

Anthropology and Development
in a Globalized India

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An Ethnography of Sericulture from the South

By

Eswarappa Kasi

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P U B L I S H I N G

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Dedicated to my Grandma, and Parents

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CHAPTER ONE

ANTHROPOLOGY AND DEVELOPMENT IN A GLOBALIZED INDIA: AN INTRODUCTION

Anthropology is the study of the rich and diverse societies and cultures that contribute to a global world. Its focus on both sameness and difference links it to those branches of philosophy that analyse what it is to be human. The view from Anthropology is that human beings interpret a material world through their social relations, and through their capacity to think imaginatively - to see the world in different ways.

Comparative studies in society and culture, the familiar and the strange, reveal the way in which different groups - from local communities to nations states - define themselves and influence others. The subject stands at the crossroads of social science and the humanities. Anthropology shares much of its theory and method with Sociology and Cultural Studies, but remains distinct in its emphasis on fieldwork and comparison.

Anthropology allows students to adopt discerning views on major issues in the world today. Once a study of small-scale societies, Anthropology now involves mainly the analysis of modern nation states and trans-national relations. This includes diverse ethnic and religious conflicts, gender relations in cultural context, migration, globalisation, and the importance of indigenous peoples in national and international politics. In the process of development and spread, it has experienced ups and down most importantly during the post-colonial and liberalization and Globalization phases.

Anthropology and Globalization

Globalization is the process by which the people of the world are unified into a single society and function together. The term "globalization" has been used in the social sciences since the 1960s; however, the term did not achieve widespread use until the later half of the

1980s. Since its popularization in the 1980s and 1990s, the concept of globalization has inspired numerous competing definitions and interpretations. The United Nations Economic and Social Commission for Western Asia (ESCWA) has written that globalization "is a widely-used term that can be defined in a number of different ways. When used in an economic context, it refers to the reduction and removal of barriers between national borders in order to facilitate the flow of goods, capital, services and labour...although considerable barriers remain to the flow of labour...Globalization is not a new phenomenon. It began in the late nineteenth century, but its spread slowed during the period from the start of the First World War until the third quarter of the twentieth century. This slowdown can be attributed to the inwardlooking policies pursued by a number of countries in order to protect their respective industries.. however, the pace of globalization picked up rapidly during the fourth quarter of the twentieth century..." (2002).

Saskia Sassen (2006) writes that

"a good part of globalization consists of an enormous variety of micro-processes that begin to denationalize what had been constructed as national - whether policies, capital, political subjectivities, urban spaces, temporal frames, or any other of a variety of dynamics and domains."

Developmental efforts in the last decade have not been as successful as expected in a majority of the developing nations. Except in a few newly industrialized countries, in all the other developing nations poverty has been on the rise, economic growth has slowed down, employment faltered and inflation is on an upward swing. Consequently, the general levels of living are low for a majority of the people in these economies. These low levels of living are manifested in the form of low incomes, inadequate housing, poor health, and low productivity, etc.

A greater portion of the population of developing nations depends on agriculture, the primary sector, for livelihood, for the simple reason that the first priority is for food and clothing. However, the productivity levels in the agriculture sector are low. This is not only because of pressure on land but agriculture in these nations is also often characterised by poor organisation, limited capital and investment. Hence, the developing countries are directing all their development strategies on the productivity levels in rural areas.

Countries like China and India have already shown that agricultural practices should be integrated with animal husbandry, dairying, fisheries, horticulture and sericulture to generate more income for each household.

In India nearly 76.3 percent of the population is living in rural areas and 68.8 percent of it constitutes agricultural population. Indian Agriculture is mainly classified into two categories on the basis of availability of water resources, namely 1) rain-fed or dry land farming and 2) Irrigated farming. Indian agriculture is primarily rain dependent, and rain-fed agriculture supports 40 percent of the total cultivated area (Sandhya Rani-1996). India has a net sown area of over 140 million hectares of which only 41.2 million hectares are under irrigation. Irrigation facilities are inadequate in India. Therefore, agriculture is still a gamble and at the mercy of the monsoons. Generally speaking, 762 MM of evenly distributed rainfall is most favourable for normal agricultural growth. But rainfall has been erratic in India. Moreover, even for most of our irrigation projects, rainfall is the only source. Owing to erratic and inadequate rainfall, most of the dams, tanks and other water resources go dry during summer season. The rain-fed areas are frequently afflicted by periodic droughts, soil erosion, crop fluctuation and other related problems. To overcome drought problems and to improve the status of farmers, the Government of India has given high priority to major irrigation projects in the Five-year plans. So with a view to improve the droughts prone areas, the Government of India has devised and implemented such projects as are helpful for economic development, rural upliftment, eradication of poverty and unemployment. The incidence of poverty and unemployment in rural areas is very high with 33.4 percent of the people living below the poverty line, compared to 20.1 percent of their urban counterparts (Narsaiah and Jayaraju, 1999).

