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Gorbachev's Agricultural Policy: Building on the Brezhnev Food Program

A Research Paper

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Gorbachev's Agricultural Policy: Building on the Brezhnev Food Program

Summary

*Information available
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Since becoming General Secretary, Gorbachev has assigned high priority to improving efficiency and reducing the enormous costs of food production. He has called for changes in policy toward agriculture and other sectors involved in food production and is pushing hard to:

- Accelerate the shift in the share of investment resources dedicated to food production away from farms and into development of rural infrastructure, food processing, and the machine-building and chemical industries that support agriculture.
- Further restructure management of the agro-industrial sector to eliminate interdepartmental conflicts and better synchronize the process of moving food products from farms to retail outlets.
- Replace "administrative means" with stronger economic incentives as a means of regulating enterprise activity.

These proposals build on the 1982 Brezhnev Food Program and, in concept, represent a fundamentally sound attack on the problems in food production. Gorbachev has made a good start in implementing at least some of his ideas. To date, he has:

- Replaced top agro-industrial officials with his own associates and made major cuts in administrative staffs. The new agro-industrial czar, Vsevolod Murakhovskiy, seems committed to moving ahead rapidly in implementing Gorbachev's program.
- Moved aggressively to further revise and enhance organizational aspects of the Food Program by merging five ministries and one state committee into a state agro-industrial committee that is intended to have broad authority to plan and finance activities of all branches concerned with production and processing of food and natural fiber.
- Issued a decree on agro-industrial management that gives local authorities and farms more control over disposal of above-plan production and allows the sale of more produce, particularly perishables, at market-influenced prices.
- Provided for the transfer of all production subunits on farms and in other agro-industrial enterprises to the collective contract system of labor payments that makes financial rewards for workers somewhat more dependent on results.

- Promised to come up with specific proposals for improving planning, financing, and incentives in time for the 1991-95 Plan.

Gorbachev's strategy resembles that of past regimes in that it so far relies on reorganizing bureaucracy, manipulating investment, and revising the existing incentive system while dodging the very difficult and controversial issues of major reforms in incentives, price formation, and decisionmaking latitude permitted individual farm managers. Gorbachev acknowledges that his present program is only a first step. His prior experience in agriculture and political strength in the area, which allowed him to undertake major reorganization first in this sector, put him in a good position—if he so chooses—to introduce additional initiatives that would be difficult to sell in other parts of the economy.

Effective implementation of even the limited programs adopted to date requires, first, that Gorbachev, with Murakhovskiy's active support, overcome bureaucratic resistance to the reorganization and successfully implement new lines of authority. Second, if the investment program is to pay off, Gorbachev must have at least some success in the campaign to modernize industry. Finally, Gorbachev must follow through on his stated intention to provide an environment that relates rewards to effort. This requires a pattern of incentives (and penalties) to induce managers of farms and enterprises providing goods and services to farms (including transportation, marketing, and processing of farm output) to carry out their functions in an efficient and timely manner. As long as, for example, prices are poor guides to decisionmaking, supplies are centrally allocated, and detailed plans are issued "from above," there will be pressure for bureaucratic interference in farm affairs and no way to make enterprises accountable for inefficiency and high costs.

To achieve productivity gains large enough to reduce costs, subsidies, and the flow of resources to food production, therefore, Gorbachev must be willing and able to implement additional, fundamental changes. The March 1986 decree on agricultural management and the experiments currently under way in the farm sector, however, demonstrate that Gorbachev is not yet ready to pursue such fundamental reforms. He undoubtedly perceives that such reforms carry unacceptable risks at present because they would threaten the prerogatives of the firmly entrenched party and government bureaucracies and might cause economic

dislocations in the short run. Apparently he has achieved a consensus in the Politburo on the major aspects of his program, but those initiatives in the March decree allowing an expanded role for market influences appear to be the subject of continuing controversy. Gorbachev himself will probably wait to assess the results of his present program before seriously considering more radical alternatives.

We believe that the leadership will be disappointed in the limited improvements possible within the confines of the modified Food Program. While some progress may be made toward increasing per capita consumption of perishable foods and reducing food imports, the growth targets in the 12th Five-Year Plan are undoubtedly out of reach, and little progress is likely to be made on reducing costs and subsidies. By the late 1980s, disappointment with the results achieved along with the continued consolidation of Gorbachev's power may reduce leadership resistance to fundamental changes allowing a larger role for market forces and on-farm decisionmaking. Continued failure to make progress in this sector, where Gorbachev's power is strongest and productivity the lowest, would bode ill for reform in other sectors. Indicators of a willingness to move to this "second stage" of agricultural reform might include:

- Expanding the right of local authorities to set some prices in response to changing conditions.
- Reducing local party interference in day-to-day farm operations.
- Moving toward lower minimum wages and giving farms more authority over what they pay out.
- Providing farms with more authority to decide what to produce and greater say over the acquisition of supplies such as equipment and fertilizer.
- Following through on the promise to keep product procurement targets stable to expand the amount controlled by the farms.

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Gorbachev's Agricultural Policy: Building on the Brezhnev Food Program

Background

General Secretary Gorbachev has inherited an inefficient food-production sector that has one-third of all fixed capital (excluding housing and services) but provides a diet well below that of other industrialized countries in terms of quality and variety.¹ The legitimacy of Gorbachev's economic and social revitalization programs will be judged, in part, by his ability to improve the quality of the Soviet diet. At the same time, he needs to raise productivity in this sector so that he can divert new resource flows from agriculture to his industrial modernization effort:

- The farm sector alone absorbs about 20 percent of the labor force and investment resources (excluding housing and services) compared with less than 5 percent in the United States.
- State subsidy payments to cover the differences between relatively low state retail food prices and procurement prices paid to farms have tripled since the early 1970s. They now account for 15 percent of the state budget and are equivalent to about one-third of total national income generated in the farm sector.
- The additional fixed capital needed to generate an additional ruble's worth of farm output has gone up by a factor of four; it is now three times as high as comparable capital requirements in industry.
- Hard currency outlays for farm product imports are about four times the level of the early 1970s. They account for one-third of hard currency imports, up from one-fourth in the early 1970s.

The leadership has acknowledged that problems not related to weather have contributed substantially to

¹ In Soviet usage, the food production sector, or "agro-industrial complex," traditionally includes agriculture; organizations supplying goods and services to agriculture such as fertilizer, pesticides, machinery, repair, and other services; procurement agencies; food-processing industries; and trade organizations

the high costs and inefficiency in Soviet food production:

- A proliferation of specialized administrative bodies—developed as part of past efforts to address agricultural problems—has led to bloated administrative staffs. In the absence of a mechanism to regulate the relations of these "partners," bureaucratic self-interest has encouraged the pursuit of often conflicting goals. Excessive bureaucratic interference in local farm management has led to inefficient production decisions and encouraged irresponsibility among farm managers.
- A grossly inadequate farm-to-market road system and a lack of storage and transportation capacity have been responsible for large losses of farm products between field and retail outlet.
- Industrial inputs to farms and food-processing enterprises have been deficient in quality and assortment.
- Financial incentives for farm managers and workers do not depend sufficiently on the size and quality of the harvest. As a result, efficiency and initiative are not encouraged.
- Inadequate housing and poor rural living conditions have encouraged younger, better educated workers to migrate to cities.

The Soviets made a major effort to rectify these problems with the May 1982 Brezhnev Food Program. It was a package of measures designed to improve the efficiency of food production through better integration of all branches of the agro-industrial complex, in terms of both the allocation of resources and planning and management. The program also contained schemes to improve agriculture's infrastructure and better the quality of life in the rural areas (see inset, "Key Features of the Brezhnev Food Program").

The Food Program was flawed in a number of respects. Its organizational measures included concessions to the interests of the central branch agencies, which made integration largely unworkable. It also failed to come to grips with the more fundamental problems, of linking rewards to performance, giving farms freedom to make production decisions, and instituting a rational price system that would elicit the right mix and volume of farm output and inputs.

Nevertheless, Soviet citizens experienced an increase in per capita consumption of quality foods during the first three years (1983-85) of the Food Program. Despite drier and therefore less favorable growing conditions, the regime was able to boost forage crop production substantially and increase the production and distribution of fertilizer and other agricultural chemicals. Increased feed availability, milder winter weather, large grain imports, and improved feeding practices allowed the livestock sector to continue steady growth, which began in 1980.² Modest gains were achieved in the production of fruits and vegetables. Progress in the production of other important crops during this period has been negligible, however, with average annual production of grain, potatoes, sugarbeets, and oilseeds below 1976-80 levels.³

While the regime has made progress in per capita consumption of quality foods such as meat, milk, fruit, and vegetables, the Food Program has done little to further other important regime objectives—arresting the rapid rises in costs of production, raising productivity, and reducing waste (figure 1):

- Real per capita food imports in 1983-85 were 60 percent above their mid-1970s' levels.
- There was no apparent improvement in transportation and storage.
- Production costs for major farm products rose steadily.
- Gains in productivity were small.

² The average annual rate of growth of net livestock production was 3.1 percent in 1983-85, up from 2.1 percent in 1981-82 and 0.9 percent in 1976-80.

³ The average annual rate of growth in net crop production was -0.5 percent in 1983-85, down from 3.9 percent in 1981-82 and 1.6 percent in 1976-80.

Key Features of the Brezhnev Food Program

The Brezhnev Food Program included three key measures aimed at improving food production and distribution.

First, to promote "unified management" of food production, the Food Program brought under a single administrative hierarchy the Ministry of Agriculture; the ministries supplying agriculture with maintenance, transportation, and other services; the Ministry of Procurement; and the ministries managing the food-processing industry. This organization was responsible for coordinating the entire food-production process from farm to retail outlet. Commissions made up of the heads of the organizations involved were formed at the national, republic, kray, and oblast levels. At the rayon (district) level, "rayon agro-industrial associations" (RAPOs) were formed. They include all farms, service agencies, and processing enterprises in a given district and theoretically cut across ministerial lines, concentrating authority at the local level.

