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Soviet Agrarian Reform And The Food Crisis: *Neither Can Be Ignored*

By S.R. Johnson and A.A. Nikonov

The Soviet people are becoming more impatient for change and improved economic conditions. For example, the idea of a market economy is broadly supported. However, the reforms necessary for the transition to a market economy are threatened by a possible short-term food crisis and the political and economic realignment of the republics with the Union. These concerns and the sheer momentum of the old system have diverted public attention and the resolve for effectively dealing with the agrarian reform. But, the time has come for a fundamental change in the economic system that can stimulate economic growth and provide tangible evidence of success. Agriculture and the food production and distribution system, long-standing problems for the Soviet Union, are logical starting points.

Many initiatives are needed to achieve the agrarian reform. All must be timed and implemented consistently with one another and with a macroeconomic policy that assures more balanced fiscal and financial management. Food and farm subsidies need to be reduced, prices rationalized, property and contract law and administration restructured, a competition policy initiated, economic and financial sectors opened, markets established, and the role of government changed and reduced.

Those responsible for agrarian reform and food policy have a critical challenge. How to achieve these reforms in ways that do not risk radical changes in government? The recent disintegration of the Union makes the necessary coordination and staging of the agrarian reforms with those in other sectors especially difficult. A centrally-coordinated

transition is no longer possible. The agrarian sector is not an economic island. The center does not have the political power or economic capacity to closely orchestrate the reforms.

The Soviet Union in Transition

From fiscal and financial perspectives, the Soviet Union is in a tailspin. The state budget deficit was about 8 percent of GDP in 1990, and continues to grow. This budget deficit is being financed

largely by printing rubles. In 1991, for example, the money supply is projected to increase by 15 to 20 percent, depending on source and definition. The anticipated rate of real economic growth for 1991 is negative, estimated at -10 to -16 percent as late as September of this year.

The added money chasing fewer goods and the prospect of an increased deterioration of the value of the ruble have resulted in a current Moscow inflation rate of 2 percent per week, a rate equivalent to over 250 percent per year. Regulated or formal sector retail food (state shop) and agricultural procurement (farm) prices are now far out of line with free market prices in the major northern urban areas like Moscow and St. Petersburg and other areas including the mining and industrial centers that rely heavily on the traditional distribution system.

Prospects for restoring the fiscal balance and financial stability in the immediate future are dim. A Union Treaty is being negotiated and there appears to be progress. But, the Union is in a very weak position. The republics control nearly all the economic resources. And, for historical reasons, they may be hesitant about yielding it to the center without clearly articulated and credible evidence of mutual benefit. This is particularly the case for revenue-raising capacity. If funding for the Union budget is not secured by a concrete agreement with the republics, more rubles will be printed to finance the budget and inflation will continue to accelerate. An additional and compounding factor for central money supply management is the liquidity of households, with savings estimated in 1990 at 381 billion rubles.

Soviet tradition complicates the situation further. The republics

➤ **Food security and the reform of agriculture are major issues for the Soviet Union and its republics. The specter of a food crisis this winter threatens political and economic stability. Yet, actions to meet the possible food crisis must not be at the expense of true progress toward agrarian reform. To perpetuate the current period of indecision or to attempt to reconstitute the old command system rather than achieve effective reforms could have high costs for the future of agriculture, the resurgence of the economy, and the newly-found political liberties.**

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have been conditioned to expect high levels of services and significant transfers or subsidies from or through the Union. The republics will demand that these transfers and services be continued. However, the republics are not likely to grant to the Union corresponding revenue raising authority. These demands may require even more deficit funding. Thus, it is almost a certainty that the market-based agrarian reform as well as the possible food crisis will have to be managed under conditions of high inflation, at least in the initial years.

The situation for the agrarian sector is less bleak, although there are clear symptoms of major structural problems. Reforms designed to increase productivity and decentralize management of agricultural enterprises have been evolving since the 1950s. State and collective farms can now keep and reinvest profits. And, more flexible forms of within-farm contracting are now common practice, including family production units, leasing, and mini-cooperatives.

The 1988 Law of Cooperatives provided a basis for developing private farming units and enterprises that have supplemented the formal food production and distribution system, especially for non-staples. By the end of 1991 there will be more than 100,000 private farms, still accounting for only about one-half of one percent of total arable land. These initiatives are far short of market liberalization by western standards, but clearly show the changing economic structure of the agrarian sector and the longer term trends in the reintroduction of private incentives.

