The Sikh Community in Indian Punjab: Some Socio-Economic Challenges

Ranjit Singh Ghuman
Centre for Research in Rural and Industrial Development, Chandigarh

The Sikh religion, though the youngest among the major religions of the world, has come to acquire a distinctive identity. Its followers have emerged as a distinct socio-religious community. The community, however, has been facing formidable socio-economic challenges in view of the changing development pattern and emerging global scenario. The access to quality education and health services to all members of the community so as to enable them to participate in the development process are the foremost challenges. The occupational diversification - shift from farm to non-farm sectors - and the unfavourable sex ratios are still further challenges. This paper argues that all Sikh institutions – religious, social, economic, educational and political – need to address these challenges and thus play a vital role in translating the challenges into opportunities.

Introduction

Sikhism is one of the most prominent, if not the only, surviving links with the several Bhakti movements that made their appearance in various parts of India during the medieval period.[1] That it has stood the test of time, whereas most of the other contemporaneous movements have practically vanished, is however, not a mere accident of history. According to Fauja Singh (2000), this may be explained by three important factors:

(i) the establishment of suitable institutions;
(ii) the firm social commitment of the Sikh movements; and
(iii) the powerful social backing from the business and agricultural classes of the then society .

Further, according to J. S. Grewal:

> Essentially, the ideology of Guru Nanak embodies his creative response not to religious strife but to the total political, social and religious situation of his days. His message was meant to transcend all contemporary dispensations... Guru Nanak founded a new religion as the basis of a new social order. (Grewal, 2005, p. 54).

The Sikhs are the fourth largest religious community in India next to Hindus, Muslims and Christians. Their number increased from 7.85 million in 1961 to 19.23 million in 2001. Their proportion in the total population of India increased from 1.79 per cent in 1961 to 1.89 per cent in 1971 and to 1.97 per cent in 1981. Thereafter it started declining. It was 1.94 per cent in 1991 and 1.87 per cent in

2001.[2] Their decennial growth rate during 1961-1971, 1971-81, 1981-91 and 1991-2001 was 32.0, 26.2, 25.5 and 16.9 per cent, respectively. Compared to the Sikh community, the growth rate of all other religious communities was 23.4, 24.2, 22.8 and 20.0 per cent, respectively, during the corresponding periods (Govt. of India, 2004).

Though Sikhs are present in almost all the states of India and in a large number of countries of the world yet their maximum concentration is in the Indian Punjab. Out of the total population of Sikhs in India, nearly 76 per cent reside in Punjab and 6 per cent in Haryana, Delhi, and Rajasthan. Uttar Pradesh and Madhya Pradesh are the other states with a conspicuous Sikh religious community. Within the state of Punjab, the proportion of Sikhs is approximately 60 per cent, followed by 16 per cent in the union territory of Chandigarh (GOI, 2004).

The rural population of Punjab constitutes 66 per cent of the population and the urban population makes up 34 per cent, whereas in the case of India as a whole, the proportion of rural population is 72.18 per cent (Government of India, 2001, paper 1). In the case of the Sikhs, 79.27 per cent live in rural areas of Punjab. The remaining 20.73 per cent are in urban areas. By comparison, in India as a whole, a little more than 73 per cent of the total Sikh population is resident in rural areas (GOI, 2004). The remaining 27 per cent live in urban areas. In the national context, the proportion of rural/urban population of Sikhs resembles nearly with that of the total rural/urban population. Of India's rural Sikhs, very high proportions are engaged in agriculture and in allied agricultural activities, either as cultivators and dairy-farmers or as agricultural labourers. The urban Sikhs are largely engaged in the tertiary sector.

The community, however, has been facing formidable socio-economic challenges in view of the changing development pattern and emerging global scenario. Improving access to quality education and health services to all members of the community so as to enable them participate in the development process are the foremost challenges. Other issues such as occupational diversification involving a shift from farm to non-farm sectors and the unfavourable sex ratios are yet further challenges before the community.

This paper is a modest attempt to discuss the above mentioned socio-economic challenges to the Sikh community. The next section reflects on the gender scenario in Punjab in general and among the Sikhs in particular. Subsequent sections will, respectively, discuss agrarian change and their occupational and economic scenario; and then the education and health situation. The last section provides a brief summary of the arguments.