Second, the administrative reorganization was backed up by an investment program to upgrade the system for handling, storing, and processing food and to improve housing and living conditions in the countryside. The heavy emphasis on investment in rural infrastructure reflected Moscow's desire to improve farm-to-market transportation and stem the flow of younger workers to urban areas. Increasingly, the Soviet agricultural labor force is made up of older, less productive workers as younger adults migrate to cities.

Third, the Food Program provided an increase in financial incentives that was intended to increase output and retain younger, better educated workers on farms. Procurement prices, especially for livestock products, were raised substantially on 1 January 1983.

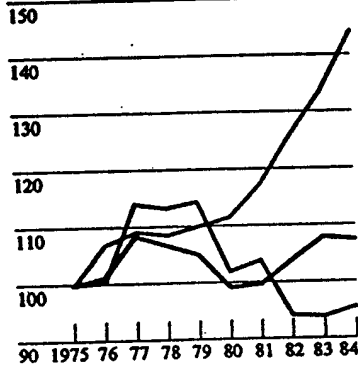
Figure 1
USSR: Measures of Performance in Agriculture

Note scale change

Net Crop Production, Precipitation, Fertilizer Deliveries to Agriculture, 1975-84^a

Index: 1975=100

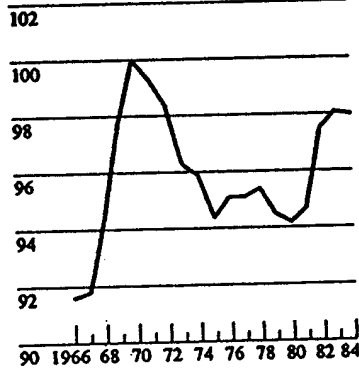
— Fertilizer
— Crop production
— Precipitation^b



Productivity of Livestock Feed, Socialized Sector^{a,c}

Index: 1970=100

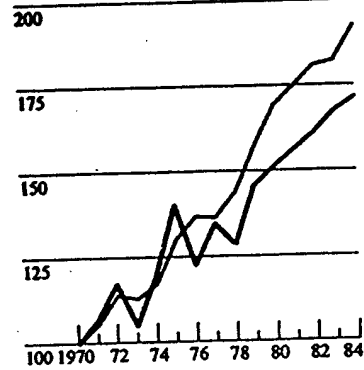
— Gross value of livestock output per unit fed



Production Costs in Current Rubles

Index: 1970=100

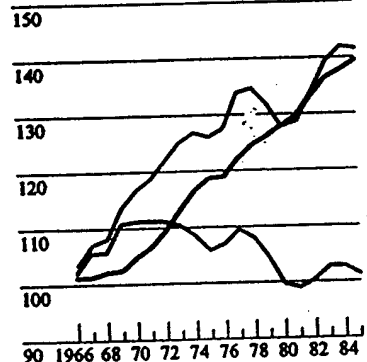
— Livestock products
— Crops



Output, Inputs, and Factor Productivity, 1966-85^a

Index: 1965=100

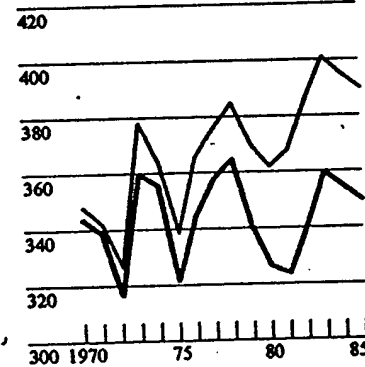
— Net farm output
— Total inputs
— Factor productivity



Per Capita Availability of Farm Products^a

1970 Rubles

— Net domestic output plus imports
— Net domestic farm output



^aIndexes are three-year moving averages.

^bCumulative April-July precipitation. The contribution of each region is derived according to its share of area sown to crops.

^cTotal livestock feed in terms of food units is derived by aggregating quantities of various livestock feeds using a set of weights that measures their feed value relative to that of oat grain.

^dNet farm output and net imports priced in 1970 average realized prices.

Moving the Food Program Forward

As Brezhnev's agriculture secretary, Gorbachev was a major architect of the Food Program, but his speeches at the time reflected dissatisfaction with some of the compromises. Since Brezhnev's death in late 1982, Gorbachev has sought to use his growing influence in the leadership to reshape the program to reflect more closely his own views and priorities. In particular, he has sought to:

- Go faster and further than originally planned in shifting investments within the agro-industrial sector.
- Push for a substantial modification of the organizational structure of the Food Program.
- Provide, through better economic incentives, an environment to foster enterprise accountability and link reward to effort.
- Promote the private sector in agriculture as a valuable adjunct to the socialized sector

Gorbachev's influence in changing the pace and focus of the program was apparent during Andropov's brief tenure, but Chernenko's subsequent, equally brief tenure was generally a period of marking time. It was not until Gorbachev took over as General Secretary in March 1985 that he was in a position to set forth fully his plans for implementing the Food Program.

Gorbachev probably views the agro-industrial sector as critical to his overall strategy for economic revitalization (see inset, "Gorbachev's Game Plan"). The highly inefficient nature of agricultural production and distribution, in particular, offers him the potential for major productivity gains and the attendant acceleration in growth of badly needed resources for the industrial modernization effort. He probably understands the problems of the agricultural sector better than those of the industrial sectors, and the Food Program provides a political and policy framework for instituting change. He is close to key personnel in the field, and his strong political authority in this sector makes it possible for him to initiate modifications to it that are likely to be more difficult to sell in other parts of the economy.

Gorbachev's plans for reorganizing economic planning and management are, in fact, being implemented first in agriculture, and the sector seems to be the

Gorbachev's Game Plan

Gorbachev's views on agriculture are part and parcel of a general strategy that he would like to carry out for the economy as a whole—a multifaceted approach that he hopes will rapidly place the country on a modern, more efficient footing once it is fully implemented:

- *A redistribution of resources in favor of machine-building and other industries vital to the modernization of the economy.*
- *A streamlining of the central government bureaucracy to facilitate a shift of more decisionmaking authority to the enterprise level.*
- *Improvement in the role and effectiveness of economic levers—prices, credit, taxes—to stimulate more efficient production and reduce the need for detailed, centrally set directives.*
- *A short-term focus on improving discipline and uncovering "hidden reserves"—tacit acknowledgment that his strategy may take years to translate into specific policies or to show results.*

General Secretary's testing ground for some of his more innovative and controversial ideas (see inset, "The Impetus for Agricultural Reform"). He has moved aggressively to initiate changes in less controversial areas—investment, organization—while avoiding the politically risky and economically difficult changes such as overhauling the price structure and giving greater autonomy to farm managers. By all indications, however, Gorbachev realizes that substantial progress in improving agricultural productivity hinges on resolving these latter issues.

The Component Parts of Gorbachev's Agricultural Strategy

Restructuring Investment

Gorbachev appears to have been the driving force behind the Food Program's investment strategy—concentrating resources where they would do most to

The Impetus for Agricultural Reform

The agricultural sector will serve as an important testing ground for more far-reaching changes that Gorbachev appears to have in mind. Because of the vagaries of the weather and the need for timeliness, flexibility, and on-the-spot initiative, reform-minded Soviet economists have long looked to agriculture as the sector most in need of reform, most likely to benefit from it, and the place to begin any such serious effort.

The case was most forcefully argued by Novosibirsk economist Tatyana Zaslavskaya in an interview with the government newspaper Izvestiya. "The importance of agriculture's pioneering role has been proved," she said in the interview, "by the experience of other socialist countries which have implemented economic reform." She went on to argue that "agriculture is the most responsive sector to economic reform rather than administrative forms of leadership. New forms of economic management, many of them quite effective, fruitful, and original, constantly emerge in agriculture in spite of administrative control." According to Soviet sources, Gorbachev has had a longstanding acquaintance with Zaslavskaya that dates back to his days as a regional party boss in Stavropol Kray. He reportedly traveled frequently to Novosibirsk to seek her advice on various experimental management innovations that he was trying in Stavropol

improve efficiency and reduce waste—and he has consistently pushed for more energetic measures to carry out this strategy. In his report to the 27th Party Congress in early 1986, he highlighted the fact that losses of farm produce amounted to 20 to 30 percent, adding that the cost of eliminating losses would be one-half to one-third the cost of obtaining the same supply through additional production. In particular, he has argued for a more rapid shift away from the traditional concentration of resources on farm production—livestock facilities, land reclamation, and so forth—to:

- Development of the industries that supply the farm sector with goods and services—machine building, chemicals.

Table 1
USSR: Distribution of Capital Stock
in the Agro-Industrial Complex ^a Percent

	1983	1984
Total	100.0	100.0
Branches producing machinery and other inputs	9.0	9.1
Construction ^b	7.3	7.2
Agriculture and forestry	64.5	64.6
Food processing	11.8	11.9
Procurement and retail trade ^c	7.4	7.2

- ^a Reproducible fixed assets excluding housing and services.
- ^b The definition of this category is not available. It probably includes capital stock belonging to organizations that carry out construction and land reclamation for farms.
- ^c Includes retail trade in food products and public dining.

- Improvement of rural infrastructure—housing, roads, storage.
- Modernization of industries that process agricultural raw materials.

According to Soviet statistics, a shift in investment away from facilities used in farm production took place toward the end of the 1981-85 period—presumably reflecting Gorbachev's growing influence. During this period, the share of investment in housing and rural amenities showed a comparatively large increase. There was a slight increase in the share for machinery production, food processing, and other elements of the nonfarm sector.⁴ Nevertheless, Soviet statistics show that the distribution of capital stock in the agro-industrial complex changed little during 1983-84 (table 1)

⁴ Because complete, consistent plans for investment in the agro-industrial complex and in its various branches during 1986-90 have not been published, there is presently no precise statistical evidence on the extent to which these shares are scheduled to shift over the next few years

Table 2
USSR: Distribution of Capital Stock
in Industries Supplying Agriculture and
Food Processing With Inputs ^a

	1983	1984
Total	100.0	100.0
Tractors, agricultural machinery, and repair	55.3	56.3
Machinery for food processing	3.1	3.1
Fertilizer and chemicals	34.3	32.8
Other ^b	7.3	7.8

^a Reproducible fixed assets excluding housing and services.

