

Notes

## The Economics of Amartya Sen - A Review

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### Introduction

The economics of Amartya Sen envelopes diverse aspects of economic inquiry ranging from social choice theory to issues relating to poverty and inequality, dimensions of human development and the role of State and social action in enhancing the quality of life. It represents a distinctive approach which cannot be easily bracketed within convenient compartmentalisation of contemporary economic research. This amazing ability to transcend the contours of specialization in the late 20th century academic world sets Prof. Amartya Sen apart from the rest. The awards of the Nobel Prize and Bharat Ratna to this outstanding economist provides an opportunity to explore his diverse world which represents a judicious mix of theoretical insight and empirical evidence, making his research a composite whole.

This review, containing five sections, attempts to provide an overview of Prof. Amartya Sen's major contributions to economic literature. The first section looks into his work in welfare economics and social choice theory. [Section II](#) deals with Amartya Sen's concern regarding economic inequality. [Section III](#) analyses Sen's contributions in the fields of poverty, famines and hunger, while [Section IV](#) deals with Prof. Sen's concept of development and draws attention to his views on economic reforms and liberalization. The final section provides some concluding observations.

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## Section I

### Amartya Sen and Economics of Welfare

Modern public choice theory, a study of the political mechanism and institutions that arrive at collective choice from individual preferences, deals with the decision process inherent in situations where markets fail to provide the best outcome. Modern public choice theory rests on the theoretical underpinnings of Bergson-Samuelson social welfare function and Arrow's impossibility theorem. Kenneth Arrow in his 'Social Choice and Individual Values' presented a pessimistic attitude by demonstrating the inherent instability of collective decisions. Sen's works in the field of welfare economics in the earlier years was profoundly influenced by Kenneth Arrow and his 'Impossibility Theorem' in social choice theory (Arrow, 1951). In simple terms, the theorem states that under certain reasonable conditions, it is impossible for society to logically arrive at a collective choice from individual preferences. Sen, like many other welfare theorists, worked with various dimensions of the 'Impossibility Theorem'. In one of his early works, "A Possibility Theorem on Majority Decisions", published in *Econometrica* in 1966, Sen tried to arrive at a social ordering from individual preferences, by producing more general conditions regarding individual orderings. Later in 1969, in a joint work with Prasanta Pattanaik published in the *Journal of Economic Theory* titled "Necessary and Sufficient Conditions for Rational Choice under Majority Decisions", he shifted his focus from social ordering to rational choice which does not require the assumption of transitivity. Within the framework of relational collective choice rules, they showed that if the assumption of transitivity is relaxed by replacing the transitivity condition ( $xRy \ \& \ yRz, \ \rightarrow \ xRz$  where R means 'at least as good as' and x,y,z are alternative social choices society can make) by a weaker condition of quasi transitivity ( $xPy, \ yPz \ \rightarrow \ zPx$  or even a weaker  $xPy, \ yPz \ \rightarrow \ xRz$ , where P means 'preferred to') then the Arrow Impossibility result does not hold. In his influential *Collective Choice and Social Welfare* (1970), Sen showed the process through which we can arrive at some collective decision if we relax some of the restrictive assumptions of Arrow. This certainly leads to a loss of generality, but Sen feels that such purity of Arrow's Impossibility Theorem is not required in reality. In Sen's own words : "It is worth emphasizing that pure systems of collective choice tend to be more appealing for theoretical studies than in social decisions,.....While purity is an uncomplicated virtue for olive oil, sea air and heroines of folk tales, it is not so for systems of collective choice" [Sen (1970)]. His idea of social choice, unlike Arrow, was elegant not only in terms of theory, but also in providing a more practical solution to the decision makers. In Sen's own words, "The central issue (in social choice) is how far we can go on the basis of widely agreed judgements to arrive at some policy guidance, and it is this problem of practical reason that has to be our basic concern." [Sen (1970)] .

Readers should not get a false notion that Sen's primary contribution to welfare

economics was to redefine the Arrow barrier and suggesting ways to transcend it. The departure from a 'social welfare function' to a 'functional collective choice' rule was indeed an important step. But Sen's contribution to welfare economics after 1970 is equally important. It is all too well known that welfare economics was dominated for long by one particular economic approach called Utilitarianism, advocated by Jeremy Bentham, John Stuart Mill, Francis Edgeworth, Henry Sidgwick, Alfred Marshall and A.C. Pigou. Utilitarianism uses the utility function to analyse social states. Policy actions based on utilitarian consideration however, leads to negligence of the rights and liberties of people, which, to Sen was fundamental to the problem of social choice and welfare in an economy. Thus, Sen's contributions to welfare economics since his publication of *Collective Choice and Social Welfare* (1970) has tended to focus on personal liberty and rights. Utilitarianism, being dependent on summation of individual utilities imposes 'informational constraints' on social choice (Sen, 1970c). Such informational deficiencies of utilitarianism became a hindrance to the growth of welfare economics as a subject. Sen and Williams (1982) in their brilliant work showed how utilitarianism hindered the use of rights, liberties and freedoms of people in social choice.

