

THE SEARCH FOR NUTRITION POLICY

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NUTRITION AND NATIONAL POLICY. Edited by BEVERLY WINIKOFF. (Cambridge, Massachusetts and London, England: MIT Press, 1978.)

DEVELOPMENT, REFORM AND MALNUTRITION IN CHILE. By PETER HAKIM and GIORGIO SOLIMANO. (Cambridge, Massachusetts and London, England: MIT Press, 1978.)

Throughout the 1960s and 1970s, a renewed interest developed in the problems of hunger and generalized malnutrition among vast portions of the world's population. Nutritional science has traditionally studied these problems from clinical or technological points of view, and much work has been done by biochemists, pathologists, food technologists, pediatricians, and nutritionists, the latter being interested basically in determining the dietary needs of the population; however, the development of nutrition policy or programs of "applied nutrition," particularly for the countries of the Third World, acquired significance only in recent years. Programs of this type were begun in some seventy countries with the help of nutrition and food experts from international agencies such as the Food and Agricultural Organization (FAO), the World Health Organization (WHO), UNICEF, and others. In the United States the relationship between nutrition and development was noted after Alan Berg published his book *The Nutrition Factor*.¹ Despite these studies on nutritional problems and the recognition that such problems should figure among the most important concerns of national and international policy, little has been accomplished in the fight against hunger, misery, and malnutrition in the Third World.

The book edited by Beverly Winikoff, *Nutrition and National Policy*, is a result of the recognition that nutrition policy has had little success in most of the developing countries where it has been applied. The work consists of a series of papers prepared originally to be presented to a conference on nutrition in Bellagio, Italy, in 1975, under the auspices of the Rockefeller Foundation. This conference was attended by nutritional experts from various countries and international organizations, as well as by noted social scientists and public administrators who related their areas of specialization to nutritional problems. Thus doctors, health workers, nutritionists, social scientists, and public administrators were

brought together in an attempt to focus on "the relationships between different areas of government activity (health, agriculture, economic policy, etc.) and the nutritional status of populations" and to try to understand what happens when governments "operate in the real world." The basic question asked was why in nutritional matters "that which has seemed obvious and logical has usually proven ineffective" (p. ix). According to Winikoff, who also organized the conference, it constituted only a first step toward describing various nutritional activities within their local political and historical contexts. The conference therefore claimed to be "the beginnings of a new perspective on the problems of hunger" (p. x).

The central part of the book consists of eleven national case studies that describe the nutrition standards and policies applied in different countries. Each case study was written by an expert currently or formerly involved with the nutritional activities of their respective governments. Prior to the Bellagio conference, an outline was distributed by the organizers that served as a guide for preparing each of the case studies. This outline asked for a description of the environment in which nutritional problems developed, a determination of the "nutritionally vulnerable" groups, the services used by these groups, and so on. Further information was requested concerning government activities, whether the government recognized the existence of nutritional problems, the solutions proposed, their obstacles, the institutions and legal instruments used in each country to solve nutritional problems, the reasons for their success or failure, and more. As will be shown further on, one of the main interests of the conference organizers appears to have been to promote agencies specializing in nutritional matters that were capable of acting autonomously or of coordinating the nutritional activities of different governmental departments, such as the ministries of health, agriculture, and others. While each of the case studies presented to the conference generally follows the overall outline prepared by the organizers, each also reflects problems and perspectives that are substantially different. This divergence is one of the interesting aspects of the work.

Ten of the eleven national case studies refer to developing countries, the eleventh being the case of the United States. From Latin America came papers on Chile by P. Hakim and G. Solimano, on Columbia by Clara Eugenia López, on Jamaica by A. C. Kenneth Anthrobus, and on Panama by Julio Sandoval. From Africa came papers on Ghana by Fred T. Sai, on Nigeria by Ade Omolulu, on Tanzania by T. N. Malletlema, and on Zambia by A. P. Vamoer. Asia was represented by only two papers, one on Indonesia by Soekerman, and the other on the Philippines by Florentino Solon. This section of the book concludes with a work on the United States by Kenneth Schlossberg, which was sup-

posed to serve as a basis of comparison to show how nutrition policies applied in that country compare with those applied in the Third World.

