FOOD AS A COMPONENT OF NATIONAL DEFENSE STRATEGY

by

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conomic warfare statutes in the United States date to 1917. Since World War II, these statutes have increasingly given the President broad authority to restrict US exports to prevent economic shortages, to protect national security, and to support US foreign policy objectives. The apparent success of the 1973 OPEC oil embargo in producing changes in US policy in the Middle East and the potential of further embargoes or extravagant price hikes by producers of oil and other nonreplenishable raw resources, such as bauxite or chromium, have renewed public interest in the possible use of food as an instrument of foreign policy. Such use might take the form of establishment of strategic food reserves and a selective export policy which would use agricultural exports as both a carrot and a stick in the achievement of US national interests.1

The logical conclusion which follows at this juncture is that any decision to employ economic warfare as a strategic weapon must be based on our export capabilities in agricultural commodities, which until recently have combined with foreign military sales to produce a trade surplus in the US balance of payments. Given the apparent success of economic warfare by other nations, the question that then remains is whether food and agricultural exports can in fact become a useful addition to the range of strategic alternatives available to US policymakers for the achievement of diplomatic and political objectives. Careful analysis will, I contend, lead us to ultimately reject the concept of food as a strategic weapon. Let us first, however, examine the major arguments which have been propounded in favor of using food in this way.

THE POSITIVE CASE

The United States exports 24 billion dollars' worth of agricultural commodities each year. Given President Carter's goal of reducing the worldwide flow of arms, and hence the volume of US arms sales, our surplus in agricultural trade will clearly become the dominant factor in our foreign This dominance of exchange earnings. agriculture in the US export capacity is due in large part to a degree of American technical sophistication which borders on monopoly-a technical sophistication which includes not only the machinery and fertilizers used in the production of crops, but also the economic infrastructure, including transportation, credit, marketing, and storage facilities, all of which are essentially in the private sector. Cereal and feed grains are the two foodstuffs which offer the greatest exploiting natural potential for our abundance.

Advocates of the "food-as-a-weapon" policy argue that the United States has every reason and every right to use this powerful agricultural lever in support of diplomatic and political initiatives to aggressively restrain the Soviet Union and to increase American influence both in the developing nations and in nations ravaged by natural disasters. Many policymakers can almost "smell the rising power of food in economics, politics, and the pursuit of peace." Former Secretary of Agriculture Earl Butz best summarized the

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1. REPORT DATE 1977	2 DEDORT TYPE			3. DATES COVERED 00-00-1977 to 00-00-1977		
4. TITLE AND SUBTITLE		5a. CONTRACT NUMBER				
Food as a Component of National Defense Strategy				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Army War College ,ATTN: Parameters,122 Forbes Avenue,Carlisle,PA,17013-5238				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAII Approved for publ	LABILITY STATEMENT ic release; distributi	ion unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	15	ALSI ONSIBLE I EKSON	

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Form Approved OMB No. 0704-0188 position by noting, "When I come calling with wheat in my pocket, they pay attention." Although the United States produces a very small percentage of the world's total cereal and feed grains, it provides over 55 percent of all feed grains moving in world trade, accounting for 43 percent of the wheat (not including flour) and 78 percent of the soybeans (not including oil) in calendar year 1976.3

Necessary and Sufficient Conditions

If the United States is going to use food as a diplomatic lever, then quite obviously it must be in a position either to form a cartel with other food exporting nations or to exercise virtual monopoly control over the world food market. The success of any stratagem to use agricultural commodities as a weapon rests on two critical conditions. First, both supply and demand for food must be relatively insensitive to price changes; a higher price must neither reduce the final demand for the food product in question nor trigger substitution with alternative commodities. Conversely, a lower price must not lead to restricted production of the controlled commodity. Second, cartel nations must be able to get along with each other.

The available evidence suggests that the world demand for food is price inelastic; major changes in price do not affect the quantity of food demanded. Demand for American grain exports has doubled in all grains except soybeans. At the same time, worldwide food exports from the major producing nations have increased by 27 percent.4 Industrialized and developing nations alike feel the burden of increased demands for foodstuffs. Despite the fact that grain prices increased nearly 210 percent from to 1974, underdeveloped nations 1972 boosted imports from 20.6 million metric tons to 26.7 million metric tons. Food dependence more seriously inhibits the development of many emerging nations than the recent increases in the price of petroleum. This dependence is much more stark than the dependence of Western Europe and Japan on Middle Eastern oil, primarily because of the inadequacy and high costs of substitutes for US agricultural products when compared with the intermediate and long-term substitution possibilities for petroleum.⁵

a cartel action, supply of the For controlled product must be relatively insensitive to price changes which can occur either because of actual shortages or as a result of technological monopolies.⁶ This condition presently exists. Of the five nations essentially in the grain export business, the United States so completely dominates the market that the influence of all other exporting countries tends to be marginal by comparison. The historic example of the Great Depression and the experience of the Federal Farm Board showed that American farmers could not be counted on to reduce their production voluntarily.

The logic behind continued large production in light of low prices is fairly simple. Most farmers had certain fixed costs like taxes, interest, and for general operations. If a farmer's expenses... are \$2000 a year and wheat sells for \$1 a bushel, he needs 2000 bushels to meet his obligations. If the price of wheat drops to 50 cents the farmer needs 4000 bushels, or twice as much, to pay his bills. Thus the pressure on him may be to grow even more. 7

These conditions prevailed in the 1930's when most of the world was self-sufficient in cereal and food grain production, and it is obvious that they will exist when there are world shortages. Indeed, the termination of the soil bank and price support programs which had artificially limited production for nearly 40 years resulted in a return to cultivation of nearly 50 million acres, even though the price that the farmer was paid for his crop did not increase at nearly as rapid a rate as the prices of manufactured goods and raw materials. The resulting harvests have again depressed domestic prices in all cereal and feed grains; as a result, Congress has mandated "set-aside" programs to be used at the discretion of the President in the 1977 Farm Bill. The final decision to employ a 10-percent "set-aside" for barley and corn, in addition to that already announced for wheat, was announced by President Carter on 15 November 1977.8

inally, any attempt to artificially control the flow of commodities in world trade requires that the participating nations be able to cooperate with each other. The potential for joint action on a broad political and economic front would appear to be significant.