The Gender Scenario: Female-Male Ratios

Punjab's ranking amongst the 35 states and Union Territories in India, was 24th in terms of its gender ratio in 2001, in descending order. It is noteworthy that the gender-ratio (number of females per 1000 males) in Punjab was only 874, compared to the all India average of 933 (GOI, 2001, paper 1). The gender-ratio in Punjab declined from 882 in 1991 to 874 in 2001. The Ludhiana district in

Punjab was dubbed as having the lowest gender ratio (824:1000), according to the 2001 census. It is further pertinent to note that in Punjab the gender ratio in the age group of 0-6 years declined from 875 in 1991 to 793 in 2001. Amongst the districts of Punjab, Fatehgarh Sahib has the lowest gender ratio (754:1000) for this age group. Evidently, 207 females in Punjab and 246 females in Fatehgarh Sahib district, respectively, are missing for every 1000 males for this age group (GOI, 2001, paper 1).

Table 1 highlights the fact that the sex ratio among all the religious communities in India declined from 941 in 1961 to 930 in 1971. It declined further to 927 in 1991 from 934 in 1981, and then slightly increased to 933 in 2001.The sex ratio in the Hindu community remained close to the national average. As regards the Muslims, it was slightly lower than the national average in 1961 and 1971 but was marginally higher than the national average from 1981 onwards. The sex ratio among Christians and Buddhists has been noticeably higher than the national average. The Jains also registered a higher sex ratio than the national average during 1971 and 2001.

Although the population census in India dates back to 1872 yet since 1891 it is being conducted successively after an interval of every 10 years. It is only in the 2001 census that a Report on Religious Data has been included (ibid. p. XXVII).

Between 1961 and 2001 the sex ratio among Sikhs was significantly lower than both the national average and that of the other religious communities. There were only 849 females for 1000 Sikh males, compared to the national average of 941 females in 1961. The situation was no better in later years, as is evident in Table 1.

The situation is particularly serious in the age group of 0-6 years. The sex ratio among the Sikhs in this age group was 780 and 786 females for 1,000 males, in Punjab and India respectively, in 2001. Compared to this, the sex ratio in this age group among all the communities was 798 and 927 females for 1,000 males in Punjab and India, respectively (GOI, 2004). To spread awareness and sensitize the people, an innovative programme, *Nanhi Chhaan*, was launched on August 27, 2008 at the Golden Temple, Amrtisar (Dhillon, 2009). The most important objectives of the programme were to save the girl child and the tree as both need tender care to bloom. Both the girl child and the tree provide protective cover like a mother. Without girl child there would be no human race and without tree the world would be a desolate desert. Both these mothers display one of the rarest quality and true spirit of nature – the selfless service.

Table 1: Religion-wise Gender Ratio in India: 1961-2001

Religion	1961	1971	1981	1991	2001
All Religious Communities	941	930	934	927	933
Hindus	942	930	933	925	931
Muslims	935	922	937	930	936
Christians	989	986	992	994	1009
Sikhs	**849**	**859**	**880**	**888**	**893**
Buddhists	981	962	953	952	953
Jains	924	940	941	946	940
Others	1022	1011	1010	982	992
Religion not stated	976	863	881	887	900

Source: Computed from Government of India (2004), *Census of India, 2001, The First Report on Religions Data (Abstract***)**, New Delhi; p. XXVII.

It is also important to note that the proportion of the Sikh population in the age group of 0-6 years in the total Sikh population of India is 12.8 per cent, as compared with 15.7 per cent in all communities. In Punjab, the proportion of Sikhs in this age group is 12.1 per cent as against 13 per cent in all communities (GOI, 2004). The alarmingly low sex ratio in this age group among Sikhs will have very serious long term repercussions for social and cultural stability in the state in general and amongst the Sikhs in particular. It is an indication that in the near future male Sikh youth may have to search for brides from amongst the non-Sikh communities, either in Punjab or elsewhere.

Such a serious imbalance in the gender ratio is a disturbing phenomenon. It is an indication that the practices of female feticide and infanticide may still be prevailing in Punjab in general and among the Sikhs in particular in spite of the fact that it is against the Sikh religious philosophy and ethics.

Significantly, the sex ratio among Sikhs in the United Punjab (before the Partition of the country into India and Pakistan in 1947), had been highly skewed against the females. In 1881, there were 765 females per 1000 males among Sikhs, while the province as a whole (all religious communities) had 843 females per 1000 males. The situation had not improved even by 1901 (Kaur, 2005, pp. 125-126).

