Food and Freedom

Amartya Sen

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FOOD AND FREEDOM Amartya Sen*

I feel deeply honored to have this opportunity of paying tribute to the memory of Sir John Crawford and to his many contributions to agricultural research and economic development. Sir John was a powerful practitioner, but he was also involved in bridging theory and practice, and keen on investigating connections that may not be straightforward.

The links between food and freedom may at first sight appear to be rather remote to policymaking and far from central to practical concerns. I shall argue against that view, trying to discuss the various important connections that have to be recognized more fully as background to practical food policy. I shall not, of course, deny the fact that these connections are not typically taken to be straightforward preludes to practical policymaking, but I will argue that we have to probe deeper for an adequate background to policymaking.

Food for freedom and freedom for food

"Grub first, then ethics," thus runs a much quoted aphorism of Bertolt Brecht. There is undoubtedly some sense in this phased gradation. Ethics may seem like a much more remote and much less immediate subject than the command over food that we need to survive. Freedom too—as an important concept in ethics—may seem to be far less immediate than the compelling demands of grabbing grub.

But this contrast is quite artificial. The provision of food is indeed a central issue in general social ethics, since so much in human life does depend on the ability to find enough to eat. In particular, the freedom that people enjoy to lead a decent life, including freedom from hunger, from avoidable morbidity, from premature mortality, etc., is quite centrally connected with the provision of food and related necessities. Also, the compulsion to acquire enough food may force vulnerable people to do things which they resent doing, and may make them accept lives with little freedom. The role of food in fostering freedom can be an extremely important one.

*Amartya Sen is Lamont University Professor at Harvard University.

On the other side, freedom may also causally influence the success of the pursuit of food for all. One consideration that has received a great deal of attention recently relates to the role of freedom to make profits in providing incentives for the expansion of food production, thus helping to solve the food problem. This consideration has often cropped up in the critical evaluation of agricultural policies pursued in many countries in Africa and Asia. For example, the rapid expansion of agricultural output in China in the economic reforms carried out from 1979 onwards has, with much justice, been seen to be closely related to the freeing of markets and the unleashing of productive opportunities connected with profit incentives. These experiences invite attention and scrutiny.

Other types of freedom may also have important instrumental roles to play in the guaranteeing of food for all. Insofar as public policy to combat hunger and starvation—including rapid intervention against threatening famines—may depend on the existence and efficiency of political pressure groups to induce governments to act, political freedom too may have a close connection with the distribution of relief and food to vulnerable groups. There are other possible causal connections—operating in both directions—which may be worth investigating, and some of these I will indeed try to examine and assess in this lecture. Freedom to make profits is not the only freedom the causal influence of which would have to be considered.

Thus, what may superficially appear to be rather remote connections between food and freedom can be seen to be, in fact, central in importance and extremely rich in the variety of influences involved, operating in the two respective directions, viz., from food to freedom, and from freedom to food. I shall try to supplement the conceptual and theoretical discussions with illustrations from practical problems with empirical content. Freedom and ethics are indeed very practical matters in the determination of food policy.

Four concepts of freedom

In a justly famous essay called "Two Concepts of Liberty", Isaiah Berlin¹ made an important distinction between "negative" and "positive" theories of freedom. The negative view sees freedom exclusively in terms of the independence of the individual from interference by others, including governments, institutions and other persons. The positive view, which can be characterized in many different ways,

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sees freedom not in terms of the presence or absence of interference by others, but in terms of what a person is actually able to do or to be. The distinction may be quite central to different approaches to the idea of freedom and its implications.² If a person is not free from hunger and lacks the means and the practical opportunities to feed himself or herself adequately, then that person's positive freedom must be seen as having been thoroughly compromised. On the other hand, his or her negative freedom may be completely unviolated, if this failure to acquire enough food is not a result of his or her having been stopped by interference from others.

There is another distinction which is quite central to the content and role of freedom, and this concerns the issue of intrinsic importance of freedom as such, in addition to its instrumental roles. That freedom must have instrumental importance as a means to other ends is obvious enough. Our freedom to choose one bundle of commodities rather than another may have an important effect on the living standards we can have, the happiness we can enjoy, the well-being we can achieve, and the various objectives of our lives we can fulfill. Similarly, the absence of interference by others may have important causal influence on various things that we can do and value doing. In the "instrumental" view, freedom is taken to be important precisely because of its being a means to other ends, rather than being valuable in itself.

In contrast, the "intrinsic" view of the importance of freedom asserts that freedom is valuable in itself, and not only because of what it permits us to achieve or do. The good life may be seen to be a life of freedom, and in that context freedom is not just a way of achieving a good life, it is constitutive of the good life itself. The "intrinsic" view does not deny that freedom may *also* be instrumentally important, but does reject the view that its importance lies *entirely* on its instrumental function.

It is easy to see that the two ways of categorizing different approaches to freedom can be combined with each other, yielding four distinct categories. It is indeed possible to look through the history of ideas to see how different thinkers sharing a regard for freedom fall into different categories, related to the positive-negative distinction and to the intrinsic-instrumental classification. At the risk of over simplification I might illustrate the distinctions involved by referring to some particular examples.

