

SNOHOMISH COUNTY AGRICULTURE: An Industry in Transition

**Snohomish County
Focus on Farming Conference
Evergreen Fairgrounds
November 18, 2004**

Presented by
Carolyn J. Henri, Ph.D.

Resource Consulting

The purpose of this talk is to give a general sense of where agriculture stands today and to define a baseline so that when we set future development goals for agriculture, we know where we started. The presentation includes a historical perspective using agricultural statistics from the last 20 years, followed by some economic interpretations of what those statistics imply for the future. The presentation concludes with a look at economic opportunities. Please note that none of the statistical data presented below includes Forestry or timber production numbers.

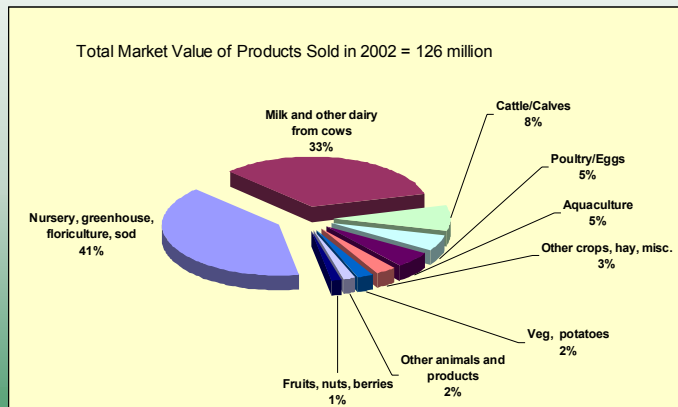
Snohomish County Agriculture Today

Below is a textual “snapshot” of Snohomish County agriculture today:

- Total land in farms = 69,000 acres
- Total number of farms = 1,600 approx.
- Average farm size = 44 acres
- 70% of farms produce less than \$100K per year in sales

This last point above is important from the viewpoint of economic development. Snohomish County farms are small businesses, which has implications for their flexibility and ability to be engines of economic growth in the county. The fact that farms in this region are small enterprises also means they are more vulnerable than larger corporations to changes in taxation and regulations.

Snohomish County Agriculture Today



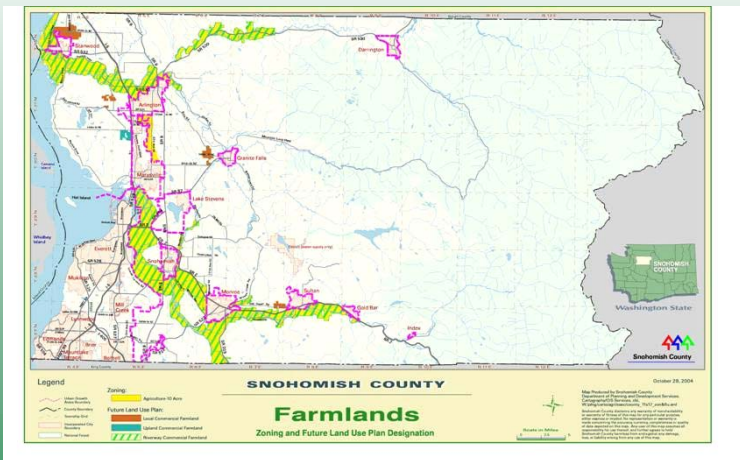
Resource Consulting
5

Figure 1

Snohomish County Agriculture is a small but diverse sector, generating 126 million dollars in sales in 2002. This production is divided between a number of sectors including the nursery industry, the dairy industry, and a host of other crop and livestock producers (Figure 1).

Agriculture is located within the western half of the county, predominantly within the floodplains of the two major river systems, the Stillaguamish to the north and the Snohomish-Skykomish-Snoqualomie complex to the south (Figure 2).