Sikh religious teaching holds females in very high esteem. According to Gurū Granth Sāhib: "*bhande jaminane bhande niminane, ...So kion manda aakhie, jitu jame rajaan'* (Gurū Granth Sāhib, p. 474). (It is by woman, the condemned one, that we are conceived, and from her we are born…, why should we call her evil from whom great men are born?). The Sikh *Rehatnama* advises the Sikhs not to keep any social ties with those who kill their daughters (Padam, 1989, p. 65).[3]

Historically, a number of cultural, social and economic factors have been responsible for the low sex ratio among the Sikhs. The preference for a male

child is particularly pronounced in Punjab because of its martial and agricultural traditions. Punjabis have always preferred sons to daughters, because in times of war their sons could go to the battle and during peace time they could plough the fields (Singh, 2007, pp. 191-195). According to the National Family Health Survey (NFHS-2) 29 per cent of the parents in Punjab wanted more sons than daughters. Nearly 86 per cent of the parents wanted at least one son. Only 0.4 per cent of the parents wanted more daughters than sons (Inderjit Singh, 2007, p. 220).

The preference for sons in the Punjabi psyche is deep rooted in the history of Punjab. The main reasons usually given for son preference were: to run the family; make the family and parents respectable in society; for social and economic support; to inherit the family property; and to take care of parents in their old age (Bose and Mira, 2003). Further, the very location of Punjab, as a border state, made it and its female population vulnerable to outside invaders over the centuries. Due to the subjugation and atrocities committed on local women by the victorious invaders, women came to be perceived as a liability in Punjabi society (Agarwal, 2003). The need for more males to work in the fields (Punjab being primarily an agrarian society) is also responsible for son preference. The custom of dowry and post-marriage liabilities are among other significant reasons for son preference.

More generally, other forms of violence against women remain high in Punjab. A recent report (*The Tribune*, 2008) highlighted the fact that women continue to be unsafe in Punjab, as per the information revealed by the Punjab State Women's Commission. At least one rape and kidnapping of two women are reported daily in Punjab. A women is murdered every third day and at least one case of molestation is registered every day. At least 12 women commit suicide every month and the same number are killed for dowry. And all this is happening in a state where the majority of the residents are Sikhs.

Agrarian Change, Employment and Occupational Structure

Traditionally, the main occupation of the Sikhs has been agriculture, along with defence, transport and small scale business. Nevertheless, they have diversified into many other occupations over time. It is worth noting that the number of Sikhs employed in major government departments, up to the second decade of the 20th century, was insignificant as compared with other religious communities (Singh, 2005). The spread of education, and shrinking opportunities in agriculture and in rural areas, have been largely responsible for the increase in non-agricultural employment. Immigration and employment opportunities in other countries of the world have also made a significant contribution towards their entry into new occupations. Nevertheless, the rural Sikhs in Punjab are still predominantly engaged in agriculture and allied agricultural activities.

It is important to note that the work participation rate[4] and the nature of occupations are major determinants of the economic position of a community.

Besides, there is a very high correlation between work and dignity. The work participation rate among Sikhs is lower (37.7 per cent) than the average work participation rate of all religious communities (39.1 per cent) in India, according to the 2001 census. However, the male work participation rate among Sikhs is higher (53.3 per cent) than the average work participation rate among all religious communities (51.7 per cent) in India. Female work participation rate among Sikh women is lower (20.2 per cent) than the average work participation rate among all the religious communities (25.6 per cent) in India (GOI, 2004).

In the case of Punjab, however, Sikhs are slightly better placed as compared to the average work participation rate among all religious communities. The overall work participation rate in Punjab is 37.5 per cent compared to 38.2 per cent amongst the Sikhs. However, in the case of the male work participation rate, the overall rate is 53.6 per cent compared to 53.2 per cent among Sikhs. It is interesting to note that the female work participation rate (21.5 per cent) is higher among Sikhs than the overall female work participation rate in Punjab (GOI, 2004). Such an outcome may be attributed to one of the three spiritual trinities (the basic tenets) of Sikh philosophy – *dharam di kirat* (earning livelihood through honest and truthful means). This also implies dignity of labour.

At the all India level, 31.7 per cent of the total workers are cultivators amongst all religious communities whereas the proportion of cultivators among Sikhs is 32.4 per cent. In the case of agricultural labourers, the corresponding proportions in all the religious communities and in the Sikh community are 26.5 per cent and 16.8 per cent, respectively. Thus, at the all India level nearly 58 per cent of the workers, from amongst all communities, are engaged in agriculture (as both cultivators and labourers) compared to 49 per cent amongst Sikhs. In the case of non-agricultural activities, the corresponding proportion in all religious communities and in the Sikhs is 42 per cent and 51 per cent, respectively (GOI, 2004).Thus, at the all India level, Sikhs are relatively better placed, as employment in the non-agricultural sector is more rewarding than that in the agricultural sector.