For example, Milton Friedman and James Buchanan have both tended to put considerable emphasis-indeed priority-on the negative view of freedom, related to non-interference by the state, institutions and other individuals.³ This contrasts with the emphasis on the positive view of freedom that can be found in the writings of, say, Bentham or Marx. On the other hand, within the negative perspective, Friedman is much more concerned with the instrumental role of freedom rather than its intrinsic importance, while Buchanan constructs a "non-instrumental" normative case in favor of giving priority to liberties and democratic rights. Whereas Friedman concentrates primarily on what he calls "the fecundity of freedom", Buchanan goes largely beyond this role of freedom as a means to other ends. Attaching intrinsic importance to negative freedom is seen also in the writings of John Rawls, Robert Nozick and other contemporary moral philosophers, and it is a position that was broadly shared also by John Stuart Mill.⁴

Similarly, among the various theories concentrating on positive freedom, some have seen freedom to be intrinsically important, such as Adam Smith and Karl Marx, following a line of reasoning that goes back to Aristotle in Nicomachean Ethics and Politics. In fact, Aristotle had direct influence on Marx's writings on this subject. Marx's philosophical focus included giving a foundational role to bringing "the conditions for the free development and activity of individuals under their own control", with a vision of a liberated society in the future that would make "it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticize after dinner, just as I have in mind, without ever becoming hunter, fisherman, shepherd or critic."⁵ While his urban middle-class origins may have influenced Marx's evident belief that evening is a good time to rear cattle (he was obviously on more familiar ground with "criticize after dinner"), the placing of this general perspective of freedom in Marx's entire approach to economics, politics and society was altogether foundational.

While John Rawls' case for the "priority of liberty" attaches overriding importance to negative freedom, his advocacy of the importance of "primary goods" commanded by people reflects his basic concern for positive freedom as well. Primary goods include "rights, liberties and opportunities, income and wealth, and the social bases of self-respect". Possessing these things adequately makes a person positively more free to pursue his or her objectives and ends, and Rawls develops his political concept of social justice based on the efficiency and equity in the distributions of these freedoms.

In contrast, Jeremy Bentham's ultimate concern is with utility only, and positive freedom is regarded as important in the Benthamite system only because that freedom may be conducive to more happiness. This is, of course, an instrumental view. The Benthamite instrumental-positive view of freedom contrasts with Marx's intrinsic-positive view. And each in turn contrasts with the instrumental-negative view of Friedman, on the one hand, and the intrinsic-negative view of Buchanan and Nozick on the other. It is easy to find other examples to illustrate the contrasts, but perhaps the ones already mentioned will do. I ought to warn that these categories are often not very pure, and the same writers may have a certain amount of plurality within their overall theories (this was, of course, clearly seen in the case of Rawls in the preceding discussion).

Food policy and alternative approaches to freedom

This categorization is of crucial relevance even in understanding various demands on food policy, arising from different views of freedom. For example, the advocacy of greater freedom to earn profit in agriculture and of greater use of free market without much interference by the state and other public institutions (an advocacy that can, incidentally, be found in many documents of the host for this lecture, the World Bank) usually reflects an instrumentalnegative view of freedom, applied to food policy. Freedom to earn profits without interference is advocated not because it is typically taken to be foundationally important on its own, but because it is seen to be conducive to such things as greater productivity, larger income and enhanced food output. In general, the perspective of incentives constitutes an instrumental focus, related to what Milton Friedman calls "the fecundity of freedom", and in this particular case this is applied primarily to the negative view of freedom, seen in terms of non-interference.

In contrast, the writings of some authors, such as Peter Bauer, have tended to go beyond the instrumental view even in the context of agricultural development, emphasizing the importance of people having the right to enjoy the fruits of their own creation, without interference by the state or by other institutions or individuals.⁶ Bauer has seen this as a central feature of a good agricultural policy. The instrumental consideration of incentives is not denied in this perspective (far from it), but the ethical argument goes well beyond that, to intrinsic importance as well.

On the other hand, economic approaches emphasizing the need to fulfill "basic needs" for food and other essentials, or to pursue public policy to guarantee "freedom from hunger", and so on, take a positive view of freedom, concentrating on what people are able actually to do or be, rather than what they are prevented by others from doing or being.⁷ The focus of this literature has often tended to be on pragmatic rather than foundational issues. Concentration on "freedom from hunger" and related objectives can indeed be defended either on grounds of their supposed intrinsic importance, or because of their instrumental role in serving other-allegedly more basic-goals, such as enhancement of happiness or welfare of individuals. The instrumental view can be seen clearly in the analysis presented by one of the earliest writers on "basic needs" (though he did not use that expression), viz. A.C. Pigou, in The Economics of Welfare.⁸ For an example on the other side, Paul Streeten's approach is perhaps best seen in terms of intrinsic value being attached to these respective freedoms to fulfill the various "basic needs".9

The instrumental-intrinsic distinction relates to the foundational question as to what is regarded as valuable in itself, and what must be seen as important only as a contributor to other more basic goals. This is a question of deep philosophical interest, but it has pragmatic importance too, since instrumental arguments turn ultimately on the correctness of the cause-effect relationships postulated. For example, if it emerges that free markets and profit earnings do not provide much incentive for the expansion of production, or do not contribute to bettering living standards, the instrumental defense of these free market policies may well collapse, but this need not disestablish at all the view (e.g., Bauer's) that would see the right to earn these profits to be intrinsically important. In this sense, the intrinsic view is less vulnerable to empirical counter-argument, but it has, of course, greater need of foundational ethical defense.

