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SPECIAL GROUP E

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Methodology of Decision-Making in the Less Developed Countries: The Case of Indonesia

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Indonesia

INTRODUCTION

1. Decision-making on the agricultural economy of a country is carried out by both governments and farmers. The decision-making by governments involves national production policies whereas decision-making by farmers is associated with individual action plans.

2. As agriculture occupies a major role in many less-developed countries, decision-making on the agricultural economy of those countries is crucial in their economic development. Literature on decision-making in less-developed countries is abundant. To get a meaningful discussion, this essay aims at describing decision-making by governments.

3. The decision-making environments differ from one country to another. It is impossible to make a general description on decision-making concerning all less-developed countries. Hence, to illustrate a specific problem, the actual case in Indonesia is presented in this paper.

4. Decision-making on the agricultural economy of a country involves many aspects, ranging from decisions on price policy to decisions on institutional development. Specific aspects should be selected in order to be able to discuss the matter clearly. Hence the objectives of this essay are (a) to describe how decision-making on food production is made by the government in Indonesia, and (b) to discuss problems associated with government decision-making on food production policy in Indonesia. The method used in this essay is heuristic. The analysis is based on actual observation of the decision-making process and interviews with the relevant policy-makers. Hopefully, inference can be made to other comparable countries.

FOOD PRODUCTION POLICY

5. The main policy questions associated with food production are (a) insufficient supply to meet domestic demand, (b) low level of farmers' income aggravated by seasonal cash shortages, (c) serious rural unemployment and (d) various institutional weaknesses.

6. The goals of food production policy are (a) to increase food production towards self-sufficiency, (b) to improve rural welfare through increased income and more equitable income distribution and (c) to increase rural employment.

7. The long-run policy instruments are formulated in the Five Year Development Plan, whereas the short-run ones are designed in the Annual Budget Appropriation. The basic strategy is to introduce high yielding varieties. In densely populated areas like Java, Bali and Lombok, labour-intensive methods are applied in order to create more employment. In sparsely populated areas, less labour-intensive methods are used. In both cases, the strategy is to apply the appropriate technology for the environment.

DECISION-MAKING INSTITUTION

8. As food production is a complex activity, there are many institutions which are involved in designing the food production policy. At the central government level, there is the Food Stabilization Council consisting of the Minister of Development Planning as chairman, the Ministers of Agriculture, Trade, Finance and Public Works together with the Directors of the government banks involved in food crop activities as members. The Food Stabilization Council meets once a week to make decisions on the economics and logistics of national food supply.

9. The Ministry of Agriculture is the main institution responsible for the actual production policy. Within the Ministry of Agriculture, the Bureau of Planning is the one which prepares the groundwork for decision-making. As the Ministry of Agriculture is also responsible for other agricultural crops, the Bureau of Planning makes the co-ordination so that food crop production policy fits well with national economic policy as well as with production policy for other agricultural commodities.

10. Under the umbrella of the Ministry of Agriculture, the relevant institution directly involved in food crop policy is the Directorate General of Food Crops. In the Ministry of Agriculture, there are four other Directorate Generals, each concerned with major agricultural commodities, namely, estate crops, livestock, fishery and forestry. Both for the long run and the short run, the Directorate General of Food Crops decides on (a) the production projections and the required inputs and (b) the relevant directives to the Provincial Agricultural Services.

11. The Provincial Agricultural Services integrate the directives from the Directorate General of Food Crops with the directives from the Provincial Governors into a meaningful provincial food production

policy. The Provincial Agricultural Service decides on the projected harvested area, production, input requirements and agricultural extension plan. The different projections now become important directives to the District Agricultural Services.

THE ENVIRONMENT

12. During the past five years, the political environment, in which the decision-making on food production had taken place, has been relatively quiet. There were no serious upheavals which might influence the government decision-making process on food production policy.

13. The Provincial Agricultural Service is one of the oldest administrative hierarchies in the country. At the central government level, however, several structural changes have taken place during the past twenty-five years. The structure has been stable during the past five years, and improvements in technical and administrative facilities have enhanced the decision-making capability. Lack of co-ordination between the different ministries in the central government and various services in the provinces have been one of the unfavourable environmental features for the decision-making process.

14. The general price increase has been moderate during the past four years as compared with the preceding decade. Seasonal price fluctuation has also been sufficiently reasonable to create a normal set of economic environments for the government decision-making process on food production policy.

15. The most unfavourable environmental feature has been the weather conditions. Although observation has been made of the incidence of three-year, five-year and seven-year cycles of drought, the government has often been caught by surprise by adverse weather conditions. The latest example was in 1972 when the decision-making process on food production policy has been unhappily troubled by abnormal weather. What is needed is better skill and equipment for weather forecasting.

DATA PROBLEM

16. Statistics on food production come from two sources, namely, (a) Directorate General of Food Crops and (b) Central Bureau of Statistics. The first produces data for the whole country whereas the latter supplies data for Java and Madura only. To give an idea of the country's geography, it is useful to state that in total there are about 12 million farms on 13 million hectares of which about 8 million farms are located in Java and Madura comprising about $5\frac{1}{2}$ million hectares. Hence, Java and Madura represent more than half of Indonesian food-crop farming.

17. Both the Directorate General of Agriculture and the Central Bureau of Statistics employ different methods in crop cutting, reporting system and technical conversion estimates. Every year, tedious reconciliation has to be made to produce statistics as bases for decision-making.

