

Appendix C

Questionnaire Results

Questionnaire background information

Ninety-three questionnaires were received by Arizona researchers out of 175 sent out. Respondents categorized the primary activities of their organization. Four categories (crops, livestock, food processing, and finance and marketing) were chosen for aggregation. There were 38 respondents in crops, 33 in livestock sector, 21 in food processing and 22 in financing and marketing. Where the number of responses is lower than these numbers, some respondents did not answer the question. In some cases organizations placed themselves in multiple categories. Where this was the case their responses have been recorded in **both** categories. The "Overall" category provides responses of the full sample. Because of the responses in multiple categories, the four category numbers will not add up to the overall numbers.

Sonoran researchers also conducted a survey with questionnaires similar to Arizona questionnaire. Where possible, responses from the Sonoran questionnaires have been added to provide a contrast to Arizona responses. If a minor question was asked, parentheses will indicate how the **Sonoran Questionnaire** read. Where the identical question was asked both in Arizona and Sonora, there will be no alterations in the printed question. Sonoran researchers conducted their survey so as to have no overlap between categories, so no overall number is given. They tailored their questionnaires to the target group so in many cases where Sonoran responses are represented, not all four categories will be present. Finally, in many cases, direct comparison was not possible for a variety of reasons.

1. What categories below describe the organization and activities of your business or employer?

Organization:	Activities of Organization or Specialization:
Single Proprietorship	9% Banking/Finance
Family Owned and Managed Partnership	32% Broker
Private Company or Corporation	11% Food Processing or Value-added
Joint Venture	5% Dairy
Public Corporation	0% Ranching (cow-calf or yearling)
Cooperative	3% Feedlot Production
Educational Institution	3% Tree or Vine Crop Production
Commodity/Industry Association	3% Vegetable Crop Production
Government	4% Field Crop Commodities
Other	6% Produce Warehousing
	2% Other
	30%

Responses given under "Other" Organizations:

Chamber of Commerce
Trust

Equipment Sales	Livestock Marketing
Seed Production	Ostrich, Process Ostrich Hides
Seed Conditioning	Breed Association
Herbs	Breeding Reg. Cattle
Turgrass Production	Education and Research
Citrus Harvesting	Distributing

Nursery	Premium Dry Dog and Cat Food
Cereal Grain and Seed Marketing	Distributor
Marketing, Fruit and Vegetables	Service to Fresh Fruit and Vegetable Industry
Marketing, Exports	Information
Animal Health	Business Consultant
Herd Health Consulting	Distributor
Ostrich	Information
Ostrich Meat and Leather Sales	Transportation

2. What do you consider the primary products or services you produce, sell or provide?

- Crops**
- Durum wheat, cotton, barley, grain sorghum.
 - Cotton.
 - Business development, protection of water rights, legislative/regulatory review, promotion, education.
 - Greenhouse agriculture, aquaculture, drip irrigation, plasticulture.
 - Feed corn.
 - Farm equipment, new and used, irrigation equipment, rentals, leasing, custom harvesting, Citrus, certified alfalfa seed, certified asparagus seed.
 - Wheat, corn seed.
 - Vegetable seed, herb seed.
 - Celery, lettuce, lettuce mix.
 - Citrus, fresh only.
 - Seed sales and conditioning, contract seed production
 - Specialty vegetables and lettuce, herbs.
 - Citrus (oranges, lemons, grapefruit, tangelo).
 - Bermuda grass, alfalfa, coating, conditioning.
 - Vegetable transplants, flower transplants, citrus seedlings.
 - Citrus.
 - Grains, cotton, seed alfalfa.
 - Milk.
 - Cotton, grains.
 - Alfalfa, cotton.
 - Pecans.
 - Citrus fruit, citrus trees.
 - Wine.
 - Pecans — grower/processor.
 - Wheat, barley, grain, and seed — Farming Co. (all field crops), produce, cotton, grains.
 - Tomatoes, grapes, mangoes, cucumbers, bell peppers.
 - Cotton, wheat, feed grains.
 - Leafy vegetables, watermelon, cantaloupe, honeydew, broccoli, carrots.
 - Tomatoes, grapes, mango, cucumber, bell pepper.
 - Watermelons, honeydews, hard shell squash.
 - Vegetables, pecans.
 - Melons, broccoli, cotton, wheat, citrus.
 - Grower-shipper/processor/mixed fruit and vegetables/agribusiness consulting (Ind.).
- Livestock**
- Protection of livestock industry from disease.
 - Import/export preparation of livestock, herd health consulting, ranch management services, seed stock selection, livestock, order buying, livestock.
 - Ostrich meat, leather, feathers, live ostrich, ostrich eggs.
 - Feeder cattle.
 - Alfalfa, ostrich.
 - Livestock.
 - Seed stock genetics.
 - Feeder cattle, fat cattle, registered breeders.
 - Cattle for slaughter.
 - Regulate animal production industries in AZ.

Arizona-Sonora Agribusiness Study: Questionnaire Results

4. If you are not fluent, does anyone in your organization speak Spanish and English fluently?

- Calves, herd bulls.
- Custom cattle feeding.
- Feeder cattle.
- Milk.
- Dairy products.
- Milk.
- Seedstock, cattle, Herefords, feeder cattle.
- Breeding stock, beefmaster.
- Fluid milk, cream, butter, nonfat dry milk, lactose.
- Cattle.
- Registered Brahman and Hereford cattle
- Slaughter ready cattle.
- Registered breeding stock.
- Feeder cattle.
- Slaughtered, feeder calves.
- Feeder cattle.
- Breeding bulls, breeding heifers, beef.
- Fed cattle.
- Commercial cattle feeding.
- Fat cattle.
- Lamb, wool.
- Eggs, feed, hogs, hay, cattle.

Food Processing

- Students, information.
- Salsas.
- Safe food, fewer animal and plant diseases, pests, stronger AZ ag economy.
- Beverages.
- Manufacture desserts.
- Honey, candle making supplies.
- Green chili, jalapeno, tomatillo, sauces (Mex, Italian), salsa, bell pepper, artichoke.
- Wine.
- Soft drinks.
- Olive oil, artichokes(canned in olive oil), Italian tomatoes.
- Processed meat, snack foods.
- Pro Pal dry dog and cat foods, Sportmix dog biscuit treats.
- Softserve frozen dessert products.
- Gourmet salsa.
- Tomatoes, squashers, peppers, melons, mangoes.

Finance/Marketing

- Business, environment and tax code.
- Information, trade contracts, trade education.
- Demographics and data, surveys, market studies, feasibility studies.
- Promotions, business referrals, community information.
- Produce shipments.
- Operating loans, term loans, deposit relationships.
- Financial services.
- Rural development loans and grants.
- Vegetable distribution.
- Import-export.

3. Do You Speak Spanish (English)?

	Fluent	Some	None	Respondents
Crops	0.08	0.61	0.32	38
Crops	0.36	0.39	0.25	33
Livestock	0.12	0.64	0.24	33
Livestock	0.31	0.23	0.46	13
Food Processing	0.10	0.52	0.38	21
Finance/Marketing	0.17	0.48	0.35	23
Arizona Overall	0.12	0.57	0.31	93

- 5. Do you feel that language is a bigger barrier than cultural differences in trading with Sonora (Arizona)?

Question for Sonorans*: Do you feel that the language difference is a barrier to trade with Arizona?

	Yes	Same	No	Respondents
Crops	0.19	0.19	0.61	36
Crops	0.31	0.00	0.69	32
Livestock	0.41	0.13	0.47	32
Livestock	0.54	0.00	0.46	13
Food Processing	0.38	0.24	0.38	21
Food Processing	0.27	0.23	0.50	26
Finance/Marketing	0.30	0.22	0.48	23
Arizona Overall	0.33	0.20	0.47	90

*Crop and livestock respondents.

