **carbon neutrality and bioeconomies**

FISHING AS AN ENGINE FOR PEACE-BUILDING IN THE PACIFIC REGION OF COLOMBIA



World fishery production in 2022
91 million tons



FAO, 2024



“Fishing is one of the areas in the Colombian Pacific that can help us to replace an illegal economy with a legal economy.”

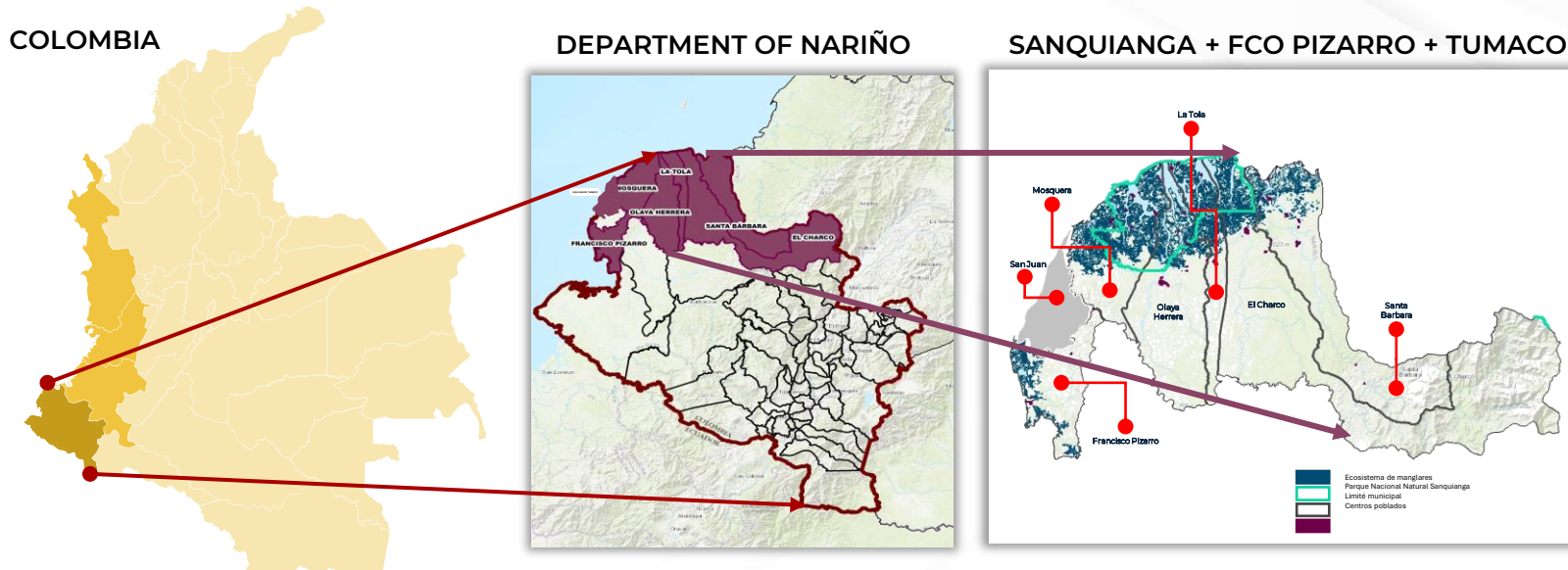
**President Gustavo Petro
Tumaco, 10 de octubre de 2023**

Enabling Environment



- **Z.E.E.E. Special Economic Export Zone** (Law 617 of 2001 and Decree 045 of 2003).
- **ZOMAC. Tax relief for territories affected by the armed conflict** (decree 1650 of 2017).
- **Z.R.A.E. Special Customs Regime Zone** (Decree 1165 of 2019).
- **Border Zone. Special Border Development Unit** (Law 191 of 1995).
- **Z.I.F. Border Integration Zone.**
- **Municipal Tax Compensation**

Strengthening artisanal fishing and Piangua value chains in the Nariño Pacific: Territorial and population focus



7 Municipalities PDET nariñense Pacífico
Sanquianga Subregion+ Francisco Pizarro + San Juan de Tumaco

Rural population : **53.491**
inhabitants
5.349 Fishers
3.484 Piangueras

140,885 ha mangroves
(22% of the targeted area)

Productive diagnostics

35 Districts engaged in deep-sea fishing of **99** fishing districts

2.865 Fishers engaged in deep-sea fishing

34 Deep-sea **fishing boats** in the area

4 - 5 average daily hours of energy in the Districts

Limited and deficient energy

Only 6 ice producers in the region

Fishers can take up to 1.5 hours per trip to procure ice.

687,084 Kg CO₂/month
High carbon footprint

Diagnosis of social conditions

Multidimensional poverty index
73,4%

Source: (DANE,2024)

Food insecurity moderate or severe
32,7%

Source: (FIES,2024)

Rural electric coverage
25.3%

Rural water supply coverage.
2.6%

Rural sewer coverage.
0.4%

Rural internet coverage.
0.3%

ARTISANAL FISHING AND PIANGUA VALUE CHAINS

Investment components



Efficiency in fishery production

- 1 State-of-the-art vessels, fishing gear and technology for navigation and capture.
- 2 Occupational safety equipment



Cold chain and connectivity infrastructure

- 1 Cooperative storage of refrigerated products
- 2 Cold chain: ice production and storage
- 3 Satellite connectivity



Energy efficiency and water treatment

- 1 Solar energy autonomy systems and power plants..
- 2 Water treatment plants for ice production and human consumption.



