

The Socio-Economic Impacts of NAFTA in Tlaxcala, Mexico

by

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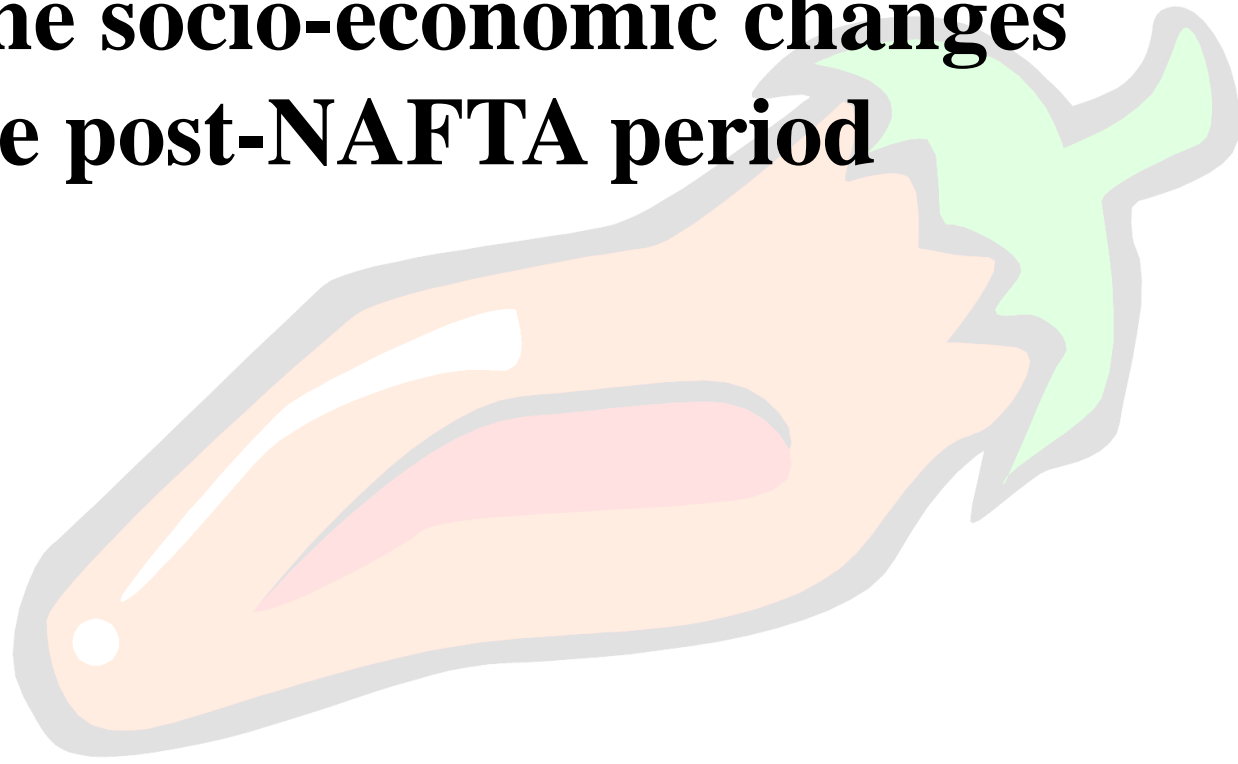
In Mexico, NAFTA has Impacted:

- ❖ **Commodity prices**
- ❖ **Structural shifts in the
rural/urban labor markets**



An industrial/Agricultural Region was Selected to:

**Examine the socio-economic changes
during the post-NAFTA period**



The General Objective is:

❖ To increase the understanding of the impact of NAFTA on the interaction between the agricultural and industrial sectors at the regional and household levels

A holistic evaluation of NAFTA impacts, social and economic



The Studied Area:

❖ **Xicohtencatl Industrial Corridor**

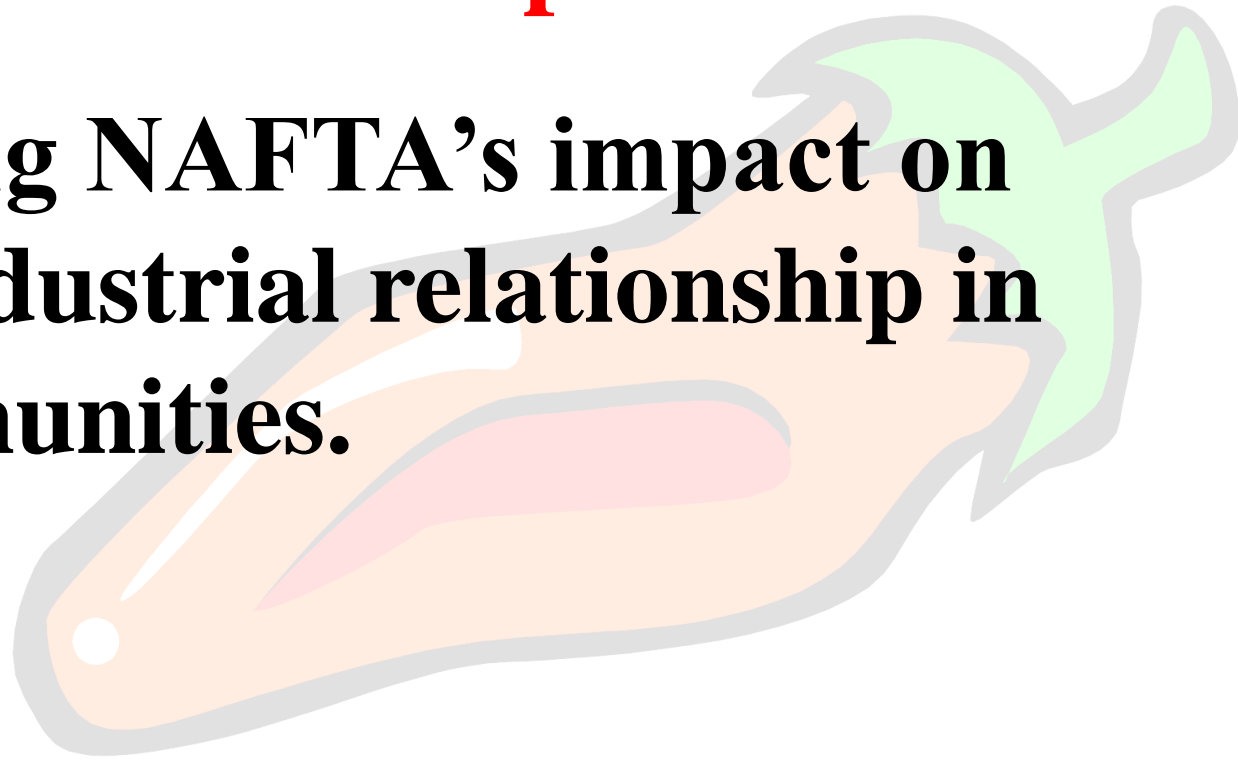
❖ **Region of Tlaxcala, Mexico**

**The data are collected from
household surveys**



The interaction between the peasant agricultural sector and the rapidly expanding industrial sector makes Tlaxcala perfect for:

❖ Analyzing NAFTA's impact on the agri./industrial relationship in these communities.