For the state and collective farms, profit levels are high with national averages having increased from near zero in 1980 to about 25 percent in 1990. This has been mainly due to increases in procurement prices. Yields and output of cereal grains, for example, have been flat when adjusted for weather. And, in 1991 farm profits began to decrease due to rapid increases in input prices resulting from reductions in subsidy levels for the enterprises that supply the agricultural sector.

The lack of response to increases in procurement prices and the introduction of more flexible management systems for farms have added to the impetus for reform of the agrarian sector. The domination of the state and monopoly within the state and collective farms and in the formal processing and distribution industries are now targets for reform. Privatization, breaking the control over subcontracting units within farms and enterprises,

increases in the size of family plots, and limiting monopoly control in the farm input and processing distribution subsectors are broadly embraced as directions of change, along with a reconsideration of the pricing system. The agrarian sector is thus in many respects poised for the transformation to a market organization.

The Immediate Food Situation

The current food situation is a pressing problem. Will there be a crisis this winter? What will be the nature of the crisis? And, what are the appropriate actions to mitigate or deal with it? Many

observers including ourselves agree that it is highly likely there will be a food crisis or a set of localized crises in the Soviet Union this coming year. But there is much disagreement on the nature of the crisis that might occur and what should be done about it.

Of course, the nature of the food crisis suggests ways to meet it. We reiterate the importance that approaches to

the food crisis be carefully crafted and that these interventions not slow progress on the economic reform. First, consider the nature of the crisis. Where is it likely to occur and why?

Farm production for key food commodities is down significantly in 1991 (Table 1). Grain and potato production show the most decline. Meat production is off less but perhaps only because of the liquidation of the livestock herd due to feed shortages. Dairy production is down comparable to meat, 8 to 10 percent. Still the 1991 farm production figures, though lower and suggesting the urgency of the agrarian reform, are not sufficient to imply in themselves a major food crisis.

The prospective problems of food security in the Soviet Union

are associated largely with the collapse of the old command system for procurement and distribution and the severe erosion of purchasing power of consumers. And, it is worth emphasizing that the procurement and distribution problems are quite different this year than in 1990 when a much discussed food crisis did not materialize.

Over the years, the command system was operated by the Union in cooperation with the republics. The central

government required producers to supply output at given procurement prices. These supplies were then distributed to processing enterprises and state shops. With the breakup of the Union, the resources and authority for centrally operating the command system are quite limited. Still, dependence on this system is high. In

Table 1.

Agricultural production in the Soviet Union, key commodities (million tons)

Commodity	1986-90 Average	1991 Estimate	% Change 1991/ 1986-90 Av.
Grain	196.6	170.0	-13.5
Sugar Beet	87.4	80.0	-8.5
Potatoes	72.3	65.0	-10.1
Meat	19.3	18.5	-4.1
Milk	105.9	100.0	-5.6
Eggs (bil)	83.0	78.0	-6.0

SOURCE: Agrarian Institute, Agricultural Academy of Sciences (VASKhNIL), Moscow.

Table 2.

Sources of the Food Supply for Urban Families, Percent of Expenditures, First 6 Months

SOURCE	Commodity					
	Bread Products	Potatoes	Fruits & Vegetables	Meat	Eggs	Milk/ Cheese
State & Cooperative Trade	80	27	46	57	62	65
Private Market	3	21	21	9	5	3
Personal plots/ family on farms	0	1	7	13	13	3
Restaurants, institutions	11	19	18	21	12	15
Other	6	32	8	0	8	10

SOURCE: Agrarian Institute, Agricultural Academy of Sciences (VASKhNIL), Moscow.

the first half of 1991, 80 percent of bread products and over 50 percent of milk and milk products, eggs, and meat for urban workers came from state and cooperative shops (Table 2). These are national averages and even higher percentages are reflected in Moscow, St. Petersburg, and other food-deficit areas. As of September this year, the formal system had procured only about 30 million tons of grain compared to an average annual level of 68 million tons for the period 1986-1990.

Grain and other food commodities are simply not moving through the formal system, even though procurement and retail prices have been sharply increased in 1990 and 1991. One reason is that, apart from the distrust of the command system and the exercise of new rights by the republics, the agents in the food distribution system, including farm managers and owners of individual plots, expect prices to go up still further. And why not? With accelerating inflation, real commodities alone have value. Barter arrangements which are emerging with the breakdown of the formal system are poor, costly, and inefficient substitutes for markets functioning with an accepted currency.

