

Chapter 8

Overall Survey Results

Survey results directly relevant to individual sectors (i.e., crops, livestock, food processing, and financing and marketing) are presented in chapters 4 through 7. This chapter summarizes results from Arizona and Sonora surveys that are relevant for all four sectors of the agribusiness cluster. Questionnaires used for the survey are presented in Appendices A and B. Please see Appendix C for a detailed listing of responses to all questions. Responses to selected key questions are summarized below.

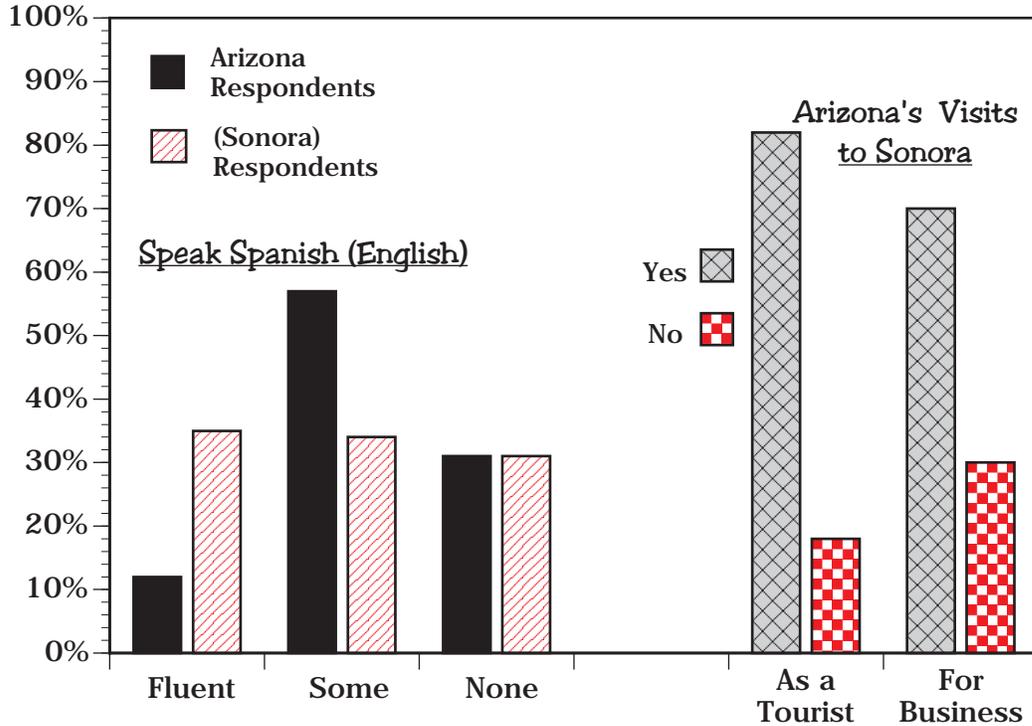
8.1 Status

In this section, responses to questions pertaining to the current status of a participant's business are summarized. To quantify Arizona and Sonora participants' awareness of and interest in opposing states and countries, each participant was asked several questions.

Figure 8.1a indicates that about 70 percent of Arizona (Sonora) participants know at least "some" Spanish (English) and only about 30 percent of participants do not know the other language. 75 percent of Arizona participants and 85 percent of Sonora participants indicated that someone in their organization (including themselves) speaks the foreign (English or Spanish) language fluently. It therefore appears that Arizona-Sonora agribusiness is reasonably well equipped in terms of language.

Also, 82 percent of Arizona participants have visited Sonora at least once and of these 70 percent have visited Sonora for business purposes. 59 percent of Arizona participants have visited a business operation similar to their own during a trip to Sonora, and 52 percent made trips to Sonora to explore the possibility of exporting or forming a joint venture in Sonora. These numbers indicate that survey participants on both sides of the border are well aware of each others state and display aptitude and interest in cross-border agribusiness activities. This is an encouraging sign and speaks well of the Region's agribusiness sector.

Figure 8.1a. Survey Results: Cross Culture Language Fluency and Arizona's Visits to Sonora.