In addition to total American dominance of the food export market... the four most important grain exporters are all English-speaking, Western-style democracies allied with each other in various political, economic, and military ways [which] increase the probability that they will act jointly [overtly or covertly] on decisions dealing with the allocation of surplus grain. 9

Commonality of political interest and cultural backgrounds does not insure that nations seeking to restrict the flow of a "strategic commodity" will always act in a united front. Splits in OPEC and OAPEC over the desirability of further price increases for crude oil are increasingly in the news, as Saudi Arabia—and at times, Iran—push to keep oil prices from increasing even more while other producing states press for still higher rates. However, given the accumulation of evidence of an absolute American dominance in world grain markets, the requirement for unity of effort is clearly met and thus least limiting on the United States if it were to attempt to use agricultural commodities as an element of economic warfare in pursuit of strategic, political, or diplomatic interests.

All conditions for the aggressive use of a monopoly or cartel action appear to be agricultural the case of present in agricultural commodities. Demand for products is clearly insensitive to price changes in the short run. And, while most economists will argue that demand is sufficiently more responsive to price changes in the long run (demand is said to be elastic), the long run is very long indeed-especially when we speak of the capital investment required to bring new and undeveloped lands into agricultural production in order to foster an efficient expansion of food supplies in those nations against whom we might apply economic leverage. Even though the manifestations of American food power are subtle, they are nonetheless real. As Daniel Morgan has so aptly noted, the United States is, in reality, the world's only agricultural superpower, and there are not even any close challengers. 10

New agricultural resource development must, of necessity, take place in the lesser-developed countries (LDCs) which, if past history is any indication, are very likely to limit the freedom of outside investment sources once the agricultural technology and capital are in place. 11 The magnitude of investment required is such that many of the newly emerging nations will not be able to devote the resources required to substitute agricultural production indigenous imports. The risk associated with this type of investment, coupled with the difficulty in getting government insurance to cover the investment, deters investors even further. High costs of environmental requirements for agriculture both in the United States and

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abroad, questionable tax advantages, the threat of nationalization, and the lack of an enduring commitment to agriculture by foreign governments add greatly to the uncertainties. And, while meat consumption can be cut back and cereal grain consumption resumed in countries such as Japan and the Soviet Union, there are many nations for which there is no substitute for cereal grains as food.

Strategic Objectives and Goals for Food Policy: The Soviets and the Third World

If the United States could successfully employ food as a diplomatic weapon, then the obvious question is whether food ought to be used in such a manner, and if so, what practical results would necessarily follow. One proponent of the use of food as a strategic lever argues that there are a multitude of reasons why the United States should use this powerful agricultural lever to achieve political and diplomatic objectives:

Many of the nations with which the United States has important conflicts of interest are precisely those whose dependence on U.S. agriculture is likely to be significant over the near term. The manner in which the conflicts are resolved is important: they may not be capable of politically acceptable resolution through the threat or use of force. The agricultural lever, however, may give U.S. diplomacy improved prospects for success in an international environment where it may be difficult to sustain our foreign policy objectives by any other means. 12

American-centered grain trade now crisscrosses the world without regard to geographic or ideological boundaries. East Germany is now totally dependent on the United States for corn to feed its growing hog, poultry, and beef populations. The same pattern of dependency is true for our allies. Japan imports 55 percent of its cereal grains from the United States. In Western Europe,

only France could do without American grains for any extended period of time extensive disruptions without in the economy. Oil-producing Venezuela bought nearly all its wheat from the United States in 1975 and 1976; 75 percent of all grain used in Israel is American; Chile imports nearly all of its cereal grains from the US; and tropical countries such as Jamaica, which are rich in mineral resources but have either soil or weather which is not conducive to cereal grain production, are almost totally dependent on the United States for their food grain requirements. 13

Those who advocate the use of economic warfare concede that it must be one of several coordinated elements of a broad foreign policy strategy. Most discussions of strategy still tend to view the world in a bipolar mode. that is, as a world in which the most probable case for future conflict involves the United States and the Soviet Union, either directly or by proxy. It is in this context that agricultural exports as an element of foreign policy are most widely discussed, particularly since one of the most promising policy assets is the consistent ability of the United States to up shortfalls in Soviet domestic make agricultural production. Similarly, there are those who argue, given the major policy decision of the Soviets to alter the primary source of protein from cereal grains to meat, and the rather ambitious goals for increasing production of basic agricultural commodities above the levels of 1970, that "It is not unreasonable to expect that a denial of U.S. agricultural exports to the Soviet Union would bring the Soviet economy to its knees."14 In fact, some would argue that of all the modern economies of the world, all but the Soviet Union and Japan are immune from economic leverage of this variety.