Unfortunately, no one representing countries as important in nutritional matters as Cuba, China, Brazil, and India attended the conference, despite the fact the corresponding invitations were made. It would have been interesting to consider the nutritional situation of these four countries—Cuba and China because they constitute success stories in nutritional matters, and Brazil and India because they contain a great part of the malnourished of Asia and Latin America and because they are countries that have not had much success in the fight against hunger. It is also unfortunate that Mexico was not represented, given its long experience in matters of nutritional policy. Furthermore, few of the countries considered to be the “most severely affected” (MSA) by the world food crisis were represented at the conference. These are defined as countries in which the degree of poverty and malnutrition is much greater than that existing in most of the national case studies analyzed at the conference.

The second part of the book incorporates papers that approach nutrition problems and policies from more general and global perspectives. They were written by social scientists, doctors, political scientists, and public administrators who are prominent in their respective fields of specialization. The first, written by Ewen C. Thompson, deals with “The Symbiosis of the Scientist, the Planner, and the Administrator in Nutrition Program Implementation”; the second, written by Michael Latham, considers the relationship between “Nutrition and Culture”; in the third paper, Joe D. Wray analyzes the relationship between “Nutrition and Health Policy”; in the fourth, John D. Montgomery relates “Nutrition and Political Process”; and the last two papers deal with “Nutrition and Agricultural Policy” and “Nutrition and Economic Policy” and were written by John W. Mellor and F. James Levinson, respectively.

Nutrition and National Policy also includes the discussion occasioned by each presentation. Editor Winikoff has done a fine job that permits readers to gauge the reaction of the participants to each of the papers presented. This section is probably the most intriguing part of the book, which otherwise could easily become arid and of interest only to a select minority of “experts.” In these pages of discussion, the overall limitations of the subject matter and experiences presented are brought out, comparisons among different countries are made, different approaches to these problems are presented, and so on.

The work also includes two chapters prepared by the editor. One that deals with “Political Compromise and Nutritional Policy” summarizes a long discussion that ensued after all of the national case studies were presented. During this discussion, some of the crucial problems

of the subject matter considered were brought to light. The last chapter of the book, entitled "Programs and Policies: Some Questions," sets forth the essential concerns of the organizers of the conference.

Giorgio Solimano (formerly Chief of the Nutritional Division of the National Health Service of the Health Ministry of Chile between 1971 and 1973) and Peter Hakim (formerly on the staff of the Ford Foundation and Professor of the Institute of Human Nutrition at the University of Columbia, and at present with the Inter-American Foundation in Washington, in charge of the department of evaluation and research) presented one of the most complete and interesting papers to the Bellagio Conference. Their paper, which deals with the Chilean case, was changed slightly and published in book form.

The main purpose of this work is to analyze the impact of Chile's development between 1930 and 1970 on food consumption and nutrition standards of low-income groups. In the first part, the authors exhaustively review the literature on this subject and conclude that nutritional standards probably "did not improve significantly in that period, even as rates of infant mortality declined sharply" (p. 14). The second part examines the overall socioeconomic patterns of development of this period, presenting the case that "the continued prevalence of malnutrition was a consequence of the consistent discrimination against low-income strata inherent in that pattern" (p. 14).

The general approach the authors employ in this paper is more explicit and perceptive than that of many of the other papers. The authors point out that nutrition is usually analyzed in terms of the individual and family characteristics of the malnourished, "largely without reference to the social order in which they live. Nutrition analysts, for example, have given little attention to the effects of government economic and social policies or other broad socioeconomic influences on the incidence of malnutrition in a country" (p. 14). Studies focusing on the relationship between nutrition and national development have mainly been concerned with the problem of malnutrition as an obstacle to development while neglecting the inverse problem, that is, the consequences of development and social change on nutritional standards. Thus, "prescriptions for raising nutritional standards are invariably addressed to those suffering from or at risk of malnutrition, and rarely address changes in the rest of the society" (p. 14).