^b Includes peat extraction for agricultural use and assets of the microbiological industry.

Farm Machinery. Gorbachev appears to have had some success during Andropov's tenure in gaining Politburo approval for additional investment in farm machinery production. A party-state decree on agricultural machine building published in April 1983 apparently earmarked an additional 5.6 billion rubles for this sector over and above what had been called for in the Food Program. In a reference last year to this measure, Gorbachev noted that it was beginning to show good results.⁵ Soviet statistics confirm that during 1983-84 producers of tractors, agricultural machinery, and repair facilities for farm machinery attained the largest increase in the share of capital stock among the various industries that provide agriculture with inputs (table 2).⁶ Producers of agricultural machinery are likely to achieve comparatively large increases in capacity in the 12th Five-Year Plan (1986-90) period as a result of the rapid growth slated for the machine-building sector as a whole.

Progress in actual machinery production has been mixed. Last year production of machinery for livestock and feed production grew at faster rates, while

⁵ The 5.6 billion rubles apparently is to be spent over the period covered by the decree (1983-90). Under these circumstances, annual outlays would be 700 million rubles, equal to approximately 5 percent of annual investment in the machine-building industry.
⁶ Nevertheless, the farm sector still accounts for almost two-thirds of all capital stock in the agro-industrial complex.

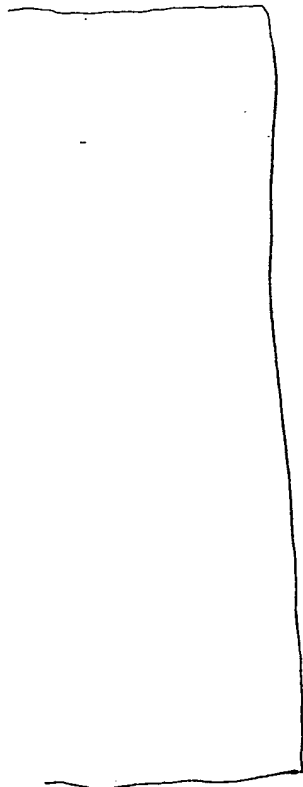
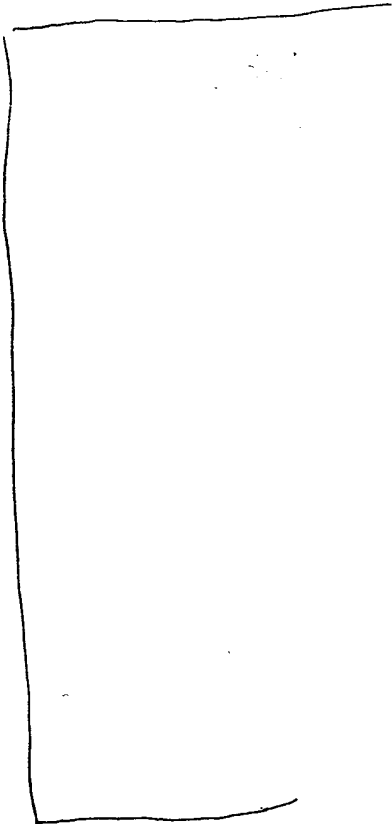
Table 3
USSR: Production of Selected Types of
Farm Machinery, 1981-85

	1981	1982	1983	1984	1985
<i>Billion 1982 rubles</i>					
Value of output					
Machinery for crop production	3.1	3.3	3.4	3.6	3.7
Machinery for livestock and feed production	2.2	2.3	2.4	2.6	2.9
<i>Thousand units</i>					
Production					
Tractors	559	555	564	571	585
Grain combines	106	112	118	118	112
Balers	32	32	33	33	35
Fertilizer-application machines	47	46	46	48	NA
Cotton harvesters	9.6	9.9	10.1	10.1	9.4
Self-propelled silage and feed harvesters	6.6	8.6	10.9	12.2	14.6

growth rates fell for machinery involved in crop production (table 3).

Storage and Transportation. Gorbachev has been particularly critical of the failure to follow through on the Food Program's plans for investment in storage and transportation. "Despite frequent talk of the importance of developing them," he complained earlier last year, "no perceptible improvement is yet visible, and nearly one-fifth of the harvest continues to be lost." The Food Program called for storage capacity for food products to be built on farms and in food-processing enterprises. Farms were also to receive more storage capacity for perishable inputs such as fertilizer and livestock feed, but frequent complaints by Soviet officials suggest that little progress

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has been made. The paucity of data on storage capacity makes it impossible to measure progress and to assess future plans in detail.

The Food Program plan for improving transportation is centered on expanding and improving the network of interfarm and farm-to-market roads and providing more vehicles such as refrigerator trucks, milk tankers, and cattle trailers. Investment in paved roads is needed badly to reduce high transportation costs and reduce losses in marketing farm products. Soviet sources claim, for example, that only 20 percent of the roads used to move workers to jobs, feed to livestock, and machinery to fields are paved Although statistics on planned investment in storage and transportation for the 12th Five-Year Plan period have not

appeared, a decision was taken in early February to greatly increase investment in the logistic base of the consumer's cooperative trade network.

Food Processing and Packaging. Gorbachev has assigned the highest priority to upgrading food-processing and packaging equipment in the 1986-90 Five-Year Plan. Soviet goals include reduced energy consumption and labor requirements in food processing, increased quality and variety of food products available to consumers, reduced losses and transportation costs, and extended shelf life of food products.

8

In one of his earliest speeches as General Secretary, Gorbachev charged that work in carrying out the Food Program goals for building up the material-technical base of the food-processing industry was lagging badly.⁷ On two separate occasions during 1985, the Politburo approved measures for the development of this sector that presumably involved the allocation of additional funds. The second 1985 Politburo decision, taken as late as December, suggests that Gorbachev continued to work for a further upward revision of investment in food processing after publication of the draft guidelines for the 12th Five-Year Plan. Premier Nikolay Ryzhkov stated in his party congress speech that priority in the agro-industrial complex will be assigned during the 12th Five-Year Plan period to the sectors processing agricultural raw materials and that capital investment in these sectors will increase by 51 percent—from 26 billion rubles in 1981-85 to 39 billion rubles in 1986-90.⁸

Housing. The heavy emphasis in the Food Program on improving living conditions in Soviet rural communities resulted in a sharp rise in the share of farm investment going for "nonproductive" purposes—housing, schools, and so forth—in 1985. Commissionings of rural housing, furthermore, which declined steadily in the 1960s and 1970s, not only increased during 1981-85 but also grew more rapidly than commissionings of urban housing. Nevertheless, during this period growth declined in the employment of workers that better housing is intended to attract—such as agronomists, veterinarians, and drivers of tractors and grain combines.

Other Investment Priorities. Improvement in on-farm technology depends in part on following through on Food Program plans to increase supplies of fertilizer,

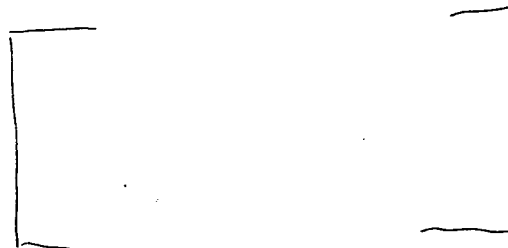
⁷ According to Soviet statistics, annual commissionings of new capacity for processing meat, dairy products, and vegetable oil have not increased substantially since the Food Program was implemented.

⁸ This amount probably includes investment in food-processing capacity on farms as well as investment in food-processing industries.

pesticides, and livestock feed supplements.⁹ Fertilizer and pesticides are key inputs for the "intensive technology" effort strongly endorsed by Gorbachev to increase grain production.¹⁰ Growth rates for deliveries of these products to agriculture have picked up sharply since the introduction of the Food Program.¹¹ Per hectare application rates of fertilizer on grain in 1983-85 were 24 percent above that of 1981-82. The increase in quantities available for use on forage crops was even larger. Despite these gains, there are frequent complaints in the Soviet press about shortages of fertilizer-application machinery and improper application techniques on farms. Further, total supplies of agricultural chemicals are still far short of needs.

Taking the Money From Traditional Areas. Gorbachev has been far more emphatic than Brezhnev in insisting that the restructuring of investment within the agro-industrial complex should not entail an increase in its overall share. "We have reached the rational limits of building up capital investment in this sector," Gorbachev bluntly told a June 1985 conference. He went out of his way to note approvingly that the additional resources allocated in mid-1983 for agricultural machine building had been taken from the farm sector and indicated that he favored further shifts of this sort

Gorbachev appears to be particularly eager to cut back on the large amount of resources going to the land-reclamation program.¹² Since the mid-1960s,



¹⁰ Fertilizer deliveries to agriculture grew at an average annual rate of 8.0 percent in 1983-85 compared with 3.6 percent in 1981-82 and 1.7 percent in 1976-80.

¹¹ According to Soviet calculations, returns on these investments have been lower than those for other major investment projects in agriculture.

investment in irrigation and drainage projects has consumed almost one-fourth of total investment in agriculture. The Soviet leader has consistently held that emphasis should be put on improving yields through better maintenance and repair of existing reclaimed lands rather than on undertaking new projects. He appears to have had little part in the long-term land-reclamation program adopted during Chernenko's tenure and has clearly been responsible for the decline in Moscow's support for many of the locally backed projects.

