
Background Information:

AN EXCERPT FROM

A NEW LOOK AT AGRICULTURE



Redefining agriculture's role in our
economy, landscape, environment
& social culture

EXCERPT #3

What Does this Mean to Me?

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What Does this Mean to Me?



Food. It's a matter of survival. If you eat right, it also can be a source of great pleasure.

Like most Americans, you probably pay little attention to where your food comes from. You buy it at a store, order it at a restaurant, expect it to be safe, nutritious, affordable and ... mostly ... to be there.

That's why the following message should concern you.

U.S. farmers and ranchers are the world's most efficient food producers. As a result, Americans have more abundance and variety to choose from — and spend only 10.7 cents of every dollar earned on their food bill,¹ compared with over 51 cents in India, 33 cents in Mexico, 21 cents in Spain and 18 cents in Japan.² *That gives us more money to spend on houses, cars, college educations and the things that bring us pleasure.*

Moreover, the average U.S. farmer feeds almost 130 people every day.³ *That means that, for every farmer, 130 other people can be doctors, lawyers, teachers, business managers, entrepreneurs, artists and students.*

But we are losing our farmers and ranchers. Rapidly. In Florida alone, almost 150,000 acres of productive agricultural land are converted to another use each year. That's over 17 acres an hour — or one acre every three and a half minutes.⁴ & ⁵ As a result, we are relying more and more on food from other countries. From countries where, in many cases, our own State Department warns us to not eat the produce when we travel there.⁶

We eat 3 times a day, thanks to the farmers who grow our food. Yet our food could become more expensive and less safe in the very near future, because of current government attitudes toward our farmers and ranchers. As populations skyrocket in the developing, high-birth nations that currently fill our supermarkets with cheap imports — and we lose our farms and ranches — we will be competing for the first time with the world's hungry billions for every meal we eat.

We eat 3 times a day. Yet we forget where our food comes from, because we are blessed with the world's most sophisticated food production and distribution system.

The world's population passed the 6 billion mark in October 1999.⁷ It is projected to grow to 9 billion in the next 30 years, then begin to level off. That's 3 billion new mouths to feed!

Yet there are huge unmet nutritional needs in much of the world. A statement prepared for the 1996 World Food Summit reported that 800 million people are underfed — and 2 billion are insufficiently nourished.⁸ That's almost *half* of the world's population! (In fact, in 1996, it *was* half of the world's population.)

The United Nations Food and Agricultural Organization (FAO) also reports that arable

land (that which is fit for cultivation) is diminishing at a rate of 10% per year in some developing nations because of soil erosion and spreading water scarcity.⁹ & ¹⁰

According to the FAO, food production will have to DOUBLE just to maintain current rates of malnutrition in the world. To adequately feed tomorrow's people, it is estimated that food production will have to increase by 174 percent — almost THREE TIMES!¹¹ Plus, food *distribution* must be greatly improved.

These changes will have to occur in the span of just one generation — at a time when we are losing our farms ... and our farmers, who know how to grow safe, affordable, abundant food. *At a time when the rest of the world is losing the land it needs to farm.*

As one environmental leader recently noted: “*Who is going to worry about a clean environment if there is no food on the table?*”¹²

We have taken our food — and our farmers and ranchers — for granted far too long. This is more than a business problem or tax problem or regulatory problem for a few farmers or ranchers. *We eat 3 times a day!* The loss of our farms and ranches is a matter affecting our national interests. It also could very well become a matter of survival.

Agriculture is more than just another business venture — it is our food supply. It is more than just a value that enhances our quality of life — it is our life support system.¹³ *Agriculture is the cornerstone of our civilization and society.*

Unfortunately, our government — at all levels — is driving farmers and ranchers out of business. Not on purpose. More by default. The effect, however, is the same. Every day, government policies, estate taxes and regulations whittle away at our farms. Profits disappear, competition for land and water intensifies, families are forced to sell land to satisfy estate taxes, farms are taken out of production to protect wildlife habitats and urban sprawl devours fields.

