

## **Development Ideas of Teacher and student - Noble Laureates (1970 and 2001) (A 21<sup>st</sup> Century Comparative and Critical Note)**

**Prof. Samuelson & Joseph E. Stiglitz, Dr. Kousar Jahan Ara Begum\***

*\*Prof. & Principal, BES COLLEGE, JAYANAGAR, BANGALORE*

### **I. Introduction**

The Noble prize was first awarded in the year 1969. Samuelson was the first American to get it in 1970. This noble laureates has been very flamboyant and versatile writer with physics and mathematics as his pillows. He revolutionized and corrected various classical and neoclassical economic ideas. No doubt, in the initial years he gave greater attention to economic growth and soon could raft in the water's of economic development.

Whereas, the graduate student of Prof. Samuelson & Joseph E. Stiglitz<sup>1</sup> is the latest American to get the noble prize in 2001. He has greatly embarked upon the development as major concern of his writings. He also has a great institutional background in the design of development process (not only as an economist but also senior vice president of World Bank). Therefore a comparison developmental ideas of teacher and student with a quarter century gap is certainly a rewarding one for those concerned with development.

The purpose of this paper is to compare the developmental ideas of Samuelson and Stiglitz place an eye on those aspects, which are not treated by them. For convenience, it is divided into five parts. The Part-I deals with the developmental ideas of Samuleson. The Part-II deals with the agenda for development in the 21<sup>st</sup> century as conceived by the student, Stiglitz. The emerging similarities and differences are noted in Part-III. The tangential ideas for teacher and student concerning development with great emphasis have been discussed in Part-IV. Summary and conclusion are given in Part-V.

### **Part- (I)**

#### **The Developmental ideas of Samuelson**

It is herculian task even to spell out briefly or to mention various contributions of Prof. P.A. Samuelson to economics (partly as a starting point attempted by Joseph E. Stiglitz and consecutively by the Noble Academy). He began his career with the foundation of economic analysis for Doctorate Degree<sup>2</sup> (1940). It is difficult to ponder upon the ideas untouched by him and extremely difficult not to find his articles in almost economic journals<sup>4</sup>. But we take his idea only on development and that too appeared in his internationally acclaimed economics text<sup>5</sup>.

All the economics principles we have learned can now be bought to bear on perhaps one of the most challenging problems of the next quarter- century- the problem of underdeveloped economies there are almost 7 billons people in the world, and at this moment half of them are hungry—if not literally so, certainly malnourished. Only someone who has been pursuing beauty or health on a temporary diet of lees than 1,500 calories per day will know how food can fill one's dreams and pervade every walking thought. For conscience's sake, we are impelled to help. Besides, history teaches us that men do not always starve quietly says Samuleson.

The geographical distribution of natural resources- topsoil, rainfall, dimmable water for irrigation and power, oil and ore deposits- is important, but in a world where trade is increasing possible, grave deficiencies in this respect can be at least partially offset, as the examples of Denmark, Japan, Rhode island, and Israel have shown says Samuleson.

A glance at history-at the Ethiopian and Berber cultures, at ancient China, primitive northwestern Europe, and flowering near eastern culture- reveals that many factors have been dominant, and that the factor of itself cannot be isolated as a discernible determination of Economic development. The Chinese at home were always said to lack enterpreneurship. Yet, their descendants in Malaya and Southeast Asia, with the same genes in their cells, are accused of being too successful at the art of enterpreneurship points out Samuelson.

In another place, he reflects that, material progress does depend on replacement of a belief in magic and superstition by discommend of and belief in the cause- and –effect relations of engineering and science. If it is a nation tradition to abhor manual work or work in general; If its people emphasize the hereafter as against world; they despise material prosperity; if they this courage ordinary honesty in contractual dealings with strangers; if their way of life puts a great premium on current consumption rather provision for the future; if their government officials are corrupt and inefficient- all such cultural traits are, of course not particularly conducive to economics development.

According to Samuelson, often there are strong external economies involved in development. A country agent adviser can simultaneously benefit all the farmers in his region. A railroad can benefit all industry. A multiple-purpose dam has similar externalities. It should be obvious that one can find examples of externalities that do not involve increasing returns that are unrelated to social overhead capitals or externalities. But it should be evident that there is often a strong interrelationship between these three notions- externalities, increasing returns, social overhead capital.

