

Quintana Roo, Mexico

An Urban and Industrial Environmental Management Program facilitates institutional integration for productive resource management

The integrated Urban and Industrial Environmental Management Program addresses urban development, water resources and climate change, through the exchange of knowledge and experiences, capacity building and the use of environmental management tools.

Urban NEXUS Case Story 2014 - 27

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The project in brief

The state of Quintana Roo has undergone a burst of economic growth and tourism in recent decades. As a product, environmental challenges such as soil, water and air quality and waste management have continued to rise. For example, at present, 30% of municipal waste and 80% of hazardous waste are improperly disposed of, severely threatening a multitude of ecosystems in the region (GIZ, 2013).

A significant contributor to the Quintana Roo's environmental challenges was the lack of accountability and inter-sectoral coordination between the municipalities, the state and the national level, to manage urban and industrial waste and to create cohesive policies and actions to promote public health and the environment. Therefore, the Urban and Industrial Environmental Management Program (2010-2013) was implemented to ensure a much needed integrated NEXUS approach between stakeholders. Today, the network has gathered over 400 promoters who have trained and advised 7,000 state and national officials in more than 1,600 municipalities in a triangular cooperation between Mexico and Guatemala. The network has expanded to Ecuador, El Salvador and Dominican Republic.

What makes it "Urban NEXUS"?

The Urban and Industrial Environmental Management Program (PGAUI) is the result of cooperation between the Mexican and German governments. The institutional NEXUS came about through consultations between the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) who advised the Secretariat of Environment and Natural Resources (SEMARNAT) during the development of the National Program for the Prevention and Management of Waste 2009-2012. The integrated waste management program was first implemented in Quintana Roo, Guerrero and the State of Mexico.

Following, the SEMARNAT, the GIZ and the National Institute of Ecology and Climate Change (INECC), created the Integral Solid Waste Management Network (GIRESOL) to harmonize integrated waste management standards and awareness and to bring together officers, experts and academics to work as promoters and advisors within communities and municipalities.

PGAUI provides knowledge and technical expertise to experts and officials. The project has succeeded in reintegrating different scales of the waste management sector by linking regional and international networks and through the promotion of interaction between public-private partnerships and multi-level cooperation. The collaboration between



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Date	2004-2014
NEXUS Sectors	Resources+ Institutional+ Education
NEXUS Innovations	Design + Technology; Law + Policy; Institutions
Scale	1,600 municipalities, 7,000 officers, 1,600 municipalities
Budget	7 million (EUR)

Urban NEXUS Definition

The Urban NEXUS is an approach to the design of sustainable urban development solutions. The approach guides stakeholders to identify and pursue possible synergies between sectors, jurisdictions, and technical domains, so as to increase institutional performance, optimize resource management, and service quality.

It counters traditional sectoral thinking, trade-offs, and divided responsibilities that often result in poorly coordinated investments, increased costs, and underutilized infrastructures and facilities. The ultimate goal of the Urban NEXUS approach is to accelerate access to services, and to increase service quality and the quality of life within our planetary boundaries.

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Further Reading

Interview with Jan Peter Schemmel, Director General of the German Cooperation Agency in Mexico, "For Germany, Mexico is a strategic partner", July 2012: <http://amexcid.gob.mx/index.php/es/prensa/entrevistas/1550-alemania-giz-jan-peter-schemmel-agencia-alemana-cooperacion-amexcid> (20 Aug 2014)

INECC, SEMARNAT, 2012, Diagnóstico Básico para la Gestión Integral de los Residuos: http://www.inecc.gob.mx/descargas/dgocnica/diagnostico_basico_extenso_2012.pdf (20 Aug 2014)

SEMARNAT, 2007, Política y Estrategias para la Prevención y Gestión Integral de Residuos en México: http://siscop.inecc.gob.mx/novedades/politica_y_estrategias_gir.pdf (20 Aug 2014)

Integral Solid Waste Management GIRESONL Network: <http://www.giresol.org/>

GIZ and ICLEI, 2014, Operationalizing the Urban NEXUS: towards resource efficient and integrated cities and metropolitan regions, GIZ Study: www.iclei.org/urbanexus

GIZ and the Mexican government has allowed the strengthening of state and national legal frameworks and regulations for environmental protection and integrated waste management. The newly founded ties between institutions of public, private and academic sectors, municipalities and regions collectively integrate policy and strategy development, through the promotion of a favorable legal environment, design and implementation of programs via training and pilot projects.

Scope for improvement

The project succeeded in achieving institutional integration at local, state and national levels; however, the lack of a bottom-up process diminishes the involvement of the community, and reduces opportunities to address social relations and behavioral change. The integration of other governmental agencies and local organizations can help anchor the transformation of the waste management via collective action.

Replication

Mexico's experience to extend the GIRESONL Network to other Latin American countries demonstrates its potential for replication. The successful implementation in three Mexican states can also be replicated in other industrial and urban areas of the country.

Acknowledgements

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For more information:

GIZ and ICLEI, 2014, Operationalizing the Urban NEXUS: towards resource efficient, productive and integrated cities and metropolitan regions, GIZ Study: www.iclei.org/urbanexus



On behalf of:



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