

**AG BUSINESS IN SW FLORIDA:
PRESENT AND FUTURE**

**Prepared by: The Lutgert College of Business
Florida Gulf Coast University**

**Dr. Stuart Van Auken and Dr. Howard Finch
Principal Investigators**

**Dr. Ara Volkan, Dr. Walter Rodriguez,
Dr. Shelton Weeks, and Dr. Gary Jackson
Research Collaborators**

June 6, 2007

EXECUTIVE SUMMARY OF AGRICULTURAL RESPONSE	7
Purpose of the Study	10
Research Protocol	12
Ag Strengths in SW Florida	14
Climate (Viewpoints of Nine Executives)	14
Lands (Points-of-View of Six Executives)	15
Citrus (Views of Four Executives)	16
Consolidation (Insights from Four Executives)	17
Vegetables (Perspectives of Three Executives)	17
Soils (Views of Two Executives)	18
Labor (Perspectives of Two Executives)	18
Regulations (Views of Two Executives)	18
Geography (Perspectives of Two Executives)	18
Ag Management (Insight from One Executive).....	19
Science (Perspectives of One Executive)	19
Technology (View of One Executive)	19
Water (Insight from One Executive).....	19
Natural Markets (Perspectives of One Executive).....	19
Grapefruit (View of One Executive).....	20
Crop Flexibility (View of One Executive).....	20
Ag Weaknesses in SW Florida	21
Labor Issues (Perspectives of Eleven Executives).....	21
Agricultural Costs (Views of Nine Executives).....	23
Land Costs (Perspectives of Five Executives).....	24
Citrus Industry (Reflections from Five Executives)	24
Pricing (Views of Three Executives)	25
Cattle (Views of Two Executives)	25
Promotion (Perspectives of Two Executives).....	25
Typography (View of One Executive).....	26
Ag Opportunities In SW Florida	27

Citrus (Perspectives of Five Executives)	28
Competitive Options (Viewpoints of Four Executives).....	28
Vegetables (Insights of Four Executives).....	29
Alternative Fuels (Insights of Three Executives)	30
Land and Land Credits (View of Three Executives)	30
Ornamentals (Points-of-View of Three Executives).....	30
Sugar Cane (Viewpoints of Two Executives).....	31
Cattle (Views of Two Executives).....	31
Link to Environmentalists (View of One Executive)	31
Education (Perspective of One Executive)	32
Vertical Integration (Insight from One Executive).....	32
Food Safety (Point-of-View of One Executive)	32
Threats to Ag Business In SW Florida.....	33
Competition (Points-of-View of Eight Executives).....	34
Diseases (Perceptions of Eight Executives).....	35
Environmentalism (Views of Five Executives)	36
Land Development (Points-of-View of Five Executives)	36
Government Regulations (Perceptions of Five Executives)	37
Water Issues (Perceptions of Four Executives)	38
Policy Issues (Perspectives of Three Executives).....	39
Protection of Ag Products (Insights from Two Executives).....	39
Climate (Views of Two Executives).....	39
Comments Related to Ag Businesses' Five-Year Trend Line.....	40
Pro Citrus (Perspectives of Three Executives)	41
Neutral Citrus (Views of Two Executives).....	41
Con Citrus (Points-of-View of Four Executives)	41
Pro Land (Insights from Two Executives).....	42
Neutral Land (Perspectives of Three Executives)	42
Con Land (Viewpoints of Four Executives)	43
Pro Ag Business (Perspectives of Two Executives).....	43
Neutral Ag Business (Insight of One Executive).....	43

Con Ag Business (View of One Executive)	44
Pro Vegetables (Viewpoints of Three Executives).....	44
Pro Cattle (Insights of Two Executives).....	44
Pro Sugar Cane (Viewpoint of One Executive).....	44
Commentary on the Continuation of Ag Business Operations	
Despite Land Sale Opportunities.....	45
Ag Diversity (Views of Four Executives)	45
Sale of Land (Perspectives of Three Executives)	45
Continuation of Ag Operations (View of One Executive).....	46
Pressures to Sell (Views of Two Executives).....	46
Diversification Outside of Agriculture.....	46
Future Importance of SW Florida Agriculture.....	47
Pro Future Importance (Views of Nine Executives).....	47
Con Future Importance (Views of Two Executives)	48
EXECUTIVE SUMMARY OF ENVIRONMENTAL RESPONSE	49
Comments on Whether Land Use and	
Protection Are of Interest to Environmentalists	50
High Density Real Estate Development (View of One Environmentalist).....	50
Common Interest Model (Perspective of One Environmentalist).....	50
Pro Agriculture (View of One Environmentalist).....	51
Response as to Whether the Development of Ag Land for Real Estate Purposes	
Threatens Florida’s Heritage.....	51
Protection of Agricultural Heritage (Views of Two Environmentalists).....	51
Definitional Issue of Heritage (Perspective of One Environmentalist)	52
Comments on the Awareness of Real Estate Projects	
That Threaten Land Irrevocably	52
Pro Awareness (View of One Environmentalist).....	52
Negative Awareness (Point-of-View of One Environmentalist)	53
Commentary on Preference for Developers Versus Agriculture	53
Pro Comments in Support of Agribusiness	
(Viewpoints of Three Environmentalists).....	53

Negative Comment Relating to Ag Business (Perspective of One Environmentalist).....	54
Recommended Strategies of Environmentalists	
To Protect Agricultural Land	54
Recommended Strategies (Points-of-View of Three Environmentalists).....	54
Final Reflections of Environmentalists (Points-of-View of Three Environmentalists)	55
EXECUTIVE SUMMARY OF POLITICAL LEADER RESPONSE.....	56
Responses Concerning the Provision of State Aid to Ag Business	56
Pro State Support (Viewpoints of Four Political Leaders)	56
Comments on the Effectiveness of	
Agribusiness Organization in Eliciting Concessions	57
Pro Organization (Perspective of One Political Leader).....	57
Need for Organizational Support (View of One Political Leader)	58
Commentary on Whether Agribusiness Is a “Sinking Ship”	58
Pro Ag (Perspectives of Three Political Leaders).....	58
Responses to One’s Extent of Participation With AG Lobbyists	59
Lobby Interactions (Perspectives of Two Political Leaders).....	59
Agribusiness Interactions (Views of Two Political Leaders)	59
Views of Political Leaders as to What Agriculture is Seeking the Most.....	60
Perceived Agendas of Ag Business (Points-of-View of Four Political Leaders)	60
Comments on Political Leader Support for Additional Ag Research Funding	61
State Financial Support (Points-of-View of One Political Leader)	61
EXECUTIVE SUMMARY OF REAL ESTATE	
DEVELOPER RESPONSE	62
Response to the Extent that Ag Lands Are Being Targeted	
by Residential and Commercial Real Estate Developers	
in Light of Florida’s Immigration Patterns.....	63
No Ag Targeting Per Se (Perspectives of Two Executives).....	63
Pro Ag Land Targeting (Views of Four Executives)	64
Other Factors Influencing Ag Targeting (Perspective of One Executive).....	64

Perceived Attitudes of Ag Business Landowners to “Selling Out”	65
Pro Attitudes Toward “Selling Out” (Viewpoints of Four Executives)	65
Family Issues (Perspectives of Three Executives).....	66
Comments on Heavily Targeted Ag Lands.....	66
Site Characteristics (Viewpoints of Four Executives)	67
Market Factors (Views of Two Executives)	67
Actual Physical Locations (Viewpoint of One Executive).....	68
Other Factor (Perspective of One Executive)	68
Responses to Developer Interests that Are Held in Ag Land.....	68
Interim Interests (Points-of-View of Three Executives).....	68
Non-Speculative Comments (Insight from One Executive)	69
Comments on Types of Executives Most Active in Pursuing Ag Lands	69
Active Participants (Views of Three Executives).....	69
Inactive Participants (Perspectives of Four Executives).....	70
Responses of Developers on the Future of Ag Lands Five-Years From Now.....	71
New Ag Focus (Points-of-View of Three Executives).....	71
Ag Land Conversion Slowdown (Points-of-View of Three Executives)	71
Market Factors (Views of Two Executives)	72
Incentive for Ag Land Conversion (Insight of One Executive).....	72
Land Use Shift (View of One Executive).....	72
Comments on Factors Impacting Ag Land Conversion.....	73
Governmental Influences (Points-of-View of Four Executives)	73
Market Realities (Views of Four Executives).....	74
Agricultural Efficiencies (Views of One Executive)	74
Natural Forces (Insight of One Executive)	74
Other Factor (View of One Executive).....	75

AG BUSINESS IN SW FLORIDA:

PRESENT AND FUTURE

EXECUTIVE SUMMARY OF AGRICULTURAL RESPONSE

This summary is a compilation of the essence of ag business executive responses. It begins with weaknesses to reveal a self diagnosis of ills and issues, and proceeds through strengths, threats, and opportunities. It also reflects on the future and a litany of issues that are most germane to the agricultural industry. Above all, it presents top-of-the mind issues and salient beliefs about the industry.