Prof. Samuelson exclaims that technologies soon discovered, however, that this sort of quick miracle is exactly what cannot be accomplished in connection with the development of a whole economy. Indeed, the typical pattern is one of complete disillusionment: after spending several months surveying an underdeveloped country, the expert is thoroughly impressed with the thousands of cultural and economic barriers to progress, so much so that he comes back with a hopeless feeling of defeat. This thoroughly pessimistic conclusion is probably just as wrong in its way as was the optimistic illusion. Experience shows development is truly as hard and slow a process but not an impossible one. To hasten its evolution, spontaneous entrepreneurship and invocation must develop among peoples directly involved. Remember many cultures being with contempt for dirty, hard work- a contempt they often inherit from the colonial elite who used to rule over them. Often, too, they have a contempt for business- for money-grubbing and production. Gradually, they must develop for themselves, within their own mixed cultural pattern, a creative group of producers alert to trying out new ways, alert to consumer wants, responsive to pecuniary risk taking and rewards.

Samuelson says, most of the world consists of less developed countries: countries with low per capita income relative to the advanced economies; countries capable of improvement but now lagging behind the growth rates of the advanced nations. The increasing political self-consciousness of such countries, plus the eagerness of the communist ideology to help them "skip the capitalistic stage of development", reinforces self-interest in finding new sources of mutually advantageous aid and trade- not objects for imperialistic make-work programs. All this and altruism, too, make the development problem of major interest.

As per Samuelson, geography and climate, race and custom, religion and business attitudes, class conflicts and colonialism- each effect economic development but none does so in a simple and invariable way.

The phenomena of increasing returns, externalities, and social overhead capital provide some substance to notions of 'take offs'. 'Spurts, and 'big pushes'. They suggest a scope for supplementation of competitive market forces. But they do not at all necessarily lead to any simple concept of 'balanced growth' is the firm belief of the first American noble laureates.

For Samuelson, the key to development lies in four fundamental factors: population, natural resources, capital formation (domestic or imported), and technology. Population causes sociological problems of explosive growth as death rates fall before birth rates fall; the Malthusian devil of diminishing returns stalks less developed realms. On the constructive agenda, improving the population's health, education and technical training has high priority. The pool of 'disguised unemployment', provides an important manpower source for extra products; the "brain drain" of the talented man to developed countries provides an important threat to human capital of the low developing countries.

Even in densely populated areas, discovery and better utilization of natural resources can help offset the law of diminishing returns. Land reform raises real problems of transition. The process of capital formation investing in soil conservation, irrigation, drainage and so forth- interacts with the natural resource category, just as it does with population- through investing in people.

Samuelson says, technological change interacts with, and is embodied in, new capital goods. Nevertheless, it is a distinct process, and one, which offers much hope to underdeveloped nations inasmuch as they can copy from advanced nations. The experience of Japan, Russia and the United States show that the process of adapting to one's own uses the methods developed elsewhere is not easy. It takes a degree of entrepreneurship and innovation. One task of development is to spur internal growth of the scarce entrepreneurial and commercial spirit.

The other developed idea of Samuelson is rates of productive capital formation in less developed countries are low because of a) poverty, b) lack of bourgeois ethic stressing frugality and acquisitiveness, c) qualitative distortion of saving outlets toward unproductive hoarding of precious objects and inventory and toward luxury real estate or outlets abroad, d) emulation of consumption standards of advanced nations, and e) nationalistic barriers to importing capital on terms acceptable to investors in the advanced countries and to multinational corporation.

Alas! To sum up the Asian miracle and Asian crisis of the last decade of 20<sup>th</sup> century have become too teething problems which have missed the writings of Samuelson on economic development.

## **Part- (II)**

### **Agenda for development in the 21<sup>st</sup> Century-Stiglitz**

The development is the verb more than being it as a word in the dictionary. It is more a practical than theoretical construct. Accordingly, along with the academia <sup>6</sup> like his teacher, Joseph E. Stiglitz has had the opportunities of formulating and implementing development ideas as activities. His present position is sufficient to justify our views. The best expression and with is most up to date of Stiglitz in his speech to the world development conference <sup>7</sup> from which we have gathered his ideas.