It is apparently assumed that malnutrition can be alleviated in third world countries without altering economic growth patterns or transforming the social and political arrangements which underlie those patterns. The assumption is a questionable one, particularly as evidence increases that standard development strategies and growth-promoting mechanisms may also promote economic con-

centration and a worsening of the relative, if not absolute, position of the poor. (P. 14)

In our opinion, the overall approach presented in this Chilean case study, together with those presented on Jamaica, Panama, and Tanzania, are among the most perceptive. The Chilean study is the one most oriented towards the development of a global and social perspective on nutritional problems and one of the few that analyze these in their broad historical contexts.

Despite the fact that information on these matters is scarce, Hakim and Solimano review all of the material available on the evolution of the nutritional status of the Chilean population in the period 1930–70. This information includes clinical investigations, food-supply and -consumption surveys and infant-mortality statistics. Since the 1930s, Chilean researchers have more or less regularly conducted clinical surveys on the nutritional status and growth of children in Chile. The authors counted twenty-one such surveys between 1940 and 1966 of varying quality and reliability, and with findings that are not always comparable because of the differences in methodology, samples, and techniques of measurement.

A survey carried out in 1960 by the Interdepartmental Committee on Nutrition for National Defence was one of the few nationwide efforts. This survey compared the size and weight of Chilean infants and children with their peers in the United States. Hakim and Solimano point out that overall clinical information shows that “Chilean growth rates are consistently below North American standards and the differences become increasingly accentuated between the ages of 10 and 14” (p. 15). According to the authors, the overall results obtained in the different studies “suggest that nutritional deprivation had probably affected around 50% of the schoolchildren sampled” (p. 15).

Most clinical studies made in Chile, including several regional surveys, show similar results: first, that the average height and weight of Chilean children at birth conforms to U.S. standards; second, that rates of growth and development among infants and children from middle- and upper-class homes in Chile are equal to those observed for North American youngsters; and third, that at approximately six months, significant differences begin to appear in heights and weights among Chilean children from different socioeconomic levels, with lower- and lower-middle-class children falling further and further behind those from upper- and middle-income households as they get older. The degree of these differences at each age is generally larger than those found among U.S. children at different income levels.

Furthermore, according to Hakim and Solimano, the data available show that the nutritional status of the Chilean population has not

varied significantly throughout the years. Despite the scantiness of the information available, the authors infer "that malnutrition was long a characteristic of a portion of Chile's population, and persisted as a serious and widespread problem for the country as a whole through the 1960s," and that there is a "strong inverse relationship . . . between nutritional vulnerability and socioeconomic status" (p. 19). That is to say, families with malnourished children had lower incomes, less-stable employment, higher rates of illiteracy, and less-adequate housing conditions.

These findings are not surprising and are confirmed by other studies on food availability and consumption per social stratum. The standard technique of national food-balance sheets reveals, despite its deficiencies, that the national availability of food per capita approached the minimum caloric and protein requirements (about twenty-four hundred calories and sixty-five grams of protein per person per day). This per capita rate of food availability was relatively high for Latin America as a whole, and far above regional averages in Asia and Africa.

Nevertheless, as is pointed out by the authors, these data on food availability are not particularly useful because they do not provide information concerning the distribution of food or nutrients among different population groups. To obtain this information, Hakim and Solimano analyzed a series of food-expenditure surveys, one of which was carried out in Santiago in 1968. These studies show the proportion of household income spent on food and the consumption of calories and protein per stratum. The authors estimate that 30 percent of the households in Santiago consumed less than two thousand calories per capita per day in 1969 and therefore could be considered to be "nutritionally vulnerable." Furthermore, lower-class families (those with income levels of less than two minimum salaries) spent 50 percent of their household incomes on food. The higher-income strata (those with more than eight minimum salaries) consumed three times more food per capita, despite the fact that they spent only 26 percent of their household budget on food. A series of food-consumption surveys confirm the clinical results as well as the food-availability studies referred to above. The authors conclude that "food consumption among Chile's lower income group probably didn't increase in any significant degree between 1935 and 1970, and that nutritional deprivation consistently affected one third or more of the country's population during that entire period" (p. 40).