Snohomish County Agriculture Today



Resource Consulting
4

Figure 2

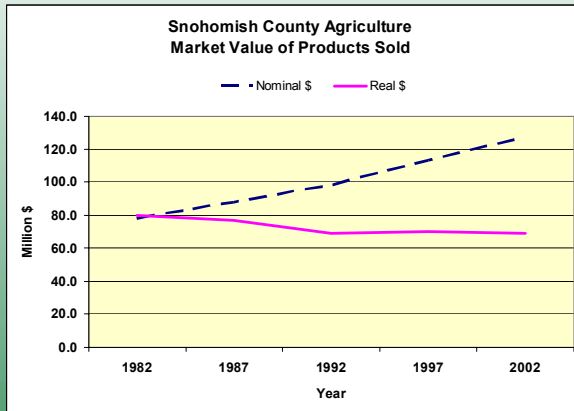
Signs of a changing industry

The heart of my argument today is that Snohomish County farming is in a period of transition from traditional industrial, commodity agriculture towards more intensive, value-added, urban-edge farming.

There is a similar trend occurring in agricultural counties all across the nation in intensely

urbanized areas including places like the Hudson Valley out side of New York City, Maryland and Virginia surrounding the DC metropolitan area, and agricultural counties north of Los Angeles. Many farm owners are faced with the same issues we face and are working out creative solutions that might also work here. Learning from their failures is equally important. These changes are occurring in both large and small scale farming enterprises, and are presenting some unprecedented challenges for the industry.

Signs of a changing industry



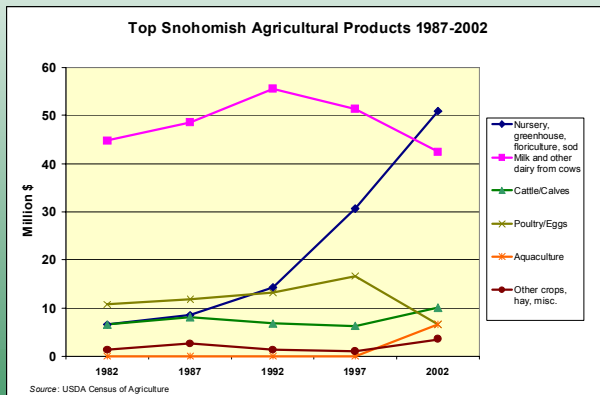
Resource Consulting
7

Figure 3

The previous pie chart was a breakout of the 126 million dollars of agricultural production in 2002. If we put today's production values into a historical context and adjust for inflation we get the picture in Figure 3. What this graph tells us is that the nominal amount of agricultural production has gone up over the last 20 years. However, when you account for inflation rates during that time production has actually stayed fairly flat. This suggests that the industry is not growing in real terms.

Signs of a changing Industry

- Production trends have steadily changed



Resource Consulting
8

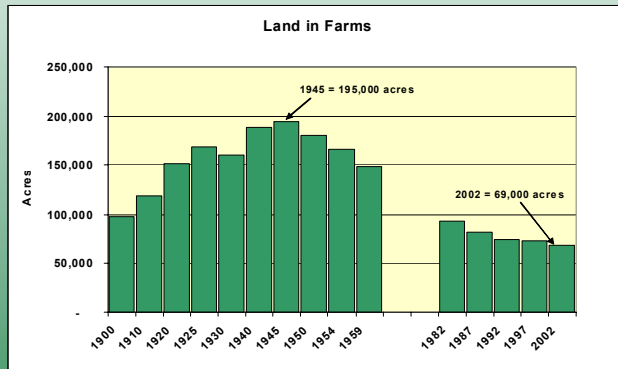
Figure 4

While total real production has been flat, the break down of what is grown has changed, especially in the last 10 years. The graph in Figure 4 shows the top products grown in the county over the last 20 years. The climbing blue line describes the rise of the nursery industry over the last 20 years. 2002 was the first census in which nurseries surpassed dairies as the largest contributor to agricultural production in the county. I'll discuss more about what's driving that trend later on.