Ag business is now dealing with labor issues and rising ag costs, as well as rising land costs. There is a need for skilled and educated labor and a rising cost structure is exerting pressure on profit. Troubles continue for the citrus industry (e.g., water, diseases, labor and foreign imports), and the perishability of ag products continues to exercise a pressure on price taking.

Despite these weaknesses, ag business in SW Florida basks in a unique window of warm weather and is generally characterized by a lack of freezes. Ag land is also viewed as a long-term asset and is noted for its potential. Citrus is seen as the apex of quality production due to climate and single blooming. There is no place in the world that produces the quality of citrus found in Florida and the industry is seen as resilient.

External forces, however, do serve as threats to ag business in SW Florida. These threats encompass foreign competition, diseases, environmentalism, land development, government regulation, water, and even climate in the form of hurricanes. Among the competitive issues is a concern over the impact of Brazil, especially its' cost structure and lack of regulations. Diseases in the form of greening and canker remain unsolved and pressures, from what many ag executives view as uninformed environmentalists, continue to be felt. The *Florida in the Year 2060* report also reveals that only the Panhandle of Florida will not be facing build-out in fifty years and that nearly seven million acres of undeveloped ag land will be needed to accommodate the exploding population. Government regulations are still viewed as being burdensome on ag, as well as water management policies. Overall, the threats evidence the potential to influence Florida's economic base in significant and undesirable ways.

Although ag will always be open to external threats, many opportunities exist as countervailing forces. Among them, citrus continues to apply science to diseases and in the development of stronger root stocks. Citrus also evidences potential for demand stimulation and additional growth. Additionally, ag opportunities serve to lessen competitive pressures and such opportunities extend to vegetables due to their growth and demand matching potentials, as well as alternative fuels through crop production. The sale of land and land credits is part of the opportunity equation and ornamentals appear attractive due to a growing Florida population. Finally, sugar cane and cattle offer opportunities and a common bond exists for farmers and environmentalists to come together due to their common interest in land protection.

The trend line for Florida's immediate five-year future is mixed with the most controversy seen in such areas as land and citrus. With regard to the former, the impact of development and enhanced population projections casts a shadow over land, despite the positive relating to land's economic return. Citrus, however, has positives relative to economic efficiency, the future for new root stocks, and land value. The negatives encompass return, foreign competition, and mainly greening. A solving of the greening problem would do much for the citrus industry. The five-year trend is also buoyed by vegetables which are characterized by growing demand and lesser competition. However, ag business in general is impacted by poor returns and free trade, yet a silver lining may be seen in the development and application of technology and science. Uniquely, labor is not a top-of-the mind issue in looking out over the next five years.

Given these observations on the present and future states of ag business, ag executives continue to pursue an economic model that includes land sales, yet part of the model involves the seeking of ag diversity and the protection of land to enhance its value. Additionally, the underlying value of land fosters a sense of security among ag producers. As ag lands continue to be held, they appreciate in value, while efficient ag production yields an economic return. Further, the diversity that is sought tends to be within ag although a minority of ag producers are well entrenched in the real estate development field.

One thing is clear, SW Florida is viewed as increasing in importance in ag production relative to the rest of the state. Developments along the coasts and inland encroachments point to a long-term trend of SW Florida ag growing in relative importance and stature. In fact, SW Florida may become an ag oasis. Basically, it is becoming too costly in an opportunity cost sense to keep or

assemble large tracks of lands in other areas, such as Central Florida due to development pressures. Even if SW Florida can maintain its status quo, it will grow in relative importance as ag production statewide continues to shrink. Basically, SW Florida may become the ag mecca for the state of Florida and depending upon the attitudes of the United States government toward food independence, ag business may become an even more valued member of the economy. Overall, ag business in SW Florida is a key resource whose luster may still be difficult to discern, yet all of the fundamentals that promulgate success are in place. Hopefully, this report will shed additional light on current and future prospects for ag business in SW Florida.

Purpose of the Study

This study is designed primarily to reveal the perceptions of ag business executives toward the present and future state of the ag business industry in SW Florida. It is designed to reveal top-of-the-mind issues and the beliefs of those responsible for the health of the industry. The study reflects a candid view of pressing issues and the silver linings pervading the industry. It is unique in that it directly assesses the strengths, weaknesses, opportunities, and threats pervading the industry, as well as the revelation of five-year trends and the importance of ag business in SW Florida relative to the rest of the state. It also assesses the prospect of ag business continuation in light of land sale opportunities and the extent of diversification in response to pressures on the industry.

To develop a well-rounded study, this research also embraces the views of environmentalists, politicians, and real estate developers concerning ag business and its future. With respect to

environmentalists, the study assesses the relevancy of land usage and its protection; the impact of real estate developer encroachments on Florida's heritage; and real estate projects that may threaten land in an irrevocable way. Additionally, the degree of support for agriculture among environmentalists is to be determined, as well as the strategies of environmentalists that may protect agricultural land.

The study also assesses political leaders on their perceptions of State support for ag business; the "clout" of ag business as an organized force; and whether ag business is a "sinking ship." Additionally, the study reveals insights into ag lobbying; a determination of what ag business is seeking; and support for agricultural research funding.

Finally, the last section of the study assesses real estate developers as to the extent that ag lands are being targeted and their perception of ag's willingness to "sell out." Additionally, the views of real estate developers as to "targeted" areas and individual developer interest in ag land are revealed. Other assessments include a revelation of the most aggressive developers and developer perceptions of the future of ag lands.

The views of environmentalists, politicians, and real estate developers reveal an external perspective and help to reveal the extent of support for ag business and the obstacles that ag business faces in the future. Such assessments can clarify thinking and help in the development of strategic responses.

Overall, it is believed that this is the first comprehensive study of ag executive perceptions and beliefs in the state, and its development may help in the galvanization and prioritization of issues facing the industry. The study, hopefully, will reveal the concerns in need of in-depth study and response. This work is sure to engender debate and controversy and possibly it will be Promethean or life-bringing in its impact.

Research Protocol

The study emanated from a list of twenty-four ag business CEOs that ranged from citrus, to vegetables, to juice processors. However, the greatest focus was on citrus. Of the twenty-four executives who were approached concerning study participation, fourteen agreed to an in-depth, personal, face-to-face interview and participated in an interview ranging from one hour to an hour and a half. Appendix I contains the list of participating executives and the names of their companies. A perusal of the list reveals that they are key players in ag business. These individuals graciously gave their time and regaled us with colorful stories and in-depth insights.

To encourage thoughtful reporting, the principal investigators informed each executive that their response would not be revealed by name, rather their responses would be placed in categories or taxonomies. It is felt that such an approach fostered objectivity and helped to bolster the study's credibility.

It will be noted that the *numbers* of executives who responded to, or reported, a given issue have been revealed, thus showing the magnitude of executive response. As might be expected, what is

important to one executive may not be to another, hence the frequencies of executive response denote patterns in the data.

The same procedure was likewise followed with environmentalists and political leaders. In the case of the former, three of five environmentalists who were approached responded and four of nine identified politicians participated. The names of these participants appear in Appendix II.

Drs. Ara Volkan and Walter Rodriguez served as the study's research collaboration in these areas, contacted potential respondents, and conducted face-to-face interviews. They administered research questions that were unique to each group.

Finally, Drs. Shelton Weeks and Gary Jackson contacted five real estate developers and followed the same exact study protocol. The names and companies of these participants appear in Appendix II.

Ag Strengths in SW Florida

The strengths of ag business are heavily seen in the areas of climate, lands, citrus, consolidation, and vegetables. References are made to such climatic areas as SW Florida's window of warm weather and lack of freezes, while such considerations as SW Florida's land values and land applications are also evidenced. Citrus is praised for its quality, single blooms, and unique climate among other considerations. And consolidation is noted for its efficiencies, economies of scale, and a longer-term perspective, as well as other attendant strengths. Finally, vegetables are perceived as offering natural advantages.

Other strengths are seen in labor, regulations, and geography. Additionally, strengths are noted for each of the following: ag management, science, technology, water, natural markets, grapefruit, and crop flexibility. Overall, climate has the highest executive response and citrus, climate and lands are the leaders with respect to the number of individual comments and/or observations. Clearly, ag business in SW Florida evidences significant strengths.

Climate (Viewpoints of Nine Executives)

- There is a window of warm weather for three months during the year; only two other areas have it (California and a spot in Mexico).
- SW Florida has a two-month window of opportunity.
- SW Florida ag is south of the generally perceived frost line.
- SW Florida's climate offers a strategic advantage over the rest of the U.S.

