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COMMODITY POLICY ISSUES FOR THE 1980s

Milton H. Ericksen and James D. Johnson

SCOPE OF COMMODITY POLICY

National food, agriculture, and trade policies operate in part through commodities. In our view, commodity policy encompasses the actions policymakers direct toward individual commodities in their attempt to influence supply, demand, price, farm income, and resource use. The instruments or provisions Executive branch policymakers use are granted by Congress through legislation. In this article we consider commodity-related developments that could occur in the 1980s and relate those developments to issues that policymakers will confront. We examine the economic pressures likely to affect producers, the instruments that policymakers may seek, and the legislative response.

In exploring the commodity policy issues for the 1980s, we keep in mind how those issues are related to the ability of the policymaker to develop policy instruments for influencing supply and demand. The next section summarizes the current thinking pertaining to aggregate supply and demand in the 1980s. With that background, we discuss several issues that are likely to arise or that will be factors affecting policymaker decisions. Specific commodity observations follow. In conclusion we examine what the identified issues or factors could mean for different groups affected by commodity policy.

SUPPLY AND DEMAND IN THE 1980s

If production and all the characteristics of demand could be predicted accurately, the job of identifying specific issues and their timing would be considerably easier.¹ Ahalt, addressing the International Minerals and Chemicals Corporation's World Food Production Conference in Hong Kong, recently observed:

"The 1980's will be a period of adjustment in the global agricultural sector—adjustments to slower growth in economic

activity, to demand for more animal protein in diets, to slower growth in agricultural production, and to relatively higher food and energy costs."

The potential for food production gains in much of the food-importing world is limited. This fact implies a continuation of trade growth, resulting in greater volume and value of agricultural exports.

Analysts in ESCS currently see an expanding market for U.S. grains and oilseeds but have a relatively less optimistic outlook for cotton. When they develop the global view the prognosis is for real price increases for the grains and oilseeds. On a year-to-year basis production could exceed use in some years. On the average, however, the full production potential of U.S. agriculture will be needed to meet the anticipated level of demand.

FACTORS RAISING POLICY ISSUES OR AFFECTING POLICYMAKER DECISIONS

Aggregate Production Capability

There is a school of thought that the United States has reached relative resource equilibrium in its agricultural plant. The view is that the United States no longer has a latent reserve available to provide an "immediate" production response to a short-supply situation. This view is supported by the following observations:

- Harvested acreage of crops of 337 million acres in 1977 was the largest acreage used in 30 years and only 15 million acres below the largest acreage in use since the beginning of farm programs in 1933.
- The average annual increase of farm size has slowed to less than 1 percent from an average of 2 to 3 percent a decade earlier.
- Farm employment was relatively stable throughout the 1970s compared to the 1950s and 1960s and increases in wages

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¹This is an application of the old economic maxim that given the right price, all economic problems are trivial.

for hired farm labor continued.

- The rate of decline of the farm population during the 1970s was slower than for the 1950s and 1960s.
- Rates of total return on investment in farm production assets have been above rates obtained from investment in either common stocks or long-term United States bonds.
- Per capita disposable personal income of the farm population increased as a percentage of the nonfarm income, rising from an average of 62 percent during the 1961 to 1965 period to 87 percent in the mid-1970s.

Supply and demand forecasts indicate that the 1980s will generally be a period of intermittent tight supply which will test the ability of the United States to respond to an increase in demand for food and feed grains. As production can be increased either by increasing yields or by increasing the number of acres used to grow crops, both factors need scrutiny.

Availability of additional cropland. Slightly more than one-fourth of the nonfederally owned land area of the United States—1.5 billion acres—is classified as cropland; more than one-third was classified as either pastureland or rangeland in 1977. In 1978 about 331 million acres of land were harvested for crops, compared with a 48-year high of 352 million acres harvested in 1949 and a record low of 286 million acres in 1969.

Cropland set aside or diverted averaged nearly 23 million acres in the latter half of the 1950s, increased to 35 million acres during the 1960s, and reached a maximum of 62 million acres in 1972. Since 1972, acreage withheld from production has decreased in response to both the political decisions of some nations to increase grain imports and the domestic and foreign crop reductions from adverse weather, disease, or pests. No land was set aside or diverted from 1974 through 1977. Eighteen million acres were idled in 1978 and 10 million in 1979 in response to a buildup of wheat and feed grain ending stocks and depressed farm price levels. Program announcements for 1980 freed all set-aside and diverted land for production.