Historically, and up through the 1990s, big agricultural production in this county, and many western WA counties, has been in dairy products, primarily milk, which is represented by the pink line in Figure 4. Plant nurseries and dairies have been accompanied by moderate production levels for products such as poultry, cattle and various crops such as hay and various vegetables. These last categories combined make up about 30% of the total agricultural production.

Signs of a changing industry

- The amount of land in agriculture has declined by 24,000 acres or 26% in the last 20 years.



Resource Consulting
9

Figure 5

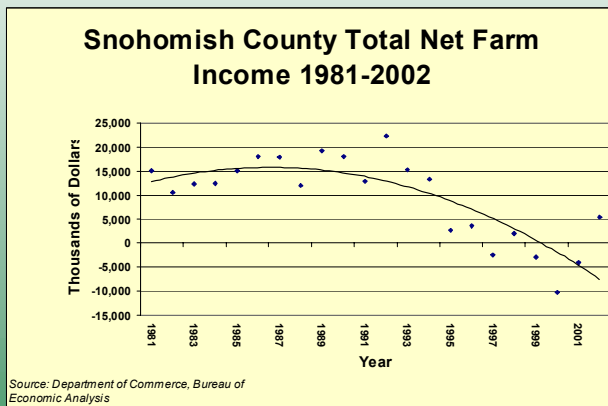
continued, but at a much slower rate, on average about 1,200 acres per year. That statistic can be broken down further into two 10-year periods. In the first, from 1982-1992 we were losing farmland at a rate of almost 1,900 acres a year. Since 1992, that rate has slowed quite a bit to a loss of about 550 acres per year. It's still too early to know for sure, but it's probably not a coincidence that the Growth Management Act came into effect in Washington State at around that same time.

The amount of land on which we are growing agricultural products has declined by 26% over the last 20 years. This declining trend is not new, but has actually been occurring since the post war period. Acreage reached its peak of about 195,000 acres in 1945. Then it saw a rather precipitous decline in the post WWII period through the 1960s.

If you fast forward to the last 20 years since 1982, that downward trend has

Signs of a changing industry

- Farm net income is declining



Source: Department of Commerce, Bureau of Economic Analysis

Resource Consulting
10

Figure 6

Another key indicator that suggests changes in the industry is that farm net income has declined over the last 20 years. NET farm income is defined as pre-tax profits, which include farm subsidies.

Figure 6 shows that in the decade of the 1980s farm incomes stayed pretty much the same, with a slight increase that peaked in 1992. There

after, in the last 10 year period things started sliding downward very quickly, and for three years between 1999 and 2001, total net income was negative. Things have picked up slightly in 2002.

Key economic factors contributing to the recent decline in Snohomish County’s agriculture industry

So, what are some of the factors behind the changes taking place in Snohomish County agriculture? (I call these “Agents of change”). Some of the big ones include:

- Low or stagnant prices for farm products
- Increasing production costs
- Increasing development pressure

It’s important to emphasize that there is a long list of factors which have played a role in the changes that are occurring in agriculture, we just simply can cover all of them in a 30 minute presentation. Other significant agents of change include:

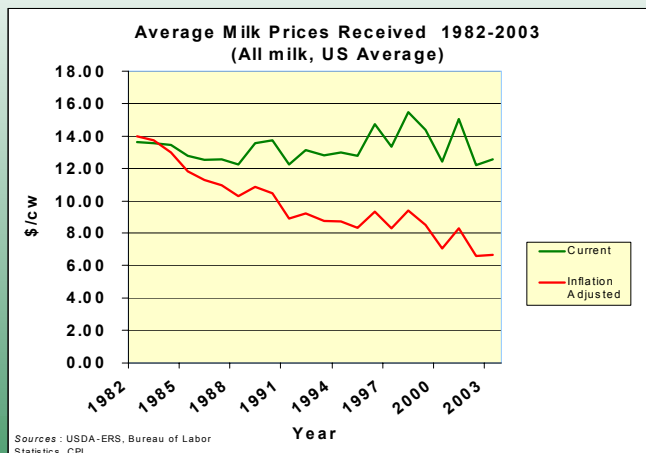
- Insufficient access to capital
- Decline of farm infrastructure in the county
- And the lack of young, new farmers coming up through the industry.