- Quality citrus is due to our subtropical climate.
- There is generally no frost south of Highway 60.
- Florida ag has a geographic advantage (also reported under Geography).
- Florida has a climatic window of opportunity.
- Florida's climate has encouraged citrus crop production to move here in an attempt to escape freezes (also reported under Citrus).
- The SW Florida climate is great for vegetables (also reported under Vegetables).
- SW Florida offers a 12-month growing cycle.
- SW Florida is the winter vegetable center and can produce three crops per year with the winter season yielding the highest price.
- Climate and soil richness are the two basics of farming and SW Florida has them (also reported under Soil).

Lands (Points-of-View of Six Executives)

- The strength in Florida ag resides within its land and land's development.
- The SW segment of Florida has a broader use of land.
- Land is available and we should not be concerned with housing and its development.
- One can buy citrus land and have it pay for itself (also reported under Citrus).
- A strength of citrus is its land value over the long term (also reported under Citrus).
- Pricing vagaries may impact citrus in the short run (e.g., low prices may come from an over supply), yet land values are an asset over the long run (also reported under Citrus).
- Ag land will hold value until something better comes along.

- Canker eradicated land can be leased out for cattle ranching.
- Underlying land values serve to help farmers in a psychological sense.
- The strength of SW Florida ag is in land.

Citrus (Views of Four Executives)

- There is no place in the world that produces the quality of citrus found in Florida; not in Brazil, not in Mexico, not anywhere else.
- Citrus offers a significant return relative to input.
- Quality citrus is due to our subtropical climate (also reported under Climate).
- All of Florida citrus blooms at the same time resulting in harvesting efficiencies.
- Florida citrus offers a quality advantage as it is produced by a single bloom which results in a uniformly better taste; Brazil and Mexico have multiple blooms and, therefore, varying maturities.
- The costs of citrus production have not risen dramatically; in 1962, it cost \$1 per pound and 45 years later it costs \$2 per pound.
- One can buy citrus land and have it pay for itself (also reported under Land).
- A strength of citrus is its land value over the long term (also reported under Land).
- Pricing vagaries may impact citrus in the short run (e.g., low prices may come from an over supply), yet land values are an asset over the long run (also reported under Land).
- Citrus is the leading ag enterprise.
- Florida's climate has encouraged citrus crop production to move here in an attempt to escape freezes (also reported under Climate).

- Citrus is a resilient industry, as science can solve any of its maladies like greening (also reported under Science).
- Citrus offers a production efficiency in that no grading system is required, as Florida citrus blooms all at once; Brazil has seven blooms and seven harvests, and has the need for a grading system.

Consolidation (Insights from Four Executives)

- The consolidation of farms and farming has resulted in efficiencies and economics of scale and has helped to spread risk; the consolidation also applies to packing houses which are making money, while some farms may not be.
- Corporate farmers are well capitalized.
- There has been ag consolidation in Florida that has resulted in economies of scale.
- Ag strength in SW Florida is due to an economic shakeout in which those that remain are strong.
- Consolidation has caused owners to see value more so in terms of the balance sheet than the income statement, as their focus has shifted to the long run.

Vegetables (Perspectives of Three Executives)

- Florida vegetable markets are closer to the NE sector of the U.S. and, as a result, vegetables are cheaper out of Florida; trucking is also easier.
- Niche crops do well.

- The SW Florida climate is great for vegetables (also reported under Climate).

Soils (Views of Two Executives)

- Climate and soil richness are the two basics of farming and SW Florida has them (also reported under Climate).
- Florida has affordable water and good soil (also reported under Water).

Labor (Perspectives of Two Executives)

- Farm labor is comprised of hard working, good people, who are adaptable.
- Labor is adequate pending migrant bills.

Regulations (Views of Two Executives)

- A rule of law exists, which does not exist in foreign markets.
- Tariffs are a strength.

Geography (Perspectives of Two Executives)

- Florida ag has a geographic advantage (also reported under Climate).
- SW Florida ag is away from Miami and exotic pests.

Ag Management (Insight from One Executive)

- Florida agriculture is characterized by professional management instead of second and third generation families.

Science (Perspectives of One Executive)

- Research is being undertaken to make fruit bigger.
- Citrus is a resilient industry as science can solve any of its maladies like greening (also reported under Citrus).

Technology (View of One Executive)

- Mechanical harvesting is a strength.

Water (Insight from One Executive)

- Florida has affordable water and good soil (also reported under Soils).

Natural Markets (Perspectives of One Executive)

- Florida has natural markets and its population is growing, plus we export.
- The landscape market (trees and turf) is entirely local and is expanding.

Grapefruit (View of One Executive)

- Florida is the grapefruit leader in the world as to supply and quality.

Crop Flexibility (View of One Executive)

- SW Florida offers crop flexibility, when and if citrus is out (e.g., tomatoes and vegetables).

Ag Weaknesses in SW Florida

The most revealed weaknesses are centered on labor and agricultural costs. Other top-of-the-mind issues encompass land costs, the citrus industry, pricing, cattle, promotion and typography.

Among the most pressing issues concerning labor are the need for skilled and educated labor with school systems and universities being seen as part of the problem. Ag costs are also perceived as generally rising, thus exerting pressure on profits. Land costs were also singled out as appreciating in value thus creating an additional cost pressure. The citrus industry is likewise viewed as being troubled and pricing is viewed as an ag issue. Finally, there were top-of-the-mind considerations of the nonlucrative nature of cattle and issues with citrus promotion, and finally typography.

Labor Issues (Perspectives of Eleven Executives)

- People don't want to work in agriculture.
- Career laddering is restricted due to a handed-down placement orientation within agricultural families.
- Labor is a definite weakness.
- We have a hard time hiring workers in skilled trades (e.g., electricians and welders).
- Schools are not committed to developing a skilled ag labor force.
- Ag is not unionized and may not be as attractive as other protective industries.
- Universities are creating unrealistic expectations as students just want to be managers.

- Immigration reform would hurt the labor market.
- We have labor shortages.
- College kids don't want to work in ag, especially 80-90 hours per week.
- There is a need for skilled people with agricultural backgrounds in civil and environmental engineering to address such issues as water quality, discharge and materials as applied to a crop.
- Ag competes for employees with the service industry.
- There is a need for housing for ag workers.
- The cost of executive housing that we have to provide is high.
- Labor costs keep going up in packing houses.
- There is a lack of labor and sometimes groves are not picked.
- We are now seeing global markets where foreign labor is cheaper and other than a "level playing field." (also reported under Competition)
- One-third of my costs are in labor.
- Labor is getting tighter and tighter, thus requiring mechanical harvesting.
- Only 50% of my fruits are harvested.
- The main threat to ag business is immigration.
- Due to immigration issues, our labor costs are not competitive with Brazil (also reported under Competition).
- Fifty percent of our costs are in harvesting, yet they are four times higher than in Brazil (also reported under Competition).
- Perhaps the real number one threat to Florida ag is immigration.

- Citrus is still picked by hand, thus creating labor dependency; yet sugar cane can be mechanically harvested.

Agricultural Costs (Views of Nine Executives)

- Fuel and fertilizer costs are high.
- Vegetable costs have gone up.
- Citrus has difficulty competing due to its cost structure.
- There is difficulty in controlling costs and income (e.g., we have no control over fertilizer prices which have tripled).
- The costs of ag products are higher.
- Chemicals are three times more expensive here than in Brazil (also reported under Competition).
- The push for corn in ethanol production is raising the price of corn, thus hurting ag producers who use it as feed.
- All phases of beef and pork have felt the price increases in corn.
- Imports create a cost disadvantage; for example, we pay more in one day than Brazil does in a week (also reported under Competition).
- Quality issues as to water and work are expenses and ag output may not cover them adequately.
- There are higher production costs and lower productivity levels in SW Florida than in Central Florida.

Land Costs (Perspectives of Five Executives)

- Agricultural lands are appreciating in value, thus taxes keep going up (e.g., last year they almost doubled).
- The cost of land is now going up. Those who want to farm have to buy it or rent it.
- Land is imposing a whole set of costs.
- Rents for land are going up.
- Price of farm land is exorbitant.

Citrus Industry (Reflections from Five Executives)

- Citrus issues are many including water, disease, labor, and foreign imports.
- Not one grower in citrus is making money; we do not pursue citrus.
- Citrus operates under a cloud; it may not be an economic engine and, if this is true, 5-7 billion dollars could disappear.
- Citrus has difficulty competing due to its cost structure (also reported under Agricultural Costs).
- In the last ten years, citrus growers have not been covering their costs of production, yet fundamentals have changed.
- Citrus has never seen competition like there is today (also reported under Competition).
- A lack of juice supply from citrus puts the U.S. market for not-from-concentrate (i.e., non-frozen) orange juice at risk.

Pricing (Views of Three Executives)

- There is price pressure from big players like Wal-mart.
- A reduction in the supply of citrus hurts processors.
- The perishability of agricultural products, especially vegetables, sugar cane, and oranges leads to price taking with timber being the exception.