The occupational structure of Punjab presents a different situation, as compared to all India, as far as the Sikh community is concerned. The proportion of the population in the agricultural workforce amongst all religions communities in Punjab is 39 per cent (22.6 per cent cultivators + 16.3 per cent agricultural labourers). Compared to this, the corresponding proportion amongst Sikhs is 50.4 per cent (32.1 per cent cultivators + 18.3 per cent agricultural labourers) (GOI, 2004). In rural areas it is still higher amongst Sikhs, as most of the Sikh workers in the rural areas are engaged in agriculture, as cultivators and labourers, and in allied agricultural activities.

It is significant to note that the age-old folk-saying '*Uttam kheti, madhaam vapaar, nakhidh chakri'* (Agriculture as a profession is supreme, trade comes next and service is subservient), (Kohli and Singh, 1992) seems to have been reversed. Global experiences and economic theory tell us that agriculture is subject to the law of diminishing returns. In fact, nature's productive system is subject to decreasing returns and agriculture is all the more governed by the law

of diminishing returns. This means that, after a certain stage, the successive marginal doses of inputs generate a lower and lower marginal output.

As a result of diminishing returns, per hectare net return from agriculture starts to decline. This is what has happened to the highly acclaimed green revolution in Punjab (Ghuman, 2001). The sheen of the green revolution started dimming in the late 1980s. In fact, the annual trend growth rate of per hectare return, over variable costs, in major crops (wheat, paddy and cotton) was negative during the 1990s. In the case of wheat-paddy (combined) it was minus 2.18 per cent per annum and in the case of cotton it was minus 14.24 per cent per annum (Ghuman, 2001). Furthermore the predominance of the paddy-wheat cropping pattern in Punjab resulted in a serious depletion of the water table (Singh, 2007; Romana, 2006). Excessive uses of fertilizers and pesticides, over-mechanization and declining fertility of the soil have further aggravated the problem. In fact, in the form of rice cultivation, Punjab has been exporting its precious sub-soil water to other states of India and abroad.[5]

At the same time, the labour absorption capacity in Punjab agriculture has been declining ever since the mid 1980s. The employment of the workforce in cultivating and rearing crops declined from 480 million man-days in 1983-84 to 430 million man days in 1996-97 (Gill, 2002). It is likely to have declined further during the last decade or so. All this has led to Punjabi farmers being heavily indebted. More than 65 per cent of Punjab's farmers are in debt, next only to Andhra Pradesh and Tamil Nadu. The average debt burden per farmer household in Punjab is to the tune of Rs. 41,576 (GOI, NSSO, 2005a). This was the highest among all the states in India and 3.3 times higher than the national average.

According to estimates generated by Punjab Agricultural University, Ludhiana, the total debt burden of the Punjab farmers had already reached about Rs. 200,000 million to Rs. 260,000 million. Nearly 89 per cent of the farmer households in Punjab are in debt and, and debt per farmer household amounted to Rs. 201,427 (Sukhpal Singh, et. al., 2007). According to Shergill (2010), the total farm debt in Punjab amounted to Rs. 303,941 million during 2007-08. In the absence of suitable policy measures, nearly 64 per cent of the farmers in Punjab (those with up to 10 acres) may not be able to repay the debt/loan and are likely to fall into a debt-trap during the next 10 to 15 years (Ghuman, 2008). For all these reasons, nearly 37 per cent farmers in Punjab have already expressed their willingness to opt out of agriculture (GOI, NSSO, 2005b). About two hundred thousand of the small and marginal farmers in Punjab have already been pushed away from farming, during 1990-91 and 2000-01 (Karam Singh; Singh and Kingra, 2007). However, in the absence of alternative employment opportunities they find themselves beleaguered in the situation. The suicides by the agricultural workforce (both cultivators and labourers) are being largely attributed to such a desperate situation in the agricultural sector (AFDR, 2000; Gill, 2005).

The Indian government earmarked Rs. 700,000 million in its annual budget of 2008-09 for waiving, and one time settlement of agricultural loans. In Punjab 0.42 million farmers benefited to the sum of Rs. 12000 million (*The Tribune*,

2009).This amount for loan waiver and one-time settlement covered only outstanding institutional agricultural loans, as on 31 December 2007, which was only about 25 per cent of the total institutional loans and 1.7 per cent of the gross domestic product of India (Ghuman, 2008b).What is needed as a lasting solution is diversification of the agricultural sector and of the rural economy (Ghuman, 2008b).

