

Reply

Famine and Mr Bowbrick

Amartya Sen

This is a response to Peter Bowbrick's Rejoinder. Professor Sen argues that Mr Bowbrick's Rejoinder continues in the same tradition of empirical and conceptual confusions as his earlier article, but in addition he distorts or ignores Sen's replies to Bowbrick's earlier points.

Amartya Sen is Drummond Professor of Political Economy at Oxford University and a Fellow of All Souls College.

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¹Peter Bowbrick, 'Rejoinder: an untenable hypothesis on the causes of famine', *Food Policy*, Vol 12, No 1, 1987, pp 5-9.

²Peter Bowbrick, 'The causes of famine: a refutation of Professor Sen's theory', *Food Policy*, Vol 11, No 2, 1986, pp 105-124.

³Amartya Sen, 'The causes of famine: a reply', *Food Policy*, Vol 11, No 2, 1986, pp 125-132.

⁴I shall also take up some of the interesting issues raised by Professor George Allen in his post-mortem of the last round ('Famines: the Bowbrick-Sen dispute and some related issues', *Food Policy*, Vol 11, No 3, 1986). Professor Allen mentions that he had advised Mr Bowbrick on his earlier 'refutation' (and in one case, he says: 'My suggestion has started Mr Bowbrick down this particular "path of dalliance"' (p 263). It is, therefore, an insider's view, but not necessarily unfair for that reason.

⁵M.M. Islam, *Bengal Agriculture 1920-1946*, Cambridge University Press, Cambridge, UK, 1978.

⁶G. Allen, *op cit*, Ref 4, p 261.

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By this time the readers of *Food Policy* must be deeply bored with the 'Bowbrick-Sen debate', but since the editors are ready to put up with another round, I must respond to Mr Bowbrick's Rejoinder in this issue.¹ Mr Peter Bowbrick's alleged refutation of my analysis of famines² had drawn heavily on empirical and conceptual confusions as well as misdescriptions of my views, as I discussed in some detail in my Reply.³ Mr Bowbrick's Rejoinder continues the same tradition, but has the additional characteristic of distorting many of my responses to his points and of ignoring others. I shall come to these misdescriptions and misattributions presently, but since a reader can justifiably feel lost in a flood of accusations and counteraccusations, I should first discuss the central issues that seem to divide Mr Bowbrick and myself.⁴

Food output

In discussing the causation of the Bengal Famine of 1943, I had used *all* the available production statistics, without exception, including the 'unadjusted' and 'adjusted' figures of output (and current supply) presented by the official Famine Inquiry Commission. It was clear on that basis that the food output per capita was *higher* in the year of the famine, viz 1943, than in 1941, when there was no famine.

Any set of statistics - even officially endorsed ones - can, of course, contain possible errors. In particular it may be the case that 'the primary

reporting agencies tended to overestimate bad years and underestimate good ones', as has been argued by M.M. Islam⁵ and endorsed by George Allen.⁶ This will, however, apply *both* to 1941 and to 1943, so that my point, which was concerned with the *relative* picture of 1943 *vis-à-vis* 1941, is not affected.

Of course, general caution about production statistics of this type is an entirely sensible attitude. However, in the absence of inventing our data, we cannot do much better than using *all* the statistics that can be found, which is exactly what I did. I had referred also to the later estimates of Professor G. Blyn,⁷ which yield a similar picture to that given by the government statistics and the Famine Inquiry Commission, and which indeed followed closely the methodology and substantive information used by the Commission. No substantial reason whatsoever has been given by Mr Bowbrick as to why the comparison between 1943 and 1941, which is the point at issue, might have been particularly distorted in favour of 1943, against 1941, by the official unadjusted or adjusted figures.