Stiglitz points out that this is an exciting time for those of us committed to advancing economic growth, reducing poverty, and sustaining policy reforms in developing countries and countries that are making the transition to a market economy.

The success not just of one but of several countries in breaking out of poverty in which they had been mired for centuries shows that development is possible, in Latin America the debt crisis and the growth of stagnation to which it gave rise seem to be behind us, and the latest data shows that developing countries are faster than industrial countries. Although the financial crisis in East Asia have attracted much attention lately, we should not allow that to obscure the amazing achievements of the East Asian countries. Per capita income in Republic of Korea has increased tenfold in just over three decades. There is almost no one in Korea, Malaysia or Thailand living on less than \$2 a day and Indonesia is within reach of goal. Even Africa, where many countries experienced negative growth in the 1970 and 1980s, has at last started to experience growth, countries such as Uganda that have sustained reforms over several years are showing consistent growth averaging six per cent – still not in the league of China, but far better than was the case a few years ago.

It is now clear that countries that pursue appropriate policies have better chance of economic success than those they do not and there is mounting evidence that economic assistance, when combined with good policies, promote economic growth, especially among the poorest countries. That is, of course, good news not only for the countries involved, the challenge is to understand which policies are appropriate and how to target our assistance to promote growth and reduce poverty most efficiently. There is clearly no magic formula; if there were, the number of success would be far higher than it is. And the fact that the message that we have emphasized have changed over time and that many of the countries that were successful did not take the particular medicine that was then being dispensed by the development community- should, at the very least, induce a modicum of humility as we consider future directions.

Stiglitz says that the development agenda includes a changing role for the state- with a partnership between government and private sector- that involves a catalytic function for government in helping to create markets. In some areas, it includes a more enduring role for government and the private sector- that involves a catalytic function for government in helping to create markets. In some areas it includes a more enduring role for a government in regulating markets. And it requires government to improve their own performance, partly by making more extensive use of market like mechanism, by using and helping to create competition wherever it can. For both developing and industrial countries, the new agenda requires an openness that both group have often resisted. The mutual benefits are clear: developing countries will continue to be an engine of growth for industrial countries, providing a broader variety of products at low prices to their consumer and offering higher returns to their investors. For developing countries, the transfer of resources and knowledge will enable a continuation of the growth.

There is an important role in development agenda for the world bank and other international financial institutions. But what that role is and how it can best be performed must undergo a continuing process of reexamination. There is no room in this agenda for dogma or for doctrinaire approaches. The Washington consensus on basic economic reforms-keep inflation to a moderate level, limit the size of the fiscal deficit, avoid introducing large distortions in the economy, open the economy to foreign competition – issues of fundamental importance and has made important contributions to stabilization in several countries. There is a danger that the Washington consensus has become dogma and as dogma, may sometimes be applied inappropriately. One of the principle advantages of the Washington consensus is its simplicity. But the policy agenda of the coming decade will not be as amenable to such a cookie-cutter approach. Regulatory regimes and legal and other institutional structures should be better adapted to country circumstances. And in many cases reforms are far more technically complex than the Washington consensus suggests. For instance, designing regulations that promote competition in telecommunications and electricity is extremely difficult, as we are learning from the experience of the United States and other.

Stiglitz points out that need to learn from theory and history, from best practices, and from what has worked. But we need to be careful in extracting the appropriate lessons.

The world today is different from the world thirty, twenty, or even ten years ago. Private capital flow are more important today than they were then; this opens up a new opportunities- and new challenges. Thus the fact that some East Asian economies made relatively little use of foreign capital may have little bearing on whether a developing country today should make more extensive use of these flows.

Some of the most successful economies did not follow all the key prescriptions that are commonly given today. Much of the growth in GDP among low-income countries can be accounted for by the growth in China. China focused on creating new enterprises and engendering computation rather than on privatizing state enterprises. Would these successful enterprises have grown even faster had it followed the alternative strategy? Most observers are doubtful. The Republic Korea has been widely criticized during its 1997 financial crises for its failed economic system- yet that system somehow increased per capita incomes tenfold in three decades, a record unmatched by any large country following the prescriptions now commonly proffered.