94 percent of Arizona participants and 77 percent of Sonora participants use computers in their business. Almost all individuals in financing and marketing (e.g. brokers) indicated that they use computers in their business. 53 percent of Arizona participants use the Internet for e-mail and/or accessing information on the world wide web. Sonora is a bit lower in this category at 46 percent. Food processing participants from Sonora utilize the Internet more than their Arizona counterparts (64% versus 52%), but are noticeably lower for crops (35% versus 60%), and livestock (14% versus 44%). Overall, about half of the Arizona-Sonora agribusiness respondents are equipped to take advantage of the latest in Internet technology, suggesting this tool could be a very effective way to disseminate information regarding trading regulations and opportunities.

In July of 1997, National Agricultural Statistics Service (NASS) released results from a survey of computer usage and Internet access for US crop and livestock producers. Results showed that 35 percent of Arizona's farmers and ranchers utilize computers for their business, almost twice the 20 percent usage rate for the US. NASS also found that 16 percent of all Arizona ranchers and farmers have Internet access compared to 13 percent for the US. Computer usage and Internet access was found to be almost three times higher from our survey participants than what NASS reported. The NASS survey is representative of all livestock and crop producers in Arizona whereas the population selected for this study was heavily weighted towards individuals that are involved with agricultural trade or hold positions of commodity leadership.

Overall, survey results indicate that agribusiness firms' own research and development, land grant universities (e.g., University of Arizona), and governmental agencies as the three most important sources of technical assistance/information. However, 30 percent of participants indicated that the present agricultural research information available for the Region is either deficient or has little relevance to their needs. Another 41 percent said that present agricultural research information is adequate only for some of the commodities of interest to them. Thus, there appears to be a greater demand for well organized research information targeted at local agribusiness activities and efforts should be made to meet this demand.

Figure 8.1b gives the effects of NAFTA and the 1994 peso devaluation on survey participants. Although it is difficult to untangle the effects of the 1994 Mexican economic crisis and NAFTA, about 20 percent of Arizona and Sonora participants indicated that NAFTA negatively affected their profits. About 40 (45) percent of Arizona (Sonora) participants indicated that the 1994 peso devaluation had a negative effect on their profits. 40 percent of Sonora participants said that the peso devaluation was good for them, mainly due to increased exports to the US.

Figure 8.1b. Survey Results: How has NAFTA and the 1994 Devaluation of the Peso Affected Your Profits?