hese arguments are based on the importance of grain imports to the Soviet plan for agriculture. Clearly, a denial of these grains would have an important impact on agricultural resource allocation and affect the success of the plan. The Soviets would be forced to take resources away from the other sectors of their economy, especially the

defense sector, since the modern Soviet citizen has become accustomed to higher standards of living and the opportunity to compare his lot with that of his counterpart in the West. Success in meeting the goals of the agricultural plan is politically important, not only for reasons of autarky or economic self-sufficiency but also for restructuring the system of incentives in order to raise productivity in other sectors of the economy. Thus, Western strategists argue, the Soviet agricultural plan will not be abandoned lightly, and the political stakes associated with the success of the Soviet agricultural program may very well open up diplomatic opportunities for the United States to obtain a political quid pro quo for our agricultural exports. Finally, it is argued:

> The situation in major deficit nations such as India and the Soviet Union could be changed dramatically through major institutional changes.... [The] manner in which agricultural production is organized makes it impossible for these nations to meet their objectives with indigenous production. Changes in the direction of market-oriented agriculture could bring about abrupt changes in their dependence on foreign agricultural imports. The persistence of their preference for the existing mode of agriculture, however, suggests that such change is unlikely to emerge over the next decade. As a consequence, their deficit status is likely to endure. 15

Support for such arguments. both intellectual and political, is widespread. The importance of the Soviet five-year agricultural plan to the Soviet defense strategy was underscored when Agriculture Minister Dmitry Polyonsky was dismissed from the Politburo and made scapegoat for the dismal harvest which resulted in a 76-million-ton grain shortage in 1976.16 And, even though the Politburo decided to pay for the continuing emphasis in weaponry agriculture by cutting back on the rate of expansion in consumer goods production, Soviet officials have hinted at a growing concern with the increasing American grain hegemony and warned the United States not to act as if "you have your boots on our necks." Aleksandr Solzhenitsyn has driven home the point concerning Soviet dependency:

Their clumsy and awkward economy, which could never overcome its own difficulties by itself, is continually getting material and technological assistance. Even Stalin recognized that two-thirds of what was needed was obtained from the West. And if today, the Soviet Union has powerful military and police forces—in a country which is by contemporary standards poor... we have western capital to thank for this also.... Let us try to slow down the process of concessions and help the process of liberation! 18

The utility of food as a strategic weapon appears almost axiomatic, given the persistent Soviet crop failures or shortfalls and the concomitant enhancement of Soviet nuclear and conventional capabilities. Since the summer of 1975, at least eight percent of all grain used to feed people and animals in the Soviet Union has been American. Earl Butz argues that American food "kept the Russians on the sidelines" while Henry Kissinger negotiated the 1973 Middle East peace agreements. 19 Given the Soviet ideological commitment to the doctrine of centralized management of the economy, there appears to be little chance that Soviet dependence on US grains will diminish. Indeed, recent shortages in predicted harvests have led to new Soviet initiatives to buy American grain at levels several times in excess of the five-year purchase agreements negotiated in 1975. And, even though we might not be able to effect curtailments of conventional arms buildups in the Warsaw Pact area, American agricultural exports could well be used to achieve leverage in areas where Soviet influence has caused problems in the past. Continued grain sales in excess of 8 million tons a year, for example, could very well be conditioned on Soviet behavior in helping to resolve the problems of the Middle East at the Geneva Conference.

n the lesser-developed countries, the requirements for heavy, long-term capital investment and simultaneous reductions in population growth necessary for indigenous food self-sufficiency serve as default conditions which render it extremely easy for the United States to use agricultural exports as an implement of foreign policy. Advocates of such a policy argue that food exports to LDCs can be used to insure both access to strategic raw materials at reasonable prices and political support in the world arena for US policy and diplomatic initiatives.²⁰

This is especially true for the many LDCs where American agricultural imports have become a major factor in the political stability of military regimes which have attempted to exploit their mineral resources through commodity cartels. Many of these nations are characterized by cities which have been swelled by an influx of peasants. farmers, and rural dwellers who are no longer able to feed themselves. Food imports thus become crucial, since governments faced with hungry populations often choose politically easier option of food imports rather than facing hard reality and trying to increase their indigenous agricultural production. The bloody food riots and overthrow of Wladyslaw Gomulka in 1970, in a country where there is no real organized political opposition of consequence, should serve as a sufficient reminder that providing food at reasonable prices is often the crucial factor in the political survival of a government.²¹ This is especially true in LDCs, where there are often active insurgencies and where the traditional hostilities among competing factions lie just below the surface of every political issue.

The use of agricultural exports as a means of leverage to obtain diplomatic, political, or economic objectives is, according to policy advocates, best viewed as a policy instrument for dealing with short- to intermediate-term political disputes. Small, lesser-developed countries, supported by world opinion, could and probably would turn to alternate

suppliers in the short run. The major utility of agricultural exports as a political weapon would thus be to bring influences to bear on Soviet Union short of military confrontation, be it direct or by proxy in a Third World nation. Thus used, a US policy of embargoes on agricultural exports would deprive the Soviets of a major opportunity to improve their centrally directed resource allocation mechanisms, which are so critically dependent on the substitution of efficient low-cost American raw agricultural commodities for inefficient and high-cost Soviet manufacturing and consumer products.²

THE NEGATIVE CASE

Arguments which favor the conscious use of agricultural exports as a lever to achieve foreign policy objectives are, on the surface, impressive indeed. However, there is no doctrine more dangerous or deceptive than the idea that food is the ultimate power which will achieve US strategic interests in either the long or the short run. Arguments for the use of food as a bargaining chip presume that, in the short term, food may buy time for the resolution of fundamental differences through diplomacy and thus permit nations to avoid resorting to armed conflict.

