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TAMRC REPORT

THE U.S.-MEXICO FREE TRADE AGREEMENT: AGRICULTURAL LABOR ISSUES

H.L. Goodwin, Jr.*

U.S.-Mexico Free Trade Issues for Agriculture Series
TAMRC International Market
Research Report No. IM-11-91
April 1991

TEXAS AGRICULTURAL MARKET RESEARCH CENTER REPORT

Department of Agricultural Economics
Texas Agricultural Experiment Station
Texas Agricultural Extension Service

Texas A&M University *system*
College Station, Texas



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Texas Agricultural Market Research Center (TAMRC) U.S.-Mexico Free Trade Issues for Agriculture Series, TAMRC International Market Research Report No. IM-11-91, by H.L. Goodwin, Jr., Texas Agricultural Market Research Center, Department of Agricultural Economics, Texas A&M University, April 1991.

ABSTRACT: The U.S. and Mexico appear to be heading toward negotiations on a relatively narrow "trade and investment only" free trade agreement (FTA). Labor issues will apparently be excluded from the negotiations. Nevertheless, labor considerations permeate most other areas specifically to be addressed by the FTA. The focus of this paper is on the likely impacts of a U.S.-Mexico FTA on agricultural labor as it relates particularly to Texas. The paper provides background on the agricultural labor issues and then discusses the potential effects of a U.S.-Mexico FTA on agricultural labor. Finally, priority issues relating to agricultural labor relevant to a U.S.-Mexico FTA are outlined.

The Texas Agricultural Market Research Center (TAMRC) has been providing timely, unique, and professional research on a wide range of issues relating to agricultural markets and commodities of importance to Texas and the nation for more than two decades. TAMRC is a market research service of the Texas Agricultural Experiment Station and the Texas Agricultural Extension Service. The main TAMRC objective is to conduct research leading to expanded and more efficient markets for Texas and U.S. agricultural products. Major TAMRC research divisions include International Market Research, Consumer and Product Market Research, Commodity Market Research, and Contemporary Market Issues Research.

THE U.S.-MEXICO FREE TRADE AGREEMENT: AGRICULTURAL LABOR ISSUES

EXECUTIVE SUMMARY

The U.S. and Mexico appear to be heading toward negotiations on a relatively narrow "trade and investment only" free trade agreement (FTA). Migration, labor, and labor rights issues will apparently be excluded from the negotiations because of the general sensitivity to labor issues in both countries. Despite the absence of explicit labor considerations in a U.S.-Mexico FTA, however, implicit agricultural considerations permeate most, if not all, of the other areas specifically to be addressed by the FTA. The focus of this paper is on the likely impacts of a U.S.-Mexico FTA on agricultural labor as it relates particularly to Texas. Key points in this paper include the following:

- Of particular interest with respect to a U.S.-Mexico FTA are Mexican immigrants. The high percentage of Hispanics in the Texas agricultural labor force originate from Mexican Americans native to Texas residing primarily in the Lower Rio Grande Valley and from both legal and illegal Mexican immigrants.
- U.S. fruit and vegetable growers expect labor-intensive agriculture to shrink in South Texas not only because of the Immigration Reform and Control Act of 1986 (IRCA) or other programs but also because of the combined effect of several programs and regulations on the cost of agricultural labor in Texas. Lower Mexican labor costs mean that Mexican vegetables are as cheap in the U.S. as are Texas vegetables even with Mexico's deficient infrastructure and transportation systems and duties. Over time, Mexico is expected to gain cost advantages while Texas agriculture must grapple with problems of a limited quantity of water suitable for irrigation, pest problems, erratic weather conditions, and decreasing profit margins.
- Some large and multi-area fruit and vegetable growers are expanding their operations into Mexico, suggesting that expansion into Mexico may be more rational, for some at least, than diversifying within the United States. Legalizing illegal alien farmworkers to promote gradual employer labor adjustments has apparently not worked in South Texas. Instead, these employers either began or expanded production in Mexico. The South Texas experience suggests that international competition may make it impossible for Congress to legislate labor market adjustments which both improve farmworker conditions and preserve *all* U.S. labor-intensive production.
- Already several U.S. firms own thousands of productive acres in Latin America and are shipping large amounts of perishables into the United States. The enactment of IRCA, combined with improved transportation and storage capabilities in Latin America and the desire of U.S. consumers for year-round availability of fresh fruits and vegetables, is adding impetus to the trend toward increased imports of perishables. A U.S. Mexico FTA would be another step in that direction.
- Most South Texas vegetable growers are pessimistic about the effects of a U.S.-Mexico FTA. Nevertheless, some growers see an opportunity to sell vegetables into Mexico. With respect to cash grains, freer trade would, at least in the short-run, increase rural Mexican migration to the U.S. because cheaper U.S. grains would be imported and displace Mexican grain farmers and workers. Although U.S. grains would be available to Mexico quickly following a

successful agreement, it could take years to expand Mexican fruit and vegetable production sufficiently to absorb the displaced Mexican workers.