In his Rejoinder Mr Bowbrick asserts that he had 'presented other evidence which suggested that the production statistics were not just unreliable but wrong' (p 5). Indeed, Mr Bowbrick did reject the official statistics in favour of some *alleged* data verbally and vaguely referred to by 'the trade'. Rejecting the official statistics, Mr Bowbrick had referred to his understanding that 'the trade

had its own way of estimating supplies' and that 'it did not rely on official estimates', and he had pointed to the fact that 'the trade was talking of the worst crop in 20 years'.⁸ The only source of information that Mr Bowbrick cited on the subject of what 'the trade was talking of' was the report of the Famine Inquiry Commission itself.⁹ What Mr Bowbrick did not mention (and what I did point out in my Reply) was the fact that the Commission's reference to what 'the trade was talking of' came entirely in a quotation from 'a note prepared at that time by the Civil Supplies Department of the Government of Bengal' and that the reference was in the context of identifying 'psychological' causes of the high price of rice. The note quoted in the Famine Inquiry Commission included among the psychological influences the following: 'fears as to the result of the Midnapore cyclone and exaggerated statement as to its effects on the supply position of the province as a whole', and 'propaganda, sometimes perhaps interested, in certain trade circles, making out that the coming crop was to be the "worst for the last 20 years"'.¹⁰ That is where Mr Bowbrick's phrase 'the worst crop in 20 years' came from, and his 'other evidence' consisted entirely of this piece of 'propaganda', quoted as such by the Famine Commission!

In his Rejoinder, Mr Bowbrick defends the trade's alleged diagnosis of a crop failure on the ground that 'the predictions of the trade proved right and those of the [Civil Supplies] Department disastrously wrong'.¹¹ Since one of the points of the entitlement approach is to show that famines can occur even without a food output decline, it is obviously a *non sequitur* to treat the occurrence of the famine itself as evidence for the view that the crop was a particularly bad one.

It is indeed hard to put much faith in Mr Bowbrick's rejection of official statistics and of the Famine Inquiry Commission's figures on the basis of one reference to what 'the trade was talking of', when that reference itself describes that talk as 'exaggerated statement' and 'propaganda, perhaps interested'. In my reply to his original

article I could not help wondering that 'Mr Bowbrick's faith in the gullibility of the reader is evidently boundless',¹² and nothing in this new Rejoinder can prevent that speculation.

Carryover

On the subject of what was assumed about carryover of foodgrains from previous years, Mr Bowbrick essentially repeats his earlier arguments, taking no note of the response presented in my Reply. In my book *Poverty and Famines*,¹³ I had presented various ways of estimating current availability. One of them took the percentage changes in current availability to be the same as the percentage changes of output plus net imports. This indicated that the 1943 supply was 11% higher than that in 1941. Quoting this Mr Bowbrick observes that 'this calculation is based on the assumption that there was zero carryover' (p 6). This is a mistake. A constant ratio of carryover to current output plus net imports is a necessary and sufficient condition for the two percentages to be the same. That ratio does not have to be zero.

Further, this was only one of the bases of my assessment of probable availability. In an alternative method of dealing with the problem of carryover, I had used moving averages over time. This had indicated roughly comparable foodgrains availability in the period ending in 1943 compared with that ending in 1941, if we take three-year moving averages. With two-year moving averages, the period ending in 1943 had more than 6% higher per capita availability than the period ending in 1941.

Mr Bowbrick now complains that if I had meant the 'moving averages to be taken seriously, rather than being ignored', then I 'would have said that current availability of food was 1% higher in 1943 than in 1941, not 11%', and that 'this would have removed all the impact of his dramatic thesis' (p 6). This is all very confusing, since the statement about the 11% difference was on the basis of one assumption (constant carryover ratio), whereas the moving averages figured in the calculations under a different assumption. The proposition was being tested

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⁷G. Blyn, *Agricultural Trends in India 1891-1947: Output Availability and Production*, University of Pennsylvania Press, Philadelphia, PA, USA, 1966.

⁸Bowbrick, *op cit*, Ref 2, p 114.

⁹Bowbrick, *op cit*, Ref 2, p 114, footnote 33.

¹⁰Famine Inquiry Commission, *Report on Bengal*, Government of India, New Delhi, 1945, p 33.