The position is a little different as far as positive freedom is concerned. A policy of state intervention, e.g., in the distribution of food, is scarcely ever regarded as being of fundamental value of its own. The possibility of foundational valuation arises at a somewhat later stage (in this respect its contrast with the valuing of right-based procedures, as in the systems of Robert Nozick or Peter Bauer, is quite sharp), and valuing positive freedom has to be based on a good deal of instrumental analysis in moving from the means of state intervention to the realization of positive freedom.

The difference between the "intrinsic" and "instrumental" views of positive freedom lies, in this context, in the length to which the instrumental analysis has to be carried. In the broadly Aristotelian view, which sees the capability to achieve important functionings as being valuable in itself, the instrumental analysis can end at that point, but in those views in which positive freedom happens to be no more than means to other ends, e.g., in the pursuit of utility, the instrumental analyses have to go further into the translation of freedom into the fulfillment of other goals. In each case there is need to examine the effects of policies such as public distribution of food on the positive freedoms that individuals can actually obtain, and the difference arises only at a later stage, in moving from freedom to achievement. In this respect the positive freedom view is basically more instrument-dependent than the negative freedom approach is.

These considerations may, at first glance, appear to be rather distant from the nitty-gritty of practical policymaking in the field of food and hunger. But foundational questions are ultimately quite central to the acceptability of particular policy analyses. While the tendency to avoid facing these foundational questions is quite common, it is more a reflection of escapism than a demonstration of uncanny wisdom. Ultimately policies have to be justified in terms of what is valuable and how various policies may respectively enhance these valuable things. There is no escape, therefore, from considering both the question of what is fundamentally valuable and the question of what instruments enhance these things best. It is indeed the combination of the intrinsic considerations and instrumental analyses that can lead the way to an adequate examination of what should be done and why.

While these conceptual and theoretical discussions can be carried further—I have tried to discuss some of these further issues elsewhere¹⁰—I shall devote the rest of this lecture to rather practical matters, dealing with actual policy disputes in the field of food and hunger.

Opulence and living standard

A preliminary point first. The process of economic development is often seen in terms of the expansion of the material basis of wellbeing and freedom that people can enjoy. This approach has a rationale that is easy to understand, since the positive freedoms that we can enjoy and the well-being levels that we can achieve are both dependent on the commodity bundles over which we can establish command. This clearly is the sense behind assessing economic development in terms of the progress of real gross national product per head. On the other hand, freedom and well-being depend also on the use that is made of the opulence of the nation. Income distributions can vary. No less importantly, the command that people enjoy over essential food, health services, medical attention, etc., depends crucially on the delivery system for these commodities. A public distribution system geared to the needs of the vulnerable sections of the community can bring the essentials of livelihood within easy reach of people whose lives may remain otherwise relatively untouched by the progress of real national income.

Table 1 illustrates the point. Oman or South Africa may have a gross national product per head that is a great many times higher than that of China or Sri Lanka, but each of the former has under-five mortality rates (covering infants and children) that is two or three times higher than those prevailing in the poorer economies. The life expectancy at birth in Oman and South Africa lingers around the mid-fifties, while China and Sri Lanka have achieved longevity rates reasonably close to those prevailing in Europe and America.

	GNP Per Head (Dollars) 1985	Life Expectancy at Birth 1985	Under-5 Mortality Rate (Per Thousand) 1985
Oman	6,730	54	172
South Africa	2,010	55	104
Brazil	1,640	65	91
Sri Lanka	380	70	50
China	310	69	48

Table 1. Opulence, Life and Death

Sources: World Development Report, 1987; The State of the World's Children, 1987.

This is, of course, a well-known point, but it is worth emphasizing in the present context, since the demands of agricultural policy in general and food policy in particular are often seen primarily in terms of expanding the material bases of well-being and freedom. Indeed, as we shall presently see, there is an important policy issue related to this question even in terms of the recent economic reforms in China. The point to note here is that the positive freedom to lead a long life may well be typically enhanced by expansion of material prosperity, but the relationship is far from a tight one, and indeed it is quite possible for the freedom to live long to go down, while the level of economic opulence goes up. The shift of focus from the national product to the freedom enjoyed by members of the nation can bring about a major reexamination of the requirements of economic policy.

The freedom to live long is, of course, only one of the positive freedoms that may be thought to be important. It is a freedom that is particularly valued since our ability to do other things is, obviously, conditional on our being here, and it is not surprising that the option of living longer is very rarely refused. This is, of course, the reason why longevity, which is an achievement, can also be seen as an important indicator of the freedom to live long (we tend to exercise this freedom, in most cases, to the maximum extent we can), and the metric of life expectancy is, thus, a fairly basic indicator of a foundational positive freedom. There are, however, other important positive freedoms as well, e.g., freedom from hunger and undernutrition, freedom from escapable morbidity, freedom to read and write and communicate. Indeed, the list of important freedoms must be seen to be a long one in any accounting that aims at some degree of comprehensiveness. While any practical analysis may have to confine attention to only a few indicators, the need to have a wider informational base for a more definitive analysis has to be borne in mind.