Any substantial expansion of the cropland base in the 1980s will have to come from lands that have a potential for conversion to cropland rather than cropland held in abeyance under government programs. In 1977 nearly 1

billion acres of pasture, range, forest, and other lands were assessed for their potential to be converted to cropland. In the judgment of local agricultural experts, 135 million acres were rated as having a medium to high potential for conversion to cropland under 1976 prices and production costs. Only 40 million acres were rated as having a high potential for conversion.² Of the cropland rated as having a high potential for conversion to cropland, only 2.2 million acres could be converted quickly to crop production without major outlays for soil preparation or water facilities.

The availability of land rated as having a high to medium cropland conversion potential varies by region. The Lake and Cornbelt states have 8 million acres with a high potential for conversion to cropland. The Plains states have another 11 million acres. Most of the land available for conversion to cropland is either in regions or in land classes very susceptible to erosion or other environmental problems. Land is available to expand the cropland base, but it can be added only at an increasingly higher cost either in terms of land management investments or damage to the soil base.

Prospects for yield increase. Production can also be expanded through increased yields by improving management of present production resources or through improved genetic potentials of the seed stock. Increasing the genetic yield potential probably will require a larger outlay for basic research by both public and private institutions. These outlays must come out of current appropriations or compete with other investment opportunities. Increasing yield through larger applications of fertilizer and other chemicals will increase production costs, particularly because these inputs are mainly petroleum and natural gas based. Increasing the use of chemicals may also carry a hidden cost in the form of greater pollution and other environmental damage.

Issue of increasing production. Once set-aside and diversion acreages are returned to production, further additions to the cropland base can be accomplished only at progressively higher production costs plus substantial investment in such measures as terracing, irrigation, or drainage facilities. Even then, the acreages available are not large. Also, these acreages are likely to be currently supporting livestock. Beyond judicious use of reserves and the possibility of more intensive input use, the ability of policymakers to effect short-run production increases appears limited.

Conservation and Use of Natural Resources

The federal government has maintained a long-standing practice of providing assistance

²Adopted from the Soil Conservation Service, National Erosion Survey, Preliminary Estimates, December 1978.

for conservation efforts. Past assistance has been in response to environmental stress or excessive production. The excess supply conditions confronting the farm sector in the 1930s, 1950s, and 1960s left room for conservation actions. Farmers were encouraged and in some cases paid to convert low-productivity cropland subject to erosion or drought to pasture or forest.

The environmental policy emphasis had been on solving problems after they occurred, but during the 1970s the focus was redirected toward prevention of environmental problems. Though the traditional interest in flood prevention and erosion control remained, the new set of interests included (1) the impact of fertilizers, pesticides, and other chemicals on water pollution, (2) the effects of mechanized agriculture on soil quality and loss, and (3) the impact of restricting agricultural access and use of resources, particularly water. Recent administrative and legislative actions have added emphasis to the resource issues of fully accounting for the nation's land and water resources, preservation of farmland, and expansion of wilderness areas. Current indications are that in spite of the short-run aberration caused by the suspension of grain sales to the Soviet Union, the debate over resource use and conservation will be staged in the context of a narrowed supply and demand balance. Any policy or program to restrict the use of cropland, water, fertilizers, pesticides, and other chemicals and possibly to impose special requirements for tillage and other mechanized production practices will require policy choices that could reduce farm output, reduce food supplies, and increase the cost of food. Another conflict will be the issue of property rights and the amount of control that government can exercise in the use and disposition of private property.

An important consideration in the issue of conservation and use of natural resources will be whether or not a linkage between price and income supports and conservation practices is established. Some observers apparently believe the conservation problem is so great that specific conservation practices should be required in order to be eligible for program benefits. Imposing this linkage would add another dimension to commodity program development and expected response.

Risk and Uncertainty

Farm firms are relying more on purchased inputs in the production process. For the 7 percent of farms with sales in excess of \$100,000, production expenses are nearly 87 percent of gross income. Small adjustments in costs or prices can result in large adjustments in net income for these farms. This instability can lead to:

- Disruption of the farm planning and investment decisions.
- Disruption in the domestic livestock sector with adverse effects on meat supplies and consumer food prices.
- Political debate on domestic consumption versus export of agricultural products, raising questions of trade embargoes and the reliability of the U.S. as a consistent supplier.
- Uncertainty concerning permanent shifts in land use.
- Consideration of use of cooperative or state controlled grain marketing conventions to obtain the highest possible price for exported products.

The structure of American agriculture has evolved to a position where it is particularly sensitive to changes in input-output price ratios. Moreover, increasing demand along with dependence on export markets is likely to result in reduced stock levels which will tend to exacerbate domestic uncertainty. Some major factors relevant to this situation are:

- Unexpected domestic production levels due to exceedingly good or bad weather patterns.
- Variations in global weather conditions.
- Changes in world economic conditions and the value of the dollar which can influence the possibility and terms of trade.
- Changes in domestic political and economic conditions.
- Alterations in the political mindset of major trading and consuming nations, ranging from ideological disagreements to armed conflicts.