Yet future unavailability of food may well be the fundamental reason that nations go to war. If, as some studies have predicted, world weather conditions in the next 40 years severely reduce agricultural production in Canada and the Soviet Union—and world demand is not met through agricultural development in newly temperate zones such as the sub-Sahara—then we may well face the threat of nuclear holocaust if we are not prepared to release our agricultural exports to feed such traditional enemies as the Soviet Union, not to mention such friends as the NATO allies and others.²³

Arguments that the energy crisis of 1973 could have been offset by the organized use of agricultural export embargoes against the OPEC nations—and ultimately the Soviet Union—are misplaced. Any advantages which

might have accrued would soon have been met by countermoves in terms of embargoes on the shipment of raw materials from the Soviet Union and lesser-developed countries to the United States, and the result might have involved direct confrontation with the Soviet Union. Any analysis of the proposition ultimately requires that the wider issues of American food policy be addressed, for it is in these areas that US policy will have the most enormous consequences for international relations.

America in a Changing World: The Merging of Foreign and Domestic Policy

US domestic policy will increasingly become a matter of international concern. The politics of food is now the politics of trade, not charity. The key issues, all economic in nature, are concerned with radical changes in US policy and relationships in American agriculture, and they include domestic food prices, US export policy, the role of the free market in determining the future of American agriculture, and the changes required in US domestic agricultural policy in view of the new conditions of the world food economy.²⁴

If 'economic power politics' is defined as the use of economic advantages for political ends, then the United States cannot help but become involved in that process precisely because her share of the grain market will continue to be so large.... Thus, the rest of the world simply will not allow the United States to even pretend not to control, at least to some degree, the political behavior of other states through economic decisions. Even though that control might be exercised by the United States for ostensibly economic reasons, those reasons will, instead, often be viewed by affected nations as 'collateral' to the real U.S. objectives which they will view as political.25

The traditional dichotomy between US domestic policy for agriculture and foreign

policy is becoming increasingly blurred. Rules which encourage either domestic agricultural production or the maintenance of a grain reserve to use in maintaining domestic price stability for foodstuffs will have a direct bearing on the relationships between the United States and the Soviet Union as well as United States and the between the lesser-developed countries. Our motives for a particular action with regard to agricultural commodities, innocent as they might be, are already suspect and thus make it difficult for the United States to openly pursue strategic objectives in the diplomatic arena. Increased production for sound economic and political reasons will bring economic and political advantages, but these advantages will come wrapped in the cloak of responsibility in both the domestic and the international arenas.

With regard to the issue of food price stability, it is now reasonably clear that both the world oil and food crises of 1973 were essentially consequences of the contemporaneous and, as some would argue, deliberately timed change in the economic policies of both the United States and the Soviet Union.²⁶ Before 1972, American policy had been designed to promote the expansion of US food exports, profits, and price stability for US farmers. World grain markets were characterized by a dependence on the United States, stable prices, and subsidized exports (since the world price was generally below the US domestic price). Just as the international monetary system had depended upon the dollar since Bretton Woods, so had the international food system depended upon American support of the system. Grain reserves were maintained through government subsidies and the "land" or "soil bank" which kept land out of production.²⁷ Food was exported to all countries on extremely favorable credit terms through the Public Law 480 program. The US 1972 to in late decision government-financed reserves and payments for keeping land out of production, coupled with the delayed Soviet decision to buy large quantities of grains on the world markets, caused a drastic upward revision in 1973 prices, and many of the poorer nations came close to insolvency in buying the food required to feed their populations. In order to prevent large price increases at home, the US Government embargoed further wheat sales to the Soviets and soybean sales to Japan.

his change in American agricultural and export policy was anchored in two key issues. On the one hand, there was excessive domestic concern over rising food prices in the United States and the role of free enterprise in American agriculture. The policies instituted by the Nixon Administration in reaction to this concern clearly represented a break in continuity from the policies followed since 1933. No longer would the government automatically pay to stocks of agricultural maintain reserve through subsidies and commodities government storage or interfere in the domestic market with those reserves in order to regulate rising domestic food prices.

On the other hand, it is clear that American policymakers were reassessing the United States' position in the world economy and that continued deficits in the balance of payments position called for a retreat from the heavy costs of American foreign aid. Despite the "profitability" of American agriculture, the United States had borne a disproportionate share of the cost of keeping world food prices stable and paying for food to feed foreign nations. The preeminence of the United States as a producer and exporter of food during the last 40 years has not changed. Nor will it change in the foreseeable future. What has changed are the policies which have governed food production since 1934. The decision to gradually extract the Government from the conduct domestic agriculture and the United States from the conduct of the world food economy has quite naturally resulted in diversity and confusion. Decisions concerning the export or embargoes on the export of food to the rest of the world will invariably affect US agriculture, which is now oriented producing for the international market.²⁸

International Reactions to the 1973 Food Embargoes

Nations which were affected by the export embargoes placed on wheat and soybeans in 1972 and 1973 are seeking to reduce their dependence on imported American grains by promoting agricultural self-sufficiency; by storing food reserves, as the Soviet Union and the European Community have attempted to do; or by investing in joint agricultural development projects in the lesser-developed countries, as Japan has done in Brazil.²⁹ In the latter instance, the Brazilian share of the world soybean export market has jumped from 5 percent in 1970 to 30 percent in 1975. Reasons for this spectacular growth in the agricultural sector of Brazil include the following:

- Brazil's recent drive for self-sufficiency in wheat arising from the US embargoes on soybean and wheat exports in 1973.
- The Japanese need for soybeans and search for alternate supply sources.
- Japanese investors who were willing to risk long-term capital investment.
- The fact that soybeans and wheat are ideal rotation crops, especially in a two-crop year, since the planting and harvesting equipment for both crops is the same.
- Widespread support for development in the agricultural sector by the Brazilian Government.³⁰

