

Review of the AG 2000 Project: Implications for the Future of Farming Project

AG 2000 Project, General

The AG 2000 project was conceived to develop economic strategies for Washington Agriculture to the year 2000. It was a large-scale effort, spearheaded by then Director of Agriculture, Dr Alan Pettibone. It employed the services of senior economist, Dr James Cornelius, on leave from Oregon State University. It involved contributions over a two-year period from the Washington State Department of Agriculture, the Agricultural Market Development Advisory Committee and Washington State University, and the input of many individual farmers and ranchers, processors, merchandisers, commodity commissions, grower and industry organizations, agribusiness firms, university interests and government agencies. Its report was issued in June 1989. The Future of Farming project 2020 seeks to complete in less than one year what the AG 2000 project achieved in two years. Accordingly, the Future of Farming project 2020 needs to absorb the lessons learned before, during and after the AG 2000 project and implement those lessons in developing strategies for Washington agriculture to the year 2020.

The AG 2000 project based its findings and recommendations on a thorough diagnosis of the then status of Washington agriculture. Washington agriculture was defined broadly as “the farming, ranching, processing, business, and associated cultural activity that combine to produce food, fiber and certain industrial goods for consumers in the state and around the world.” It was recognized both as a major industry in its own right and as a major contributor to the state’s economy and especially to rural areas. The AG 2000 project assumed that long-term coordinated strategies were necessary, and an offensive stance the best way, to take advantage of the economic opportunities and challenges facing the state’s agricultural industry. It aimed to specify (1) preferred futures/objectives, (2) emerging issues, (3) major challenges and opportunities, and (4) priority strategies to achieve the preferred futures.

Ag 2000 Project, Diagnosis

In its review of the status of Washington agriculture in the 1980s, the AG 2000 project reported that there were 38,000 farmers and 16 million acres of farmland in the state. The industry was diverse and characterized by a large number of producers, selling to a much smaller number of processors, handlers, or marketers, who in turn sold the finished products to a large number of consumers. A tendency to consolidation was also noted both at the farm level and in the marketing system. However, most producers remained price-takers, being too small to individually influence the market. About 75 percent of the state’s agricultural production was sold outside Washington and over 25 percent in foreign markets. Significant value was added to the raw commodities through processing and handling in-state. However, producers’ share of the retail food price averaged only 30 percent during 1986 for a representative basket of goods. Many farms had suffered financial stress in recent years and one thousand had left the industry between 1983 and 1987. Only dairy and wheat farms had benefited from government support programs.

From its diagnosis of the status of Washington agriculture, the AG 2000 project concluded that the industry had survived difficult conditions in the years since 1982, was now entering a new era of international and domestic economic relationships, and faced continued structural and economic change on into the 21st century. Because of diversity in both products and functions, different segments of the industry had been affected by different forces in the recent past. However, it was now a “technologically advanced, economically viable but inherently volatile industry, with a relatively complex structure that most consumers take for granted.” The review was optimistic that Washington agriculture was “favorably situated to exploit opportunities in new products and markets, advances in biological and information technology, and value-added processing.” However, to do that would require efficient use of natural resources, maintaining competitiveness, building infrastructure, regaining profitability, reducing government regulation, and managing lingering excess capacity. It would require greater emphasis on flexibility, innovation, creative marketing and coordination and cooperation skills. This contrasted with the traditional emphasis on capital-intensive, large-scale, supply-oriented, low-cost production of bulk, homogeneous products.

AG 2000 Project, Preferred Future for Washington Agriculture

The AG 2000 project sought agreement from all participants on a preferred future for Washington agriculture that could permit agreement on strategies to reach this preferred future. The preferred future for Washington agriculture included seven major elements:

1. Become a market-driven economic community with reduced dependence on government policy.
2. Develop a broad base of marketable commodities and appropriate markets.
3. Increase the opportunity for profitability in the agricultural industry.
4. Enhance the economic growth and improve the business environment of Washington’s agricultural sector.
5. Achieve an efficient use of Washington’s resource base: land, water, capital and management.
6. Obtain ready and efficient access to markets for agricultural inputs and products.
7. Achieve a more stable level of prices, production, sales, and net returns to individual firms.