Party secretary for agriculture Viktor Nikonov told a [redacted] last summer that the regime would not halt projects that had already been started, but he sharply criticized such projects as the ambitious Siberian river diversion scheme, long under study, as inordinately expensive. References to the completion of feasibility studies for this highly controversial project were dropped from the draft guidelines for the 12th Five-Year Plan published last fall, and public lobbying by central Asian spokesmen at the same time came to an abrupt halt. Moreover, several other water diversion projects that were included in the draft guidelines—the most controversial being the diversion of water from the northern lakes and rivers to the Volga—subsequently came under sharp public attack from eminent academicians, including Gorbachev's reputed adviser Abel Aganbegyan, and were removed from the final version of the plan approved at the 27th Party Congress in February and March 1986. The close timing between this last-minute decision to shelve the river diversion scheme and the decisions earmarking additional resources for the consumers' cooperatives and the food-processing industry appear to reflect Gorbachev's priorities.¹³

Streamlining the Bureaucracy

Gorbachev has viewed the central bureaucracy, with its organization along narrow departmental lines, as the main obstacle to his plans to redirect investments, resolve interbranch conflicts, and transfer greater

¹³ A subsequent decree was published in August announcing the termination of all planning and preparatory work on both the northern and Siberian river diversion projects. Financial and material resources released as a result of this decision are to be channeled into other land-reclamation and irrigation repair projects in the Russian Republic.

authority to the regional and enterprise levels. Not surprisingly, Food Program initiatives to coordinate the management of the entire food-production and distribution process were effectively quashed by the ministries and state committees that stood to lose authority if a regionally oriented system were fully established. The district-level commissions (RAPOs)—the Program's solution to coordinating agricultural decision making at the crucial local level—were never effectively established. Many RAPOs exist in name only. Few have gained sufficient authority to even attempt to operate as originally envisioned.

On becoming General Secretary, Gorbachev acknowledged the inadequacy of the 1982 organizational measures and pushed hard for more extensive management restructuring that would streamline decision-making and establish clear lines of authority. In one of his first speeches as new party boss, Gorbachev bluntly reminded Central Committee members: "We agreed at the May 1982 plenum that the agro-industrial complex should be planned, managed, and financed as a single entity at all levels. We must carry this to its logical conclusion." Such a broad interpretation of the Food Program was intended both to justify the creation of a central coordinating body with more teeth than the existing commission and to give the RAPOs enhanced authority, at the expense of the central ministries, to distribute resources earmarked for their districts and assign production plans among association partners.¹⁴

This call was followed by a November 1985 decree establishing a USSR Union-Republic state agro-industrial committee (Gosagroprom) with broad authority over all components of the agro-industrial

¹⁴ Gorbachev's interpretation appears to reflect the views of two reformist economists connected with Gosplan's agro-industrial section, one of whom, Vladimir Miloserdov, was reported several years ago by [redacted] to be a key consultant to Gorbachev. Miloserdov has written a number of articles arguing that the concept of creating unified management and planning of the agro-industrial complex at all levels logically means that material and financial resources should pass down to the individual enterprises through one channel, that of the agro-industrial bodies, and not through many different branch channels.

sector. While the Food Program's Agro-industrial Commission served a coordinating function—in effect by working with the various ministries involved with agriculture—Gosagroprom has been given substantial line authority. The committee merges five ministries and one state committee and includes elements of three other ministries (figure 3). The Ministry of Procurement—reorganized into the Ministry of Grain Products—and the Ministry of Land Reclamation were not included in the merger,¹³ but Gosagroprom—as the “central organ of management of the agro-industrial complex”—was given the authority to plan and finance their activities and that of all other branches concerned with the production and processing of food and natural fibers. Ministries involved with the production of material and technical inputs for agriculture and the food industry have been enjoined to coordinate their activities with Gosagroprom and are included on the committee as members.

The way for the reorganization was cleared by the removal in late October of the two top government agro-industrial officials, Deputy Premier Ziya Nuriyev and Minister of Agriculture Valentin Mesyats—both Brezhnev holdovers—and the appointment of a close Gorbachev protege, Vsevolod Murakhovskiy, as the new government agro-industrial czar. His position as First Deputy Premier gives him more influence than his predecessor Nuriyev possessed and may put him in line for a seat on the Politburo, the party's top policymaking body, at some future date.

The reorganization was accompanied by a major cut in administrative staffs. Soviet officials state that 50 percent of the personnel in the central apparatuses of the abolished agricultural ministries have been let go, either transferred to jobs at the production level or fired. Similar cuts are reportedly being made at the local level. The decree includes a number of provisions to smooth the transition for those released, but such a

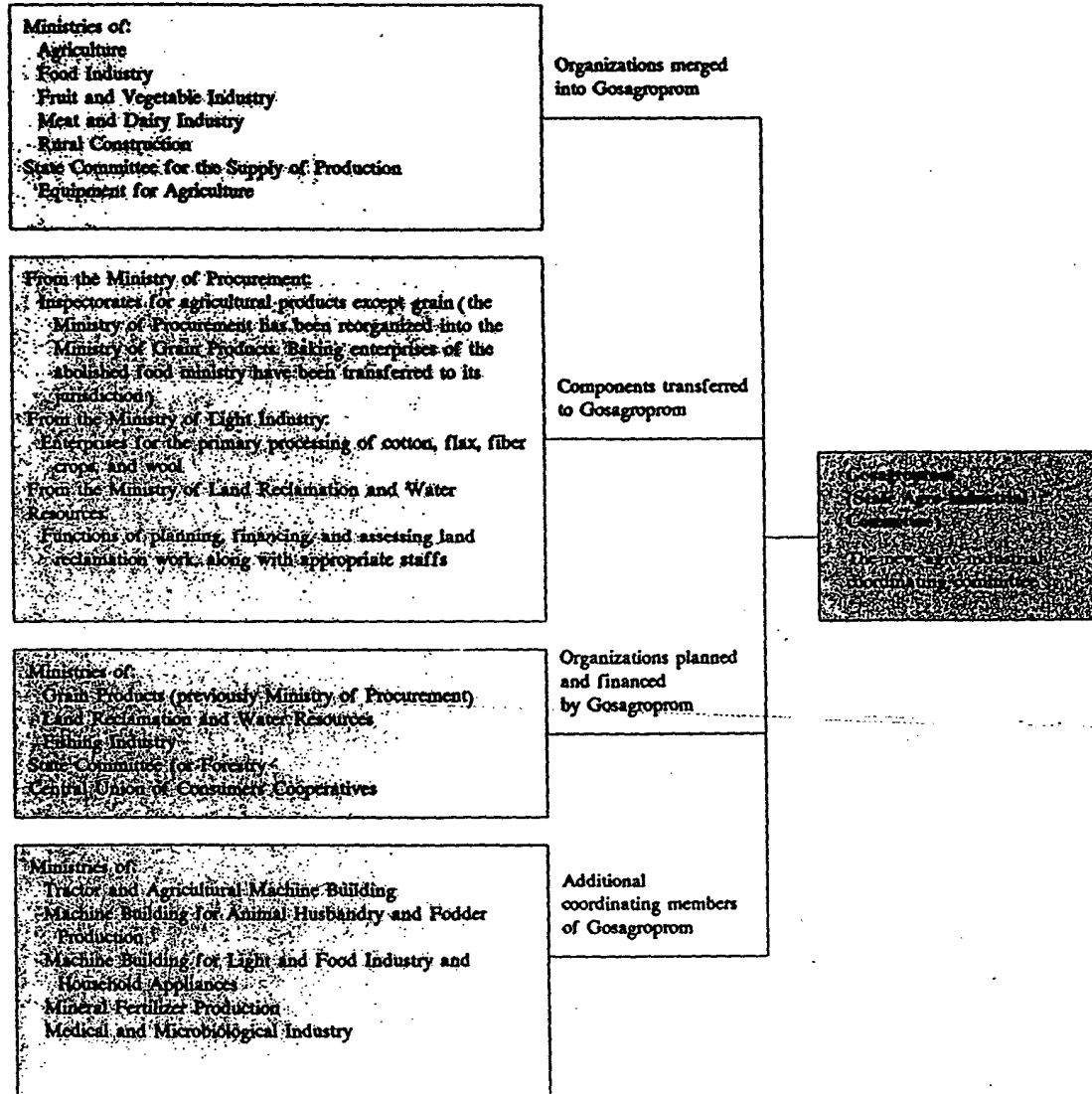
¹³ The exclusion from the merger of the reorganized Ministry of Grain Products—the major food-production branch—is puzzling. This arrangement may be only temporary, but it is also possible that it is intended to allow the regime to retain tight control over grain—the most important basic crop—while permitting more local control over other agricultural produce.

major reduction in force has no parallel since Khrushchev's 1957 *sovnarkhoz* reorganization and is reportedly generating much unhappiness and confusion. Nevertheless, Murakhovskiy can be expected to carry out this policy with vigor. In an article published in the party journal *Partiynaya Zhizn'* not long before his appointment, Murakhovskiy argued that the administrative staff of the agro-industrial complex should be reduced by “no less than a third and paperwork by a factor of 2 to 3.” He remarked that he made the same pitch at the all-union agro-industrial conference several years ago.

Soviet agriculture officials have expressed confidence that Gosagroprom will put an end to the special-interest lobbying, which often encouraged previously existing ministries to work at cross-purposes. They contend that Gosagroprom will have a vested interest in seeing that the entire input-production-processing chain runs smoothly, as well as the latitude to make the requisite investment and resource-allocation decisions. Six months after the reorganization, however, the new committee was apparently still going through a difficult shakedown period. Writing in the May issue of the journal *Voprosy Istorii KPSS*, party secretary Nikonov complained that the functions of subdivisions within Gosagroprom and the duties of each worker had not yet been clearly defined, resulting in a lack of coordination and efficiency and an unwillingness on the part of many specialists to accept responsibility for resolving questions.

