MEXICO SOUTHERN STATES DEEP DIVES

CREATING MARKETS IN **YUCATÁN, MEXICO**

OPPORTUNITIES

The Deep Dives explored three critical sectors for Yucatán: agro-industry, forest, and information and communication technology (ICT). Private investment in these sectors could enable the state to accelerate economic growth, reduce development gaps, diversify its economy, and integrate into GVCs.

AGRO-INDUSTRY

In 2021, Yucatán was among Mexico's 10 largest producers of **grapefruit** and **soy** (4th); **eggplant** (5h), **orange** (6th), **lemon** and **cucumber** (7th), **coconut** (8th), **zucchini** (9th), and **avocado** (10th).

There is potential to increase the production of fresh agriproducts and develop higher added-value processed products. The refrigerated warehouse in Puerto Progreso can be leveraged to consolidate fresh products for exports. Establishing agro-industry parks could help the state realize this opportunity.

There is also potential to expand the production of **meat** (4th and 9th largest producer of pork meat and poultry, respectively, in Mexico for 2021), **honey** (largest producer), and **fish** (1st and 2nd largest producer of octopus and lobster, respectively), exploring aquaculture and other sustainable production processes.

Target markets to reach are domestic and international (notably the U.S. East Coast, Europe, and Central and South America).

FORESTRY SECTOR

There is a strategic **opportunity to consolidate the furniture subsector in Yucatán**. The state has the seventh highest labor productivity in the manufacturing of **fitted kitchens and modular bathroom furniture**.

Two large furniture producers are already installed, one of them a Chinese company that is harnessing the nearshoring trend to expand its operations. To overcome the low availability of raw inputs, producers could acquire them from neighboring states in the short term.

There is also an opportunity to develop the **pulp, paper, and paperboard** subsector, which is increasingly relying on recycled raw materials.

In the medium-term, Yucatán requires the development of sustainable commercial plantations to curb deforestation and enable a larger production of furniture and other forest products.

ICT SECTOR

Yucatán has developed a **"knowledge-economy" ecosystem** to become an ICT hub. In 2003–21, value added generated by the ICT sector in Yucatán grew by 143.4%, mostly from services.

Mexico could increase its modest participation in ICT export services through Yucatán's firms, while **the state could expand its ICT manufacturing industry by leveraging Mexico's competitive position** (top-10 ICT goods exporter). ICT goods manufacturing in Mexico is expected to increase because of nearshoring trends.

Five manufacturing categories have the highest potential: all other electrical equip. and component, radio and television broadcasting and wireless communications equip., communications and energy wire and cable, electronic component manufacturing, and computer and peripheral equip. **Yucatán's labor productivity in computers and peripheral equip. is the ninth highest** and above the five states concentrating 75% of the industry.

ASSETS

- Surface area: 39,524 km^2 (2.0% of national)
- Proximity to the U.S. Gulf Coast, Central and South America, and the Caribbean region
- Safest state in Mexico (ENVIPE and IEP, 2022) and the best-ranked legal system (IMCO)
- Among the most competitive states in the South-Southeast region (IMCO)
- High biodiversity and favorable edaphoclimatic conditions for agricultural production
- High water availability: 21,813 hm^3 in 2020 (4.7% of national), 2.6 times the national per capita availability
- Twelve ports, including the international port of Puerto Progreso with commercial trade to and from the United States, Europe, Central and South America, and the Caribbean
- Connection with the Interoceanic Corridor of the Isthmus of Tehuantepec through the Chiapas-Mayab railway
- Fifth state in Mexico with the highest firms' satisfaction for toll-free roads
- World-class culinary and cultural tourism destinations, and proximity to the Riviera Maya
- Competitive labor costs vis-à-vis other states
- Five industrial parks, with two ICT-related
- Fifth highest ratio of researchers per million inhabitants in 2021, and more inventions per capita than any other Southern state