Cattle (Views of Two Executives)

- No one has made a lot of money off cattle; yet cattle enables us to maintain our land and keep out poachers.
- There is not a lot of money in cattle.

Promotion (Perspectives of Two Executives)

- We have long-term contracts to sell at a given price; hence the box tax doesn't seem to help growers.
- Misperception of consumer response to orange juice has limited demand stimulation; for example, a product called Orange Nip fits the taste preference of children and thus serves as an entry into adult orange juice consumption, but was downed because only 75% of the product was orange juice.
- Promotion has not stressed the role of orange juice in recovery from colds, flus, etc., thus demand stimulation is missing some key marks.

- Poor marketing has been a threat, especially when one considers that orange juice at one time did not appear in vending machines, schools, and restaurants.

Typography (View of One Executive)

- Soils here are not that great.

Ag Opportunities In SW Florida

Opportunities denote more of a spread with no more than five of the fourteen surveyed executives concentrating on a given topic (e.g. citrus). Overall, twelve opportunity areas are revealed and those with multiple executive responses are as follows: citrus (5), competition (4), vegetables (4), alternative fuels (3), land and land credits (3), ornamentals (3), sugar cane (2) and cattle (2). Sole executive mentions are seen for opportunities that link to environmentalists, education, vertical integration, and food safety.

Citrus opportunities are seen in the application of science (i.e., stronger root stocks), demand stimulation, growth, and having links to processors. Opportunities are also seen as a means of protection against competition, and as a way to produce on foreign soils to evade restrictions. Additionally, crop subsidies are viewed as a way to enhance competitiveness.

Vegetables evidence a litany of comments tied to such consideration as growth and demand matching. Alternative fuels through crop production are seen as an opportunity, yet one executive noted that gasoline prices will have to be in excess of \$4 per gallon for alternative fuels to work.

Land and land credits are presented as opportunities, especially the sale of land and credits. Ornamentals are viewed as fertile opportunities due to the housing demand generated by an increasing Florida population.

Sugar cane and cattle both offer opportunities, and an opportunity exists for farmers and environmentalists to come together as both have an interest in land protection. Education also has an opportunity to be responsive to ag and the issue of food safety could be an opportunity area. Finally, vertical integration presents an opportunity to lessen economic dependency.

Citrus (Perspectives of Five Executives)

- I am very bullish on citrus and vegetables, but not cattle (also reported under Vegetables).
- Citrus is a great product and it goes well with a growing demand for health and wellness.
- There is a better opportunity for citrus growers linked to processors.
- There is an opportunity for new root stock to make citrus stronger.
- There is an opportunity to stimulate demand for orange consumption; we need to support the Florida Citrus Commission's box tax on advertising.
- There is an opportunity for citrus growers to make serious money and they should stay; we have location and fruit quality here.
- We see opportunities in sugar and oranges; sugar is growing about 1.5% per year (also reported under Sugar Cane).

Competitive Options (Viewpoints of Four Executives)

- Ag producers can go abroad and produce crops without restrictions and then ship to the U.S.

- A crop failure outside of Florida may help the ag industry here (e.g., California lost \$480 million of its citrus crop due to a freeze).
- There is an opportunity for greater crop subsidies; without them we will not be competitive.
- We spend on ag opportunities to protect ourselves.

Vegetables (Insights of Four Executives)

- The demand for vegetables is increasing due to a greater health consciousness among the American people.
- I am bullish on citrus and vegetables, but not cattle (also reported under Citrus).
- Vegetables have a promising future.
- There is an opportunity for big gains, especially through the selection of a crop that is in short supply (e.g., a vegetable farmer made \$17 million one year in Bell peppers).
- We constantly shift our vegetable product mix to match demand.
- We are bullish on vegetables, while fruits (e.g. blueberries) have a higher set-up cost; \$10,000 per acre in the case of blueberries.
- Vegetables and row crops have a nice future.
- Vegetable demand is growing here.
- The areas that have “legs” for the future are sod, vegetable farming, cattle and sugar cane (also reported under Ornamentals, Cattle, and Sugar Cane).

Alternative Fuels (Insights of Three Executives)

- There is an opportunity for alternative fuels (e.g. ethanol); sugar cane represents an opportunity for conversion into fuel (also reported under Sugar Cane).
- Crops can now be converted to energy; even grasses.
- Unless gasoline prices are in excess of \$4 per gallon, ethanol will go bankrupt.
- Corn may work as a fuel, if it is subsidized.

Land and Land Credits (View of Three Executives)

- Opportunities exist for selling land both for profit and conservation (e.g., land has been sold to SW Florida Water Management for the purpose of conservation).
- Land is available for farming; there is a misconception of land value relative to housing.
- There is an opportunity for land owners to sell development credits, which will keep land pristine or protected-land pristine.
- In Collier County, there is an opportunity to sell Rural Land Stewardship Credits on pristine land and apply them elsewhere.

Ornamentals (Points-of-View of Three Executives)

- Sod is an opportunity that is linked to new home sales.
- Tree farms will do well, so will other ornamentals.

- The areas that have “legs” for the future are sod, vegetable farming, cattle and sugar cane (also reported under Vegetables, Cattle, and Sugar Cane).
- Ornaments have a good future.

Sugar Cane (Viewpoints of Two Executives)

- Sugar cane may offer an advantage; but not leafy vegetables, as they are not produced in Florida.
- We see opportunities in sugar and oranges; sugar is growing about 1.5% per year (also reported under Citrus).
- The areas that have “legs” for the future are sod, vegetable farming, cattle, and sugar cane (also reported under Ornaments, Vegetables, and Cattle).

Cattle (Views of Two Executives)

- Cattle represent an opportunity, as they can graze in a swamp.
- The areas that have “legs” for the future are sod, vegetable farming, cattle and sugar cane (also reported under Ornaments, Vegetables, and Sugar Cane).

Link to Environmentalists (View of One Executive)

- There is an opportunity for environmentalists to embrace farming, as it is better for them to have farms than a Wal-mart parking lot.

Education (Perspective of One Executive)

- There is an opportunity to educate engineers in permitting, reporting, water quality compliance, etc.

Vertical Integration (Insight from One Executive)

- Vertically integrated ag business firms will find more opportunities, as they are not dependent upon a single layer.

Food Safety (Point-of-View of One Executive)

- There may be a real opportunity in the creation of a safe and secure food supply.

Threats to Ag Business In SW Florida

The Threats that are most personified by the targeted agricultural executives encompass competition, diseases, environmentalism, land development, government regulation, water, policy, protection, and climate. They have in common a lack of control, although government regulation and protection are amenable to influence. All in all, they are viewed as being more intractable than the prior identified Weaknesses.

Among the revealed competitive issues is a real concern over the impact of Brazil on Florida ag business, especially their far lower cost structure and lack of regulations. Diseases are also revealed as being very worrisome along with the oppressive actions of what many executives view as uniformed environmentalists. The impact of land development is noted with one executive presenting the findings of the harrowing *Florida in the Year2060 Report*. Concerns are also evident with respect to government regulations that are viewed as being very burdensome on agriculture, as well as policies relating to water management. Finally, a few policy issues were presented and, of course, the unpredictable nature of weather with respect to ag business is revealed as a Threat. All in all, they evidence a litany of forces that require resolve and try one's tenacity and spirit. Truly, the threats are formidable and they evidence the potential of influencing Florida's economic base in undesirable and significant ways.

Competition (Points-of-View of Eight Executives)

- Ag producers in the U.S. are competing with U.S. producers who go abroad and then ship to the U.S.
- Citrus has never seen competition like there is today (also reported under the Citrus Industry).
- Brazil is the largest producer of citrus and they do not have restrictions, thus making them harder to compete against.
- Brazil has strategic alliances that add to competitive pressures.
- Cuba is a threat to U.S. ag or will be.
- Citrus and sugar cane are produced elsewhere, thus hurting Florida ag.
- Free trade has ruined the winter vegetable crop here.
- Foreign countries have cheaper ag costs and lax laws on child labor, etc.
- We export our technology (e.g., to Brazil) and it is used to hurt us.
- We are not competitive with Brazil.
- Imports create a cost disadvantage; for example, we pay more in one day than Brazil does in a week (also reported under Rising Agricultural Costs).
- Fruits from Brazil are cheaper.
- Due to immigration issues, our labor costs are not competitive with Brazil (also reported under Labor Issues).
- Fifty percent of our costs are in harvesting, yet they are four times higher than in Brazil (also reported under Labor Issues).

- We are now seeing global markets where foreign labor is cheaper and other than a “level playing field” (also reported under Labor Issues).
- Chemicals are three times more expensive here than in Brazil (also reported under Agricultural Costs).
- Tariff issues are a competitive threat.
- Imports and foreign competition are issues.