The fixed and artificial prices and the rigidities of the command system also contribute significantly to distributional inefficiencies. Historically, farm level investments have been emphasized at the expense of investments in distribution and marketing capacities. Waste is widespread in the system. Common estimates of "waste" are 20-35 percent for many agricultural commodities. Waste and inefficiencies will persist until reforms occur. There are no technological miracles for sharply reducing waste without a change in economic structure. As well, the capital to achieve fundamental technical change is not available. Past overinvestment in farm-level production capacity (tractors and combines) are not easily converted into distributional and marketing system investment goods (warehouses and refrigeration).

The bright spot in the food distribution and processing system is the informal sector. In many regions the informal market supplies significant quantities of food and bridges supplies in periods of shortage. Estimates of informal sector supply (private market and personal plots/family on farms) are 28 percent for fruits and vegetables and around 20 percent for meat and eggs. (Table 2.) The informal or free market and barter sector, however, is not advanced to the point that it could supply major food deficit areas throughout the 1991 winter, if the formal sector were to fail.

Even with the free market that now exists, there are difficulties. Free market and controlled prices differ widely, especially in food deficit areas. These differentials are a major incentive for corruption. Persistence of these differences can distort the development of the free market and make unpopular the idea of profits legitimately derived from trading and providing marketing services. Many citizens believe that "unearned income" is bad.

Last, due to inflation, reduced real purchasing power of consumers is a source of potential difficulty and a special type of food crisis. Many citizens have fixed incomes, especially in large cities where manufacturing and government have been important sources of earnings and pensions. With rapidly accelerating free market prices and shortages of food at controlled prices, households with fixed incomes are at high risk.



The Short Term Fix

To unblock the formal command system, prices that reflect inflation and expectations of inflation must be introduced. Price and competitive incentives that will induce private sales of commodities to consumers are essential in the absence of an effective command regime for procurement, processing, and distribution. Unless both retail and procurement prices are freed, shortages will occur and subsidies will be required.

Freeing prices before macroeconomic, financial, and fiscal balance is achieved involves a major risk. Prices may fluctuate too widely to be good indicators of excess demand or optimal resource allocation. The same is true for agriculture leading the way in the general economic reform. But there seems to be no alternative

given the weakness of the Union and the newly realized sovereignty of the republics. The citizens cannot be expected to wait for the success of the financial and fiscal reforms. Whatever short run dislocations occur from freeing prices and making the initial reforms in agriculture will simply have to be seen as a necessary cost of moving toward long term abundance and efficiency.

The alternative is continuing to operate with the formal procurement system, perhaps for fewer and staple commodities. If procurement and retail prices are fixed while free market prices

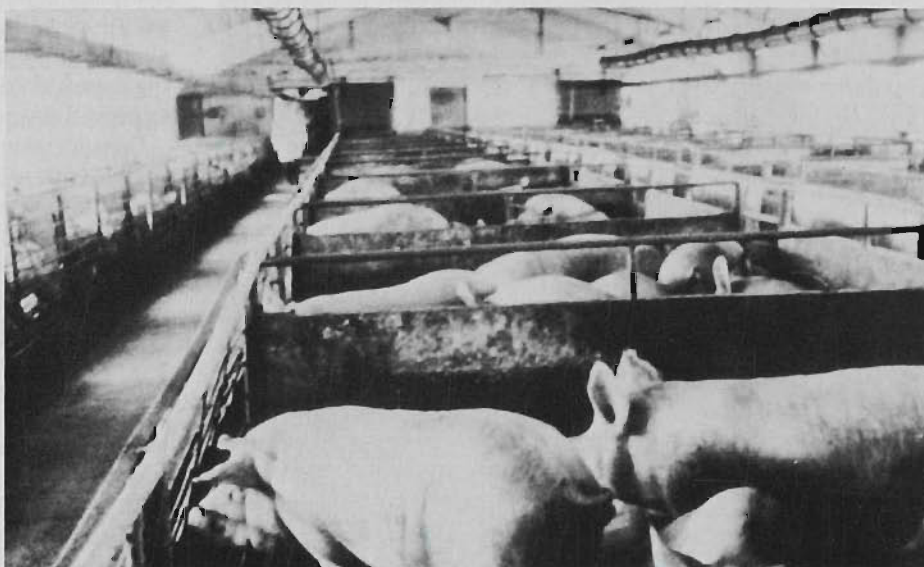
Table 3.