Often these indicators move in the same direction (e.g., life expectancy, avoidance of morbidity, and literacy frequently tend to be highly correlated), but this is not invariably the case. For example, in the contrast between different states in India, Kerala comes out as having very much higher life expectancy and literacy than any other Indian state, but in terms of morbidity rates, Kerala does not seem to have this advantage. Indeed, measured in the metric of reported illnesses, Kerala's morbidity rate is much higher than that of many other Indian

states.¹¹ Some of that difference may undoubtedly be due to the fact that a more literate population, with access to medical attention and health care, is likely to report illnesses more thoroughly. But it is possible that even after these corrections are made, there is some dissonance between Kerala's performance in the fields of literacy and life expectancy and that in the prevention of morbidity.¹² The conflicts between different indicators may not, of course, always be serious, but the general possibility has to be kept in view in interpreting results of empirical analysis based on one or a few indicators. In this sense, analyses of the kind pursued in this paper must be seen to be tentative, even though it can be argued that even a preliminary move in the direction of indicators of certain basic capabilities and freedoms can bring out aspects of economic policy in general and food policy in particular that tend to be overlooked in the more traditional concentration on national income in general and food production in particular.

China and India

The comparison of the performances of China and India in dealing with problems of well-being and elementary freedoms has been one of the subjects of great interest in the field of comparative economics. In terms of achievements of GNP per head, China's performance would seem to have been better than India's, even though in terms of standard estimated figures, the Chinese GNP per head of \$310 is only about 15 percent higher than India's \$270, for 1985. Since Simon Kuznets'13 estimate of GNP per head for China and India were about comparable, with a "product per capita" 20 percent higher in China, in 1958, it is tempting to think that China's and India's performances in terms of production have been roughly comparable. In fact these figures underestimate the relative performance of China vis-a-vis that of India, and if more comparable figures are used, China would seem to be further ahead than India in terms of national product and national income per head.¹⁴ Nevertheless, it would appear that judged in this perspective, while the Chinese have done noticeably better than what has happened in India, the Chinese performance in this field is not tremendously superior to that of India. Furthermore, some of the advantages that China now enjoys compared with India as far as national product is concerned relate to the high growth rate of the Chinese economy in very recent years, since the economic reforms of 1979. More on this later.

In terms of calorie consumption per head, the Chinese picture is considerably better than India's, as Table 2 reports. Here again, a big part of the difference has arisen only in recent years through the rapid expansion of agricultural output in general and food output in particular since the economic reforms.

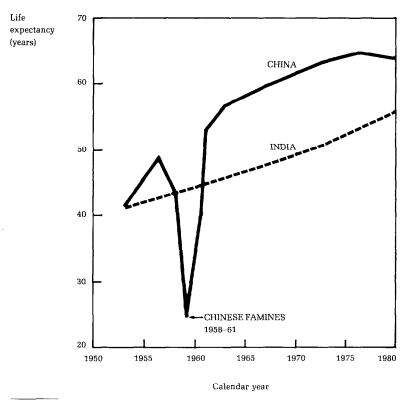
	China	India	
GNP per head (\$) 1985	310	270	
Calorie consumption per head 1985	2,602	2,189	
Life expectancy at birth (years) 1985	69	56	
Under five mortality rate (per thousand) 1985	50	158	
Famine mortality (millions): Chinese famines 1958–61	29.5		
Excess Indian ''normal'' annual mortality (millions) 1985		3.8	

Table 2. China and India

Sources: World Bank, World Development Report 1987 (New York: 0.U.P., 1987); UNICEF, The State of the World's Children, 1987 (New York: O.U.P., 1987); B. Ashton, et.al., "Famine in China 1958-61", Population and Development Review, 10 (1984).

If we look, instead, at the indicators of basic freedom to avoid premature mortality, i.e., life expectancy at birth, China's performance would seem to be of a different order of magnitude altogether from that of India. Chart 1 presents the respective time series of life expectancy in the two countries. Beginning with life expectancy figures quite close to each other—not much above 40 years—in the early 1950s, the Chinese have been able to raise the life expectancy figure to close to European standards, while India lags behind by a big margin. The difference in the achievement of a life expectancy close to 70 years and that in the mid-fifties is very large indeed, as

Chart 1



Source: See Amartya Sen, Hunger and Entitlements (Helsinki: WIDER, 1987).

we know from the history of life-expectancy changes in different parts of the world.

Famines and prevention

One of the interesting features in the comparison of life expectancy of China and India is the remarkably sharp drop that the Chinese figure has around 1958-61. These are the years of the Chinese famines following the failure of the Great Leap Forward. At one stage life expectancy had fallen to the mid-twenties. While the Indian progress of life expectancy has been slow, it has not undergone fluctuations of this kind at all. Indeed, it must be recognized that in the field of famine prevention, India's record is distinctly superior to that of China.

I have tried to argue elsewhere¹⁵ that India's success in eliminating famines since Independence is not primarily the result of raising food output per head, as it is often thought to be. Indeed the increase in availability of food per head in India has been fairly moderate (as it had also been in China up to the economic reforms¹⁶) and the ratio of food to population has remained lower in the post-Independence period than it was in the late 19th century, when India had several famines. The main difference has been brought about by an administrative system which compensates the loss of entitlements as a result of such calamities as droughts and floods by providing employment—often at cash wages—giving the affected population renewed ability to command food in the market. The process is further helped by using substantial stocks held in the public distribution system which can be brought in, to supplement what the creation of income does in regenerating lost entitlements.