Volatile markets and a strained production capacity will increase the production and price risk faced by farmers and increase pressure on the government to provide assistance to farmers. Society (collectively) has embraced the notion of sharing both production and price risks with farmers through grain reserves, target prices, loans, and disaster programs. In return consumers have been promised, and most of the time have experienced, a reduction in the proportion of their income spent for food. Should the proportion of income spent for food increase, the stage will be set for policy confrontations between agriculture and the

consuming public. Once again Congress will be forced to reexamine society's role in food production as expressed through programs to support farm prices and incomes and to provide stability for the agricultural producers and for consumers.

ENERGY

At the 1980 National Outlook Conference, Barton stated:

"Long-term decisions on energy usage in agriculture should be based on the premise that fossil fuels will continue to diminish in supply and must be replaced with renewable energy sources."

Farmers are sure to be faced with rising costs for energy-based production inputs—fuel, fertilizers, herbicides, and pesticides—if there are no significant breakthroughs in new energy sources.

Exactly what this situation portends for production in the 1980s is not clear, but there will be changes in the economics of food production. Tight supplies and rapidly increasing prices for fuel may force producers to alter long-standing crop choices and production practices. Possible production trends include:

- Less use of fertilizers and other petroleum-based chemicals. This could make it difficult even to maintain current crop yields much less increase yields.
- Increased reliance on rotations, particularly rotations that include legumes, and shifts to less energy intensive practices such as minimum tillage.
- Diesel fuel could lose its advantage just at the time when producers have been making rapid shifts to use of diesel engines. If demand for diesel fuel continues to increase the price of diesel fuel could go far above that for gasoline simply because a barrel of oil makes less diesel fuel (*Popular Science*).
- Less use of irrigation to produce some field crops. As a result a realignment of land values may occur with land having favorable soil and climatic conditions being bid up in price.

A second aspect of the energy question relates to on-farm fuel production. "Gasohol" has become a watchword for many farmers, farm groups, environmentalists, and consumers. Widely increased interest in the use of corn, sugar, and other field crops to produce

alcohol could bring the use of cropland, water, and agricultural investment capital into conflict with the use of those inputs to produce food. Several issues associated with the grain for fuel argument may have to be resolved in the policy arena. One issue is the location of fuel production facilities. If corn is used as an alcohol fuel stock, the corn residue can be used as livestock feed. Facilities scaled to farm production probably would not disrupt location of livestock feeding, but large commercial alcohol plants could affect the present structure of the livestock industry through their impact on feed availability and cost. Another issue is the competition for grain between fuel and export uses. International political and economic stability could be affected by a decision to use more grain to produce fuel. The suspension of sales to the USSR is a case in point, as nearly a fifth of the corn not shipped is being considered for conversion into gasohol under government encouragement. This short-term encouragement could lock in an additional demand that will have substantial long-run impacts.

The energy question is certain to affect food and agriculture policy in several ways. If substantial production is used to make alcohol, policymakers will have an additional demand factor to consider. Alcohol producers will want a supply of feed stock at stable prices. The changing cost picture could change comparative advantage and lead to regional production shifts. These underlying shifts could pose problems to policymakers in developing and administering programs.

Transportation

Monthly inspections for export averaged 380 million bushels of wheat, feed grains, and soybeans in 1979. The average was 291 million bushels per month in 1973. The U.S. shipped more than 4.5 billion bushels of grain last year; a total of 1.8 billion bushels was shipped in 1970. Before the USSR sales suspension, grain exports were expected to total 4.9 billion bushels for calendar 1980, more than 17 percent above the 1978 exports. This level was expected to strain the nation's agricultural transportation system.

Recent problems in the transportation network include:

- Work stoppages and slowdowns by grain handlers and rail workers.
- Cash flow problems that have constrained investment and in some cases led to bankruptcy proceedings by rail lines in the Midwest and Plains.
- Insufficient capacity to meet the timely demand for rail cars by country elevators.

- Constrained ability to greatly increase inland waterway grain shipments because of the inability of current locks and dams to handle a substantial increase in barge traffic.
- A deteriorating highway network.
- Greatly increased cost for diesel and other fuels to power the transport system.

Marketings and farm profit opportunities depend on the ability of shippers to deliver commodities to inland markets and port destinations on a timely schedule and at a reasonable cost. If transportation bottlenecks develop in the 1980s, the consumer will incur higher costs for agricultural products. This increase will be due to higher private sector costs to ship commodities and greater public investment to upgrade the nation's railbeds, highways, and waterways. Transportation could become an important issue if the 1980s is a decade of all-out production.