In addition, US exports are now meeting greater competition. The developed food-exporting countries are seeking markets in the Soviet Union, OPEC, and the LDCs in a manner imitative of the American efforts of the mid-1950's, efforts which were not aimed at promoting domestic agricultural development in the importing countries, but at creating dependence on American exports to satisfy newly acquired tastes. As noted by Emma Rothschild:

As food prices increase and the developing countries spend more cash on imported food, the competitors of the United States devote more effort to market development. Canada and Australia pursue markets in the oil exporting countries; the European Community has approved a long-term

agreement to supply food to Egypt at subsidized prices. . . . If France and other countries do increase their exports, the world food economy will become more diverse and wide open. 31

Clearly, the 1973 export embargoes on wheat sales to the Soviet Union resulted in greater sales by both Canada and Australia.^{3 2} Finally, many of the developing nations, spurred by the "food crisis" in 1972 and the apparent success of the Brazilian efforts in soybean production, have begun to invest in the development of a labor-intensive agricultural sector in order to increase their rates of food production. This has proceeded apace with national efforts to institute some forms of family planning and population control.

The change in political attitudes toward agriculture is of great importance. At its most general, it signifies a doubt in many developing countries about the benefits of 'interdependence' or of developments dependent on international trade: an affirmation of the policy of determined autarky that was urged by the Chinese at the World Food Conference.³³

American predominance as the world provider of food will not disappear immediately; however, the signs are clear that changes in the food policies of other nations will reduce our special advantage to a short-term advantage at best.

Moreover, US embargoes on grain sales to the Soviet Union have not resulted in any major reallocation of resources away from the Soviet national defense sector to the domestic agricultural sector, as contemplated by those who would use food and cereal grains to gain diplomatic leverage on the Soviet Union. To the contrary, the Soviets simply sought out other suppliers or cut back in the production of consumer goods for both the immediate crisis and for the long term. Consequently, the American agricultural sector became panicky and began to muster political support for the reestablishment of a free market. The administration quickly lifted the 1973

embargoes and approved closely controlled sales to the Soviets for the next five years. Thus, the credibility of agricultural export embargoes as a diplomatic lever vis-a-vis the Soviet Union appears to be tarnished at best.

Political and Economic Costs

What, then, of the potential use of food as a diplomatic and economic lever against the developing countries, which either buy food on a commercial basis, like the OPEC nations, or need foreign aid to pay for imports to keep their people alive? As noted earlier, the situations in many LDCs serve as default conditions for the US to attempt to employ commodity embargoes to achieve political goals. But ease of initial application and the long-run political costs which would accrue to the United States are clearly divergent. In its ultimate form, an embargo on agricultural emerging country exports to an tantamount, at least in the short run, to the power of life and death over that nation-a power that few democratic form of governments would cherish or wish to exercise in this world of instant mass communication.

A reverse form of political blackmail seems much more likely. One can easily imagine the discrediting of the US Government both at home and abroad as millions watch children the evening television news on programs. The influence of the mass media is apparent, and the exploitation of that influence by the North Vietnamese to discredit American policy in Vietnam provides an object lesson which should not be forgotten guickly. But moral considerations aside, there are practical reasons for which the politics of restricting the flow of agricultural commodities to the very poor countries will involve more than the use of "food power." Ouite simply, the very poor countries depend on the rich nations for credits and forms of assistance in addition to food. In instances such as the Bangladesh famine in 1974, bureaucratic bickering in the United States prevented the approval of short-term commercial credits to finance previously negotiated commercial agreements as well as timely emergency assistance or credits under Public Law 480. The resultant black eye for the United States in the world arena could have been avoided. In those instances in which quick humanitarian aid is needed, there are generally few long-term problems. Yet governments tend to invest poor nations faced by natural disaster with a form of strategic importance which they would not have in normal times. The potential for a US-Soviet confrontation, whether direct or by proxy, in a nation suddenly deemed strategically important in time of a national disaster is both clear and to be avoided at all costs.

By the same token, plans which condition agricultural exports to lesser-developed countries upon political alliance, conformance to a US-defined standard for human rights, or population control are foolhardy at best. American insistence on the adoption of our own domestic values-such as the adoption of a national program to control population growth, abandoning trade relations with an American adversary, or the congressional requirement for certification that human rights are not being violated on a widespread scale-in exchange for commercial grain sales, for example, are or would be intensely resented as an unlawful and unwarranted intrusion of the US Government into the internal affairs of the recipient nation. Nothing is more likely to destroy the political and economic gains that the United States might achieve with food-importing nations who pay hard-earned foreign exchange for food than this type of coercion, which is broadly viewed as the ultimate form of sophisticated genocide, especially in those nations which are composed of several tribal or religious groups.

And, as noted earlier, food may be the very thing which preserves the stability in many parts of the developing world; to impose export embargoes for any of the several reasons listed might well lead to a conflict which would be hard to contain and in which we had unwittingly surrendered our ability to aid in bringing the opposing parties together.