Paradoxically, infant mortality rates declined substantially between 1927 and 1973, in apparent contradiction to the previous conclusions concerning the degree of malnutrition existing among the Chilean population. Hakim and Solimano ascribe the lowering of infant mortality rates neither to greater food availability nor to better nutrition conditions among the least-favored strata of the population, but instead

to first, "the introduction of new methods of prevention, diagnosis, and cure of previously endemic diseases" (p. 24) resulting from important changes in medical practice that occurred in the late 1930s (p. 25); and second, to "the extension and improvement of public health services in the country" (p. 24). They explain the latter improvements: "Increased emphasis was given the preventive aspects of medicine with greater attention to maternal and child health care" (p. 25).

An apparent contradiction arises here. Solimano argued in the discussion following his presentation that among the strata of groups with greater infant mortality rates, the basic causes of death are gastrointestinal and respiratory infections. He nevertheless also recognizes that the primary cause of these infections are malnutrition. On the other hand, among the more economically favored groups, the problem "was much more akin to that in the developed countries: neonatal mortality is proportionately more important than late infant mortality. Quite a different pattern" (p. 40). Therefore, it would seem contradictory that infant mortality rates would have been reduced without an overall betterment of the nutritional status of the infant population in general.

This proposition presented by Hakim and Solimano with respect to infant mortality also contradicts the paper presented by Wray and included in the Winikoff volume. According to Wray, improved nutritional standards for the population are the basic determinants for the reduction of infant mortality rates and are much more effective than improving medical and public health services. He analyses data on the City of New York, which shows that infant mortality fell drastically in the first three decades or more of the present century. Wray concludes that "this fall in mortality occurred, primarily, because fewer and fewer children were dying from diarrheal diseases and respiratory infections. . . . The only way we can account for this is to assume that there must have been changes in exposure to and in resistance to infection, and *it seems likely that these changes were related, above all else to nutrition*" (p. 437, emphasis added). The improvements in medical science and public health were not comparable to those occurring in nutritional standards during this period. This conclusion is also corroborated by other studies carried out in the United States, England, and other European countries.

This apparent paradox in Hakim and Solimano's paper is clarified when one considers that infant mortality could have been reduced basically among all income strata of the population except the least favored. While it is true, as the authors note, that health services and medical attention tended to favor higher-income strata, that white collar workers had more access to medical attention, and that provinces with higher income levels registered lower infant mortality rates, these groups are the same ones that have suffered less malnutrition and have bettered

their nutritional status throughout the years. Thus, even if global infant mortality rates were reduced throughout the period being considered, it does not necessarily mean that infant mortality among the third of the population belonging to the lower-income strata was reduced. The proposition that overall infant mortality declined is perfectly compatible with the proposition presented above that throughout the period one-third of the population continued to be “nutritionally vulnerable.”

In the second part of their article, Hakim and Solimano relate the nutritional status of the Chilean population with the economic development and social-reform process, something not easily done. It is here that Hakim and Solimano probably make their most important contribution. The authors point out that if some of the usual economic indicators are considered superficially, Chile during 1930–70 doubled its income per capita, transformed itself into a semi-industrialized country, and obtained a high degree of “modernization.” Furthermore, among the countries of the Third World, Chile has been one of the more progressive in matters pertaining to social legislation, particularly in the areas of social security, health, and education. Nevertheless, as Hakim and Solimano point out,

. . . clinical indicators of malnutrition, and infant mortality in Chile for the 40-year period 1930–1970 has revealed marked and persistent inequalities in food consumption, growth rates, and survival chances among the country’s different socioeconomic strata. Those inequalities, moreover, may have increased over time. It appears likely, although the evidence at our disposal is limited, that food consumption and nutritional standards among Chile’s low income groups did not improve measurably and that the prevalence of malnutrition, affecting principally the poorest third or so of the country’s families, did not diminish significantly over the period studied. (P. 27)

How can we explain then the persistence of malnutrition in Chile despite the relatively intense development and social-reform process operating in that country? Hakim and Solimano explain it in terms of the “type of development that took place and the underlying sociopolitical structures that conditioned its course and results” (p. 27). They believe that government policies of the 1930–70 period “consistently discriminated against low income groups and contributed to the maintenance of inequality and poverty in Chile” (p. 17).