Twenty years on, in 2008, it is clear that some parts of the preferred future remain elusive. Some reasons for this will be discussed in a later section. The grain and dairy industries remain heavily dependent on government programs that provide price or income supports but restrict marketing options. In other commodities, such as fruits and vegetables, the more progressive firms have become market-driven, but many operations continue to be supply-oriented. The base of marketable commodities and appropriate markets has alternately expanded and shrunk in response to changing opportunities. Profitability has been particularly elusive since the mid-1990s. The shocks of the Asian, Russian and Latin American financial crises have caused wide fluctuations in prices and net returns and have forced many producers, packers, processors and marketers out of business. The business environment for Washington agriculture remains unattractive. The surviving firms have been forced to become more efficient in their use of land, labor, water, capital and management, but much progress remains to be made.

AG 2000 Project, Economic Strategies for Washington Agriculture

Based on the preferred future vision, the AG 2000 project outlined five major economic strategies for Washington agriculture. The key areas of emphasis were:

1. Domestic and International Marketing, including expanded market information, target market analyses, product development, promotion and enhanced marketing support programs and services.
2. Commercializing Science and Technology through new discoveries, technology development and commercialization.
3. Value-Added Processing, through improving the business climate and encouraging or recruiting selected processing activities.
4. Building Infrastructure, especially in education, finance and transportation, and
5. Natural Resource Management, through multi-interest coalitions, increased efficiency in natural resource use and increased education of the public and industry about agriculture and the environment.

The report noted that the strategy for domestic and international marketing was the only one formally in place through WSDA's Market Development Program and WSU's International Marketing Program for Agricultural Commodities and Trade (IMPACT) Center. Both these programs remained very active through the mid-1990s, but have suffered severe attrition since. The commercialization of science and technology in the service of Washington agriculture has been fitful and erratic. The processing industry in the state has also suffered from attrition. The infrastructure for education, finance and transportation continues to lag behind the industry's needs. A number of efforts at establishing multi-interest coalitions have come and gone. While agriculture has become increasingly efficient in its use of natural resources and careful in its treatment of the environment, the agricultural industry is still seen in too many quarters as inimical to, rather than a friend of, the environment.

AG 2000 Project, Implementation Plan

The AG 2000 project did not set out a detailed implementation plan for executing the chosen strategies or meeting the preferred future. It saw the strategies as long-term areas of involvement and the desired outcomes as objectives that might not be fully realized for 10 or 20 years into the future. It intended the strategies to act as "guiding, ongoing philosophies rather than detailed action plans." It suggested detailed activities that might contribute to execution of the key strategies. It argued that while state government had taken the lead in initiating the AG 2000 planning process, the momentum for the implementation process must ultimately pass to private industry. It recognized that implementing even one of the strategies would be difficult, "requiring broad-based support, inspired leadership and patience." It warned against preoccupation with short-term issues that "can erode the commitment to long-term objectives with distant future payoffs." It argued for quick action by the agricultural industry to determine the priority topics to be tackled, to formulate appropriate policy initiatives and to place these on the agenda of public and private decision-makers for further action.

Factors that have changed since the AG 2000 Project

Twenty years have elapsed since the AG 2000 project report was completed. Many factors affecting Washington agriculture have changed in the intervening period. These range from global geopolitical changes to changes at the local level within agriculture.

Global changes. Major global changes have altered the economic, social and political landscape for every person and industry. Among the most dramatic events have been the collapse of the Soviet empire and the switch of its member countries from central planning to free-market capitalism. Equally startling has been China's embrace of a modified form of capitalism that has allowed its economy to grow at double-digit rates for two decades and gained China admission to the World Trade Organization in 2002. Since the mid-1990s, India has gradually liberalized its market system. The joint effects of these changes have been to add 2 billion workers to the global free market system. Initially, that led to increased supplies of many products to the rest of the world at very low prices. As their affluence has grown, these economies have also driven up global demand for many products. Finally, as their savings have grown, they have become major sources of capital for governments and the private sector in the rest of the world. However, economic growth in many key Washington State markets has been far from smooth. Exports have been severely disrupted by financial crises that began in Mexico in 1994, in East Asia in 1997, in Russia and Eastern Europe in 1998 and in Latin America in 2000. Markets in oil-producing countries have oscillated up and down with oil prices.