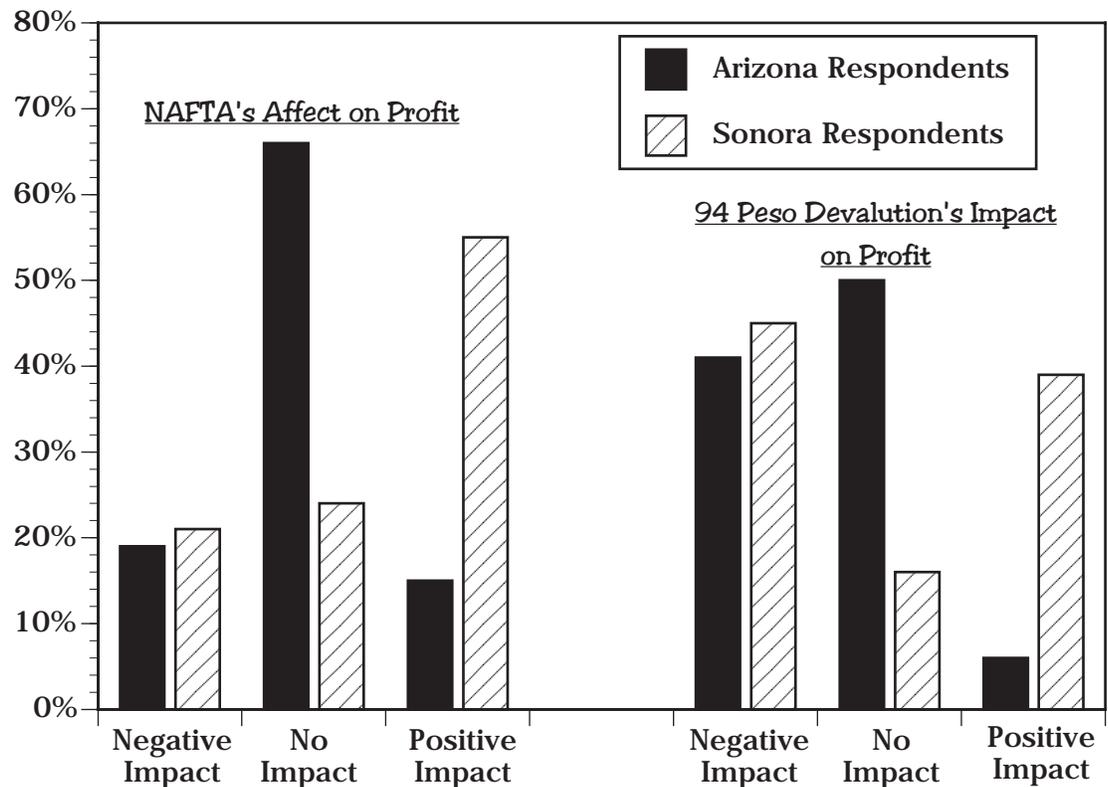
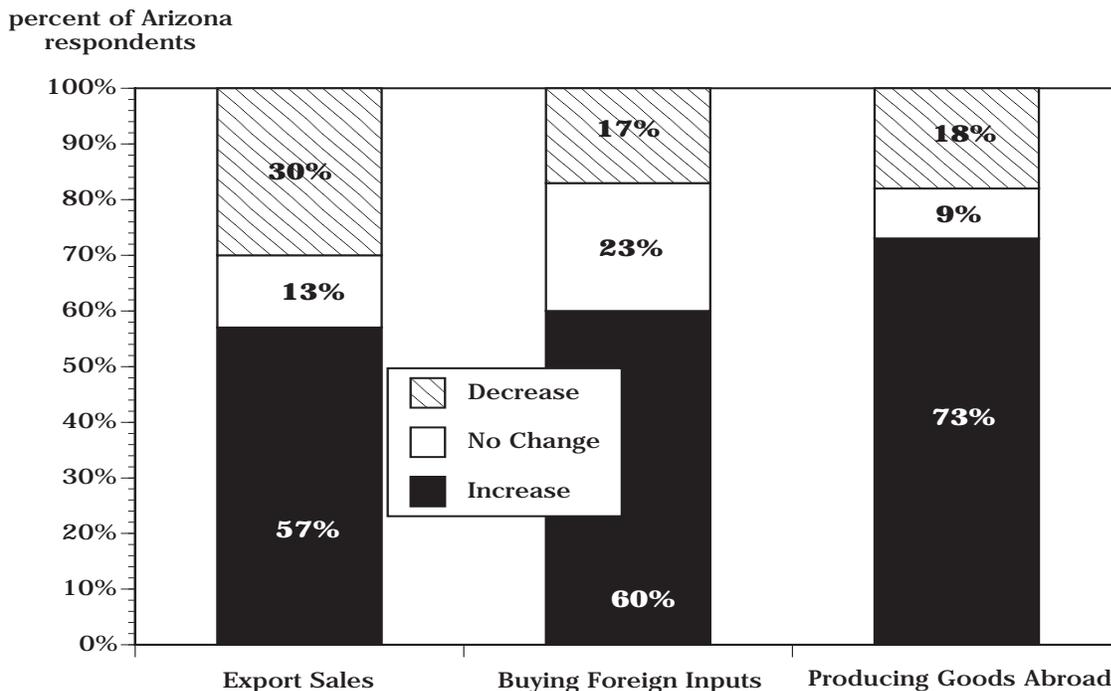


Figure 8.1c describes how trade and foreign business activities have changed for Arizona respondents from five years ago. An overwhelming majority indicated growth for export sales (57%), buying inputs from a foreign country (60%), and producing goods in a foreign country (73%). Arizona’s food processing individuals reported more growth for all three of these activities than any of the other sectors. 93 percent reported an increase in export sales, 82 percent had an increase in buying foreign inputs, and 100 percent indicated that their production of goods in a foreign country has increased. Clearly, trade is more important for agribusiness today than it has been in the past.