The development of welfare economics since the 1970s, in which Sen was actively involved, adopted two different approaches to rights, *i.e.* independent rights and integrated rights. In an influential paper "The Impossibility of a Paretian Liberal" published in the *Journal of Political Economy* in 1970, Sen demonstrated that there is a very basic conflict between the rights of people and the fundamental principle of welfare economics, the principle of Pareto Optimality. The theory of independent rights attempts to move out of the dilemma by giving liberal rights priority over social choice. The theory of independent rights looks at rights as desired elements but not in competition with other things that may be judged socially 'good'. The 'rightness' of rights in this case takes precedence over its 'goodness'. An example of this is Nozick's (1974) entitlement theory, where rights are side constraints which cannot be violated. As Nozick (1974) pointed out :

"Individual rights are co-possible; each person may exercise his rights as he chooses. The exercise of these rights fixes some features of the world. Within the constraints of these fixed features, a choice can be made by a social choice mechanism based upon a social ordering..... Rights do not determine the social ordering but instead set the constraints within which a social choice is to be made"<sup>1</sup>

Such independent rights may include the fundamental rights of citizens in a country - right to religious practices, right to live anywhere in the country, right to the basic necessities of life and so on.

In contrast, the integrated approach to rights looks at rights as socially important. There are different rights in societies which may conflict at times with each other leading to possible 'trade-offs' between them. Sen's approach has largely moved towards the 'integrated' direction. Sen has written extensively to highlight the advantages of a framework of 'rights inclusive social choice theory' that sees beyond utilitarianism by including the fulfillment and violation of rights as parts of the emerging states of affairs. The strength of such an analysis lies in : (a) making the need for political value judgements open and explicit, (b) providing a framework for expressing relative weights on right of different types, (c) acknowledging the interdependence of different persons rights and their fulfillment, and (d) finally, moving towards a more acceptable integrated

framework of overall assessment.

## Section II

### The Economics of Inequality

Prof. Amartya Sen's analysis of the dimensions of economic inequality has enriched the understanding of the concept of economic inequality. Starting with the measurement problems of inequality in *On Economic Inequality* in 1973, Sen exposed the limitation of earlier theories which equated the concept of inequality with income and asset distribution. In his Tanner lecture on Human Values on 'Equality of What?' in 1980 which provided a penetrating ethical analysis of the idea of equality, Sen observed that while economists agree on the view that equality is a desirable objective, they have tended to emphasise different indicators of economic equality. John Rawls in his *The Theory of Justice* (1971) and in his article 'Reply to Sen' (1988) emphasised the need for equality in the distribution of primary goods or essential commodities, Ronald Dworkin's *Taking Rights Seriously* (1981) highlighted 'treatment as equals' and 'equality of resources'. Other works in this field concentrated on some other focal variables. Harsanyi (1982), Hare (1982) put equal weights to equal interests of all parties, Atkinson [(1975), (1983)] emphasised the need for pushing the economy to a situation where it ensures the maximisation of social welfare. More recently, there have been attempts at developing an unified indicator of equality by constructing a Human Development Index (HDI) to judge the relative progress made by different countries in the sphere of social welfare. To cover additional dimensions, since 1991, attempt has been made to construct a Human Freedom Index (HFI) based on the work of Charles Humana by incorporating political instability as an additional parameter. Sen, in *his Inequality Reexamined* (1992) emphasised that discussions of inequality is influenced by the choice of a focal variable. The appropriate measure, to Sen, will be some sort of a quality of life measures, like the Human Development Index, which relates to the actual conditions of the people. This has widened the scope of inquiry considerably and helped in the formulation of a meaningful development strategy.