6. How often do you make phone or fax connections to Mexico (the US)?

	Often	Some	Never	Respondents
Crops	0.37	0.34	0.29	38
Crops	0.36	0.39	0.24	33
Livestock	0.42	0.42	0.15	33
Livestock	0.82	0.09	0.09	11
Food Processing	0.38	0.33	0.29	21
Food Processing	0.82	0.11	0.07	28
Finance/Marketing	0.48	0.30	0.22	23
Brokers	0.90	0.10	0.00	20
Arizona Overall	0.38	0.38	0.25	93

7. How often do you have difficulty in making desired telecommunication connections?

	Often	Some	Never	Respondents
Crops	0.09	0.54	0.37	35
Livestock	0.19	0.59	0.22	32
Food Processing	0.14	0.52	0.33	21
Food Processing	0.04	0.31	0.65	26
Finance/Marketing	0.13	0.43	0.43	23
Arizona Overall	0.11	0.53	0.36	90

8. Does your business utilize computers?

	Yes	No	Respondents	
Crops	0.89	0.11	38	
Crops	Sonora	0.56	0.44	32
Livestock	0.91	0.09	33	
Livestock	Sonora	0.57	0.43	14
Food Processing	1.00	0.00	21	
Food Processing	Sonora	0.96	0.04	28
Finance/Marketing	0.96	0.04	23	
Brokers	Sonora	1.00	0.00	20
Arizona Overall	0.94	0.06	93	

9. Do you or your business personally utilize the Internet for e-mail or accessing information on the World Wide Web?

	Yes	No	Don't Know	Respondents	
Crops	0.60	0.40	0.00	35	
Crops	Sonora	0.35	0.65	23	
Livestock	0.44	0.56	0.00	32	
Livestock	Sonora	0.14	0.86	7	
Food Processing	0.52	0.48	0.00	21	
Food Processing	Sonora	0.64	0.32	0.04	25
Finance/Marketing	0.64	0.36	0.00	22	
Arizona Overall	0.53	0.47	0.00	89	

10. What was the last computer your business purchased and when was it purchased?

76 of 93 (82%) respondents reported computers.

PCs were 65 of the 76 computers mentioned (85%).

Macs were 8 of the 76 (11%).

38 of the 65 PCs were Pentiums (58%, 50% overall).

Remainder includes a mainframe and two unrecognized brands.

For 22 respondents, their most recent computer was purchased in 1997.

26 purchased in 1996, while 14 purchased in 1995.

Some answers implied continual updating of computer resources.

11. How would you evaluate the current cooling infrastructure in Mexico?

		Sonora				Rest of Mexico			
		Needs Improvement	Don't Know	Respondents	Adequate	Needs Improvement	Don't Know	Respondents	
Crops	0.00	0.75	0.25	32	0.00	0.74	0.26	31	
Livestock	0.10	0.74	0.16	31	0.03	0.80	0.17	30	
Food Processing	0.10	0.60	0.30	20	0.00	0.70	0.30	20	
Finance/Marketing	0.05	0.55	0.41	22	0.05	0.55	0.40	20	
Overall	0.07	0.70	0.23	86	0.02	0.73	0.24	83	

12. What type of irrigation systems do you use? (Crops only, multiple answers)

	Only Flood	42%
Crops	Some Drip	4.5%
Crops	Some Sprinkle	32%
Livestock	Some of "Other"	3%
Livestock	Some Flood	84%

13. What are the two most utilized sources of technical assistance/information for your organization?

	Crops	Livestock	Food Processing	Finance/Marketing	Overall
Own R and D	0.35	0.17	0.44	0.34	0.31
Govt. Agencies	0.11	0.09	0.15	0.20	0.15
Land Grant Universities	0.20	0.30	0.08	0.05	0.19
Other Universities	0.04	0.06	0.08	0.00	0.05
Foreign Inst.	0.01	0.00	0.00	0.05	0.01
R and D of Domestic Competitors	0.04	0.03	0.10	0.00	0.05
R and D of Foreign Competitors	0.00	0.00	0.02	0.02	0.01
Commodity Associations	0.10	0.14	0.05	0.17	0.10
Private Consultants	0.11	0.18	0.08	0.12	0.12
Other	0.03	0.03	0.03	0.05	0.02
Responses (1 or 2 per respondent)	71	66	39	41	176

14. How would you evaluate the present agricultural research information developed for your region?

	Adequate	Adequate for Some Commodities	Deficient	Little Relevance to Local Needs	Other	Respondents
Crops	0.24	0.45	0.21	0.08	0.03	38
Livestock	0.30	0.36	0.21	0.09	0.03	33
Food Processing	0.19	0.31	0.31	0.13	0.06	16
Finance/Marketing	0.25	0.45	0.25	0.05	0.00	20
Overall	0.29	0.41	0.20	0.08	0.02	86

15. How does weather impact the profitability of your organization?

Arizona-Sonora Agribusiness Study: Questionnaire Results

16. Is historical weather data (daily max./min. temperature and rainfall data) available for your local geographic area of interest?

	Yes	No	Don't Know	Respondents
Crops	0.78	0.16	0.05	37
Livestock	0.73	0.17	0.10	30
Food Processing	0.65	0.15	0.20	20
Finance/Marketing	0.78	0.04	0.17	23
Overall	0.74	0.13	0.12	89

c. a new region allows for the expansion of another product?

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.42	0.19	0.26	0.00
Livestock	0.08	0.19	0.54	0.04
Food Processing	0.19	0.19	0.31	0.00
Finance/Marketing	0.61	0.17	0.22	0.00
Overall	0.28	0.19	0.36	0.01

17. When do you generally sell, contract, or forward price your products? (average of % given)

	After Harvest/ Shipment	At Harvest/ Shipment	Less than 1 Month Prior to Harvest/ Shipment	1 to 2 Month Prior to Harvest/ Shipment	2 to 6 Month Prior to Harvest/ Shipment	6 Months or More Prior to Harvest/ Shipment
Crops	27	30	8	2	17	12
Livestock	19	41	9	11	5	14
Food Processing	59	0	5	5	17	13
Finance/Marketing	25	31	5	4	15	11
Overall	27	31	8	6	12	13

18. How important are different geographic regions of production for reducing risk to your organization when:

a. the regions have the same harvest/shipping period?

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.45	0.15	0.24	0.00
Livestock	0.33	0.19	0.37	0.04
Food Processing	0.24	0.24	0.18	0.00
Finance/Marketing	0.76	0.12	0.12	0.00
Overall	0.38	0.18	0.28	0.01

b. the regions have a different harvest/shipping period?

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.41	0.12	0.26	0.03
Livestock	0.23	0.23	0.42	0.00
Food Processing	0.33	0.17	0.22	0.00
Finance/Marketing	0.61	0.11	0.17	0.00
Overall	0.33	0.17	0.32	0.01

19. What are the two greatest risk factors or uncertainties that your organization faces?

	Crops	Livestock	Road Processing	Finance/ Marketing	Overall
Frost	0.16	0	0.12	0.1	0.08
Drought/Heat Stress	0.13	0.31	0.15	0.02	0.18
Hail	0.03	0	0.06	0.02	0.03
Diseases	0.11	0.07	0.15	0.12	0.1
Insects	0.14	0.05	0.06	0.02	0.07
Payment Default	0.09	0.03	0.18	0.24	0.11
Regulations	0.11	0.23	0.09	0.24	0.18
Output Prices	0.11	0.18	0.12	0.12	0.13
Input Prices	0.04	0.05	0	0.02	0.04
Interest Rates	0.01	0.03	0	0.05	0.03
Exchange Rate	0.01	0.06	0	0.02	0.04
Other	0.04	0.02	0.03	0.05	0.04
Responses (1 or 2 per respondent)	70	61	34	42	167

20. Are you concerned about future devaluations of the peso for your business?

	Yes	No	Respondents
Crops	0.51	0.49	37
Livestock	0.72	0.28	32
Food Processing	0.57	0.43	21
Finance/Marketing	0.61	0.39	23
Overall	0.59	0.41	91

21. Have you considered using the Mexican Peso Futures on the Chicago Mercantile Exchange as a way to manage exchange rate risk?

	Yes	No	N.A.	Respondents
Crops	0.05	0.65	0.30	37
Livestock	0.03	0.78	0.19	32
Food Processing	0.10	0.67	0.24	21
Finance/Marketing	0.04	0.57	0.39	23
Overall	0.04	0.68	0.27	91

Arizona-Sonora Agribusiness Study: Questionnaire Results

26. Has the lack of a PACA (Penshabil Agricultural Commodity Act) or similar agreement for other products kept your level of trade with Mexico lower than it would otherwise be?