What work is one set of circumstances may not work in others. Analysis is required to identify the factors that determine success and to establish the counterfactuals (what would have happen in the absence of a particular project or policy). Example of best practices may provide useful and persuasive anecdotes, but they are not substitute for analysis.

We need to be careful not to confuse means with ends. Macroeconomic stability, deficit reduction, and even enterprises reforms are not ends in themselves but means to the broader development objectives describe earlier. If a government reduces its fiscal deficit by cutting back vital investments in infrastructure or in human capital, growth may actually suffer. If a government reduces its fiscal deficit by cutting back on food subsidies and that lead to rioting that undermines the country more or less attractive to foreign investors?

We also must not confuse ends with means: improved education and health are essential means of increase in GDP, but they are also lends in themselves.

The broadened set of objectives is an essential aspect of the development agenda. But while he recognizes a richer set of objectives, the constraints provided by limited resources are no less binding. We must approach these issues with soft hearts and hard head. We face a difficult tradeoff: we might able to reduce poverty more today, but only at the expense of fewer resources- and therefore more poverty- in future.

One of the lessons of East Asia's experience is that there are important instances of policies that increase economic growth, promote equality, and ameliorate poverty. The search for such policies and their implementation must be at center of the development agenda of the future.

If we truly believe in democratic development, we must recognize the limited role of technical advisers. We can describe our judgements about the changing of cultures- the movement to a culture of change and science, where existing practices are questioned and alternatives are constantly explored. (These cultural changes where, of course, the subject of considerable decision in the development literature a half century ago). Deciding how best to effect such changes require a great deal of local knowledge or the corresponding technical expertise. Moreover, democratically elected governments must, in the end, make the judgements about both the tradeoffs and the political consequences. These principles that apply to advisors in advanced as well as in developing economies. Having said that, there are vast areas in which technical expertise's are highly relevant. For example, certain fundamentals in establishing effective banking regulations apply to all countries.

Today we recognize that development is more than the accretion of physical capital and even more than the accretion of human capital. It includes closing the knowledge gap between rich and poor economies. And it includes other transformations, such as those that result in lower population growth rates and changes in economic organization.

The coming decade will be enormous growth in the developing world and a reduction of poverty. It will be a struggle. The challenges are great, but the opportunities are many. The challenge for those of us who advise governments will be to strike those hard to find balances: between the roles of the state and the roles of the private sector, and between the doctrinaire positions that have often characterized the policy advice of the past and agnosticism that gives little guidance to those struggling to make the hard that will affect millions of lives.

Therefore, Stiglitz leaves the bull at horn at the process of development. Because fungibility of funds, foreign investment supporting domestic spending improvshment of future generation, placing greater emphasis on good plans and good implementation and expecting good results underneath the fear of corruption. The corruption especially in developing countries needs more detailed study and approach for streamlining it for the purpose of development <sup>8</sup>.

### **Part- (III)**

#### **Similarities and Differences**

There are a number of similarities and differences between the idea of teacher and student regarding the agenda for development of 21<sup>st</sup> century.

#### **The important similarities between the two are;**

1. For Samuelson, for example it was the growth, which boggled his mind early years. But in the later part he too concentrated on the idea of development<sup>9</sup>. For Stiglitz , it was only development throughout.