- What would happen to the flow of agricultural labor across the border and the supply of agricultural labor in both countries as the result of a U.S.-Mexico FTA depends crucially upon the relative impact of an FTA on the various agricultural commodities produced and traded by each country. Enactment of an FTA with Mexico would provide a relative cost advantage to the production of labor-intensive as opposed to capital-intensive agricultural commodities in Mexico and create opportunities for Mexican agricultural labor to shift from capital-intensive production and to remain in Mexico instead of migrating north in search of jobs. For this to occur, however, sufficient investment capital would have to become available to allow a rapid enough expansion of capacity and infrastructure in labor-intensive agricultural activities to absorb the additional labor. In the short-run at least, the net effect of a U.S.-Mexico FTA that excludes labor considerations would likely be increased migration of Mexican labor to the U.S. until sufficient capital investment created adequate opportunities for domestic labor in Mexico.
- U.S. agribusiness expansion into Mexico could reduce any short-run increase in the flow of illegals into the U.S. as a result of an FTA with Mexico. What to do about such a migration increase must be dealt with in some way if not in the provisions of a negotiated FTA. Choices include a guestworker program or simply increased illegal immigration.
- The three highest priority agricultural labor issues for the U.S.-Mexico negotiations include the expected relative commodity effects of the FTA, the potential for U.S. capital and investment in Mexico, and the opportunity and ability for a Texas response to agricultural labor issues related to an FTA with Mexico.

THE U.S.-MEXICO FREE TRADE AGREEMENT: AGRICULTURAL LABOR ISSUES

The U.S. and Mexico appear to be heading toward negotiations on a relatively narrow "trade and investment only" free trade agreement (FTA). Migration, labor, and labor rights issues will apparently be excluded from the negotiations because of the general sensitivity to labor issues in both countries. Despite the absence of explicit labor considerations in a U.S.-Mexico FTA, however, implicit agricultural labor considerations permeate most, if not all, of the other areas specifically to be addressed by the FTA. Affected economic sectors run the gamut from agricultural production and processing to service and industrial employment, from impacts on border industries and *maquiladoras* to impacts on social and governmental services in both the U.S. and Mexico. Although each of these sectors is linked in varying degrees to the others, the focus of this paper is on the likely impacts of a U.S.-Mexico FTA on agricultural labor as it relates particularly to Texas.

The agricultural labor situation in Texas has been in a state of rapid evolution since 1980. Numerous state legislative initiatives involving unemployment insurance, workman's compensation, minimum wage, and pesticide application have begun to alter the labor environment within the state. Additionally, economic forces affecting production within Texas and across the U.S. continue to impact the mobility status and employment level of Texas agricultural laborers. Most significant of the numerous factors affecting agricultural labor in Texas has been the passage of the Immigration Reform and Control Act of 1986 (IRCA) which is currently under the Congressionally mandated five year review/revision process by the Commission on Agricultural Workers (CAW). It is appropriate, therefore, to view the possible effects of a U.S.-Mexico FTA in light of potential further adjustments such an FTA may bring indirectly when considered in concert with the current evolution of the agricultural labor picture in Texas.

BACKGROUND

Some background on the historical and current U.S. and Mexican agricultural labor situation will aid in the subsequent examination of the potential effects of a U.S.-Mexico FTA on agricultural labor. Topics to be reviewed briefly here include the U.S. agricultural labor situation, the Mexican agricultural labor situation, U.S. agricultural labor policy, estimates of the current situation in agricultural labor, and entrepreneurship in agricultural labor.

U.S. Agricultural Labor Situation

Cotton and cattle are the largest contributors to the agricultural economy of Texas in dollar terms. Horticulture, fruits, and vegetables rank third in receipts and play a prominent role in many areas of Texas. Onions, melons, peppers, cabbage, potatoes, and leaf crops are the major vegetables grown. Fruits include citrus, grapes, berries, and peaches. The production processes for these crops include heavy use of labor in the harvest periods and for cutting, seeding/transplanting, thinning, pest control, and cultural practices. Pressures on the agricultural labor supply and technological advances in seeding, varietal development, and transplanting are beginning to alter this pattern to a degree. Primary demands for labor in grain and cotton are in the period between planting and harvest for the vegetable crops but also overlap the harvest season somewhat during the thinning and weed control

phases of cotton production. Additionally, significant labor is used by certain producers and growers throughout the grain and cotton harvest period, thereby utilizing additional low or semi-skilled laborers in the during summer months. Predominant labor pressures generally ease by September, however.

Livestock and associated industries are not included in IRCA provisions but probably should be considered, particularly in light of decreasing availability of legal, relatively low-cost labor on beef, dairy, poultry, and sheep and goat operations. Sales from beef cattle comprise well over 40% of all agricultural receipts in Texas. The dairy industry is expanding rapidly. Additionally, Texas dominates the U.S. sheep and goat industry. All these industries, while not labor intensive as compared to defined perishable activities, nevertheless require labor during certain peak times of the year. Dairy hired workers are used statewide on a year-round basis.

An interesting sidelight in terms of growers, packers, and shippers of vegetables in the Texas Panhandle/Southern Plains is that many firms, and, therefore, a large proportion of the total acreage and production, are owned or affiliated with firms in the Lower Rio Grande Valley of Texas. This linkage is important in understanding the production, organization, and management behavior which exists. It is not uncommon for a significant number of laborers to be brought by firms from South Texas or other parts of the Rio Grande Valley to work in the industry during the summer harvest period when availability of labor in South Texas far exceeds demand.

Ten states dominate the use of hired labor, accounting for 81% of all hired labor. Texas ranks third behind California and Florida and accounts for over 10% of all hired labor in the U.S. A considerably greater portion of hired laborers originate from Texas and migrate to other areas, primarily the Midwest and Pacific Northwest, during the period June through September. Overall, farm labor expenses average about 15% of all reported production expenses. They comprise about 50% of production expenses on horticultural specialty, vegetable, melon, fruit, and nut farms. Given the large number of workers and the level of hired labor expenses in these industries in Texas, much of the focus on agricultural labor research has been upon these industries (Goodwin).