Each of the factors in the first set of bullets will be discussed in detail below.

Low prices for farm products

Figure 7 shows the US trend in fluid milk prices over the last 20 years. Nominal prices hovered pretty steadily between 12 and 15 dollars per *hundred weight* (CWT). In

Agent of change: Low prices for farm products



Sources : USDA-ERS, Bureau of Labor Statistics, CPI

Resource Consulting 12

inflation adjusted terms this means that measured in 1982 dollars, farmers are only receiving the equivalent of about \$6.30 per CWT today. A similar trend has occurred for green peas, which have historically been an alternative cash crop for farmers in this county.

Increasing production costs

Now we will take that stagnant product price history and compare it to what’s been happening to farm expenses.

Figure 7

Agent of change: Increasing production costs

- Total production expenses have risen at an annual rate greater than revenues

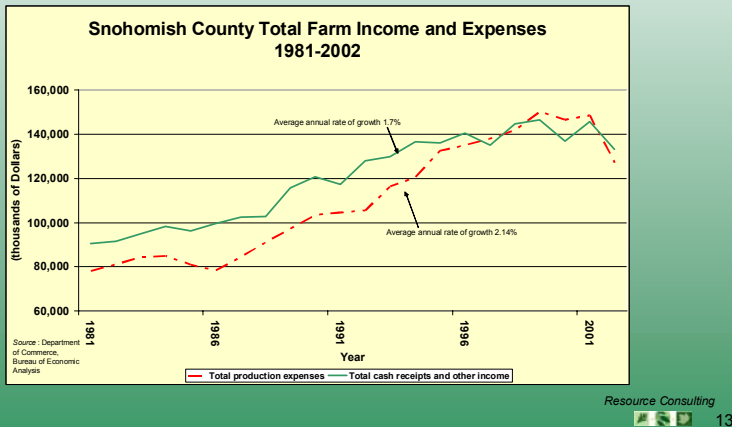


Figure 8

Figure 8 is a graph of Snohomish County total farm income and expense between 1981 and 2002. Over the past 20 years, expenses have been growing at a rate of 2.14% per year, while farm gross incomes have increase at a rate of 1.7% per year. This imbalance finally caught up with the industry in the mid 1990's when expenses finally exceeded income, and they have continued to do so until just recently.

Agent of change: Increasing production costs

- Since 1981, labor costs have risen from 9% to 28% of all production expenses

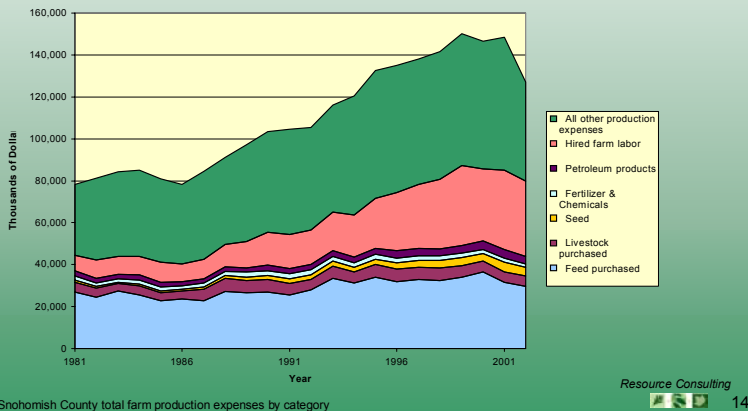


Figure 9

While total costs have been increasing over time, some cost items have grown more than others. Figure 9 is a graph showing the breakout of farm expenses over the last 20 years. The fastest growing component of increasing costs has been labor costs, which is shown in orange. In 1981, labor costs represented 9% of total expenses. By 2002 they accounted for 28% of all production expenses

Increasing development pressure

The last agent of change that I'll discuss today is increasing development pressure. Snohomish County has experienced exponential population growth since the 1960s. It has been growing by over 40% each decade since that time. The current population is

639,400, and is expected to grow to 833,000 by 2020. Snohomish County is using a target population of 930,000 residents by 2025 for planning purposes.