	Sonora		Rest of Mexico		Other Foreign Country	
	Yes	No	Respondents	Yes	No	Respondents
Crops	0.50	0.50	32	0.53	0.47	32
Livestock	0.72	0.28	29	0.50	0.50	30
Food Processing	0.37	0.63	19	0.44	0.56	18
Finance/Marketing	0.64	0.36	14	0.65	0.35	17
Overall	0.55	0.45	76	0.49	0.51	77
				0.75	0.25	32
				0.24	0.76	29
				0.85	0.15	20
				0.65	0.35	17
				0.53	0.47	78

223. Have you ever visited Sonora (Arizona)?

	Less	Same	More	Respondents

Table 2. Summary of the Number of Respondents

223. Have you ever visited Sonora (Arizona)?

	Less	Same	More	Respondents

		For Business					
		As a Tourist		For Business			
		Yes	No	Yes	No		
Crops		0.78	0.22	32	0.65	0.35	34
Livestock		0.83	0.17	29	0.73	0.27	33
Food Processing		0.85	0.15	20	0.65	0.35	20
Food Processing	Sonora	0.90	0.10	29	0.71	0.29	28
Finance/Marketing		0.91	0.09	23	0.81	0.19	21
Overall		0.82	0.18	83	0.70	0.30	86

24. Did you visit a similar operation to yours?

Table 1. Summary of the main parameters of the three models.

卷之三

29. What impact do you expect a more fully implemented NAFTA to have on your profits in 5 years?

		Yes	No	Respondents
Crops		0.62	0.38	26
Crop	Sonora	0.43	0.57	28
Livestock		0.52	0.48	27
Livestock	Sonora	0.10	0.90	10
Food Processing		0.59	0.41	17
Food Processing	Sonora	0.59	0.41	22
Finance/Marketing		0.55	0.45	20
Overall		0.52	0.48	73

Arizona-Sonora Agribusiness Study: Questionnaire Results

30. How has the 1994 devaluation of the peso affected your profits?

- NAFTA has not had a significant impact on our business nor do we expect it to in the future.
- Ag commodities have decreased in value as a result of NAFTA.
- Mexico ignored NAFTA with regards to cattle shipments.

	Negative Impact	No Impact	Positive Impact	Positive Impact Respondents
Crops	0.22	0.13	0.63	0.03
Crops Sonora	0.39	-	0.03	0.58
Livestock	0.45	0.19	0.23	0.00
Livestock Sonora	0.57	-	0.00	0.13
Food Processing	0.11	0.05	0.79	0.05
Food Processing Sonora	0.28	0.20	0.12	0.24
Finance/Marketing	0.22	0.17	0.48	0.09
Finance/Marketing Sonora	0.42	-	0.53	0.04
Arizona Overall	0.27	0.14	0.50	0.02
				0.06
				84

31. In what way did NAFTA impact your business and what additional effects do you foresee for your business when NAFTA is fully implemented?

Crops

- More competition in citrus fruit.
- Initial implementation of NAFTA stopped my goods to Mexico due partly to lack of understanding of new rules by importers. Also shifted business to suppliers in other states.
- Greater partnership opportunities with Mexican agribusiness entities.
- Very little effect at present because of peso devaluation but in future NAFTA will increase competition with our domestic production.
- As an equipment dealer some transactions and shipments to Mexico were easier. The negative side is the effect that fruit and vegetable imports to the US are pushing local producer's incomes down. This is a major concern.
- Reduced or eliminated duty on imports, will ultimately increase the opportunity for exports to Mexico.
- More competing Mexican citrus.
- Quality issues.
- NAFTA has negatively affected our business because it has facilitated the movement of Mexican citrus in to the US and we have had to compete against cheaper prices.
- Lower prices on domestic sales.
- Made it difficult to export seed into Mexico because of heavier quality regulations.

Livestock

- Opened doors for more Arizona Competition in exports, created more paperwork.
- Increased movement of animals results in increased risk of disease introduction.
- When NAFTA is fully implemented US vehicles and equipment will be easier and cheaper to supply our Mexican corp. We will not have to duplicate vehicles, and equipment in US and Mexico.
- Less paper work, if we could only reduce the fees.
- Livestock can cross border from both directions without tariffs.
- Less tariffs to our company.
- Export fees increased.
- Sonora invoked their certified meat grading system to impose a non-tariff trade barrier.
- I think NAFTA has taken a bad rap, having been confused with fallout from the peso devaluation.
- NAFTA will continue to benefit the ag exports.
- Because we are a small operation and are some distance from the border, I don't foresee much of an impact, either positive or negative.
- Sales of fresh milk and product (cheese) will increase.
- Need more milk products to be moved out of the US.
- If we see more cattle, especially breeding cattle, cross in to Mexico without the high import cost as it is today, we will have increased competition.
- Used to sell breeding stock annually to Mexico but have not sold anything since NAFTA passed.

- I give certification classes for process supervisors of chemically processed foods. We have had a increase of participants since NAFTA.
- Phytosanitary and sanitary problems emerged as tariff barriers declined. Demand for more unified phytosanitary regulations to promote freer trade. Department becoming more involved in international trade issues to promote AZ exports.
- Lowering of duties.
- Might increase potential markets.

Finance/Marketing

- 25 mile free zone, access to diminishing tariff on fresh vegetable to be processed.
- It should be good for the state government in both states.
- Has helped expedite crossings but even this has slowed in 96-97 season due to volume and poor system in place in Mexico. Also lack enough inspectors (USDA, FDA) at border.
- Other than for cantaloupes, no tariff rate impact. Biggest impact is on ease of exporting US inputs and services to Mexican growers.
- Live cattle dumped on US caused all kinds of negative discussions. Tomatoes also dumped in US.
- Mexico has not implemented NAFTA, our import costs are still 50% to Respondents. Mexico will not change unless we get a better form of trade. Their economy is bankrupt.
- Easier and more freight internationally.
- We will be asked to finance companies with production/sales in Mexico.
- Provides more opportunities for business development, more opportunities to make direct and guaranteed loans.
- Increased costs of operations -increased interest of non-professional amateurs, thereby decreasing system efficiency.
- Lessened duty costs.
- Less import duties owed to US customs.
- Paper flow and crossings have improved but have seen and do not see any other improvements.

32. In what ways did the 1994 devaluation of the peso affect your operation or business?

Crops

- No significant impact.
- Created financial instability.
- Slowed export to Mexico.
- Helped our labor force.
- Far less equipment sales.
- Monetary Loss of Funds in Mexico.

Livestock

- Export companies left the Mexican market.
- No affect, except for increasing movement of cattle Northward (other factors were involved, 1.25M in 94, 1.6M in 95).
- Helped our labor force.
- Caused increased cattle exports from Mexico and more demand for our services preparing the cattle to meet USDA import requirements.
- Less packaged milk sold in Mexico from US.
- Made the money worth more and labor cheaper by comparison.
- Reduced customers' ability to purchase.
- Less sales.
- Caused us to cease sales of live cattle to Mexico and extend long-term credits to customers with accounts receivables prior to devaluation.
- It substantially limited the purchasing power of the Mexican people, as it is stabilized and confidence is restored, I see Mexico as a major player for US and AZ products.

Arizona-Sonora Agribusiness Study: Questionnaire Results

- Mexican ranchers have less money to buy herd bulls.
- We didn't feel a direct impact in our business; however, I think the devaluation had a significant negative effect for Mexico as a whole and for AZ businesses of overall types.
- Sales of fresh milk stopped.
- Less product purchased.
- Less interest from Mexico buyers.
- Exports of lactose decreased. Also reduced the amount of non-fat dry milk exported under DEIP.
- Customers could not purchase service.
- Less purchasing power of the peso means we have to decrease cattle prices to sell into Mexico.
- Mexican ranchers have less buying power and consequently purchase fewer breeding animal from me.
- Mexican cattlemen had less dollars to spend on breeding cattle from Arizona.
- Business stopped - they did not pay for cattle.
- Hurt their economy and reduced the sale of meat.
- We sell slaughter cattle to Sonora meat packers, devaluation stopped most of their purchasing power.

