

Powering the concrete in Nicaragua

By Andrés Lee
**Instituto Nicaragüense del Cemento y
del Concreto**



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Nicaragua is a small country in Central America



- Main cities: Managua, León, Granada, Chinandega, Estelí, Matagalpa,
- Population: 6.3 million (2015)
- Gross domestic product: 12.2 billion USD (2015)
- GDP per capita: 1,949.2 USD (2015)

Soure: The Global Competitiveness Report 2016-2017



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Concrete has a great potential in our projects

EL NUEVO DIARIO .COM.NI



START



MONEY

ENTERPRISES

SECTIONS

Construction sector with high growth

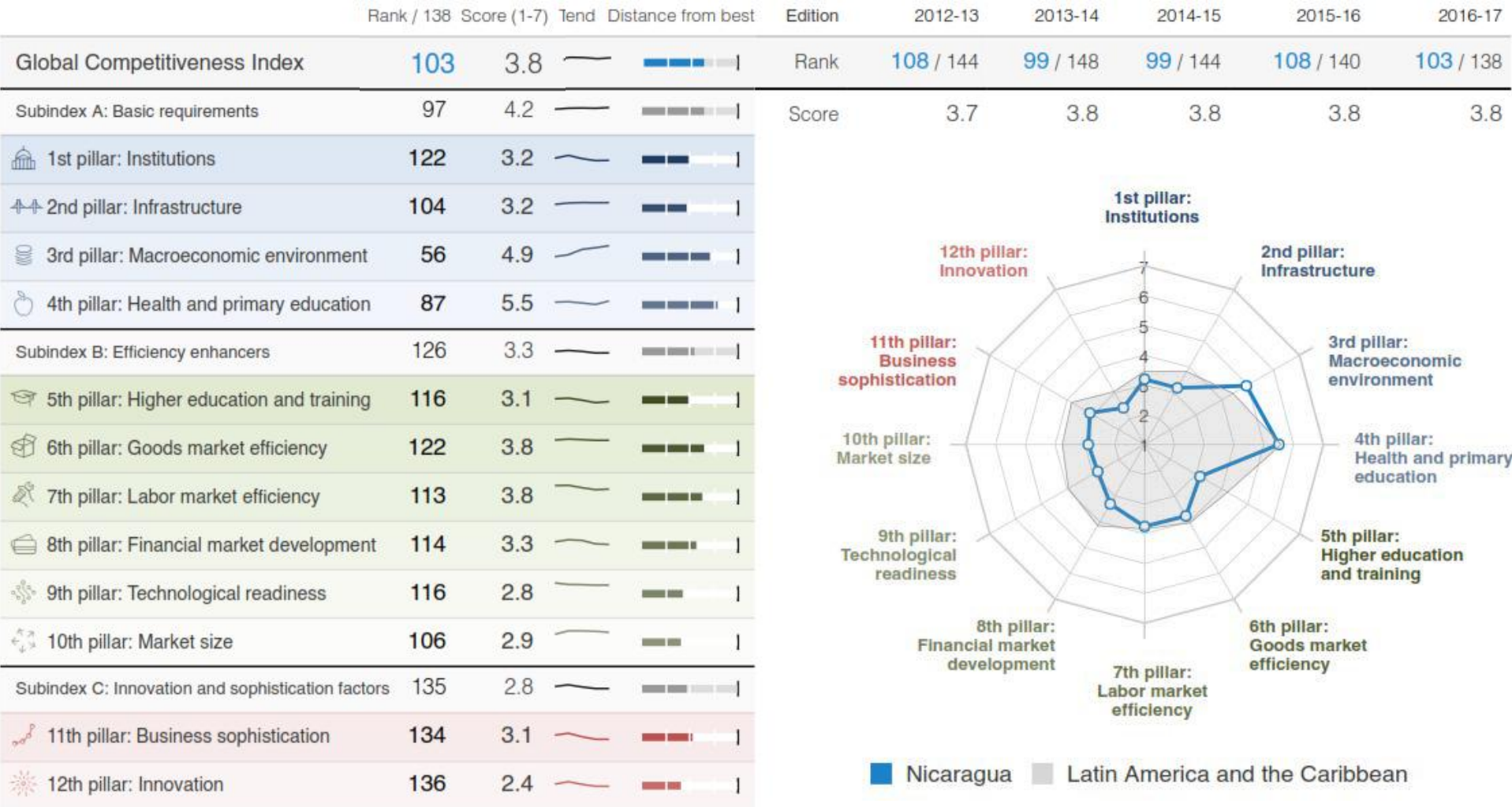


Dynamism. The CNC projects a "conservative" 20% growth for 2016.

Manuel Bejarano | Jose Denis Cruz



However, there's a lot work to do



Instituto Nicaragüense del Cemento y del Concreto - INCYC

- INCYC was founded in 2004 and his members are cement factories, ready mix concrete suppliers and pre-cast concrete factories
- ACI's member from 2007
- IMCYC's member from 2007
- FICEM's member from 2008
- FIHP's member from 2009
- ACI's international partner from 2016

We are focus on:

1. Diffusion

2. Training

3. Technical assistance





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We **spread** the specifications and benefits
of **concrete**



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benefits of **concrete**

- National Congress of Concrete Technology (2013-2016)
- Iberoamerican Congress of Concrete Pavements (2010)
- Online reports
- Write, print and free distribution of more than 30,000 handbooks for quality assurance in concrete works



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We have developed a **training plan** for **technicians and engineers** in **concrete applications**





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We have developed a **training plan** for **technicians and engineers** in concrete applications

- ACI Concrete Field Testing Technician Certifications
- Concrete works supervision, QA/QC seminars
- Concrete pavement design and construction seminars
- Concrete floor design and construction seminars



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We have provided **technical assistance** to **government agencies, contractors** and **supervisors** in many **construction projects**



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We have provided **technical assistance** to **government agencies, contractors and supervisors** in many **construction projects**

- Roads
- Hospitals
- HDM-4 Evaluations
- Industrial floors
- Private projects



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Main achievements



Use of concrete pavements from 0% in 2008 to 4% of roads in 2015 and will be 12% in 2017 with projects under construction or in bid process



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More than 1,200 people trained

- 3 ACI Concrete Field Testing Technician Certification programs with more than 30 technicians certified





CÓDIGO DE ACREDITACIÓN: LC-003-15-I

**OFICINA NACIONAL DE ACREDITACIÓN (ONA) del
MINISTERIO DE FOMENTO, INDUSTRIA Y COMERCIO (MIFIC)**





En cumplimiento a lo establecido en el Artículo 11 de la Ley N° 219 "Ley de Normalización Técnica y Calidad"

Acredita al

Laboratorio de Calibración del Instituto Nicaragüense del Cemento y el Concreto-INCYC

Como Laboratorio de Calibración que cumple con los Requisitos de la Norma Técnica Nicaragüense NTN 04 001-05 "Requisitos generales para la competencia de los laboratorios de ensayo y/o calibración", equivalente a la ISO/IEC 17025, el cual está facultado para realizar las calibraciones detalladas en el Anexo Técnico adjunto a este certificado.

Este certificado es válido por un periodo de cuatro años a partir del 21 de septiembre del año 2016 Sujeto al cumplimiento permanente de los requisitos establecidos en la ISO/IEC 17011.



MSc. Martha Angélica Gutiérrez Pizarro
Oficina Nacional de Acreditación

**First and only one accredited ISO 17025 construction
laboratory in Nicaragua.**

*Este certificado no es valido sin el Anexo Técnico (LC-003-15-I)

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Thank you