The reorganization is intended to be the first step in shifting more decisionmaking authority to the regional and enterprise levels. At least on paper, the reorganization eliminates the dual subordination of enterprises that plagued the RAPOs and opens the way for strengthening their role in planning and resource allocation. Provisions enhancing their authority were spelled out in the revised RAPO statutes issued in March 1986. Again, however, lack of progress in working out and implementing these measures has caused concern in Moscow. In the same journal article

Figure 3
The New Organization of the Agro-Industrial Sector: Gosagroprom



Nikonov charged that the apparatus of Gosagroprom at the national level was continuing to examine questions that should be resolved at the local level just as the former ministries had. He went on to complain, as did Gosagroprom chief Murakhovskiy in the April issue of *Kommunist*, that "old-style departmentalism" was also making its presence felt in the new organizations at the regional level, and he criticized the failure of many regional Gosagroprom officials to move more quickly in including agricultural-related enterprises in the RAPO structure

Moscow's slow progress in delegating decisionmaking to the regional and local levels is not too surprising. Besides having to deal with bureaucratic foot-dragging, Gosagroprom is probably still in the process of weeding out deadwood, selecting regional officials, and establishing its own role within the Council of Ministers. Even when Gosagroprom is fully operational, there is no guarantee that it will be able to effectively delegate authority to the farm. Local party leaders have traditionally played a major role in resource allocation and production decisions within their respective regions. As long as local political officials—whose interests may not coincide with those of their farm managers—retain decisionmaking control, decentralization measures may have only limited effect.

Effective delegation of authority to the local level, however, is also dependent on the far more challenging issue of establishing a set of economic incentives that will ensure that this additional authority is properly exercised at each level—that the RAPO, in particular, does not become one more bureaucratic layer impinging on the operational autonomy of the farms.

Improving Economic Incentives

Gorbachev has repeatedly emphasized that changing the role of ministries and giving the RAPOs and farms greater autonomy cannot be fully accomplished unless accompanied by stronger economic incentives as a means of influencing enterprise activity and has stressed the need to overhaul the existing system of economic levers. His rhetoric—his repeated call since the congress for "radical reform," for instance—suggests that he is inclined toward and would support

fairly major changes, and he has pressed hard for the implementation of a number of specific policies that, although not new in themselves, may push the regime in the direction of more meaningful reforms. He has, however, avoided any concrete proposals for basic changes in the system of economic incentives. Gorbachev acknowledges that coming to grips with this issue is the most controversial, complex, and difficult aspect of his program.

Self-financing. Gorbachev has attached particular importance to the introduction of self-financing—requiring enterprises to finance their operations out of their own revenues—as the main vehicle for creating positive incentives for producers and as a prerequisite for managerial autonomy. While self-financing has been a regime goal for years, it has largely been introduced only on paper and has not been an effective means of increasing farm accountability. During the late 1970s and early 1980s, unfavorable weather, rising production costs, and inadequate procurement prices combined to cause the virtual collapse of the regime's efforts at self-financing in the agricultural sector.

On becoming party secretary for agriculture in 1978, Gorbachev argued for the need to create more "profitable" conditions for the farms and began to work in other ways to make self-financing a more meaningful proposition. Gorbachev has since called for putting all management and production subunits on a self-financing basis. He has stressed in particular that "contracting brigades"—an innovative form of organizing labor on the farms that he began pushing most vigorously during Andropov's tenure—should also operate on a self-financing basis (see inset "Contracting Brigades").

Although self-financing has the potential to encourage greater responsibility on the part of farm management and labor collectives for the efficient use of resources allotted them, it does not provide the incentives of true profit-and-loss accounting because farms do not face rational procurement prices or have

Contracting Brigades

The semiautonomous brigades or teams operate under a contract with the farms and are given latitude to manage the production process as they see fit. During the growing season, workers receive monthly cash advances. After the harvest, total wages are increased if crop yields or livestock production have improved. Where self-financing has been fully introduced, an effort is made to take into account production costs. The March decree calls for all production subunits on farms and in food-processing and other enterprises to shift to the collective contract system. Contracts with families are also encouraged.

The effectiveness of this type of brigade is directly dependent upon the success of farm self-financing. Although many teams operate on some form of collective contract, few have reportedly switched to full cost accounting because of the many unresolved problems.

Machinery, fertilizer, and other supplies guaranteed to teams operating on collective contracts, for example, are frequently shifted by farm managers to other uses, leaving teams with no alternative suppliers. Furthermore, personnel sufficiently trained to assume responsibility for all phases of the crop-production cycle and for maintenance and use of machinery are in short supply. High turnover among skilled machine operators, the core of a team, undermines the team's effectiveness. Finally, farm managers, who have been reluctant to hand control over to teams, receive relatively small financial rewards for operating under the collective contract system.

enough choice about what to produce, what inputs to purchase, and how to spend their profits. The system of centralized allocation of material resources means that deliveries of goods to farms are planned in physical terms and that farms must pay for these deliveries regardless of their utility or quality, a situation that has a negative impact on production costs. Self-financing is also weakened by the payment

of high minimum wages and by writing off debts of unprofitable farms. In response to spreading farm losses in the late 1970s and early 1980s, the central authorities resorted to writing off debts and issuing cheap bank loans, effectively undermining efforts to penalize inefficient farmers.

Most of all, self-financing has been undermined by the existing price system. Specifically, rigid, centrally set prices do not cover costs for some farm products and cannot take into account the impact on costs of constantly changing growing conditions and the extreme differences in soil and climate that exist from region to region. A farm chairman bluntly addressed one aspect of the problem in a *Rural Life* article: "Financial autonomy remains just wishful thinking," he asserted, "as long as there are such wide swings in earnings from good to bad years. How is it possible to expect farms to finance their own development when incomes swing from huge losses to enormous profits?" What is needed, the farm chairman suggests, are modifications to procurement prices so that they will rise in years of drought when the harvest is small and fall in years of plenty when the demand is correspondingly less.

Some reform-minded economists have gone further in explicitly arguing that a major price reform is needed—one that would reflect scarcity and would balance supply and demand. For example, agricultural economist Ivan Buzdalov insisted in an article appearing in a leading Soviet economic journal in the spring of 1985 that "a comprehensive approach to price formation presupposes a consideration of general market laws, supply and demand."

Gorbachev is well aware of these basic obstacles to the implementation of fully effective self-financing and acknowledges that changes in the economic system are required. He has argued that the practice of automatically bailing out the farms breeds irresponsibility and in his congress report urged that the system of bank credits be "substantially altered." He has also

called for a more rapid shift to a system of wholesale trade to increase the reliability and timeliness of industrial deliveries to agriculture. While Gorbachev has not taken as reformist a stand on prices as some economists such as Buzdalov and clearly does not have in mind abandoning the system of officially administered prices, he has called for more price flexibility, noting in his party congress speech that prices should be "coordinated" with consumer demand.

Public exhortation for change notwithstanding, Gorbachev is well aware that he lacks a significant bureaucratic constituency for reform measures. He appears to be pushing self-financing partly as a way to define and highlight the problems and, more important, to help build the broadly based support for a program of change that is necessary if it is to work. In a conversation this summer []

[] the economics editor of a leading Soviet journal noted that a debate was under way between those who argued that expansion of self-financing should not proceed until a price reform had been worked out and those who saw this as a delaying tactic and, like Gorbachev, felt that expansion should proceed now [] this latter group felt there would be little pressure for price reform unless self-financing was rigorously pursued.

While little progress has been made in formulating a comprehensive reform package, a few initial steps have been taken. A major decree on agricultural management issued in late March after the party congress includes some measures aimed at improving the "economic mechanism" and the conditions for farm financial independence and lays the groundwork for some other changes in the future.

March Decree on Agricultural Management. In his congress report, Gorbachev unveiled a scheme to give regional officials and farms greater control over the disposal of above-plan production and allow the sale of more produce, particularly perishables, at market-influenced prices. Gorbachev repeated a promise often made in the past, but never kept, that farms will be given stable annual procurement quotas for the entire five-year period. What they produce in excess of these

quotas they may dispose of at their own discretion: either keep for internal use, or sell on the collective farm market, through the consumer cooperative network, or to state agencies. Gorbachev described this scheme as a contemporary version of Lenin's tax in kind (*prodnalog*), a measure introduced in 1921 that put an end to the policy of confiscating all farm surpluses and opened the way for the New Economic Policy with its more tolerant attitude toward private enterprise and the market."

The decree incorporating Gorbachev's congress initiative, published at the end of March 1986, includes a complex array of changes in planning, procurement, and marketing procedures, which Soviet spokesmen contend will provide the farms better incentives and improve conditions for their financial independence. The decree is not, however, the bold new program that Gorbachev's reference to *prodnalog* seemed to promise. While some of the measures in the decree are promising, none is radically new, and much that has promoted economic inefficiencies in the past has been retained:

- Farm autonomy is not enhanced in any important way. Farms will continue to receive plans for sales, investment quotas, and input deliveries.
- Elements that tend to undermine self-financing, such as minimum wages and measures to bail out unprofitable farms, are preserved.
- The overall level of procurement targets is not reduced—a change necessary to give full play to the concept of *prodnalog*. Furthermore, the targets for grain procurement may have been increased.
- The system of bonuses for above-plan procurements—which causes large annual fluctuations in farm income—was preserved, and, in the case of grain, was enhanced.

Because the decree specifies that procurement targets are to be set at least at the 1981-85 level, much of the flexibility granted to farms and local officials will under the decree apply only to what they can produce

"The measure established a progressive tax in kind that was deliberately set very low. The peasants were permitted to sell their after-tax surplus on the open market

above plan. Moreover, a key factor will be whether procurement quotas, once set, remain unaltered, releasing the farms from the traditional vicious circle in which increased production is inevitably followed by an increased quota. Regime officials appear determined to adhere to their promise of stable plans for this five-year period, but farms may continue to seek understated plans, anticipating a big jump in procurement targets in the next five-year plan.

While the decree is not likely to have a substantial impact on productivity, it holds out some promise of reducing losses and improving local food supplies. Specifically, officials at the oblast and republic level are given greater responsibility for managing local food supply. They will continue to receive centrally set procurement targets for delivery into all-union and republic stocks, but, starting in 1987, procurement targets for agricultural produce destined for "local supply" will be set by officials at the oblast and kray level. In the case of republics that have no oblasts, targets will be determined at the republic level.¹⁷

Local authorities are also authorized to exchange food products with other regions directly instead of channeling requests through Moscow—a measure that could improve food distribution. More important, union republics will be able to set procurement prices for individual farm products as long as the total procurement budget is not exceeded.¹⁸ By adjusting prices, and therefore profits, republic authorities will be able to increase the willingness of farms to produce products called for in the plan but that at present provide little profit. While this measure will not reduce costs or subsidies, it could increase the assortment of products procured in a given area.