While specific data to describe the exact size, location, and nature of the hired agricultural labor force is less than adequate, certain information sources exist from which generalities may be drawn, exist. Two such sources are *The Agricultural Workforce Survey (AWF)* and *Farm Labor*. Both are produced in conjunction with the U.S. Department of Agriculture and include field workers only. The *AWF Survey* is a sample of roughly 60,000 households conducted biennially in December. *Farm Labor* is a survey of employers conducted the second week of January, April, July, and October of each year. Due to the timing and nature of the surveys, both publications have limitations. They both can exhibit a high probability of under-counting (particularly of unauthorized workers) and of inaccurate reporting. Minor adjustments in the number of workers are apparent in the October and April data with U.S. totals declining slightly. Decreases in numbers of workers will more likely begin to occur once sanctions are fully operative. About 49% of all workers in the survey are involved in crop production, 27% in vegetable, fruit, and nut production and horticultural specialties, and 24% in livestock activities.

Also, in the context of IRCA and its effect on labor utilization is the data relating to ethnic groups of agricultural workers as determined by the *AWF Survey*. As expected, the greatest concentration of Hispanics are in the Pacific region and Texas, making up 34% and 44%, respectively, of the hired workforce. Although large numbers of Hispanics are legal residents or U.S. citizens, sizeable numbers are likely unauthorized aliens, particularly in areas relatively distant from the U.S.-Mexico border.

Immigration and Naturalization Service (INS) reports of December 22, 1990, indicate that just over 3 million persons were granted permanent residency status in the U.S. as a result of IRCA; 2.25 million of these were from Mexico. Of primary interest to Texas agriculture are the number of SAW applicants granted residency status. There were 1.275 million SAW applicants. Of these 81.5% were from Mexico. Their average age was 29 and 82% of all SAW applicants were male. Texas accounted for 10.3% (131,213) of these applicants, 68% of which were employed at the time of their application, in fruit and vegetable production and harvest (INS). The remainder were in cash, grains, horticultural specialties or some unspecified qualifying category. This substantial number of SAWs are now available for all types of labor in the U.S., but their primary occupations are likely to continue to be in low or semi skilled positions such as agriculture production and harvest.

Mexican Agricultural Labor Situation

The high percentage of Hispanics in the Texas agricultural labor force originate from Mexican Americans native to Texas residing primarily in the Lower Rio Grande Valley and from both legal and illegal Mexican immigrants. Of particular interest with respect to a U.S.-Mexico FTA are Mexican immigrants. Historically, the primary origins of Mexican immigrants to Texas have been from the states of Coahuila, Guanajuato, Nuevo Leon, San Luis Potosi, and Tamaulipas. These states account for 26.9% of all migration to the U.S. and 73.9% of all migration to Texas. Significant numbers have also come from Zacatecas, Chihuahua, and Federal District (Jones). The density in workers per 1,000 of state population at the figure of the last census (1980) was 62.1. Although the Northeast region of Mexico has been the predominant source of immigrants to Texas, there have been growing numbers of immigrants from Central and Southern regions more recently.

Historically, the composition of Mexican immigrants has changed from time to time seemingly dependent upon the nature of guest worker/immigration provisions in the U.S. The *Braceros* Program of the 1950s and early 1960s encouraged the immigration of large numbers of "solo" men into the workforce. Expiration of the program apparently changed the composition of immigrants over the following twenty years to include primarily family units or the completion of family units. Since the passage of IRCA, the pattern toward primarily solo men apparently has returned (Mines). Employers and farm labor contractors seem satisfied with these solo men since most can secure documentation for work easily. Some destabilization has occurred, however, as these men continually switch employers to seek higher wages and better supervision and working conditions.

Government Policy in the U.S.

The Immigration Reform and Control Act of 1986 (IRCA) became law in November of 1986. Passage of this landmark legislation came as a result of some eleventh-hour compromises and culminated over ten years of intense debate in Congress about how the U.S. will treat aliens. The law made sweeping changes which will affect *all* employers and employees. Specifically, IRCA will have a significant impact on agricultural employers and the agricultural labor market in the near future. The law includes provisions regarding: (1) alien legalization; (2) special agricultural workers (SAW) and replenishment agricultural workers (RAW); (3) revisions of the H-2 program and the establishment of the H-2A program; and (4) employer sanctions (see Goodwin, 1987).

Immigration reform may change the number and characteristics of workers available to do U.S. farmwork, setting in motion a series of adjustments which may affect the demand for labor, the

operation of the farm labor market, and the structure of U.S. agriculture. IRCA promises potentially sweeping changes in farm labor policy which are just beginning to unfold. Managerial adjustment to IRCA is occurring according to surveys of farm employers. There is the potential for major impacts after the law is fully implemented for some time (Rosenberg and Perloff; Martin and Taylor).

The actual effects of IRCA on agriculture are still unclear. The law, designed to curb illegal immigration and limit employment of non-qualifying alien workers, has yet to be thoroughly analyzed in terms of its efficiency in achieving its purposes. The flow of illegal immigrants into the U.S. from Latin American countries has not substantially decreased (Associated Press). Apprehensions of illegal aliens in 1990 exceeded those in previous post-IRCA years by 10%. The widely publicized agricultural labor shortage has not developed. These occurrences may well be inextricably linked. The market through which agricultural labor is recruited, hired, and distributed has adjusted to the disruptions imposed upon it through policy alterations.

Current Status of Agricultural Labor

Congressional directives require that CAW monitor the impacts of IRCA on agricultural labor from nine perspectives, including supply, wages, working conditions, and unique needs assessments. The U.S. Department of Agriculture (USDA) and the U.S. Department of Labor (DOL) were charged with determining whether labor shortages resulted from the passage of IRCA. Two separate surveys (the **Quarterly Agricultural Labor Survey** and the **National Agricultural Workers Survey**) indicated no shortage of labor was present. In fact, an actual increase occurred in the number of seasonal agricultural workers approved by governmental agencies (Rural California Report). Shortages which were anticipated on a widespread basis did not materialize except in traditionally labor shortage areas. As a result, the USDA and the DOL determined that no additional agricultural workers were needed in the U.S. and did not issue visas for Replenishment Agricultural Workers (RAWs).