Diseases (Perceptions of Eight Executives)

- Canker and greening are real issues.
- Citrus greening is worrisome, yet canker can be overcome.
- Due to canker and greening, there is no longer an aggressive replacement of citrus.
- Canker and greening are major threats for citrus.
- Citrus disease is a problem, especially canker and greening.
- Canker and greening have led to a non-aggressive replacement of citrus.
- There is a new citrus disease called crustacia.
- Hurricanes served to blow canker all over.
- Greening is the culprit that could end the citrus industry, as psyllid’s spread it.
- Greening is on the Federal government’s terrorism list which impedes the use of cultures in the search for a cure.
- We see pests and diseases as threats.
- A lack of serious enforcement with respect to ag import inspections has helped to bring diseases to us with the culprit being a new emphasis on terrorism.

Environmentalism (Views of Five Executives)

- Environmentalists have attacked ag and sugar.
- The environmental scene is harmful to us; consider that the protection of 50 panthers keeps us down.
- Environmentalists hurt farming, yet they do not consider how well farmers treat their land and the fact that they are excellent conservationists.
- Ag land has been sold to the state and harm has occurred.
- Environmentalists are not familiar with wildlife as ag doesn't get in their way.
- Environmentalism is shaping ag strategy; for example, rezoning is a threat to land availability.
- The threats are environmental, such as water, regulations, land-use, and labor.

Land Development (Points-of-View of Five Executives)

- Farming requires land and without it ag suffers; as a result, threats to land are threats to farming.
- Development is putting stress on farmland; some are selling out, yet some of the land is purchased by ag business.
- Land is being squeezed by development; as ag land disappears, Mexico and Cuba could be major suppliers.
- The Federal government took out 80,000 acres in Florida to burn and control.

- The impact of urbanization is being felt; oranges are not plentiful North to I-4, yet they are West of I-80.
- Only the Panhandle of Florida will not be facing build-out in 50 years (*Florida in the Year 2060 Report*).
- Nearly seven million acres of undeveloped agricultural land will be needed to accommodate the exploding population (*Florida in the Year 2060 Report*).
- In five county areas, interiors are being pushed out to developers seeking agrarian land.
- Retirees on the coast care nothing about agricultural land and its development for non-ag purposes.

Government Regulations (Perceptions of Five Executives)

- Permitting on the federal, state, and local level has hurt.
- Water management people are creating a whole new set of headaches (also reported under Water Issues).
- The Department of Transportation, the Environmental Protection Agency, and the Health Department all present issues.
- Governmental regulations are a weakness.
- Governmental regulations are at the top of my list.
- Government regulations add to agricultural costs (e.g., tractors must meet emission standards and our costs on required portable toilets are excessive).
- Governmental regulations are a threat.

- Endangered species legislation (e.g., the protection of the Mexican vulture) is wiping us out.
- Government regulation on the lowering of lake levels makes the ag industry more vulnerable to additional lowerings due to natural forces (also reported under Water Issues).

Water Issues (Perceptions of Four Executives)

- The watering of yards and golf courses hurts ag, as well as regulations on lake levels which impact irrigation.
- Government officials do not understand ag, especially the unintended consequences of their actions, such as the lowering of lake levels to keep the fishing good.
- Government regulations on the lowering of lake levels makes the ag industry more vulnerable to additional lowerings due to natural forces (also reported under Government Regulations).
- With continual population growth in Florida there will be more demand for water and the concerns of politicians over water quantity and quality will lead to zoning and land use restrictions which will be detrimental to ag.
- Water management people are creating a whole new set of headaches (also reported under Government Regulations).

Policy Issues (Perspectives of Three Executives)

- The push for alternative fuels limits the use of land for ag and real estate development; as a result, we need something else to supplement ethanol.
- Ag is impacted by jammed roads, poor schools, and higher electricity rates.
- There are trade issues and the need for good farm bills.
- U.S. taxes are used to develop sea ports and airport infrastructure, thus making it easier for the U.S. to receive foreign ag products.

Protection of Ag Products (Insights from Two Executives)

- Produce has no protection; it is a total “crap shoot.”
- Brazil owns 50% of the citrus processing in Florida.

Climate (Views of Two Executives)

- Freezes have hurt citrus in the Central and Northern portions of the state.
- The summer climate has proven fertile for potential hurricanes.

Comments Related to Ag Businesses' Five-Year Trend Line

Comments by ag executives deal with the following areas: citrus, land, ag in general, vegetables, cattle and sugar cane. The areas with the most controversy are land, citrus, and ag in general, while positive projections are posited for vegetables, cattle, and sugar cane.

Overall, citrus and land are discussed by nine executives apiece with the most neutral and negative observations being reserved for land. With respect to this, the impact of developer and enhanced population projections cast a pall over land, despite positives relating to land's economic return. Citrus trends reflect more of a mix with positive reflections concerning such issues as efficiency, the future for new root stocks, and land value. On the other hand, the negatives deal with such concerns as economic returns, foreign competition, and mainly greening. Basically, a solving of the greening issue would do much for the citrus industry. Ag business in general is buoyed by observations relating to technology and the benefits of spending, while the negatives involve poor returns and the impact of free trade.

Vegetables are supported by three executives who note considerations such as a growing demand and less competition, while two executives see a future in cattle, and one executive with sugar cane. Clearly, land and citrus are at the heart of the debate as to the future five-year trend line for ag business in SW Florida. Finally, labor is not viewed as an issue in the interpretation of a five-year trend line.

Pro Citrus (Perspectives of Three Executives)

- Efficient citrus growers will still be in business.
- Citrus will offer very satisfactory profit returns over the next two to three years.
- A citrus grove with 135 trees can go to 220 or 300 with costs of production only going up a little.
- The future will lead to the development of new root stocks that resist greening and we can develop new production practices.
- The trend line for citrus is going up, as evidenced by citrus land up to I-4 going for \$50,000 an acre, plus the land is income producing (yielding around \$2,000 per acre).

Neutral Citrus (Views of Two Executives)

- Price-wise, citrus is at a 16 year high in box prices, yet citrus can be impacted by immigration laws and a paucity of workers.
- Citrus growers can live with canker, yet greening is a problem.

Con Citrus (Points-of-View of Four Executives)

- Citrus is not on the trend line.
- A bank CD provides a better return than citrus.
- Citrus has a poor trend line and the culprit is not canker, rather it is greening.
- Citrus farmers who borrowed are in trouble as Brazil is cheaper and without restrictions.

- Citrus is in trouble due to canker and greening.
- The trend line for citrus is dependent upon canker and greening.
- A cure for greening is conceivable, yet it may take ten years.
- Greening is spread by a flying insect and requires a series of sprays costing around \$350 per acre, thus increasing caretaking costs around 50%.

Pro Land (Insights from Two Executives)

- Real estate development may be losing steam in the short run.
- Ag is being squeezed, yet land ownership yields a dividend.
- Land targeted for preservation grows into a jungle, yet farming this land would make it more pristine.

Neutral Land (Perspectives of Three Executives)

- Orange groves can be converted to farm fields.
- When farmers go out, somebody will still use the available land.
- Ag business is land starved, thus increasing the productivity of existing land is the key to growth.
- Projecting out to 2060, the University of Florida study notes that one-third of Florida land will be in ag, one-third preserved, and one-third developed; thus ag will always be part of the equation.

Con Land (Viewpoints of Four Executives)

- Developers are taking a bite out of farming.
- As the number of houses being built increases, ag land will be eaten away.
- The state of Florida needs an incentive to encourage land use and preservation, as there are no value-addition policies.
- More distant population projections (2060) show that Florida will have 35.8 million people, which is substantially higher than the existing population of 17.8 million; as a result, nearly seven million acres of land and/or undeveloped land will be needed.

Pro Ag Business (Perspectives of Two Executives)

- The trend is toward consolidation and ag yields will increase due to technology.
- An upward trend line will continue despite weaknesses.
- As production units expand so does revenue; by spending more now, one can make more.

Neutral Ag Business (Insight of One Executive)

- Ag may diversify into areas with better returns (e.g., there are large landowners who convert from citrus to vegetable), yet the worry is over residual chemicals used to treat citrus.

Con Ag Business (View of One Executive)

- The trend line is in decline.
- A quantitative analysis reveals that ag returns barely exceed costs and some are not even close to break-even.
- Free trade is depressing the trend line.

Pro Vegetables (Viewpoints of Three Executives)

- The trend for vegetables is okay, as there is growing demand and a lesser competitive threat.
- There is always a need for vegetable farming; in fact, Florida supplies 80% of the crop.
- Green beans are tough, but we can market them.

Pro Cattle (Insights of Two Executives)

- The trend line is supportive of cattle, as cows “can live on nothing.”
- Cattle production is more efficient and mad-cow disease is under control, yet cattle is not as vertically integrated as in the Midwest.

Pro Sugar Cane (Viewpoint of One Executive)

Sugar cane has a positive trend line and the farm bill may offer sugar cane protection.