¹¹Bowbrick, *op cit*, Ref 1, p 5, italics added. Mr Bowbrick also asks tendentiously: 'What is the basis for Professor Sen's apparent belief that civil servants are always both truthful and omniscient, while traders always lie?'. It is not my belief that traders do always lie, nor that civil servants are always truthful or omniscient. But rumours in trading circles do sometimes play a part in creating panic and, in the context of the Bengal famine, this role was particularly outlined by the Famine Inquiry Commission in its Report, endorsing the description of the Civil Supplies Department.

¹²In his post-mortem of the last Bowbrick-Sen round, Professor Allen chides me for this remark, since an error can be 'inadvertent' (*op cit*, Ref 4, p 259). This is indeed so, but Mr Bowbrick's *reassertion* of the correctness of what 'the trade' was allegedly 'talking of' (despite Mr Bowbrick's source of information describing it as just a piece of propaganda) makes inadvertence carry a heavy load.

¹³A. Sen, *Poverty and Famines*, Clarendon Press, Oxford, UK, 1981, pp 58-62.

on the basis of several assumptions, and the inclusion of any one of the procedures does not imply that the other procedures were not being 'taken seriously'. The point of using different methods was to show that *all* of them – without exception – indicate that the availability in 1943 was no lower than in 1941, when there was no famine. That is the point at issue. If it is true that the availability in 1943 was only 1% higher than in 1941, the point would still hold. It does not make one iota of difference to the argument as to how 'dramatic' the excess of the availability might have been in the famine year 1943 compared with that in the non-famine year 1941.

In addition to these mistakes about the analytical and empirical points involved in the disputation regarding carryover, Mr Bowbrick also seems to miss the methodological point, which I did belabour in my Reply (pp 129–130), that no full analysis of carryover can be done without bringing in demand considerations as an integral part of the story. In fact, if carryover fell because of a rise in demand and this caused a famine, this would give little comfort to a purely supply-based theory of famines such as FAD. If there is no substantial decline in output, but nevertheless a decline in supply due to a reduction of carryover from previous periods due to an expansion of demand, then the explanation is importantly *demand-based* in much the same way as a famine caused by current expansion of demand with unchanged carryover would be. The possible influence of demand factors in the genesis of famines was one of the points emphasized in my book, *Poverty and Famines*.

Food shortage and FAD

In my Reply I had complained of Mr Bowbrick's persistent confusion between 'availability decline over time' and 'supply inadequacy and shortage at a point of time'.¹⁴ Mr Bowbrick denies that he made this confusion. Presumably to assure us that he understands the distinction clearly enough, Mr Bowbrick goes on to say that 'it is necessarily true that if there is no FAD [food availability decline], there is no "shortage", but it is not true that any

FAD must imply a "shortage"'.¹⁵ This, I am afraid, is simply wrong. There may be no food availability decline at all, but still demand could expand so much that there would be a shortage. (Indeed, that is, I claim, an important part of what exactly happened in the Bengal Famine of 1943.) Supply being short *vis-à-vis* demand may push prices up, and this can lead to the inability to purchase enough food on the part of those who are badly squeezed by the price rise. Shortages can occur without a decline in food availability. Mr Bowbrick's confusion is reflected in the fact that he takes market shortage as evidence of food availability decline (on the basis of his belief: 'no FAD. . . no shortage'), but this just misses the point that shortages can be initiated on the demand side.

The FAD thesis

The 'Bowbrick-Sen' dispute happens to be primarily concerned with two different, though related, issues. One concerns the specific causation of the Bengal Famine of 1943. The other is a general question as to what causes famines as such. On the first, I have indicated why Mr Bowbrick presents no sustainable reason for supporting the FAD explanation of the Bengal Famine.¹⁶ On the question of the general validity of the FAD thesis (not necessarily applied to the Bengal Famine of 1943), there is not a great deal that Mr Bowbrick says in his Rejoinder, except perhaps to restate his mistaken belief that 'if there is no FAD, there is no shortage' (p 8). However, in his post-mortem of the Bowbrick-Sen dispute, Professor Allen has discussed the question rather extensively and, in many ways, illuminatingly. I would like to take this opportunity to comment on a few points on which there may be some misunderstanding of what I was claiming and why.

