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## ABSTRACT

Research Agenda Priorities for Public Price and Income Policy --

A Task Force View

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Recent events suggest the urgent need to develop a research agenda that would provide the knowledge base for an effective and consistent future national policy dealing with price and income problems related to agriculture and food. This paper suggests a conceptual framework for such research input and reflects initial discussions from a workshop that addressed this task.

Key words: Price policy, Food policy, Agricultural Policy, Income policy

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Introduction. Public agricultural policy has emerged in this nation from a wide range of problems over a span of two centuries. In early history, the problems and hence the policies dealt with the structure and organization of the agricultural sector, often referred to as developmental policy. As a result, major policy thrusts have occurred relative to public land disposal and use, conservation of land resources, research about agricultural technology, education of the rural population, marketing institutions, and credit for the agricultural producers and their service organizations. Of more recent vintage has been public policy concerned directly with agricultural prices and incomes. Since the initiation of such policy with the Agricultural Marketing Act of 1929 (Federal Farm Board), public agricultural price and income policy has existed with important implications for farmers, consumers, taxpayers, the rural community, and agricultural business industry. Furthermore, it has important linkages with international relations, the progress of developing economies, monetary management, and general welfare policy.

This stream of public policy is a changing, volatile, and usually controversial one. Its economic and political overtones are strong. <u>If the</u>

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research enterprise is to serve in providing current, relevant, and useful input into this public policy-making stream, then its agenda must be set with full awareness of the contemporary scene. Thus, this paper focuses upon those priority research issues in the U.S. public price and income area.

In the recent past agricultural economists have tended to concentrate their attention on agricultural (farm) policy. In the next decade we need to develop the capacity to deal with an integrated food and agricultural policy. <u>Policies of price control, food distribution, general income redis-</u> <u>tribution and taxation relevant to the food sector, trade and foreign affairs</u> <u>involving food agricultural inputs, and industrial and institutional struc-</u> <u>tures of the food and agricultural systems must be integrated with the</u> traditional concerns about farm production, prices, and incomes.

<u>Genesis of This Report</u>. The research priority identification and problem statements set forth in this paper are largely the product of a Land Grant regional and U.S.D.A. research task force commissioned to develop research guidance in the public price and income policy area.\*

Over a period of about a year, this task group individually and in several joint sessions reviewed the current situation, existing policies, and policy alternatives, using as resources the relevant literature, their own research under way, and the conclusions of the individual participants.

After first inventorying some forty-two important research topics or questions, the group then identified those which they viewed were of the

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highest research priority. Those about which there was a substantial consensus are identified and briefly characterized in the following section. A systematic problem formulation and research outline is not the purpose of this paper; rather, it is to convey a composite view of a research agenda from a group of researchers involved in this policy area for information and further stimulation of needed effort by the entire profession.

Setting for This Review. Among the many participants in public policymaking in our system, the economic research enterprise is one vital link providing dependable knowledge and serving to translate knowledge emanating from numerous sources into feasible alternative policies. To facilitate the optimum contribution from the research stream is the objective of the identification of the priority research issues in this paper. Among the many factors influencing the content of public policy, the existing economic situation is of particular importance. This current setting for price and income policy is probably the most unique that has existed since the immediate post World War II period. Let us briefly sketch it.

First, the world is experiencing widespread food and fiber shortages, high raw farm product and consumer prices, and numerous instances of deliberate market intervention. Parts of this situation can be attributed confidently to unusual natural disasters, to altered international monetary policies, and rising incomes of selected developed countries, but a thorough explanation remains illusive.

Second, the U.S. as a major food and fiber exporter has essentially eliminated all public stocks of such raw products for the first time in over two decades. This resulted largely from a deliberate policy of balancing production with utilization and shifting from a price supporting to a

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compensatory payment approach. No deliberate policy of public stockpiling or reserves is in effect as a replacement.

Third, and ironically, the less and more developed countries were ushered into the present period with opposing food problems. The former were experiencing the increasing food production payoff of a green revolution, which balanced against rising population growth rates still left per capita food availability at a low or nutritionally inadequate level. At the same time the more developed countries were unleashing through technological advances a food production potential which exceeded their slowing population growths with chronic problems of surpluses, production control, and export subsidization.

Fourth, the concerns of the nonfarm, food-consuming sectors of most nations are increasingly prominent in the governmental policy-making process. This is due to a relative decline of agricultural populations, to the increased knowledge and awareness of nutrition and health problems, and to the rising expectations of the mass of low income, inadequately fed citizens.

Fifth, in the U.S., strong food distribution as well as farmer-oriented policy is combined in single agricultural policy enactments. Likewise, their administration falls in one executive department.