18. A more serious problem is the lack of data feedback on the economics and social impact of government food production policy on the farmers. This kind of data feedback should constitute an important element in the decision-making process. To overcome this shortcoming, a few years ago, an inter-ministerial research organization called Agro Economic Survey was established. The main purpose of the Agro Economic Survey is to collect primary data and to make an analysis of the impact of government policy on the agricultural economy of the rural sector.

THE PROBLEM OF SKILL

19. In the whole office of the Bureau of Planning in the Ministry of Agriculture, there is no one with the Ph.D. qualification in planning. Recently, for a temporary period, a man with Ph.D. qualification was attached to the Planning Directorate of the Directorate General of Food Crops. A team of experts from FAO are attached to the Ministry of Agriculture. Due to lack of technical communication with the Indonesian counterparts, the FAO team has difficult problems in giving their contribution to improve the decision-making capability of the Ministry of Agriculture.

20. The Third National Conference of Agricultural Economics recently held in July by the Indonesian Society of Agricultural Economist put forward two conclusions namely (a) the government decision-making capability on food production policy needs to be improved, and (b) to support the government in improving the decision-making capability, the Indonesian Society of Agricultural Economist will develop a well-designed recruitment plan to build a qualified agricultural economics research and policy-makers community. Since its establishment four years ago, the Indonesian Society of Agricultural Economics has been active in stimulating discussions on decision-making process in food and rural development policy.

CONCLUSION

21. There has been a relatively good administrative hierarchy of decision-making institutions on food production policy. The co-ordination among the different parallel institutions, however, is a weakness in the decision-making process.

22. Government decision-making on food production policy has been carried out in a relatively favourable economic and political environment. Weather forecasts need to be improved.

23. Lack of skill hampers the provision of a good analytical base for appropriate decision-making on food production policy. Likewise, the data based should be organized properly, in order to have a meaningful decision-making process on food production policy.

24. If reference could be made to other similar less-developed countries,

major obstacles to appropriate decision-making process are lack of good data and an insufficient supply of skilled manpower. In countries endowed with relatively stable economic and political environment, one way to improve the decision-making capability is to develop well-designed manpower planning to build a strong policy-making community as well as a qualified research community.

SPECIAL GROUP E REPORT

Conflict between ministries create unfavourable situations for decision-making and how best to resolve this conflict is usually the crucial issue.

Basically, economists seems to have little influence on decision-making. Most processes or frameworks now being used tend to be *ad hoc*. Consistency in framework may be identified in rich countries with respect to maximization of resource input, particularly land and labour. Undue emphasis on these two factors, however, may be misleading. Capital productivity, too, may sometimes become crucial. In general, the most scarce resource has to be identified and maximization of output with respect to this resource is a useful guiding principle.

In low-income countries, their economists, having been trained in rich countries, tend merely to apply the technology used in the rich countries and follow the same research system. Thus, these economists tend to focus their criteria on land and labour resource productivity. In most of these low-income countries, land and labour are not usually scarce. Given any unit of output at least two alternatives are usually available, namely:

- (a) High capital/land ratio.
- (b) High labour/land ratio.

To select one will require some major policy decision-making.

Institutional labour wage rate tend to create the problem in low-income countries and labour though available is not prepared to work at going institutional wage rates. Increased productivity, as such, is not necessarily automatically advantageous, especially if achieving it results in over-capitalization of farm operations or unemployment. Once the farms or the agricultural sector has been over-capitalized, it becomes too difficult to reverse the trend and this may become detrimental to the long-run interest of the farming population.

It was further stated that to improve decision-making, the erroneous assumption that unduly inflates the role or merits of sophisticated techniques to solve agricultural problems in developing or low-income countries, should be dispensed with. Furthermore, it may also be misleading to make generalizations about land and labour as being surplus in low-income countries.

Looking at the question of decision-making, it was felt that there are four possible categories of decision-makers. These are:

- (a) technicians, including agricultural economists;
- (b) politicians, including statesmen;
- (c) administrators, and
- (d) the people—specifically the farmers and consumers.

It was pointed out that in decision-making, some of the limiting factors relevant to low-income countries are as follows:

- (a) The lack of adequately correct information (data) and knowledge (or understanding) of farming and decision-making processes, particularly at the farm level.
- (b) As a result of the above limitation, there is a tendency towards easy and palatable but misleading generalizations with respect to policy objectives and techniques needed for solving these problems. These generalizations pay little or no regard to the specific problems as related to the society or the time dimension.

It was also mentioned that in some cases, if not most, agricultural economists working in low-income countries either tend to be encouraged to undertake research not useful to policy and decision-makers or they are not given the facilities or incentives to undertake it.

It is essential that agricultural economists help with research aimed at promoting better decisions and to delineate the consequences of the decisions being made as well as the alternatives available to them, in the aggregate farmers constitute the major decision-makers in agriculture.

Agricultural economists have to be definitely better equipped to understand the basic nature of the society, the economy, the decision-makers and their interaction. For good decision-making framework the role of the agricultural economists cannot be overestimated, but in low-income countries there is need for better data and knowledge of how best to evolve a workable framework to improve decision-making.

Among those participating in the discussion were: R. C. Agrawal, *West Germany*; Q. B. O. Anthonio, *Nigeria*; U. A. Aziz, *Malaysia*; J. Cleave, *IBRD/U.K.*; V. M. Rao, *India*.