Market Pricing

Substantial change in agricultural marketing during the last 25 years includes use of vertical integration and forward contracts to gain more control over quantity, quality, and price. In 1970, field crop, fruit, and livestock commodities produced under vertically integrated arrangements or producer contracts accounted for (Mighell and Hoofnagle):

- All of the sugar crop.
- Nearly all of the vegetables produced for processing.
- Half of the vegetables produced for fresh markets.
- Almost nine-tenths of all citrus fruits.
- More than nine-tenths of fluid-grade milk.
- Nearly all broiler and more than half of the turkey production.
- A fifth of fed cattle.
- More than a fifth of total farm output of crops and livestock.

Less than 1 percent of all feed grains and less than 2 percent of food grains were produced under contract or integrated arrangement at the beginning of the 1970s. About 2 percent of hog production was under contract at that time.

More recent information indicates that 9 percent of all cash grains were under contract by 1974, reflecting contractual arrangements for 7 percent of corn, 8 percent of wheat, and 11 percent of soybean production (ESCS).

As integration and the use of contracts become more prevalent, the use of traditional open markets declines. The end result is thinner markets and the absence of reliable market price data. Absence of reliable price information increases marketing difficulties for the smallest two-thirds of the nation's farmers who do not produce the volume nor possess the managerial and technical skills needed to take full advantage of alternative marketing arrangements. Some government program operations are also impaired by the absence of reliable early season market information. A particular example is the lack of reliable early season market prices for determining rice deficiency payments.

The issues identified for the 1980s suggest difficulty in maintaining stable prices. One of the goals of firms that attempt to integrate is to be able to stabilize prices and quantities. A question policymakers should be asking is whether increased market integration will make it easier or harder to maintain stability in the segments that are not integrated.

Focus on Production Costs

Producer focus. Estimates of per-acre and per-unit costs of producing individual crops will be an important factor associated with commodity policy in the 1980s. Because of the expectation of continuing energy problems, rising cost, and periodic strains on production capability, producers will continue to voice concern over increasing production costs.

Producers can effectively use production costs as a basis of claims for price and income supports. There is a shared sense of inherent fairness in being able to earn returns sufficient to cover production costs regardless of whether farm or nonfarm businesses are being considered. However, every producer has a different level of cost. The usual practice for estimating costs for agricultural commodities is to derive an average cost. It has been aptly observed that when production costs are represented by the average, there will always be a group of producers who can legitimately claim that their costs are higher and that prices equal to average cost do not provide an adequate return. Producers will continue to argue for government intervention to support prices and income from the standpoint of cost.

The instability and risk associated with continued energy problems, price inflation, and increasing food demand puts a premium on management's ability to make profitable produc-

tion shifts and decisions on long-run investments affecting production capacity. Enterprise costs will be an important management tool in making these decisions. A particularly crucial decision could involve competition between crops and livestock for land resources.

Policymaker focus. Policymakers are likely to continue to rely on enterprise costs as a means of making judgments about support levels and as a guideline for determining production adjustment payment rates. A particular challenge to policymakers is the search for a consensus on how to interpret and use cost of production estimates for setting support rates. This consensus must be developed out of the fundamental objective of supports. The most recent statement of that objective comes from Department testimony to the Senate Committee on Agriculture, Nutrition, and Forestry:

“The target prices are a means of income support, protecting farmers from economic disaster when atypically low prices occur. They are to act as a safety net, protecting producers from the consequences of disaster level prices when supplies are in excess of market requirements. However, target prices are not and were never intended to be a guaranteed income program or to cover total costs of production including a full return to and based upon current land prices” (Hjort).

For practical purposes, the argument becomes the division of risk between producers and society. The political debate focuses on that issue; enterprise costs are assigned the role of translating the political objective into a factual standard. This process raises the issue of the proper use of production costs. Economists appeal to the concepts of variable costs, fixed costs, and opportunity costs. Policymakers and producers will not necessarily apply these concepts in their use and interpretation of production costs. Conceptual and political issues often become mixed in debate about cost of production.

Policymakers also rely on production costs for making program administration decisions and for making production response judgments. Just as for producers, rapid and pronounced changes in costs and practices lead to more emphasis on cost estimates instead of historical market relationships.

A major problem policymakers face in using cost of production is that of having target price adjustment formulas that do not track the changes in costs that producers actually experience. A good example is the 1980 target prices calculated with the 1977 Act adjustment formula. Producers had substantial cost in-

creases in 1979 and further increases can be expected for 1980, yet the calculated target prices for 1980 would be below 1978 target levels for corn and only slightly above 1978 target levels for wheat.