Sixth, the U.S. agricultural price and income policy stream is approaching another periodic cycle of major decision-making. With the four-year implementation of the 1973 Agriculture and Consumer Protection Act nearing the halfway mark, a period for thorough reflective evaluation and a fertile environment for research payoff in the next round of public policy decision-making is at hand.

Those research problem areas with the highest priority, as viewed by this research task force, are now summarized.

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Research Priorities in Public Price and Income Policy

Gauging Current Supply and Demand Forces for Agricultural Products. In the presence of the recent dramatic changes in agricultural product prices and trade flows, the economic, political, social and physical forces currently affecting the demand and supply of food and fiber need to be identified and measured as precisely as data will permit. This analysis is needed for both the United States and for major areas of the world. A conceptual framework is needed to put these forces into better perspective. For example, it is important to distinguish between trends and deviations from trends, or between permanent and temporary relationships. With the growing importance of purchased inputs, like petroleum-based products, an adequate analysis would also encompass projections of their supply and price. Intelligence is needed on whether current food scarcity or a continuation of an earlier surplus condition is the likely direction for the future.

The implications of worldwide monetary inflation for supply, demand, and trade of agricultural products need thorough investigation. Monetary inflation affects the extent and location of grain reserves. It distorts the pattern of relative prices and undermines the capacity of the price system to provide signals to producers and consumers consistent with an efficient allocation and use of products and resources, further amplifying effects of market structure differences.

The impact on allocative efficiency seems to be greatest during the period when the economy is adjusting to the new higher level of aggregate money demand. Once the adjustments have been made, assuming additional inflationary increments in money demand are not forthcoming, relative prices again tend to reflect the underlying "real" conditions influencing supplies

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and demands. The influences operating on U.S. farm export demand via the components in the balance of payments and exchange rates of other countries should be analyzed in an effort to improve the basis for predicting the future level of export demand which now has become a highly important determinant of the domestic price level for farm products.

Operational projections could include: (1) estimating the requirements for food and fiber commodities based on exogenously determined projections of per capita consumption, net trade, and population; (2) estimating substitution potentials among alternative sources of protein, e.g., grain vs. livestock, under different conditions; (3) estimating probable supply responses of major commodities under selected conditions of technology, factor availability, and prices; (4) estimating alternative patterns of distribution of the supply among consuming areas, in view of historical trends in the distribution of commodity production, adjusted for current supply, demand, and trade.

Evaluating Need and Developing Alternative Models for Grain Reserve Stocks--World and/or U.S. There is much concern both in the U.S. and among international organizations about the low level of food grain stocks. Particular attention is given to the recent low levels of U.S. grain and soybean reserves. During the 1950's, stocks were accumulated as a byproduct of the price support programs. The accumulated stocks were drawn upon during the Korean conflict, the unusual world need in 1966, and by the corn blight and foreign demand during the early 1970's. Current production was more nearly balanced by means of workable policy with utilization in the 1960's. By the end of the 1973 crop year wheat and rice stocks were below 10 percent of 1973 utilization and feed grain stocks will not be much better. Soybean

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stocks are expected to be up after the tight situation a year earlier. Because of these low stock levels, there is renewed interest in establishing new national and/or international policy on reserve stocks.

Probable objectives of an adequate grain reserve program would be to: (1) provide working stocks; (2) reduce danger of food shortages both for the U.S. and world; (3) help maintain commercial exports--i.e., a dependable and steady supply; (4) help stabilize farmers' incomes and the general economy; (5) raise the level of farm price and income along with production adjustment; and (6) assist growth of underdeveloped areas of the world (LDC's).

Any analysis of reserve stocks should implicitly or explicitly include four components: (a) the overall objectives to be achieved, (b) the types of storage rules that will be used to achieve the objective, (c) the specification of the market conditions, e.g., supply, demand, the role of government, etc., and (d) a method for evaluating the effectiveness of storage rules in achieving specific objectives.

Among the specific questions on which the research would focus are: (1) The estimations of the aggregate world stock required to hold international grain prices within a defined range under an assumed degree of random fluctuations in world grain production. (2) The estimation of the size of grain stocks, and composition of stocks, that individual countries might hold under various conditions (e.g., of size of population, per capita income, volume of foreign trade). (3) The formulation of international conventions required in the governance of individual stock programs to render them effective. (4) The estimation of program costs to individual countries of the program magnitudes and operations described in points 1, 2 and 3 above.

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In summary, much discussion is being generated now in the professional literature, popular media, Congress, and in the form of proposals concerning grain reserve programs. Therefore, it is very urgent that we economists attempt to shed some light in regard to the economic aspects of a grain reserve program. A perusal of literature indicates that indeed very little research has been conducted on the topic of grain reserves.