In a succinct, but revealing, overview of the principal accomplishments in the field of industrial and agrarian development and social services (the latter having a long tradition in Chile), the authors conclude that the Chilean pattern of development was characterized by “a high concentration of economic resources under private control, a sharp degree of stratification among different social classes, and the virtual exclusion of a significant portion of the population from the benefits of economic growth” (p. 36). Government policies in this period, including

those pertaining to social security and public health services and “even those designed to improve the situation of the disadvantaged, by and large acted to reinforce and sustain these processes of concentration, stratification, and exclusion” (p. 36). The authors conclude that “The evidence suggests that persistence of low levels of food consumption and a high incidence of malnutrition among the poorest third or so of the population was a direct consequence of this development pattern” (p. 36).

The paper thus places Chile’s nutritional problems within a wider historical context. As an epilogue, the authors devote a few pages to the Allende government and to the following years. They point out that the series of reforms and structural changes carried out by the Unidad Popular government meant, among other things, an important redistribution of income and social benefits in favor of the less-privileged classes. For the first time in many years, food consumption increased significantly among lower-income groups, to the extent that food imports from abroad increased substantially. Solimano, in a comment made after the presentation of the paper, contributes additional data showing a substantial reduction of malnutrition among preschool children for the period 1970–73. These trends were severely reversed after the military coup of 1973.

Development, Reform and Malnutrition in Chile is an important work not only because of the information it provides and systematizes, but also because of the overall approach and historical perspective adopted. What differentiates this work from many of the other national case studies presented in *Nutrition and National Policy* is that it places nutrition problems in a historical context and relates them explicitly to the larger socioeconomic processes.

What remains to be done is to analyze the specific way that these patterns of development or accumulation cause malnutrition and hunger and the extent to which the marginal sectors of society are “functional” to capitalist development or are inherent in it. Although the authors do not consider the pattern of development in these terms, they do establish the basis for such an analysis. Even more important is the perspective they set forth in the conclusion that only deep structural transformations can eliminate malnutrition and hunger completely in Chile.

That nutritional policy cannot be disassociated from political or “ideological” considerations is one of the main considerations of the discussion during the Bellagio conference (see in particular chapter 19). At least two different “ideological” approaches to nutrition problems can be distinguished. On the one hand is that emphasized by the organizers of the conference, which tends to consider nutritional policy as essentially a technical-administrative problem. Implicit in this approach

is the idea that if nutritional policy has not succeeded in the cases where it has been applied (and in most cases it has had very limited success), the cause of failure must be bureaucratic or technical-administrative problems. Consequently, a series of factors that nutrition policy should contain to be effective usually include: first, a commitment or recognition by government, as well as by the medical, health, or nutritional community, that nutrition is important; second, a certain coherence in its elaboration, with objectives or "targets" clearly defined; and third, an administrative apparatus capable of effectively carrying it out. Also required are nutritional promoters capable of detecting nutritional problems and of disseminating the idea that nutrition policy is important. Trained technicians and professionals capable of elaborating and implementing nutritional policies are also considered important. In most cases, specialized agencies in nutrition are essential if nutrition policy is to be given continuity. Many participants at the conference frequently pointed out the need to establish special agencies or councils specializing in nutritional matters, which should have autonomy or be capable of coordinating nutritional strategies of different government agencies.

Yet historically, such councils or agencies have had little success (p. 531). As was noted, according to the technical-administrative approach, this failure has been due to bureaucratic or administrative problems such as a lack of coordination among different government agencies, a lack of internal organization of these specialized councils, a lack of specialized personnel, finance, and so on.

Much emphasis is placed on the need to develop specific training in nutritional matters, and the creation and participation of nutritional institutions and universities in nutritional programs. These developments are important not only because of the need to train nutrition specialists, but also as a means of sensitizing the population to nutritional problems encouraging them to participate in the elaboration of nutritional strategies. Finally, it is pointed out that international organizations contribute much to the solution of these problems, despite the fact that often different organizations do not coordinate their activities sufficiently among themselves.