The world has continued to shrink and become more interconnected with the advance of information technology. The internet has become ubiquitous in personal, social and business life. Increasingly, problems are seen as being global in nature, requiring global solutions. Among the most debated is the impact of human activities on climate change, the accumulation of greenhouse gases, and what should be done to reduce the impact. Agricultural production and food distribution are considered major contributors to climate change and are being pressured to contribute extensively to the solution. Many global issues are deemed too important to be left to governments or multinational businesses alone. Well-organized non-profit groups claiming to represent "Civil Society" have sought, and often gained, a seat at international negotiations. Another recent development that affects all trade and travel is homeland security, the anti-terrorist system set up after the September 2001 attack on the World Trade Center in New York.

Washington State Changes. Within Washington State, the population has continued to grow rapidly. The demand for housing, roads, schools, hospitals, etc., to meet that population growth has put additional pressure on agricultural land (often prime farmland), especially on the west side of the state and on the periphery of urban areas in Eastern Washington. In contrast, agriculture's share of the state's economy has continued to shrink. Careers in agriculture have become less attractive. Even in rural areas, agricultural activities have become concentrated in fewer, larger towns and cities. Many rural communities have become "hollowed out" as they have lost employment on farms or supporting agribusinesses and can no longer maintain their local schools, banks, doctors and other critical services.

Structure of Agriculture Has Changed. The structure of agriculture in Washington State has also continued to change. Each successive year, there have been fewer producers, packers, processors, warehouses and marketing firms. The surviving firms continue to get larger, either to gain economies of scale or to assure access to major customers. The surviving firms have been eager adopters of new technology from mobile phones to computers to global positioning systems to precision agriculture techniques. Much of the change in structure has been in response to significant changes in the domestic and international marketing system for agricultural and food products.

Domestic and International Marketing System Has Changed. At the time of the AG 2000 project, the retail food system in the United States was dominated by large, traditional supermarket chains and large wholesalers that maintained high marketing margins and competed for consumers by emphasizing special price promotions. Unlike the fast food restaurant chains, they had little interest in expanding outside the United States. However, during the 1980s, discount retailer, Wal-Mart, entered the food business with its “Every Day Low Price” policy, mostly using the supercenter format. Membership club stores like Costco emerged to offer a limited assortment of high quality foods and non-foods at low margins. Wal-Mart and Costco preferred to build relationships with suppliers that could meet their quality and price specifications on a twelve-month basis, rather than compete in providing special promotions. The traditional supermarket chains were forced in large part to follow suit. Traditional wholesalers lost market share. Formats similar to those of Wal-Mart and Costco were introduced in many other countries by mega-retailers such as Tesco (UK), Ahold (Netherlands), Metro (Germany), Carrefour (France) and Delhaize (Belgium). By 2003, the top ten global food retailers commanded one third of the global grocery business.

These large retailers are moving towards a global sourcing system for their purchases. They prefer to buy from the source that can provide the best combination of delivered cost, quality and service for their far-flung enterprises. The food processing industry has responded to these pressures by concentrating its plants in the most favorable locations. For example, just five processing companies now provide 80 percent of the world’s frozen potato supplies. Seasonal factors play a more important role in procurement of fresh products. However, there are numerous quality suppliers that compete with Washington State firms for global markets. China has become a formidable competitor in apples and pears, Peru in asparagus, Chile in apples, pears and raspberries, Turkey and Spain in sweet cherries, and so on. Even in bulk wheat, countries of the Former Soviet Union have re-emerged as competitors in many markets.