As per 1991 census, the population of India is about 845 million, and India constitutes the second largest populous country in the world. Indian population is expected to touch 986 million by 2001, of which rural and urban populations are expected to be about 660 million and 326 million, respectively. The explosively increasing population has been putting pressure on agriculture with what one may term as diminishing returns over the years. Further, it is intensifying the problem of unemployment. Underemployment is acute in rural areas and those who suffer most from it are agricultural labourers, rural artisans and small and marginal cultivators (Narsaiah and Jayaraju, 1999).

Suitable strategies are needed to overcome the above-mentioned problems. In India, from the beginning, the Five-year plans have been stressing the need for enlargement of work opportunities for the growing millions. This has been one of the supreme tasks of planning. Typical is the statement in the draft outline of India's First Five year plan that a 'development plan is essentially an effort to create conditions for full

employment (Sandhya Rani, 1996).

Indian policy makers and planners have evolved measures to abolish unemployment and poverty. Moreover, they have realised that the employment opportunities created must be productive enough in ensuring minimum income and standard of living to the poor. Therefore, the discovery of productive employment opportunities under integrated rural development assumes vital importance for the economic development of India. In fact, Indian agriculture now is no longer confined to the cultivation of traditional crops alone. Farmers are encouraged to take up activities in non-farm sectors such as animal husbandry, poultry, fisheries, social forestry, sericulture, etc (Ghosh, 1988).

It should be noted that employment and income are the two faces of the same coin. The income of the family could be raised by 1) increasing full utilisation of labour potential in the family itself, 2) eradication of unemployment, 3) raising the daily earnings and 4) involving the family members in income generating activities. As rural areas are rich in natural resources, large employment opportunities in these areas could be created by 1) increasing the area under cultivation, 2) increasing irrigation facilities, 3) encouraging intensive cultivations and multiple cropping, 4) increasing the use of chemical fertilizers and high yield variety seeds and 5) introducing modern technology and co-operative farming for the benefit of small and marginal farmers and, finally, 6) searching for alternative crops which are labour intensive and yield more income. Selecting a highly labour intensive and income yielding cropping pattern suitable for both wet and dry cultivation may bring about changes in employment and income opportunities in rural areas. Change in the cropping pattern is decided on the basis of soil fertility, climatic factors, rainfall and irrigation. It should be noted that irrigation and shift in the cropping pattern towards a more labour intensive and income yielding crop cycle are responsive for high level of labour inputs (Ghosh - 1988).

Green Revolution

The introduction of high-yielding varieties of seeds after 1965 and the increased use of fertilizers and irrigation are known collectively as the Green Revolution, which provided the increase in production needed to make India self-sufficient in food grains, thus improving agriculture in India. Famine in India, once accepted as inevitable, has not returned since the introduction of Green Revolution crops.

The major benefits of the Green Revolution were experienced mainly in northern and northwestern India between 1965 and the early 1980s; the

program resulted in a substantial increase in the production of food grains, mainly wheat and rice. Food-grain yields continued to increase throughout the 1980s, but the dramatic changes in the years between 1965 and 1980 were not duplicated. By FY 1980, almost 75 percent of the total cropped area under wheat was sown with high-yielding varieties. For rice the comparable figure was 45 percent. In the 1980s, the area under high-yielding varieties continued to increase, but the rate of growth overall was slower. The eighth plan aimed at making high-yielding varieties available to the whole country and developing more productive strains of other crops.

The Green Revolution created wide regional and interstate disparities. The plan was implemented only in areas with assured supplies of water and the means to control it, large inputs of fertilizers, and adequate farm credit. These inputs were easily available in at least parts of the states of Punjab, Haryana, and western Uttar Pradesh; thus, yields increased most in these states. In other states, such as Andhra Pradesh and Tamil Nadu, in areas where these inputs were not assured, the results were limited or negligible, leading to considerable variation in crop yields within these states. The Green Revolution also increased income disparities: higher income growth and reduced incidence of poverty were found in the states where yields increased the most and lower income growth and little change in the incidence of poverty in other states.