Agricultural Liberalization

- ❖ **Phasing out existing tariffs**
- ❖ **Trade Restrictions into Tariff-Rate Quotas (import sensitive ag products)**

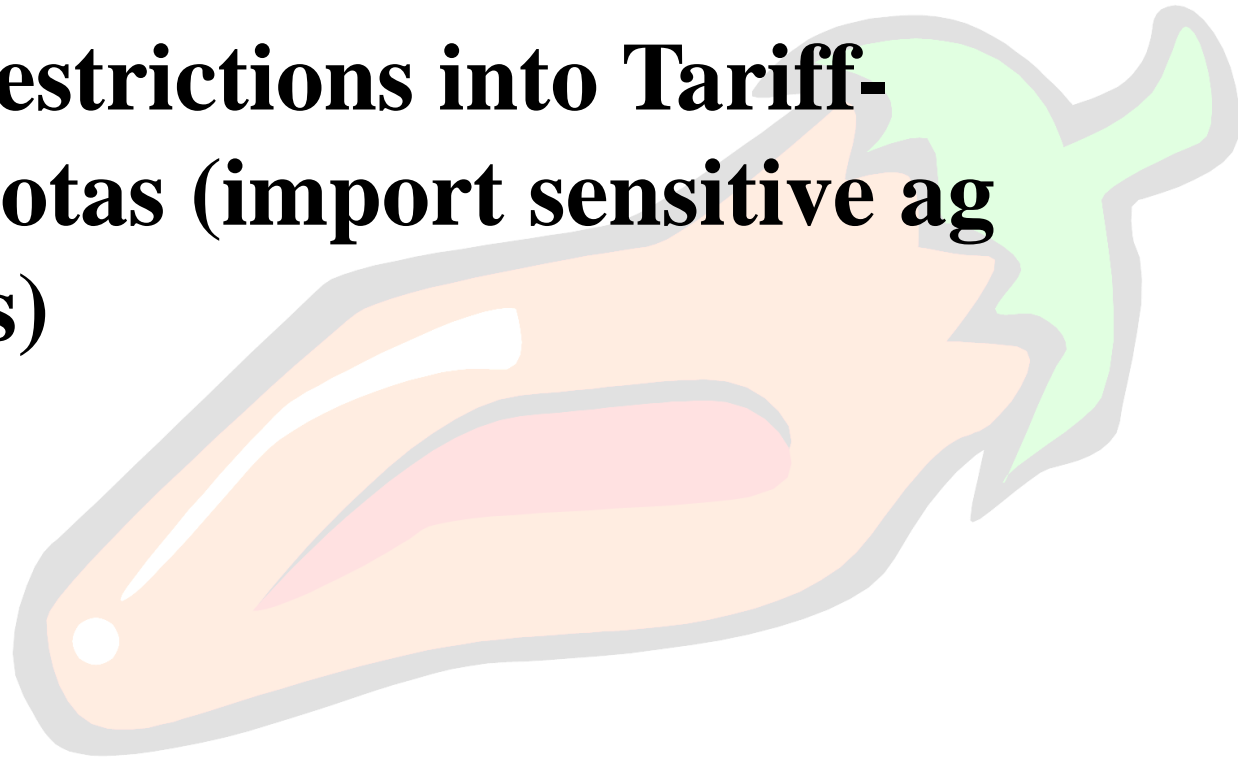


Table I: Comparative Analysis of National and International Agricultural Prices (1992 dollars)

Product	Domestic Price	International Price	% Difference
Corn	236.6	137.6	72.0%
Beans	656.9	439.7	33.0%
Barley	257.9	202.7	27.2%
Tomato	1200	1687.99	-28.9%
Oranges	244.39	1610.32	-84.8%
Avocado	2251	6086.28	-63.0%

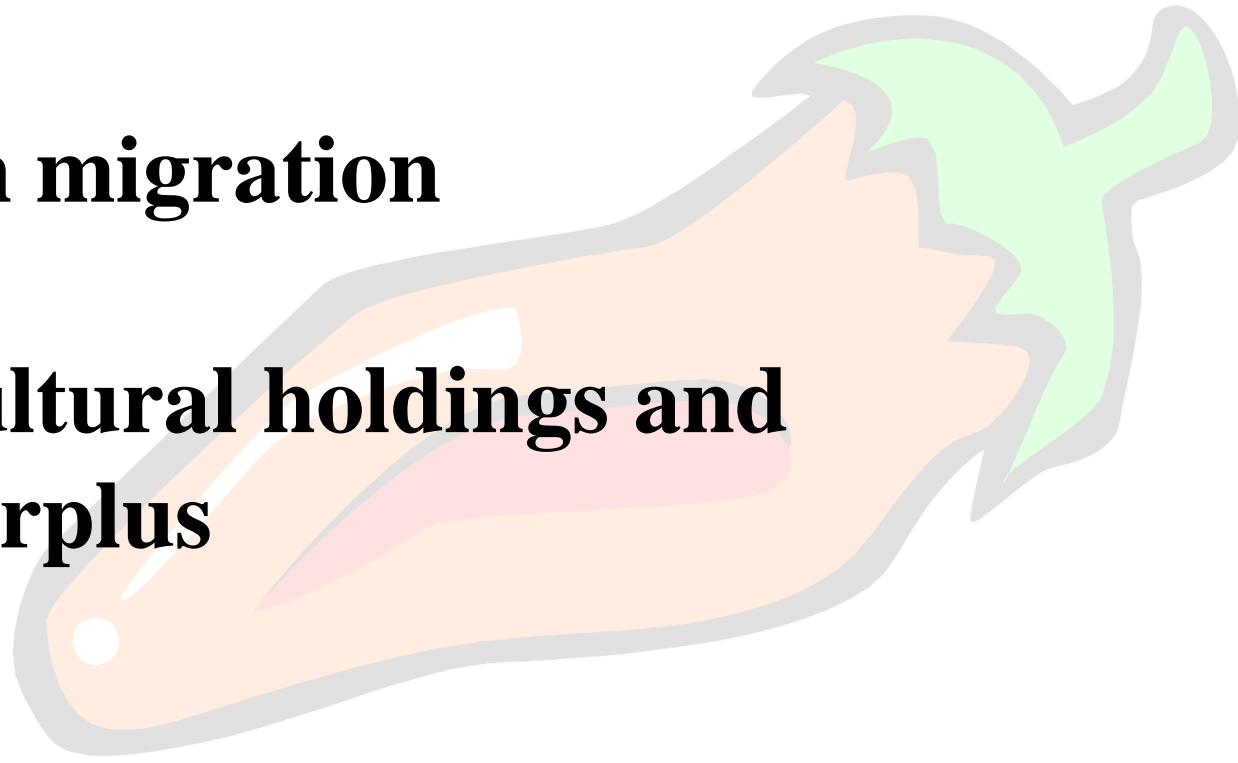
Sources: *Perspectivas de Comercialización de los Productos Básicos*, Mexico, Secofi, 1993.