It seems clear that the regime hopes to channel more food products through the consumer cooperative network—a quasi-independent organization that sells food at retail prices somewhere between the low state

¹⁷ This procedure appears to be drawn from an experiment in Lithuania that began several years ago. Problems developed, however, because even though procurement targets for local supply were set locally, central authorities continued to hand down specific plans for what should be produced by whom and in what quantities.

¹⁸ It is not clear from the decree whether this applies to all products or only to those procured for local supply.

store prices and the much higher prices at the collective farm markets. Meat and poultry products raised under contract with private plot owners, for example, will be sold through consumer cooperatives rather than through state procurement channels.¹⁹

Farms are given the most flexibility in disposing of perishable produce such as fruits and vegetables, for which timely delivery to stores is vital and where losses have been greatest—at least 40 percent in the case of fruit. This seems to be one area where Gorbachev's call at the congress for coordinating prices with supply and demand will be applied. Individual farms will continue to be able to sell their above-plan produce where they can get the best price. Moreover, the quota for fruit and vegetables that they can sell to consumer cooperatives or on collective farm markets that will count toward fulfillment of the procurement plan has now been raised from 10 to 30 percent.

Agricultural officials express the hope that these measures will improve quality and profitability of production and help drive down prices on the collective farm markets. Any sizable increase in the sale of fruits, vegetables, and meat to the consumer through nonprocurement channels would also help reduce the burden of state subsidies somewhat.²⁰ The consumer would face a rise in the average retail prices of these products, but the resulting improvement in quantity and assortment should help compensate.

The degree of success that the regime will have in selling these measures, however, is uncertain. For the three years during which the farms had the right to

¹⁹ In his speech to the 27th Party Congress, the chairman of the Central Union of Consumer Cooperatives, Mikhail Trunov, claimed that 3 billion rubles would be allocated during the 12th Five-Year Plan to improve the cooperatives' logistic base—as much as had been allocated for this purpose for the entire 20 years past. He indicated that major attention would go to building up interregional trade capabilities, the weakest link in the Soviet food distribution system.

²⁰ Any reduction in subsidies from higher retail prices, however, probably will be offset by the effects on grain procurement prices of doubling the bonus for above-plan sales—especially in years of large harvests.

Gorbachev Raps With Khabarovsk Farm Managers (see photo)

Gorbachev: *Are you making use of the right of the 30-percent sale of vegetables?**

Farm manager: *Yes, we are. We have set up stalls at the [collective farm] market.*

Another manager: *Last year we were receiving 47 kopeks from selling 1 kilogram, now it is 80 kopeks.*

Gorbachev: *Precisely because of those 30 percent.*

Manager: *Right. That is really an extraordinary decision, Mikhail Sergeevich.*

Gorbachev: *The main thing is, nothing is wasted now. If someone gets annoyed, if the fruit and vegetable [procurement] base makes difficulties, you go right back to your stall. And the prices will fall in the market, too.*

Manager: *Recently prices have been beaten down in no time at all. Tomatoes were 5 rubles from the speculators. But if one turns to the state farm they are 2 rubles.*

Gorbachev: *You should not refer to all of them as speculators. Your workers might be there too. There is nothing wrong with growing something for oneself.*

Manager: *The point is that prices have fallen by 50 percent.*

Gorbachev: *You know, the problem of prices cannot be resolved with administrative means. It could be, but then the market would be empty. But what you have said is another thing. That is good. And it is profitable for you.*

Manager: *Yes. And we would like to grow other things now—carrots, eggplant, and green crops. Green crops were not profitable before, but now they will be.*

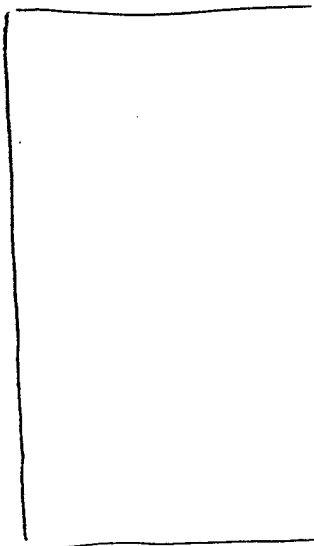
Official: *They are learning to trade.*

* Gorbachev is referring to the provision in the March decree that allows farms to sell 30 percent of their procurement quota for fruits and vegetables through collective farm markets and consumer cooperatives.

sell 10 percent of their procurement quota for fruits and vegetables on the collective farm market or to the consumer cooperatives, very little advantage was taken of it.²¹ Agricultural spokesmen now acknowledge

²¹ Less than 5 percent of potatoes, meat, and milk marketed by farms in 1984 was sold to purchasers other than state procurement organizations. Sales of vegetables and eggs through cooperative and collective farm market channels was slightly larger but still no more than 10 percent of marketings.

that this was the case, blaming it on the conservatism of local officials and their hostility to innovation. In sharp contrast, however, to the almost total lack of official public attention in support of the 1982 measure granting the farms the right to sell 10 percent of



their procurement plan on the open market, Gorbachev's supporters seem determined to move aggressively in promoting the present expansion of this measure. Not only are cases of local obstructionism being publicly scored, but Gorbachev also made a special point of putting in a plug for the concept in his informal talk with farm officials during his trip to the Soviet Far East in late July (see inset, "Gorbachev Raps With Farm Officials"). Moreover, as farms come under increasing pressure to become financially self-sufficient, they are likely to take a greater interest in the opportunities afforded by the measures in the decree.

There are nevertheless signs that opinions within the top leadership differ on the role that market influences should play under the conditions of the March decree. Gorbachev's two closest agricultural advisers have been the most upbeat on this issue—even more so than Gorbachev. Gosagroprom head Murakhovskiy

described the decree in his April *Kommunist* article as "exclusively" devoted to strengthening and developing "commodity-money" relations (Soviet jargon for market forces), and he focused at length on those measures in the decree that allow some greater pricing and marketing flexibility. In a subsequent *Kommunist* article, Aleksandr Nikonov, President of the Academy of Agricultural Sciences and a longtime Gorbachev associate, implied that the concept of *prodna*log would be greatly expanded. Agricultural policy in the next five-year plan, he said, will "creatively embody" Lenin's tax in kind. Party secretary for agriculture Viktor Nikonov, on the other hand, in another lengthy journal discussion of the decree, avoided any reference to the specific market-related elements of the decree entirely

The Second Stage. The March decree is clearly intended as an interim measure. It calls for further economic experiments to improve planning, financing, and the incentive system with proposals to be elaborated by 1990 and incorporated in the 1991-95 plan.² This seems consistent with Gorbachev's timetable for reform throughout the economy—experiments and initiatives that promise quick gains now, laying the groundwork for more fundamental reforms in the second stage.

The Soviet leader appears to be fairly openminded in his search for practical approaches to stimulate farm production. He has turned to reform-minded economists like Abel Aganbegyan, former head of the Novosibirsk branch of the USSR Academy of Sciences and now head of one of the academy's institutes in Moscow, and Tatyana Zaslavskaya, a former associate of Aganbegyan's at the Siberian branch. □

□ Aganbegyan is playing an important role as an informal adviser to Gorbachev, drafting economic proposals and speeches for him. Zaslavskaya's ties to the Soviet leader reportedly go back a number of years.

Public debate on reform issues has also picked up since Gorbachev came to power. What is particularly notable is the attention that reformist proposals are receiving in the mass media. Ideas that in the past would have appeared, if at all, only in obscure journals are now often vetted in the central press. *Izvestiya*, in particular, has provided a forum for proponents of controversial ideas. Television has also provided a vehicle for the exposure of such views. In the summer of 1985, for instance, the TV news carried an interview with an eminent agricultural economist, Vladimir Tikhonov, in which he spelled out in very straightforward language a comprehensive proposal for the radical reform of agricultural management that appeared to go almost as far in reducing central administrative controls as that accomplished in Hungary. He indicated that his institute had

² Specifically, the decree calls for a shift from the present system of directive planning of farm production to a "normative" method based on an economic assessment of the farms' land, capital stock, and labor resources. While difficult and cumbersome to implement, Soviet agricultural leaders view such a shift as vital to their goal of improving economic methods of management.

The Tikhonov Proposal

In June 1985, in a televised interview on agricultural reform, a prominent Soviet economist, Vladimir Tikhonov, asserted that Gorbachev's call for the creation of conditions in which the consumer can dictate his requirements to the producer is the central issue of improving the economic mechanism. He said that central planning was the legitimate prerogative of the Central State Planning Bureau (Gosplan), but the plan should be worked out as a strategy of national economic development aimed at creating a proportional and balanced agro-industrial complex. Gosplan should not be engaged in making detailed decisions for the farms—for example, in allocating tractors to farms whether they want them or not—or in assigning specific production tasks

Tikhonov further maintained that the farms themselves should have the right to choose their own suppliers, decide on their own production structure, and sell their produce to whom they choose. He insisted that the state could ensure that what was profitable for the farms was also what was wanted by society as a whole, partly by manipulating credit and interest rates and by instituting a more flexible price structure—that is, by allowing prices to float between certain set limits. Tikhonov noted, however, that in view of the "current disrespectful attitude" toward prices, reliance on them alone would not help. He also proposed in addition the introduction of a system of taxation to include a tax on land value, capital assets, and profits

Finally, Tikhonov asserted, the system of economic contracts must come to play a major role. Contracts signed between suppliers and producers, that is, between the farms and processors, should be used not only as an instrument for fulfilling the plan but also as the basis for formulating it

suggested to higher authorities that these ideas be tried out on an experimental basis in several Soviet republics (see inset, "The Tikhonov Proposal").

