

CREATING MARKETS IN OAXACA, MEXICO



OPPORTUNITIES

The Deep Dives explored two critical sectors for Oaxaca: agro-industry and forest. Private investment in these sectors could enable the state to accelerate economic growth, reduce development gaps, diversify its economy, and integrate into global value chains (GVCs).

AGRO-INDUSTRY

In 2021, Oaxaca was among Mexico's 10 largest producers of **papaya** (1st); **pineapple** (2nd); **lemon** (3rd); **coffee, sugarcane, and sesame** (4th); **mango** and **amaranth** (5th); **coconut** (6th); **watermelon** (7th); **melon, banana, and chickpea** (8th); **avocado** and **pear** (9th); and **apple and nut** (10th).

There is potential to expand the production of fresh agriproducts and develop higher added-value processed products. **Private initiatives have already emerged**, including an agro-industry park project aiming to process coconut production in the Costa region, taking full advantage of all the components of the fruit and its palm tree to elaborate a wide range of by-products. A similar project is being deployed on the coast of Guerrero,

suggesting the opportunity to promote an interstate cluster of common agriproducts with collection centers, processing plants, and R&D facilities along the coast and close to both states' borders.

There is also potential to expand the production of **meat** (6th, 9th, and 9th largest producer of goat, sheep and pork meat, respectively, in Mexico for 2021), **honey** (6th largest producer), and **fish** (7th largest producer of tuna), exploring aquaculture and other sustainable production processes.

Target markets to reach are domestic and international (U.S. West and East Coasts, Asia, and Central America).

FORESTRY SECTOR

There is a strategic **opportunity to consolidate the furniture subsector in Oaxaca**, the **third-largest producer of timber in Mexico** with the third-largest area certified by the Forest Stewardship Council. Its higher-than-average productivity and comparative advantage in the production of **sawn boards and planks, and wood containers and pallets** have already been leveraged by one the most important door manufacturers and exporters in the country.

Oaxaca could **start with the production of basic furniture or furniture components to supply larger producers**, and, over time, gradually evolve into more sophisticated products such as ready-to-assemble furniture, which is gaining market and attracting investments in Mexico.

There is also an opportunity to expand the **pulp, paper, and paperboard** subsector (increasingly relying on recycled raw materials) to **reduce dependence on imports** as Mexico's trade deficit of paper and paperboard has nearly quadrupled since 1995.

Among Mexico's 32 states, **Oaxaca ranks eighth in labor productivity for paper manufacturing**. There are more than 280 pulp, paper, and paperboard firms in Oaxaca, including a leading multinational company located in Tuxtepec, at the border with Veracruz (the state at the other end of the ICIT).



ASSETS

- Surface area: 93,757.6 km² (4.8% of nat'l.)
- Oaxaca is one of the two states that encompass the Interoceanic Corridor of the Isthmus of Tehuantepec (ICIT), which represents Mexico's shortest distance between the Pacific and Atlantic Oceans (~300 km)
- International oil and commercial port, with direct access to the U.S. West Coast, Asian, and South American markets, and connectivity to the U.S. East Coast through the ICIT
- Connection to Central America (through its border with Guatemala) through the Chiapas-Mayab

- railway
- High water availability: 57,450 hm³ in 2020 (12.4% of nat'l.), 3.8 times the nat'l. per capita availability
- Only state in the South region with access to natural gas through a pipeline serving the regional demand, with the potential to connect to Chiapas and Central America
- Holds one of the seven operating oil refineries in the country and the only one along the Mexican Pacific coast
- High potential for renewable energy: largest producer of wind energy (~2,758 MW in 2022, 38%

- of nat'l.) and ~6,600 km² of land with "good-to-excellent" wind resource potential (7% of the state's total)
- High biodiversity and favorable edaphoclimatic conditions for agricultural production
- World-class culinary and cultural tourism destinations



PEOPLE

TOTAL POPULATION (2023e) <i>10th largest in Mexico or 3.3% of nat'l. total</i>	4.3 million
MEDIAN AGE (2020) <i>nat'l. median: 29 years</i>	28 yrs.
SELF-IDENTIFIED INDIGENOUS POPULATION (2020) <i>nat'l. avg.: 19.4%</i>	69.2%
AVG. YEARS OF SCHOOLING (2020) <i>nat'l. avg.: 9.7 years</i>	8.1 yrs.
URBANIZATION RATE (2020) <i>nat'l. avg.: 79%</i>	49%
POVERTY RATE (2022) <i>nat'l. avg.: 36.3%</i>	58.4%
EXTREME POVERTY RATE (2022) <i>nat'l. avg.: 7.1%</i>	20.2%
GINI COEFFICIENT (2022) <i>nat'l. avg.: 0.431</i>	0.446
LIFE EXPECTANCY AT BIRTH (2023) <i>nat'l. avg.: 75.3 years</i>	73.1 yrs.