Food Processing

- Students from Mexican-owned companies dropped to zero.
- Some companies quit exporting and demanded fewer department service. Other companies wanted more help to cope with the devaluation.
- Big effect. Lost 30% of our business.
- Lost customers.
- Made purchases more efficient. Made Mexican suppliers now want to be in US.
- None, made adjustments with growers.

Finance/Marketing

- Caused growers to try to export work to US, result was lower markets offset by more volume.
- Reduction in overall demand growth for higher priced produce in Mexican national market. Otherwise no effect. Most inputs are priced in dollars and peso items of interest rate rise offset temporary decline of labor costs.
- Interest rates skyrocketed as local banks wrote off Mexican notes.
- We had to close our office in Nogales, AZ.
- Little effect, most freight paid in dollars by US companies.
- Our customers who have peso exposure were weakened.
- Reduced the ability of some borrowers to repay loans.
- Little effect - risk managed around.
- We pay expenses in pesos and sell in dollars, principally. Cannot sell into Mexico, currently only importing.
- Very little. Increased Mexicans' desire to export.
- Curtailed exporting to Mexico.

33. Have you purchased any production inputs (e.g., seeds, breeding livestock, etc.) or received technical assistance from Mexico in the last . . .

	Sonora				Rest of Mexico				Pesticides			
	3 Years		4 to 10 Years		3 Years		4 to 10 Years		Mexico Less		Mexico More	
	Yes	No	Respondents	Yes	No	Respondents	Yes	No	Respondents	Yes	No	Respondents
Crops	0.21	0.79	34	0.15	0.85	33	0.09	0.91	33	0.09	0.91	32
Livestock	0.27	0.73	33	0.17	0.83	30	0.13	0.87	31	0.14	0.86	29
Food Processing	0.16	0.84	19	0.16	0.84	19	0.16	0.84	19	0.21	0.79	19
Finance/Marketing	0.24	0.76	21	0.24	0.76	21	0.10	0.90	20	0.20	0.80	20
Overall	0.20	0.80	86	0.14	0.86	83	0.09	0.91	81	0.11	0.89	79

34. If you have ever traded or done business in any foreign country (including Mexico), how have these activities changed from five years ago to the present time?

Selling in the export market?

	Increase	Decrease	No Change	Responses
Crops	0.60	0.24	0.16	25
Livestock	0.45	0.40	0.15	20
Food Processing	0.93	0.07	0.00	14
Finance/Marketing	0.30	0.60	0.10	10
Overall	0.57	0.30	0.13	54

Buying inputs from a foreign country?

	Increase	Decrease	No Change	Responses
Crops	0.50	0.29	0.21	14
Livestock	0.75	0.00	0.25	8
Food Processing	0.82	0.00	0.18	11
Finance/Marketing	0.44	0.33	0.22	9
Overall	0.60	0.17	0.23	30

Producing goods in a foreign country?

	Increase	Decrease	No Change	Responses
Crops	0.63	0.25	0.13	8
Livestock	0.00	0.00	1.00	1
Food Processing	1.00	0.00	0.00	4
Finance/Marketing	0.80	0.20	0.00	5
Overall	0.73	0.18	0.09	11

35. Are production practices different in Mexico compared to the US regarding the quantities used of the following inputs?

Arizona-Sonora Agribusiness Study: Questionnaire Results

36. Please indicate the importance of the following areas you think should be considered to enhance Arizona and Sonora's potential as an agribusiness industry.

a. Better development of infrastructure to port of Guaymas.

	Mexico Less	Mexico Same	Mexico More	No Opinion	Respondents
Crops	0.11	0.23	0.20	0.46	35
Crops	0.31	0.34	0.34	0.00	32
Livestock	0.04	0.04	0.15	0.78	27
Food Processing	0.19	0.06	0.19	0.56	16
Finance/Marketing	0.11	0.26	0.32	0.32	19
Overall	0.10	0.10	0.18	0.61	77

Fungicides

b. Development of a regional International airport at Yuma to facilitate transportation of perishable products.

	Mexico Less	Mexico Same	Mexico More	No Opinion	Respondents
Crops	0.06	0.29	0.15	0.50	34
Crops	0.34	0.44	0.22	0.00	32
Livestock	0.04	0.04	0.11	0.81	27
Food Processing	0.06	0.19	0.13	0.63	16
Finance/Marketing	0.11	0.21	0.37	0.32	19
Overall	0.07	0.13	0.16	0.64	76

Growth Regulators/Hormones

c. Legal agreements that offer enforcement of contracts between Arizona and Sonora individuals.

	Mexico Less	Mexico Same	Mexico More	No Opinion	Respondents
Crops	0.09	0.12	0.09	0.71	34
Crops	0.42	0.26	0.29	0.03	31
Livestock	0.10	0.14	0.14	0.62	29
Livestock	0.21	0.57	0.21	0.00	14
Food Processing	0.13	0.06	0.06	0.75	16
Finance/Marketing	0.11	0.17	0.17	0.56	18
Overall	0.09	0.10	0.12	0.69	78

Vaccinations

	Mexico Less	Mexico Same	Mexico More	No Opinion	Respondents
Crops	0.15	0.00	0.03	0.82	33
Crops	0.33	0.26	0.30	0.11	27
Livestock	0.30	0.10	0.10	0.50	30
Livestock	0.29	0.43	0.29	0.00	14
Food Processing	0.06	0.00	0.06	0.88	16
Finance/Marketing	0.24	0.00	0.12	0.65	17
Overall	0.21	0.04	0.06	0.69	77

d. Property right/foreign land ownership issues in Sonora.

	Mexico Less	Mexico Same	Mexico More	No Opinion	Respondents	
Crops	0.46	0.29	0.23	0.00	35	
Livestock	0.44	0.34	0.19	0.00	32	
Food Processing	0.40	0.15	0.40	0.00	20	
Food Processing	0.17	0.42	0.17	0.25	0.00	24
Finance/Marketing	0.57	0.35	0.04	0.04	0.00	23
Finance/Marketing	0.25	-	0.40	-	0.35	20
Arizona Overall	0.43	0.30	0.23	0.01	0.03	88

e. Improvements in transportation and communication infrastructure in Sonora.

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.51	0.23	0.23	0.03
Livestock	0.63	0.34	0.03	0.00
Food Processing	0.45	0.25	0.20	0.00
Food Processing Sonora	0.76	0.20	0.00	0.04
Finance/Marketing	0.74	0.17	0.09	0.00
Arizona Overall	0.53	0.28	0.16	0.00

f. Unified standards and grading.

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.63	0.29	0.06	0.03
Livestock	0.59	0.28	0.13	0.00
Food Processing	0.55	0.10	0.20	0.10
Food Processing Sonora	0.42	0.46	0.04	0.08
Finance/Marketing	0.57	0.26	0.13	0.04
Finance/Marketing Sonora	1.00	-	0.00	0.00
Arizona Overall	0.57	0.26	0.14	0.02

g. Working together to impact federal legislation in Washington D.C. and Mexico City.

j. Streamlining border crossing formalities for individuals.

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.63	0.29	0.06	0.03
Livestock	0.59	0.28	0.13	0.00
Food Processing	0.55	0.10	0.20	0.10
Food Processing Sonora	0.42	0.46	0.04	0.08
Finance/Marketing	0.57	0.26	0.13	0.04
Finance/Marketing Sonora	1.00	-	0.00	0.00
Arizona Overall	0.57	0.26	0.14	0.02

h. Developing and producing more value-added products.

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.42	0.24	0.27	0.00
Livestock	0.48	0.29	0.23	0.00
Food Processing	0.45	0.30	0.20	0.05
Food Processing Sonora	0.42	0.54	0.00	0.04
Finance/Marketing	0.50	0.27	0.14	0.00
Arizona Overall	0.45	0.27	0.24	0.00

i. Annual trade show focused toward Arizona and Sonora Agribusiness.

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.29	0.26	0.43	0.03
Livestock	0.38	0.28	0.25	0.03
Food Processing	0.35	0.40	0.20	0.10
Food Processing Sonora	0.25	0.30	0.40	0.04
Finance/Marketing	0.60	0.36	0.04	0.00
Finance/Marketing Sonora	0.39	0.35	0.26	0.00
Arizona Overall	0.34	0.30	0.34	0.01

j. Streamlining border crossing formalities for individuals.