Commentary on the Continuation of Ag Business Operations Despite Land Sale Opportunities

The overall theme of responses reveals the use of an economic model. If the returns are great enough ag producers may sell, yet a component of the model is the seeking of ag diversity and the protection of land to enhance its value. Overall, land is an asset that presents multiple opportunities.

Ag Diversity (Views of Four Executives)

- We do a little farming; our asset is land which we lease.
- We are very diversified; we will go into areas that represent sound economic investments and we are not afraid to take land out of ag production.
- We are sensitive to opportunities in real estate, yet we are looking for compatibility; overall we seek ag production in all twelve months of the year and this leads to ag diversity.
- We embrace diversification.

Sale of Land (Perspectives of Three Executives)

- We will sell land; the current valuation is from \$5,000 to \$7,000 per acre.
- Ag will continue, but some ag land will be sold for a greater return.

- We merely maintain our land for its own inherent value; this leads to land sales.

Continuation of Ag Operations (View of One Executive)

- We are staying.

Pressures to Sell (Views of Two Executives)

- Developers are all over and not just on the coasts (e.g., there is a gated community going up in Clewiston); Indian gaming will also develop an infrastructure to surround it.
- We are approached about our land, but it is not overwhelming.

Diversification Outside of Agriculture

The interviews conducted did not reveal a great deal of diversification in businesses outside of agribusiness. Obviously, some major ag producers are already well entrenched in the real estate development business. However, they represent the minority, and there did not appear to be a great deal of current migration into new business lines concerning the development of ag lands.

Most of the diversification that was cited by executives as a risk reduction strategy was across new agricultural product lines, such as ornamental plants and sod. Mining represents a tangential business being developed alongside ag for product line diversification by some major producers.

Future Importance of SW Florida Agriculture

Perhaps the most insightful responses concerned the future of SW Florida relative to the rest of the state as a producer of agriculture. A clear consensus exists that SW Florida is growing, and will continue to increase in relative importance for agribusiness production. Developments in other regions, the consolidation of ag producing land, and inland locations all are cited as contributors to a long run trend of SW Florida agribusiness growing in status and influence relative to the rest of Florida.

Pro Future Importance (Views of Nine Executives)

- SW Florida is becoming more important relative to the East coast due to disease and contamination; there is not much reinvestment in ag land foreseen along the East coast.
- The increased urbanization of the U.S. 27 corridor is shrinking ag production there and SW Florida will continue to grow in relative importance even as ag production shifts further inland within the region.
- Development in other areas of the state will increase the relative importance of SW Florida ag statewide.
- Development in other regions will diminish ag influence there, making SW Florida relatively more important.
- By holding ag production in SW Florida relatively constant, its statewide influence should increase as ag production in other regions declines.

- If citrus diseases can be controlled, SW Florida citrus will survive and increase in relative importance as the East coast, especially Indian River, continues to develop and take land out of ag production.
- SW Florida is becoming more important relative to the rest of Florida.
- Consolidation of large land tracts in SW Florida makes continued ag production more economically efficient, while the opportunity cost of consolidating large land tracts in other regions is too high.
- There will be no new land devoted to ag production, so it is a question of remaining stable relative to shrinkage in aggregate land devoted to ag production statewide.
- SW Florida has gained in relative statewide importance over the last five years; SW Florida can grow in relative importance merely by maintaining the status quo, as relative ag production statewide continues to shrink.
- SW Florida ag production is becoming more influential statewide; the largest land owners in the state are now concentrated south of Highlands County, as it is becoming too costly to keep or assemble large land tracts in central Florida due to development pressures.

Con Future Importance (Views of Two Executives)

- Society is going to have to decide if it is willing to pay more for current crops, or ag production will continue to diminish here as well as statewide.
- In the very long term, environmental land purchases and development will diminish ag in SW Florida, but this is happening statewide.

AG BUSINESS IN SW FLORIDA:

PRESENT AND FUTURE

EXECUTIVE SUMMARY OF ENVIRONMENTAL RESPONSE

Agricultural land planning is of great interest to the three SW Florida environmental leaders that were interviewed. One of the environmentalists indicated that his group advocates specific solutions, such as, high-density development; while another interviewee mentioned that land has a life-cycle with various types of land use at the appropriate phase. Overall, environmentalists believe that real estate development is impacting agriculture, but at the same time some praised a few sustainable developments in the area. As a result, the critical issue may be how land is developed, rather than whether it's developed or not. The respondents indicated that ag dynamics will change with the geopolitical environment. Therefore, ag business must continuously monitor the situation and sense and respond accordingly.

Comments on Whether Land Use and Protection Are of Interest to Environmentalists

High density real estate development is the solution of one environmentalist and denotes an integrative solution. A common interest model is also developed as well as a response supportive of agriculture.

High Density Real Estate Development (View of One Environmentalist)

- Appropriate land use and protection are seen through the Lee County Smart Growth Task Force and the promotion of high density construction.
- Land goes through a life cycle, with different uses of land appropriate at different times; this is the time of smart development that supports agricultural use.
- While taking citrus out to put in a trailer park is bad use of land, taking a few acres of citrus out to have a high density subdivision along with citrus is a good use.

Common Interest Model (Perspective of One Environmentalist)

- Citrus has land and needs income, juice plant needs citrus, high density development needs land; so, combine citrus with development to keep the citrus in the money, the juice plant supplied, and development needs met.

Pro Agriculture (View of One Environmentalist)

- We had rather see crops grow instead of condos, as long as agriculture is well managed.

Response as to Whether the Development of Ag Land for Real Estate

Purposes Threatens Florida's Heritage

Responses are mixed concerning the query with answers ranging from definitions of heritage to a perceived collision course between development and what amounts to agricultural heritage.

Protection of Agricultural Heritage (Views of Two Environmentalists)

- Local agricultural heritage may be kept if the Lee County Planning Commission stops development.
- Development is colliding with rural lifestyle and technology is not developed enough to ensure that development and agricultural use co-exist (manure-smell, equipment noise and road congestion, and pesticides offer a health danger); Ave Maria is one experiment and Babcock will be next, even though we don't see them as self-sustaining, we expect a traffic nightmare.

Definitional Issue of Heritage (Perspective of One Environmentalist)

- Heritage doesn't mean "no change" or every aspect of something (land, in this case) has to be kept the same forever; heritage is a collection of logical, sensible, and well planned events through time that makes us good stewards of something (land, in this case.)
- Heritage of land has always been "best use"; the only land heritage that pays for itself right now is unimproved pasture. All other uses will change to or include development to be profitable.

Comments on the Awareness of Real Estate Projects That Threaten Land Irrevocably

Awareness levels are mixed with one environmentalist noting yes and another no.

Pro Awareness (View of One Environmentalist)

- While Ave Maria is a done deal, Babcock will be monitored; Big Cypress will be challenged under the Endangered Species law (panthers) to stop it or slow it down and it will be hampered by blocking its access to or through CREW lands.
- The Florida Water Management District 2005 Land Acquisition Report will be used to acquire land that will make the Big Cypress project unprofitable.

Negative Awareness (Point-of-View of One Environmentalist)

- Although specific projects are not named, we can emulate Virginia and Maryland by placing high taxes on city and rural developments and by not providing them with infrastructure and roads; meanwhile, we place no taxes on developments in the city and provide roads and infrastructure free.

Commentary on Preference for Developers Versus Agriculture

Responses are uniformly in favor of agribusiness with some qualifications. Overall, environmentalists are in favor of agriculture.

Pro Comments in Support of Agribusiness

(Viewpoints of Three Environmentalists)

- We support agribusiness if it is the proper use for the land; for example, Pacific Tomato grows a breed at a premium price that can only be farmed in SW Florida, south of Ave Maria; Duda Corporation spends more R&D on food than any other business and has chosen SW Florida to grow miniature carrots, bagged lettuce, etc.
- The conflict that environmentalists have with agribusiness involves sugar growers and not other agribusiness.

- Environmentalists will support agribusiness as long as it is responsible agriculture; in fact, we need exemptions from the estate tax to keep land in agriculture and those benefiting must keep land in agriculture for at least 25 years.

Negative Comment Relating to Ag Business

(Perspective of One Environmentalist)

- When Cuba opens up, sugar and citrus will be gone in a decade.

Recommended Strategies of Environmentalists

To Protect Agricultural Land

Numerous strategies are provided ranging from land rotations; the purchase of development rights from farmers to keep land in farming; and dual strategies to protect farming and the panther.

Recommended Strategies (Points-of-View of Three Environmentalists)

- Rotate land during the year (bird sanctuary 6 months, then crops) and every two out of every three years.
- Florida Forever and Rural Land Development must acquire easements from sugar growers south of Lake Okeechobee to provide flow ways and panther access to and from the Everglades; we may consider pipe(s) from Lake Okeechobee to Everglades.