That's why each of us needs to:

- *Help others to understand and appreciate the importance of agriculture;*
- *Identify government policies that are working against agriculture; and*
- *Do everything we can to change these policies – and put new ones in place that will promote and encourage a agricultural industry.*

For information on what is being done by the author of this article, and how you can help, go to <http://privatelands.org> and click “contact us.”

Endnotes

1. Judith Jones Putnam and Jane E. Allshouse, "Food Consumption, Prices and Expenditures, 1970-97," Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., Statistical Bulletin No. 965.

This is the average price spent by all consumers on all food, both inside and outside the home, including snacks. The average expenditure by Americans for food to be eaten at home is only 7.4 percent of every dollar earned. The report goes on to note, however, that "The proportion of income spent for food varies widely among households of different sizes and incomes. Data from the 1996 Consumer Expenditure Survey conducted by the U.S. Department of Labor showed that the percentage of aftertax income spent for food [both inside and outside the home] varied from 8.7 percent for households with incomes of \$70,000 ... to 34.2 percent for households with incomes of \$5,000-\$9,9999."

2. "Farm Facts - Food is Most Affordable in the United States," a comparison of percent of income spent on food in 14 countries, from the American Farm Bureau web site, <http://www.fb.com/today/farmfacts/ffacts2.html>. Data from USDA and United Nations System of National Accounts.
3. U.S. Department of Agriculture, Washington, D.C.
4. *Mapping & Monitoring of Agricultural Lands Project*,: Department of Community Affairs, Tallahassee, Florida, 1984; and *Major Land Uses*, U.S. Department of Agriculture, Economic Research Service, Washington, D.C.,1992.

Over a 20-year period, the average loss is a little bit less -- but still significant. According to Florida Department of Agriculture and Consumer Services, *Agricultural Facts*, 1996, farmland losses averaged over 139,000 acres per year from 1974 through 1995, a 28% loss during that time.

A high rate of loss also is projected to continue. According to an April 1999 estimate by Dr. John Reynolds, University of Florida, Department of Resource Economics, Institute of Food and Agricultural Science, we can expect an average of 130,000 acres per year to be converted to residential or other urban uses from 2000 through 2020. See following press release:

*News release form UF/IFAS Educational Media & Services
"newsifas@gnv.ifas.ufl.edu"
UF researcher estimates rate of rural-to-urban land conversion*

*By Cindy Spence
April 26, 1999/photo available*

*Source: John Reynolds
(352) 392-1845, ext. 412*

GAINESVILLE---Natives grumble about it all the time -- the rate at which Florida land,

seemingly overnight, is transformed from pasture to pavement, hammock to highway, scrubland to skyscraper.

But how fast is it really happening? And what does the future hold?

University of Florida economist John Reynolds can hazard some pretty good guesses. The food and resource economics researcher specializes in models that provide estimates of the rate of land conversion from rural to urban.

Using population projections and data from aerial photography and satellite imagery, Reynolds estimates that 130,000 acres per year will be converted from rural to urban uses in Florida from 2000 to 2020. For Florida, the issue is critical.

"The conversion of rural land to urban uses is considerably more important to Florida than to most of the rest of the nation," said Reynolds, a professor in UF's Institute of Food and Agricultural Sciences. "Only about 2 to 3 percent of the total land area of the United States is accounted for by urban development, and only small fractions of percentages are being converted to urban uses each year.

"By contrast, Florida's urban land uses account for 10 to 11 percent of land area and that is expanding more rapidly."

Reynolds has determined that for each additional person who moves to Florida, a half-acre of land is converted to urban uses. Florida's population broke the 15 million mark in 1998, and roughly 673 people move to Florida every day. The U.S. Census Bureau projects that Florida will pass New York as the third largest state by 2025, with 20.7 million residents.

"We will continue to see the conversion of rural land to urban uses because we will continue to see people move to Florida," Reynolds said. "There will be a need for places for those people to live, work, play and go to school."