In a recently completed a study of farm labor, Duffield found a high degree of responsiveness of hired labor to real farm wages in the 1984 to 1988 period. He concludes that if IRCA successfully restricts labor supply, real wages may not rise significantly as employers adopt labor-saving production practices. If IRCA fails to restrict labor supply, therefore, at best real wages may remain the same or likely decrease, particularly if illegals continue to contribute to the labor pool. Indeed, a temporary labor glut may occur in select geographic areas as low-skill workers in the agricultural labor supply pool retrain to move out of agriculture simultaneous with a growing immigrant base.

Entrepreneurship in Agricultural Labor

The entrepreneurial spirit of agribusiness in adjusting to agricultural policy changes brought by IRCA may have prevented labor shortages from occurring. The primary consideration for agribusinesses appears to be their motivation for profit and their desire to shift the responsibility for routine, repetitive farm labor tasks to someone outside the agribusiness firm. Two extreme possibilities may be operative here: 1) that firms may vertically integrate to include all activities of production or 2) that separate firms will exist for each activity of production. In reality, most firms operate somewhere in between these two extremes. Determinants as to which course is taken include the transaction costs of recruitment and employment of labor and the principal agent status of the employer. Larger firms have a greater opportunity to spread the information costs associated with hiring workers and, therefore, may not choose to utilize farm labor contractors (FLCs). Small firms will likely choose an opposing course of action.

Areas where hired agricultural labor is in tight supply will understandably see greater entrepreneurial activity. The decision to pursue labor contracting in such areas may well be driven by recruitment or search costs (cost of information) such that producers or agribusinesses choose to defray these costs by "subcontracting" to FLCs. Similarly, FLCs have the opportunity to market their recruitment skills so as to extract greater profits. To the agribusiness, the marginal value product of the FLCs recruiting exceeds the opportunity cost of worker recruitment by the firm and/or a lower marginal value product of the recruitment function by FLCs.

FLCs play a greater role in areas lacking an indigenous or resident labor supply. A primary reason is that the value of the recruitment function is greater when the labor pool is transient in nature and/or employed for short periods of time. Larger firms may use FLCs less than smaller firms due to the larger firms' ability to lower the costs of recruitment. However, considerable use of FLCs is apparent by large firms for numerous reasons, including the risks of sanction enforcement and a shift in costs for various worker benefits mandated by state and federal regulations. FLCs are anticipated to be more widely used in those labor-intensive agricultural activities classified as "perishable" by IRCA (horticultural specialties, fruits and vegetables, grains). Counter to this, individual agribusinesses are likely to take up entrepreneurial activities in "non-perishable" activities such as livestock, dairy, poultry, and forestry.

That FLCs are increasing in frequency and importance in Texas agriculture is indicated by examination of *Texas Employment Commission* data for the years 1986 through 1989. These data, taken from the reporting units of unemployment insurance records, span the period from before IRCA to beyond the last extension of agricultural compliance to IRCA. Quarterly data indicate that the increase in both reporting units and in number of employees accounted for by FLCs exceeds increases by fruit and vegetable firms and agriculture as a whole (Table 1). Importantly, the number of agricultural employees hired by FLCs increased 48% in the third quarter from 1986 through 1989 compared with no increase in fruit and vegetable firm hirings and a 14% increase in agriculture as a whole. First quarter increases were much larger: 117% for FLCs vs. 15% and 22% for fruit and vegetable firms and all agricultural firms, respectively (Table 2). Relative shares of laborers in agriculture have increased to 13% and 15% in the first and second quarters of 1989 (up from 7% and 10% in 1986). The percentage for fruit and vegetable firms has remained at 29% for both quarters across this time period (Table 3).

Sanctions

Sanctions were expected to play a major role in revising patterns of use of illegal laborers by the framers of IRCA. The potential effectiveness of sanctions, however, rests with the *threat* of enforcement and costly penalties for each illegal worker identified. The *reality* of enforcement has been less than threatening as predicted in 1987 by the Dallas Federal Reserve Bank. Sanction enforcement in agriculture is likely less than expected because of the concentration of illegals in certain industries such as textiles and apparels, leather and footwear, certain food manufacturers, and miscellaneous light manufacturing (Hill and Pearce). Additionally, select geographic areas with high concentrations of illegals are likely to be targeted for sanctions rather than areas of sparse population and/or heavy agricultural production because of the lack of INS personnel for apprehension and prosecution in those areas.

The threat of effective enforcement appears to be small for employers of large numbers of low-skilled agricultural labor. Large firms may well feel more compulsion to comply with laws and regulations based upon other non-sanction related areas such as wage and hour standards, workman's compensation, unemployment insurance, and workplace safety requirements. For this reason, small and medium sized firms particularly in California are moving to the use of FLCs. Regardless of the

lower actual level of both the risk involved and the potential for lower employer profits due to sanctions, the cost of hiring agricultural workers has increased since IRCA was enacted in 1986.

No significant agricultural labor union activity has yet developed in Texas. In fact, as of January 1991, not one agricultural job was covered by union contract in Texas, according to recent testimony at the Commission on Agricultural Workers hearings in Weslaco, Texas. Union activity continues to be strong in areas where large vertically integrated companies geographically distant from a plentiful low-skilled supply are located. Union activity will likely increase in areas distant from adequate labor supply and decrease in areas of adequate labor supply. This will particularly be the case in the face of the apparent inability of sanction enforcement to limit illegal labor in agriculture and the corresponding increase in available legalized labor.