Ecological mangrove restoration

- 1 Restoration of mangrove ecosystem



Model of Socio-Entrepreneurial Cooperative Management

- 1 Administration hubs
- 2 Capacity-building
- 3 Economy of care

Phase 1	USD \$3.6 million	USD \$2.1 million	USD \$3.0 million	USD \$0.2 million	USD \$1.1 million	TOTAL USD \$10 million (Colombian Govt.)	
Phase 2	USD \$5.2 million	USD \$2.1 million	USD \$6.3 Millons	USD \$0.9 million	USD \$5.0 million		TOTAL USD \$19.5 million
TOTAL	USD \$8.8 million	USD \$4.2 million	USD \$9.3 million	USD \$1.1 million	USD \$6.1 million		TOTAL USD \$29.5 million

Indicators. Average IRR 18.8% / NPV USD 33.5 million

Beneficiaries and notable indicators



COMPONENTS	DIRECT BENEFICIARIES	INDIRECT BENEFICIARIES	INTEREST INDICATORS		
Efficiency in fishery production	3,456	13,824	Impacts 50% Fishermen 75% Piangueras	Fishing 259 tons/month Total estimated yield for the enIRRe fleet delivered	Piangua 4,953,600 units/month
Cold chain and connectivity infrastructure	1,618 Fishers with cold chain 1,800 People with internet access	6,472	90% Demand for ice in the area satisfied (29.9 tons)	50% Fuel savings per vessel per month in ice procurement	50% CO2/month reduction in carbon footprint
Energy efficiency and water treatment	20,800	15,090	52,000 Ltrs Daily water output for ice and the same amount for human consumption	50% Emission reductions for hybrid system vs. diesel-powered system	
Ecological mangrove restoration	2,232	8,928	9.4% Increase in the amount of CO2 captured compared to the current state of the mangrove ecosystem.	USD \$7.5 Million in the sixth year Annual monetary value of the impact of fisheries biodiversity conservation and carbon sequestration.	
Model of Socio-Entrepreneurial Cooperative Management	3,456	13,824	7 Cooperative units formed and strengthened (one per municipality)	84 Direct jobs created for cooperative administration	

Net Income x Fisherman x Current Month

1. Current shoreline fishing	\$123 USD	620%	2. Traditional deep-sea fishing	\$692 USD	28%
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Net Income x Fisherman x Month expected

3. Improved deep-sea fishing	USD \$885
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Phase III: Additional Investment for the Transformation, Commercialization and Modernization of the Tumaco Fishing Port

The reactivation of the Tumaco fishing port, as a strategy for:

- **Regional Integration**
- Boosting **local economic development** by creating jobs in the value chain.
- Access to **better markets** for the commercialization of fishery resources.
- Fishing and productive **training center**:
Regional Fishing School.





Phase III Project: Transformation and Commercialization in Connection with Tumaco Fishing Port

GOALS

- Modernize the region's fishing infrastructure.
- Increase productivity and sustainability of fishing activities.
- Facilitate the commercialization and export of fishery products.
- Create direct and indirect employment and improve the quality of life of local communities.
- Promote the active participation of local fishermen in decision-making and project benefits.

BUSINESS MODEL

- Mixed economy company
- 70% participation of the private sector (35% for local fishermen and 35% for private companies).
- 30% state participation.

Note: Investment estimate pending

INVESTMENT SUMMARY

USD \$29.5 M Total	USD \$10 M Government investment	USD \$19.5 M Investment gap	18.8% Average IRR	USD \$44.16 M NPV	33,362 Direct Beneficiaries	56,890 Indirect Beneficiaries	5,958,897 Tons CO2 Eq per year Valued at USD \$7.5 million from year six Sequestered by 2034
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1 Fishery Efficiency

- Cost: **USD \$8.8 million**
- IRR: **20.57 %**
- NPV: **USD \$ 11.5 million**
- Direct beneficiaries: **3.456 fishers y piangüeras** with their own vessels and improved incomes
- Indirect Beneficiaries: **12.576 people** (families of 4 people)

2 Infrastructure and Connectivity

- Cost: **USD \$4.2 million**
- IRR Components 2 + 3: **15.92%**
- NPV: **USD \$ 8.8 million**
- Direct beneficiaries: **3.418 fishers and piangüeras** with hatcheries. **1.650 people** with internet access.
- Indirect Beneficiaries: **6.472 people**

3 Energy and Water

- Cost: **USD \$9.3 million**
- IRR Components 2 + 3: **15.92%**
- NPV: **USD \$ 8.8 million**
- Direct beneficiaries: **20.800 people** with drinking water for consumption
- **15.090 people** with access to personal sanitation systems

4 Mangrove restoration

- Cost: **USD \$ 1.1 million**
- IRR: **21.62 %**
- NPV: **USD \$ 15.06 million**
- Direct beneficiaries: **2.232 piangüeras** with restored mangroves.
- Indirect Beneficiaries: **8.928 people**

5 Cooperative management

- Cost: **USD \$6.1 million**
- IRR: **Not applicable**
- NPV: **Not applicable**
- Direct beneficiaries: **3.456 fishers and piangüeras**
- Indirect Beneficiaries: **13.824 people**