Both conceptual and operational considerations are involved in using cost of production or any standard. In the preceding example, the problem relates to reliance on historical experience in making adjustments for an upcoming year. Given the possibility of substantial cost and technical change in the 1980s, policymakers will have to pay particular attention to operational aspects of support level calculations and adjustments.

Ownership and Tenure

The average per-acre farmland value continues to increase. The value rose an average of 16 percent in 1979. In terms of an operating unit, the average capital requirement for a cash grain farm capable of attaining \$40 to \$60 thousand in gross farm sales was nearly \$379 thousand in 1976 (Hottel and Harrington). Capital requirements for an identical farm totaled \$468 thousand in 1978, and thus rose by nearly one-fourth from 1976 to 1978.

The growing capital requirements plus increasing operating capital needs will intensify the focus on credit availability and credit management. One of the current problems is to generate the cash flow necessary to service well-secured debt. Will credit needs alter the structure of agriculture or will the needs alter the structure of credit institutions?

Rapidly increasing prices for land as well as for machinery and other equipment have raised concerns about how beginning farmers can gain entry into farming and how small farmers can expand their operations. Expressions of policy interest have largely focused on two concerns:

- Land ownership may become concentrated, resulting in the separation of farm management and ownership.
- Corporate and foreign interests may obtain ownership of an “unacceptable” amount of farmland.

Rising capital requirements for farms have had an impact on farm tenure. Thirty years ago, 57 percent of all farms were operated by full owners, and another 15 percent were operated by part owners. Numbers of farms operated by full owners did not change appreciably, accounting for 62 percent of all farms in 1974; the number of farms operated by part owners was 27 percent of the total. However, *acreage* in farms operated by part owners increased

from 37 percent of total acreage in 1950 to 53 percent in 1974, a dramatic increase in control of land by part owners. Dramatic changes have also occurred in the size of farms operated by the different tenure classes. Thirty years ago owner-operated farms and tenant farms were nearly equal in size; in 1974 farms operated by tenants were nearly double the size of farms operated by full owners. Part owners operate the largest farms (nearly 3.5 times larger than full-owner farms and almost 2 times larger than tenant farms) and account for 14 percent of farms with sales over \$40,000. A tenure situation in which most of the land is operated by part owners and tenants creates an income support dilemma for policymakers. The dilemma is how to effectively support the incomes of current farm operators without unduly adding to the wealth of current landowners. This policy problem could become more severe in the 1980s as an ever increasing share of the nation's farmers gain access to farmland through rental agreements.

Real Cost of Food

Food prices increased an average 2 percent per year in the 1950s and 1960s. In the 1970s, food price increases exceeded the average inflation rate by about 1 percent, rising about 8 percent per year. Retail food prices in 1979 averaged about 11 percent higher than those in 1978 after a 10 percent increase from 1977 to 1978. Food prices are expected to increase another 7 to 11 percent this year with farm value contributing only 1 percent of the increase (Farrell).

Although food expenditures have increased in absolute terms, they have not increased as a percentage of disposable personal income over the last three decades. Personal consumption expenditures for food averaged 21.7 percent of disposable personal income during the 1950s, dropped to 18.5 percent during the 1960s, and decreased to 16.7 percent during the 1970s. Increases in disposable personal income have more than offset increased food expenditures.

The trend of decreasing percentages of income spent for food could reverse in the 1980s. This conclusion is based on the fact that processing and marketing costs are 60 percent of the total retail value of food. These costs are sure to rise as energy, labor, and other capital outlays increase. The farm value of the raw product will also rise unless cost increases are offset by changes in productivity.

Rising costs for food as well as for energy, housing, transportation, and other consumer goods will draw attention to farm and food assistance programs. Commodity program features which are perceived as being inflationary will come under closer scrutiny from both con-

sumer and budget advocates. Direct payment programs will be viewed with suspicion by taxpayers having pressing family budgets.

COMMODITY POLICY ISSUES FOR THE 1980s

Policymakers attempt to keep commodity supplies and prices within politically acceptable bounds. Either too much or too little production can create untenable positions — producers and farm interests become concerned with incomes in the first instance and consumers and food aid recipients become concerned with prices and availability in the second case. Both situations occurred during the 1970s. Achieving balance in the farm economy will be more difficult if issues of energy, production costs, land use, production capacity, conservation, and water availability continue unresolved. The policymaker will be less able to address food price inflation through commodity programs as a greater share of the food dollar goes to marketing and other non-farm costs. The remainder of this section explores individual commodity issues.