Farm Labor Contracting

Farm labor contractors are largely involved in the recruitment of labor and the coordination of labor supply and demand. FLCs possess a comparative advantage with low-skilled, repetitive task laborers. Certain FLCs are extracting higher labor payments based upon extra services provided such as harvest hauling (Polopolous and Emerson). All FLCs apparently provide the requisite fringe benefits. Many employers of FLCs appear to be transferring management and overhead costs of fringe benefits by including these items in the labor contracts, essentially a cost cutting method on both recruitment and overhead. Additionally, liability for violation of laws and regulations is transferred to FLCs, a practice gaining widespread adoption in Texas.

Counter to this trend, some large employers in Texas are choosing to hire so-called "company crews" so that all control for compliance rests with the firm. Shippers and packers responsible for harvesting fall in this category. The reason for this apparently contradictory logic lies in what employers believe to be inconsistent determination of financial liability in court cases, dependent upon the specific regulatory agent involved. If the firm is held ultimately liable for violations regardless of FLC contracts, then these same firms reason that they should be in charge of all facets of regulatory compliance. Until such inconsistency is rectified, there is likely to be a bi-modal pattern of FLC use, particularly in Texas.

POTENTIAL EFFECTS OF A U.S.-MEXICO FTA ON AGRICULTURAL LABOR

CAW is currently conducting hearings in twelve locations across the U.S. to evaluate the impacts of IRCA on agricultural labor. One such hearing was held in Weslaco, Texas on January 16, 1991. Discussions and testimonies were not limited to narrowly defined labor issues but covered a wide array of issues including perceived/anticipated impacts of a U.S.-Mexico FTA. Review of testimony given and discussion with various of the Commissioners present at Weslaco provide broad insight to the FTA issues. Many effects relate specifically to labor-intensive commodities processes, although most all agricultural labor would be affected in some way by an FTA with Mexico.

U.S.-Mexico Agricultural Labor Linkage

South Texas illustrates a farm labor market which has become accustomed to a surplus of

workers. Most labor-intensive vegetable production is from a handful of very large 2,000 acre to 8,000 acre operations. These large operations often pay seasonal workers the federal minimum wage of \$3.85 per hour and offer few benefits beyond Social Security, unemployment insurance, and workman's compensation as required by law. There seem to be few above-minimum-wage jobs available to seasonal farmworkers within South Texas agriculture or in the South Texas non-farm economy (Martin). The consequence has been that South Texas has traditionally been home to U.S. citizen and green card workers who migrate to the Midwest where farm work is available from May to September when there is little work available in South Texas.

Growers expect labor-intensive agriculture to shrink in South Texas not because of IRCA or other programs alone but because of the combined effect of several programs and regulations on the cost of agricultural labor in Texas. The total cost (including payroll taxes) of farm workers in Mexico is about \$1.00/hr compared to that of South Texas farm workers of \$5.00/hr to \$6.00/hr. Consequently, Mexican vegetables are as cheap in the U.S. as are Texas vegetables even with Mexico's deficient infrastructure and transportation systems and duties. Over time, Mexico is expected to gain cost advantages while Texas agriculture must grapple with problems of a limited quantity of water suitable for irrigation, pest problems, erratic weather conditions, and decreasing profit margins.

South Texas agricultural employers were accustomed to a surplus of farmworkers before IRCA. There is no evidence that IRCA has encouraged South Texas employers to gradually adjust their employment practices to retain SAWs or other experienced U.S. farmworkers. Some of the largest employers have operations throughout Texas. Consequently, South Texas workers taken to West and North Central Texas by FLCs can have a longer period of employment. These large and multi-area growers, however, are also expanding into Mexico, suggesting that for many growers expansion into Mexico is more rational than diversifying within the United States. Consequently, legalizing illegal alien farmworkers to promote gradual employer labor adjustments has not apparently worked in South Texas. Instead, these employers either began or expanded production in Mexico. The South Texas experience suggests that international competition may make it impossible for Congress to legislate labor market adjustments which both improve farmworker conditions and preserve *all* U.S. labor-intensive production.

Changing Patterns of Agricultural Production

Although mechanization has advanced rapidly in recent years, particularly in the harvest of fruits and nuts, insufficient technology exists currently to provide fresh vegetables and fruits in the quantity and quality desired by American consumers. Increased labor costs may cause increased pressure to improve technology and/or change crop mixes in order for production to become less labor-intensive. Over one-half of the respondents to a 1985 survey of citrus and vegetable firms in the lower Rio Grande Valley indicated that increased costs and regulations concerning hired agricultural labor would result in a desire to mechanize their operations (Goodwin and Thomas, 1985). An almost equal number said they would change their crop mix to include less labor-intensive crops. Most likely the general move to develop new technology and to reduce the percentage of labor-intensive crops under cultivation will continue and intensify. The third highest response concerning reaction to increased costs and regulation of hired agricultural labor was that producers would move production out of state (in reality, out of the country). Already several firms that own thousands of productive areas in Latin America are shipping large amounts of perishables into the United States. The enactment of IRCA, combined with improved transportation and storage capabilities in Latin America and the desire of U.S. consumers for year-round availability of fresh fruits and vegetables,

will add impetus to the trend toward increased imports of perishables. Fresh fruit and vegetable consumption is rising relative to processed consumption in part because low farm wages allow fresh produce prices to remain low. Fruit and vegetable production increased in the U.S. in the 1980s, as did fruit and vegetable imports, because of rising U.S. consumer demand. Additionally, the ability to import fresh produce from Mexico and Latin America has allowed a certain level of price stability to be maintained.