	Very Important	No Opinion	Not Important	Not Respondents
Crops	0.34	0.38	0.25	0.03
Livestock	0.05	0.40	0.20	0.25
Food Processing	0.35	0.54	0.08	0.04
Food Processing Sonora	0.22	0.26	0.26	0.09
Finance/Marketing	0.95	-	0.05	0.00
Finance/Marketing Sonora	0.23	0.30	0.26	0.09
Arizona Overall	0.23	0.30	0.32	0.08

m. facilitator/clearinghouse to establish trade lead contacts.

Arizona-Sonora Agribusiness Study: Questionnaire Results

- n. listing source for translation providers and services.
 b. pursuing joint production/marketing ventures.

	Very Important	No Opinion	Not Important	Respondents
Crops	0.25	0.41	0.31	0.03
Livestock	0.41	0.31	0.25	0.03
Food Processing	0.33	0.33	0.22	0.00
Food Processing Sonora	0.16	0.52	0.20	0.12
Finance/Marketing	0.18	0.36	0.32	0.00
Finance/Marketing Sonora	0.95	-	0.05	0.00
Arizona Overall	0.29	0.36	0.28	0.00
o. current regulations specific to agriculture.				85

- o. current regulations specific to agriculture.

	Very Important	No Opinion	Not Important	Respondents
Crops	0.45	0.45	0.10	0.00
Livestock	0.55	0.26	0.19	0.00
Food Processing	0.28	0.39	0.28	0.00
Food Processing Sonora	0.33	0.46	0.08	0.04
Finance/Marketing	0.29	0.48	0.19	0.00
Finance/Marketing Sonora	1.00	-	0.00	0.00
Arizona Overall	0.39	0.39	0.20	0.00
			0.02	83

Question 36 responses ranked by Arizona order of importance.

36. Please indicate the importance of the following areas you think should be considered to enhance Arizona and Sonora's potential as an agribusiness industry? (See Appendix A for exact question wording.)

	Crops	Livestock	Food Processing	Finance/Marketing	Arizona
a. Infrastructure to Guaymas port	13	14	1.5	1.1	14
b. Development of Yuma airport	15	15	1.4	1.5	15
c. Enforceable contracts between AZ + Sonora	1	5.6	2.3-4	2	2
d. Property right/land ownership in Sonora	6.7	7	12	4.5	7
e. Sonoran infrastructure improvements	8.9	1	8.9-10	3	4
f. Unified standards and grading	2	3	8.9-10	4.5	3
g. Work together to impact federal legislation	8.9	5.6	6.7	7	6
h. Value-added products	12	9.10	11	6	9.10
i. Annual trade show	14	9.10	13	14	13
j. Streamlining border crossing - products	3	2	1	1	1
k. Streamlining border crossing - individuals	11	13	2.3-4	9	9-10
l. Bilingual Regional Agency - dispute resolution	6.7	12	6.7	10	11
m. BRA - facilitator/clearinghouse	4.5	11	2.3-4	13	8
n. BRA - translation list	10	8	5	12	12
o. BRA - Current regulations	4.5	4	8.9-10	8	5

37. Do you think that Arizona and Sonora can better develop markets outside the region for products grown or processed by

- a. developing a better year round supply of perishable products.

	Yes	Uncertain	No	Respondents
Crops	0.47	0.50	0.03	34
Livestock	0.37	0.57	0.07	30
Food Processing	0.38	0.37	0.05	19
Food Processing Sonora	0.67	0.08	0.25	24
Finance/Marketing	0.65	0.30	0.04	23
Customs	0.42	0.47	0.11	19
Arizona Overall	0.49	0.47	0.04	85

- c. taking advantage of economies of size opportunities.

	Yes	Uncertain	No	Respondents
Crops	0.61	0.39	0.00	33
Livestock	0.74	0.19	0.06	31
Food Processing	0.71	0.29	0.00	17
Food Processing Sonora	0.75	0.08	0.17	24
Finance/Marketing	0.65	0.35	0.00	23
Finance/Marketing Sonora	0.82	0.06	0.12	17
Arizona Overall	0.67	0.31	0.02	84

- d. developing better financing strategies/legal agreements.

	Yes	Uncertain	No	Respondents
Crops	0.79	0.21	0.00	34
Livestock	0.87	0.10	0.03	31
Food Processing	0.83	0.17	0.00	18
Food Processing Sonora	1.00	0.00	0.00	24
Finance/Marketing	0.87	0.13	0.00	23
Finance/Marketing Sonora	0.53	0.16	0.32	19
Arizona Overall	0.82	0.16	0.01	85

- e. developing a common brand label for the region.

Arizona-Sonora Agribusiness Study: Questionnaire Results

38. Which of the following reflects your views of Sonora (Arizona) and the rest of Mexico (USA) for your business.

a. Sonora (Arizona) is a potential or expanding market.

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.49	0.46	0.06	35
Crops	0.64	0.18	0.14	22
Livestock	0.50	0.47	0.03	32
Livestock	0.60	0.10	0.10	10
Food Processing	0.42	0.58	0.00	19
Food Processing	0.50	0.38	0.13	24
Finance/Marketing	0.57	0.43	0.00	23
Arizona Overall	0.45	0.52	0.05	87

b. The rest of Mexico (USA) is a potential or expanding market.

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.32	0.15	0.26	34
Crops	0.20	0.12	0.16	25
Livestock	0.06	0.19	0.31	32
Livestock	0.10	0.10	0.30	10
Food Processing	0.16	0.21	0.21	19
Food Processing	0.13	0.08	0.21	24
Finance/Marketing	0.26	0.00	0.17	23
Arizona Overall	0.15	0.14	0.28	86

c. Sonora (Arizona) is a competitor for my business.

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.24	0.15	0.30	33
Crops	0.39	0.09	0.35	23
Livestock	0.06	0.09	0.38	32
Livestock	0.10	0.10	0.40	10
Food Processing	0.16	0.11	0.16	19
Food Processing	0.17	0.42	0.17	24
Finance/Marketing	0.13	0.04	0.17	23
Arizona Overall	0.12	0.09	0.31	85

d. The rest of Mexico (USA) is a competitor for my business.

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.24	0.15	0.24	33
Crops	0.39	0.09	0.35	23
Livestock	0.06	0.09	0.38	32
Livestock	0.10	0.10	0.40	10
Food Processing	0.16	0.11	0.47	19
Food Processing	0.17	0.42	0.17	24
Finance/Marketing	0.13	0.04	0.17	23
Arizona Overall	0.12	0.09	0.31	85

e. Agribusiness opportunities are better in Sonora (Arizona) than the rest of Mexico (USA)

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.06	0.21	0.53	34
Crops	0.08	0.17	0.25	12
Livestock	0.22	0.38	0.03	32
Livestock	0.13	0.00	0.38	8
Food Processing	0.16	0.16	0.53	19
Food Processing	0.08	0.04	0.46	24
Finance/Marketing	0.09	0.17	0.39	23
Arizona Overall	0.14	0.24	0.49	86

39. Do you think it is possible for Arizona and Sonora to increase the economic viability of the region's Agribusiness Industry by working together?

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.64	0.33	0.03	33
Crops	0.90	0.00	0.10	29
Livestock	0.77	0.23	0.00	31
Livestock	1.00	0.00	0.00	14
Food Processing	0.84	0.16	0.00	19
Food Processing	0.65	0.00	0.35	26
Finance/Marketing	0.64	0.36	0.00	22
Arizona Overall	0.72	0.27	0.01	85

40. Food Products processed in Mexico

a. utilize the same processing technology as in the US.

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.18	0.03	0.47	34
Crops	0.16	0.16	0.41	32
Livestock	0.20	0.25	0.25	20
Food Processing	0.08	0.40	0.16	0.00
Food Processing	0.15	0.20	0.36	25
Finance/Marketing	0.18	0.14	0.36	22
Arizona Overall	0.16	0.13	0.33	87

b. undergo the same food safety precautions as in the US?