The Green Revolution has also been criticized as unsustainable. It requires immense amounts of capital each year to purchase equipment and fertilizers. This may lead to a cycle of debt if a farmer is unable to pay off the loans required each year. Additionally, the crops require so much water that water tables in some regions of India have dropped dramatically. If this drop continues, it is possible that the process of desertification may take place. Already, the low water is starting the process of salinization. If continued, this would leave the land infertile, spelling disaster for India.

Sericulture

Sericulture, or silk farming, is the rearing of silkworms for the production of raw silk. Although there are several commercial species of silkworms, *Bombyx mori* is the most widely used and intensively studied. According to Confucian texts, the discovery of silk production by *B. mori* dates to about 2700 BC, although archaeological records point to silk cultivation as early as the Yangshao period (5000 - 10,000 BC). Later it was introduced in Europe, the Mediterranean and other Asiatic countries. Sericulture has become one of the most important cottage industries in a number of

countries like China, the Republic of Korea, Japan, India, Brazil, Russia, Italy and France. Today, China and India are the two main producers, together manufacturing more than 60% of the world production each year.

Silkworm larvae are fed cut-up mulberry leaves, and, after the fourth molt, climb a twig placed near them and spin their silken cocoons. The silk is a continuous-filament fiber consisting of fibroin protein, secreted from two salivary glands in the head of each larva, and a gum called sericin, which cements the two filaments together. The sericin is removed by placing the cocoons in hot water, which frees the silk filaments and readies them for reeling. The immersion in hot water also kills the silkworm larvae.

Single filaments are combined to form yarn. This yarn is drawn under tension through several guides and wound onto reels. Finally, the yarn is dried, and the now raw silk is packed according to quality.

Stages of production

The stages of production are as follows:

1. The silk moth lays eggs.
2. When the eggs hatch, the caterpillars are fed mulberry leaves.
3. When the silkworms are about 25 days old, they are 10,000 times heavier than when they hatched. They are now ready to spin a silk cocoon.
4. The silk is produced in two glands in the silkworm's head and then forced out in liquid form through openings called spinnerets.
5. The silk solidifies when it comes in contact with the air.
6. The silkworm spins approximately 1 mile of filament and completely encloses itself in a cocoon in about two or three days but due to quality restrictions, the amount of usable silk in each cocoon is small. As a result, 5500 silkworms are required to produce 1 kg of silk.
7. The silkworm then metamorphoses and changes into a moth; however, the silkworm is usually killed with heat before it reaches this stage. The silkworms are killed, because once they reach the moth stage, the moth secretes a fluid to dissolve the silk so it can emerge from the cocoon. This damages the cocoon and the silk then becomes a lower quality. Some silkworms are allowed to live to be used for breeding.
8. The silk is obtained from the undamaged cocoons by brushing the cocoon to find the outside ends of the filament.

9. The silk filaments are then wound on a reel. One cocoon contains approximately 1,000 yards of silk filament. The silk at this stage is known as raw silk. Just one thread consists of 48 individual silk filaments. This could lead to at least 4000 yards in a whole cocoon.
10. A yarn can now be formed by combining several threads of silk.
11. Estimated investments of Rs.12,000 to 15,000 (excluding cost of land and rearing space) is sufficient for undertaking mulberry cultivation and silkworm rearing in one acre of irrigated land.
12. Mulberry takes only six months to grow for commencement of silkworm rearing. Mulberry once planted will go on supporting silkworm rearing year after year for 15-20 years depending on inputs and management provided.
13. Five crops can be taken in one year under tropical conditions.
14. By adopting stipulated package of practices, a farmer can attain net income levels up to Rs.30000 per acre per annum.

Significance of sericulture as a development strategy

In spite of limitations, it can be said that Indian agriculture is on threshold of entering into a stage of development characterised by a shift from static technology to a modern technology, in which capital requirement and purchased inputs occupy large share (Hanumappa, 1986). Much of the success of the new programmes will depend upon the ability of the workers to act as growth promoters. So all the new technologies should be built on the ability of the farmers to understand and adopt the new agricultural activities, which will ensure higher income and employment to the rural population.