As already noted, any decision regarding agricultural exports is essentially a multifaceted decision requiring analysis of

both foreign and domestic considerations. The loss of foreign markets to Canada and Australia has already been alluded to, but to date there has been little discussion in foreign policy circles about the long- and short-term effects of export embargoes on US domestic agriculture. Farm lobby groups such as the American Farm Bureau are fond of noting that agriculture:

- Is a key industry and major plus factor in the US balance of payments.
- Ultimately provides over 25 percent of the jobs in the private sector of the American economy.
- Contributes over \$100 billion a year to the Gross National Product.
- Has witnessed a 68 percent increase in productivity, versus 37 percent for private industry, in the last ten years.
- Suffered greatly in associated industries when the embargoes were imposed in 1973; e.g., tractor sales were down nearly 20 percent in the year following the embargo.³⁵

The establishment of a \$2 billion farm export market in the OPEC nations has contributed greatly to the recycling of petrodollars for American goods. Iran, the second greatest OPEC producer, has increased its purchase of farm products by some 400 percent to \$757 million. Saudi Arabia recorded a 300-percent increase from 1973 to 1975.36

Farmers argue that they cannot be expected to maintain full production in the absence of free access to world markets for their commodities or in the face of government over uncertainty will reduce action-conditions which confidence in the reliability of the United States as a source of supply and stimulate the development of alternate supply sources. Indeed, short-term government policies to agricultural prices of domestic control commodities have provoked a militant reaction on the part of some farm groups, and barring change, many farmers have threatened not to plant their crops rather than be faced by farm prices which are less than the cost of production. Governmental attempts to allocate markets through export embargoes and to determine prices through the use of surpluses, given the new farm militancy, will seriously reduce the opportunity for US agriculture to expand its commercial markets and will substantially reduce farm income.

Finally, we should realize that export embargoes against OPEC nations would have the same political consequences as the exercise of military force.

The Fatal Flaw: Marketing

Any plan to use agricultural exports as a lever to achieve political goals involves establishing control over the marketing agents for American agricultural products. Currently, over 90 percent of American grain sold in the international marketplace is sold by six giant grain dealers; the government's role is limited to approving sales and issuing export licenses. Of the six, only Cook is publicly owned, and only one of the others is American-owned. Of the remaining four, two are French, one is Argentinian, and one is Swiss.37 All are multinational corporations which have the ability to shift their operations to other countries or, more importantly, to transship grain to embargoed areas through third countries outside the purview of government bureaucrats. For example, "In the global grain trade, the 53,000 tons of wheat that Panama gets from us is a raindrop in a deluge, a mere two-freighter cargo. Mexico alone could supply the paltry amount without anybody's being the wiser."38 Abuses arising out of the 1972 wheat sales to the Soviet Union appear to have been a combination of inherent policy conflicts among some of the 26 government agencies which now administer or formulate US food policy and collusion among the US Department of Agriculture, the Department, and the exporters; at best, these abuses can be attributed to a very poor job of predicting the impact of these sales on world and domestic markets.

All attempts to control the exporters have met with dismal failure. After the 1972 sales, the Department of Agriculture issued a new set of reporting regulations for dealers in foreign grain sales. However, these require only voluntary reporting of sales agreements to the US Government before they are actually signed. In an attempt to rectify the situation in 1975, Congress provided for a Commodities Futures Trading Commission to further protect US stocks from exporter raids. On the date that the law was to go into effect, none of the five commissioners had vet been by the President.³⁹ Those appointed commissioners were appointed over a year later and are now attempting to register over 20,000 commodities brokers and to issue trading in 30 regulations for over commodities. From t he outset, the Commission has been embroiled in constant political battles. Criticism in Congress over the lavish way the regulatory agency conducts its business and discontent with its rate of progress in the licensing and regulatory arenas have led to moves to abolish the Commission when its charter comes up for congressional renewal in March 1978.40

Marketing by farm co-ops has enjoyed only limited success. They manage to market about 8 to 10 percent of all grains sold on the world market. As William S. May, vice-president and secretary of the Federal Land Bank, noted:

American farmers are Rhodes scholars at producing, but are high school drop-outs at marketing. Marketing is the Achilles heel of agriculture and is the basis for the anxiety we express about its prosperity in the remaining years of this decade.⁴¹

United then, if the States What. Government were to assume the role as actual marketing agent for agricultural products and deal on a government-to-government basis in the world grain markets? Experience in other sectors of the American economy and the Soviet experience in centrally directed production and marketing systems do not offer much objective proof that a government bureaucracy can manage either marketing or production decisions which lead to increased agricultural production. In fact, there is a strong argument to the effect that Soviet failures in agriculture are directly tied to a lack of incentive which results from a centrally planned economy. Certainly confusion would be the inevitable result as the government and farmers attempted to maintain artificial boundaries between domestic and world marketing activities.

In the case of the United States, the argument is not that the government would take over total planning for agricultural production, but that lack of direct access to world markets and the requirement to deal through a government agency acting as a commodities broker in a highly speculative world market would cause farmers to cut back on production rather than see export embargoes used to keep domestic prices for raw farm products artificially low. Nor is there much support for the use of export controls to achieve leverage in the world arena. Use of an embargo would be imposed either suddenly, catching the farmer with surplus grain on hand, or on a delayed basis, after production decisions had already been made and capital committed. Indeed, the idea of a wildly fluctuating market arising for reasons of political expedience to gain international political advantage is a more fearsome threat than the possibility of mild price fluctuations determined by operation of the market mechanism over time.

PRELIMINARY CONCLUSIONS

Professor Stanley Hoffman has noted that American foreign policy is characterized by an unpolitical engineering or "skills thinking" approach better suited to technical problems. It results in the exclusion of political factors outside our own experience and a paucity of understanding of the political dimensions of world affairs.42 The American tendency to look for the quick solution rather than consider the long-term ripple effects is well known. Interestingly enough, both those who argue for and against a "food-as-a-weapon" policy use essentially the same arguments: the potential gains are short-term at best, and there is little doubt that the ability to use this "strategic" weapon over the long run is subject to question. Both schools tend to ignore the fact that food, as a subset of a much larger question concerning the equity of distribution of the world's wealth, may well become the ultimate issue which causes nations to go to war with each other.