Another dimension of extreme inequality and injustice, emphasised by Sen is the concept of gender bias in a household and in a society. This, to Sen, is important, as "the Persistence of extraordinarily high levels of gender inequality and female deprivation are among India's most serious social failures".<sup>2</sup> His interests in issues relating to female deprivation began to be manifested in his writings in the early 1980s, where Sen explored the reasons for the adverse female-male ratios in the developing countries. In this article 'How is India Doing?' in the New York Review of Books in 1982, and in subsequent essays, Sen dealt with issues of sharp 'deficit' of women and the relative neglect of health and well being of women. Quite interestingly, Sen observed that even a conservative estimates of the number of 'missing' women in India is around 37 million, who would have survived longer if their survival disadvantages were removed. Sen and Sengupta (1983) presented direct evidence on neglect of female children in terms of health care, nutrition and related needs in north India. In fact, Sen and others have been vocal to point out that while stories of female infanticide make headlines in the news papers, social practices that result in excess female mortality and that are far more subtle and widespread have been rarely focussed by the media. The benefits of economic development have disproportionately occurred to men than women. Female deprivation and backwardness have

been related to the intensity of patriarchy and caste hierarchy which include female infanticide, child marriage, seclusion, dowry, sati, polygamy and other patriarchal practices. Kynch and Sen (1983) show that the extent of gender bias is substantially reduced by various influences that give women more voice and agency within the family. Crucial among them are, basic education to all, higher female literacy rate and women's ability to earn and independent income. The positive link between gainful female employment and the status of women also improve the quality of life of the female child, leading to inter-generational transfer of female opportunities.

Prof. Amartya Sen's pioneering contribution to the search for positive influences of women's agency and empowerment has resulted in a number of studies on the factors influencing the quality of life of women in developing countries. Dreze and Sen (1998) provide a competent survey of these studies. Murty, Guio and Dreze (1995) suggested certain crucial linkages that enhance the quality of life of women. Their study with district level data provided empirical evidence that greater female labour force participation results in lower under-five mortality. Similarly, higher female literacy rate was found to be strongly linked to a lower infant mortality rate and under-five mortality rate, the effect being larger on the girl child than the male child.

Sen also argues that the well-being of women is closely interlinked to population policy and how it brings about a change in the fertility pattern. While there is an imperative need for reduction in birth rates, Sen is against the use of forced birth control, as has been practiced in China or in India during emergency in the seventies. Sen believes that in a democracy, coercion has a huge political cost, not to forget the fact that forced birth control programmes can negatively hurt the existing voluntary birth control programme by alienating people. This explains why birth rates continued to be high in these countries in the presence of forced sterilization. Kerala and Tamil Nadu, on the other hand, have birth rates even lower than China's, which is due to their much higher levels of female literacy.<sup>3</sup> As a matter of fact, Sen argues that states which have experienced rapid progress in health indicators are those where women play an important social and economic role. On the other hand, persistence of high level of gender inequality and female deprivation are observed in states which have not done well in economic terms. Gender inequality and deprivation, according to Sen are among the crucial social failures in India, causing other social and economic failures.

### **Section III**

#### **Poverty and Famines**

Prof. Amartya Sen's contributions to the study of poverty and famines were the outcomes of his concern for the poorer sections of society. Rein's (1971) view on poverty may be placed as a contrast : "People must not be allowed to become so poor that they offend or are hurtful to society. It is not so much the misery and plight of the poor but the discomfort and cost to the community which is crucial to this view of poverty". He objected to this view of poverty being uncomfortable to the non-poor, which looks at human beings as 'means' and not 'ends'. Sen thus asks who should be the focus of our concern? Sen argues that while there may be externalities in poverty, they are not the fundamental focus of poverty eradication. Poverty is an ethical issue, and the capabilities and functioning of the poor are the major concerns related to poverty. Sen has also stressed the need for an appropriate measure of poverty, since both head count ratio and

income gap measure suffer from certain limitations. Head count ratio will give misleading signals if people just below the poverty line are helped out of poverty by the state. On the other hand, income gap alone will give no indication of the number of poor. To overcome these limitations, Sen provided a measure of poverty -

$$P = H [I + (1 - I) G]$$

Where

- P = Sen's Poverty Index
- H = Head Count Ratio
- I = Poverty Gap Ratio
- G = Gini-Coefficient of the Distribution of Income of the Poor

Sen showed that P satisfied several desirable properties : it is sensitive to fall in income of a poor person and it is insensitive to increase in income of non-poor; and it increases when income is transferred from the poor to non-poor.