This administrative system does, in fact, have its roots in the Famine Codes formulated in British India in the 1880s. However, these Codes were often invoked too late, and intervention was often not a high priority item for the then government. In some cases, most notably in the notorious Bengal famine of 1943, no famine was ever officially "declared", in order to avoid the necessity of taking actions required by the Famine Code (as Governor Rutherford of Bengal explicitly put it in an intra-government communication).¹⁷ The situation is now altogether different given the nature of politics in post-Independent India. No government at the center-or at the state level—can get away without extreme political damage if it fails to take early action against famines. The presence of active opposition parties and a relatively free news distribution system provide the political triggering mechanism that the Famine Codes in their original form lacked.¹⁸ The availability of food in different parts of India has often fallen greatly below those prevailing in Ethiopia, Sudan, or the Sahel countries (see, for example, Table 3) at the time when they had their worst famines.¹⁹ Indeed, even the normal availability of food per head for India as a whole is not decisively higher than that of Sub-Saharan Africa, as Table 4 shows (India coming halfway down the list of Sub-Saharan economies, with less food availability per head than many countries with persistent famines).

	Gross Production Per Head Sahel India Maharashtra		Net A Sahel	Net Availability Per Hea Sahel India Maharasl		
1971	102	96	51	101	84	55
1972	75	92	46	76	84	57
1973	78	83	27	85	76	46
1974	115	88	62	120	82	73

Table 3. Famine, Averted Famine and Cereal Production:* Sahel and India

*100 = 182 kg. per head per year.

The Chinese experience in this respect has been guite different. There was, of course, a very remarkable drop in food output per head after the Great Leap Forward (though not more than in some parts of India in different years, e.g., in Maharashtra in 1973), but there was no major revision of economic policy, no alert anti-famine relief operations, and not even an official recognition of the existence of famine for a number of years. The famine in China raged on for three years, and it is now estimated that the additional mortality because of the famine amounted to about 29.5 million.²⁰ It is quite remarkable that a famine of this magnitude could continue unrecorded without bringing about a major policy shift, and this failure is certainly one connected closely with the absence of a relatively free press and the absence of opposition parties free to criticize and chastise the government in power. It may, thus, be argued that the massive deaths connected with starvation and famine during 1958-61 relate closely to the issue of freedom of information and criticism.

Chinese economic reforms

While the progress of food production in China was relatively moderate until the economic reforms, things have moved very fast indeed after 1979. Table 5 presents the gross value of agricultural output (including food output) between 1979 and 1986, as reported

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Source: Jean Dreze, "Famine Prevention in India", WIDER Conference Paper, to be published in J. Dreze and A. Sen, eds., Hunger: Economics and Policy, to be published by Oxford University Press.

Country	Daily Calorie Supply Per Head	
Less than India		
Ghana	1,516	
Mali	1,597	
Chad	1,620	
Mozambique	1,668	
Benin	1,907	
Kenya	1,919	
Zambia	1,929	
Guinea	1,939	
Zimbabwe	1,956	
Burkina Faso	2,014	
Nigeria	2.022	
Cameroon	2,031	
Angola	2,041	
Central African Republic	2,048	
Somalia	2,063	
Sierra Leone	2,082	
India	2,115	
More than India		
Sudan	2,122	
Zaire	2,136	
Botswana	2,152	
Togo	2,156	
Ethiopia	2,162	
Malawi	2,200	
Mauritania	2,252	
Niger	2,271	
Tanzania	2,271	
Rwanda	2,276	
Uganda	2,351	
Liberia	2,367	
Lesotho	2,376	
Burundi	2,378	
Congo	2,425	
Senegal	2,436	
Ivory Coast	2,576	

Table 4. Comparative Food Availability Per Head 1983:India and Sub-Saharan Africa

Source: World Development Report 1986, Table 28.

	Index Gross Value of Output		Ind Death	
	Industry	Agriculture	National	Rural
1979	100	100	100	100
1980	109	104	102	101
1981	113	111	102	102
1982	122	123	106	110
1983	135	135	114	120
1984	154	159	108	105
1985	181	181	106	104
1986	197	210	108	105

Table 5. China Since 1979 Reforms (Indices)

Sources: People's Republic of China, Statistical Yearbook of China 1986 (in English); 1987 (in Chinese).

in the Statistical Yearbooks of China. It would seem that the agricultural output has doubled in the seven years since 1979, and the rate of growth of agriculture, which is typically much lower than the industrial growth rate, has in fact been exactly comparable. That the economic reforms permitting greater freedom to earn profits based on economic calculations have been a success from this point of view can scarcely be denied. It is possible to question some of the figures, and it has sometimes been argued that there were incentives for understating the agricultural output in the pre-reform period, but even when these corrections are made, the performance of Chinese agriculture since the economic reforms must be accepted to be altogether exceptional.

On the other hand, judged in terms of the freedom to avoid escapable mortality, the picture is much muddier. Even in Chart 1, one notices a slight tendency for the life expectancy to decline in the period following the economic reforms. This is brought out also in Table 5 in terms of the index of death rates, which goes up—rather than down—in the post-reform period. While the peak increase in death rate is now well past, the last reported death rates in China are still higher than that in the pre-reform period. Questions can be raised about the acceptability of these official mortality statistics, and it must also be recognized that the Chinese death rates were very low indeed by the time the economic reforms began. But it is still remarkable that rather than the increase in material prosperity pushing down the death rate, what has happened is some *increase* in mortality rates along with the policy package that has characterized the economic reforms.