Identifying Policy Decisions and Research Needs Implied in the 1973 Agriculture and Consumer Protection Act. The 1973 Agriculture and Consumer Protection Act embodies the current compromise choices by the policy-making body politic concerning the traditional agricultural price and income problems as well as domestic and foreign food distribution and some conservation problems. As such, it symbolizes both what this politic perceives as true, whether in fact so or not, and what it prefers to be done by our government about the many facets of the situation. Thus, the research enterprise is challenged to seek useful insights into:(1) the accuracy of some of the implicit "truths"; (2) the meaning of the actions embodied in the Act and the decisions still left open for discretionary programming by the administering authority; (3) reliable relationships between various provisos of the 1973 Act, e.g., loan level, payment rate, target price, set-aside requirements, diversion payments, treasury costs, production control capability, consumer food prices, and farmer income levels; (4) effects of alternative land retirement procedures upon primary policy consequences; (5) an effective evaluating process of on-going policies; and (6) the alternatives and consequences which should continually be kept before the policy-making public as definitive economic information is accumulated for the next major policy-making period of 1977; (7) cost studies mandated

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by the Act and implications of the new cost-of-production adjustment.

Analyzing Alternative Food and Agricultural Policies for the Future.

The current 1973 agricultural price and income legislation for the U.S. terminates in 1977 and a new cycle of major policy-making will be initiated well in advance of this crossroads. It provides a useful period for careful review of past policy, the present situation and trends, and alternative future policy directions. Future policy is beset with the uncertainty of whether the years ahead portend chronic food shortages or intermittent pockets of surplus and scarcity. Various goals figure in an adequate policy review: maximizing trade consistent with comparative advantage, stabilizing farm product prices and supply, improving farm income, minimizing food costs while improving nutritional quality, and furthering the development of all nations.

Given the population growth and uneven agricultural output, policies may be needed to greatly increase the productivity of available agricultural resources. Planning for emergency situations of increased production, expanding the utility of food supplies, or more equitable distribution should be done with sufficient lead time. An obvious research need is to evaluate the consequences of alternative means of utilizing grains through livestock or directly as human food. Rationing and price control programs would also need to be examined in the context of world-wide scarcity and inflation.

Managing supplies of agricultural products may well continue to be a problem in the future and research should keep the alternatives clearly defined. The major means of supply management in the past has been the price-supportstorage programs, acreage control and marketing quotas. Other means are managing the inputs of factors such as fertilizer, labor, and credit.

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Alternative institutions for production and distribution of food products should be studied. These might include publicly supported systems of forward deliverable contracts, publicly supervised efforts to extend cooperatives, bargaining associations, collective action, vertical coordination, and the exploration of new avenues for equity control--all directed at the agricultural producers.

Evaluation is also needed about various institutional arrangements in the international arena, such as Marketing Boards, International Commodity Agreements, State Trading, etc. Countries which are deficit producers of food have an interest in assured supplies of food from countries which are normally surplus producers. The exporting country is similarly interested in having an assured market for its surplus production. These interests could lead to negotiated agreements handled by state trading boards or by private interests. It is likely that the federal governments will play a sizable role in either case and improved understanding of techniques and results is needed.

Understanding Public Policy-Making in the U.S. Public policy seems increasingly important to the functioning and welfare of the agricultural sectors of contemporary economies. As a result, normative issues are continually faced by the researcher along with the usual questions of positivism, reliable prediction, quantification, and accurate identification. At the same time, students of policy are gleaning from political science, logic, and fundamental philosophy clearer glimpses of problem formulation in a systematic sense--i.e., alternative theories, their content, consequences, and strengths/weaknesses. Since this theoretical underpinning is likely to affect the work of the policy researcher, it seems desirable that attention be directed at the alternative theories-processes of public policy formulation and implications for policy research and development. Information is needed about the concerns and objectives of groups that are influential in the food and agricultural policy-making process. By periodic surveys of the leadership of organized interest groups, data could be generated about their current and future concerns and goals as well as the weights of each as related to such policy. This could provide a basis for improving the selection of the most relevant problems for analysis by policy researchers. The data also would be useful in analyzing the problems growing out of goal conflicts among organized interest groups. Such interdisciplinary research effort might involve policy-oriented agricultural economists, political scientists, and sociologists.

The various roles of the economist in public policy-making should be more clearly identified and enunciated. With questions constantly on the national agenda related to agricultural prices and incomes, quality of the rural environment, and consumer food costs, professional economists are increasingly drawn into policy-making in both the public and private sectors. Yet, their roles are unclear. Study and clarification is needed of the alternative roles economists do play and/or should play in the policy arena. It could identify the kinds of performance associated with each role, the likely consequences, and ultimate contribution to policy development in a democratic society.

## A Postscript

This task force is continuing its efforts toward an improved specification and appropriate communication of the priority research problems in the public agricultural and food policy area.

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