Although there are no official and authentic estimates of the number of farmer suicides, some rough estimates indicate that the number of such suicides in Punjab may have been between eight and ten thousand during the last 15 to 20 years. Besides farmers, agricultural labourers, whose number may be anywhere between 3000 and 4000, have also been committing suicide during the same period.[6] A recent study (PAU, 2009) has revealed that 1757 farmers and 1133 agricultural labourers committed suicide in two districts of Punjab, namely Sangrur and Bathinda, during 2000 to 2008. The study further highlighted the fact that 73.31 per cent of farmers and 59.22 per cent of these agricultural labourers had committed suicide as a result of indebtedness. The average outstanding debt on farmers (who committed suicide) ranged from Rs. 2.95 lakhs (district Bathinda) to Rs. 3.36 lakh (district Sangrur).The average size of land holding of those farmers who committed suicide was 2.35 hectares in Sangrur and 1.26 hectares in Bathinda.

The most important causes of suicides have thus been serious economic distress and consequent indebtedness. According to another study (Gurpreet Singh, 2008) the debt burden of those farmers and agricultural labourers who committed suicide was Rs. 270,419 and Rs. 57,121, respectively. Public policy responses have so far been far from satisfactory (Gill and Singh, 2005) since no government in Punjab recognized the gravity of this serious phenomenon so as to address it at the policy level.

In the absence of alternative employment opportunities, cultivators and agricultural labourers are compelled to remain in agriculture. Most of the workforce (both cultivators and labourers) are either only apparently employed or are grossly under-employed, with zero or negligible marginal productivity. This means that, even if they were to be withdrawn from agriculture, the total production of the agricultural sector would not decline. Rather, the per capita productivity and earnings would improve significantly. Thus, what is required urgently is the shifting of the agricultural workforce from agriculture to non-agricultural activities. The ever rising rural unemployment, the dismal growth rate of employment in other sectors, the shrinking labour absorption capacity of agriculture, the declining employment opportunities in agriculture, (Bhalla, 1987 and 1989; Gill, 2002), plus the high growth rate of the labour force and the predominantly capitalist agriculture in Punjab combined together provide a strong rationale for the development of a rural non-farm sector (Gill and Ghuman, 2001 and Ghuman, 2005).

The development experience of present-day developed countries and their pattern of growth indicate that as an economy attains higher stages of growth the share of agriculture in the gross domestic product (GDP) declines (Kaldor, 1967; Kuznets, 1965). The size of the agricultural workforce in the total

workforce also declines with growth and development. Punjab must learn from the global experience and evolve some long term policy measures for a smooth transition of its workforce from agriculture to non-agricultural sectors.[7] Such a transition is inevitable but very painful if left to market forces alone. To minimize transitional pains, the state must make an effective and pro-active intervention within an appropriate policy framework.

Unfortunately, whatever shifting of agricultural workforce is taking place in Punjab it is largely because of 'push' factors and not because of 'pull' factors, that is, the workforce is being pushed out of agriculture and not being pulled in by non-agricultural sectors. Moreover, the proportion of rural workers employed in non-agricultural sectors in Punjab ranges from 15 to 20 per cent (Ghuman, 2005). They, too, are largely employed in the unorganized sector at very low wages.

Thus, what is required is the development of a rural-non-farm sector (RNFS) in a systematic manner. This is possible only through the development of rural-based-rural linked, rural-based-urban linked and urban-based-rural linked enterprises and activities. It would further require development of 'mandi-towns' (marketing towns), 'agri-polis' and/or focal points, etc. that have a natural growth potential. The vertical integration of agricultural produce to the industry would help the development of RNFS in a big way (Basu, 1992; Chadha, 1986; Friedman, 1976; Ho, 1986; Seth, 1992; and Ghuman, 2005).

The opening of the Wagah and Hussainiwala international borders for trade, between India and Pakistan, would certainly help the development of the non-farm sectors/employment in both the Indian and Pakistan Punjabs and in the adjoining regions (for a detailed analysis on this, see Ghuman, 1986; 2005b; and 2006).

The Education and Health Environment

Modern growth theories have established that economic growth and development cannot attain an optimum and self-sustaining path without the development of human resources (Romer, 1990; Lucas, 1993; Benhabib and Spiegel, 1994; Barro and Sala-i-Martin, 1995; Baroo, 2001; Krueger and Linddahl, 2001; Chadha, 2004; Becker, 1964; Nelson, 1966; Qian, 2007; World Bank, 2002; and Tilak, 2001). All countries that made appropriate investment in human capital formation in the past have achieved a high growth trajectory in their national and per capita income (OECD/UNESCO, 2002).