- Buy development rights from farmers to keep land in farming and away from developers forever.
- Development can protect agricultural land and the panther as follows:
 - Develop a high density community to provide income to the county (tax base)
 - Surround the community by agricultural land and citrus
 - Set aside lots of land for panther access and roaming
 - Use agricultural products to help the panther's life cycle (oranges feed pigs and pigs feed the panther)
- Pursue an integrative strategy whereby developers get land and provide houses (tax money), agricultural products and citrus, and land for panthers and pigs.

Final Reflections of Environmentalists

(Points-of-View of Three Environmentalists)

- My main worry is citrus as it is low impact, uses lots of land with low or no profit, and can be developed quickly and easily.
- Citrus is dead; landholdings that are in ag will become niche products only because mass production is gone.
- Profit is in rock, sod, timber, cattle and niche products (ornamentals and unique vegetable varieties.)

AG BUSINESS IN SW FLORIDA:

PRESENT AND FUTURE

EXECUTIVE SUMMARY OF POLITICAL LEADER RESPONSE

The four political leaders interviewed indicated that the Ag Industry is a tremendous economic and political force in Florida. The State already provides assistance including education and research, infrastructure-support and tax exemptions, among others. There is a continuous concern about the health of crops and the effect of disease and climate, as well as global competitive issues. They believe that innovations, such as, the Rural Land Stewardship program are addressing the conflicting and complex dynamics of development versus conservation.

Responses Concerning the Provision of State Aid to Ag Business

All political leaders see some type of state support.

Pro State Support (Viewpoints of Four Political Leaders)

- The state offers a fuel tax exemption and other credits for agricultural equipment and materials.
- Zoning protections are provided to promote the continuation of small farms.

- The sale of development rights allows farmers to keep farming and well off; the Rural Stewardship program is one of three methods to preserve agricultural land in perpetuity.
- The state encourages research to deal with canker through the University of Florida Agricultural Extension Program in the form of support and grants.
- Secretary Brunson has the respect of all parties and will continue the funding for Everglades restoration.
- As sugar starts migrating to Cuba and development pressures and compensations increase for vacated land, we need tax incentives to keep farmers and sugar land holders from selling out; we also need fuel crops to take over citrus lands (e.g., permits for site plants and facilities for ethanol.)

Comments on the Effectiveness of Agribusiness Organization in Eliciting Concessions

Responses encompassed ag businesses' ability to speak with a single voice and its need for support to ensure long-term survival.

Pro Organization (Perspective of One Political Leader)

- Agribusiness is an incredibly well organized political force and is supported by Secretary Brunson; it has good lobbyists, is equally supported by Republican and Democrats, and speaks with one voice (including sugar, rice, dairy, plants, citrus, timber, and cattle.)

Need for Organizational Support (View of One Political Leader)

- Agribusiness will need to join forces with environmental groups and will need support to survive in the long term.

Commentary on Whether Agribusiness Is a “Sinking Ship”

Comments are supportive of ag business, yet the form or nature of ag business is projected to change.

Pro Ag (Perspectives of Three Political Leaders)

- Selling to developers is an option, but agribusiness will remain a potent force.
- Ag business will continue in a form different than from today; compact in nature and co-existing with high density developments without the vast areas for cattle and citrus that currently exist.
- Agribusiness will provide high sugar crops for alternative fuels, producing niche and specialty crops that are better than those from Brazil and ready at the table due to close proximity.

Responses to One's Extent of Participation With AG Lobbyists

Political leader response to the query reveals interactions with lobbyists, yet individual contacts with agribusiness are more paramount.

Lobby Interactions (Perspectives of Two Political Leaders)

- I am working with the Florida Ag Council/Land Council and Farm Bureau, focusing on regionalism, affordable housing, and growth management.
- The lobbyists for small growers (Vegetable Association and Fruit Association) are very competent.

Agribusiness Interactions (Views of Two Political Leaders)

- Alico, Inc. and the Land Council own 70% of the undeveloped land in SW Florida; so we talk to them most of the time and not lobbyists.
- We tried to combine those concerned with the environment and land development (environmentalists, developers, and agribusiness owners/associations); presently, no such forum exists.

Views of Political Leaders as to What Agriculture is Seeking the Most

Definitive points of view are presented by political leaders as to what agribusiness is currently seeking. Several distinct agendas are presented.

Perceived Agendas of Ag Business (Points-of-View of Four Political Leaders)

- Ag business is concerned that they don't get credit for the environmental improvements that they have made and the money they have spent on cleaning the environment and similar projects; for example, the media and environmentalists portray the sugar industry as polluters when the facts point to the contrary.
- Agribusiness is worried that their land will be taken by decrees, laws, and regulations to keep farm land undeveloped, or in farming without compensation, as they will be unable to sell for development when they wish to do so.
- Ag business wants a smooth zoning change process, tax incentives, disease and genetic research support, access to workforce, and infrastructure (road access and rail).
- Agribusiness wants continued funding for the Rural Land Stewardship Program.

Comments on Political Leader Support for Additional Ag Research Funding

Responses are seen in the form of state financial support as well as laws/regulations and the need for research support in general.

State Financial Support (Points-of-View of One Political Leader)

- While they don't need State money, they need support for research and laws/regulations, zoning, and alternative fuel crop development.
- The issue of the land owned by sugar farms comes down to environmentalists trying to take the land without paying for it (i.e., pass laws preventing development and other farming projects rendering the land worthless), versus landowners trying to sell it to the highest bidder free from zoning regulations.

AG BUSINESS IN SW FLORIDA:

PRESENT AND FUTURE

EXECUTIVE SUMMARY OF REAL ESTATE

DEVELOPER RESPONSE

The responses of five real estate developers note that while ag lands continue to be targeted for potential development, the demand for ag conversion has cooled. However, the perceived attitude toward selling by ag landowners continues to be encouraging. Real estate developers have well-defined site location characteristics in mind, especially transportation access, perceived driving time, and the presence of an infrastructure. Most of the real estate developers have a strong interim interest in ag land (e.g., purchasing land and then leasing it for agricultural use). Those developers who are most active at present are pure land developers and those seeking entitled land; yet the interests of large regional and national homebuilders have waned. Overall, the more immediate five-year future shows a newer focus on larger and more concentrated projects like Ave Maria and Old Cypress along with a projected ag land conversion slowdown. Finally, the perceived factors most impacting ag land conversions are governmental influences and market realities, such as consumer response.

**Response to the Extent that Ag Lands Are Being Targeted
by Residential and Commercial Real Estate Developers
in Light of Florida’s Immigration Patterns**

Comments by developers reveal a mix of statements that relate to land per se and not ag targeting. In other words, land characteristics are more important than whether it is ag land. Alternatively, some developers note specific ag targeting.

No Ag Targeting Per Se (Perspectives of Two Executives)

- We are targeting properties that can be easily entitled.
- We focus on properties that provide a mix of marketable attributes.
- We want natural features that can be developed and sold to their target market.
- We are not really targeting ag land per se.
- We are mostly driven by location attributes.
- We are steered by a comprehensive plan.
- We look at the supply/demand for various submarkets with an emphasis on high demand areas.
- Comprehensive plans drive us to look at certain areas, by location, and not just targeting agricultural lands.
- Our company looks at supply and demand, demographics, and groups of home buyers and we look at the prestige of locations to see if they support the market segment that is

being targeted; the company is not buying land to hold, but to develop so it is not speculating on land that might be used ten years from now.

Pro Ag Land Targeting (Views of Four Executives)

- Ag lands have been the primary focus for master planned community developers.
- Until the market slowed, agricultural lands were being heavily targeted with development moving East; during this time there was very limited in-fill activity.
- There is a path of transition – most of the supply is further from the coast; the appeal of urban centers/villages and demographics may slow the consumption of ag lands.
- What we have seen is buyer driven, developer demand for agricultural lands.
- Concurrency is forcing leap-frog movements toward the rural/urban fringe. Adjusting concurrency may reduce demand for conversion of ag land.
- Long term ag is going away.

Other Factors Influencing Ag Targeting (Perspective of One Executive)

- Policy decisions of county governments are influencing the demand for ag conversion.
- Allowing for higher density in Hendry County limits the demand for ag conversion.

Perceived Attitudes of Ag Business Landowners to “Selling Out”

The response patterns denote positive views by real estate developers on ag landowner propensity for selling. However, there is some tempering due to family issues.

Pro Attitudes Toward “Selling Out” (Viewpoints of Four Executives)

- Increasing competition, cost, and foreign influence are making selling out more attractive.
- The economics behind agricultural operations often do not support continuation.
- Many owners of ag lands are looking to sell portions of their holdings in order to facilitate continued ag use of the remainder.
- Some owners are willing to sell out using take-down contracts which allow the property to remain in ag use until the last possible moment.
- Land sales are seen as a natural progression.
- Large land owners have planned for it and will likely sell out as market conditions permit.
- Smaller operators look to maximize return (bought with appreciation in mind).
- Some landowners look at starting development companies.
- Economics may not support the continued use of ag.
- The Question is: When? And how much?
- Ag landowners are aware of demand for development/conversion.
- We see ag landowners planning for exit in several years.