Grains and Oilseeds

The 1977 Act was designed to establish equitable program relationships among the designated commodities. Loans rates were set to reflect competitiveness in use, target prices were established to cover the same components of cost for each grain, long-standing historic allotments were suspended for all grains but rice, major inequities in the disaster program were addressed, and set-aside rules were reexamined to give producers flexibility in determining crop organization in conjunction with set aside. Several equity concerns remain.

Rice is still subject to historic allotments. Benefits and set-aside requirements of the rice program apply only to allotment holders. Soybean interests have continued to keep soybeans outside most program provisions. Attempts to develop programs for rice and soybeans similar to those for wheat and feed grains can be expected.

Attention also will be given to the possibility of establishing a basic support program for sunflowers. Sunflower acreage has increased so that it now exceeds the acreage for crops such as rice, peanuts, and tobacco.

Another equity issue that will draw attention in the 1980s is the distribution of benefits among producers. Some recently completed work indicates that:

- The largest 50 percent of producers receive more than 90 percent of the payments.

- The largest 10 percent receive nearly 50 percent of the total payments (ESCS).

This work confirms the findings of previous studies—that a relatively small number of the largest farmers receive the largest share of total program benefits. Data from the disaster payment program indicate that:

- 29 producers received between \$100 and \$200 thousand in 1978 disaster payments.
- 15 producers received between \$200 and \$500 thousand.
- 2 producers received in excess of \$700 thousand (ASCS).

Legislation recently passed by Congress limits total disaster payments to any one person to \$100,000.

Policymakers will continue to search for an acceptable and adequate support standard in the 1980s. In the 1950s support for producers' incomes was based on loan levels for individual commodities. Loan levels were often established above market clearing levels, resulting in the accumulation of stocks. By the mid-1960s, the support standard was being switched to direct Treasury payments with crop loan rates established at levels which would encourage movement of grain into the normal market channels. The search for a standard of support which would encourage grain marketing and support farm incomes while keeping a lid on government expenditures continued into the 1970s. In 1973, the broad prices-paid index was accepted by participants in the farm policy decision process only to be replaced with individual commodity cost measures in 1977. These measures too have difficulties, as evidenced by the legislative changes accepted in 1978 and again in late 1979 and early 1980. This legislation increased the 1980 target prices for wheat and feedgrains above the levels determined with the 1977 Act provisions and granted the Secretary of Agriculture authority to revise target prices for 1981 to reflect changes in cost. This action gives the Secretary more discretion in deciding on an "appropriate" target price level as the actual cost formula is left unspecified.

Consideration of regionalized support levels is mentioned frequently. Differences in production technology and input practices among regions could lend credence to producer claims for supports that recognize these differences. The concern is that regional production patterns could become locked in with this kind of support because producers would have little incentive to alter production patterns to achieve comparative advantage.

In a decade of near-capacity production, grain reserves could become the primary buffer between farmers, consumers, and the market. Set aside would be difficult to justify to consumers and taxpayers in a period of rising food prices. Because provisions that can elicit substantial increases in short-run production are either not available or are costly, reserves are a key supply management tool.

Land and water conservation is attracting considerable attention. The Administration, Congress, and public interests have indicated that the use of fragile land and other soil and water issues will be prime policy issues in the near future. One possibility for program change is the requirement of some minimal soil conserving practices as a basis for program benefit eligibility. This change will be considered during the 1981 farm bill debate if not before.

Livestock

A key issue for livestock will be competition among livestock and grain producers for land. The growing demand for food and crop-based energy will intensify this competition. Cattle numbers reached 132 million head in the mid-1970s and dropped to 111 million head in 1979 in response to the income losses in the mid-1970s. Cattlemen are now starting to rebuild their breeding herds. As cattle numbers expand, the competition for land between crops and livestock will increase. This competition could intensify as export demand increases and production capacity tightens.

Livestock producers took heavy losses in the seventies, partly because of higher feed prices. As competition for grain for export and alcohol production increases, the grain reserve will be placed under greater stress to control price variations. Currently pork producers are losing money on a total cost basis. Variation in grain prices can further exacerbate short-run losses. Development of some form of income support for livestock producers could be an issue in the 1980s. The focus of arguments for such support could be equity between crop and livestock producers, an objective that has often been overlooked as programs have been developed to support the prices and incomes of grain producers.

Cotton

The export market will be a key for the cotton industry. Currently, forecasts do not indicate a dramatic increase in demand, domestic or foreign, for U.S. cotton. These forecasts translate into steady or decreasing acreage trends. Although costs of producing petroleum-based manmade fiber will increase,

cotton's share of the fiber market is expected to continue to decline, especially in industrialized countries. Nonprice factors related to fiber characteristics will continue to be the most important determinant of individual fiber demand.