2. The development of underdeveloped countries is other similarity between Samuelson the Stiglitz. Indeed both consider the development of developing countries as a demand factor and a supply factor. The countries are treated as suppliers of raw material and large consumers of industrial products. The development of economics of developing countries have been treated both as means and ends for developing countries.
3. There is yet another methodological similarity between Samuelson and Stiglitz with regard to the process of development itself. For example, for Stiglitz macro economic reforms, deficit reduction and even enterprise reform are not ends in themselves but means to the broader development. For Samuelson, most of the world consist of less developed countries with low per capita incomes relative to the most advanced economics, countries capable of improvement but now lagging behind the growth rates of the advanced nations, The increasing political self-consciousness of such countries, plus the eagerness of the communist ideology to help them “skip the capitalistic stage of development”, reinforces self interest in finding new sources of mutually advantageous aid and trade not new objects for imperialistic make-work programs, all this and altruism too, make the development problem of major interest.
4. If it is simply the agenda for development for Stiglitz, it is constructive agenda is more comprehensive and the need of the hour than the simple agenda for development.
5. There is no doubt, somewhat a roundabout similarity in the developmental thoughts. For instance, for Stiglitz, it is transfer of resources and knowledge, which can brings about rapidity in development. The efficient use of resources with knowledge is essential for Samuelson. Therefore, there is a common ground for resources utilization between the two.
6. In the process of economic development capital has occupy a prominent place in the ideas of Stiglitz and Samuelson. The former emphasizes private capital flows (because they are more efficient) for development, while Samuelson pin points the importance of capital formation and increase in productive capital is more productive than the public).
7. Lastly, the economic development is a common play ground for both teacher and student with a given court. The democracy and shift towards democracy<sup>10</sup> has been considered as essential for development for both Samuelson & Stiglitz.

Notwithstanding, the similarities there are a number of differences between Stiglitz and Samuelson in the idea and the process of development.

When we turned to Samuelson, we may find 1970, geography, climate, race and custom, religion and business attitudes, class conflicts and colonialism, political self consciousness, increasing returns, social overhead capital, externalities, take offs, spurts, big pushes, balanced growth, disguised unemployment, brain drain, law of diminishing returns, land reforms, five year plans, paradigmatic shifts out of reach for Samuelson.

When we turned to Stiglitz 2001, transfer of knowledge, role of government, partnership between government & private sector, engine of growth, new opportunities and challenges, foreign capital, macroeconomic stability, reduction in fiscal deficit, Gross Domestic Product, education, health, policies and implementation, trade off, dogma and doctrinaire approach.

Thus, there are differences in the ingredients, phenomena and process of development between teacher and student.

#### **Part- (IV) Off the Tangent**

The process of economic development for 21<sup>st</sup> century requires more than what has been considered by Samuelson & Stiglitz. These include; a) public capital goods, b) Social costs, c) Emergence of Asian Common Market, d) Cultural transitions – theory of marriages, e) tackling the problems of technological shifts, f) the chaos in every day walk of life and g) revolution in information technology.

- a) There are many economists and theories dealing with the causes of increases in public expenditure. But this has given rise to increasing deficit in various countries. In a way, it may be called as democracy in deficit<sup>11</sup>. The deficit has and has been shaking the foundations of democracy. For example, we have PLO, lity, naxalites, Maos (in Nepal and Bengal) and terrorists<sup>12</sup> organizations who have caused irreparable economic damages and also destroyed peace in democracy. Therefore there is need for providing more public capital goods during 21<sup>st</sup> century, it has to be firmly placed in the agenda<sup>13</sup>. But essentially to an economist such a suggestion is surely off the tangent.
- b) Samuelson and Stiglitz have placed emphasis on social over heads. But the social costs have been increasing at a faster rate by the end of 20<sup>th</sup> century. The social costs<sup>14</sup> are going to be all pervasive during the first quarter of 21<sup>st</sup> century. Because there is going to be a faster flow of labour and capital across the board. There will be the social costs of adjustments to be core by all citizens alike.