Professor Allen criticizes Mr Bowbrick's claim that my attitude to FAD as a thesis is 'scathing', but he points out – presenting several quotations – that my attitude to FAD 'is not exactly complimentary'.¹⁷ He is, of course, quite right, and this is not at all a point at issue. I did argue against the FAD

¹⁴In his post-mortem, Professor Allen remarks that 'he did not find this persistency' (*op cit*, Ref 4, p 259). I had given several examples where this confusion had occurred, and this new Rejoinder by Mr Bowbrick contains other examples.

¹⁵Bowbrick, *op cit*, Ref 1, p 8.

¹⁶Many other points that Mr Bowbrick has presented (eg those dealing with his 'model', the purchasing power of the Calcutta population, the role of speculation, and the importance of food imports), are essentially no different from what he stated in his first 'refutation' and which were dealt with in my Reply. I have not rediscussed these issues, in order to try to keep this note decently short. However, in the context of restating my views, Mr Bowbrick has managed to misrepresent them quite seriously in many cases, and in the examples of distortion to be given later on in this note, some of these misstatements will be referred to.

thesis that famines can be caused only by a decline in food availability. But this does not, of course, imply (and should not be taken to imply) that food availability decline cannot play an important part in the causation of famines. FAD as a *thesis* has to be distinguished from the *phenomenon* of food availability decline (sometimes also abbreviated as FAD) and its non-unique, but possibly important, relevance. Food supply clearly must have some effect on prices, which would affect the entitlements of those who have to purchase food. Also, food production is the source of income and purchasing power of many occupation groups. These various relationships were extensively discussed in my *Poverty and Famines*, chapters 6–10. Some of the famines studied were indeed accompanied by sharp declines in food availability, eg the famines in the Sahel countries in the early 1970s (Chapter 8) and the 1974 (as opposed to 1973) famine in Ethiopia (Chapter 7).

I did point out, further, that 'even in those cases in which a famine is accompanied by a reduction in the amount of food available per head, the causal mechanism precipitating starvation has to bring in many variables other than the general availability of food' (*Poverty and Famines*, p 154). Much of the book was concerned with discussing these causal mechanisms, and food availability is *one* of several variables that can play a part in the causation of famines. In some cases, famines can take place without any food availability decline at all (see chapters 6, 7 and 9), while in others it may *inter alia* be quite important (chapters 7 and 8).

My complaint against the FAD approach was not only that it takes a single-causation view of famine, but also that 'the FAD approach gives little clue to the causal mechanism of starvation, since it does not go into the *relationship* of people to food' (p 154). It is that relationship (involving entitlements, ownership and exchange) that has to be investigated, in my judgement, to understand why and how famines develop, and why some groups of people are affected by it while others are hardly touched.¹⁸ If I

understand correctly what Professor Allen intends to emphasize, I do not see any real reason for serious disagreement.

Distortions by Mr Bowbrick

Finally, I would like to note briefly a number of misdescriptions of my views present in Mr Bowbrick's Rejoinder in this issue.¹⁹ The profuse presence of these distortions makes it difficult to decide how to handle particular critical points made by Mr Bowbrick, which very often are preceded by serious distortions of my views or arguments. The list here is, I am afraid, far from exhaustive.

1) On page 6, Mr Bowbrick says: 'I have presented a model showing that even if Sen's production and import figures were correct, the stock position in November 1943 would be the lowest for 17 years at least. He does not challenge the validity of the model nor that it is a possible explanation for the famine.' What I had in fact said was:

The support that FAD apparently gets from Bowbrick's table comes entirely from what Bowbrick himself 'arbitrarily' introduces in the figures. These involve the peculiar (and oddly undefended) set of consumption assumptions and, as he confesses, an 'arbitrarily chosen' carryover figure ('I have arbitrarily chosen a carryover of 8 500 000 tons at the beginning of 1941', p 113). It is, of course, not surprising that figures could be 'imagined' that would support FAD; no one has disputed the power of imagination. The real issue is whether the figures thus imagined have any empirical basis at all.²⁰

The validity of Mr Bowbrick's model and its role as a 'possible explanation for the famine' had, in fact, been disputed on several grounds.