Manrubbio y Santoyo, *¿Es negocio el Campo?*
 Revista Agronegocios, 1992.

Competitiveness: Economies of scale, limited access to credit and technology, and reliance on traditional production practices

Rural-urban migration

Small agricultural holdings and marketed surplus



Social Impacts of NAFTA

Vary by:

- **Age**
- **Gender**

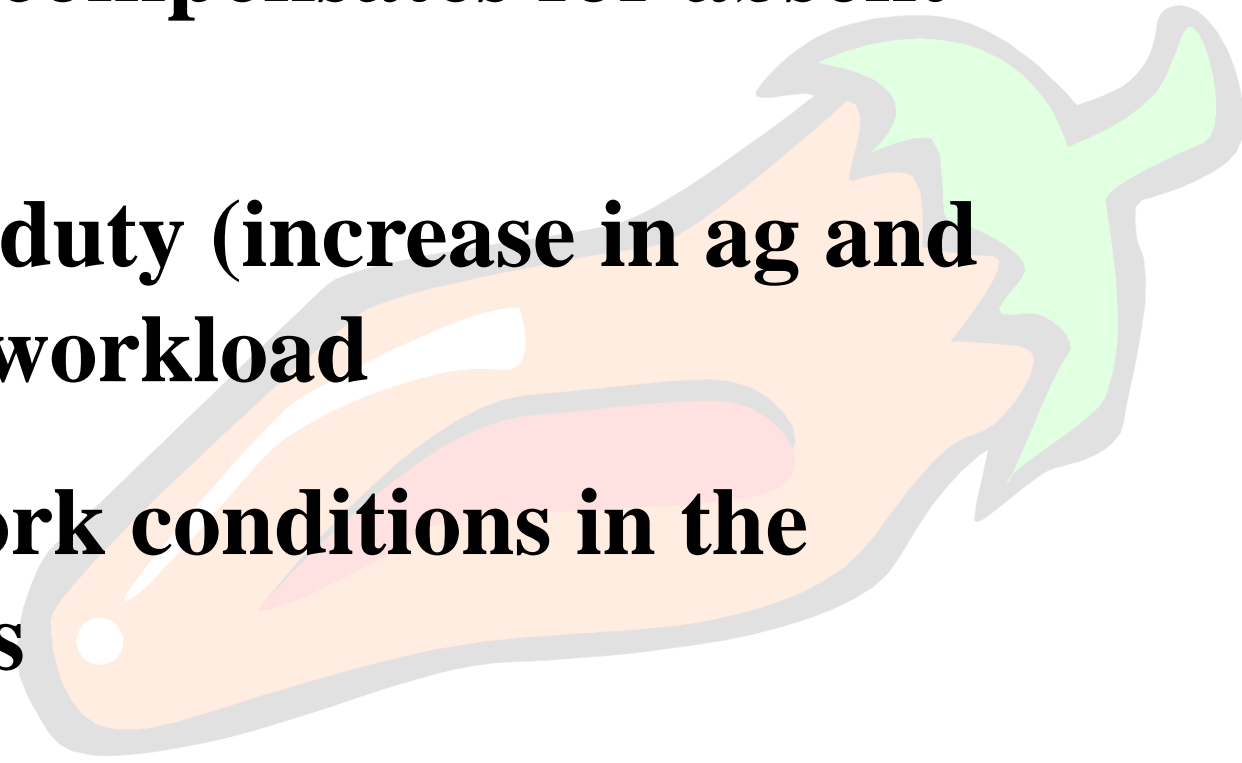




Impacts on Peasant Women of NAFTA:

Negative:

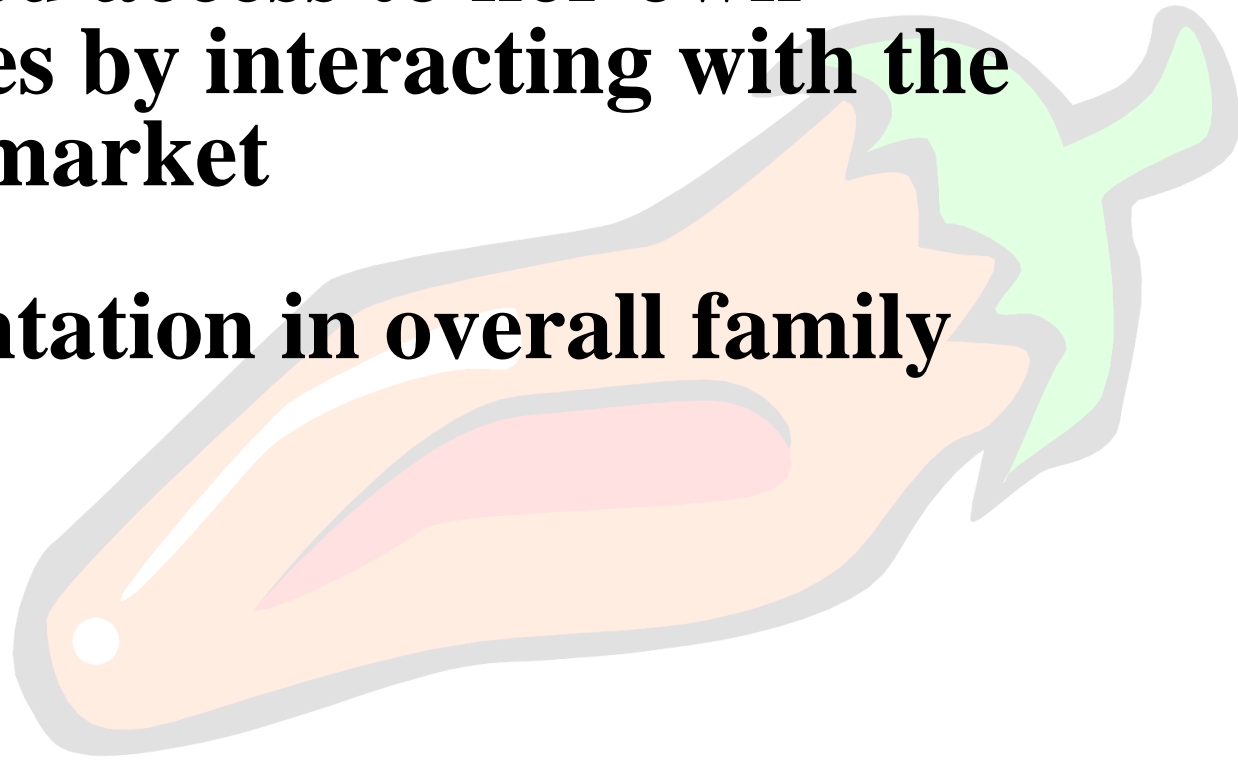
- ❖ **Female compensates for absent male**
- ❖ **Double-duty (increase in ag and non-ag workload)**
- ❖ **Poor work conditions in the factories**



Impacts on Peasant Women of NAFTA:

Positive:

- ❖ **Increased access to her own resources by interacting with the formal market**
- ❖ **Augmentation in overall family income**



Map I: Location of the state of Tlaxcala relative to Mexico City and Veracruz. Major highways highlighted in black. State boundaries in red.



Xicohténcatl Industrial Corridor. Tlaxcala, Mexico.



Employment Opportunities:

- ❖ **The region employs 22,000 people**
 - ❖ **150 factories**
 - ❖ **67% produce for exportation**
 - ❖ **Xicohtencatl houses 19% of all Tlaxcala's factories and provides 30% of employment**
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Principal Industries are:

❖ **Chemical production**

❖ **Clothing fabrication**



Figure II: Climactic Characteristics of Western Tlaxcala.

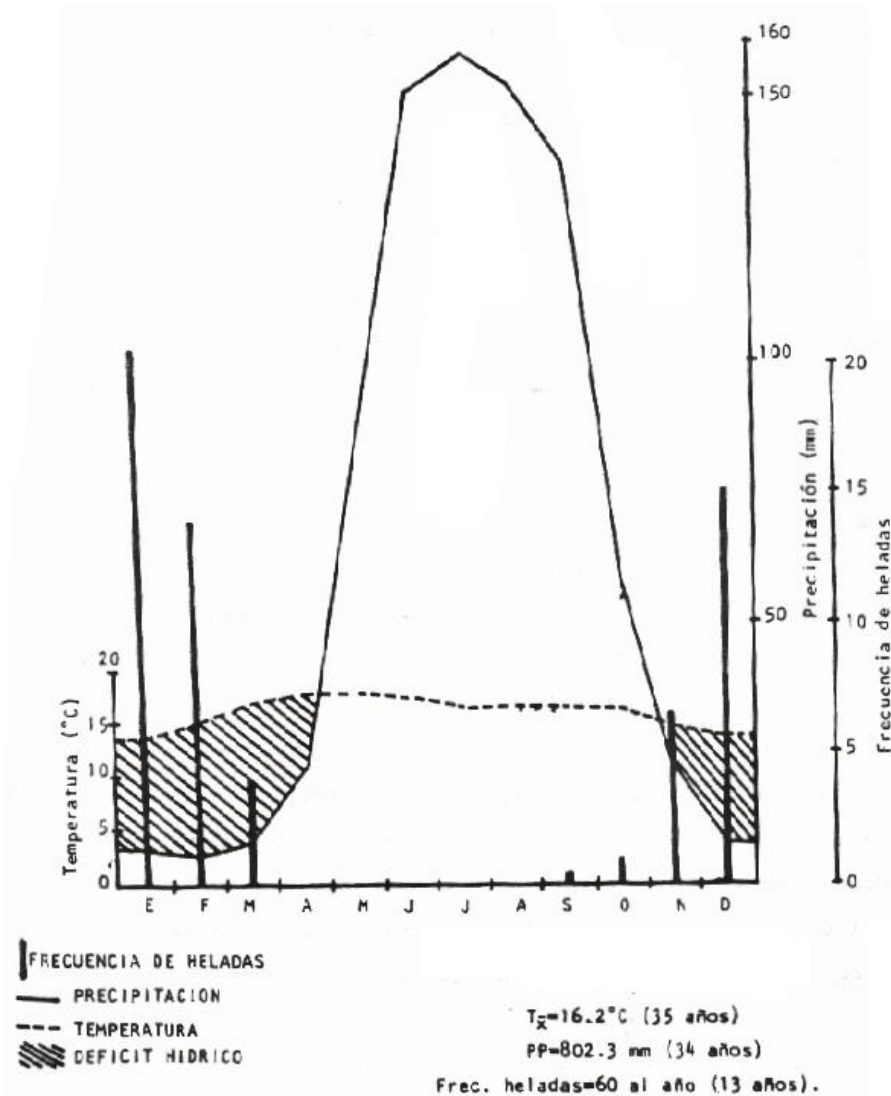


Table II: Summary characteristics of rural communities surrounding the industrial corridor of Xicohténcatl.