Household Size, Income and Food Expenditure Share, First 6 Months of 1991 (Rubles)

REGION OR AREA	Factory & Office Workers			Collective Farm Workers		
	Annual Income	Food Share	Household Size	Annual Income	Food Share	Household Size
Union Average	4,176	32.5	3.2	3,438	28	4.1
Russian Republic Average	4,803	28.0	3.0	4,542	28	3.6

SOURCE: Agrarian Institute, Agricultural Academy of Sciences (VASKhNIL), Moscow.

The state and collective farms...are now targets for reform.



Richard Heifner



continue to rise, less food will flow through the formal system. Shortages in state shops will persist. Farm and processing and distribution system resources will remain misallocated. Progress in reforming the agricultural and the food systems will be hampered.

Clearly, at least in the short run, a restructuring that will keep the existing system operating but not be inconsistent with the reforms seems the only alternative. Price liberalization coupled with strong anti-monopoly measures appears to be the best alternative. The free market simply cannot grow fast enough in parallel with the fixed-price formal procurement system to supply the food demand throughout the country.

If prices are freed, however, the short-run increases may be substantial, possibly going as high as current informal market prices which are 3 to 5 times current state shop retail prices. And, even for average households, there will be hardship. Table 3 shows 1991 average household income for the Soviet Union and the Russian Republic, along with the food expenditure shares. With average savings estimated at 12 percent, a doubling of food costs could erase all estimated savings and increase the food expenditure shares to levels comparable to low income developing nations.

Diets would shift away from meat toward more basic foodstuffs, a pattern observed in Central European countries after similar price reforms. It is a hard reality that high income consumption patterns previously enjoyed in the Soviet Union through large food subsidies cannot be sustained, partly because of the decreased role of the central government and partly due to falling national and per capita real income.

If the free price alternative is chosen, and food prices do rise relative to real incomes, then some real income subsidy program should be implemented. This program must target only the deficit populations. Food aid is a natural form of real income subsidy. However, the programs must be developed anticipating the worst in terms of timing, numbers of households in trouble, and problems with the formal procurement and distribution system. The same factors that now hamper the food distribution system make the timely delivery of food assistance difficult. Transportation, storage, and processing facilities are in bad repair and the economic incentives for efficient utilization are largely absent.

The vexing question is, "Who shall be responsible for the food aid?" Since the republics have the economic and political power, it makes sense that they, not the Union, should be responsible. The role of the Union would be to monitor the transfer systems and the situations of at-risk households. Public disclosure of this monitoring information would pressure the republics to have similar targeting and assistance levels. But how these interventions were made, whether by food stamps, food coupons, or commodity distribution would be left to the republics. Alternative approaches

might work more efficiently in different republics depending on the culture, the food supply, and their progress with the agrarian reform.

Foreign nations could assist in thwarting the food crisis either by aiding the republics or supporting the Union food assistance monitoring and price stabilizing systems. Technical assistance, commodities, and financial grants all could be used. Commodities obtained with loans and grants could be sold on the free market to stabilize prices and alleviate general shortages. Income from the sales could support the targeted assistance and monitoring programs.

For food assistance, stocks should be accumulated and held by the republics. Stocks used to stabilize prices will require Union management to avoid free riding, if borders between republics are open. Judicious private stock holding will be encouraged by the

freed prices. Foreign governments planning to assist with commodities will have to move them into place in advance of the food crisis if the support is to be effective and these commodities or associated revenues are to be directed to the republics with special problems or with assistance programs that meet their particular standards for international relief.



In the first half of 1991, 80 percent of bread products for urban workers came from state and cooperative shops.

The Longer Term Agrarian Reform

Economic reform of the agrarian sector in the Soviet Union will

be a long-term process. Also, the design of the reform and the transition process will rely heavily on the republics, given their economic and political power. This is why it may be necessary to depart from the usual prescriptions for successful transition from controlled to market economies. Experiences with developing and developed countries have shown that financial control is almost a necessary condition for successful reform. This situation is different in that liberalization of prices and increased competition along with appropriate agreements among the republics for sharing downside risks may in fact accelerate or set up conditions for improved financial and fiscal balance.

Consistent with the short-term fix, the long-term prescription begins with a liberalization of agricultural and food prices and immediate attention to problems of monopoly. This would be accompanied by a transfer of even greater responsibility to the republics for dealing with whatever form the food crisis takes. Costs of meeting the food crisis will give the republics incentives to support control of monetary balances and inflation. Also the responsibility will give added urgency to a clear delineation of Union and republic economic and financial obligations. The result will be a more balanced Union budget, financial, and competitive conditions that encourage entrepreneurship and foreign involvement in the reforms.