However, in terms of its literacy rate, Punjab ranked 16th amongst the states and Union Territories of India in 2001, in descending order. The state of Punjab stood at 25th and 14th ranks in the descending order in terms of male and female literacy rate, respectively, in 2001 (GOI, 2001, paper 1).The literacy rate in Punjab is high, compared to the all India average, but within Punjab the literacy rate among Sikhs is slightly lower than the overall average of the state. The overall literacy rate in Punjab as per Census, 2001, was 69.95 per cent compared to 67.3 per cent amongst Sikhs. The overall male literacy rate in

Punjab is 75.2 per cent as compared to 72.9 per cent amongst Sikhs. In the case of the female literacy rate, the corresponding ratios are 63.1 per cent and 61.2 per cent, respectively (GOI, 2004). The literacy rate in rural Punjab was 65.16 per cent as compared with 79.13 pr cent in urban Punjab, in 2001 (GOI, 2001, paper 2). However, what is important is not simply the literacy rate, but in fact the level of skills and quality of education as they play an important role in the socio-economic development of the community and the region.

Health is another important determinant of human development. In fact, the level of educational attainment and health indicators account for a two-third weightage in the human development index (HDI). Only one-third weightage has been assigned to per capita real income (UNDP, 2006, p. 394). The publicly funded education and health services in rural Punjab, where most Sikhs live, are grossly inadequate. Of the total number of students in Punjab's four universities (Guru Nanak Dev University, Amritsar; Punjab Agricultural University, Ludhiana; Panjab University, Chandigarh; and Punjabi University, Patiala) during the academic session 2005-06 only four per cent were of rural backgrounds, the latter defined as those whose schooling up to 10th and 12th standard had been in rural schools (Ghuman, Singh and Brar, 2006). Moreover, the proportion of rural students in higher professional education was only 3.71 per cent, during the academic session 2007-08 (Ghuman, Singh and Brar, 2009).

About 40 per cent of the rural households and 31 per cent of the urban households in Punjab cannot afford to pay the cost of general higher education, let alone medical, engineering or other professional education, for even one child. The high charges of the private service providers are beyond the reach of nearly 80 per cent of Punjab's population, with the proportion as high as 90 per cent in rural areas (Ghuman, Singh and Brar, 2007).

The public delivery system in education and health in Punjab (and especially in rural Punjab) has almost collapsed since 1980. Government schools in rural Punjab are turning into schools exclusively for students from weaker sections, scheduled and backward castes. The proportion of such students in these schools ranges from 65 to 80 per cent (Joshi, 2003; Kaur, 2004; Rani, 2007).

A recent National Health Survey (IIPS, 2007) provides a strong indicator of the collapse of the public health delivery system in Punjab. According to this survey, about 80 per cent of urban people and 81 per cent of rural people use private health services, which are much costlier than the government health services, reportedly because of the poor quality of public health services. Moreover, in 67 per cent of the rural households in Punjab there was, reportedly in 2005, at least one drug addict. About 73 per cent of the drug addicts are in the age group of 16-35 years (Thukral, 2009).

Moreover, more than 22,000 teaching posts have been vacant for many years in the government schools in Punjab and a very high proportion of them are in the rural schools (*The Tribune*, 2008).The rural government schools also suffer from serious inadequacies in terms of safe drinking water and toilets, especially separate toilets for female students.

About 1.5 lakh children, in the age group 6-14 years, in Punjab were out of school, during the academic year 2007-08 (Sarava Sikhyia Abhyan Authority,

2008). Another recent study (NGO, 2007), highlighted that 5.0 per cent children in the rural schools were out of school (including those never enrolled).The study further indicated that out of the fourth and fifth standard students in Punjab, 60 per cent and 36.5 per cent, respectively, could not read a second standard textbook. Furthermore, 58 per cent of the fifth standard students were not able to divide a simple sum by 8 and 63.3 per cent could not subtract a two-digit figure from a higher figure. The difference between the private and government schools ranges from three to four percentage points. This is a grave reflection on the quality of rural education, both in government and private schools, whereby students fail their examinations in higher standards. This explains the high drop out rate in the middle, high and senior secondary schools in rural Punjab. This, in turn, explains the exclusion of rural students from education at secondary, senior secondary and higher levels.

Estimates indicate that in 69 per cent of the rural households in Punjab not one member has matriculated. In the case of agricultural labour households, this proportion is as high as 90 per cent (Ghuman, Singh and Singh, 2007b). Rural households neither have access to quality education nor can they afford it.