Pueblo	Population	Principal Crops	Irrigated Area	Agri. Structure	Labor Migra.
Emiliano Zapata	6500	Corn, potato, haba	10%	Ejido	Minimal
Lazaro Cardenas	2700	Lettuce, corn, carrots	74%	Ejido	Average
Zotoluca	300	Small grains corn, haba	0%	Private	Extensive
Capula	1500	Small grains corn, haba	0%	Ejido	Average
Santa Fe` la Troje	400	Small grains corn, haba	0%	Ejido	Extensive

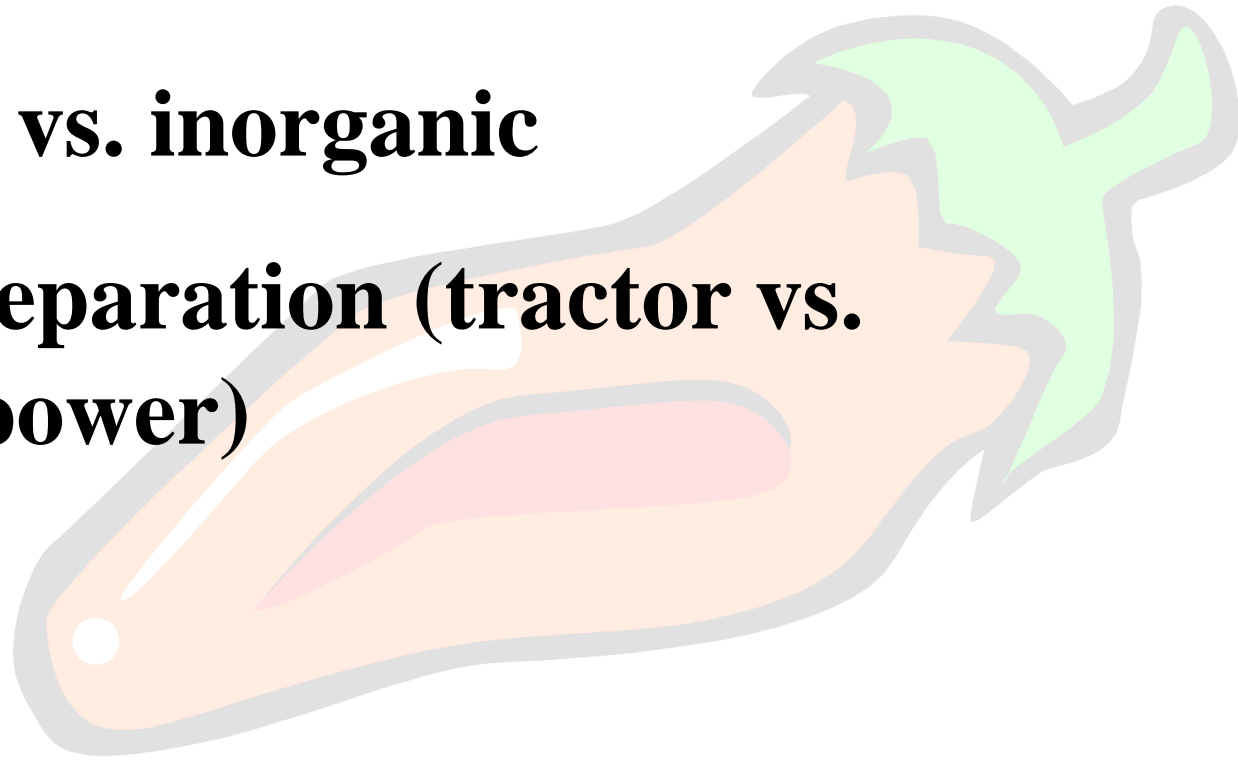
Table III: Survey results

Survey Questions:		Aggregate Results
Household size		7.5
Gender composition	male	46%
	female	54%
Age composition	0-9	26%
	10-18	12%
	18-28	32%
	29-up	33%
Employment	campo	44%
	household	41%
	industry	7%
	other	7%
Land Ownership	Yes	100%
	No	0%
Plot size (hectares)		4.24
Crop areas	corn	63%
	beans	16%
	lettuce	44%
	Other Vegetables	53%
	grains	18%
Water availability	irrigation	0%
	temporal	100%
% for household use	corn	80%
	beans	100%
	potato	100%

Production Characteristics:

Labor and capital requirements vary:

- ❖ **Rain fed vs. irrigated**
- ❖ **Organic vs. inorganic**
- ❖ **Land preparation (tractor vs. animal power)**



Corn field being prepared for planting with use of animal power.



Table IV: Yield differentials on irrigated and temporal lands.

<i>Crop</i>	<i>Yields (ton/hectare):</i>	
	Rainfed	Irrigation
Corn	1.5	3
Haba	1	6
Potatoes	2.5	9
Small Grains	2.5	3