The issues and politics of "food power" suggest a more general proposition about the politics of American economic power:

The use of economic power has appeared to require a diminution of U.S. power in general. 'Food power,' that is, is conceivable only in a situation of agricultural transition, where the United States is engaged in a retreat from the power it exercised during the twenty years when the world food economy was American ordered and American secured. 43

The central issue, therefore, is not one of absolute power to be exercised for the achievement of long-run goals, but one of the recognition of economic forces which link the worldwide distribution of food to the issues of domestic US agricultural policy. Given that American agriculture is oriented more and more toward world markets and that more than two-thirds of our cereal and feed grains are produced for export, it is clear that agriculture cannot survive by relying solely on markets without substantial domestic government subsidies and a return to the discredited agricultural policies of preceding 40 years.

A world food market subject to and marked by widely fluctuating conditions which follow as a direct result of conscious government decisions to restrict the flow of agricultural exports can hardly be characterized as optimal for the development of agricultural trade, especially in light of the agricultural and marketing decisions outside the United States. As noted, competitors will eventually rise to fill any vacuums in the world supply generated because of a political decision.

FUTURE TRENDS

One area affecting our ability to use food as an economic weapon against the LDCs

which has not been discussed is that of developing agricultural technology which might offer hope for the future. The Club of Rome, whose Limits to Growth stated the case for controls on population and economic growth, jolted people into the realization that the current trends in population growth and the associated increased demand for finite resources such as food could not continue indefinitely. But the Club has now announced what its founder, Aurelio Peccei, calls the second part of an evolving strategy-a prescription for selective growth-which is every bit as difficult to put into operation as a policy of no growth and which "requires nations to take voluntary actions aimed at speeding the development of the poorer countries while slowing that of their industrial brethren."44 The desired result—bitterly opposed by the Environmental Fund and those who argue for a tough line and the selective use of agricultural exports—would be a redistribution of the world's riches and productive capacities, which could serve as foundation for global peace the prosperity through economic interdependence.

Herman Kahn is equally optimistic in his hopes that such food-deficit nations as India can eventually become food-exporting countries, and he is optimistic and somewhat counterintuitive in noting that aside from occasional temporary problems, such as drought, no particular food problem exists among most LDCs, including the Asian Communist countries.

Indeed, within the last few decades, the list of LDC's which regularly cope reasonably well with their food needs has grown far longer; it is now greater in population than those who do not.... Would there be enough food we may still ask, if after 500 years, the world population reached, say 20 billion—about five times the current population? The answer to that question, we assert, is a simple yes!, if we are referring to what is economically and technically feasible.⁴⁵

The practicalities of imposing export embargoes and the possibility of a changing world in which more and more countries begin to develop their own agricultural base combine to tip the balance against using agricultural exports, including food, as a lever the pursuit of national political or diplomatic goals. However, all of the preceding arguments have only hinted at the barest outlines of what US food policy ought to be. If we believe that food policy decisions must be based on economic linkages between international markets and domestic production and, as President Carter has recently emphasized, the notion of universal human needs, then American food policy must be designed to insure free access to world markets while also insuring that domestic prices for food and raw agricultural products do not fluctuate wildly.

NEW POLICY IMPERATIVES

is an active role for the there government, it is not in the blatant use of agricultural exports for political purposes, but rather in eliminating inefficiencies in domestic grain markets and the rationalization of a policy which is currently conducted by 26 federal agencies with minimal central policy direction. One of the most obvious flaws evident in the 1972 grain sales was that farmers and food producers operated in commodities markets biased against them; that is, they operated without all the knowledge of the conditions of world production and demand that was available to the federal government and the major grain exporters. The use of "insider" information on domestic supply and world demand furnished by the US Department Agriculture to the major grain exporters led to excessive profits, widespread abuses, and food distribution problems.

An alternate marketing strategy which would improve the US position in both world trade and in competition for foreign markets is that of continuing to produce sufficient quantities of wheat and other cereal grains for export. Recalling the fact that the supply of grain is essentially price inelastic in the short run, I believe that this increased production would have three major impacts on the world food situation. First, it would, in the absence

of US Government subsidies, bring US and world market prices into line with each other and thereby contribute to domestic food price stability. Second, a greater supply of cereal grains would lead to lower world prices and thus reduce food prices for importing nations, freeing capital for investment in the economic infrastructure required to support agricultural development. This would result in greater political stability in those areas of the world where potential conflicts threaten to provoke major-power confrontation. Finally, increased US production would also serve to prompt other exporting nations to produce grains and food more efficiently in order to remain competitive in the world market.

he American position in the world food economy will not diminish in the foreseeable future. We are and will continue to be an agricultural superpower without equal. Government intervention in the export market in 1973 was justified as a means to control domestic price stability and to extract minimal concessions from the Soviets in the delicate process of detente. However, the results were not very encouraging, since they created uncertainties for American farmers and foreign customers alike. Policies which encourage increased farm production, domestic price stability, and better distribution must be forged anew. If, as it now seems certain, our policymakers have chosen to remove the outmoded American supports of the world food economy based on automatic farm subsidies and mandatory soil they bear the inherent banks, then responsibility for constructing a new international food policy based on US domestic reform. In any event, it seems ill-advised to attempt to use food as a weapon of force within the context of America's defense strategy and foreign policy stance.

