

Mexico City, Mexico

Mercado del Trueque: how Mexico City is turning trash into food

By allowing residents to exchange their recyclable ‘waste’ such as paper and glass for food vouchers, the City of Mexico addresses waste management and food security concerns, while stimulating a market for fresh produce from local farmers.

Urban NEXUS Case Story 2014 - 16

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The project in brief

The Mercado del Trueque is a monthly barter market where city residents exchange cardboard, paper, glass, and other recyclable waste for vouchers, from which they can buy fresh produce from participating local farmers. With over 2,000 people attending the market each month, in 2012, the market collected more than 173 tons of recyclable waste. Consumers collect a maximum of ten kilos of recyclable waste and receive “green points” in return to buy fresh food from traditional Chinampa farmers. In order to facilitate this process, the metropolitan government has chosen to purchase all of the Market’s vegetables at above-market prices (total monthly cost: \$6,800). Local farmers warmly welcomed the initiative which improved their livelihood as well as their visibility in the community; whereas market-goers enjoy a cleaner environment in exchange for freshly sourced local vegetables.



What makes it "Urban NEXUS"?

In 2011, one of the world's largest landfills, Bordo Poniente in Mexico City, reached its 70 million ton capacity and closed. As a result, surrounding landfills were overwhelmed with trash, in a city which produces more than 12,000 tons of waste every day (Maciag, 2013). Identifying Urban NEXUS synergies between waste management and food cultivation, the local government addressed the issue through an innovative multi-purpose systems solution that encouraged scalar and service integration, in addition to social inclusion. The Mercado del Trueque integrates the traditionally disparate food and waste management sectors, to increase effectiveness and efficiency. The Urban NEXUS approach adopted by the government also encouraged greater integration of the different scales of the region to promote traditional Chinampa farming, which has become increasingly disintegrated from the rest of the city and confined to the Xochimilco region south of Mexico City (Morehart, 2011). The project has a strong social component, whereby financial incentives in the form of free food are used to foster greater environmental awareness among citizens. The Mercado del Trueque has been designed and implemented by the City of Mexico, the Ministry of Environment (Secretaría del Medio Ambiente del Gobierno del Distrito Federal) along with the Office for Environmental Education (Dirección de Educación Ambiental), the Directorate of Information and Broadcasting (Dirección de Información y Difusión) and the Citizen Services (Atención Ciudadana). The public-private partnership project also integrates private firms such as the recycling companies Recupera and Proambi, whereas the latter manages electronic waste (Galán 2013).

Date	2012-ongoing
NEXUS Sectors	Waste-Food-Agriculture-Social
NEXUS Innovations	Communications + User Behavior; Institutions, Delivery Models
Scale	City-wide (2,000 participants/month)
Budget	16,000 EUR/month

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

Maciag, M., 2013, Mexico City's Recycling Incentive: More Food. Governing The State and Localities, February 2013: <http://www.governing.com/topics/economic-dev/sustainable-communities/gov-mexico-city-recycling-incentive-more-food.html> (20 Aug 2014)

Morehart C., 2011, Sustainable Ecologies and Unsustainable Politics. Anthropology News, April 2011: http://www.academia.edu/1588631/Sustainable_Ecologies_Unsustainable_Politics_Chinampa_Farming_in_Ancient_Central_Mexico (20 Aug 2014)

Mercado de Trueque official website: <http://www.sedema.df.gob.mx/mercadodetrueque/>

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

Scope for improvement

The initiative is perceived as part of a wider attempt on behalf of the Environmental Department to educate citizens about the benefits of recycling. Although the ambitious project has succeeded in increasing citizens' awareness, it is limited in scope due to its small size. However, given the success of the operation, the City could consider opening additional markets within Mexico City for a greater effect.

Replication

The project is easily replicable in any metropolis tackling problems of social inclusion, waste recycling and food security. Not only does it increase waste management awareness and efficiencies, but the initiative can also flexibly adapt to different local contexts.

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On behalf of:



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