The Genesis of a Binational Collaboration

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In the Beginning There Were Questions to Answer

A Big Underlying One: The Agricultural Transformation
…Leaving in Its Wake Many Other Questions

Can small farms compete?

Is migration good or bad for development rural Mexico?

How can rural households move out of poverty?

Crime and corruption

Is Mexico losing its maize genetic resources?

Where will U.S. farmers get their labor?

Is NAFTA good or bad for Mexican farmers?

Does immigration policy matter?

Is migration good for the environment?
Problem: Not Enough Data

- Success, but
- Need to scale up
- Students

Ed and Antonio* doing field work

*Antonio Yunez-Naude, COLMEX
Desarrollo y Alimentacion Sustentable

UC Mexus, William and Flora Hewlett Foundation, CONACyT, Ford Foundation

REAP-UCD

PRECESAM-COLMEX/DAS*

* Desarrollo y Alimentacion Sustentable
Programa de Estudios del Cambio Económico y la Sustentabilidad del Agro Mexicano

AVISOS Y NOVEDADES

1. Jornada de Análisis Insumo Producto
   El desarrollo regional sustentable: sectores y recursos estratégicos
   Mérida, Yucatán
   14 y 15 de marzo de 2013
   VER PROGRAMA

   “Próximamente publicación del libro sobre el campo mexicano”
UC Mexus, William and Flora Hewlett Foundation, CONACyT, Ford Foundation

REAP-UCD

PRECESAM-COLMEX/ DAS*

Mexico National Rural Household Survey-ENHRUM

Network of Regional Universities

* Desarrollo y Alimentacion Sustentable
Distribución regional de la ENHRUM I

ENCUESTA NACIONAL A HOGARES RURALES DE MÉXICO (ENHRUM), 2003
REGIONES Y DISTRIBUCIÓN GEOGRÁFICA DE COMUNIDADES ENCUESTADAS

14 regional universities
More than 100 Mexican students per round

SIMBOLOGÍA
- Región Noreste
- Región Noroeste
- Región Centro - Occidente
- Región Centro
- Región Sur - Sureste
- Comunidades encuestadas

UC Mexus, William and Flora Hewlett Foundation, CONACyT, Ford Foundation

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The Bottom Line: New Data (100,000 person-years) Show That...

- Mexico’s farm labor supply is declining
- The demand for labor on Mexican farms is rising
- The reservation wage (minimum wage needed to induce new workers to migrate) is increasing
- What does this mean for immigration policy?
- U.S. growers must look for labor substitutes
  - Shift from labor-intensive FVH production
  - Seek migrant workers from other countries
  - Invest in labor-saving agricultural technologies
Migration and the End of Farm Labor Abundance

The End of Farm Labor Abundance

J. Edward Taylor*, Diane Charlton, and Antonio Yúnez-Naude

We’re running out of farm workers. Immigration reform won’t help.

ANR NEWS BLOG
The past, present and future of ANR news

The U.S. is running out of farmworkers

What’s Really Behind the Decline in Mexican Farm Workers?

As California farmworkers age, a labor shortage looms
# Student Awards and Positions