- c) The trade unions, associations, common markets have been growing in number<sup>15</sup>. There are more such regional unions are likely to come up sooner or latter. The Asian Common Market, Asia African Common Market are some of the hypothetical examples at present. Some of them, in particular the European Common Market has been standing out with root and branch difference with other countries. The common currency<sup>16</sup>, the common tax<sup>17</sup>, common political institutions including the top European parliament are going to throw their weight separately in the process of globalization. This is an inevitable part of the agenda to be taken up and treated more seriously in the days to come and have missed from the analysis of Samuelson and Stiglitz.
- d) After Myrdal's "Asian Drama", the impact of culture on economic development has received not much attention<sup>18</sup>. Therefore, the culture and institution of marriage and its impact on economic development are going to occupy a prominent place not only for movement of individuals but also to the other factors of production. If development is taken to mean the rise in the welfare of an individual, group, society and country, then the marriage as an institution has a very serious global role with great consequence to economic development<sup>19</sup>.
- e) The technological shift is going to occupy another important place in the agenda of development during 21<sup>st</sup> century. A frequent change in the model and more sophistication will be the order of technical progress in all spheres of production. The biotechnological innovations have become a great route for technical change. Therefore, the 21<sup>st</sup> century will experience greater capital obsolescence. If it grows slowly in one pocket then it becomes outdated in other. The moment is beyond the grasp. How far this is to be coped up by developing countries is a big question mark in the forth-coming agenda, which has missed by the teacher and student.
- f) The chaos in every day walk of life is the hallmark of fast evolving economy. The chaos is not a crisis then we could adopt the familiar prices management, it is not an expression of anarchy or lawlessness. It is also not to be equated with terrorism. The chaos will be the part and partial of development process<sup>20</sup>. Therefore, the understanding of chaos and its social control has not been touched either by Samuelson or Stiglitz.
- g) The 21<sup>st</sup> century did not wait for the sudden gust of resolution in technology. This revolution, though contributing for express development has brought in large number of side effects and evils. The virus attack, deliberated checks and business parsimony are growing very fast. The counter-revolution in information technology therefore becomes inevitable. But unfortunately this aspect has not brushed the minds of teacher & student. The ideas of Samuelson and Solo namely the surrogate production function and capital as Jelly product do not hold water during the days of I.T<sup>21</sup>. The I.T has revolutionized the money and capital market. The volatile of the capital and money markets do not figure much in the thinking of Joseph E Stiglitz.

#### **Part – (V)**

#### **Concluding**

An attempt to compare the developmental ideas of the first and the latest made prize winners in the field is really fruit bearing. There are similarities and differences but few are beyond the grasp of both of them. If we begin with Prof. Samuelson, for example, who belongs to the mid of 20th century has many ideas on development. The ingredients of development also have been given careful attention. Much to the dissatisfaction, he has more growth- men'ship.

Whereas Joseph Stiglitz the present Noble Prize winner has been a really a devotee of development. He has sketched development as a phenomenon free from dogma. His firm belief in market is appreciable. He has carefully listed the agenda for development during 21<sup>st</sup> century. However, the things which either don't come to the grips or have remained tangent to the thoughts or no less important parts of development during 21<sup>st</sup> century. The notable omissions of ideas by both are, public capital goods, social costs, emergence of common markets, cultural transitions-theory of marriages, tackling the problems of technological shifts, the chaos in every day walk of life, and revolution in information technology and its impact on development.

Lastly, it is difficult to spell out what needs to be done for development within two decades of 21<sup>st</sup> century itself is a difficult question for development.

#### **Notes & References**

For convenience the contributions of other noble prize co-winners George A. Akarlaf and Michael Sponsor has not been considered here.

- [1]. Indeed Stiglitz began his career with the book, "The Collected Scientific Papers of Samuelson." Vol. I & II, MIT Press, 1965.
- [2]. He had great respect for many economists including the colleagues, students and teachers (may be with differences in Ideas). But Abraham Berson and Joseph A Schumpeter are the two teachers who have left great imprint on him.