- Many in the agricultural business have many parcels that they are trying to decide when and how much to sell at each point in time; some agricultural interests are selling parts of their land with the option to buy more in stages.

Family Issues (Perspectives of Three Executives)

- The younger generation is more prone to sell out.
- Current ag landowners love ag, but the next generation may not feel the same way.
- The legacy of the landowner is a primary concern.
- Landowners need to be comfortable with the process and want to choose who purchases their property.
- Parents are making decisions about continued use.
- Some are eliminating decisions for the next generation.

Comments on Heavily Targeted Ag Lands

Responses denote a heavy emphasis on site locations characteristics instead of specific locations. Still, markets and physical locations are in evidence. Sites that are particularly attractive possess a convenient access to transportation and the support of an infrastructure.

Site Characteristics (Viewpoints of Four Executives)

- Those properties within 30-60 miles of major airports are most heavily targeted; as the market has slowed that radius has tightened.
- Those areas along the urban services boundaries are the most heavily targeted; however, there are exceptions such as the Ave Maria development.
- Easy access is a concern, especially access to water and employment.
- Transportation is the key driver.
- Timeline driven – ease of permitting and entitlement determine targeting.
- The percentage of land that is upland/wetland.
- Properties with access to employment, airport retail, healthcare, etc. are preferred.
- Site characteristics are defined by the end user.
- New home buyers include a new workforce, seasonal and retirees; they are looking for the areas close to airports and hospitals.

Market Factors (Views of Two Executives)

- Certain types of lands are offered to developers.
- Markets determine what lands will be offered for conversion.

Actual Physical Locations (Viewpoint of One Executive)

- SR80 and Burnt Store, Ave Maria and Eastern Collier are targeted.

Other Factor (Perspective of One Executive)

- During the last few years there was a lot of citrus conversion.

Responses to Developer Interests that Are Held in Ag Land

Three of the five executives surveyed worked for firms that have an interest in agricultural land. The common theme for these executives is that agriculture is an interim use for these holdings. It should be noted that the other two executives provided fee-based consulting services to the industry and would not typically have landholdings as a part of their normal operations. The following comments were made by the three executives whose firms have agricultural holdings.

Interim Interests (Points-of-View of Three Executives)

- Typically land is kept in agricultural use during the entitlement process; it is leased to ranchers.
- We have control of lots of agriculture.
- We are buying more for future use.

- It is structured so that land will stay in ag until market conditions indicate that it is time for conversion; the outcome is extending ag usage.
- We do not do farming, but we lease land for ag use.
- We use take-downs, allowing demand driven response to market conditions.

Non-Speculative Comments (Insight from One Executive)

- We are not buying and warehousing land.
- We are not bearing the price risk associated with long-term purchases.
- We have a very small interest in land and we do not buy and hold; we do have some small holdings due to staged development.

Comments on Types of Executives Most Active in Pursuing Ag Lands

Responses fall into Active and Inactive categories. Those that are most active or aggressive are pure land developers and those seeking entitlements. The most inactive are regional and national homebuilders who have withdrawn with the housing downturn.

Active Participants (Views of Three Executives)

- Those with cash, the pure land developers, are currently the most aggressive; the builder developers are not actively seeking more land at this time.
- Current buyers only look for land that is already entitled.

- Those adding value through entitlement (sales to national builders from landholders themselves – ag guys trying to capture returns for themselves).
- Some entitled parcels are now being picked up by investors.
- Some local and regional buyers are picking up parts of existing projects.

Inactive Participants (Perspectives of Four Executives)

- National and large regional homebuilders were the most aggressive; however, they are now trying to unload properties.
- There has been a significant slowdown recently.
- Many have been out of the market since 2004.
- Regional homebuilders were very active.
- National companies were there when the housing market was on “fire.”
- Regional developers and national homebuilders entered the market in a very aggressive manner buying entitled and non-entitled ag land, thus driving prices up (they are now walking away from deals and deposits).

Responses of Developers on the Future of Ag Lands Five-Years From Now

- According to the surveyed executives, ag land conversions will slow down yet a different focus may appear in land development and ag lands will be subjected to new ag uses, market forces and newer ag incentives.

New Ag Focus (Points-of-View of Three Executives)

- We will see more concentrated development.
- Larger projects may get most of demand.
- The current big projects, Ave Maria and Big Cypress are showing the way.
- We will see a smaller market in terms of new homes especially in the \$180 – \$200 thousand dollar price range instead of the \$300 thousand dollar price category that was previously seen.
- Expect some owners of agricultural lands to be working on entitlements prior to selling out.
- More prototypes like Ave Maria and Old Cypress will be in evidence.

Ag Land Conversion Slowdown (Points-of-View of Three Executives)

- The conversion process will slow and agricultural uses will still be in place.
- There will be a resumption of ag land conversion, yet 18-24 months of inventory must be worked through.

- During the next two to three years we will see the consumption of the existing ag supply with little or no demand for the conversion of ag land.

Market Factors (Views of Two Executives)

- We see a return to more healthy markets; the years 2004 and 2005 were “out of control.” (The adjustment to the current slowdown may take another two years.)
- The demand for land conversion will likely trend along with the growth of the population.

Incentive for Ag Land Conversion (Insight of One Executive)

- Owners will also have increased incentives to convert ag land as the costs of labor, fuel, chemicals, land, and environmental issues increase.

Land Use Shift (View of One Executive)

- There will be some changes in the type of ag usage, such as increased acreage for ornamentals, organic, fuel, specialty, and value-added crops; it is likely that more acreage will be used for mitigation for habitat and carbon off-sets, and the impact of canker and greening will also be felt.

Comments on Factors Impacting Ag Land Conversion

Each developer was also asked to list the items/issues that have the ability to significantly alter the pattern of agricultural land conversion. Their responses indicate that the process is susceptible to a number of potential shocks, especially governmental interventions and market realities. As a result, market participants must continue to monitor the market as it responds to changing conditions.

Governmental Influences (Points-of-View of Four Executives)

- There are problems with governmental vision of sustainable development.
- There are environmental restrictions – water, panther, protected species.
- We see insurance, taxes, local government and national government influences.
- International trade deals could alter the competitive position of agriculture.
- State policy or establishment of minimum density could slow conversion.
- We see water issues and urban boundaries.
- We see the increased costs and time associated with permitting and entitlement.
- There will be increased impact fees.
- Owners will face significant risks associated with potential changes in land use regulations.

Market Realities (Views of Four Executives)

- There may be a lack of market understanding of urban villages.
- How well will Florida continue to sell? More competition from other states.
- How will consumers respond to the urban village concept?
- There could be a change in the propensity for conversion.
- Declining consumer confidence could result in lower demand for conversion of ag land.
- An increasing cost of living could result in lower population growth in Florida.
- Ag and development are not mutually exclusive.
- Transfer of development rights, TDRs, will work for participants on both sides of the equation, developer and ag; currently there is no real market for TDRs.
- It is purely an economic solution.

Agricultural Efficiencies (Views of One Executive)

- Demand for land for other uses will result in an increased efficiency of ag operations.
- Increased ag efficiency allows land to be taken out of ag usage.

Natural Forces (Insight of One Executive)

- We see natural/environmental threats.

Other Factor (View of One Executive)

- An increase in home loan delinquency could impact conversion.

APPENDIX I

Names and Companies of Participating Ag Business Executives

CEO Agricultural Interviewees

Alexander, John – Alico, Inc.
Buker, Bob – U.S. Sugar Corp.
Caruso, Steve – Florida's Natural Growers
Duda, Joseph – A. Duda & Sons, Inc.
Edwards, Ron – Evans Properties, Inc.
Griffin, III, Ben Hill – Ben Hill Griffin, Inc.
Heller, Billy – Pacific Tomato Growers
Hilliard, Joe Marlin – Hilliard Brothers of Florida
Lucas, Charles – Consolidated Citrus
Lykes, Charles – Lykes Brothers
Marinelli, Paul – Barron Collier Companies
Obern, Chuck – C & B Farms
Priddy, Russell – J.B. Ranch
Wheeler, David – Wheeler Farms

APPENDIX II

Names and Associations of Participating Environmentalists

Hammond, William – Florida Gulf Coast University
McElwaine, Andrew - Conservancy of SW Florida
Woodruff, Richard – Wilson Miller

Names of Participating Political Leaders

Davis, Mike
Richter, Garrett
Saunders, Burt
Williams, Trudi

Names and Companies of Participating Real Estate Leaders

Bowens, Cliff – Agri-Property Consultants
Hutchcraft, Mitch – Bonita Bay Group
McCormick, Rich – Pulte Homes
Miers, Grady – LandMar Group
Timerman, Mike – Hanley Wood