Government programs for cotton are likely to continue and production will also continue to shift to regions and to producers that have a comparative advantage. If there is no boom in demand, the emphasis will shift to efficiency and toward government programs for income support.

The current method of income support—basing target prices on production costs and deficiency payment eligibility on planted acreage—does have the effect of slowing shifts or reductions in production of crops affected by sluggish markets. As long as the producer is assured of target price protection on what is planted, the actual market conditions are not crucial in production decisions. The debate over appropriate standards for target price protection could be particularly important to cotton producers.

Dairy

The dairy industry presents some complex policy issues, the details of which are beyond the scope of this article. Consideration of dairy policy is influenced by the following factors:

- Milk is a multiproduct and multimarket commodity. There are competing products for several milk derivatives.
- Dairying and milk are highly regulated worldwide. Protection and subsidies are very much a part of international trade. The import policies of the U.S. are controversial.
- Most milk is marketed under Federal Milk Marketing Orders. In addition there are large milk cooperatives.
- The current parity-based price support policy which is best suited to stabilization also must function as an income support program.
- The dairy product pricing mechanisms are based on differentials and base prices. Changes in pricing formulas could have effects on producers and consumers as well as government costs.
- There is a strong linkage between dairying and grain production because about 50 percent of the cost of producing milk is feed cost.

A major issue in the 1980s will be the method of support, the support level, and the discretion given to the Secretary of Agriculture to adjust that level. Policymakers have been moving away from parity-based price supports toward a dual support system that treats market prices and income levels separately. Policymakers will continue to examine the dairy price support system and compare the current system with alternatives that would offer more flexibility. A crucial factor will be level of government purchases required to meet the parity-based price support levels. Large purchases and holdings will increase the pressure for a change.

Because feed costs are a relatively high percentage of total cost, the price of feed will have a substantial effect on dairy production and income from dairying. The trend to larger and fewer dairy farms is expected to continue. The situation appears conducive to continued anti-trust surveillance.

Peanuts and Tobacco

Peanuts, tobacco, and ELS cotton have restrictive marketing quotas. They, along with rice, have historic allotments. Both the tobacco and peanut programs have drawn considerable public criticism which will continue in the 1980s.

During debate on the 1977 Act, attempts were made to prevent tobacco exports under the auspices of the long-term credit sales program of Public Law 480. For the year ending September 30, 1977, about 7 percent of total tobacco exports were under government programs. Though not crippling, elimination of these programs would place additional stress on domestic markets and programs to support producer incomes if commercial sales do not offset lost concessional sales.

The key tobacco issue will probably be changes in demand for tobacco products. Will people continue to reduce smoking? If so, more income support is likely to be needed which would draw into social conflict the goal of supporting the incomes of relatively small growers and the question of tobacco's role in affecting the health of the population.

The peanut program was substantially revised in 1977. The amount of quota peanuts on which a grower could receive support was reduced along with the level of support. Before 1977, the support price was established at 75 percent of parity. This level was changed to a minimum of \$420 per ton with authority granted the Secretary of Agriculture to increase this amount if demand, cost of production, or other factors indicate that an increase is justified. Despite the revision, many interest groups still view the program as being infla-

tionary and providing an unnecessary amount of support in comparison with the support given other crops. The program will come under increasing criticism as the Congress becomes more urban-oriented and as food prices continue to rise.

POSSIBLE IMPLICATIONS OF THE COMMODITY PROGRAM ISSUES

Research and Extension

An obvious implication for research and extension is the need to improve domestic and international forecasts of agricultural supply, demand, and prices and to improve macroeconomic forecasts, as well as to better utilize present forecasts. A misdirected program or a failure to anticipate an emerging issue has the potential to be more serious if full production is consistently required to meet expected demand.

The combination of increasing costs, continued energy problems, and growing demand is likely to change competitive relationships among commodities and among regions. Research on interregional competition and on farm organization will be needed. Extension will need to emphasize the organization of the farm business to meet the risks of rapid cost changes and to be in position to produce to meet the emerging demand. It is important to recognize that farm businesses will range from entities that obtain most of their income from off-farm sources to very large incorporated farm firms.

The effect of taxes on farm capital investment and on intergeneration transfer is more important than is commonly realized. More information is needed on the effect of taxes. Policymakers must comprehend the effect of taxes on investment and production response and individual farmers must understand the tax implications for their operations.

More cooperation with physical scientists will be needed, particularly in the area of adapting and combining cost-saving technology. Marketing is another area that will need added attention from research and extension. The structure of marketing is changing, particularly for livestock. The reserve program also adds another element to marketing strategy. Producers will need assistance in developing workable marketing strategies.