One cannot deny the importance that all these problems have in the elaboration of nutritional policy. Many of these aspects are considered concretely in the case studies of the Philippines, Zambia, and Indonesia. Nevertheless, a close relationship does not always exist between the elaboration and application of nutritional policies and the elimination of hunger and generalized malnutrition. The participants at the conference pointed out that in some countries nutrition councils or agencies exist as well as nutritional plans or programs, but that basic nutritional problems have not been solved. In other countries, where no specific nutritional policies or programs have been elaborated, the basic

problems of hunger and misery have been tackled. It is not enough for a government to recognize that solving the basic needs of the population, including their basic food needs, should be important objectives of overall national policy. Certain "preconditions" are also required for hunger and malnutrition to be eliminated.

The second "ideological" approach mentioned above holds that nutritional problems cannot be tackled in Third World countries if deep social transformations are not carried out. This approach considers the need for a more global socioeconomic perspective on reality and its transformation, without which malnutrition will not be solved. Thus, nutritional problems must be considered in a broader framework, similarly to the way that many problems are dealt with by the social sciences.

Various participants in the conference subscribe to this approach, certainly Solimano in the case of Chile, but also those presenting the case studies of Jamaica, Panama, and Tanzania at least. According to Solimano, nutritional policy alone is not sufficient to attack hunger efficiently: the socioeconomic and political structures of society as a whole must also be transformed. As Mellor points out, many nutritional or poverty programs do not always seek to transform the status quo: "all governments do, indeed, need to have programs to help the poor, but some structure them only in such a way that the underlying order is not disturbed" (p. 523).

According to Solimano, not only must governments be convinced that nutritional activities must be carried out. Community participation is also required for them to be effective. Interestingly enough, among the conference participants, only those countries of the Third World that have experienced some degree of popular participation in certain historical periods (certainly Jamaica, Chile, Tanzania, and Panama) have had some success in nutritional matters, if only for a short period of time.

Even though many of the participants in the conference recognize that only within a certain environment can malnutrition be tackled, and that nutritional problems cannot be solved independently of changes in the socioeconomic and political system, these considerations are not always given due emphasis. As Solimano points out, "often we incriminate people because of their malnutrition or poverty, without attempting to analyze the system in which those people function. I think if you want to be fair, you have to look not only at the people, but at the system and whether, without changes in the system—minor, moderate, or large—the problems can be solved" (p. 365). He also says, "If you really want to solve the problem, you must examine the national and institutional factors that are determining all social problems, including nutrition. A nutrition problem is no more than the consequence and expression of the fact that a certain society is malfunctioning" (p. 357).

It is interesting to point out the opinion of the participants that

“socialist countries and countries with directed economies can be seen to deal explicitly with food and nutrition problems. They deal with it, and quite effectively, but through different mechanisms than ‘nutrition programs’—because food needs and thus nutrition are at the very base of the system, not an addendum or an appendix to it. It would be a large effort to conceive of these societies as ones which do not pay specific heed to the nutritional well-being of their populations” (p. 498). This proposition also applies to Great Britain during the Second World War where, thanks to rationing and the planning of food distribution, the nutritional status of the population improved substantially.

On the other hand, Solimano for one believes that “nutrition programs” or “nutrition interventions” usually affect the problem only marginally. Therefore, Solimano and Hakim stress that “in any discussion of nutrition goals on an international level, the very deep ideological content of even the verbal formulations of the problem must be clearly recognized” (p. 498).

In the conference collection, it is frequently pointed out that those countries that have carried out important social transformations have solved their nutritional problems, among them China, Vietnam, and Cuba. In these countries, nutritional programs were not always explicitly adopted. Nevertheless, the nutritional situation of these countries improved due to the distributive reforms carried out. “Many social interventions in these countries have clear nutritional implications: food rationing, agricultural reform, and advice on infant care and family planning to name a few” (p. 500). Thus, nutritional policy in these countries are implicit in income-distribution policies, food-rationing programs, agrarian reforms, and all other policies generally supporting the neediest groups in society.

Some participants pointed out another set of countries that have supposedly solved their nutritional problems in the context of a rapid, capitalist economic growth “coupled with a reasonably participatory and equitable pattern of development” (p. 500), such countries as South Korea and Taiwan among others. Furthermore, Levinson notes that those countries that require the application of nutritional policies of the sort conceived by the organizers of the conference are those that are not found in either of these two main groups (countries experiencing rapid major social transformations or those experiencing rapid capitalist growth). Thus the majority of the countries of the Third World involved in an overall capitalist development fall within the conference’s representation.