ECONOMY

GDP (2022 nominal) <i>2.1% of Mexico's GDP</i>	US\$25.4 billion
AVG. GDP GROWTH (2010–22) <i>nat'l. avg.: 1.9%</i>	0.7%
COMPETITIVENESS NATIONAL RANK (IMCO, 2023)	31/32
GDP SECTOR COMPOSITION (2022)	
Agriculture <i>nat'l. avg.: 4.1%</i>	4.6%
Industry <i>nat'l. avg.: 34.7%</i>	34.3%
Services <i>nat'l. avg.: 61.2%</i>	61.1%
ECONOMIC COMPLEXITY NATIONAL RANK, BY VALUE ADDED (2018)	27/32
EXPORTS (2023) <i>0.2% of nat'l.</i>	US\$1.2 billion

GDP PER CAPITA (2022 nominal) <i>53.2% of nat'l.</i>	US\$5,993
UNEMPLOYMENT RATE (2023 average) <i>nat'l. avg.: 2.8%</i>	1.5%
INFORMALITY RATE (2023 average) <i>nat'l. avg.: 55.1%</i>	80.7%
EMPLOYMENT, BY SECTOR (2023 averages)	
Agriculture <i>nat'l. avg.: 11.2%</i>	28.6%
Industry <i>nat'l. avg.: 25.2%</i>	20.6%
Services <i>nat'l. avg.: 63.6%</i>	50.8%
LABOR PRODUCTIVITY, % OF NAT'L. AVG. & NAT'L. RANK (2018)	44.6%, 32/32
FDI (2023) <i>0.1% of nat'l.</i>	US\$53.2 million



CROSSCUTTING CONSTRAINTS

Cross-cutting constraints for private sector development are mainly related to **land tenure, human capital, infrastructure, and access to finance**:

- **Land fragmentation and communal property** deter private sector development, as it is difficult to secure larger land extensions to invest with legal certainty.
- **Transport infrastructure deficiencies combined with a ripped topography** increase operational costs and reduce productivity.
- **Low human capital** prevents the sophistication of economic activities.
- **Limited financial penetration and weak financial intermediation** affect the conditions under which local firms (notably micro, small, and medium enterprises and entrepreneurs) can fund their operations.



SECTORAL CONSTRAINTS

- AGRO-INDUSTRY
- **Deficient roads** constrain access to markets, particularly those connecting rural regions (where agricultural production is concentrated) with urban areas (main domestic markets) and export points.
 - **Sector-specific infrastructure is deficient**, as water provision is costly, grain storage capacity is insufficient, the state produces more livestock than its slaughterhouses can handle, and there is not a single certified slaughterhouse (TIF) with quality standards to trade nationally/internationally.
 - **Market concentration** in the inputs segment undermines small farmers' ability to access high-quality fertilizers and seeds at competitive prices.
 - **Land fragmentation** prevents economies of scale and reaching key markets requiring agriproducts at a high scale and standardized quality, and reduces the bargaining power of small-scale producers.
 - **Access to finance** is significantly constrained not only for agricultural activities but also for food and beverage industries.
 - Exports to the United States and the European Union are subject to **strict regulations and certifications**, which can be costly for small producers to obtain and comply with.

- FORESTRY SECTOR
- **Low human capital** prevents the growth of advanced segments of the paper and furniture value chains.
 - **Lack of transmission lines and low balance of energy production-consumption** (despite Oaxaca's high potential for renewable energy) could be a constraint for the manufacturing of high energy-intensive forest products, including pulp, paper, and paperboard.
 - **Limited coverage and low quality of paved roads** constrain the growth of most forest subsectors (highly freight intensive).
 - High **vulnerability to arboreal diseases and forest fires**, and **illegal logging and burning of forests** result in significant deforestation.
 - **Burdensome regulations with lax enforcement** stimulate a growing illegal market reducing the profitability of sustainable production.
 - **Communal landowners often lack the capacity to organize** and comply with long-term sustainable production contracts, in terms of the required volume, quality, and certifications.
 - Constrained access to finance largely because of a **scarcity of financial products** with longer terms aligned with the investment and return periods of forest projects, and unclear definition of property rights in **communal land** that prevents its use as **collateral**.