In Florida, many of the urban counties are still important agriculturally, too.

Eight of the top nine counties in agricultural sales are metropolitan statistical areas or urbanizing areas. These counties -- Palm Beach, Dade, Collier, Hillsborough, Manatee, Orange, St. Lucie, Polk -- sell more than [\$3.3 billion] in agricultural products annually [based on their direct "farm-gate" value] and, according to [1993] figures [from Florida Department of Agriculture and Consumer Services], account for [58] percent of all agricultural products sold in Florida.

Today, urban and agricultural uses in these areas co-exist quietly, but Reynolds see the potential for conflict in the future. Between 2000 and 2010, population growth in those eight counties will result in the conversion of 340,291 acres, or 531.7 square miles, to urban uses, he said. While all the new urban land would not come out of farmland, the conversion will affect agriculture.

In Dade County, farmers have stayed in business by virtue of their ability to grow winter vegetables during a window when they cannot be grown elsewhere. Tapping into that niche market has kept their farms viable. But as the value of their land creeps up, more farmers will feel the pressure to sell out, especially considering that land within 5 miles of urban areas in Dade County already carries a \$28,000-per-acre price tag.

"In Dade, agriculture is really threatened, and it could disappear," Reynolds said. "The farmable areas are being squeezed between preservation and urbanization. If the Dade population continues to grow as much, there will be severe pressure."

Numbers tell the story of Florida's transformation from rural to urban use particularly well. For example, in 1954, the census of agriculture showed 192,517 acres in Dade and 129,872 acres in Broward being used for agricultural production. By 1992, that figure had dropped to 83,681 acres in Dade and to 23,735 acres in Broward. In Pinellas County, the 1954 census showed 56,955 acres in agricultural production and that number had dropped to 4,123 by 1992.

"Most of the coming growth will be concentrated around the current major population areas. In some of these areas there will be competition for water and concern about a number of environmental land issues, along with conflict between urban interests and agricultural interests," Reynolds said. "There's going to be fairly intense competition for the rural land.

"In some cases, agricultural production can move to other rural areas," Reynolds said. "But that's not always the case, as with Dade County's vegetable-growing region."

Florida's comprehensive planning process has resulted in enough land being designated in all the counties to accommodate population growth in the next 50 years, Reynolds said. But, the designated land is not always where people want to develop.

"We will continue to see intensification of land use planning efforts and restrictions on land use changes in the next 20 years," Reynolds said.

Traditionally sleepy North Florida counties also are feeling urban pressures. Walton, Wakulla and Gilchrist counties saw 30 percent growth from 1991 to 1997. Gulf County grew 20 to 30 percent.

"These counties won't be anything like Miami," Reynolds said. "But they're not going to be Old Florida, either."

Reynolds said other trends also will affect which counties grow.

"How much will computers allow us to work and get an education at places that are nontraditional now?" Reynolds asks. "Computers may allow people to live in North Florida more than they have in the past even if their place of work is somewhere else.

"It's always hard to judge the next century's change," Reynolds said. "People now expect

more change than they did 50 years ago. But we always adapt to change, and we'll continue to adapt to change."

5. As Tim W. Williams says: "Please focus on farmers, not acreage. I got the feeling my land value would be in peril as those concerned might blanket AG areas under a cover of 'no development'. Without any other remedies in place to mitigate the possible effect my land worth as much as 20+ K per acre falls overnight to 5000.00 Where does the million dollar production loan come from if I only own 150 acres ? $150 \times 5000 = 750,000$ while $150 \times 20,000 = 3,000,000$ ltv. @ 33%. **DO YOU UNDERSTAND THIS?"**

6. Foreign travel advisories, U.S. Department of State, Washington, D.C.

Also: Center of Disease Control Travel Information: "Food and Water Precautions and Travelers' Diarrhea," Division of Quarantine, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, July 12, 1996.