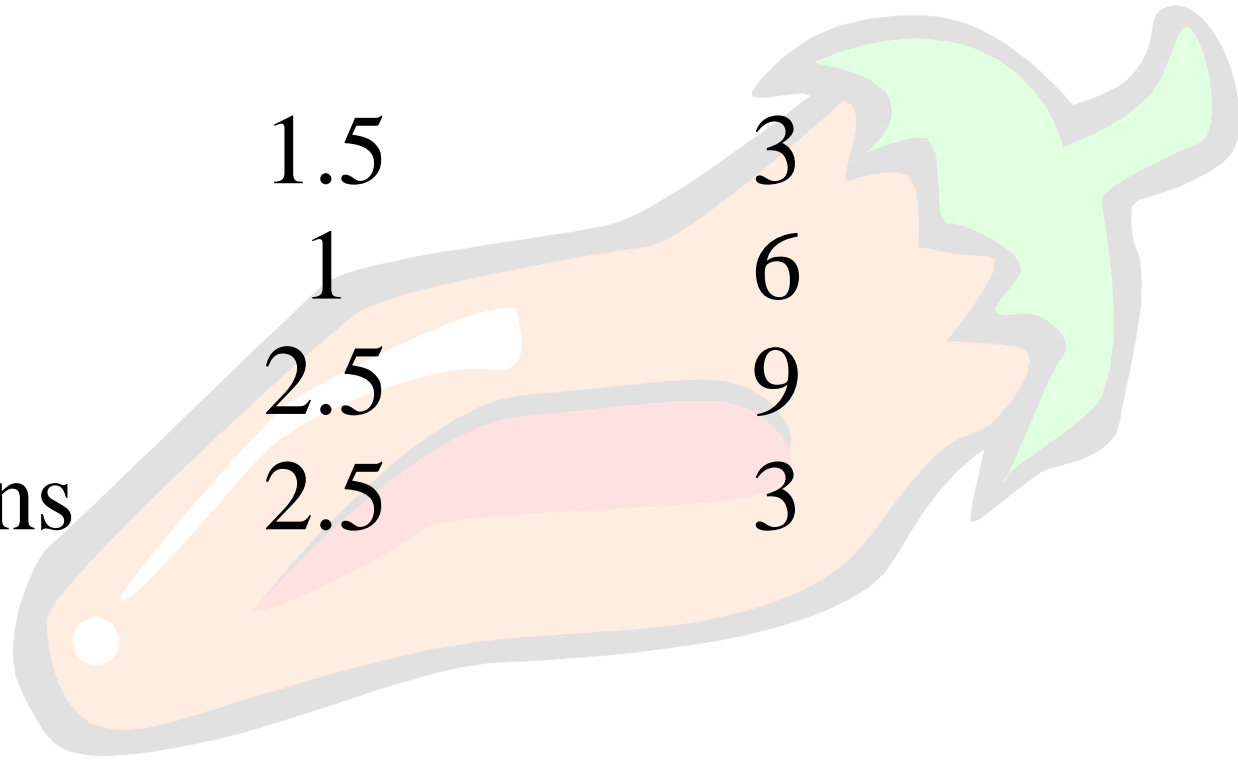


Figure III: Mexican Prices for Commodities Produced in the Xicohtencatl Agricultural Areas, 1980-1995

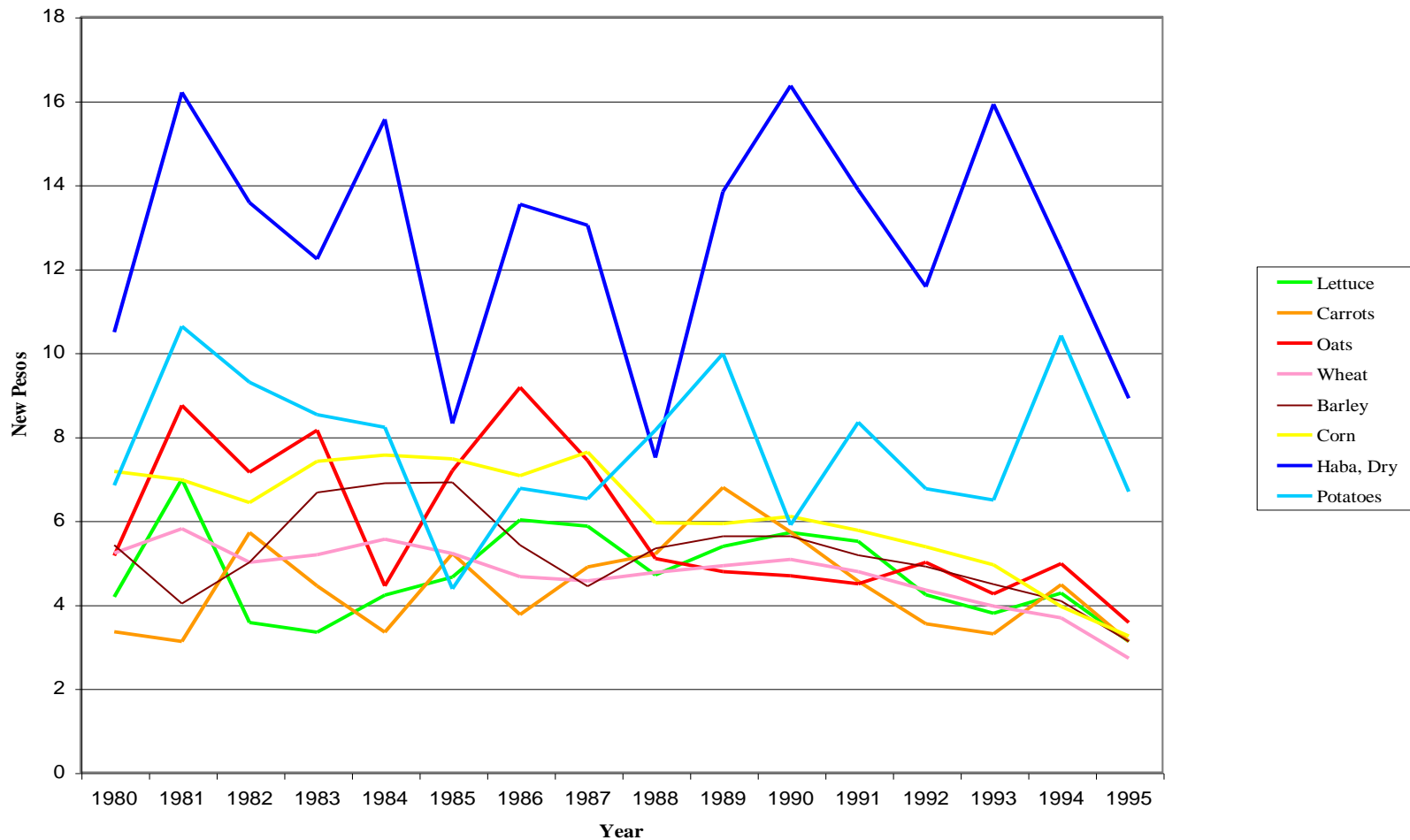


Figure IV: Total Employment in the Industrial Corridor of Xicohtencatl, 1993-1999