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.18	0.06	0.27	33
Crops	0.19	0.16	0.09	32
Livestock	0.15	0.05	0.25	20
Food Processing	0.08	0.36	0.20	0.00
Food Processing	0.18	0.05	0.32	25
Finance/Marketing	0.17	0.09	0.24	22
Arizona Overall	0.17	0.09	0.24	86

Arizona-Sonora Agribusiness Study: Questionnaire Results

c. need FDA or USDA certification to be accepted by US consumers, even if the processing technology and safety precautions are the same as those used in the US?

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.44	0.26	0.03	34
Livestock	0.50	0.25	0.13	32
Food Processing	0.35	0.30	0.15	20
Food Processing Sonora	0.29	0.33	0.13	24
Finance/Marketing	0.45	0.27	0.18	22
Arizona Overall	0.44	0.25	0.21	87

41. Phyto-sanitary requirements at the border are more political than scientifically based.

- Do not trust the Mexican Government.
- Risk/cost factor.

Food Processing

	Strongly Agree	No Opinion	Strongly Disagree	Respondents
Crops	0.39	0.18	0.33	33
Livestock	0.29	0.19	0.32	31
Food Processing	0.15	0.25	0.50	20
Food Processing Sonora	0.33	0.33	0.17	24
Finance/Marketing	0.48	0.17	0.26	23
Arizona Overall	0.31	0.20	0.37	86

Financing

42. Have you ever made any direct loans or invested in any Mexican business activities?

	Sonora			Rest of Mexico		
	Yes	No	Respondents	Yes	No	Respondents
Crops	0.67	0.33	12	0.43	0.57	7
Livestock	0.71	0.29	7	0.50	0.50	4
Food Processing	0.60	0.40	5	0.50	0.50	4
Finance/Marketing	0.67	0.33	12	0.56	0.44	9
Overall	0.65	0.35	26	0.47	0.53	17

42a. Having made direct loans or invested in Mexican business activities, what are your basic requirements for Mexican loans?

Crops

- Non-revocable letter of credit.
- Contract to purchase and a check from the entity as security.
- Contract on production allowing for deduction of loan upon delivery and settlement of crop.

Livestock

- Character of the borrower is weighted equal to collateral.
- Money safe with people I know.
- Trust.

Food Processing

- Heavy selling, good contracts.

Finance/Marketing

- Contract and collateral if available.
- Any business built on trust, consideration and cooperation.
- Secured in US assets or guaranteed by major Mexican financial institution.
- Reputation.
- Contract registered in Mexico, collateral if available.
- We no longer invest in Mexico.

42b. If you have not made any direct loans or invested in any Mexican business activities, why not?

Crops

- Do not trust the Mexican Government.
- Risk/cost factor.

Food Processing

- Very risky.

Finance/Marketing

- Issues regarding securing assets.
- Work through American growers.

Livestock (26 AZ and 14 Sonoran livestock respondents)

43. What are your primary concerns in leasing pasture to Sonorans (Arizona) or sending live cattle to Sonora (Arizona) for grazing? Indicate the importance of each concern.

	Very Important	Important	Not Important
Brand registration concerns	Arizona 0.40 Sonora 0.66	0.40 0.17	0.08 0.17
Re-entry risk/concerns (e.g., quarantine, legalities of ownership)	Arizona 0.73 Sonora 0.77	0.27 0.08	0.00 0.15
Grazing contract concerns (e.g., adequate water, grass, health care)	Arizona 0.58 Sonora 0.50	0.31 -	0.00 0.15
Method of payment/Fraud	Arizona 0.65 Sonora 1.00	0.27 0.00	0.04 0.00
Animal health risk in Sonora (Arizona) or herd health risk in Arizona (Sonora)	Arizona 0.58 Sonora 0.33	0.31 0.17	0.00 0.50

44. Have you ever sold live cattle to Mexico?

	Livestock	Sonora	Rest of Mexico	Both	None	Respondents
	0.38	0.04	0.35	0.23	26	

45. Have you ever shipped live cattle for grazing to Sonora (Arizona) (i.e., retained ownership) with the intent to return them to Arizona (Sonora)?

1 out of 26 Arizonans.

1 out of 14 Sonorans.

46. If you are a feedlot operator, about what percentage of your feeder cattle originate from Sonora?

	Respondent	5 Years Ago	Last 2 Years
	#1	0	30
	#2	5	6
	#3	80	65
	#4	10	15
	#5	15	25
	#6	30	2

47. How do Sonoran raised calves perform relative to Arizona raised calves in Arizona feedlots

	Better	About the Same	Worse	No Opinion	Respondents
Arizona	0.05	0.36	0.23	0.36	24
Sonora	0.08	0.64	0.14	0.14	14

For Firms Doing Business With Mexico

48. What are the primary products your business has exported to Mexico in the last 3 years and about what percentage do these exports make of your total business sales?

Crops

- Cotton pickers (mostly Sonora, 2%), combines (1%), tractors (2%), parts (3%), rentals, (Monterrey, 2%).
- Asparagus seed (Caborca, Baja CA), alfalfa seed (Caborca, Baja CA).
- Bunching onion seed (Sonora, 2%), radish seed (Sonora, 1%), other vegetable seeds (various, 1%).
- Fresh citrus (Nogales, Mexicali, <1%).
- Alfalfa, sudan, vegetable, oats, barley.
- Bermudagrass seed (Sonora, 5%), safflower (1%).
- Transplants (Sonora, 5%).
- Pecan meats (Mexico City, 1%).
- Pecans (Chihuahua, <1%).
- Barley and wheat seed (Sonora & Baja CA, 3.5% Pre-NAFTA).
- Melons (Nogales, 1%).

Livestock

- Cattle (Sonora).
- Livestock services (Sonora, Chihuahua, Baja, Coahuila, Durango, 85%), horses (5%), bulls and heifers (10%).
- Live ostriches (Sonora, 20%), raw hides (Sonora, 90%).
- Ostrich hides (Chihuahua, Leon).
- Breeding stock.
- Bulls (Nogales, 10%).
- Live cattle (Hermosillo, Sonora, 1%), breeding cattle (Hermosillo, Sonora, 1%).
- Herd bulls.
- Bulls (Sonora, >10%), bull semen (all of Mexico, >10%).
- Lactose (all of Mexico, 5%).
- Breeding bulls (Sonora, 20%).
- Breeding cattle.
- Live cattle (Sonora, Mexicali, >10%).
- Fat cattle (Sonora, Baja, 5%).

Food Processing

- Beverages (Sonora, Chihuahua, Sinaloa, Baja, 40%), milk (Sonora, 20%), soups (Sonora, 20%).
- Cheesecake (Mexico, 5%).

Finance/Marketing

- Financial services (1%).
- Processing equipment (Eastern Mexico, 10%), post harvest equipment (Eastern Mexico, 10%), grains (Central Mexico, 70%), fruit.

49. What are the main products or inputs your business has imported from Mexico in the last 3 years and about what percentage have these products made of your total products purchased or grown (include products grown in Mexico)?

Crops

- Bermudagrass (5%).
- In-shell pecans (Sonora, Chihuahua, Torreon, Durango, 10-20%).
- Pecans/inshell (Sonora, Chihuahua, 4%).
- Tomatoes (Sinaloa, Baja CA, 20%), grapes (Sonora, 10%), mango (Jalisco, 10%), cucumbers (Sinaloa, 10%), squash (Sonora, Sinaloa, 10%), peppers (Sinaloa, Sonora, 8%).
- Dry onions (E. Mexico, 7%), melon (E. Mexico, 7%), peppers (E. Mexico, 7%), chili (E. Mexico, 7%), mango (S. Mexico, 7%).

Livestock

- Stocker cattle (Sonora, 10%), horses (Sonora, Durango, 90%).
- Cattle (Sonora, 5%).
- Cattle (Sonora, 5%).
- Live cattle (Sonora, 75%, rest of Mexico, 5%).
- Feeder cattle (Nogales, San Luis, 15%).
- Feeder cattle (25-30%).
- Feeder cattle (Sonora, 4%, rest of Mexico, 1%).

Food Processing

- Green chili (Nueva Leon, Casa Grande), jalapeno (Palomas), tomatillo (Culiacan), bell pepper (Culiacan), artichokes (Caborca).
- Olives (Sonora, Baja, 60%), artichokes (Sonora, 100%).