PEOPLE

TOTAL POPULATION (2023e) *22nd largest in Mexico or 1.9% of nat'l. total*	**2.5 million**
MEDIAN AGE (2020) *nat'l. median: 29 years*	**30 yrs.**
SELF-IDENTIFIED INDIGENOUS POPULATION (2020) *nat'l. avg.: 19.4%*	**65.2%**
AVG. YEARS OF SCHOOLING (2020) *nat'l. avg.: 9.7 years*	**9.6 yrs.**
URBANIZATION RATE (2020) *nat'l. avg.: 79%*	**86%**
POVERTY RATE (2022) *nat'l. avg.: 36.3%*	**38.8%**
EXTREME POVERTY RATE (2022) *nat'l. avg.: 7.1%*	**5.6%**
GINI COEFFICIENT (2022) *nat'l. avg.: 0.431*	**0.419**
LIFE EXPECTANCY AT BIRTH (2023) *nat'l. avg.: 75.3 years*	**74.8 yrs.**

ECONOMY

GDP (2022 nominal) *1.9% of Mexico's GDP*	**US$22.8 billion**
AVG. GDP GROWTH (2010–22) *nat'l. avg.: 1.9%*	**2.4%**
COMPETITIVENESS NATIONAL RANK (IMCO, 2023)	**15/32**
GDP SECTOR COMPOSITION (2022)	
Agriculture *nat'l. avg.: 4.1%*	**3.5%**
Industry *nat'l. avg.: 34.7%*	**26.1%**
Services *nat'l. avg.: 61.2%*	**70.5%**
ECONOMIC COMPLEXITY NATIONAL RANK, BY VALUE ADDED (2018)	**19/32**
EXPORTS (2023) *0.3% of nat'l.*	**US$1.7 billion**

GDP PER CAPITA (2022 nominal) *83.7% of nat'l.*	**US$9,436**
UNEMPLOYMENT RATE (2023 average) *nat'l. avg.: 2.8%*	**1.9%**
INFORMALITY RATE (2023 average) *nat'l. avg.: 55.1%*	**61%**
EMPLOYMENT, BY SECTOR (2023 averages)	
Agriculture *nat'l. avg.: 11.2%*	**8.3%**
Industry *nat'l. avg.: 25.2%*	**26.6%**
Services *nat'l. avg.: 63.6%*	**65.1%**
LABOR PRODUCTIVITY, % OF NAT'L. AVG. & NAT'L. RANK (2018)	**65.6%, 26/32**
FDI (2023) *0.5% of nat'l.*	**US$199.4 million**

CROSSCUTTING CONSTRAINTS

Cross-cutting constraints for private sector development are mainly related to **access to finance and infrastructure**:

- **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 and integrate into GVCs.
- **Transport infrastructure** is relatively good, but **expanding port and road systems will be key for a more efficient connection** among suppliers, intermediate and final markets (especially the United States and Canada).

SECTORAL CONSTRAINTS

AGRO-INDUSTRY

- Yucatán has **only one irrigation district** and produces **more livestock than its slaughterhouses can handle**.
- **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, making it challenging to reach key markets that require large-scale and standardized quality agriproducts, and reduces the bargaining power of small-scale producers.
- Unclear definition of property rights in **communal land** prevents its use as **collateral for loans**.
- 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

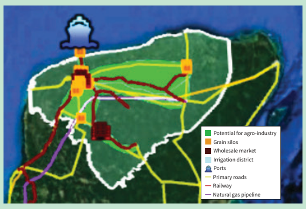
- **Relatively low coverage of paved roads** and **roads with four or more lanes** increases operational costs and reduces productivity, especially to connect rural areas (where forest production is concentrated) with processing and export points.
- **Illegal logging and burning of forests** have led to significant deforestation in the state.
- **Burdensome regulations with lax enforcement** stimulate a growing illegal market, reducing the profitability of sustainable forestry production.
- **Communal landowners often lack the capacity to organize** and comply with long-term production contracts, in terms of required volume, quality, and certifications.
- **Low availability of financial products** aligned with the investment and return periods of forest projects constrains their development (especially in manufacturing).

