

US-MEXICO PARTNERSHIPS IN HIGHER EDUCATION : RESEARCH, EDUCATION, AND OUTREACH IN "SUSTAINABILITY"

Presentation By

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US-MEXICO BORDER SUSTAINABLE DEVELOPMENT

The BORDER REGION

- ▶ Bi-national is the involvement of two countries
- ▶ Trans-border involves the back and forth movement of people, goods and services, and information across the dividing line in both countries.
- ▶ Border region is 2000 km long with a 100 km boundaries on each side
- ▶ Composed of 4 US states and 6 Mexican States
- ▶ Comprises 44 US Counties and 80 Mexican Municipalities
- ▶ Cities-14 pairs of twin cities
- ▶ Total Border Population 13 million (6.4 million in Mexico and 6.6 million in the US.
- ▶ Projected population increase by 2020 of 22.4 million (12.6 million in Mexico and 9.8 million in the US)
- ▶ Population growth linked to economic growth encouraging high migration rates, attracting younger population with high birth rates.
- ▶ The US counties along the borders have the highest level of low income and the highest levels of pollution
- ▶ The Mexican Municipalities have the highest levels of economic growth and the highest levels of industrialization with very high levels of health related problems linked to environmental impact.

Needs for sustainable solutions

- ▶ Significant degradation of natural systems including, water and air quality, and ecological resources.
- ▶ Population increases strain carrying capacity and infrastructure needs. (eg., waste water facilities in short supply).
- ▶ Significant health impacts resulting directly from heavy industrialization and shortage of environmental infrastructure. (eg., no recycling facilities for hazardous waste materials).
- ▶ Shortage of social capital and training and need for capacity building.
- ▶ Need to focus on economic development vs. economic growth.
- ▶ Manage and restore natural resources.
- ▶ Need for bi-national education in sustainability and capacity enhancement

INSTITUTIONAL ACTORS AT ARIZONA STATE UNIVERSITY IN BI-NATIONAL PARTNERSHIPS

Academic institutions hold a unique role as intermediary, especially within a global context in partnership-building among industry, government and non-profit organizations.

Organizations such as OPI, SCERP, CONAHEC, USAID TIES are focused on creating a network of select partners for projects that are a catalyst for change and sustainable development

SOUTHWEST CENTER FOR ENVIRONMENTAL RESEARCH & POLICY (SCERP)

SCERP's vision for the U.S.-Mexican border region is a sustainable and responsible border economy, involved bi-national community, healthy natural environment, and proper resource management that provides all its residents a satisfactory and secure quality of life through enhanced employment, education, and business opportunities.

SCERP is comprised of researchers working in multiple disciplines (science and technology, engineering, business management, policy studies, economics, and public health) at ten major universities in the U.S. and Mexico:

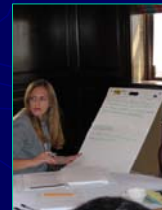
US PARTNER UNIVERSITIES

- ▶ Arizona State University
- ▶ New Mexico State University
- ▶ San Diego State University
- ▶ University of Texas at El Paso
- ▶ University of Utah

MEXICAN PARTNER UNIVERSITIES

- ▶ El Colegio de la Frontera Norte
- ▶ Instituto Tecnológico de Ciudad Juárez
- ▶ Instituto Tecnológico y de Estudios Superiores de Monterrey
- ▶ Universidad Autónoma de Baja California
- ▶ Universidad Autónoma de Ciudad Juárez

American Assembly-SCERP Workshop: Building Partnerships for A Sustainable Border



BI-NATIONAL PARTNERSHIP DIMENSIONS

PARTNERSHIP AREAS	REGIONAL LEADERSHIP	SOCIAL CAPITAL	SUSTAINABILITY	BI-NATIONAL POLICY DEVELOPMENT	PARTICIPATION CONSORTIA HIGHER EDUCATION PRIVATE/PUBLIC FUNDING	TRANSENERABILITY ▶ Technologies ▶ Research ▶ Knowledge
REGIONAL DEVELOPMENT						
HIGHER EDUCATION						
TRAINING						
RESEARCH						

A Ladder of US-Mexico Border Partnerships in Higher Education

THE LADDER

Level I

- ▶ The most successful partnerships in the border region are at the local level— Trans-border cooperation (ex: Colegio de Sonora and University of Arizona Health Policy)

Trans-border cooperation emanates from informal engagement of collaborative efforts between colleagues on both sides of the border.