Consumers have also changed dramatically. Markets have become increasingly fractionated to meet the different demands for both intrinsic and extrinsic qualities in their food. This has led, for example, to a proliferation of new varieties of apples and sweet cherries since 1980. In general, larger, better-capitalized, integrated grower-packer-shippers have been better able to quickly switch to these newer, more attractive varieties. In contrast, smaller growers have lost competitive position because they have often been stuck with a greater share of the older, less attractive, less profitable varieties.

However, producers can no longer respond only to the market signals of consumers. They also need to be attuned to the changing demands of major retailers, who, in turn, are often responding to the pressure of activist groups for food products that aid human health and worker safety, have a benign effect on the environment or meet other societal needs.

Government Role Remains Strong. Governments continue to be major players in the food system through economic, agricultural, labor and environmental policies. Agricultural price and income policies continue to influence agricultural production and trade in many countries. The efforts of the World Trade Organization to liberalize trade in agricultural products made considerable headway in the Uruguay Round negotiations, but have been stalled since 2001 because of an impasse among major governments such as the United States, the European Union, India and Brazil. Governments have also become major promoters of plant-based alternatives to petroleum such as ethanol from grain crops or biodiesel from oil crops. Due to a combination of other factors, the expansion of these alternative energy policies has coincided with depleted grain stocks and a sharp run-up in grain and oilseed prices, and has contributed to rapid inflation in food prices. Northwest agriculture has been affected most by the increase in the cost of feed for its livestock industry and by inflation in land values. The continuation of alternative energy policies are likely to lead to further changes in price signals in the grain, oilseed and livestock markets and changed reallocation of resources in agriculture.

Obstacles to Technology Transfer. The commercialization of new technology in Washington agriculture has not proceeded as the AG 2000 project envisaged. Firms have adopted many technologies developed by the private sector in electronics, computing, telecommunications, sensors, biopesticides, etc. However, the expected revolution in many parts of Washington agriculture due to biotechnology has not occurred. When Monsanto and other U.S. pioneers attempted to transport biotech advances in corn and soybeans to Europe, they were met by an avalanche of organized opposition that portrayed genetically modified organisms (GMOs) as bad for consumers and bad for the environment. The resulting adverse publicity froze any further commercialization of genetically modified wheat, fruit, vegetables, potatoes or other products of importance to Washington State. Producers and marketers were unwilling to take the risk that their entire product line, and their company's reputation, would be deemed unsafe. The tide of public opinion in favor of genetically modified foods is slowly beginning to turn, but no major company wants to be first to introduce new GMO foods.

The USDA and the universities have not provided the hoped for new discoveries that could transform the state's agriculture, nor have they been a major source of technology development of use in agriculture. Their major contribution has been in adapting technologies developed in the private sector for use in Washington agriculture. The technology transfer gap has, if anything, widened, between the universities and agribusiness. Larger agribusinesses prefer technology that can be made proprietary to their business, whereas the universities are committed to providing broad public access to scientific discoveries. A number of institutional initiatives have been set up to bridge that gap, but the gap remains a large obstacle to technology transfer.

Difficult Period for Washington State Processors. The hopes of the AG 2000 project for increases in value-added processing in Washington State have not been met. While there has been expansion of small, boutique processors that serve niche markets, and an explosion in the number of new, small wineries, large-scale processing has been under siege. As previously noted, the expansion of multinational retailers around the world and increased global sourcing of many products has led to dramatic consolidation at the processor level. When a processor's headquarters moves out of state, so do the research and development activities that are needed to spawn the next generation of new products. In many commodity sectors, processing in Washington State has been reduced to one dominant firm. Even for those surviving firms, their future in Washington State is dependent on their ability to remain globally competitive. Many other countries, such as China, Chile and Turkey, have advantages over Washington State in low-cost land, labor and public infrastructure, and can now more easily attract the capital and management expertise needed to build up their competitive capabilities. At the same time, the business climate in Washington State has not attracted new, or rapidly-growing, firms to the state. Organized efforts to recruit value-added processing firms to the state have dwindled.