Finance/Marketing

- Vegetables (Sinaloa, Chihuahua, Sonora, 100%).
- Squashes (Sinaloa, 18%), peppers (Sinaloa, 5%).

50. About how many truckloads of your product cross the border every year?

and

52. What is the average time it takes for a load of your product to cross the border?

Crops

- Number of shipments:
- Crossing time range:
- Weighted average:

Note: Does not include largest (1000) shipper because no crossing time given.

Livestock

- Number of shipments:
- Crossing time range:
- Weighted average:

Note: Does not include 2 largest delays because no shipments number given, 78% one shipper at 3 days.

Arizona-Sonora Agribusiness Study: Questionnaire Results

55. What is the longest delay you have ever had in crossing the border with your products?
 What was the explanation/cause for the delay?
 What was the cost of the delay to you?
 When did the delay occur?

	Longest Delay	Explanation	Cost \$	Date
Crops	6 weeks 1 day	Improper labeling. Paperwork phytosanitary clearance, test information, then order was canceled. Change of phytosanitary regulations.	1000 30000	Nov-91 Spring, 1996
Livestock	30 days 14 hours 1 day 3 days	Health testing delays. Could not find vet. Political, Mexico City. Ear ticks.	1000-1500 3000 2000	Jul-92 1997 Winter 95 Jul-92

51. Which port of entry/exit do you generally utilize?

	Overall	Crops	Livestock	Food Processing	Finance/Marketing
Nogales AZ	26	8	10	6	8
Yuma AZ	7	5	2	0	1
Mexicali CA	5	4	1	0	1
El Paso TX	4	2	2	2	0
Douglas AZ	4	0	3	1	0
Presidio TX	2	1	1	1	0
Columbus NM	2	0	1	1	0
Other	3	0	4	1	0
Respondents	37	14	15	7	9

Other ports include: Naco, Laredo and Del Rio.

53. How often do you experience problems in moving your products across the border?

	Always	Frequently	Occasionally	Never	N.A.	Respondents
Crops	0.00	0.14	0.79	0.00	0.07	14
Livestock	0.07	0.07	0.53	0.20	0.13	15
Food Processing	0.13	0.25	0.50	0.00	0.13	8
Finance/Marketing	0.11	0.11	0.56	0.00	0.22	9
Overall	0.08	0.14	0.57	0.08	0.14	37

54. What agencies have been most difficult to clear in moving your products across the border? (e.g., Customs, FDA, APHIS, etc.)

Crops (5 out of 26)

Livestock (6 out of 33)

- Customs
 - Overall
 - APHIS
 - Customs
 - Customs
 - Customs
 - Customs
 - SACRE/APHIS
 - Customs and vet
 - State vet, Lab
 - APHIS
 - Customs
 - Customs
 - Customs
 - Customs (Mexican and American)
 - Customs, Mexican brokers, propinos
 - Customs, APHIS
 - FDA, DEA
 - Customs
 - Customs, Mexican and American
- Food Processing** (3 out of 15)
- Finance/Marketing** (6 out of 18)
- Crop**
- 1 in Sonora - 50/50 joint venture with foreign partner.
 - San Luis, Mexicali, unspecified.
- Livestock**
- 3 in Sonora - Respondents' own financing
 - 1 in Sonora and rest of Mexico - Respondent's own financing.

56. Do you have an employee that is primarily devoted to taking care of border crossings?
- | | Yes | No | Respondents |
|-------------------|------|------|-------------|
| Crops | 0.54 | 0.46 | 13 |
| Livestock | 0.13 | 0.88 | 16 |
| Food Processing | 0.67 | 0.33 | 6 |
| Finance/Marketing | 0.67 | 0.33 | 9 |
| Overall | 0.40 | 0.60 | 35 |
- If above is yes, what city and State is your primary broker located in?**
- 22 responses:** Nogales (14), Douglas (3); Laredo, El Paso, Presidio, San Luis, Mexicali, unspecified.

58. Do you have any production, joint venture agreements or similar activities in Mexico? If yes, about what percent of the financing has been provided by . . . ?

Crop

Food Processing (3 out of 15)

- Customs
- Customs
- Customs/FDA

Finance/Marketing (6 out of 18)

- 1 in Sonora - 50/50 joint venture with foreign partner.
- 3 in Sonora - Respondents' own financing
- 1 in Sonora and rest of Mexico - Respondent's own financing.

Food processing

- 1 in Sonora - 5% own organization financing, 95% foreign partner joint venture.
- 1 in both: 1 in Sonora - 5% own financing, 70% bank financing, 25% joint venture with national partner.
- 1 in rest of Mexico - 1% own financing, 99% joint venture with national partner.

59. How many "owners" generally handle your product before it is sold "abroad"?

	Respondents	Average	Median	High
Crops	10	1.20	1	2
Livestock	8	1.50	1	3
Food Processing	7	1.21	1	2.5
Finance/Marketing	6	1.00	1	1
Overall	22	1.34	1	3

60. In your transactions with Mexico, what percentage are made in US dollars?

	100%	Other
Crops	13	30%, 90%
Livestock	15	30%, 90%
Food Processing	4	90%(2)
Finance/Marketing	2	99%, 97%, 95%
Overall	33	30%, 90%(3), 95%, 97%, 99%

Who takes the risk of a price change?

	Arizona Side	Sonoran Side	Joint	Broker	Respondents
Crops	0.33	0.42	0.17	0.08	12
Livestock	0.25	0.63	0.00	0.13	8
Food Processing	0.29	0.29	0.43	0.00	7
Finance/Marketing	0.25	0.50	0.25	0.00	8
Overall	0.27	0.54	0.12	0.08	26

Who takes any exchange rate risk?

	Arizona Side	Sonoran Side	Joint	Broker	Respondents
Crops	0.27	0.55	0.09	0.09	11
Livestock	0.22	0.67	0.00	0.11	9
Food Processing	0.29	0.43	0.29	0.00	7
Finance/Marketing	0.00	0.89	0.11	0.00	9
Overall	0.18	0.68	0.07	0.07	28

Who takes the risk of a load that doesn't clear border inspection?

	Arizona Side	Sonoran Side	Joint	Broker	Respondents
Crops	0.27	0.55	0.00	0.18	11
Livestock	0.64	0.18	0.09	0.09	11
Food Processing	0.33	0.50	0.17	0.00	6
Finance/Marketing	0.33	0.67	0.00	0.00	9
Overall	0.41	0.41	0.07	0.10	29

Who provides the cooling facilities (if necessary) in Mexico?

	Arizona Side	Sonoran Side	Joint	Broker	Respondents
Crops		0.25	0.75	0.00	4
Livestock		1.00	0.00	0.00	1
Food Processing		0.33	0.67	0.00	3
Finance/Marketing		0.00	1.00	0.00	5
Overall		0.25	0.75	0.00	8

61. If your transactions with Mexico are made in pesos, how are your pesos purchased?

- Exchange.
- Euromex (Banamex currency exchange house, Houston).
- Bank (2).
- Money exchange/broker.
- Bank in Nogales, Sonora by broker.
- Mexibank or Commercial Caso de Cambio.
- In US at border.

62. Does your organization trade or do business with countries other than Mexico?

	Crops	Yes	No	Respondents
Crops		0.89	0.11	18
Livestock		0.31	0.69	16
Food Processing		0.90	0.10	10
Finance/Marketing		0.80	0.20	10
Overall		0.65	0.35	43

If yes, what countries?