Sen's work in poverty measurement led to a spate of research in this field, and new measures were developed following Sen's ideas. The most widely used of these measures seems to be the Foster-Greer-Thorbecke Index. While analysing poverty and distribution. Sen focussed his attention to starvation. This led to his research on famines in developing countries. Traditional approach to famines have explained this phenomenon as a sharp reduction in food supply in a particular area resulting in hunger, starvation and death. Sen Challenged this conventional wisdom by pointing out that starvation is a situation when some people do not have enough food to eat, which does not necessarily imply shortage of food. Analysing the Great Bengal Famine of 1943, Sen refuted the Famine Inquiry Commission's assertion that the primary cause of famine was a serious shortage in food supply. Empirically, Sen showed (Sen 1981, 1981a) that food production in 1943 was higher than in 1941 even in per capita terms. Similar exercise for Ethiopian famine of 1973 and Bangladesh famine of 1973 revealed that famines can take place without a steep decline in food availability and can even occur in an overall boom condition (Sen 1981 : 194). Sen stressed that famines were the result of market failures or 'entitlement failures' and there is a need for state intervention in correcting inefficiencies in the market mechanism.

## **Section IV**

### **Towards a Meaningful Development Strategy**

Over the years, development economics had come to assign overriding importance to growth of per capita GNP with the implicit assumption that other features of development such as health, education, life expectancy and so on go with it. Thus, income level and its distribution were the cornerstones of development economics for a long time. Sen immensely broadened the scope of development economics by pointing out that "supplementary data on GNP per capita by income distributional information is quite inadequate to meet the challenge of development analysis" (Sen, 1983). Before 1980s or so, Sen's ideas on development largely revolved around the conventional thinking but focussed more on the institutional companies of the underdeveloped economies. By 1980s, his views on development have altered radically towards redefining the concept of development on a more realistic basis.

In his early years, Sen's work on Choice of Techniques(1960) reflects his perceptions on how developing economies can maximise their growth potential. The paradigms of the work was firmly embedded in the institutional complexities and imperfections of these economies. Also to be noticed that Sen's analysis in the earlier years was dynamic and the question of choice rested on intertemporal behaviour of economic variables in the macro-economy. The so-called Roy-Sen model (Sen and Roy, 1959, 1961) investigated the optimal use of investible resources within such a temporal framework.

Sen's research in agricultural economics also reflected the search for rational choice in the context of developing countries. In the early sixties, there was an extensive debate on how to develop the agricultural economy in India. During that time, economists were puzzled by the inverse relation between size of farm and productivity. The debate was of importance to Indian policymakers who were still in two minds as to whether to opt for collective farming or let the market forces operate. The inverse relationship between size and productivity seemed to suggest a preference for the latter and vindicated the new agricultural strategy of the sixties. Sen, however, questioned the validity of such a generalisation by delving deep into the behavioural foundations of Indian farming practices. His findings revealed that a sizable segment of the Indian farmers are driven by a different rationality, a rationality of survival, which forces them to produce at higher than optimal levels. This rationality and not the efficiency of smaller firms explained the higher productivity of small farms. Thus, by extending the debate to the rationality of agriculture in underdeveloped countries [Sen (1962)], Sen observed that if family inputs are imputed at market prices, a substantial proportion of Indian peasant farms which operated at a loss. Such valuable contribution apart, Sen's classic work on peasant economy (Sen, 1966) analysed the peasant family in equilibrium and contrasted equilibrium with home consumption with equilibrium with a combination of home consumption and market sales and helped in clarifying a large number of issues relating to the behaviour of cultivators in undeveloped countries, the impact of technological changes on efficiency of agriculture and the respective roles of State and market in Indian agricultural development.

Sen's thought on the role of State and market in developing countries is perhaps the most influential among his ideas. In his article on the isolation paradox (Sen, 1967), Sen, in the game theoretic framework, showed that if each individual had a strictly dominant strategy, this leads to a Pareto-inferior social outcome. This analytical structure suggested the role of state in social decisions and posed a fundamental question to the efficiency of the market mechanism. Later, in another article "The Profit Motive", he discussed the influential paper by Fredrich Von Hayek on "The Result of Human Action but not of Human Design" where Hayek argued against the alleged virtues of development planning [Sen (1983a)]. In his critique of the Austrian School, Sen argued that the "invisible hand" of the market is based on the assumption of 'harmony of interests' and did not account for the possibility of conflict of interests in society. Market failures can occur due to conflict of individual interests and therefore profit motive and self interest based action may be self defeating.