Infrastructure Under Siege. The AG 2000 project called for renewed efforts to build the state's infrastructure, especially in the areas of education, finance and transportation. While Washington State has an enviable legacy in education and transportation infrastructure from investments made decades ago, that legacy has suffered attrition over time. Public funds for universities have shrunk in real terms for almost 30 years during a period when the complexity and cost of scientific discovery has soared. The share of total university budgets supplied by the state has shrunk. Universities have been forced to turn increasingly to federal agencies, foundations and private sources for grants to fund their research programs. Inevitably, this has led to a dilution of the focus of university research on the state's problems. This dilution has been most noticeable in agriculture where the historic bonds were once so strong. Many agricultural-oriented departments and fields of study have suffered severe erosion in faculty numbers. The ties of the remaining agricultural faculty with working agriculture have continued to weaken. Shrinkage in the number of agricultural extension faculty has curtailed the traditional technology transfer role of the university. In addition, agricultural employers report that graduates with agricultural degrees have less practical experience with working agriculture. In general, the university branch campuses added in different localities in the last 20 years have not strengthened university links with agriculture.

The transportation infrastructure in Washington State has also been under severe stress. After World War II, the existence of two major east-west rail systems, the expansion of the U.S. interstate highway system, and the development of Washington ports gave Washington State agricultural products superlative access to national and world markets. However, consolidation and retrenchment have reduced rail services in much of Eastern Washington. The interstate highway system has become increasingly crowded going east and there is frequent gridlock going west to ports on the Puget Sound. State leaders are aware of the huge investment needed to improve the transportation infrastructure, but have not found an acceptable formula for financing that investment.

Tremendous changes have also taken place in the nation's banking and financial system in the last 20 years. Many large state banks have been absorbed into larger national entities, and their headquarters have moved further and further from the state. For example, Seattle-based Seafirst Bank was absorbed into San Francisco-based Bank of America, which has since merged with Nations Bank and moved its headquarters to Charlotte, North Carolina. Similar concentration has occurred with major insurance companies that make long-term loans to agriculture. The Farm Credit system has gone through a number of transformations. Publicly-funded programs, such as the Small Business Administration loan programs, USDA loan programs, industrial development bonds, etc., have waxed and waned. In general, finance has been most available when agriculture is most profitable and most difficult to acquire during unprofitable years. In that sense, the relatively high prices of the 2006-2008 period should temporarily ease the problem of financing Washington agriculture, but will not provide a permanent solution.

Natural Resource Battles Continue. The AG 2000 project called for improved natural resource management in a number of key areas. It proposed greater use of multi-interest coalitions to avoid polarization between environmental activists and agricultural interests. Such multi-interest coalitions have been difficult to sustain when objectives of the different parties clash. For example, years of drought have intensified battles over water rights. Water is a critical ingredient for irrigated agriculture. There is a persistent campaign to remove some of the dams on the Columbia-Snake river system in order to save the salmon. Indeed, one candidate in the 2000 presidential election, Al Gore, included removal of dams in his platform. Much of Washington State agriculture vehemently opposed dam removal as a threat to its water and cheap energy. Use of agricultural land also remains contentious. For example, developers have gained permission to build on wetlands by creating new wetlands in agricultural areas.

Because of criticism of its use of natural resources, Washington State agriculture has made major advances in increasing the efficiency of its use of land, water and energy and in improving the quality of the discharges from agricultural activities. The AG 2000 project called for efforts to educate the public and the media about the compatibility between good agricultural practices and environmental stewardship. However, agriculture's significant achievements in that respect are not widely recognized, especially by the urban-based media outlets in the state. Agriculture itself has done little to tell its side of the story.

AG 2000 Project: An Assessment. The consensus of reviewers of the AG 2000 project report was that it was a very thorough assessment of the major challenges and opportunities that faced Washington agriculture in 1988. While developments since then, such as the emergence of China and India, or the development of the internet, could not have been forecast at that time, the report still contained many strategies and recommendations that remain valid in 2008. However, many of these strategies and recommendations were not implemented. There may be important lessons for the Future of Farming 2020 project in understanding why implementation was not more effective.