	Crops	Argentina	Europe, Asia, China, Japan, S.A.	Canada
Crops		• Italy	• Japan, England	• 65 countries
Livestock		• Argentina	• Japan, Canada	• Australia, France
Food Processing		• Japan, Canada	• S. America, Greece, S. Africa, Canada	• Egypt, Argentina
Finance/Marketing		• Europe, Japan, Hong Kong, S. Korea, Canada, Israel	• Australia, New Zealand, Korea	• Europe, Asia, China, Japan, S.A.
Overall		• Argentina	• Philippines, Australia, Central and South America	• Pacific Rim

Food Processing

	Crops	Argentina	Europe, Asia, S. America	Pacific Rim
Crops		• Argentina	• Europe, Japan, Hong Kong, S. Korea, Canada, Israel	• S. Africa, S. America
Livestock		• Argentina	• Europe, Japan, Hong Kong	• Canada, Japan
Food Processing		• Argentina	• Europe, Japan, Hong Kong	• Pacific Rim, S. America
Finance/Marketing		• Argentina	• Europe, Japan, Hong Kong	• Pacific Rim, S. America
Overall		• Argentina	• Europe, Japan, Hong Kong	• Pacific Rim, S. America

Arizona-Sonora Agribusiness Study: Questionnaire Results

- Thailand, China
 • Switzerland
 • Italy, Spain
Finance/Marketing
- Japan, Canada
 - Italy
 - Japan, England
 - England, Japan
 - Guatemala
 - About 50
 - Canada
- 63. Has your business ever investigated doing trade or business with countries other than Mexico?**
- | | Yes | No | Respondents |
|-------------------|------------|-----------|--------------------|
| Crops | 1.00 | 0.00 | 10 |
| Livestock | 0.25 | 0.75 | 12 |
| Food Processing | 0.80 | 0.20 | 5 |
| Finance/Marketing | 0.44 | 0.56 | 9 |
| Overall | 0.53 | 0.47 | 30 |
- If yes, what countries:**
- Crops**
- Australia, Europe
 - Chile, Argentina
 - Many
 - Canada, Japan
- Livestock**
- Europe
 - S. Africa, S. America
 - Brazil
- Food Processing**
- Europe
- Finance/Marketing**
- Australia, Europe
 - Chile, Argentina

64. How do you contrast trade or service transactions with Mexico (USA) compared to other foreign countries?

c. Receiving/securing timely payments for goods shipped.

	Mexico		(USA) Less Difficult	No Difference	Mexico (USA) More Difficult	Respondents
Crops			0.07	0.14	0.50	0.14
Livestock			0.00	0.00	1.00	0.00
Food Processing			0.22	0.22	0.22	0.00
Food Processing	Sonora		0.31	0.23	0.46	0.00
Finance/Marketing			0.14	0.29	0.29	0.00
Arizona Overall			0.16	0.08	0.48	0.12
						25

d. Government forms and overall paperwork.

	Mexico		(USA) Less Difficult	No Difference	Mexico (USA) More Difficult	Respondents
Crops			0.07	0.00	0.47	0.20
Livestock			0.00	0.20	0.80	0.00
Food Processing			0.22	0.11	0.11	0.44
Food Processing	Sonora		0.40	0.33	0.20	0.00
Finance/Marketing			0.00	0.00	0.25	0.07
Arizona Overall			0.11	0.07	0.39	0.25
						28

e. Securing language and translation services.

	Mexico		(USA) Less Difficult	No Difference	Mexico (USA) More Difficult	Respondents
Crops			0.07	0.00	0.47	0.33
Livestock			0.00	0.17	0.50	0.17
Food Processing			0.11	0.00	0.33	0.33
Food Processing	Sonora		0.36	0.29	0.29	0.22
Finance/Marketing			0.00	0.00	0.13	0.13
Arizona Overall			0.07	0.03	0.45	0.31
						29

f. Managing exchange rate uncertainty.

	Mexico		(USA) Less Difficult	No Difference	Mexico (USA) More Difficult	Respondents
Crops			0.00	0.00	0.80	0.13
Livestock			0.00	0.00	0.60	0.20
Food Processing			0.22	0.00	0.44	0.11
Food Processing	Sonora		0.15	0.38	0.46	0.00
Finance/Marketing			0.00	0.00	0.50	0.38
Arizona Overall			0.07	0.00	0.64	0.14
						28

- a. Finding adequate transportation/shipping services.
- b. Labeling requirements.

Livestock									
g. Assistance from foreign governments.									
	Mexico		Mexico	No	Respond-				
	(USA) Less	Difficult	Difference	(USA) More	ents				
Crops	0.00	0.07	0.50	0.29	0.14	14			
Livestock	0.00	0.00	0.60	0.40	0.00	5			
Food Processing	0.13	0.13	0.38	0.00	0.38	8			
Food Processing Sonora	0.14	0.29	0.50	0.07	0.00	14			
Finance/Marketing	0.00	0.13	0.38	0.38	0.13	8			
Arizona Overall	0.04	0.11	0.48	0.26	0.11	27			
h. Phytosanitary regulations and inspections.									
	Mexico		Mexico	No	Respond-				
	(USA) Less	Difficult	Difference	(USA) More	ents				
Crops	0.07	0.07	0.47	0.33	0.07	15			
Livestock	0.00	0.00	0.67	0.00	0.33	3			
Food Processing	0.11	0.11	0.44	0.11	0.22	9			
Food Processing Sonora	0.20	0.40	0.20	0.20	0.00	15			
Finance/Marketing	0.00	0.25	0.25	0.50	0.00	8			
Arizona Overall	0.08	0.08	0.50	0.23	0.12	26			
65. Exporting to Mexico (US) is easier than importing from Mexico (US) into the US (Mexico)?									
	Mexico		No	Don't Know	Respondents				
	Yes	Same	No	Don't Know	Respondents				
Crops	0.07	0.20	0.27	0.47	15				
Livestock	0.08	0.38	0.31	0.23	13				
Food Processing	0.22	0.11	0.56	0.11	9				
Food Processing Sonora	0.63	0.31	0.06	0.00	16				
Finance/Marketing	0.09	0.27	0.45	0.18	11				
Overall	0.08	0.29	0.32	0.32	38				
For Organizations Not Doing Business With Mexico									
66. Has your organization ever investigated doing business in									
	Sonora		Rest of Mexico						
	Yes	No	Respondents	Yes	No	Respondents			
Crops	0.50	0.50	12	0.55	0.45	11			
Livestock	0.56	0.44	9	0.43	0.57	7			
Food Processing	0.71	0.29	7	0.71	0.29	7			
Finance/Marketing	0.38	0.63	8	0.33	0.67	9			
Overall	0.52	0.48	31	0.48	0.52	29			
67. What are the main reasons why your organization is not doing business in Mexico?									
	Crops								
68. How long has your company been in business in Arizona?									
	Crops			Livestock			Finance/Marketing		
	average 31.3 years (1.80)			average 37.8 years (1.109)			average 35.9 (3-100)		
	Crops - average 31.2			Livestock - average 16.4 (4.53)			Finance/Marketing - average 37.8 years (1.109)		
69. Does your organization belong to any commodity associations, trade groups, or other similar organizations?									
	Crops			Livestock			Finance/Marketing		
	0.12			0.88			33		
	0.13			0.87			31		
	0.32			0.68			19		
	0.27			0.73			22		
	0.23			0.77			83		
70. What kind of information do these organizations provide you for conducting business in Mexico?									
	Crops			Livestock			Finance/Marketing		
	Less than 10			11-50			Greater than 200		
	0.21			0.41			0.15		
	0.58			0.29			0.30		
	0.47			0.06			0.23		
	0.19			0.48			0.54		
	0.40			0.32			0.17		
	Overall			Overall			Overall		
72. Approximately how many employees (full time equivalents for year), including custom and seasonal laborers are required for your operation on an annual basis?									
	Crops			Livestock			Finance/Marketing		
	Crops			Livestock			Finance/Marketing		
	0.21			0.41			0.15		
	0.58			0.29			0.30		
	0.47			0.06			0.23		
	0.19			0.48			0.54		
	0.40			0.32			0.17		
	Overall			Overall			Overall		

74. How many employees does your organization employ compared to 5 years ago?

	Less	Same	More	Respondents
Crops	0.24	0.35	0.41	34
Livestock	0.32	0.26	0.42	31
Food Processing	0.16	0.32	0.53	19
Finance/Marketing	0.23	0.14	0.64	22
Overall	0.25	0.30	0.45	84

75. How do you classify the size of your operation relative to others that sell similar products or services?

	Below Average	Average	Above Average	Respondents
Crops	0.15	0.48	0.36	33
Livestock	0.20	0.40	0.40	30
Food Processing	0.47	0.21	0.32	19
Finance/Marketing	0.14	0.38	0.48	21
Overall	0.26	0.38	0.37	82