This policy package has included some radical changes in the distribution of health care in the rural areas, e.g., a withdrawal from the strategy of using "barefoot doctors" (Table 6), and a general shortage of public funds for communal health care under the new privatized "responsibility system". Whether the increase in death rate is firmly connected causally with these policy changes remains to be further investigated, but there is a serious question mark here concerning the post-reform economic policies which must be addressed.

It is remarkable that the enormous expansion of life expectancy in China, from a figure close to 40 years to one close to 70 years, took place in the pre-reform period with only a moderate increase in food

	Т	otal	Female		
	Numbers (Millions)	Index (1975 = 100)	Numbers (Millions)	Index (1975 = 100)	
1970	1.218	78	n.a.	n.a.	
1975	1.559	100	0.502	100	
1980	1.463	94	0.489	97	
1981	1.396	90	0.443	88	
1982	1.349	87	0.410	82	
1983	1.279	82	0.371	76	
1984	1.251	80	0.356	73	

Table 6. Barefoot Doctors in China

Sources: World Bank, China: The Health Sector (1984), for (1970-81); Statistical Yearbooks of China 1985 (for 1983 and 1984); Zhongguo tongji nianjian 1985 (for 1981-83). The Statistical Yearbooks of China from 1986 onwards do not give the numbers of barefoot doctors any more.

availability per head but with a radical expansion in the delivery of health care and food to different sections of the population. Since the reforms, food availability per head has gone up radically, but the delivery system has undergone some changes, including contraction in some respects, and there seems to have been some decline from the previously achieved peak of high life expectancy and low death rate. While the Chinese economic reforms must be praised for what they have achieved-the increase in production has been altogether remarkable-there is need to reassess the policy lessons of the Chinese reforms, especially when attention is shifted from production, GNP and output per head, to the basic indicators of the freedom to live long and the related positive freedoms. While the Chinese experience of famines in 1958-61 raises one type of issue relating food to freedom (in that case concerning freedom of information and opposition), the post-reform experiences of China raise another type of question concerning that relation (involving in this case freedom to avoid premature mortality as an indicator of success, as opposed to the size of production and output).

Assessment of Sri Lanka's achievements

Another country in which the enhancement of life expectancy has received much attention is Sri Lanka. As Table 1 indicated, Sri Lanka has a remarkably high life expectancy in comparison with its relatively low GNP per head. This achievement has been seen as being closely related to the policy of public intervention in Sri Lanka.²¹

The role of public intervention in Sri Lanka in enhancing the positive freedom to live long has been questioned in a number of contributions in recent years, leading to some lively controversies. For example, based on comparing Sri Lanka's performance since 1960 with other countries, it has been argued that Sri Lanka has not been an exceptional performer.²² Unfortunately, the period chosen for this comparative assessment, beginning with 1960, has made these comparative studies quite misleading. Extensive public intervention in Sri Lanka began in the early 1940s, and this was indeed accompanied by a sharp reduction in death rate, which went down from 20.6 per thousand in 1940 to 8.6 per thousand in 1960. By 1960, when the now-famous international comparative studies begin, the death rate in Sri Lanka was within hitting distance of more advanced countries in Europe and America. It is not surprising that the progress since

then has been relatively slower, especially compared with other countries which had more scope for reduction in mortality rates. Also, as it happens, the period beyond 1960 has been one of some fluctuation of public intervention, and some of the major planks of public intervention used in Sri Lanka to enhance the quality of life have undergone, in fact, some decline in the 1970s. The policy of free or subsidized distribution of rice which was introduced in 1942. has suffered from reductions in the later decades, and even the expansion of health services which was very fast during the 1940s and 1950s, has slowed in the later periods, with a reduction in the number of doctors and other medical practitioners in the decade of the 1970s. Table 7 presents some of the relevant figures. The fact that the enhancement of life expectancy and related indicators has not been very fast since 1960 says very little about the alleged lack of effectiveness of public delivery systems in the expansion of life expectancy in Sri Lanka. By the time the comparative studies begin much of the dramatic reduction in death rate in Sri Lanka had already taken place, and the comparisons also suffer from concentrating in a period in which there was nothing like the steady rise in public delivery arrangements for food and health care that had taken place in the earlier period, when mortality rates had indeed crumbled at a dramatic rate.

	Public Distribution of Food	Number of Medical Personnel	Death Rate Per Thousand	
1940	No (Introduced 1942)	271	20.6	
1950	Yes	357	12.6	
1960	Yes	557	8.6	
1970	Yes (Reduced 1972, 1979)	693	7.5	
1980	Yes	664	6.1	

Table 7. Sri Lanka

Periodization and British mortality decline

The issue of periodization, which proves to be central in appraising Sri Lanka's achievements, is in general an important question in assessing the effectiveness of different policies in the enhancement of life expectancy and in the decline of mortality. Even in Europe sharp reductions in premature mortality have been closely connected with expansion of public delivery of basic essentials of living, including health care and medical attention, and it is possible to move towards the identification of the relevant causal connections by distinguishing between different periods in which mortality reductions have been fast or slow.