Figure 8.1c. Survey Results: 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?



8.2 Perceptions and Implications

This section summarizes participants perceptions regarding NAFTA, the Sonora-Arizona region and actions that can be taken to help enhance the Region’s agribusiness sector.

Respondents were asked to contrast trade and/or service transactions with Mexico to other countries. Of the 29 Arizona respondents who did business with both Mexico and other foreign countries, about 35 percent indicated that, in general, it is more difficult to do business in Mexico compared to other countries. 45 percent of Arizona’s

respondents that have done business with multiple countries indicated that overall paperwork is more burdensome in Mexico than other countries. 43 percent indicated that receiving/securing timely payments for goods shipped is more difficult in Mexico compared to other countries. 35 percent indicated that it is more difficult to find adequate transportation and shipping services in transactions with Mexico relative to other countries.

Some of the main reasons Arizona respondents cited for not currently doing business in Mexico are lack of information and contacts. There is also a general apprehension regarding instability of the peso and legal security. Some indicated that as the Mexican economy grows stronger in future, demand for their high value products should increase.

51 percent of Arizona participants agreed that phytosanitary requirements at the border are more political than scientifically based with only 12 percent disagreeing (37 percent had no opinion). Thus among agribusiness individuals, there is a general consensus that phytosanitary conditions are political and should be put on a more scientific basis. It should also be pointed out that the results could be different if consumer advocacy groups were included in the study.

Reduced barriers at the border may present opportunities for Arizona agribusinesses to diversify risk by expanding to Sonora and the rest of Mexico. 60 percent of crop sector respondents and 88 percent of the respondents in finance and marketing said that different geographic regions of production are important for reducing risk to their organization. Different geographic regions also present opportunities to reduce risk by inter-seasonal diversification. 56 percent of crop producers and 78 percent of finance and marketing individuals said that such opportunities are important to their organizations. Thus, survey results indicate that enhanced opportunities for risk reduction exist by cross border expansion. Efforts should be made to highlight these important opportunities to agribusiness individuals on both sides of the border.

Figure 8.2a presents respondents perceptions of trade and NAFTA. More than 70 percent of participants in both states felt that compared to today, foreign trade will be more important to their business in five years. Only less than 3 percent of all participants indicated that foreign trade will be less important in future. This overwhelmingly indicates that Arizona-Sonora trade linkages should be brought to the forefront of any discussions related to agribusiness.

Figure 8.2a also shows participants perceived effects of a fully implemented NAFTA in five years. About 21 (17) percent of surveyed Arizona (Sonora) individuals believe that NAFTA will have a negative effect on their business. Although more agribusinesses believe that NAFTA will positively increase profits in five years, the belief is much stronger in Sonora than in Arizona - as high as 69 percent of Sonora respondents believe that NAFTA will increase their profits in five years.

Perceptions are also solicited on how agribusinesses in both states view the other state and nation as an agribusiness partner. Figure 8.2b summarizes participants' perceptions regarding how they view the other state and country. Although NAFTA promotes opportunities for partnerships across borders, it is likely that competition will stiffen in some sectors due to NAFTA. Strength of perceptions in figure 8.2b are measured on a scale of -2 to 2 with -2 indicating strong disagreement and 2 indicating strong agreement.

Figure 8.2a. Survey Results: Perceived Impacts of a fully Implemented NAFTA and Importance of Trade to Business in 5 Years?