At this point, it would be worthwhile to consider further the relationship between “development” and nutrition or nutritional policy. According to the conference participants, two groups of countries have had “success” in the fight against malnutrition and hunger: one belong-

ing to the capitalist world, the other to the socialist block. The success of the socialist group in eliminating most traces of hunger and misery was not discussed. But some of the participants, particularly Mellor, insisted on pointing out that it is also possible to eliminate hunger in nonsocialist economies like South Korea and Taiwan. What Mellor does not point out is that China and Cuba are not exceptional cases of nutritional success within the socialist context; but Taiwan and South Korea *are* exceptional cases in that they are among the few countries that have solved their nutritional problems within the context of a Third World capitalist development, especially when their nutritional experience is compared with that of India, the Asian subcontinent, Africa, and even Latin America. In none of these great regions on the periphery of capitalism has the malnutrition of vast segments of the population been eliminated. This situation evidently has very little to do with the design or application of specific nutritional policies.

Thus we come to the crux of the matter: what is the impact of "development" on the nutritional status of a population? Most of the countries of the Third World have not experienced rapid economic growth à la Taiwan, South Korea, or Hong Kong; neither are they petroleum producers; and very few have undergone radical transformations in their socioeconomic structures. Nevertheless, they are the countries where hunger and misery is prevalent to an alarming degree. Many of these countries have gone through intense "modernization" and "economic development" processes and yet hunger and misery continue to be widespread. Are hunger and misery inherent in the "style" of development sustained in these countries? In Latin America, a series of studies have shown that "modernization" has not only *not* solved the problem of hunger and misery, but has been one of its causes.² Other data relate hunger and malnutrition to the functioning of the economic system as a whole.³

Such findings encourage one to visualize nutrition as part of the larger development of an economy within a society and therefore to recognize, as Solimano observes, that if a large proportion of the population is malnourished, something is not functioning well in society. This conclusion demands a more profound analysis of the causes of hunger and malnutrition. It is evident that "development" per se does not solve these problems and may even be one of their main determinants. Many people nevertheless continue to believe in the "trickle-down effect" of development, in the idea that sooner or later all of the social strata of society, even the neediest, will receive its benefits. Nevertheless, several of the papers presented to the conference show just the contrary: that a rapid capitalist economic growth in no way guarantees that the poorest third of the population will begin to eat better or improve its standard of living. Could this perspective imply that hunger and misery are inherent

in capitalist development itself, or at least in capitalist development in the periphery?

The contributions to *Nutrition and National Policy* recognized that nutritional policies are worthless if the overall economic development process engenders marginality and misery, a possibility at the heart of the nutritional problems being considered. But few contributors question the characteristics and nature of that "development" process itself. One exception is the observation that the "agroexport development" of Ghana or Nigeria, for example, is incompatible with any strategy oriented towards the solution of basic needs, including food needs of the population. Latham also points out in his chapter on "Nutrition and Culture" the pernicious effect that agroindustrial transnational corporations have had on nutrition. These examples note the contradictions existing between economies oriented toward the "profit motive" and those oriented toward "basic needs." Both the traditional agroexport and the modern agroindustrial development patterns dominated by transnational corporations can only with great difficulty reconcile their objectives with a "style" of development oriented toward the solution of the basic needs of the population. To consider malnutrition as inherent to "development" itself, or at least to peripheral capitalist development, is to visualize nutritional policy more critically than is generally done in the papers and discussions from the Bellagio conference on nutrition and national policy.

NOTES

1. The Brookings Institution, 1973.
2. See, for example, the paper by Gerson Gomes and Antonio Pérez, "El proceso de modernización de la agricultura latinoamericana," *Revista de la CEPAL*, Naciones Unidas, agosto de 1979.
3. Compare Jacques Chonchol, "Desnutrición y dependencia. Problemas alimentarios de la población latinoamericana," *Comercio Exterior* (México) 30, núm. 7 (julio de 1980).