Trends already in progress are expected to continue over the next several years. These trends are the result, in part, of shifts in both labor availability and costs and they will be further exaggerated. Simultaneously occurring are a change in the crop mix, the adoption of labor-saving technology and the shifting of certain types of produce production to other areas within and outside the United States. Shifts away from previously high levels of production for the most labor-intensive produce items are taking place in some areas of the U.S. In addition, the use of palletized field crates, conveyor belts, field pack cartons and automated transplanting equipment is becoming more widespread, particularly where labor has become relatively expensive in comparison to costs of the new technology. There is also renewed interest in the development of equipment by public institutions, such as land-grant universities.

Technology could well reduce the demand for farm workers during the rest of the 1980s and 1990s through biogenetics, laser sensors to detect flawed produce, and automated irrigation systems. The adoption and dissemination of labor-saving technology will depend on its cost and efficiency as compared to that of hired agricultural laborers. Perhaps the greatest change which may result from a decreased and higher-priced labor supply, however, will be the move toward increased imports of fresh fruits and vegetables. Total imports have grown from \$418 million in 1975 to \$1.7 billion in 1985 (USDA). While many of these imports are of a tropical nature, unsuitable for production in the United States, there also have been tremendous increases in imports of onions, peppers, tomatoes, melons, grapes, apples, and peaches. This trend has continued into 1990, as firms seize both the comparative advantage of cheaper labor in Latin American countries and the capability to supply produce throughout the year. Additionally, the Caribbean Recovery Act, with its free trade provisions through 1995, continues to provide new opportunities for progressive business to capitalize on favorable financial arrangements through loan equity.

The FTA and Agricultural Labor for Cash Grain, Fruit, and Vegetable Production

Most South Texas vegetable growers are pessimistic about the effects of a U.S.-Mexico FTA. Nevertheless, some growers see an opportunity to sell vegetables into Mexico in cities like Monterrey, only 125 miles to the south with a population of 4 million. Many growers operate both in South Texas and in Mexico. With respect to cash grains, freer trade would, at least in the short-run, increase rural Mexican migration to the U.S. because cheaper U.S. grains would be imported and displace Mexican grain farmers and workers. U.S. grains would be available quickly following a successful agreement. It could take years, however, to expand Mexican fruit and vegetable production sufficiently to absorb the displaced Mexican workers. If Mexican fruit and vegetable production expanded in Northern Mexico, and commercial operations there continued to recruit migrant workers from Southern Mexico, there could be more migration to the U.S., because many workers willing to migrate 600 or 800 miles within Mexico are also willing to migrate on to the United States. If freer agricultural trade displaces Mexican grain farmers and workers, then trends in U.S. farm labor markets holding over from the 1980s might be aggravated including 1) falling real wages, 2) more seasonal workers covering their own housing and transportation costs as direct farmer hiring and housing is replaced by FLC activities, and (3) lower per worker earnings because with more available workers each accumulates fewer hours of work (Martin).

Labor costs (including management) comprise only about 25% of the retail price of fruits and vegetables (Gunter). The dominant factor explaining U.S. production is consumer demand. The 1980s increase in U.S. fruit and vegetable demand has not increased farm wages as much as other factors such as the rising minimum wage because the supply of alien workers is quite responsive to changes in wages. Average farm wages have been 40% to 60% of average manufacturing wages for decades and it takes a typical farmworker 4 to 6 years to move into the nonfarm labor market for the higher wages found there.

Empirical Analysis and the U.S.-Mexico FTA Agricultural Labor Linkage

An appropriate theoretical construct which integrates the interactions between U.S.-Mexico trade and illegal immigration exists from the work of Torok and Huffman. They estimate a seven-equation econometric model which includes U.S. imports and Mexican exports for winter tomatoes, U.S. demand and Mexican supply for illegal immigrants, intercountry price and wage relationships, and an equation which measures U.S. Border Patrol apprehension efforts. Results indicate that several factors tend to "push" low-skilled Mexican laborers into the U.S., including increases in population and unemployment and decreases in real manufacturing wage and the Mexico price of tomatoes. U.S. "pull" factors include decreases in population and unemployment and increases in U.S. tomato price.

Torok and Huffman found that there was a considerable effect on real agricultural wage rate in that rates increased as Border Patrol expenditures for apprehension increased. Currency devaluation decreased both U.S. wage rate and tomato price. Significantly, they found that an increase in tariffs on imported tomatoes increases the domestic tomato price and ultimately increased the demand for illegal farmworkers. An important implication of all this is that trade restrictions encourage importation of labor whereas a U.S.-Mexico FTA, by lessening restrictions, should increase the importation of product and reduce the flow of illegals to the U.S.

Although based upon a single crop, the Torok and Huffman research provides an important empirical tool whereby expectations of the effects of the FTA may be framed. Certainly, the case can be made that the FTA may decrease illegal immigration into Texas for the purposes of agricultural labor. However, research by Hill and Pearce of the Dallas Federal Reserve Bank indicates that a large percentage of illegal immigrants in Texas move into construction, hotel and restaurant services, light manufacturing, and food processing industries. The major forces determining the ability of the FTA to affect a lessening of illegal immigration, and thus labor surplus, to Texas will be the capacity for U.S. firms to transfer technology and utilize or improve existing Mexican infrastructure to take advantage of the cheaper labor supplies. Availability of financing to Mexican firms is an important force in this determination.