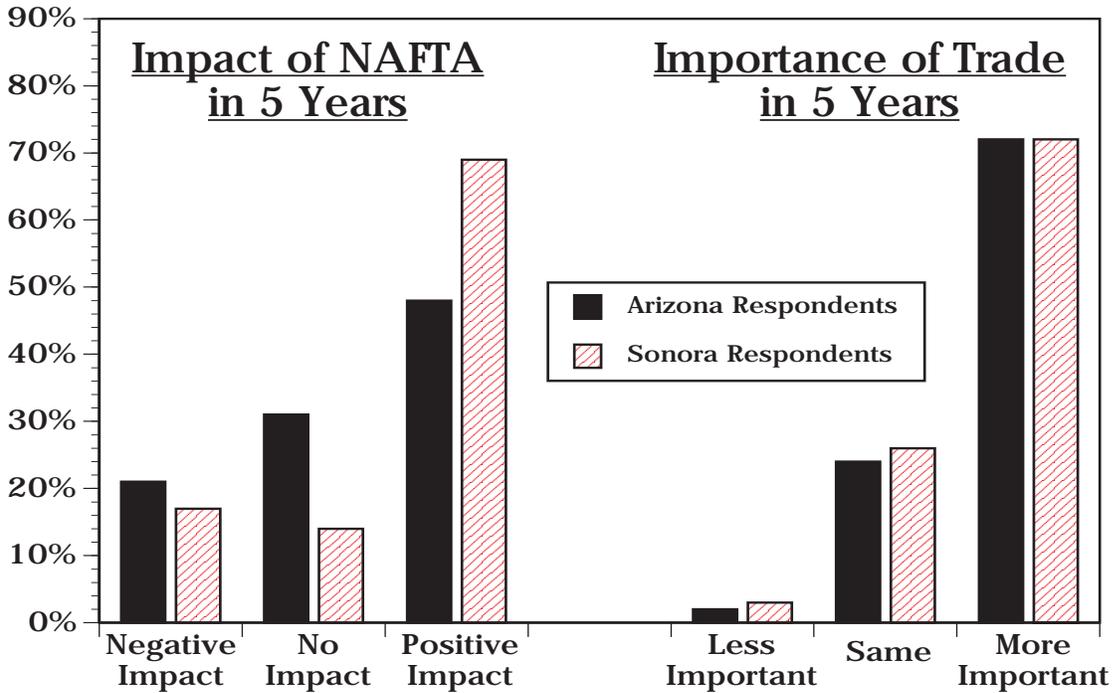
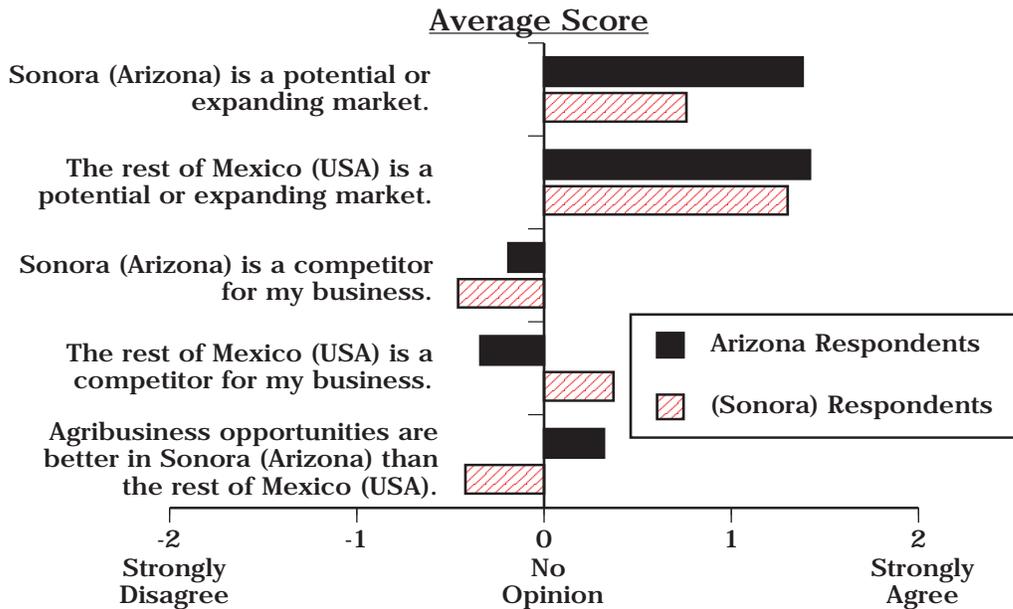


Figure 8.2b Survey Results: Which of the Following Reflects Your Views of Sonora (Arizona) and the Rest of Mexico (USA) for Your Business?