2) On page 7 Mr Bowbrick says: 'In discussing Sen's explanation of uneven expansion of purchasing power, I used the only analysis he gave. He now tells us that it was purely illustrative, and not meant to refer to reality.' What I had in fact said was that the illustrative figures were not meant to be exact representations of what happened in Bengal in 1943, which is a different statement from the figures not being 'meant to refer to reality'. (Also, the figures Mr Bowbrick gave in his earlier article, some of which he repeats

¹⁷Allen, *op cit*, Ref 4, p 259.

¹⁸The focus of the entitlement analysis is on the question of ownership of food (including initial endowment as well as production and trade), and by its very nature the analysis has to be conducted in group-specific terms, examining the way each group establishes command over food. It is in emphasizing the relationship between people and food that the entitlement analysis differs from the supply-centred view represented in the FAD thesis. The substantive analyses presented by such authors as Mohiuddin Alamgir, Keith Griffin, Roger Hay and Radha Sinha (cited by George Allen) can be sensibly accommodated within this picture of ownership and acquirement, and I had of course referred to their works in *Poverty and Famines*.

¹⁹Bowbrick, *op cit*, Ref 1.

²⁰Sen, *op cit*, Ref 3, p 130. I had also added a footnote pointing to the fact that 'there are, however, some conceptual problems with arbitrary imagination, eg the meaning of *negative* stocks (minus 1.056 million tons of rice in November 1943) in Bowbrick's Table 1 (p 114). Imagination can, I suppose, run wild.'

in his Rejoinder, actually distort the quantitative picture that would have emerged from the illustration I had outlined.) Furthermore, uneven expansion of purchasing power and its causation had been extensively discussed in my book, and the illustration was far from 'the only analysis' I had given.

3) On page 7 again, Mr Bowbrick says: 'He repeatedly implies that a famine can occur because of an increase in demand, even if this is not accompanied by any change in consumption.' Not only had I not said anything like that anywhere, I fail to see how anyone can possibly think that a famine can take place without a decline in consumption of the affected section of the population (usually some occupation groups)!

4) Still on page 7, Mr Bowbrick says: 'Sen says that his "causal hypothesis" of speculation was not meant to indicate the cause of the famine but merely to indicate "an influence". I make no apology for treating every point that was presented as a "causal hypothesis" as though it was meant to be taken seriously.' What I had said, in fact, was that 'Bowbrick seems to identify every attribution of influence as an assertion of "the" causation' (p 132). An influence can be 'taken seriously' without it being taken to be 'the' causation. One reason for my complaint was that in his so called

refutation Mr Bowbrick had attributed to me belief in various different and contradictory causations, eg 'switches in distribution [of purchasing power] caused it' (p 118); 'the famine was caused by speculation' (p 120); 'he also talks of panic hoarding from March to November 1943 as being the cause of the famine' (p 120).

5) On page 8, Mr Bowbrick says: 'His attacks on FAD appear to cover any economist who has so much as suggested that there could have been a decline in food availability in any famine.' In the footnote reference to this point, Mr Bowbrick cites a work of his own, rather than one of mine. But the view attributed to me is clearly absurd, not merely because I have never stated it, but also because several of the famines studied in detail in my *Poverty and Famines* had actually involved *inter alia* a substantial decline in food availability preceding or during the famine period (see chapters 7 and 8).

There are, I am afraid, many other misattributions by Mr Bowbrick of my arguments and claims. Indeed, accuracy does not seem to be one of Mr Bowbrick's more conspicuous concerns. But the important point is not so much that Mr Bowbrick greatly distorts the position he attacks, but that his alleged refutation does nothing to undermine the attacked position.