

# A description of the great bengal famine and sen's new approach to it

[Sociology](#), [Poverty](#)



## **Introduction**

In 1943 Bengal famine struck, with an accumulated death toll between 2.7 and 3 million alone (Sen, 1977), the people of Bengal suffered a period of hunger and deprivation for an extended period of time. A calamity of such a grand scale caused a number of theories and analytical explanations by well renowned economists to be put into mass circulation. Amartya Sen, the recipient of the Nobel Peace prize in economics was one of these economists. In 1977 Sen published an article which produced waves of academic and intellectual thought on the topic of famines and brought new light to the outdated and conventional approaches to the cause of famines. Sen, who was present in Bengal at the time of the famine, brought the widely used notion of food availability decline, a supply side explanation for famines, under heavy debate and introduced the concept of entitlements as a counter explanation. The essay is divided into two parts.

## **The Great Bengal Famine**

The estimated 3 million death toll, comprised of 1.5 million deaths due to starvation and roughly the same amount due to epidemics hitting a population in the state of mass malnutrition (Bowbrick, 1986). Some historians argued (Arnold, 1991) the famine was a consequence of pre-partition politics and was thus 'man-made'. Bengal boasted a rich agrarian economy in which the main activity was cultivating rice. The Famine enquiry commission (1945) described Bengal as "a city of rice growers and rice eaters".

There were three main crops every year:

1. 1. The Winter crop. It was called Aman and was sown in May and June, and harvested in November and December. It accounted for 73% of the annual crop.
2. 2. Aus, the Autumn crop was sown in April and harvested in August and September. It accounted for 24% of the annual crop.
3. 3. Boro, the Spring crop, was planted in November and harvested in February accounting for 3%.

In 1942, Aus was 97% of what it was the preceding four years while Aman was 83% on average. This owed to the fact, that a cyclone had occurred in October (Sen, 1977) followed by heavy rainfall in some parts of Bengal. There were also reports of a fungus disease in the area. Furthermore, in 1942 Burma was captured by the Japanese and rice imports were cut down. Sen believes that this was a mere coincidence and that because the famine occurred in 1943, one might be falsely misled that the primary cause of the famine was due to a shortage of supply of food. Moreover, maund was a local unit for rice measurement. Typically, 1 maund equated to 37.4kg. According to Sen, the wholesale price of rice, which was Rs. 13 per maund in December 1942 rose to Rs. 37 by August 1943. Due to the government fixing a maximum price, price quotations became difficult to obtain but non-official reports gave news of price spikes upto Rs. 105 per maund September onwards.

In order to describe the famine in economic terms Sen (1977) divides the famine into 3 phases:

1. 1. Phase 1: 1942-March 1943. Phase
2. 2. March 1943-November 1943. Phase
3. 3. November 1943- 1944

### **Phase 1**

This may be taken as the period the famine had not yet begun. Starvation deaths were relatively rare but in the preceding years between half and three quarters of the rural poor were living in a half-starved condition (Arnold, 1991). Thus in a way a famine was already predicted and economic distress had already gripped a substantial part of the population (Sen, 1977). As mentioned above, the autumn crop was slightly less than usual and the winter crop even more so owing to natural disasters and torrential rain. The conditions of famine were initially recognized in the districts away from Calcutta where the government abated the high price of rice with a number of procurement schemes. Reports from commissioners and district officers noted that there were ‘indications of distress among the local people’.

### **Phase 2**

Sen describes this stage as the worst in terms of starvation deaths. Rice prices continued to rise and district officers reported “towns filled with thousands of beggars who are starving” and also “crime against property increasing, and paddy looting causes have become frequent”. Calcutta was still protected by the government’s procurement schemes and the famine had manifested itself by rural destitutes searching for food in urban settings. The number of starving and sick destitutes in Calcutta were estimated to be one hundred thousand in October. According to Sen (1977), provision for

these destitutes was left to private charity which later on proved to be inadequate in terms of scale and scope. As a result the cities became filled with dead bodies, and an official number of 3363 bodies were reported by Sen(1977) which had to be disposed of by relief organizations. As a direct consequence, a legislation was passed and a decision was made to remove the destitutes from the city.