This population growth has exerted upward pressure on land values in general, including agricultural land values. This has put extreme pressure on farmlands to convert to other (more intensive) land use designations. What we see in Figure X is the rise in residential and commercial land values just over the past four years in the county represented by the green columns.

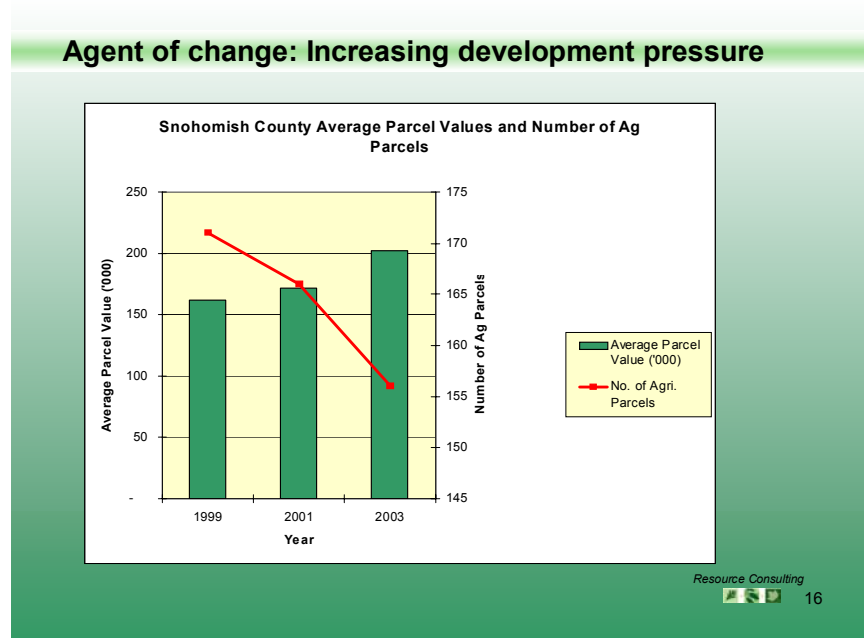


Figure 10

This is juxtaposed with the decline in the number of agricultural parcels over the same period, as represented by the downward sloping line in the same figure. As we noted earlier, agricultural land has converted to other uses at an average rate of 1,200 acres per year over the last 20 years.

New economic trends for working family farms

Changes in Snohomish County agriculture are being driven by factors

such as weak commodity prices, rising costs, and mounting population pressure. How is this going to shape what agriculture looks like in the future in our county? Below are some of the new trends that are emerging in Snohomish County Agriculture which are going to carry it into the future. These are trends that apply across all agricultural sectors and for both large and small producers alike.

- Increasing diversification of farm enterprises
- Increase in direct marketing
- Rise of specialty markets such as organics and branded products
- Shift to value-added products
- Development of new crops and products

Each of these will be discussed briefly.

Increasing diversification of farm enterprises

Diversification can occur at several levels including the farm level and the sub-sector level. Diversification is a desirable development strategy when it is used as a means to raise overall income and build protection against turns for the worse in any one product.

Our existing industry holds the key to our future diversification potential. Each of these industries has diversification potential, and many are already highly diversified, such as the nursery sector.