- [3]. For example, Samuelson attempted to compute the difference between Marxian values and competitive market values among others. See Samuelson P.A. "The Comparison of Marxian Values and Competitive Market Values – a Critique". *Journal of Economic Literature*, 1969.
- [4]. In the subject economics, as a professional economist, Samuelson has held many positions. He was the chief of economic advisory council to the president, president of economic association, American Economic Association, International Economic association – to mention a few.
- [5]. See, Paul A. Samuelson, "Economics", *Problems of Economic Growth and Development*, McGraw-Hill, New York, 1955, (Ninth Edition) pp. 765-787.
- [6]. For our recent attempt to list a hand count of few of them only see, a) Arnott, Richard, Bruce Greenwald, Joseph E. Stiglitz, 199. "Information and Economic Efficiency". *Information economics and Policy* 6(1): 77-88. B) Greenwald, Bruce and Joseph E. Stiglitz, 1988. *Quarterly Journal of Economics* 101(3): 229-64. c) Greenwald, Bruce and Joseph E. Stiglitz, 1988. "Pareto Inefficiency of Market Economies: Search and Efficiency Wage Models". *American Economic Association Papers and Proceedings* 78:351-55, d) Hellman, Thomas, Kevin Murdock and Joseph E. Stiglitz, 1997. "Financial Restraint: Towards a New Paradigm". *Stanford Graduate School of Business Research Paper*, Stanford, California, e) Sappington, David, and Joseph E. Stiglitz, 1987. "Privatization, Information, and Incentives", *Journal of Policy Analysis and Management* 6:567-82., f) Stiglitz J.E 1990, "The Economic Role of the State: Efficiency and Effectiveness. Dublin: Institute of Public Administration. g) Stiglitz J.E 1994. "Whither Socialism", Cambridge Mass: MIT Press., h) Stiglitz J.E 1996. "Some Lessons from the East Asian Miracle". *The World Bank Research Observer* 11(2): 151-78 and 1) Stiglitz Joseph E., and Mariou Uy, 1996. "Financial Markets, Public Policy and the East Asian Miracle". *The World Bank Research Observer* 11(2)249-76.
- [7]. Stiglitz J.E 1997, "An Aenda for Development in the 21<sup>st</sup> Century", In Boris Pleskovic and Joseph E. Stiglitz Eds., *Annual World Bank Conference on Development Economics*. Pp.17-32.
- [8]. The role of corruption in economic development has been debated at length in all international and national forums. There are two schools of thought, 1) subscribing to the view that corruption helps to faster development, while the others view that corruption retards the on going process of development. See World Bank conference on this aspect. Also see, the News Bulletin issued by World Bank highlighting on this aspect. Also see, the News Bulletin issued by world Bank highlighting these ideas.
- [9]. The period before 1955 was caught up with the concept of growth. In particular, the differences in rate of growth among different countries bothered much.
- [10]. The shift towards democracy is different from the original democracy. It has been a common fall out in Russian federation to shift towards democracy during 1990's, which influenced Stiglitz. But Samuelson gave went to Schumpeterian process of democracy and development.
- [11]. James Buchanan - "Democracy in Deficit: Choice Between Anarchy and Leviathan (legacy left by Lord Keynes), Chicago 1970.
- [12]. It is difficult task to give a long list of organizations operating in various places for reasons unknown to them. Mr. George Bush has in his three trillion budget has earmarked forty billion dollars for defence and an equal amount for development of air services (for security reasons). This has a lot to speak of the economics of terrorism in a democracy.
- [13]. The Chicago Dian James Buchanan divides public goods into a) Public consumer good (or also current goods) and b) Public capital goods. The PUBLIC PEACE is treated as public capital good by him. It is the duty of citizens to meet the full cost of public capital goods which is hither to not done in the democracy.
- [14]. See, the noble laureate Ronald Coase. "Social Costs".
- [15]. For details see, noble laureate James Meade – "The Theory of Customs Union", Oxford, 1958.
- [16]. In the very second year of 21<sup>st</sup> century, the European Community has introduced self-counter balancing European 'Euro Dollar' as against other dollars. This has great global exchange rate problems of management.
- [17]. The European Common Market (ECM) has fully introduced Value Added Tax (VAT) during the last quarter of 20<sup>th</sup> century. In an year or two it is going to introduced single rate VAT throughout the community. This has many hedges and wedges for maximization of trade during the days of globalization.
- [18]. Myrdal Gunnar – "Asian Drama", where he has sketched the culture of middle class and their contribution or destruction to economic development.
- [19]. For the treatment of marriages see, Meade James ed. 1988 – "Economic Development". *The Theory of Marriages, (Part III)*, Macmillan, Vol.5, London.
- [20]. For further rigorous treatment see, Philip W. Andersons, K.J. Arrow, David Pines (eds.). "The Economy as an Evolving Complex System". *Santa Fe Institute Studies in the Sciences of Complexity*, Addison-Wisely Publishing Company, Vol. 5, New York, 1988.
- [21]. For these ideas see, Hercout G.C (ed.) "Capital and Growth" Oxford, 1964.