When asked if Sonora is a potential or expanding market, Arizona participants replied with an average score of 1.4 (on -2 to 2 scale). Similarly, with an average score of 1.4, Arizona participants thought that the rest of Mexico is also a potential or expanding market. From a statistical point of view, these average scores of 1.4 are significantly different from zero indicating that Arizona participants agree that Sonora and Mexico in general is a potential or expanding market. When asked if they viewed Sonora and the rest of Mexico as a competitor for their business, the average score was -0.2 and -0.3, respectively. Although not noticeably different from zero, these results do indicate that Arizona respondents overall favorably view Sonora and the rest of Mexico.

Sonoran participants also expressed similar views about Arizona and the US in general. Thus, results in Figures 8.2b indicate that survey participants from both states strongly believe that each others state and country is a potential or expanding market. Furthermore, there is little consensus or support for the popular notion that agribusinesses in Arizona and Sonora are direct competitors with one another.

Finally, participants were given a list of 20 action items as a means for expanding the Arizona-Sonora region's agribusiness industry and were asked to evaluate each item (see Appendices A and C, questions 36 and 37 for exact wording and details). Results are summarized in figure 8.2c.

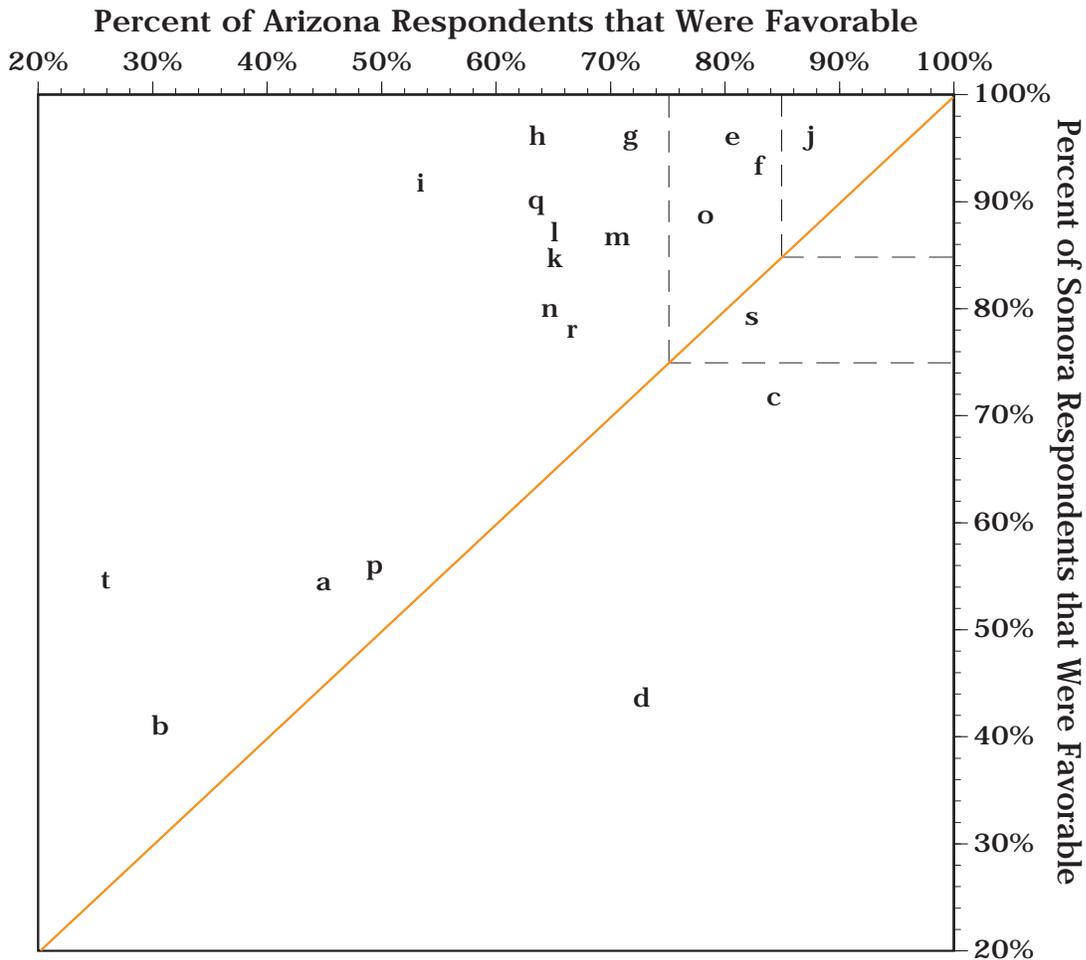
Figure 8.2c gives the percent of Arizona (on horizontal axis) and Sonora (on vertical axis) respondents that gave a favorable evaluation for a given item. The 20 items evaluated are listed at the bottom of the figure. The evaluations are presented as a scatter plot to highlight which of the items were most favorably rated by Arizona and Sonora. Each letter in the scatter plot indicates an item listed at the bottom. Items to the right have a higher favorable ratings by Arizona participants while items to the top have a higher favorable ratings by Sonora. An item close to the Northeast corner in the figure indicates a favorable rating by both Arizona and Sonora.