In this context, sericulture with its vast potential for employment generation in rural areas plays a vital role in alleviating rural poverty and unemployment. It is one of the crop enterprises that are labour intensive and is a most appropriate household activity. It provides gainful employment not only at the stage of the production of mulberry leaves but also at the stage of rearing of silk worms using the output of the former as an input of the latter. Sericulture has been plying a very important role in transforming the tradition bound agriculture into a modernised agriculture by intensive use of land and capital. Sericulture, in which the same farm households integrate production of mulberry at the cultivation level with the rearing of silk worms, provides scope for augmenting employment opportunities and also increasing the income levels of farm households (Sandhya Rani, 1996).

Now, in India sericulture has become the most promising rural activity due to certain reasons like minimum gestation period, less investment, maximum employment potential and quick turnover for the investment. Sericulture generates direct and indirect employment in various ways. Firstly, mulberry cultivation creates employment on farm, and, secondly, cocoon production, which uses mulberry leaves as an input, creates large-scale employment for the family labour of the mulberry growers. There are, instances of non-mulberry growers taking up cocoon production alone as a full-time occupation. They buy leaves from mulberry growers and use them as raw material for cocoon production. Further, the reeling activity is also mainly undertaken in rural areas or semi-urban areas and the employment generated there would help to reduce the rural unemployment in a significant way. In short, sericulture as a whole, by its very nature of activity, creates large-scale employment and income generation opportunities in the rural and semi-urban areas accelerating the economic growth of these areas.

In its long history sericulture in India has experienced many ups and downs. However, during the last 30 years, India has made tremendous progress in the production of mulberry silk for which there is an increasing international demand. There is tremendous scope for the expansion of its production in the country. In recent years sericulture has achieved enormous progress in evolving suitable mulberry varieties and techniques to bring about new silkworm races suitable for tropical climatic conditions. With the evolution and introduction of more productive silkworm races, the productivity has increased and sericulture has become a highly remunerative activity. Attracted by these advantages many more farmers have taken up sericulture and the industry has spread to almost all the States in India (Narasaiah, 1992).

Karnataka has been the leading producer of mulberry silk accounting for more than 50 percent of its production in the country. This State is now regarded as the "Silk Bowl of India". Andhra Pradesh comes next to Karnataka in producing mulberry raw silk. In Andhra Pradesh, sericulture has proved to be a money-spinner for many middle class families. Except for Hyderabad district, almost all the districts in the State have taken to sericulture activity. In 1956, mulberry cultivation in the State was only in 1212 hectares and it went up to 90,800 hectares by the end of 1993-94 (Department of Sericulture, Government of Andhra Pradesh, 1993-94).

Status of Sericulture and its Sustenance in India and Andhra Pradesh

India continues to be the second largest producer of silk in the world and has the distinction of producing all the four varieties of silk. Among the four varieties of silk produced, in 1999-2000, Mulberry accounted for 91.7%, Eri 6.4%, Tasar 1.4% and Muga 0.5% of the total raw silk production in the country. Sericulture is an important labour-intensive and agro-based cottage industry, providing gainful occupation to about 64 lakh persons in the rural and semi-urban areas in India (CSB, 2002). Of these, a sizeable number of workers belong to the economically weaker sections of society. There is substantial involvement of women in this industry.

Though India is the second largest silk producer in the world after China, it accounts for just 5% of the global silk market, since the bulk of Indian silk thread and silk cloth are consumed domestically. Germany is the largest consumer of Indian silk. The sericulture industry is land-based as silk worm rearing involves over 700,000 farm families and is concentrated in the three southern states of Karnataka, Tamil Nadu and Andhra Pradesh (CSB, 1992:2). In India sericulture has become the most promising allied agricultural activity in rural areas for the reasons of minimum gestation period, less investment, maximum employment potential and quick turnover for the investment. Sericulture as a whole, by its very nature of activity, creates large-scale employment and income generation opportunities in the rural and semi-urban areas accelerating the economic growth of these areas.

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The sericulture sector has been identified as a thrust area for generating incremental employment and income, especially amongst the rural poor, and its development is an important element of the overall strategy of poverty alleviation. The Government of India is committed to eradicating

poverty and to promoting sustainable livelihood. These objectives are operationalised through the Five Year development Plans of the Central Government and the States. The following table indicates the major silk producing States in India.