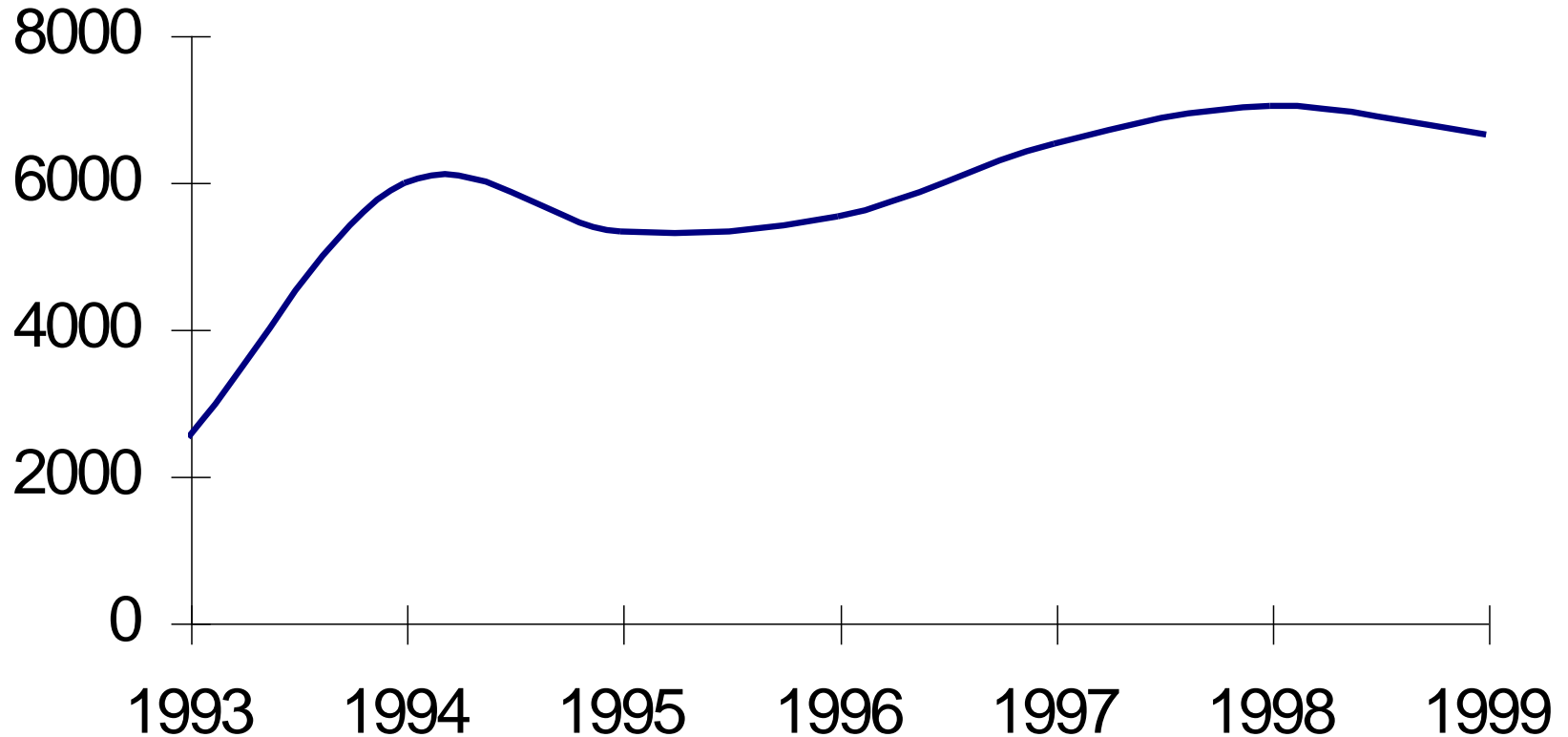
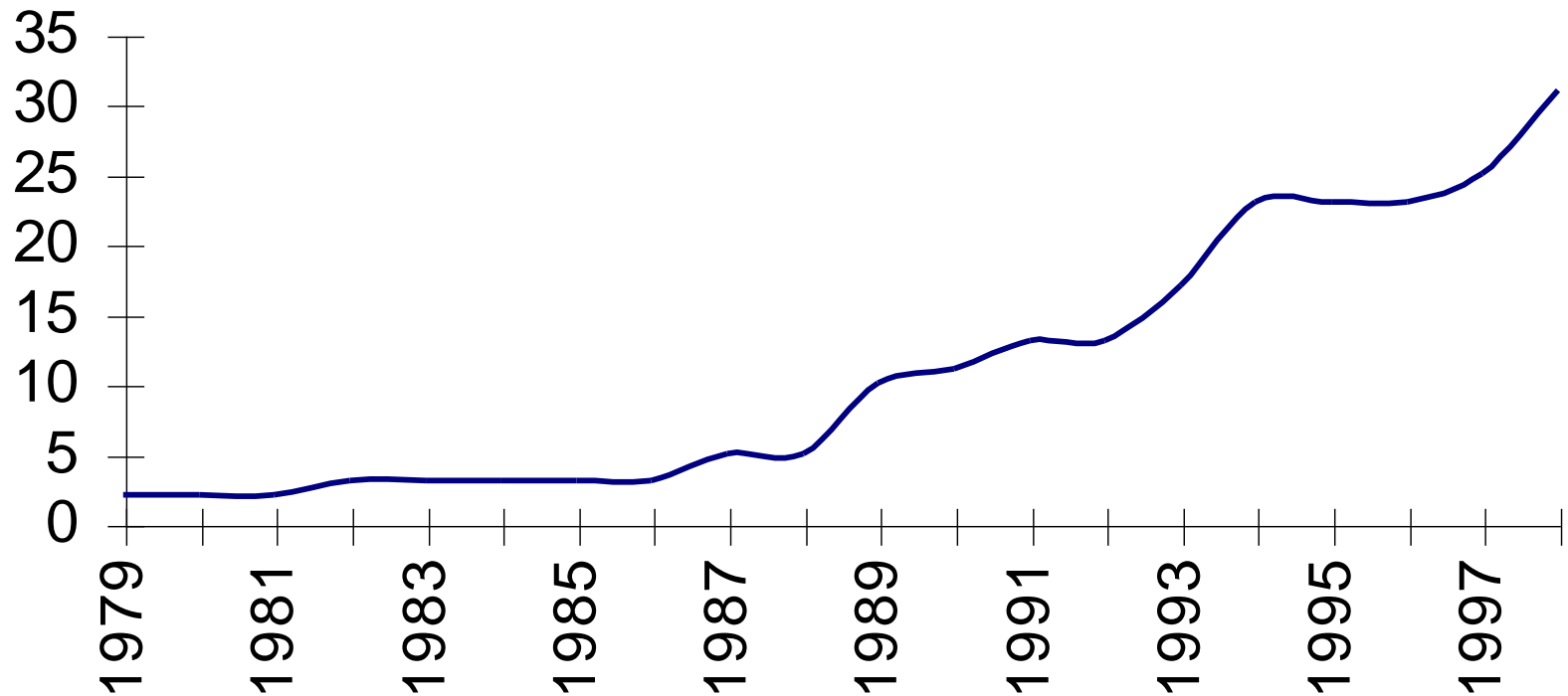


Figure V: Number of Operating Factories Est. within the Xicohtencatl Industrial Area, 1979-1998.