Potentially opposing trends are possible when the case of displaced Mexican grain farmers and workers is considered. If freer trade results in labor displacement on these and other types of farms in which the U.S. likely holds a comparative advantage (e.g., rice and beans), then the real agricultural wage rate in the U.S. would continue to fall. Lower per worker earnings, in nominal terms, could occur due to less labor hours accumulated by each worker as a result of over-supply.

A similar case may be made for any other agricultural activity in which the U.S. has a comparative advantage, particularly in use of capital-intensive high technology processes requiring little labor or requiring highly skilled labor. Thus, what would happen to the flow of agricultural labor across the border and the supply of agricultural labor in both countries as the result of a U.S.-Mexico FTA depends crucially upon the relative impact of an FTA on the various agricultural

commodities produced and traded by each country. Enactment of an FTA with Mexico would provide a relative cost advantage to the production of labor-intensive as opposed to capital-intensive agricultural commodities in Mexico and create opportunities for Mexican agricultural labor to shift from capital-intensive production and to remain in Mexico instead of migrating north in search of jobs. For this to occur, however, sufficient investment capital would have to become available to allow a rapid enough expansion of capacity and infrastructure in labor-intensive agricultural activities to absorb the additional labor. Consequently, the short-run net effect of a U.S.-Mexico FTA that excludes labor considerations would likely be increased migration of Mexican labor to the U.S. until sufficient capital investment created adequate opportunities for domestic labor in Mexico.

U.S. agribusiness expansion into Mexico, however, could reduce any short-run increase in the flow of illegals into the U.S. What to do about such a migration increase must be dealt with in some way if not in the provisions of a negotiated FTA. Choices include a guestworker program or simply increased illegal immigration. Illegal immigration appears to be rising in any event. There were about 1.6 million apprehensions nationwide in FY 1986 and a drop to 800,000 in 1988, with perhaps half of the drop attributable to SAW legalization (INS). When apprehensions again reach 1.2 million as they may in FY 1991, illegal immigration will likely have reached its pre-IRCA level. A U.S.-Mexico FTA which would rely on Mexican agribusiness expansion to hire displaced agricultural workers could be expected to add to illegal immigration. Considerable expansion of labor-intensive production operations by Texas firms is already occurring to some extent. Similarly, many Texas firms are beginning production in Mexico or are purchasing agricultural product from Mexico for importation to Texas-based processing facilities.

PRIORITY AGRICULTURAL LABOR ISSUES FOR THE NEGOTIATIONS

As trade barriers are lowered and goods flow more freely between the U.S. and Mexico, impacts on agricultural prices production, trade, and incomes can be expected. Such impacts, however, will undoubtedly have important impacts on the supply, demand, and cost of agricultural labor in both countries. Consequently, even if immigration and labor issues are explicitly excluded from the U.S.-Mexico negotiations, labor issues will nonetheless be highly important as the negotiations proceed. The supply of neither legal nor illegal laborers in Texas appears to have diminished in the face of IRCA, potentially the most sweeping U.S. labor legislation in recent years. Agribusiness and farm labor contractors will continue to utilize entrepreneurial behavior to cut costs to maintain a competitive position for agriculture. Three of the priority issues for agricultural labor to be clarified and monitored during the negotiations include the following:

Issue 1: Relative Commodity Effects of an FTA with Mexico

The effects of a U.S.-Mexico FTA on agricultural labor in Texas will ultimately depend upon which agricultural activities/commodities are included in the final agreement and the relative impact of the FTA on the markets for each commodity. The best case scenario from the perspective of agricultural labor in Texas would most likely include freer trade for labor-intensive crops and retention of protectionary restrictions on more capital-intensive production commodities such as grains, beans, and rice. This might serve to restrict the supply of agricultural labor in Texas enough to put into motion a series of improvements for laborers resulting from a contracting labor supply. Higher wages and better benefits and working conditions would be more likely under such a scenario.

The worst case scenario for agricultural labor would be an agreement which frees up capital-intensive commodity trade while maintaining restrictions on labor-intensive activities. This would exacerbate the plight of agricultural workers by encouraging continued immigration of illegals and creating the potential for a glut of workers. Mexican officials have suggested informally that they would like to exclude corn, beans, and some other more capital intensive agricultural commodities from the negotiations. The consequence could well be an increase in labor cost in the U.S.

Issue 2: U.S. Capital and Investment in Mexico

If the FTA significantly reduced investment risk in Mexico as some suggest will be the case, large-scale movement of U.S. firms into Mexico for production and or massive infusion of U.S. capital and technology could drastically alter the results of a U.S.-Mexico FTA and move them more toward those of the first scenario discussed above, i.e., a restriction of agricultural labor supply in the U.S. and an increase in labor cost.

Issue 3: Texas Response to Agricultural Labor Issues

Many of the myriad of factors which are linked to the agricultural labor issues that would arise from a U.S.-Mexico FTA can be controlled to a great extent by the State of Texas through legislative, commission, administrative, and regulatory processes. Key issues such as minimum wage unemployment insurance, workman's compensation, taxation, water rights, pesticide application, transportation regulation, and health and safety standards are all under state control to a large extent and impact upon the profitability of agricultural production in Texas and its competitive position relative to Mexico. Likewise, they are the determinants of a quality work environment and equitable economic treatment of agricultural laborers in Texas. The Animal Plant Health Inspection Service and the Federal Grain Inspection Service of the U.S. Department of Agriculture monitor quality and insect and disease levels on imported animals, plants, grains, and produce. Also, the Food and Drug Administration regulates pesticide residues and human health factors. These federal agencies are, therefore, in control of many other important factors which impact agricultural labor through quality standards imposed upon imported agricultural products. Texas can prepare to respond to the final U.S.-Mexico Free Trade Agreement by putting into place the mechanisms to evaluate FTAs impacts on agribusiness and agricultural laborers. The opportunity to respond positively will result from prudent assessments and well developed plans of action to support the sectors of agriculture which represent the highest collectively determined priorities for Texas.