NOTES

1. Advanced technology—military and industrial—and agricultural commodities are the only potential instruments of economic warfare in the current structure of export capabilities. However, there is sufficient evidence to suggest that any attempt to use advanced civilian technology as a bargaining chip is doomed to failure. Military sales are clearly used as an economic-diplomatic weapon, but with limited

success since there are many other producers of military hardware willing to sell to questionable buyers should the United States fail to license such sales. See William Schneider, Food, Foreign Policy, and Raw Materials Cartels (New York: Crane, Russak, and Company, Inc., 1976), pp. 1-9, 59; and F. D. Holzman, "East-West Trade and Investment Policy Issues: Past and Future," in Soviet Economic Prospects for the '70's, studies prepared for the US Congress, Joint Economic Committee, 27 June 1973.

2. Hugh Sidey, "More Powerful than Atom Bombs,"

Time, 12 January 1976, p. 15.

3. Earl Butz, "You Ain't Seen Nothin' Yet," Colorado Farm Bureau News (April 1976), 16; and data provided by the US Department of Agriculture, Office of Congressional Relations, Washington, D.C., 30 November 1977.

4. Schneider, p. 24.

- 5. *Ibid.*, p. 31.
- 6. C. Fred Bergsten, "The New Era in Commodity Markets," Challenge, 17 (September-October 1974), 34-42.
- 7. Gilbert C. Fite, American Agriculture and Farm Policy Since 1900 (Washington, D.C.: American Historical Association, 1964), pp. 12-13.

8. "At a Glance: Agriculture," National Journal, 19

November 1977, p. 1828.

- 9. US Army War College, Strategic Studies Institute, Forecast 90 (U): Vol. I, Final Report (31 May 1975), pp. II-31, 32.
- 10. Daniel Morgan, "American Agripower and the Future of a Hungry World," At Issue: Politics in the World Arena, ed. Steven L. Spiegel (New York: St. Martin's Press, 1977), p. 426.
- 11. The future of Japanese investments in soybean and wheat production in Brazil following the US embargo on soybean exports in 1973 remains to be seen.

12. Schneider, p. 7.

- 13. Morgan, pp. 427-28.
- 14. Ibid., p. 14.
- 15. Ibid., pp. 34-35.
- 16. "Rubber Stamping the Status Quo," Time, 15 March 1976, p. 29.

17. Morgan, p. 426.

- 18. Aleksandr Solzhenitsyn, "America, We Beg You to Interfere," speech to a Joint Session of the US Congress, 30 June 1975, excerpted from US Congress, Congressional Record, 94th Cong., 1st Sess., 1975, 121, No. 126, S15004-09.
 - 19. Morgan, p. 426.
 - 20. Schneider, p. 61.
 - 21. Morgan, p. 428.
 - 22. Schneider, p. 59.
- 23. See US Central Intelligence Agency, Directorate of Intelligence, Office of Political Research, Potential Implications of Trends in World Population, Food Production and Climate (OPR-401), August 1974.
- 24. Emma Rothschild, "Food Politics," Foreign Affairs, 54 (January 1976), 285-86.
 - 25. Forecast 90, pp. II-31, 32.
 - 26. Rothschild, p. 287.
- 27. See the Agricultural Adjustment Acts of 1933 and 1938, the Commodity Credit Corporation Act of 1933, and the Soil Conservation and Domestic Allotment Act of 1936; see also Fite.

28. Rothschild, pp. 287-88.

29. "U.S. Farmers Protest Milk Plan," The Kansas City Star, 26 April 1976, p. 9; and "European Food Madness Affects Midwest," The Kansas City Times, 28 April 1976, p. 14 C, which noted:

The old colonial Europe imported cheap food

from abroad. The new Europe was to be as independent as possible, which means producing enough to feed 280 million people from the Baltic to the Mediterranean. To achieve that goal, high prices are essential.

30. Gary Reynolds, "We Saw Brazil's Biggest Soybean Crop," Farm Journal (April 1976), 22 ff.

31. Rothschild, p. 292.

32. "Farmers Protest Limits on Exports," Farm Journal (April 1976), 6, which noted:

The U.S. wheat embargo on grain doubled our wheat sales to Russia, Lester Price of Australia told a group of state and wheat association presidents. It allowed us to sell more wheat, but it forced prices down more than \$1 a bushel because the world price for wheat is really set in the U.S.

33. Rothschild, p. 293.

34. Ibid., pp. 292-96.

35. Keith Probst, State President of Colorado Farm Bureau, in Colorado Farm Bureau News (November 1975), 1; and "A Spending Cutback Helps Farmers Prosper," Business Week, 20 October 1975, pp. 130-38. 36. "Export Extras," Farmland News, 31 March 1976, p.

29.

- 37. Carl J. Schramm, "The Perils of Wheat Trading Without a Grains Policy," Challenge, 18 (March-April 1975), 37.
 - 38. Morgan, p. 426.

39. Schramm, p. 40.

40. Colleen Sullivan, "Commodities Futures Panel Target of Disparate Critics: Some Hill Aides' Views Measured," and "Futures Markets Evolved to End Problem," The Washington Post, 25 October 1977, pp. D7-8, and the subsequent three-day series on the Commodities Futures Trading Commission carried in the Business Section of The Post.

41. "Big Cities Recognizing Crucial Role of Farmers." The

Kansas City Star, 18 April 1975, p. 10 A.

42. Stanley Hoffman, Gulliver's Troubles, Or the Setting of American Foreign Policy (New York: McGraw-Hill, 1968).

43. Rothschild, p. 302.

44. "Theory: Club of Rome Revisited," Time, 26 April

1976, p. 56.

45. Herman Kahn and William Brown, "A World Turning Point-and a Better Prospect for the Future," Hudson Institute Research Memorandum No. 13, January 1975, pp. 15, 17; see also US Army War College, Strategic Studies Institute, 432d Military Intelligence Detachment (Strat), World Population and Food Resources: The Next Twenty-Five Years, 15 August 1975.