At risk in this economic reform experiment are the poor and disadvantaged populations. But the liberalization of prices will place these populations in no more danger than would be the case

under a continuation of current conditions. In the longer term, reform will accelerate the productivity of the agrarian sector and provide added food security. Failure to protect the vulnerable populations could, however, spawn political instability. Foreign nations supporting the transformation of the Soviet economy should give priority to this area, directly assisting with price stabilization efforts through loans and grants and supporting the food assistance programs for the at-risk population. Also, these nations will be called on for technical assistance by the Union and republics for the design and implementation of institutions required for the market economy and the transition.

There are significant obstacles to agrarian reform beyond price liberalization, the limiting of monopoly power, and the financial and fiscal measures necessary to reduce inflation and stabilize the currency. Capital investment and new technology are needed, especially for food processing and distribution. The magnitude of the investment necessary to bring this industry to western standards suggests heavy reliance on the private sector for new capital. This points up again the importance of liberalized prices, competition, and managing the fiscal and financial situation to create an environment that stimulates domestic savings and investment and attracts foreign capital.

However, the keys to the success and pace of the agrarian reform will be even more fundamental changes in the economic system. Private property and contracting that is enforceable and not encumbered by arbitrary restrictions, say on land sales, will be necessary. Managing the market driven economy through competition, trade, financial, and other policies directed to market failure and externalities will be required. And, safety net systems to share and spread the risk of entrepreneurial activity and unanticipated outcomes in the reform process will have to be introduced.

The role of government in rural areas and the agrarian sector will change. Public services now supplied by collective and state farms will have to be reorganized and financed by local, republic, and union governments. Schools, housing, roads, and utilities are examples. Infrastructure for supporting markets will be necessary. Communications, information, and legal and administrative regulations assuring access to potential market participants and a lowering of transaction costs will also be required ingredients. Producers, processors, distributors, and marketers will require timely and low-cost communications if the flow of inputs and products from farms to consumers is to be efficient by standards in nations with which the Soviet Union will wish to compete and trade.

Finally, the transition must begin now. To date there has been much fence sitting, half-heartedness, and miscalculation in the reforms. A recent example is the reform package proposed for the Russian Republic late this October. Food price liberalization is set for a future date. This type of staging has the effect of increasing incentives of consumers to hoard and of those in production and distribution systems to hold back supplies. This strategic behavior produces results inconsistent with the intended consequences of the reforms.

Recommendations

We recommend, at stage one, immediately free prices, establish food assistance programs, and harden budget constraints for all enterprises and government units. This hardening of budget constraints will be difficult and not completely successful. The immediate objective is to establish fiscal and financial credibility, adding to incentives for reform and confidence in the anticipated rate of inflation.

In stage two, phased over a longer period (but beginning at the same time as stage one), privatize, change the laws on property

and contracting, institute a competition policy, organize the central bank to better control the monetary and credit system, and aggressively extend the reform to other sectors. For the farm sector this privatization initiative can build on past changes in economic structure. Family plots can be enlarged, unproductive and unprofitable farms can be reorganized or broken-up to form private firms or smaller cooperatives, and within large state and collective farms, contracting and individual incentive systems can be expanded. A critical feature of the change in structure for the remaining state and collective farms is the limitation of monopoly. Subunits, however defined, should not have the larger farm as their only supplier and customer. Within-firm, incentive-based contracting should also be initiated in the input supply, processing, and distribution enterprises, and their monopoly power for distorting prices and limiting new entrants should be checked. Concentration is a major problem in input supply, processing, and distribution industries. Replacing state monopoly by private monopoly would only accelerate price inflation and distortion. Perhaps the anti-monopoly policy will have to involve foreign competition, reestablishing trade links with Eastern European nations. During stage two borders will have to be open among republics but some buffering between national and foreign markets will be required. The latter should however be organized to encourage broad participation, the essence of a vibrant market economy. Tariffs and hard currency auctions as compared to licensing and bureaucratic allocation systems for quotas and foreign exchange are examples.

At stage three, harden the currency and open the borders to goods, financial and capital markets, and more fully join the world economy.

Our goal is not to be discouraging about prospects for economic growth and political stability in the Soviet Union. Instead we hope to emphasize the seriousness of the current situation and the urgent need for real economic reforms. There are clear short-term problems in all courses of action. However, the resiliency of the Soviet people and the new found energy from the open political system all point to ultimate success, a better economic life, and a more peaceful and prosperous world community. C

The bright spot in food distribution is the informal sector.