Table- 1: Major Silk Producing States in India (Metric Tonnes)

Serial Number	Silk producing States	Quantity (MT)	
		2000-2001	2001-2002
1	Karnataka	4100	3491
2	Andhra Pradesh	2091	1910
3	Tamil Nadu	355	262
4	West Bengal	526	563
5	Jammu & Kashmir	49	39
6	Other States	95	74
	Total	7416	6329

Source: Ministry of Commerce, Government of India

Once confined to a few pockets in Anantapur and Chittoor districts bordering Karnataka, sericulture has caught up in such a big way that in just 10 years time the State of Andhra Pradesh has come to rank next only to Karnataka, the premier State of silk. Though, almost all districts in the State have taken up sericulture, the main concentration of mulberry silk production is in the four Rayalaseema districts, namely Anantapur, Chittoor, Cuddapah and Kurnool, of which Anantapur, followed by Chittoor, stand first and second in the entire State in producing mulberry raw silk. At present Anantapur and Chittoor show enormous growth rates in sericulture development in Andhra Pradesh. Chittoor has been ambitious of achieving first rank in the production of mulberry raw silk in Andhra Pradesh. If the present tempo of growth were maintained, it would not be a surprise if it achieves its desired aim before long. Given these developments, it is worthwhile to study the changes that have taken place due to sericulture among the farmers, especially among the poor, in Chittoor district.

Background

Background has been organised into two parts. First part dealt with the general review of development, social indices of development,

anthropological approach to development and globalisation and development. The second part dealt particularly about different studies in sericulture in Andhra Pradesh, in particular, and in India, in general.

Development is fundamentally a process of change that involves the whole society – its economic, socio-cultural, political and physical structures, as well as the value system and way of life of people... The concept of development can be viewed as a process of realizing certain goals or values, such as improved health, improved housing, better nutrition, more communications, improved transportation, increased command over resources. On the other hand, "more developed" and "less developed" countries can be comparatively studied, and the empirically found differences between them can be adopted to indicate the meaning of development. Such comparisons generally focused on variations in per capita incomes, percentage of population living in rural and urban areas, percentage of workers in primary, secondary and tertiary sectors, literacy rate, mortality and fertility rates, etc. Apart from such predominantly economic variables, there are sociological variables like division of labour, social differentiation, rationalization of values and modernization in outlook, and political variables like mobilisation and participation, which are associated with socio-economic development of societies" (Alexander, 1993).

Pigou, (1972) described economic welfare as a measurable part of human welfare and well being. The emphasis on increase in per capita income as the main goal of development assumed that in the process of development income would "trickle down" to various sections of the society. Development was understood as a process by which economy gets transformed from small or negative rate of growth of per capita income to a significant and self-sustained increase of per capita income as a permanent long run feature (Adel man, 1961).

In developed countries the proportions of population living in urban areas were more, while in underdeveloped countries a greater proportion of people lived in rural areas. Therefore, proportion of urban population became another indicator of development (Kuznets, 1959).

Industrialization required capital for building factories, installing machines and operating the factories for constructing the infrastructure and various other activities required for the sustenance of manufacturing activities. This led some scholars to identify capital formation as the main engine of economic development. Since capital formation is dependent on the rate of savings in the community, it became another indicator for measuring development (Nurkse, 1953).

Realising the importance of social dimension of development, an international committee recommended the following items to constitute

the indicators of development: health, including demographic conditions; food and nutrition; education, including literacy and skills; condition of work; employment situation; aggregate consumption and savings; transportation; housing, including household facilities; clothing; recreation and entertainment; social security; and human freedoms (UNRISP, 1972).

Early in the sixties Seers (1972) emphasized that development was basically a normative concept, synonymous with improvement, and its objective was creating appropriate conditions for the realization of full potential of human personality. He therefore, stressed that development was to be understood and measured in terms of the satisfaction of certain basic needs, viz., reduction in poverty, unemployment and inequality, and not through growth in GNP or per capita income. GNP can grow rapidly without any improvement in any of these criteria. The most important requirement for the realization of the potential of human personality was the satisfaction of the food requirement. There were also other basic necessities like clothing and shelter. Another basic necessity without which personality could not develop was a Job. To be chronically dependent upon another person even for food was incompatible with self-respect for a non-senile adult (Seers, 1972).

Realization of human potential also requires adequate educational levels, especially literacy, participation in government and belonging to a nation that is truly independent, both economically and politically. As under nourishment, unemployment and inequality dwindle, the educational and political aims become increasingly important objectives of development (Seers, 1972).