This vicious cycle deprives many rural people of quality education, thus adversely affecting the development process in Punjab, in general but more specifically the Sikh community. Punjab's political leadership, across the parties, needs to compete in socio-economic development rather than in non-developmental political populism. For more than a decade both the leading political parties (Congress and Shiromani Akali Dal-SAD), have provided free electricity to the agricultural consumers and for certain other socially backward classes. The amount of subsidy increased from Rs. 14359 million in 2005-06 to Rs. 26017 million in 2008-09 (PSEB, 2008, 2009). This competitive political populism (which ill accords with Sikh religious principles) is being pursued to the detriment of education and health delivery systems.

At the policy level, the government is withdrawing from both education and health. These services are being pushed into the hands of for-profit private service providers. Moreover, the privatization of education and health services (and thereby reckless commercialization) is being justified in the name of efficiency. In connivance with the civil bureaucracy, the agenda of all Punjab's political parties is apparently to create a rationale for the entry of private service providers by wrecking public institutions. The academia and affluent sections of population are *de facto*, party to such an agenda (Ghuman, 2008c). The consequent exclusion of common and rural people has serious implications for Punjab's future socio-economic development and that of Sikhs in particular.

The unrestricted dependence on *laissez-faire* policy (policy of non-intervention) would further lead to the exclusion of a large section of the population from access to quality education and health services, especially in rural Punjab. And rural Punjab is predominantly inhabited by the Sikh community. One of the natural manifestations of such a policy would be their exclusion from the growth process itself. This, in turn, would have serious and far-reaching socio-political and economic implications for the growth of Sikh community in particular and that of Punjab economy in general.

According to Lucas (1993, p. 270) the major engine of growth is accumulation of human capital or knowledge and the main source for the difference in living standards among nations and communities is the difference in human capital. It is well recognized in the literature, especially with regards to East Asian economies, that capable human resources can create miracles as their skill and knowledge have the capacity to produce increasing returns. Raw human resources are translated into human capital in the schools, colleges and universities. Amongst the main determinants of development, education is deemed the most significant as it empowers people resulting in social transformation. Physical capital plays an essential but decidedly a subsidiary role.

Further, as stated in the very first Human Development Report "The real wealth of a nation is its people. And the purpose of development is to create an enabling environment for people to enjoy long, healthy and creative lives. This simple but powerful truth is too often forgotten in the pursuit of material and financial wealth" (UNDP, 1990, p. [i]). The ability of a nation to absorb, adopt and implement new technology from abroad is a direct function of its domestic human capital stock (Nelson and Phelps, 1966).

The political leadership, civil bureaucracy and policy makers in Punjab need to understand that the accumulation of human capital or resources is the key growth driver. The difference in human capital has been the main source of difference in the living standards among nations, along with the private returns (Tilak, 1994; Psacharopoulous, 1994; and Psacharopoulous and Patrinos, 2002). Even the World Bank (2000) recognizes higher education as a 'merit good' and hence advocates that higher education deserves public funding. As such, mindless privatization/commercialization of education is a very poor substitute for publicly funded educational institutions.

Unfortunately, successive governments in Punjab (incidentally, all headed since the 1980s by Sikh Chief Ministers, whether belonging to the Congress or the Akali Dal) followed a policy of withdrawal from education and health. The share of social services (primarily education and health) in the State's budget on revenue account declined from 31.35 per cent in 1970-71 to 19.79 per cent in 2005-06. The share of education, sports and culture declined from 22.17 per cent in 1970-71 to 12.57 per cent in 2005-06. The share of health and family welfare decreased from 7.24 per cent in 1970-71 to 3.82 per cent in 2005-06. It is just to supplement that the budgeted expenditure on education and health came out to be only 2.35 per cent and 0.67 per cent, respectively, of the state's gross domestic product (GDP) during 2004-05 (GOP, 2008). This is far below the recommendation of 6 per cent of GDP made by the Government of India's Education Commission, popularly known as Kothari Commission, way back in 1968 (GOI, 1968).

The combined share of social and economic services (known as development expenditure) has decreased from 65.26 per cent in 1970-71 to 40.19 per cent in 2005-06. By comparison, the share of general services (mainly classified as non-development expenditure) increased from 34.74 per cent in 1970-71 to 57.76 per cent in 2005-06 (Govt. of Punjab, 1974; and 2008), so

reflecting the state's changing priorities. Without public funding for health and education the majority of Punjab's population continues to be deprived of access to these services and inevitably Punjab's economy and society as a whole deteriorates further.

The shift in priority of public expenditure by the Government of Punjab may partially be attributed to the increased expenditure on law and order so as to tackle the problem of militancy during 1980-1992. As a consequence, the government squeezed allocation to social sectors taking it as an easier option. Unfortunately, the priorities in allocating public expenditure have not been resettled even after a period of over 15 years since the ending of militancy.