The contributions of Prof. Amartya Sen to the debate on optimal growth path and capital theory are rich and varied. One of his interesting pieces addressed the intricacies in measurement of capital through a conversion between Buddha and his disciple Subhuti (Sen 1974). Mention must also be made of his early works on investment decisions in Indian iron and steel industries

(Sen, 1965), requirement of working capital in Indian economy (Sen, 1964), trade policy and structural unemployment (Sen, 1960a), pricing process in the Indian Civil Aviation Industry (Sen, 1961) and labour and capital cost [Sen (1956), (1956a), (1956b), (1956c), (1957), (1957a)]. Sen's concern for efficient policy for promoting development can be traced back to some of these early contributions.

Sen started a new wave in development economics with his seminal contribution on the basic needs approach to foster development, which began with the publication of his celebrated book *Poverty and Famines: An Essay on entitlements and Deprivations* in 1981 and his paper "Public Action and the Quality of life in Developing Countries" in the *Oxford Bulletin of Economics and Statistics* in the same year. In *Poverty and Famines*, Sen emphasised that State in developing societies should introduce social security measures like subsidised food distribution schemes, health care networks and so on to contain the adverse effects of 'entitlement failures'. In *Hunger and Public Action* (1988), Sen along with Jean Dreze highlighted two alternative approaches before the developing nations - the 'growth mediated security strategy' and 'support led security strategy'. While the former approach is based on the 'trickle down effect' the latter relies on direct intervention by the state in an economy for making public provision of basic necessities. Sen argued that the support led security strategy is more efficient than the growth-mediated security strategy because the latter creates unintentional affluence in society. As explained by Dreze and Sen:

"A strategy of growth mediated' security is not at all the same thing as the pursuit of economic growth *tout court*, .... The former need not conflict with the satisfaction of basic needs - indeed it is an approach to their satisfaction. Conversely, support led security does not imply surrendering the goal of economic growth. The interconnections and contrasts between the two strategies are more extensive and more complex than would be captured in the simple dichotomy between growth and basic needs".<sup>4</sup>

Sen, nevertheless, recognised that direct intervention by state in providing public welfare services, could involve some trade-off with growth in some productive sectors. The support led security strategy will come into question, if and only if, there exists a remarkably powerful negative trade-off between public support measures and economic growth.

One important message from Amartya Sen's work on development economics is the imperative need to educate people. Sen argues that expansion of education of education, especially at the most basic level, can act as a major force in the direction of generating economic equality, in addition to its immediate role in enhancing equality itself.<sup>5</sup> Sen's stress on education as a tool of self defence and empowerment of the masses underscores the importance of choosing the right means to foster social change. Sen observes that low average literacy rate, low female literacy rate, inequalities in educational attainment among states, persistence of endemic illiteracy among younger age groups, high drop out rate from schools in India are the outcomes of prevailing inconsistencies in educational policy, widespread use of child labour, distorted expenditure priorities and stress on higher education. He argues that in the context of economic reforms in India, educational attainment of the masses must be seen as an essential means of ensuring greater participation of people in the reform process.

Sen's work on development economics is heavily influenced by achievement and failures of several developing economies. Citing the examples of China, South Korea and Sri Lanka, he



has highlighted the critical importance of enabling conditions in enhancing the quality of life in a nation. He is, however, against replicating some features of the success-stories such as privatization and extreme version of liberalization. As he argues :

"To understand what happened in these countries, it is necessary to take a fairly comprehensive view of their economic and social conditions, rather than just proposing to initiate a specific aspect of their performance, namely, their use of market based incentives. Learning from an integrated experience has to be distinguished from simply copying some particular features of it." (Sen, 1995)

The views of Prof. Amartya Sen on economic reform and liberalisation represents a typical blend of markets and government. While markets have to function well and this needs reducing distortions arising from government restrictions, controls and regulations, in order that reforms enlarge economic opportunities for the economy, government intervention in certain desired areas has to deepen and made more effective. Sen has been critical of India's reform programme, because of its lack of emphasis on factors which improve the basic capabilities of people. Sen argues that a major flaw of Indian reform came not from "the correction of government over-activity in some fields" but from "the need to correct government under-activity in other areas" [Aluwalia and Little (1998)].

## **Section V**

### **Unifying Forces in Amartya Sen's Work**

While the vastness of Sen's canvas represent years of relentless research in diverse directions, there is an astonishing unity among diversity in his thought. This coherence and continuity is the hall-mark of Sen's research. It is possible to discern certain crucial threads that unite the diverse world of Amartya Sen.

The first is his uncompromising concern for egalitarianism. This is in evidence if one looks at Sen's theoretical forays and empirical investigations on inequality, poverty, famines, hunger, deprivation, illiteracy and lack of basic needs. His contribution to the issue of productivity of Indian agriculture, measurement of inequality, poverty and famines and the role of state intervention to meet the basic needs of the people reflect this concern.