The major omission of the AG 2000 project was that it did not create a structure that could begin the process of implementing some of its recommendations. It may have wrongly assumed that there was strong commonality of interest across all of the state's agriculture. For example, its first preferred future was "Become a market-oriented economic community with reduced dependence on government policy." However, clearly, many producers in the grain and dairy sectors are not yet willing to break their links to government programs.

Many of the key players in the AG 2000 project rotated out of their leadership positions after 1988. Their successors did not readily buy into a program that they had not helped to craft. The AG 2000 report warned about the dangers of getting unduly sidetracked by short-term issues while keeping one's eyes on long-term strategies. However, during subsequent periods of economic distress, solving short-term problems took precedence as producers, packers, processors and marketers sought to survive.

Ultimately, the AG 2000 project's goals were not met because it believed that the implementation of its recommendations should be the responsibility of the private sector, and the private sector was not able to organize itself to meet the challenge. The diversity of the state's agriculture in terms of geography, commodities, markets, functions, size and organizational structure, inevitably made reaching consensus on future steps difficult. Since Washington agriculture does not have any single body through which it can discuss issues, work out compromises, and formulate common policies, such common policies are unlikely to emerge without external assistance.

Implications of the AG 2000 Project for Future of Farming 2020

The AG 2000 project demonstrated that Washington agriculture had many common challenges and opportunities on which it could agree. It also showed that Washington agriculture could agree on many of the steps that would be needed to strengthen the industry in the face of growing global competition. However, it also demonstrated that such agreement could not be easily translated into either private actions or public policies to implement those steps. This suggests a number of lessons for making the Future of Farming Project 2020 more than just another idle exercise.

Clearly, for any recommendations of the Future of Farming project to be put into effect, they will have to have the strong support and commitment of a wide spectrum of individual Washington State producers and of agricultural organizations. Opposition by even one major commodity group could doom the effort. For example, on a contentious goal such as market orientation, participants need to agree on how much market orientation is desirable, on what commodities or activities might be exempted from that goal, and under what circumstances government intervention might be desirable. While market orientation may be a preferred strategy in terms of allocation of resources, past efforts to reduce the dependence of program crops on government, for example, under the 1995 Farm Bill, proved painful for many producers and have made them reluctant to repeat the experiment.

A second lesson of the AG 2000 project is that some public body such as the Washington State Department of Agriculture needs to play a major role in the implementation phase of the Future of Farming project. The highly diversified and geographically dispersed Washington agricultural industry does not have any organizational structure that could play such a role. The state's role might include convening meetings, coordinating agendas, providing administrative, technical and secretarial support to the implementation effort, helping clear up misunderstandings, and guiding farm leaders in their interactions with the Washington State legislature and with county, state and federal governments.

Implementing any long-term strategy must, of necessity, involve long-term effort. Much thought needs to be given to ensuring continuity of leadership of the implementation effort as public officials and heads of farm organizations cycle in and out of office. Other pitfalls that need to be expected and avoided are institutional exhaustion and discouraged leadership during what may be long and difficult battles to improve agriculture's public image, ensure agriculture's access to the state's natural resources and secure state and federal policies that are supportive of agriculture's role in society.

Any implementation effort also needs to have procedures for dealing with new issues that will inevitably emerge. For example, since the AG 2000 project was completed, a number of epochal developments have roiled society and agriculture, including the rise of Wal-Mart in food, the emergence of China as a super power, the collapse of the Soviet empire and the arrival of the internet. The broad issue of combating climate change could have similar widespread impact on agriculture. Washington agriculture needs to be able to detect such major changes early, to understand their implications, and to amend its policies and strategies to retain its competitive position in the new situation.

The AG 2000 project has major lessons for the Future of Farming 2020 project both in what it achieved and in what it failed to do. The Future of Farming project can be greatly enriched if it takes and applies those lessons to its own deliberations and plans.

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