Local Experiments

Experiments in new approaches to planning and management are presently under way in a number of administrative regions in the USSR. In one district in the southern Russian area of the Kuban, an experimental territorial agro-industrial combine has been given extraordinarily broad managerial independence. The Kuban combine, which includes all the farms and processing enterprises in the district, is totally self-supporting, makes its own production decisions, and is permitted to sell some of its products at combine-owned outlets for whatever price it can command. In addition, the combine is answerable to only one ministry and receives all of its material assets through one specially organized wholesale outlet.

In another experiment with decentralized planning, centrally set procurement targets for the Lithuanian Republic only specify the amount of produce to be delivered for all-union supplies. This was reportedly to allow republic authorities greater independence and responsibility for providing local food supplies. The experiment was extended to Stavropol Kray in January 1986, and subsequently elements of it were incorporated in the March decree. Proponents of this measure see it as the first step toward freeing some agricultural products from central controls altogether, as has been done in Hungary. In another experiment being conducted in several districts in the Russian Republic, centrally set targets have reportedly been sharply reduced and the farms allowed to establish their own plans for the production and sale

of output to the state. Again, the March 1986 decree has approved elements of this experiment for nationwide use.

Finally there are a number of experiments with more radical forms of self-financing. In several collective farms in the Altay Kray, for example, all elements of the farms, including managers and specialists, as well as contract brigades, are paid out of the farm revenues. The experiments are said to have had a substantial impact on work attitudes, encouraging not only a greater sense of thrift but also a greater willingness to challenge established instructions.

All of the experiments appear to have encountered some resistance at the outset from the central bureaucracy. The Kuban combine executives complained, for instance, that individual ministries were reluctant to turn over machinery and other capital assets to the combine and continued to try to assign production tasks to enterprises in the combine. Tatyana Zaslavskaya, the architect of the Altay Kray experiment, was particularly bitter about the problem it has encountered with the central bureaucracy, noting in her Izvestiya interview last summer that plans to extend the Altay experiment to several state farms finally had to be dropped because of the refusal of central departments to allow the necessary changes in wage norms. The ministerial reorganization should alleviate some of these problems.

Several experiments incorporating elements of Gorbachev's proposals for management and planning reforms and for improving the economic mechanism are now being conducted at the regional level. They provide a clearer picture of the changes that Gorbachev would like to introduce than can be gleaned from his speeches. Not only are many of them being conducted in Stavropol Kray, his former political base, but several are evidently being monitored by economists with whom he is reportedly in close contact. While none of the experiments are as radical as the one proposed by Tikhonov, all are aimed at

enhancing authority at the local level and point up the potentially reformist thrust of Gorbachev's approach. A number of elements of these experiments have now been included in the March decree (see inset, "Local Experiments").

Even these experiments, however, dodge the most difficult issues of price formation and farm manager autonomy. Soviet sources say that Gorbachev has

commissioned a number of high-level study groups to come up with a comprehensive package of measures. They are said, however, to be far from reaching a consensus. Even reform-minded economists, for example, reportedly are deeply divided on what the proper role of prices should be, and, in interviews with Western newsmen since the party congress, Gorbachev's reputed adviser, Abel Aganbegyan, has expressed considerable pessimism about the prospects for any major price reform in the near future.

Gorbachev is aware of the obstacles he faces in pressing for major reforms. He has gone out of his way, for example, to answer potential critics by emphasizing that his call for flexible prices and greater use of economic means of management does not represent the abolition of central planning or the victory of "spontaneous market forces." He is, moreover, apparently prepared to allow considerable time for economic reform measures to be worked out. Although Gorbachev stated in his congress speech that the Politburo had drafted general guidelines for transforming the economic mechanism, he stressed that this was only the "start of the journey" and that the actual restructuring of the economic system would take both "time and energy." He appeared to indicate, as have other Soviets in private conversations, that it might be a number of years before a program appears.

The Private Sector

While Gorbachev's main concern is the revitalization of agriculture's socialized sector, he has been one of the strongest supporters of the private sector, viewing it as a valuable complement to large-scale farming. He was, for instance, closely identified with a 1981 decree that was intended to be a major concession to private agriculture. He has more recently made favorable references to experiments in Georgia and the Baltic republics involving sizable family-run farms operating under contract with the state and has sought in other ways to achieve a closer integration of private and socialized farming (see inset, "Private Agriculture in the USSR").²

² Since the initiation of the Food Program, private-sector production has increased at less than one-half of 1 percent per year, and it fell sharply in 1985. The socialized sector maintained slow but steady growth during this period.

The President of the Academy of Agricultural Sciences, Aleksandr Nikonov, stated last summer that the role of private plots had probably "stabilized," but he indicated that a more flexible policy would be pursued and that measures would be taken to create better conditions for the more efficient use of the private plots. The March decree, in particular, if fully implemented, may open new opportunities. While the measures to make the state sector more competitive could drive down prices on the collective farm markets, the loss to the private producers could be offset by potential benefits from such measures as the expansion of the consumer cooperative network. The full effect of the March decree on the private sector is, however, uncertain at this early juncture.

Potential Impact

Gorbachev's attempts to refocus and strengthen the Brezhnev Food Program, even if fully implemented, have only limited potential for improving agricultural performance for the rest of the decade. Moreover, positive impact will not be immediate and will be heavily dependent on fulfilling other goals (table 4):

- If the reorganization and streamlining of agro-industrial management is carried out according to Gorbachev's plans, it could reduce the bureaucratic haggling and competition, which has traditionally hampered effective decisionmaking. The elimination of dual subordination would facilitate coordination between farms, food-processing enterprises, and other elements of the food-production chain. Service organizations that supply farms with machinery, chemicals, and repair services would be in a better position to meet farm needs. The process of redrawing lines of authority and developing a new modus operandi for the ministerial reorganization, however, is still far from complete, and old habits and constituencies die hard.

Private Agriculture in the USSR

Private agriculture in the USSR—the one remaining sizable element of the economy still legally operating on a free market basis—is carried out on some 40 million small plots of land, up to 0.5 hectare in size, which the state allocates for individual use. In addition, families usually keep a few head of cattle or pigs and a small flock of poultry. For most people with private plots, private agricultural activity is a secondary occupation. Although the private agricultural sector produces about one-fourth of the gross value of agricultural output, its economic significance cannot be measured by its overall share of agricultural production alone. Because low quality and shortages are chronic problems with state-supplied perishables, Soviet consumers rely on their own plots or on direct purchases from private producers for a major share of their consumption of fresh vegetables, meat, dairy products, and other highly perishable produce.

Although restrictions on private agriculture are now relatively relaxed, the gradual decline in the role of private farming is continuing. The private sector's share in the number of livestock declined from one-fourth in 1971 to one-fifth in 1985. In addition, the share of potatoes, vegetables, meat, milk, and eggs produced in the private sector has fallen steadily

Soviet policymakers have made concessions to private agriculture, viewing private farming as temporary compensation for shortfalls in socialized agriculture. In the most recent decrees, the leadership

explicitly acknowledged the private sector's dependence on state and collective farms for inputs such as livestock feed and urged, but did not force, farm managers to make resources available to private producers.

Because of the high degree of interdependence between private and socialized agriculture, the private sector has been affected by many of the same difficulties faced by state and collective farms, such as the aging of the rural population, poor housing and services in rural areas, and inadequate marketing and transportation. Private agriculture faces additional negative influences, however, that make a surge in production unlikely:

- *Although the leadership has acknowledged the private sector's dependence on the socialized sector for livestock feed and other inputs, private producers are the lowest priority claimants on state resources.*
- *Rising levels of education and occupational ranking in rural areas have been accompanied by a declining interest in private farming.*
- *The gap between urban and rural availability of food in state stores has narrowed, as has the gap between urban and rural incomes.*
- *Experience has taught private farmers that campaigns to boost private farming do not result in substantial long-term efforts on the part of the leadership but tend to be temporary.*
- *The supply of machinery and tools for small-scale farming is inadequate*

• *If investment in the 12th Five-Year Plan is shifted along the lines suggested by Soviet policymakers, the results of this redistribution, which may take some time to appear, should cut losses caused by poor transportation, storage, and processing and eventually result in more and higher quality farm equipment. Success in the investment program, however, depends on Gorbachev's industrial modernization program.*

• *Increased accountability at the farm level achieved by discipline campaigns and administrative means could bring a somewhat more rational use of inputs, thereby increasing productivity. These gains will be very small, however, unless Gorbachev follows through on his stated intentions of improving the economic incentives.*

Table 4
Gorbachev's Initiatives: Benefits and Obstacles

Measure	Intended Benefits	Additional Requirements for Maximum Benefits	Likely Obstacles
Areas slated for rapid growth in investment			
Rural housing	Attract and keep higher quality labor	Greater availability of other consumer goods in rural areas	Very long lead time and very few resources
Rural roads, transportation, and storage	Substantial reduction in losses of food products	More financial incentive for all workers to maintain product quality from farm to store	Long lead time and difficulty in devising and implementing incentives
Industries producing goods and services for farms	Higher yields and animal productivity through better on-farm technology	Timely deliveries; more incentives for farm workers to maintain and use inputs efficiently	Lagging deliveries from suppliers and long lead time
Food-processing equipment	Greater variety of food for consumers, fewer losses	High-quality agricultural raw materials; adequate deliveries of packaging materials and food preservatives	Insufficient improvement in quality of agricultural raw materials, shortages of packaging, and long lead time
Areas slated for slower growth in investment			
Land reclamation	Frees resources for other projects and concentrates effort on improving return from existing stocks	Greater supplies of fertilizer and specialized machinery	Republic officials lobby for large waterworks projects
Reorganization of planning, management, and incentives			
More authority for RAPOs	Elimination of dual subordination and better inter-branch coordination	More autonomy for farm managers	Bureaucratic resistance to loss of central control
Self-financing	Producers acquire more concern for quality and cost	More control for producers over costs they incur and over how profits are spent; more rational prices	Regime unwillingness to retreat from central allocation of resources in physical terms and administratively set prices
More seasonal adjustments to centrally set procurement prices	Smaller annual fluctuations in farm income		Bureaucratic ineptitude in administering annual price changes
More efficient wholesale trade	More reliable, timely deliveries of inputs to farms and food-processing enterprises	More authority for consumer enterprises to seek alternative suppliers and stronger penalties for failure to deliver	Suppliers are constrained by their own centrally determined production plans; system of alternative suppliers would require reliance on rational prices to allocate resources
Collective contracts	Much greater efficiency in farm production	Greater supplies of industrial goods, less complicated rules and regulations, workers better trained to manage the production process, and willingness to tolerate greater fluctuations in worker income	Long lead time for industrial goods, unwillingness to let low yields in poor years reduce workers' income, and concern that worker income will be too high in good years

Will 1990 Goals for Farm Production Be Met?