The second strand that encompasses Sen's work is his abiding concern for humanity and the centrality of human freedom. Here, Sen is firmly led by the belief that the poor are not passive recipients of social grants but are active agents of social change. Sen's emphasis on education, gender equality, health care and nutrition reflect his thinking on the centrality of people in development Programmes. Here, Sen has been considerably influenced by John Rawls, approach of moral philosophy and Rabindranath Tagore's views on education and social upliftment [Sen (1995b)].

A third distinctive aspect of Sen's thinking is his strong belief in a democratic State. Sen believes in the positive role of the checks and balances of a democratic State. He is convinced that with proper monitoring, democracy can contribute a lot to economic development. In a recent article, Sen writes - "one of the remarkable facts in the terrible history of famine is that no substantial famine has ever occurred in a country with a democratic form of government and a

relatively free press.... famines have never afflicted any country that is independent, that goes to elections regularly, that has opposition parties to voice criticisms, that permits newspapers to report freely and to question the wisdom of government policies without extensive censorship".<sup>6</sup>

Fourthly, Amartya Sen's forceful advocacy of the positive role of diverse cultural factors - education, media and collective action brings him much more closer to modern social thinkers like Michael Foucault, Jaques Derrida and Jurgen Habermas<sup>7</sup>. all of whom have emphasised the power of discourse in modern societies and have addressed the role of cultural institutions in the formation of ideology of a society. This transition of Sen's economics from a subject looking at society as embedded in social injustice to an arena of subtle power struggles is also crucial in understanding the gradual evolution of his socio-economic analysis.

Viewed from this perspective, the fitting tribute of the Nobel Committee to Prof. Amartya Sen's economics, is an explicit recognition of this unity in diversity. The citation of the Royal Swedish Academy of Sciences for the award of the Bank of Sweden Prize in Economic Sciences in memory of Alfred Nobel for the year 1998 reads:

"Amartya Sen has made several key contributions to the research on fundamental problems in welfare. His contributions range from axiomatic theory of social choice, over definitions of welfare and poverty indexes, to empirical studies of famine. They are tied closely together by a general interest in distributional issues and a particular interest in the most impoverished members of the society ..... By combining tools from economics and philosophy, he has restored an ethical dimension to the vital economic problems"<sup>8</sup>.

The Nobel Citation also discusses Prof. Sen's contributions to economics in three categories, *viz.*, Individual values and collective decisions, indexes of welfare and poverty and welfare of the poorest and brings out the relevance of Prof. Sen's economic analysis in the context of the new development perspective based on the growing evidence of sustainable economic development in countries where the State has been forthright in addressing the basic needs of the weaker sections, for instance, in China and East Asia.

In retrospect, Prof. Amartya Sen's economic analysis can be viewed as a bridge between the present and the past. His work is almost invariably replete with references of Adam Smith, David Ricardo, Alfred Marshall, Jeremy Bentham, Condorcet, David Hume not to mention the old Sanskrit scholars of India. In the context of contemporary economic science, Prof. Amartya Sen has contributed profoundly to the reduction of tension among different schools of thought in economics, by pointing out the strengths and weaknesses of many of them and by making an effort to assimilate and suggest a reasonable path towards progress and prosperity of the human race.

#### **Notes :**

1. Nozick, R, *Anarchy, State and Utopia*, 1974, pp. 165-166.
2. *India : Economic Development and Social Opportunity*, 1995, with Jean Dreze.

3. Amartya Sen (1995): *Population Policy: Authoritarianism Versus Cooperation*, No. 63, DERP, STICERD, London School of Economics & Political Science, September.
4. Jean Dreze and Amartya Sen (1988), *Hunger and Public Action*, page 183.
5. Amartya Sen (1997) : *What's the Point of a Development Strategy*, DERP No. 3, STICERD, London School of Economics, p. 18.
6. Quoted from "To End Famines, Try Democracy and a Free Press", Editorials/opinion, International Herald Tribune, Friday, October 16, 1998. I sincerely thank Mr. Leo van Houtven of the International Monetary Fund for sending this article to me.
7. See for instance Michael Foucault, *Power/Knowledge*, Jaques Derrida, *Of Grammatology* and Jurgen Habermas, *Law and Modernity*.
8. Quoted from Press Release : The Bank of Sweden Prize in Economic Science in Memory of Alfred Nobel, 1998.

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