Level II

- ▶ Local Partnerships are characterized by informality frequently taking place in community based/non-governmental organizations, including at times local governments and universities. (ex: ASU research with city of Nogales for waste water treatment, ASU providing training for local government officials)

Level III

- ▶ University to University partnerships are mainly characterized by collaborative efforts (exchange information, altering activities, sharing resources, and mutual capacity enhancing). For example, ITSON-ASU and ITESEM-ASU supported by agencies and consortiums such as USAID, SCERP and CONAHEC.

Level IV

- ▶ Consortium partnerships are characterized by their multiple engagement of diverse universities connected to specific research and outreach efforts that link projects and academicians to development education, training, research, and scholarships. For example, SCERP and CONAHEC (funded by federal government and institutions of higher education) are consortiums connected directly to universities that engages these institutions in project development through research and training programs

Level V

- ▶ Foundations are partnerships characterized by alliance building to engage in networking, coordination, cooperation, and collaboration with universities, consortiums, public and private sector development. For example, CONACYT and NSF.

The Ladder © Linda Oviedo and David Pijawka

U S AGENCY FOR INTERNATIONAL DEVELOPMENT TRAINING, INTERNSHIPS, EXCHANGES & SCHOLARSHIP (USAID-TIES)



On September 2001, President Vicente Fox and George W. Bush announced the TIES program as part of their Partnerships for Prosperity Initiative.

TIES is a 6 year program funded by \$50 million to finance 750 scholarships and 35 agreements between US and Mexico.

These partnerships support capacity building in Mexico, and address development problems in both nations through collaborative efforts from institutions of higher education .

On March 1, 2004 the ambassador to Mexico, Antonio O. Garza, Jr and Dr. Reyes Tamez Guerra, the Secretary of Education of Mexico, announced 13 new TIES partnerships between US and Mexican Institutions of Higher Education. (eg., ASU-ITSON)