Morris D. Morris (1979) emphasised on the welfare dimension to development, by adopting life expectancy, infant mortality, and literacy as the three most universal and important components of development. Basing on them he had developed 'Physical Quality of Life Index' (PQLI) as a composite indicator of development. United Nations Development Programme (UNDP) developed another index of development called Human Development Index (UNDP, 1990). As Alexander observed, "... development was defined as a process of enlarging people's choices... The measurement of human development is focussed on three essential elements of life, viz., longevity of life, level of knowledge, and level of living. Longevity of life as an indicator of developments is based on three considerations, viz., the intrinsic value of longevity, its value in helping people pursue various goals, and its association with other characteristics, such as good health and nutrition... Life expectancy at birth is the indicator of longevity. For the second key component of knowledge, literacy figures are a crude reflection of command over resources needed

for decent living, GDP per capita is the best available indicator, despite some limitations... Therefore, it was advocated to be desirable to construct a composite Index of Human Development (HDI), integrating the three components of longevity, literacy and income" (1993: 261).

Citing Parsons and Polanyi, Alexander further observed rightly that, "Development affects the structure and character of societies in many ways. Transformation in occupational structure and urbanization that occur with economic development are also indicators of sociological transformations in the society... Simple societies are characterized by homogeneity in the characteristics of its members. Save for variations created through the biological factors of sex and age, most of the populations do more or less similar activities. But with development, there is increasing division of labour leading to social differentiation and social stratification. The earlier modes of distribution of goods and services become replaced by market transactions made through the use of money. This makes specialization of roles and increase in market transactions as indicators of development" (1993: 262).

Quite a few liberals and Marxists hold the view that development is related to the relative participation of the deprived groups, who are the marginalized and powerless groups in a society, in the socio-political process. Thus, development is expected to free these sections from all forms of dependency - social, cultural and political - in order that their full potentials as human beings are fully brought out for their blossoming. Thus mobilization of the poor and their participation in socio-political process becomes an important feature of development (Pye, 1960; Palmer, 1980; Alexander, 1993).

In considering the anthropological approach to development, three terms and two spheres of scholarly activity must be distinguished. The terms are "growth", "performance" and "development". The spheres of activity are anthropological contributions to the macro-analysis of social processes, and the implications of empirical field studies for development theory and interpretations (Belshaw, 1977).

"Development" represents an increase in the capacities of a society to organize for its own objectives and carry out its programmes more effectively. The essential element here is organization. Anthropologically speaking, when one society is developed and another underdeveloped, the former is, by comparison with the latter, able to make much more complicated decisions and do more complicated things. It is widely assumed that an improvement in development implies an improvement in satisfaction or welfare. The fact is that some forms of development under some circumstances improve performance while other forms of

development do not (Belshaw, 1977).

Anthropologists find themselves uncomfortable in the movement back and forth between micro field studies and macro interpretations that are increasingly necessary. More than any other social scientist they are aware of the gap between general theory and broad interpretations on the one hand, and empirical, down to earth interpretations on the other (Belshaw, 1977).

Till the emergence of new economic policy of Government of India and consequently liberalization of economic policies it is felt that the responsibilities of a welfare state must be not only as regulator but also provider of infrastructure so that the poor get freed themselves from the cycle of poverty (Gupta, 2004:1-5). Third World countries have tried to attempt and to extricate themselves from the immense burden of international debts and from internal economic morass, by way of adapting new strategies, of development aping the developed countries seeking loans from the World Bank, International Monetary Fund (IMF) and other agencies. As a part of structural adjustment they had to adapt new economic policies in which the state had to shake off its primary responsibilities of providing welfare measures to the poor (Eswarappa and Siva Prasad, 2005). Further, this new development opened floodgates for the entry of local, international non-government organizations (NGO's) as benefactors to the poor alongside the state. Meanwhile the meaning of the concept of development also changed (Eswarappa and Siva Prasad, 2006).

According to Cahill (2002) Globalisation has a long history. He mentioned that the beginning of a global system of trade can be traced back to 1492 when Christopher Columbus presented himself at the court of the Spanish queen Isabella and King Ferdinand. He further viewed that Columbus has obtained financial help for his expedition which resulted in the discovery of the 'new world'. It has led to the rivalry between Spanish empire, British and Dutch, and inaugurated an era of colonialism that opened up most of the world to the Western European powers and endured until the twentieth century (Cahill 2002: 154).