POTENTIAL LOCATIONS TO DEVELOP/EXPAND SELECTED SECTORS*

AGRO-INDUSTRY

Valles Centrales region, which includes areas around the state capital; the Istmo region, which has access to the ICIT; areas along the Federal Highways 185 and 190; and Tuxtpec and Villa de Tututepec de Melchor Ocampo in the north and south of the state, respectively.

FORESTRY SECTOR

Primary production: Istmo, Sierra Sur, and Valles Centrales regions.

Industrial production: along the Federal Highways 185 (or Transístmica) and 190 (from Juchitán to Arriaga), which also have access to the ICIT.



POLICY RECOMMENDATIONS TO UNLEASH SECTOR GROWTH

- AGRO-INDUSTRY
- **Improve** road and logistics infrastructure to connect farmers, industries, and final markets, as well as sector-specific infrastructure (notably a TIF slaughterhouse and storage facilities are required).
 - **Consolidate** existing agro-industry parks/projects and **develop** new ones in feasible locations.
 - **Facilitate** the acquisition of land by anchor firms and for agro-industry parks, including through conditional land grants to large private investments with substantial economic/social benefits.
 - **Implement** training programs to increase the supply of skilled workers for food and beverage and supporting industries.
 - **Create** supplier-development programs in coordination with anchor firms and/or potential investors.
 - **Support** the establishment of cooperatives to enhance horizontal integration among small-scale producers to improve and scale up operations, and increase/improve market access.
 - **Create** or adapt R&D and agro-industrial extension centers in partnership with the private sector and academia to improve the quality of agricultural inputs and encourage industrialization.
 - **Support** farmers to comply with standards/certification requirements to reach final consumption and export markets.
 - **Enforce** the Competition Law and support the entry of new firms into the input and intermediary markets.
 - **Improve** the design, targeting, and transparency of agricultural programs, and strengthen the rural financial sector.
 - **Support** the access to financial sector services by promoting products tailored to the needs of small and medium producers, particularly for getting inputs, equipment, machinery, and certifications required to reach high-end and export markets.
 - **Promote** rural off-farm activities including agro- and eco-tourism.

- FORESTRY SECTOR
- **Improve** road and railroad infrastructure to connect forestry sector manufacturers with primary producers and final markets.
 - **Design** and implement a strategy to prevent and respond to wildfires.
 - **Build** monitoring capacity, **increase** penalties, and **simplify** agrarian and environmental regulations to stop illegal logging and burning. Creating a single window to facilitate compliance with sectoral regulations and obtain certifications is recommended.
 - **Support** the development and training of community forest enterprises in topics such as forest management, production systems, sustainability, and business practices.
 - **Promote** joint ventures, long-term production-sharing contracts, unified negotiations and other arrangements to enhance production in areas where forested land is largely communal.
 - **Support** the establishment of forest industry clusters in regions near forest production areas and/or major paper recycling locations, ensuring they have access to necessary inputs and services for manufacturing processes.
 - **Create** R&D centers for innovation in the design of affordable and multifunctional (home and office) products and **promote** partnerships with financial technology (or fintech) and logistics firms to launch online furniture sales platforms.
 - **Create** a financing and technical support program to innovate and improve practices along the value chain (including environmental best practices).
 - Launch collection programs for paper and paperboard recycling.
 - Consolidate resources from development banking institutions to design tailor-made products to support the growth of the forestry sector (assess and adjust existing financing instruments accordingly).

Note: GDP = gross domestic product; ha = hectare; hm = hectometer; ICIT = Interoceanic Corridor of the Isthmus of Tehuantepec; IMCO = Instituto Mexicano para la Competitividad (Mexican Institute for Competitiveness); km = kilometer; MW = megawatts; R&D = research and development.
*The symbols are only indicative and are not meant to reflect exact locations.