Results indicate that item j (streamlining border crossing formalities for products) received the most favorable rating by both Arizona and Sonora. As high as 96 percent of Sonora participants and 88 percent of Arizona participants thought that 'streamlining border crossing formalities for products' is an important area to be considered for enhancing the Region's agribusiness potential. This is the only item that received over an 85 percent favorable rating for both sides.

Other items that received over a 75 percent favorable rating by both sides were unifying standards and grading (item f), improving Sonora's transportation and communication infrastructure (item e), developing better financing strategies/legal agreements (item s), and forming a bilingual regional agency as a place to go for current regulations specific to agriculture.

Item c, legal agreements that offer enforcement of contracts between Arizona and Sonora individuals, was ranked as the second most important issue overall by Arizona participants (84 percent). This was especially true among finance and marketing individuals who ranked this as a top priority item. Relatively fewer Sonoran participants (72 percent) rated legal agreements as an important issue. This may reflect that Sonoran agribusinesses feel more comfortable about the US legal system than Arizonans feel about the legal system in Sonora. Actually, only two other issues, s (develop better financing strategies/legal agreements) and d (property rights and foreign land owner-

Figure 8.2c. Survey Results: Percent of Arizona and Sonora Respondents that were Favorable to the Items Listed as a Means for Enhancing AZ-SO Agribusiness.



Areas for Enhancing AZ-SO Agribusiness

- a. Better development of infrastructure to port of Guaymas.
- b. Development of regional international airport at Yuma.
- c. Legal agreements that offer enforcement of contracts.
- d. Property right / foreign land ownership issues in Sonora.
- e. Improvements in transportation and communication infrastructure in Sonora.
- f. Unified standards and grading.
- g. Working together to impact federal legislation in D.C. and Mexico City.
- h. Developing more value-added products.
- i. Annual trade show focused toward Arizona and Sonora agribusiness.
- j. Streamlining border crossing formalities for products.
- k. Streamlining border crossing formalities for individuals.
- l. Bilingual Regional Agency (BRA) as a place to go for dispute resolution.
- m. BRA to act as a facilitator/clearinghouse to establish trade lead contacts.
- n. BRA to provide a listing source for translation providers and services.
- o. BRA to give current regulations specific to agriculture.
- p. Develop better year round supply of perishable products.
- q. Pursue joint production/marketing ventures.
- r. Take advantage of economies of size opportunities.
- s. Develop better financing strategies/legal agreements.
- t. Develop a common brand label for the region.

ship issues in Sonora), were rated more important by Arizona than Sonora agribusinesses (these are items below the dashed 45 degree line in the graph). Thus, Arizona participants strongly feel that legal issues related to contract enforcement and property ownership rights are of utmost importance for doing business in Sonora.

Interestingly, item i (annual trade shows focused toward Arizona and Sonora agribusiness) received much greater support in Sonora (92 percent) than in Arizona (53 percent). Please see pages C-16 through C-21 (Appendix C) for more information on how Sonora and Arizona respondents rated these items by crop, livestock, food processing, and finance and marketing sectors. Also, Arizona responses are ranked for each sector on page C-20.