Bi-National Partnership Consortium for Desert Environment Development

ASU-ITSON Partners



A partnership for
Sustainable Development



USAID TIES Award
Ceremony

Mexico City

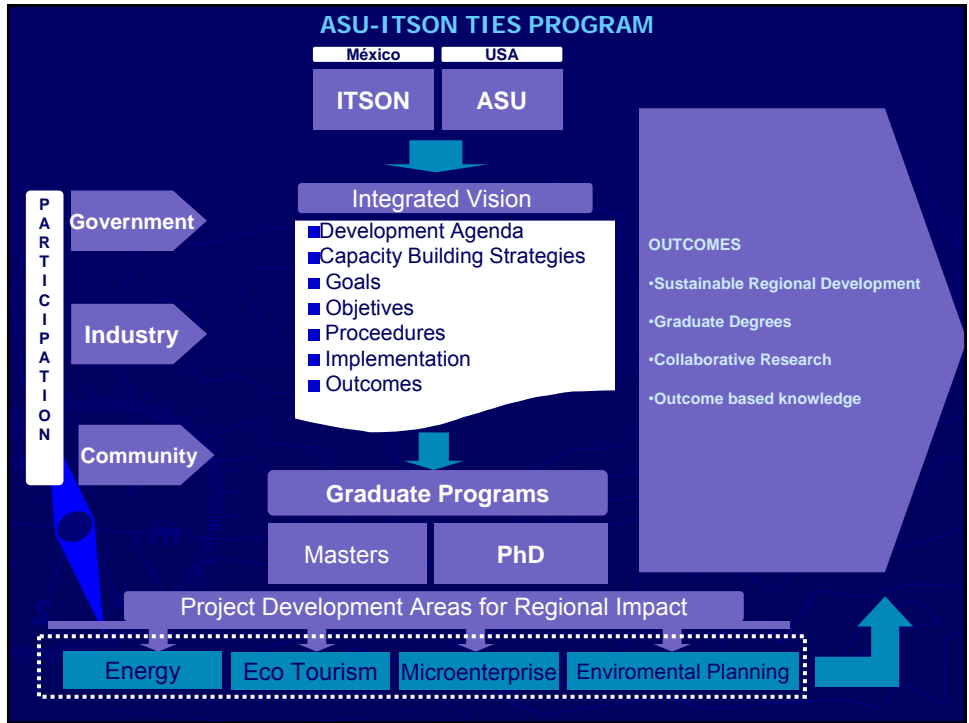
March 1, 2004

BI-NATIONAL PARTNERSHIP PROCESS



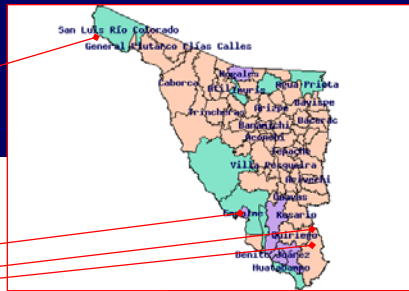
COMPLEXITY IN PARTNERSHIP BUILDING

SUSTAINABILITY DIMENSIONS	CONSTRAINTS	Geographical Scale	CHALLENGES FOR PARTNERSHIPS IN SUSTAINABILITY
<ul style="list-style-type: none"> ▶ Economics ▶ Human Well Being ▶ Environment ▶ Integrative ▶ Holistic ▶ Regional/Applied 	<ul style="list-style-type: none"> ▶ Institutional Governance Structures Curriculum, Admissions, cultural immersion, language, mentoring, faculty incentive bundle. ▶ Legal Issues (patent law) ▶ Funding Issues ▶ Organizational Structures 	<ul style="list-style-type: none"> ▶ Local to Local ▶ Local to Regional ▶ Federal to Federal ▶ Local to Federal ▶ Regional to Federal ▶ Associations to Associations 	<ul style="list-style-type: none"> Green Technology ▶ Equity ▶ Ecology ▶ Knowledge—creation, sharing, dissemination, Training, transferring, action/policy, application



- ## ASU-ITSON Partnership Goals and Objectives
- ▶ Establish a strong and viable institutional structure to support our program and projects.
 - ▶ Establish a strong academic and research curriculum to increase capacity building objectives for both students (master and doctoral) and target regions.
 - ▶ Establish and monitor students in target development regions focusing on areas of interest.
 - ▶ Develop collaborative conferences and seminars to increase student knowledge and support research development in regions.
 - ▶ Establish a student mentoring program.
 - ▶ Initiate faculty and student collaboration to increase training and research.

DEVELOPMENT TARGET REGIONS



ITSON



Educar para Trascender



A New American University

Ideal Partnerships

- ▶ Bi-national drift
- ▶ Local foci - all focal actors
- ▶ Long range perspectives
- ▶ Private sector involvement
- ▶ Universities must move to applied research teaching and transboundary community engagement

Success

- ▶ Funding
 - TIES
 - Other entities
- ▶ Building on strengths
- ▶ Flexibility in departments -curricula
- ▶ High standard
- ▶ High levels of bi-national interaction
- ▶ High levels of administrative support
 - Presidential level
 - Faculty Incentives

Success - *continued*

- ▶ Originality - Newness -Excitement
- ▶ Private - Government Sectors Involvement
- ▶ Long -Term Goal / Integration
- ▶ Transferability
- ▶ Real Results

Factors for Successful Partnerships

- ▶ Personal Relations
- ▶ Need of advanced information
- ▶ Institutionalization of partnerships
- ▶ Projects - bi-national interests
- ▶ Interfaces comfortable with both cultures
- ▶ Long-term economic development goals

Partnerships

- ▶ Reciprocal
- ▶ Respect
- ▶ Bi - national
- ▶ Sensitivity and culture
- ▶ Work together in the embedded community
- ▶ Measurable outcomes
- ▶ Research programs - long-term

Economic Partnerships

- ▶ Successful partnerships need to incorporate social accountability and networking
 - ▶ Need better communication between industries and academic counterparts
- (Educational partnerships between US and Mexico plus private sector)

Educational Partnerships

- ▶ Uneven access to exchange programs by Mexican students
- ▶ Simplistic Views of education (language, culture, technology, capacity)
- ▶ Training issues for Mexican industries, faculty, government parties - gap between needs and education
- ▶ Lack of incentives for faculties

Educational Partnerships Continued

- ▶ Limited exchanges of research partnerships
- ▶ Barriers to collaboration
 - Matching supply to demand
 - Joint programs
 - Lack of information
 - Lack of private and governmental sector interaction within universities

Partnership Criteria in Higher Education

- Reciprocal Academic and Professional Relationships
- Reciprocal Transfer of Knowledge and Capacity Building
- Mutual Respect
- Common Social, Economic, and Regional Development Agenda
- Common Research and Training Goals and Objectives
- Sensitivity and Culture
- Sharing of academic resources and facilities
- Measurable Outcomes
- Incorporate Private and Public Sector Collaboration
- Viable Funding Sources