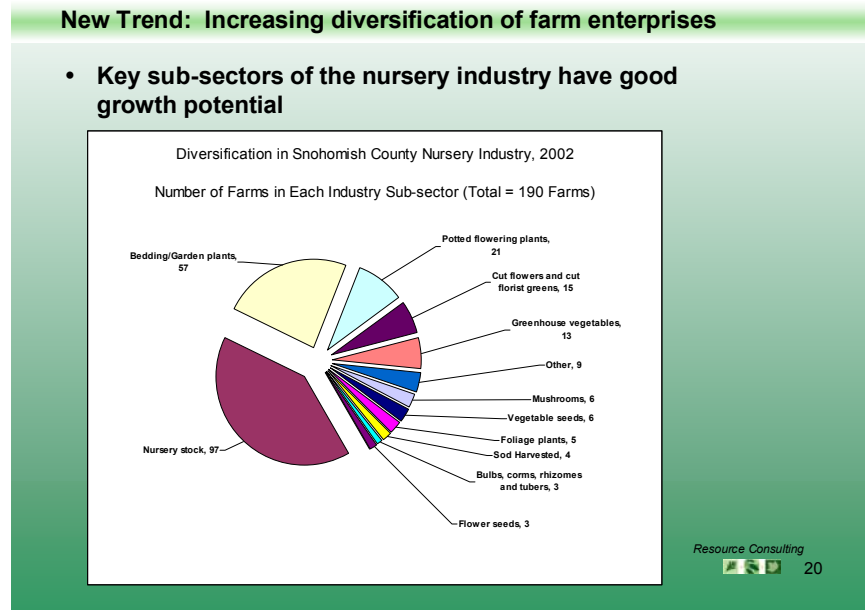


Figure 11 is a pie chart showing the diversity within the nursery sector. With the projected population growth of this county, there is tremendous growth potential for this industry. Particularly in sub-sectors such as potted plants, greenhouse vegetables and mushrooms. An important question that should be addressed in a future strategic development plan for agriculture is: What new diversification potential is there for other sectors

Figure 11

such as dairy, poultry, and cattle?

Increase in direct marketing

Shifting to direct marketing techniques and production of higher value-added products means that the farmer can achieve higher income and greater production values per acre farmed. Achieving higher production values per acre is one way to increase the growth of the industry as a whole.

A few of the many farms that have successfully used direct marketing in our county include: County Charm Dairy in Arlington, Schuh Farms (Stanwood & Mt. Vernon), Ninety Farm in Arlington, Stocker Farm here in the Snohomish basin, and Reid and Mary Carleton’s Farm in Everett.

Development of specialty markets & value added products

Some examples of growing specialty markets include:

- Growth of organics
- Grass-fed and “natural” beef
- Vegetables
- Cut Flowers

- Value-added products such as cheese, fresh herbs and preserves

These opportunities will be discussed in more detail later on.

New crops and products

Finally, new crops and products are emerging that have great potential for larger growers in Snohomish County. These include:

- Biobased products such as energy from methane and biodiesel
- Environmental services such as habitat credits and flood storage payments
- Agro-Tourism enterprises such as U-Pick operations and flower festivals similar to the annual Tulip Festival held in Skagit County.

Market Opportunities

Research indicates strong growth opportunities for Snohomish County Farmers. In 2002, WSU faculty conducted a Random telephone survey of 950 respondents in 4 Washington counties that showed consumers want to buy more local products (Table 1).

<i>Percent of consumers surveyed interested in purchasing more:</i>			
Vegetables	82%	Fruits	81%
Eggs	52%	Dairy	44%
Beef	36%	Poultry	34%

Table 1

Over eighty percent of those polled desired more local purchases of fruits and vegetables. Between 40 and 50% expressed interest in purchasing local eggs and dairy products, and 35% expressed interest in greater access to local beef and poultry.

This same survey showed that consumers’ top 3 food shopping criteria are: taste, freshness and nutritional value; suggesting greater direct marketing opportunities for local buffalo, grass-fed and organic beef, and of course fruits and vegetables.

Direct Marketing: Room to Grow

Here in Snohomish County less than 2% of county agricultural production is currently sold directly to consumers. State-wide the total is 45 million dollars, which represents less than 1% of total farm production in the state. There is hope for expansion, however. In a 2002 survey of producers, Washington State University researchers found that 34% of NW Washington farmers are planning to do more direct marketing to consumers. The same survey found that 73% of NW Washington farm owners believe that direct marketing is an effective way to keep farming viable.