Table 8 presents the extension of life expectancy at birth in England and Wales during the first six decades of this century. It can be seen that in every decade the life expectancy at birth went up moderately—by between one and four years—with two exceptions. In the decades between 1911 and 1921 and between 1940 and 1951 life expectancy increased by nearly seven years. These were, of course, the war years, and the improvement is to a great extent, recording the impact of public distribution systems that came in with protecting the general public from the possible effects of war. Public

Between	Men	Women	
 1901-1911	4.1	4.0	
1911-1921	6.6	6.5	
1921-1931	2.3	2.4	
1931-1940	1.2	1.5	
1940-1951	6.5	7.0	
1951-1960	2.4	3.2	

Table 8. Extension of Life Expectancy at Birth: England and Wales, 1901-1960 (additional years)

Source: S. Preston, N. Keyfitz, and R. Schoen. Causes of Death: Life Tables for National Populations (New York, 1972). See also J.M. Winter, The Great War and the British People (London: Macmillan. 1986). provision of food rationing and distribution, expansion of health services (including the introduction of the National Health Service in the 1940s), and other expansions of the involvement of the state in distributing food, health care, medical attention, etc., made a radical difference to the entitlements to these vital commodities enjoyed by the population at large, including its most vulnerable sections. The enhancement of life expectancy reflects these results of public policy, and it would be a mistake to think of the increase of life expectancy in Britain as the result entirely of enhanced overall economic opulence (or a general increase in GNP per head). Once the issue of periodization is appropriately faced, it is hard to escape the fact that even in the history of a country such as Britain, it is the delivery system of food and health care—over and above increases in economic opulence—that has played a strategic part in crucial periods of expansion in the elementary freedom to live long and live well.

Intrinsic and instrumental roles

In assessing the relevance of freedom in the making of food policy, both the intrinsic and the instrumental perspectives have to be kept very firmly in view. The instrumental perspective is often invoked in the context of emphasizing economic incentives in the expansion of national output in general and food production in particular, and there is undoubtedly much to be said for taking adequate note of this question, as the experiences of the Chinese economy in particular have sharply brought out in recent years. At the same time, the instrumental perspective has to be extended from the freedom to earn profits to freedoms of broader kinds, including political freedom in the form of freedom of opposition, freedom of information, and journalistic autonomy. We have seen that these freedoms can be quite crucial in the delivery and use of food.

The instrumental perspective is, however, inherently limited, since freedom can be seen as having intrinsic importance as well. In assessing economic development and social progress, it is natural to think of the enhancement of basic positive freedoms to avoid premature mortality, to escape morbidity, to eliminate undernutrition, and so on. While freedom is a complex notion, various aspects of it can be usefully studied in terms of statistical information of a kind that is frequently available and which can be made more easily accessible if the perspective of freedom is taken seriously by public policymakers.

The importance of this perspective arises partly from the fact that the metrics of gross national product, real income, etc., may often be quite misleading about the extents of freedom that people do enjoy and can build their lives on. Even in such elementary matters as avoiding premature mortality, the statistics of national products (including those of food output) can hide more than they reveal. It is possible for the national product per head and the food availability per person to go up sharply without reducing mortality rates, sometimes accompanied by increased mortality, as seems to have happened in China since the economic reforms of 1979. Once the process of economic development is reassessed in terms of the important indicators of elementary freedoms, a different light altogether may well be cast on economic policy changes that call for adequately broad evaluation. The Chinese economic reforms have been undoubtedly extremely successful in terms of raising production and enhancing income, but since the post-reform period has also seen an increase—rather than a reduction—in death rates, there is room for asking searching questions about the nature of the policy package that has gone with the economic reforms, and about variations to this package that can be considered from the economic point of view. The remarkable success of the Chinese economy in raising life expectancy at birth, from a figure close to 40 years just after the Revolution to a figure close enough to 70 years just prior to the economic reforms, was built on paying particular attention to public delivery systems involving food, health care, and related necessities. It is this aspect of the Chinese success that is in some danger of going out of focus—with possibly serious consequences—if the understandable concern with raising output and income distracts attention from the problem of delivery and public distribution.

Freedom is not a remote consideration in policymaking. This applies just as much to the making and assessing of food policy as it does to many other fields of policymaking in social and economic matters. Indeed, the inclusion of freedom as a consideration—both at the intrinsic and at the instrumental level—has the effect of appropriately broadening the concepts that must be invoked in the formulation and execution of food policies. The need for that broadening has been one of the main contentions I have tried to put across in this lecture.

The perspective of freedom, with its diverse elements, is much too important to be neglected in the making of food policy. Food and freedom are both central concerns in human life, and they have links that are both crucial and diverse. These links demand our attention. The elementary freedom to live long and live well for a great many million people is at stake.