Cahill (2002) opined that the proponents of globalisation argue for its novelty on two counts. The first is that the sophistication of modern technology means that distances have been considerably reduced. The explosive growth in communications technology made to move production from the rich world, where workers have good welfare entitlements, wages and conditions of work, to the poor world where labour costs are so much lower. It permits the global financial system to transmit trillions of dollars each day on foreign exchange markets. The rise of the multinational corporations is an associated phenomenon. Globalisation means that

multinational corporations are attracted to poor world economies because of their low labour costs which go hand in hand with poor social welfare (ibid 154-56). Free markets are the second distinctive feature of the contemporary globalisation as felt by Cahill. Free markets are being introduced throughout the world because of the belief that this represents progress of human kind. Free markets ideology has led to economic modernisation (ibid 157).

There are three models of globalisation which seem to dominate and are clearly distinguishable. Globalisation is the emergence of world systems - usually economic or political systems. These systems are thoroughly developed in the work of Wallerstein. Wallerstein is considered to be the leading exponent of 'world systems theory', though he himself did not see the object of his study in terms of 'globalisation'. Globalisation, perceived as a dual process, in which the world becomes a single place or entity (Robertson 1992; quoted in Milton 1996:143-144).

There is the idea that globalisation is the creation of a particular kind of social condition as a direct consequence of modernity (Giddens 1990; quoted in Milton 1996: 144). Giddens defined Globalisation as, 'the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice-versa' (1990: 64; quoted in Milton 1996:150-1). Globalised social relations flow inevitably from institutionalised ways of acting.

For Giddens, this intensification of social relations takes place in four dimensions: the world capitalist economy, the nation-state system, the world military order and the international division of labour (1990:71; quoted in Milton 1996:151). He has rightly criticised both world systems theory and international relations theory as having produced only partial models of globalisation, since they each concentrate on only one of the four dimensions: the capitalist economy and the nation-state system respectively. It could be rightly argued that Giddens's model is nothing more than an integration of these two images of the world system (Milton 1996:151). The four dimensions of globalisation correspond to what he identified as the four institutional dimensions of modernity: capitalism, surveillance, military power and industrialism (1990: 55-9; quoted in Milton 1996: 151). Capitalism has to do with relations among people, specifically between the owners of capital and the providers of wage labour. Industrialism has to do with relations between people and the material world; it is the production of goods through the use of machines (1990:55-6; quoted in Milton 1996: 151).

For Giddens, modern institutions enable social relations to operate over

distances in time and space that would have been inconceivable in a pre-modern world. For instance, money as a store of wealth and a measure of credit and debt 'provides for the enactment of transactions between agents widely separated in time and space'. It is thus what Giddens called a dis-embedding mechanism, in that it lifts transactions out of a particular context (Giddens 1990:24; quoted in Milton 1996:152). Modern means of communication have lifted discourse out of local contexts and enabled it to technology. It has freed agricultural production from the seasonal constraints that operate in specific locations. It is now possible to guarantee the supply of any commodity at any time (Goodman and Redcliff 1991:96; quoted in Milton 1996: 152).

In the foregoing a discussion was made about the way different social scientists of various hues, and international bodies, viewed development and globalisation. Contrary to the perspectives of economists and others, it also brought out clearly the perspective of anthropologists on development. In light of the above, it would be beneficial to view sericulture as a development strategy and analyse whether the above perspectives hold good in this context. A review of available literature on sericulture in India would provide us an understanding of the role of sericulture in ameliorating the conditions of the rural poor.

The tremendous growth of sericulture in Andhra Pradesh and Karnataka, especially in the backward areas, has led many an institution and individuals to conduct research studies and surveys. Some of these studies are very general in nature and some are purely technical. A brief review of the studies made so far on various aspects of sericulture in India can give us the nature of studies and their intent. This review would help us in focusing our research more sharply in order to understand the role of sericulture in development and in turn the nature of change that was brought about by it.

S. R. Charsley's 'Culture and sericulture' (1982) dwells on the significance of livestock industry and sericulture in the development of communities. It is not only a case study of silk industry of south India but it also offers a very good example for considering the role of social anthropology in development. Increasingly, anthropological interpretations of comparative development have been sought when economic ones prove insufficient. This book is a thorough study of a local community through an industry, its structure, its policies and their implementation. It is able to offer an anthropological interpretation of development and suggests ideas on the part of anthropology in development.