Farm management continues to broaden in scope from the traditional optimum enterprise selection to management of a large business with a trend toward increased use of borrowed capital. It is incumbent upon the research community to determine the cost structure of the present wide array of farm situations.

Producers

Producers will face a variety of problems and opportunities. Virtually everyone seems to agree that the demand for food is going to increase and that a large proportion of U.S. commodities will continue to move into international trade. The producer must become attuned to the international market. The forecasting ability of the universities and USDA is now and will continue to be very important in this endeavor. Moreover, the producer is going to be offered a variety of commercial services designed to provide information and advice.

Producers will continue to view the government as an entity that both causes and solves their business problems. The ability of policymakers to maintain reasonable price stability is crucial, particularly the ability to avoid high speculative prices. Added price instability in the 1980s could result in greater demand for contracts, bargaining, or government marketing conventions.

Producers will face more difficulty in managing both the business aspects (debt management, marketing, taxes, and records) and the technical aspects (fertilizer, pesticides, irrigation, and equipment) of a total farm operation. This will give added emphasis to the delivery of high quality and timely management information.

Marketing and Processing System

The largest proportion of retail food value is added beyond the farm gate. The system of moving and transforming raw farm products into retail food items is a multibillion dollar business. This sector also faces higher costs but is generally in a position to pass cost increases on to consumers.

This sector is likely to continue to seek opportunities for vertical integration. If it is correct to anticipate increased management problems for producers, it seems likely that producers will be willing to enter contractual arrangements in order to share risk and management. Integration would also be consistent with improved quality control and closer attention to grades and standards.

The marketing and processing sectors will also be concerned with marketing structure. The decline in terminal and public markets makes a price base more difficult to obtain. All parties, including the research and extension community, need to be concerned with marketing efficiency in the face of anticipated changes.

Policymakers

For the past 50 years, farm programs have been designed mainly to support farm income and to provide tools for controlling production.

The programs have evolved from mandatory price support programs to voluntary programs featuring both price and income supports. Production control and benefits have always been related to the individual commodity production base.

As agriculture moves into the 1980s the probability of continued problems of overproduction is considerably lower. The structure of agriculture has changed substantially. Farms are more heterogeneous in terms of size, income source, production costs, and tenure arrangements. Different classifications or groups of farms have different problems. Policymakers now need to consider the applicability of the provisions and the programs for conditions in which the need is to increase production, not reduce production. Policymakers also need to be sensitive to congressional intent in relation to the target groups who receive benefits from government programs.

Congress will be facing producers whose production costs are increasing, consumers whose food costs are increasing, and limited taxpayer dollars. The fact that the source of the food cost increase will be both raw products and marketing and processing will put some unique pressures on Congress.

Executive branch policymakers will need to provide more finely tuned production and reserve guidelines and will have to be prepared to shift from surplus to shortage situations. They are also likely to have to cope with an increased number of commodities.

Consumers

Consumers in the U.S. should continue to enjoy a highly varied and highly nutritious diet. Possibly, however, consumers will have to use a higher proportion of their income for food. This development will prompt continued concern about the efficiency of the marketing and processing sectors and will put pressure on policymakers in their efforts to develop farm programs. The 1970s was a decade of concern with safety and quality. Rising food costs could slow this effort in the 1980s. Nutrition

awareness and concern with adequate and nutritious diets will continue to be emphasized.

CAVEAT—THE GOAL TO MAXIMIZE EXPORTS

Many discussions of commodity policy issues take for granted the objective of maximizing exports. The producer is told that the future lies in the export market and that programs are developed to meet that commitment—loan rates are set in relation to world market prices and the reserve program is undertaken unilaterally to assure foreign buyers that the U.S. is a dependable supplier. The U.S. is alone in allowing domestic prices to interact with world prices just as it is alone in sponsoring a substantial reserve program. Fair trading practices must rely on goodwill and gentlemen's agreements.

On the buying side, except for the agreement with the USSR, there are no offsetting agreements ensuring that a large share of U.S. export commodities has dependable buyers. The recent suspension of grain sales to the Soviet Union shows that international politics has first priority.

The question to be considered is whether we should rely on the maximum export objective as a virtual given in any appraisal of issues and policies. Farm income and balance of payment objectives may not require continued export expansion particularly when several issues arise as a result of expansion—resource conservation, environmental stress, increasing transportation costs, and the high cost of irrigation. The goal of increasing exports promises to add to the instability of markets. What is the price of that instability? If the assumption of export market expansion is changed, the commodity issues could be viewed differently. In terms of farm income equality, the U.S. has fewer farmers now than two decades ago and even among the reduced number there is a large percentage whose family income is little affected by agricultural markets. If adequate family income is the goal, the cost of income support could be much lower if payments were based on family need rather than production level.

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