ICT SECTOR

- **Inadequate electricity supply** (generation, transmission, and distribution) **and communications infrastructure** constrain the sector's expansion, particularly in areas outside Mérida and main corridors.
- **Inadequate access to finance**: ICT projects face higher financing costs; the intangible nature of ICT services prevents the collateralization of assets; low presence of venture capital, critical for the industry's development.
- **Local ICT services firms face greater barriers of entry** for entering into international markets, while **low ICT readiness curbs domestic demand**.
- Although human capital is not a constraint, **a larger quantity of skilled workers will be required as the industry grows**, and ICT demands constant upskilling.

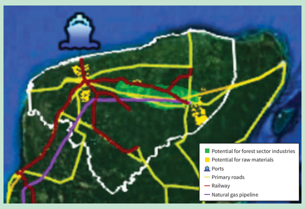
POTENTIAL LOCATIONS TO DEVELOP/EXPAND SELECTED SECTORS*

AGRO-INDUSTRY



The central region along the Federal Highway 180 (which passes through Yucatán's main cities and connects with the cities of Campeche and Cancun), the Mérida-Progreso-Tizimín triangle, and the Mérida-Valladolid corridor.

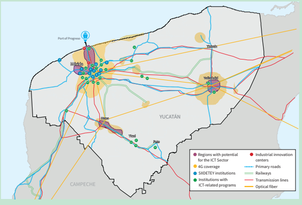
FORESTRY SECTOR



Primary production: modest potential in the Centro and Noreste regions and a small part of the Oriente region, close to the cities of Merida and Valladolid.

Industrial production: around the city of Mérida and along the Mérida-Progreso and Mérida-Valladolid corridors.

ICT SECTOR



Mérida and its surrounding area, and the Mérida-Progreso corridor, including the Progreso-Hunucmá road.

Medium-term growth potential: areas around Valladolid to the east, and the Muna-Ticul corridor to the south.

POLICY RECOMMENDATIONS TO UNLEASH SECTOR GROWTH

AGRO-INDUSTRY

- **Expand** irrigation systems and slaughterhouses capacities and create phytosanitary centers.
- **Promote** agro-industry parks consolidation in feasible locations.
- **Support** establishment of cooperatives to enhance horizontal integration among small producers to scale-up operations, **increase** market access, and **strengthen** bargaining power.
- **Create** supplier-development programs in coordination with anchor firms and potential investors.
- **Create** or adapt R&D and agro-industrial extension centers in partnership with the private sector and academia.
- **Enforce** the Competition Law and **support** new entrants into the input and intermediary markets.
- **Improve** the design, targeting, and transparency of agricultural programs, and **strengthen** the rural financial sector.
- **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.
- **Build** monitoring capacity, **increase** penalties, and **simplify** agrarian and environmental regulations to stop illegal logging and burning.
- **Expand** programs for reforesting, recovering, and preserving forests, partnering with local communities and existing producers.
- **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 or consolidation of forestry-sector industry clusters.
- **Create** R&D centers for the design of innovative, affordable, and multifunctional (home and office) products in partnership with the academic and private sectors.
- **Design** tailor-made financial products for projects in the forestry sector.

ICT SECTOR

- **Foster** competition, innovation, and entry of new suppliers in the telecom sector.
- **Strengthen** the telecom infrastructure by ensuring that the *"Red Compartida"* project remains uninterrupted, laying fiber-optic cables alongside feasible segments of the Mayan Train, promoting the installation of data centers, and supporting 5G-enabling projects.
- **Create** a public-private agency in charge of attracting large-scale ICT projects, consolidating ongoing initiatives and existing clusters, encouraging new ventures, and helping ICT services firms reach overseas markets.
- **Create** a one-stop shop for regulations and permits in the sector.
- **Launch** special financing programs for ICT projects and promote venture capital.
- **Consider** granting some incentives to attract major private investments and promote technology transfer.

Note: ENVIPE = *Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública* (National Survey on Victimization and Perception of Public Safety); GDP = gross domestic product; GVCs = global value chains; ha = hectare; hm = hectometer; ICT = information and communication technology; IEP = Institute for Economics and Peace; 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.

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