If the 1983-85 rate of growth in net farm output is maintained during 1986-90, targets set in the 12th Five-Year Plan and in the Food Program for overall growth in farm-sector production will not be met. Shortfalls would occur mainly in crop production. If recent growth rates in livestock production continue, 1990 targets for important livestock products would be met. To meet 1990 targets for overall growth, farm production must grow at 4.5 percent per year during 1986-90 compared with 1.5 percent in 1983-85.

Negative influences that will tend to hold growth rates in the farm sector below present levels over the next few years, assuming 1983-85 average weather continues, are:

- *Plans to slow growth of capital stock on farms as a larger share of investment goes to other activities of the agro-industrial complex.*
- *Continuing gradual decline of labor inputs.*
- *Little progress in devising new economic incentives capable of generating large gains in farm productivity.*

Present programs, if implemented effectively, offer positive influences that have the potential to raise

growth rates to the 1960-85 average rate of 2 percent per year, given the same weather conditions of 1983-85. These include:

- *Improvements in the quality of capital stock and other industrial goods.*
- *Measures to raise yields on reclaimed lands.*
- *Improvements in education programs for farm workers.*
- *Efforts to improve seed quality and livestock breeds.*

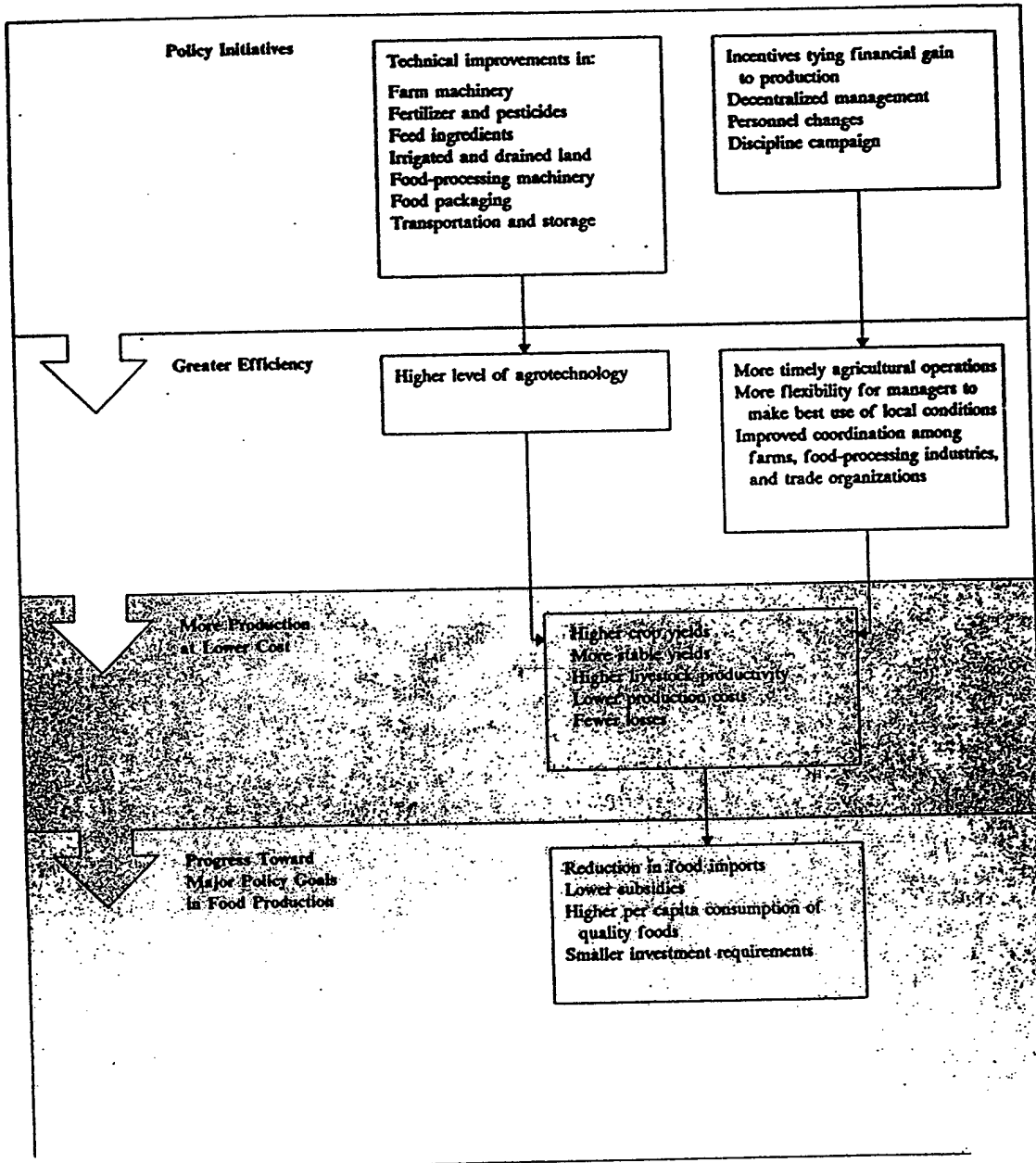
If positive influences are enhanced by a return to more favorable weather conditions, growth rates in farm production would be above long-term average rates. Raising growth rates in farm production to plan levels, however, would require very large gains in productivity and/or weather conditions so favorable that they have less than a 1-percent chance of occurring over the five-year period. With somewhat more favorable weather and modest gains in productivity, farm production during 1986-90 would grow at rates above the long-term average but well below plan.

Gorbachev's farm strategy—while threatening the prerogatives of local party officials—provides him with an opportunity to shake up the bureaucracy, bring in people whose views on farm policy parallel his own, and strengthen his political power base in the agro-industrial bureaucracy and on the local level.

Although the growth targets in the 12th Five-Year Plan for the farm sector are undoubtedly out of reach, these initiatives, if implemented effectively and paired with ongoing actions to improve feeding practices, have the potential—barring less favorable weather—to allow the Soviets to make some progress toward two of their four major agricultural policy goals (see inset, "Will 1990 Goals for Farm Production Be Met?" and figure 4):

- *Improvements in storage, transportation, and livestock feeding could contribute to gains in per capita availability of perishable food products including meat. The 1990 targets for per capita consumption for meat, milk, and eggs would be met even if current growth rates only remain constant. Improvements in storage and transportation alone would be insufficient to meet 1990 per capita consumption goals for fruit and vegetables; production of these crops must also be substantially accelerated for this to occur.*

Figure 4
USSR: Strategy for Improving Efficiency in Food Production



- **Reduction in food imports.** Maintaining 1983-85 growth rates in livestock production would require that grain imports continue, but continued improvement in feeding practices would reduce demand. At the same time, meat imports could be eliminated and butter imports reduced. If past production trends continue, however, prospects would be poor for cutting imports of vegetable oil and sugar.

Limited progress is likely to be made toward the remaining two goals over the next few years:

- **Reduction in costs of production.** Continuing the policy incentives of high minimum wages and bailing out unprofitable farms will tend to keep costs high, particularly in poor crop years. Rapid growth in the use of industrial goods in farm production will tend to raise costs, especially if incentives for farm workers do not improve substantially. While the regime may be able to limit growth in overall investment in agriculture—particularly if Gorbachev is successful in scaling down the land-reclamation effort—it will be unable to free up investment funds to support industrial modernization.
- **Lower subsidies.** Announced policies are likely to result in higher procurement prices and, in the absence of retail food price increases, higher subsidies. As a result, agricultural subsidies will continue to account for 15 percent or more of the state budget.

Beyond the Food Program. The major productivity gains sought by the leadership depend, in the final analysis, on the implementation of additional organizational and economic measures that effectively link all branches and levels of the agro-industrial sector. Perhaps most important, economic criteria must replace administrative means for regulating farm activities. As long as prices are poor guides to decisionmaking, supplies are centrally allocated, and detailed procurement targets are issued, farms and labor teams do not have the incentive or wherewithal to effectively respond to opportunities to improve the mix of inputs and outputs nor can they be held responsible for the results

While the potential economic gains are certainly attractive, any reform calling for a larger role for market forces and farm autonomy threatens the power and prerogatives of the party and could bring a period of economic instability. While Gorbachev has apparently achieved Politburo consensus on his initiatives thus far, there is apparent disagreement over moves toward market-influenced prices. In all likelihood, Gorbachev himself is hoping that current initiatives, including his campaigns for greater discipline and accountability, will bring notable improvements in the consumer diet while allowing some reduction in the share of resources allocated to the agro-industrial sector.

We believe that the leadership will probably discover, over time, that this limited approach will not yield the productivity gains needed to reduce the economic burden of this sector and allow a shift of resources to Gorbachev's modernization effort. This realization, if accompanied by an expansion of his power through the regional as well as the central bureaucracies, may reduce leadership resistance to implementing a more radical option

Indicators of a willingness by the leadership to make more fundamental changes might include:

- Expanding the right of local authorities to set some prices in response to changing conditions.
- Reducing interference in day-to-day farm operations by both central and local officials.
- Moving toward lower minimum wages and giving farms more authority over what they pay out.
- Following through on the promise to keep procurement targets stable to expand the amount controlled by the farms.
- Providing local farms with more authority to decide what to produce and greater say over the acquisition of supplies such as equipment and fertilizer.