7. U.S. Census Bureau projection as reported by Jack Z. Smith, columnist and editorial writer for the Fort-Worth-Star-Telegram, in an article entitled "At nearly 6 billion, we can't afford to forget Earth's growing problem," Sun-Sentinel, Fort Lauderdale, Florida, June 9, 1999, p 27A..

8. The World Bank, *Food Security for the World*, Statement Prepared for the World Food Summit, Rome, Italy, November 12, 1996.

9. Food and Agricultural Organization of the United Nations, Soil Resources Management and Conservation Service, *World Reference Base for Soil Resources*, 1998.

10. Ferdinand F. Wirth, Ph.D., Assistant Professor of Food and Resource Economics, University of Florida, Indian River Research and Education Center offered a dissenting comment to this and the following paragraph:

"... the gist of this paragraph is that there is not enough food for the current world population, and that increasing population will just exacerbate the situation. This is not true, for two reasons!! First, there is currently plenty of food produced to feed the world's population. Look at the huge U.S. grain surpluses every year. The U.S. is having problems finding storage for all the grain. The real problem is food distribution - actually getting the food to the people. Many third world countries lack an adequate food transportation and distribution infrastructure. This is evident every time there is a major African drought; people in the countryside starve while emergency food shipments end up rotting in central warehouses in major cities, with no way to get the food to the countryside.

"The second flaw in the reasoning is the failure to remember the tremendous improvements (past and ongoing) in the technological efficiency of agriculture (that's why one farmer can now feed 130 people). Just prior to World War II, one farm worker supplied food and fiber for only 11 people. Malthus was guilty of the same error (ignoring technological improvement) in 'Population' when he suggested that human population

growth is limited by the food supply. The rate of technological improvement has also been accelerating with biotechnology, and it is very possible that within one generation an American farmer will be able to feed 250 people. If we export our technology to developing nations, there is every reason to be optimistic that we can feed the world's population for the foreseeable future if the distribution problems are solved.”

Response: According to the United Nations Food and Agriculture Organization (FAO), Dr. Wirth is correct in stating that sufficient food is currently produced to feed *most* of today's people. FAO also notes that poor distribution, rather than lack of production, is the major cause for the world's current food deficiencies. Nevertheless, that does not change the FAO statistics cited in these two paragraphs. FAO has taken distribution problems into account in its projections. Hence, even though world population is going to increase 50%, FAO projects that current food production will have to double to keep pace with that increase, since much of the population increase will come in areas that also have poor distribution.

It's hard to comment on Dr. Wirth's second point. It is clear that there has been a dramatic increase in the amount of food produced per acre over the last 50 years. According to USDA and FAO, however, production increases have leveled off in the last 10 years. There is a lot of *hope* that technology (and biotechnology) will, once again, provide the key to continuing increases in production. But there is no solid evidence to show this is happening at the present time. If Dr. Wirth's projection is correct, and the average farmer can feed 250 people, then that will result in a doubling of food production — exactly what the FAO says is needed, at a minimum. If food distribution problems can be addressed, so much the better. Still, even if Dr. Wirth is completely correct, that does not change any of the points raised in this essay: world population and food demand are increasing at a time when we are losing our farms and farmers. While we might be able to stay exactly where we are *if* each farmer doubles his or her current production, or *if we completely solve* all the world's food distribution problems, the fact remains that we are losing our farms and farmers at an alarming rate. And that is going to impact the safety, abundance, variety and cost of our food in the years to come. Moreover, each of us is going to feel that impact *personally*.

11. Food and Agricultural Organization of the United Nations, *Food Requirements and Population Growth*, A Technical Document Prepared for the World Food Summit, November 11-13, 1996.
12. Kevin Burger, comment at Sustainable Agriculture Task Force Meeting, South Florida Water Management District, West Palm Beach, Florida, May 11, 1999.
13. From a presentation by Frank Williamson, Jr., “Agriculture in Florida,” at the Third Annual Public Interest Environmental Conference, Florida 2020: Visions of our Future, Reitz Center, University of Florida, Gainesville, spring 1997.