In fact, Washington State farmers’ markets have blossomed in recent years, and now support approximately 1,500 vendors. Total farmers’ market sales topped \$22 million in 2003, and have been growing at a rate of 25% per year for the last 5 years. If current

growth continues, farmers markets will distribute over 100 million dollars in farm products by 2010.

Thinking in terms of economic development for the agricultural sector we need to ask: What percent of agricultural products could potentially be sold through this means of distribution? And what production, infrastructure and regulatory barriers exist to prevent direct marketing from growing? A successful strategic plan would work to eliminate these barriers.

Specialty Markets: Room to Grow

Examples of highly successful specialty producers in our state include: Fungi Perfecti, LLC., a producer of medicinal and gourmet mushrooms located in Olympia, and Chukar Cherry Co., manufacturer of chocolate covered cherries, preserves and condiments, located in Prosser, WA.

In the next year the Port of Everett plans to open container shipping services to Asia. This will provide local growers with easier (closer) port access and specialty product export opportunities.

Organic: Worldwide Growth

This section touches on what's been occurring in the organic markets, which I think hold some future opportunities for Snohomish County agriculture. By all indications, organic production and consumption is moving mainstream. It is the fastest growing segment of the supermarket business, and analysts believe it will be a \$60 billion industry by 2005. Consumer demand for convenience products has risen sharply and has provided new venues for organic value-added products. In addition, consumers view organic products as viable alternatives to bio-tech foods and food safety concerns.

Organic farming in Snohomish County is just beginning. Currently there are only 578 acres of organic production and 16 farms that are certified organic. Local products that have already entered or could enter the organic market include: Milk, processed dairy products, fresh produce, processed vegetables and other processed foods.

Conclusions

I'd like to leave you with a few closing thoughts that are intended to summarize and lead us into our discussions for the rest of the conference. What I hope I've been able to show you with this data is that Agriculture in Snohomish County is in a process of intense transformation. I want to be very clear that this is not necessarily a bad thing nor does it portends the end of agriculture in this county. I think there are some great economic opportunities in this industry.

How we shape this period of change is up to all of us. The questions we are here to look at today are: How can local government motivate and foster healthy change in the industry? And how will we create a thriving agricultural sector in Snohomish County? It is vital that the farming community, business sector and local government participate in a strategic planning process that addresses these questions. Without strong input from

the industry, a development plan becomes an academic exercise. You've already made a big investment in participation by being here today, and I urge you to continue your commitment to work on this development plan in concert with the County.

The road ahead is not an easy one. Below is a paraphrase by Washington State economist Kirsta Glenn, which I think sums up the challenges before agriculture:

“Producers will continue to face rising costs amidst increased domestic and foreign competition. They must confront a broad array of challenges simultaneously. The emphasis will move towards lowering costs, increasing productivity, improving crop varieties and away from ordinary measures of growth.”

- *Kirsta Glenn, Chief Economist, WA Dept. of Employment Security, 2003*

One thing that people across all interest groups can agree on is that agriculture is a key land use for the future economic, social and environmental health of this county. I believe it is on this point that we can build partnerships and plan a bright future for agriculture in Snohomish County.

Acknowledgements

Many individuals and organizations contributed to the information in this presentation. I would like to especially acknowledge the staff at Washington State University Extension, The Snohomish Conservation District, Snohomish County Government, and last, but certainly not least, the many private farm and business operators who gave freely of their time to review and comment on the content of this presentation. I am most indebted to all of you.

Thank you.

Carolyn J. Henri, Ph.D.
Resource Consulting
7925 300th St. NW
Stanwood, WA 98292

Phone: (360) 629-6587
Fax: (360) 629-7002
Cell: (425) 308-1634
E-Mail: Carolyn@ResourceConsulting.us
Website: www.ResourceConsulting.us