<table>
<thead>
<tr>
<th>Student &amp; REAP/ PRECESAM Researcher</th>
<th>Research Area</th>
<th>Degree</th>
<th>Award</th>
<th>Current position</th>
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</thead>
<tbody>
<tr>
<td>Miriam Juarez</td>
<td>Climate change and water use in Guanajuato</td>
<td>Ph.D, Texas A&amp;M</td>
<td>2013 BANAMEX Award in Economics for the best research (based on the quoted key publication).</td>
<td>Researcher at Banco de Mexico</td>
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<tr>
<td>Javier Becerril</td>
<td>Local economy-wide impacts of migration and employment in rural Mexico</td>
<td>Ph.D, U of Kiel</td>
<td>Best article published in Problemas del Desarrollo, National University of Mexico</td>
<td>Professor, Autonomous University of Yucatan</td>
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<tr>
<td>Jesus Arellano</td>
<td>Climate change and Mexican agriculture</td>
<td>MA, COLMEX</td>
<td>Fox International Fellowship Award, Yale University, 2007-8</td>
<td>Financiera Rural</td>
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<tr>
<td>Alejandro Lopez-Feldman</td>
<td>Biodiversity, resource extraction, and poverty</td>
<td>Ph.D, UC Davis</td>
<td>UC-CONACYT Fellowship</td>
<td>Chair, Economics Department, CIDE</td>
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<tr>
<td>Dale Manning</td>
<td>Migration and Natural Resource Extraction in Rural Mexico</td>
<td>Ph.D, UC Davis</td>
<td>Association for Energy Economics Best Student Paper Award</td>
<td>Colorado State U</td>
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<tr>
<td>Lilian Albornoz</td>
<td>Maquiladoras and Household Income in Yucatán</td>
<td>MA, COLMEX</td>
<td>Award for the best article published in Problemas del Desarrollo, UNAM</td>
<td>Professor, Autonomous University of Yucatan</td>
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<tr>
<td>Gerardo Aragon</td>
<td>Un estudio sobre el uso del agua en México para la irrigación (M.A. thesis)</td>
<td>MA, COLMEX</td>
<td>2010 Best M.A. thesis in Economics. COLMEX; UC-CONACYT Fellowship</td>
<td>Ph.D. student, ARE, UC-DAVIS</td>
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<tr>
<td>Angel Pita</td>
<td>Relationship between economic change and crop diversity in Mexico</td>
<td>Ph.D, UC Davis</td>
<td>UC-MEXUS grant</td>
<td>Professor, University of Chapingo</td>
</tr>
<tr>
<td>George Dyer-Leal</td>
<td>Crop genetic resource conservation in Mexican maize</td>
<td>Ph.D, UC Davis</td>
<td>AAEA Outstanding Article Award</td>
<td>Consultant, Mex City</td>
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<tr>
<td>Irvin Rojas</td>
<td>Evaluación de Consistencia y Resultados de los Programas de. AGROASEMEX</td>
<td>COLMEX</td>
<td>Inter-american Development Bank Grant for Young Researchers; UC-CONACYT Fellowship</td>
<td>Ph.D. student, ARE, UC-DAVIS</td>
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<tr>
<td>Xochitl Juarez</td>
<td>Migration and Gender in a rural village of central Mexico</td>
<td>Ph.D, UC Davis</td>
<td>UC-MEXUS grant</td>
<td>Professor, University of Chapingo</td>
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<tr>
<td>Jose Luis Jaramilli</td>
<td>Spatial North American Agri-Food Market Integration</td>
<td>Ph.D, U of Guelph</td>
<td>CONACYT grant</td>
<td>Professor, Colegio de Posgraduados-Puebla</td>
</tr>
</tbody>
</table>
Some Thoughts and Lessons

• Need a big research question to build around
  – But room to let lots of flowers bloom
• Build on existing institutions where possible
  – Immediate bang for the buck
  – New ones take time to build
  – Ideal: A mixed strategy of short and long-run investments
• Catalyst projects bring people together
  – Generate a flow of products
• Create assets everyone in the project can draw upon
  – ENHRUM data, PRECESAM/DAS workshops, computer code, etc.
• Integrate training, institution-building, outreach
• Combine best of both countries: Expertise, labs, fieldwork
Challenges Along the Way: Incentives and Resources

• Getting people on both sides of the border fully invested (*ahora somos compadres*)

• UC’s merits and promotions do not reward institution building and outreach much
  – Opportunity costs are high (esp. for young profs)
  – Research benefits have to exceed these

• Low academic salaries in Mexico don’t help
  – Everyone has to consult, but program-building requires long-term commitments at the top
  – Talent flows through (universities are perfect)

• Core funding is hard to get!
¡Gracias por llamar!
Crop Genetic Resource Conservation

Does natural resource extraction mitigate poverty and inequality? Evidence from rural Mexico and a Lacandona Rainforest Community

Dispersal of Transgenes through Maize Seed Systems in Mexico


A crop population perspective on maize seed systems in Mexico

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Edited by Major M. Goodman, North Carolina State University, Raleigh, NC, and approved November 30, 2007 (received for review July 6, 2007)

Improvement of local germplasm through artificial selection is regarded as the main force behind maize evolution and diversity in Mexico, the crop’s center of origin. This perspective neglects the population. We estimate model parameters, including germplasm diffusion rates across localities, using data from the nationally representative 2002 Mexico Rural Household Survey [Encuesta Nacional de Cosumidores Rurales (ENCR)]. Inclusive diffusion estimates from the Mexican National Seed Law, other sources, and our model are consistent. Our model shows maize seed systems are highly diverse with substantial diffusion rates. These results suggest genetic diversity conservation through maize seed systems is a crucial aspect of crop genetic resource conservation strategies.