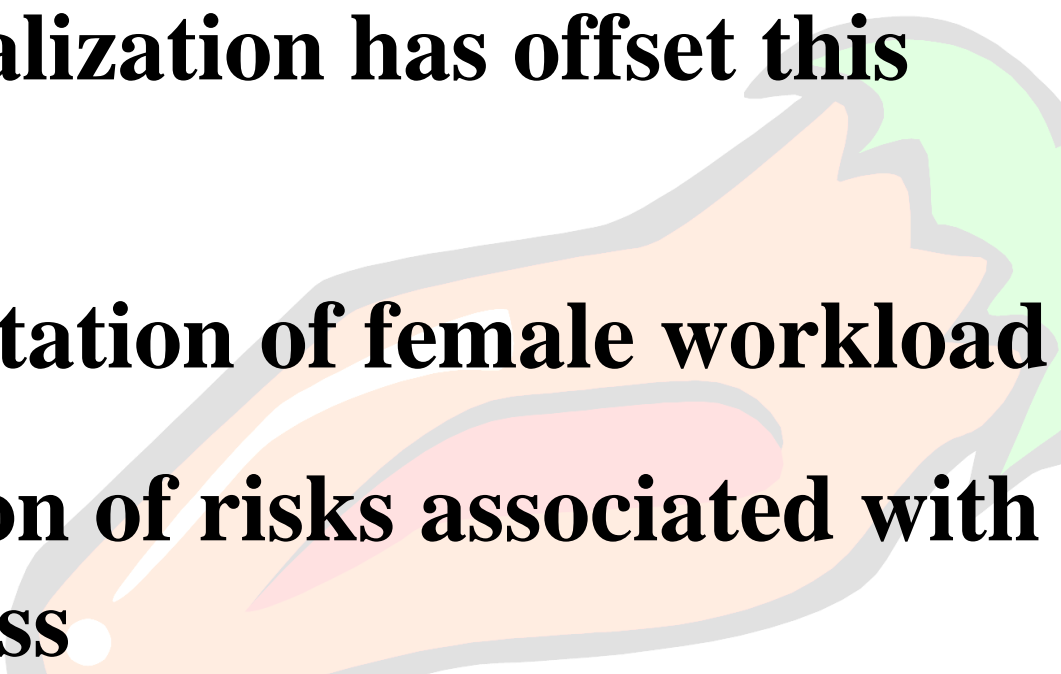
The Economic Impacts of NAFTA

A Programming Approach

Inclusion of the unpaid female labor activities



Summary and Conclusions:

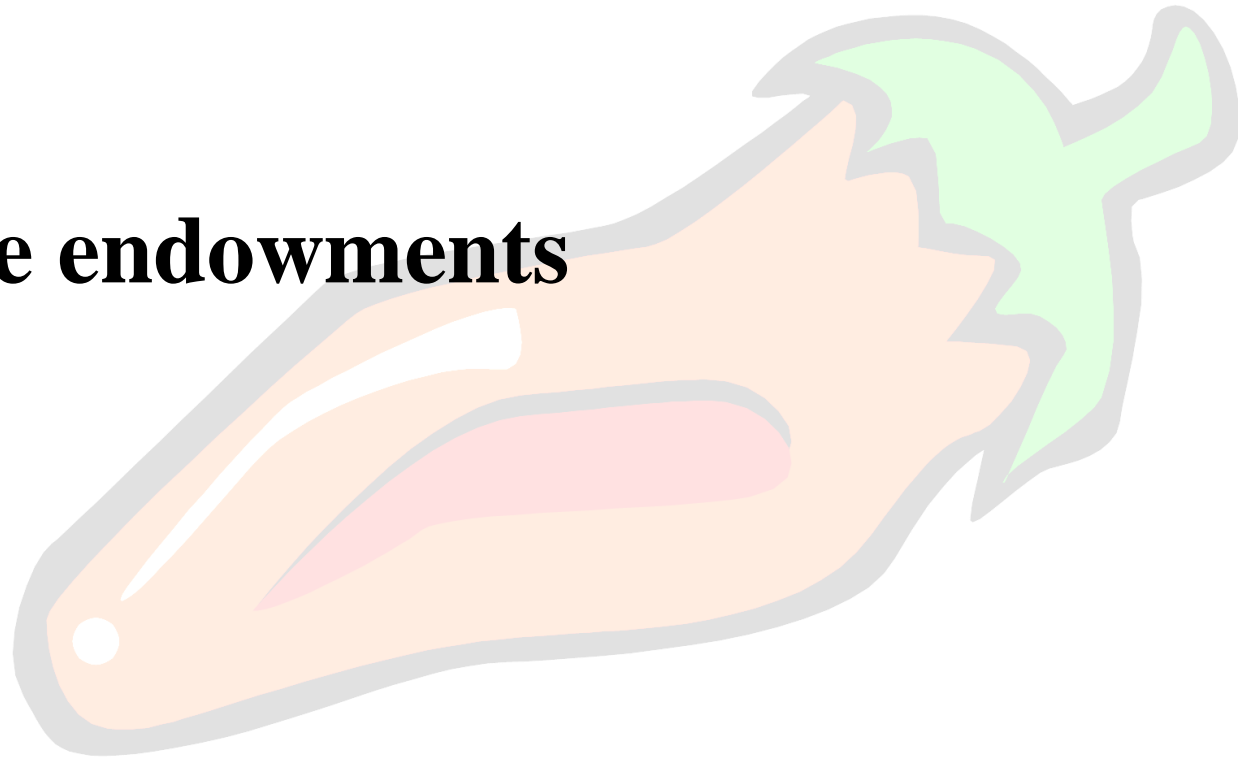
- ❖ **While falling ag prices have harmed most families (except for irrigated farmers), increased industrialization has offset this impact**
 - ❖ **Augmentation of female workload**
 - ❖ **Reduction of risks associated with ag process**
- 

The Results Vary by:

❖ **Location**

❖ **Land**

❖ **Resource endowments**



While the development of industrial corridors was associated with many concerns, it did appear to have increased the overall economic viability of the rural household while reducing agricultural risk.



Thank you!