### **Phase 3**

It was in this phase that the overall death rate peaked with deaths directly from starvation augmented by deaths from epidemics caused or exacerbated by the conditions of the famine. Reports of cholera, malaria and small pox were documented by Sen (1977) which contributed towards the continued increase in death rates. The diseases were famine induced as a result of starvation deaths that occurred mentioned above.

### **Sen's Theory**

Sen's fundamental point comes from the question: what caused the price to rise? He denies supply side explanations and thus by default we are forced to ascertain the cause of the famine owing to demand related factors. Sen supports his claim using rigorous statistics and tables taken from the famine Inquiry commission to credit his claim.

But first in order to do justice to Sen's theory we first have to understand the vocabulary of entitlements. The most common approach to famines is usually given with reference to food availability decline or the FAD view. Sen (1977) suggests that, in general, famines should be explained not in terms of natural disasters or any other supply side explanation. Rather an

entitlements approach should be taken into consideration, which suggests that people starve when their entitlement to food is insufficient and that famines occur when the entitlements of a large group of people suddenly collapse. Entitlements to food arise out of a variety of factors for example social relationships and institutions but vary from economy to economy which is an important concept in Sen's theory. Entitlements can be further divided to four categories: exchange, production, transfer and ownership. The following definitions give a brief explanation of each and a description of the event of an entitlement collapse.

### **Exchange Entitlements**

In almost all societies people have a right to exchange their rights of ownership over food and other commodities with willing buyers. In such societies a person is entitled to what food they acquire through voluntary exchange. A collapse may occur by an increase in the price of food or what people have to exchange for food. A person may be entitled to consume the food they produce with their own resources and their own labour and to what they produce with resources hired from willing suppliers. Similarly a production entitlement collapse can occur with a harvest failure, livestock disease or even an increase in taxes. A person is entitled to what they receive in the form of unrequited voluntary transfers from others. Collapse may occur by the impoverishment of givers who become unable to honor their obligations.

Again in almost all societies rights of ownership over food commodities are recognized. In such societies a person is entitled to the food they own. An

ownership entitlement collapses when food stocks are destroyed by drought, flood, earthquake or any form of destruction. (Topic notes, Economics of Famine) Coming back to what caused the price of rice to rise. A key concept in Sen's analysis that should be mentioned is that he believes there was no shortage of food initially, thus he rejects virtually any supply side explanation for the famine. In 1943 as compared to 1941, was 5% lower than the average of the preceding 5 years but 13% greater than that of 1941 as highlighted in red (Sen, 1977).

Furthermore, the index of per capita food grain available shows a 9% increase which is a significant, taking into account the overestimated population growth of 1 per cent per year (Sen, 1981). Furthermore, Sen (1977) mentions those official estimates of agricultural production have been criticized notably by P. Mahalanobis. But he (1977) also mentions that Blynn (1966) provides comprehensive estimates for greater Bengal where 1943 still boasts a higher food production than 1941. One cause of the famine (Sen, 1981), by the famine inquiry commission, was thought to be because of a shortage in the stock of the rice carried forward in 1941 from the preceding year and that of 1942 to 1943. But no information regarding this is given in the report and Sen (1981, p. 62) points out that a member of the commission himself noted that 'absolutely no data are available regarding the stock position of rice from month to month or year to year in Bengal or any part of India'. Sen (1981) instead provided a way at looking at the carry over problem by analyzing moving averages two or three years ending in the

year in question. This method showed that the two year average ending in 1943 was the highest in the series for total food grain availability.

To summarize the above there was a rise in price not because of a shortage of food supply but a fall in the value of what people had to exchange for food. Thus in theory, there was collapse of exchange entitlements of groups of people which included agricultural labourers which subsequently led to starvation. Sen used such data to explain the occupational pattern of mortality in the famine. He adds that that landless labourers suffered a higher risk to starvation than land owning peasants and landlords because they were protected by their ownership entitlements to some extent. Phase 1 of the famine was characterized by a boom in military expenditure which gave rise to inflationary forces via the printing of money.