REFERENCES

- Associated Press (AP) Release, January 29, 1991.
- California Institute for Rural Studies, "Farm Labor: Overview of 1989," *Rural California Report* 2(1):1-2, January 1990.
- California Institute for Rural Studies, "It's Official: No RAW Visas Needed," *Rural California Report*, 2(2):8-9, April 1990.
- Duffield, J.A. *Estimating Farm Labor Elasticities to Analyze the Effects of Immigration Reform*, U.S. Department of Agriculture, Economic Research Service Staff Report No. AGES 9013, February 1990.
- Goodwin, H.L. Jr. "Anticipated Impacts of Immigration Reform on Texas Agriculture," Presentation to the Texas Agricultural Forum, Austin, Texas, March 11, 1987.
- Goodwin, H.L. Jr. "Entrepreneurship, Sanctions, and Labor Contracting: Discussion," *Southern Journal of Agricultural Economics*, forthcoming, July 1991.
- Goodwin, H.L., Jr. and J.K. Thomas, "Agricultural Labor in the Vegetable and Citrus Industries of the Texas Lower Rio Grande Valley: A Preliminary Report," Department of Agricultural Economics, Texas A&M University, DIR 83-5, August 1985.
- Gunter, L. "State of Georgia Report to Western Regional Coordinating Committee WCC-76," Orlando, Florida, February 10-12, 1991.
- Hill, J.K. and J.E. Pearce, "Enforcing Sanctions Against Employers of Illegal Aliens," *Dallas Fed Economic Review*, Federal Reserve Bank of Dallas, May 1987, pp. 1-17.
- Jones, R.C. *Patterns of Undocumented Migration: Mexico and the United States*. (Totowa, New Jersey: Rowman and Allenheld, 1984).
- Martin, P.L. "Summary of Commission on Agricultural Workers Hearings in Weslaco, Texas on January 16-17, 1991," Memorandum to the author, January 22, 1991.
- Mines, R. "Commission on Agricultural Labor Report to Western Regional Coordinating Committee WCC-76," Orlando, FL, February 10-12, 1991.
- Oliveira, V. *The Agricultural Work Force of 1987*. U.S. Department of Agriculture, Economic Research Staff Report, May 1990.
- Polopolous, L. and R.E. Emerson, "Entrepreneurship, Sanctions and Labor Contracting," *Southern Journal of Agricultural Economics*, forthcoming July, 1991.
- Rosenberg, H.R. and J.M. Perloff, "Initial Effects of the New Immigration Reform Law on California Agriculture," *California Agriculture* 42(3):28-32, May-June 1988.
- Torok, S.J. and W.E. Huffman, "U.S.-Mexican Trade in Winter Vegetables and Illegal Immigration," *American Journal of Agricultural Economics* 68(2):246-260, May 1986.
- U.S. Immigration and Naturalization Service. *Provisional Legalization Application Statistics*. Statistics Division, Office of Plans and Analysis. December 22, 1990.

Table 1. Employing Units and Numbers of Employees (Field, Harvest, and Packing Labor) in Texas Agriculture by Quarter, 1986 and 1989.*

Quarter	<u>Farm Labor Contractors</u>		<u>Fruit and Veg. Firms</u>		<u>All Texas Agriculture</u>	
	Units	Employees	Units	Employees	Units	Employees
1/86	181	3647	448	15279	4330	49919
1/89	366	7924	528	17592	6736	61107
2/86	196	5141	471	15537	4831	53559
2/89	360	10554	541	20301	6769	68278
3/86	213	2662	480	11234	5157	50900
3/89	362	3939	553	11214	6875	58000
4/86	227	3496	485	14786	5284	53506
4/89	376	5601	548	15879	7093	64092

* Reporting units and numbers of employees are for those covered by unemployment insurance. Select sectors of agriculture shown.

Source: Texas Employment Commission. Undisclosed data.

Table 2. Percentage Change in Employing Units and Numbers of Employees (Field, Harvest and Packing Labor) in Texas Agriculture, by Quarter, 1986 to 1989.*

Quarter	<u>Farm Labor Contractors</u>		<u>Fruit and Veg. Firms</u>		<u>All Texas Agriculture</u>	
	Units	Employees	Units	Employees	Units	Employees
1	+102.2	+117.3	+17.8	+15.1	+55.6	+22.4
2	+83.7	+105.3	+14.9	+30.7	+40.1	+27.5
3	+70.0	+48.0	+15.2	0	+33.3	+13.9
4	+65.6	+60.2	+13.0	+7.4	+34.2	+19.8

* Reporting units and numbers of employees are for those covered by unemployment insurance. Select sectors of agriculture shown.

Source: Texas Employment Commission. Undisclosed data.

Table 3. Percentage of All Texas Agricultural Employers (Field, Harvest, and Packing) Employed by Farm Labor Contractors and Fruit and Vegetable Firms, by Quarter 1986 and 1989.

<u>Quarter</u>	<u>Farm Labor Contractor</u>	<u>Fruit and Vegetable Firms</u>
1/86	7.3	30.6
1/89	13.0	28.8
2/86	9.6	29.0
2/89	15.4	29.7
3/86	5.2	22.1
3/89	6.8	19.3
4/86	6.5	27.6
4/89	8.7	24.8

* Reporting units and numbers of employees for those covered by unemployment insurance. Select sectors of agriculture shown.

Source: Texas Employment Commission. Undisclosed data.