D.L. Narayana's (1979) book, "Economics of sericulture in

Rayalaseema” is an elaborate study of sericulture in the four Rayalaseema districts, namely Chittoor, Anantapur, Cuddapah and Kurnool of Andhra Pradesh. It gives a detailed account of the economics of sericulture, the problems of sericulture and also the scope for its development.

D.V. Ramana's (1987) “Economics of silk Industry in India” gives a picture of the sericulture activity during the eighties and covers both agricultural and industrial aspects. The author discusses the role of sericulture in economic development and the status of sericulture and silk industry in the world. He also presents an analysis of the economics of sericulture bringing out its importance in terms of income and employment generation.

Abdul Aziz and H.G. Hanumappa attempted an overall study of silk industry in their book on "silk industry, problems and prospects". In this book various operations and activities relating to the sericulture and its development are discussed. In "The Development of Indian Silk", Sanjay Sinha, (1986) gives a clear picture of sericulture in the Indian economy. The position of sericulture in India, the products and production systems, the policy and micro-economic issues in silk production are discussed in this book.

"Sericulture for Rural Development" (1986) edited by Hanumappa comprises eleven papers presented by different scholars highlighting sericulture in Karnataka right from mulberry cultivation down to research development and training activities. The book as a whole gives a clear picture of the role of sericulture in rural development.

The book “Sericulture, Society and Economy” (1993), edited by Hanumappa, is a volume of ten research papers by scholars engaged in studying the importance of sericulture to the economy and society. Hanumappa presents sericulture as an economically rewarding enterprise. He says that sericulture, consisting of several sets of activities, offers immense scope for social scientists to explore the interface that sericulture has with economy and society. These essays offer an insight into the processes by which rural development is taking place. The emphasis is mostly on the income, output, socio-economic aspects of reeling, etc.

A.R. Rajpurohit and K.V. Govinda Raju, in the book entitled "Employment and Income in sericulture", present sericulture as a tool which helps to increase employment opportunities in rural economy. The role of sericulture in generating employment and income in silk reeling units is also discussed clearly.

In "Silk Exports and Development", Koshy (1993) has tried to educate the silk exporters about the products they deal with. Part - I of this book

deals with various aspects of sericulture like silk production, processing and procurement and part-II discusses about silk trade and export procedures.

Mahesh Nanavathy (1990), in his book "Silk production, processing and Marketing" gives a clear picture of silk producing activities and a detailed scenario of the history of silk in the world.

In "Sericulture in India", Narsaiah (1992), examines in detail the growth of sericulture in India. This book contributes significantly to a better understanding of the strengths and weaknesses of sericulture operations. It also offers some useful practical suggestions to overcome the various current problems and hindrances faced by the industry, and to ensure overall development.

Ganga and Sulochana chetty's (1991) book " An introduction to sericulture" gives an overall idea of sericulture. In this book the authors discuss in detail the history of sericulture, the importance of sericulture and present a package of practices for mulberry cultivation. They also give an account of the diseases and pests to which silk worms are prone. The physiological aspects of silk worms were also discussed in detail in this book.

The book "Sericulture and Development" edited by Acharya (1993) gives a succinct report of the field studies in sericulture in the Southern States of Karnataka, Andhra Pradesh and Tamil Nadu. The essays cover the whole gamut of issues concerning sericulture and Development, women and children, technology and extension, pattern of sericulture in different agro-climatic zones, problems of sericulture under water scarcity etc.

In addition to the above books, there are a number of papers by scholars expressing their views favouring sericulture as an effective tool for the eradication of poverty, unemployment and for raising the standards of living of the rural masses.

In the paper on "Issues in sericulture activities - Macro perspectives", Hanumappa and Mangala (1986) present brief note on the nature and extent of sericulture and allied activities in Karnataka. They also point out that sericulture has served as both main as well as a subsidiary occupation to thousands of agriculturists in Karnataka.

L. Devasurappa (1980) in his paper " Silk Industry in Karnataka" gives a general idea of the performance of the silk industry in Karnataka. He presents a picture of origin and growth of sericulture in the state. The various activities involved in sericulture commencing from mulberry cultivation to silk weaving are discussed in this paper.

"Mulberry cultivation" by Boraiah (1986) covers not only mulberry