NOTES

- 1. Isaiah Berlin, Four Essays on Liberty (London and New York, Oxford University Press, 1969)
- See my "Well-being, Agency and Freedom: The Dewey Lectures 1984," Journal of Philosophy, 82 (April 1985).
- 3. James Buchanan, Liberty, Market and the State (Brighton: Wheatsheaf Books, 1986), and Milton Friedman and Rose Friedman, Free to Choose (London: Secker and Warburg, 1980). I have discussed this contrast, among others, in my "Freedom of Choice: Concept and Content", Alfred Marshall Lecture to the European Economic Association, Copenhagen, August 1987, European Economic Review, 1988.
- John Stuart Mill, On Liberty (London: 1859; republished, Harmondsworth: Penguin, 1974); John Rawls, A Theory of Justice (Oxford: Clarendon Press, and Cambridge, MA: Harvard University Press, 1971); Robert Nozick, Anarchy, State and Utopia (Oxford: Blackwell, and New York: Basic Books, 1974).
- 5. K. Marx and F. Engels, *The German Ideology* (1845-46; republished, New York: International Publishers, 1947), p.22.
- 6. Peter Bauer, Equality, the Third World, and Economic Delusion (Cambridge, MA; Harvard University Press, 1981).
- P. Streeten, et.al., First Things First: Meeting Basic Needs in Developing Countries (New York: Oxford University Press, 1981); Morris D. Morris, Measuring Conditions of the World's Poor (Oxford: Pergamon, 1979); F. Stewart, Planning to Meet Basic Needs (London: Macmillan, 1985).
- 8. A.C. Pigou, The Economics of Welfare (London, Macmillan, 1920; sixth enlarged edition, 1952).
- 9. Paul Streeten, Development Perspectives (London: Macmillan, 1981).
- Sen, "Well-being, Agency and Freedom: The Dewey Lectures 1984", Journal of Philosophy, 82 (April 1985); Commodities and Capabilities (Amsterdam: North Holland, 1985); On Ethics and Economics (Oxford: Blackwell, 1987).

- P.G.K. Panikar and C.R. Soman, Health Status of Kerala (Trivandrum: Center for Development Studies, 1986); B.G.Kumar, "Poverty and Public Policy: Government Intervention and Levels of Living in Kerala, India," D.Phil. dissertation, Oxford University, 1987.
- 12. The relatively low nutritional intakes in Kerala may have some effect on the prevalence of some illnesses, even when mortality is prevented by an extensive system of medical care.
- 13. Simon Kuznets, Modern Economic Growth (New Haven: Yale University Press, 1966), pp. 360-1.
- 14. Dwight H. Perkins, "Reforming China's Economic System," Harvard Institute of International Development, forthcoming in Journal of Economic Literature; Subramanian Swamy, "Chinese Price Structure and Comparative Growth Rates of China and India", Harvard Institute of International Development, 1986, to be published.
- 15. Amartya Sen, "Development: Which Way Now?" Economic Journal, 93 (December 1983), reprinted in Resources, Values and Development (Oxford: Blackwell, and Cambridge, MA: Harvard University Press, 1984). See also N. Ram, "An Independent Press and Anti-Hunger Strategies—The Indian Experience", WIDER, 1986, to be published in J.Dreze and A. Sen, eds., Hunger: Economics and Policy, Clarendon Press, Oxford, and O.U.P., New York, forthcoming. Note that political and journalistic pressure is less effective in preventing high levels of "normal" mortality than in countering deaths from open starvation which are more visible and easier material for news reporting and for political pressure. See footnote 20.
- See Carl Riskin, "Feeding China: The Experience Since 1949", WIDER, 1986, to be published in Dreze and Sen, Hunger: Economics and Policy, cited earlier. See also his China's Political Economy (Oxford: Clarendon Press, 1987).
- 17. See my Poverty and Famines (Oxford: Clarendon Press, 1981), p. 79.
- On this see my "How Is India Doing?" New York Review of Books, 21 (Christmas 1982), reprinted in Dilip Basu and Richard Sisson, eds., Social and Economic Development in India: A Reassessment (New Delhi, London, Beverly Hills: Sage, 1986).
- On this see Jean Dreze, "Famine Prevention in India", WIDER, 1986, to be published in Dreze and Sen, Hunger: Economics and Policy, cited earlier.
- 20. B. Ashton, et. al, "Famine in China 1958-61", Population and Development Review, 10 (1986). While this figure of famine mortality is exceptionally high, it should also be noted that normal mortality rates in China are now very low. Indeed, if India had the mortality rates prevailing in China, there would have been 3.8 million less deaths in

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India each year around the middle 1980s. That is, every eight years or so more people die in India in excess of Chinese normal mortality rates, than died in China in the biggest famine of the century. India has no more reason to be smug than China has.

- Paul Isenman, "Basic Needs: The Case of Sri Lanka," World Development, 8 (1980); Amartya Sen, "Public Action and the Quality of Life in Developing Countries," Oxford Bulletin of Economics and Statistics, 43 (1981).
- 22. Surjit Bhalla, "Is Sri Lanka an Exception? A Comparative Study in Living Standards," in T.N. Srinivasan and P.Bardhan, eds. Rural Poverty in South Asia (New York: Columbia University Press, 1987); S. Bhalla and P. Glewwe, "Growth and Equity in Developing Countries: A Reinterpretation of Sri Lankan Experience," World Bank Development Review, 1 (September 1986). See, however, the rejoinders of Amartya Sen to the former volume, and those of Graham Pyatt and Paul Isenman in the latter journal, 1 (May 1987). See also Martin Ravallion, "Growth and Equity in Sri Lanka: A Comment" mimeo-graphed, Australian National University, 1987; and Sudhir Anard and Ravi Kanbur, "Public Policy and Basic Needs Provision: Intervention and Achievement in Sri Lanka", WIDER Working Paper, 1987, forthcoming in Dreze and Sen, Hunger: Economics and Policy.