As a consequence of which, inflationary pressures gave rise to the purchasing power of some while the above mentioned class of agricultural labourers suffered because of lack of increase in incomes (Sen, 1981). With phase 1 making the threat of a famine evident, phase 2 was characterized by panic purchases to hoard food out of a fear of a predicted food shortage. This coupled with strong demand pressures from those involved in wartime defence works and from Calcutta rice subsidization schemes influenced the market for food. In addition, there was an indifferent winter crop so supply was not exactly booming. Limitations of Sen's theory: Having established Sen's explanation for the cause of the Bengal Famine we will now move on to decisive conclusion as to whether his theory holds against counter arguments and refutations. Basu (1986) mentions in his critique of Sen's



theory that it may be true that the famine was indeed a possible consequence of excess demand creating a shortage of food, however there were indicators that ill-timed and inadequate government policy had escalated the situation.

In fact Sen (1977) himself, is quick to understand the role policy had to play in the famine. He adds to his analysis that the British government had failed to declare the famine as a famine, which would have obligated it to introduce work programmes and relief operations (Sen, 1977). Furthermore, he (1977) points out that the refusal of the government to allow more food imports as an emergency measure to alleviate the conditions of the famine in Phase 2 was also severely criticized. The government was more focused on feeding the growing number of the army and the civilian workforce that contributed in the war effort (Basu, 1986). Thus in short policy may have had a greater role than imagined towards the cause of the famine or it may be safe to conclude that it escalated the situation to a higher degree.

On the other hand, Bowbrick points out some flaws in the way Sen uses statistics to support his theory. He (1986) stated that the collector of statistics provided by Sen did not know the acreage or yields but only the estimates of the deviation of the norm, so there was some substantial error overlooked in the estimation of total production and that of aggregate food supply. The statistics were also affected by the fact that parts of Bengal which was hit by a cyclone was on the verge of an insurrection (Bowbrick, 1986). So one may come to question Sen's provided statistics, regarding their authenticity. Furthermore, Browbrick (1986, p. 113) comments

regarding the carryover problem that Sen (1977) figures for production were not sufficient to show a no shortage for food as no room for stocks was made.

Defining food available to be a summation of imports and stocks the famine commission reported that the December crop was not eaten till March next year because the rice is not eatable right after harvest. This showed that there was in fact a three month carry over. And the poor crop of 1940 December meant that the harvest of 1941 was eaten as soon as it was harvested. This implies that the consumption in 1941 was above the 'adjusted supply of rice' provided by Sen and that of 1942 was below it. So the amount being higher by 11% as Sen mentions still meant that the amount actually eaten was much lower (Browbrick, 1986).

Another hypothesis of Sen refuted by Bowbrick was that the famine was associated with an uneven expansion of purchasing power and changes in income. Bowbrick (1986) argues that the change in income did not take place. He stated (1986, p. 117) that if 10% of the population had increased their consumption by 3 oz per day, this would have caused a 1.8% change in total demand which would fail to affect a population of 40 million people. Furthermore, Sen mentioned in his analysis that military and civilian workers could exercise stronger demand pressures causes spikes in prices for normal workers.

Bowbrick (1986) argued that if even if one million employees used their higher incomes to buy more food, they could'nt possibly eaten enough to

cause 3 million deaths. Islam (2007), on the other hand, argues that Amrtya Sen's proposition about famine in the absence of FAD in 1943 is based on the supply situation of 1941 aswell. And, the defects of crop statistics in the region were well known, but this could not be a justification for relying on qualitative assessment for certain trade circles only. Islam (2007) criticizes Bowbrick for using the same statistics he deemed to be useless and later based his argument around. He futher states that Bowbrick did not provide an answer to the question, that the decline in aman crop caused a famine in 1943, then why was there not a similar situation in 1941.

And finally, Islam (2007) states that Bowbrick's claim the Sen's margin of error for his estimate for level of production was almost 3000 percent is baseless. Islam (2007, p. 437), however also mentions that Sen's argument that the sole source of food for all section of the rural population was the market was fairly one sided. Instead, he (2007) provided a counter analysis that the ' food prices registered an increase patron-client ties came under strain in the sense that the dominant section of the rural population disengaged themselves from their fixed obligations to feed their dependents'. He (2007) further added that the case of exchange entitlements was not applicable for such dependents.

### **Bibliography:**

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