Role of Punjabi Diaspora

The Punjabi diaspora, predominantly comprising Sikhs is now settled across almost every country of the world. Most of them have earned good fortunes abroad and are willing to contribute in the socio-economic development of Punjab. Their willingness and potentialities must be harnessed to supplement the developmental efforts of the state of Punjab. Presently many members the Punjabi diaspora are sending community remittances through the development of hometown or village welfare associations. Such a phenomenon has gained momentum over the last 10-15 years, though, earlier too, individual were doing philanthropic activities. The community/individual remittances have been largely focused on activities, such as charity, infrastructure, human development and recreational and, of course, income-generating programme for community (Thandi, 2008).

There is an urgent need to provide a global platform to the overseas based Sikh community settled across various countries of the world. They should have their own global networking. Punjabi diaspora, located in various countries of the world, with estimates ranging from 2 to 5 million[8] needs to be mobilized so as to contribute to the development of social capital in Punjab. Lack of institutional mechanisms and lack of appreciation of the potentialities have been the major reasons for the unsatisfactory involvement of the diaspora in the development of Punjab, specially the rural Punjab (Dhesi, 2008). There is, thus, a need to strengthen global networking of the Sikh religious community. The community should create a global endowment fund to invest in social institutions such as education and health. The institution of a Sikh think tank is also the need of the hour.

The government of Punjab, the NGOs and religious institutions must make earnest efforts to rope in the Sikh diaspora for the development of the state, particularly the rural areas. There is a need for its greater incorporation into the decision making pertaining to social sector development. That would require networking and a nodal agency comprising the representatives of diaspora, NGOs, religious institutions and the government. The diaspora must be assured and convinced about their potential role in social sector development. Their participation and contribution must be given due recognition. They must have

the confidence that their contribution is in safe hands and is being invested without any pilferage.

The Punjab has already experienced certain success stories where the Punjabi diaspora has made a significant contribution towards the provision of modern amenities in sanitation and hygiene, education and health sectors. That has been made possible by the joint efforts of the government, village community, NGOs and overseas Sikhs (Bassi, 2008, Gill, 2008 and Tatla, 2008). Such efforts must be replicated and encouraged.

Some Conclusions

The most serious challenge, in the socio-economic domain, to the Sikh community is to provide access to quality education and health services for all members of the community. The unfavourable sex-ratio is also a major challenge to the community. Shifting the workforce from farm to non-farm sectors and from low-productivity to high productivity employment avenues are the other imminent challenges. All these challenges are inter-connected. All the Sikh institutions – religious, social, economic, educational and political – need to address the above mentioned imminent challenges so as to translate them into opportunities. That is the only way to empower the Sikh community and contribute to the welfare of mankind.

An educated, skilled and healthy person can be a better social, economic and political agent. So what is expected from the Sikh religious bodies, the Sikh community, the Punjabi diaspora and Sikh leadership in all spheres of life, such as political, social, academia, civil bureaucracy, etc. is action-oriented thinking to provide quality education and health services to all members of society. These services should be made available to them at an affordable cost. Those who cannot afford to pay for these services should be taken care of by the Sikh religious bodies and the overseas Sikh community. The government, too, must be persuaded to enhance its budgetary allocation to the education and health sectors in Punjab.

[**Acknowledgement**: The author is grateful to the editor and unknown referee whose comments and suggestions proved immensely useful in improving the quality of the paper. The usual disclaimers apply.]

Notes

1. Sikhism comprises the religion and social system of the Sikhs. It originated with Guru Nanak (A.D. 1469-1539), the first of the ten Gurus of the Sikhs. The Sikh religion was nurtured and developed further by the succeeding nine Gurus up to 1708 (Sethi, 1972).
2. Historically, the proportion of Sikh population (both in Punjab and India) has not been very large. During the pre-Independence period (before 15 August 1947), the percentage share of Sikh

population oscillated between 0.86 (1881) to 0.92 (1901). It increased to 1.20 per cent in 1911, 1.29 per cent in 1921, 1.55 per cent in 1931 and 1.79 per cent in 1941. In 1951, it was 1.72 per cent (Krishan Gopal, 2005, p. 240).The total number of Sikhs in the British Punjab increased from 1.14 million in 1868 to 2.13 million in 1901. Their percentage share in the total population of Punjab, in the above mentioned two years, was 6.50 and 13.90, respectively (Kaur, Anurupita, 2005, p. 122).

3. *"Meena aur masandia, mona kuri jo maar, hoi sikh vartan karih aant karega khuar"* [(He who keeps social relations with the hypocrites, wicked and killer of the daughter will have to suffer ultimately at the hands of those people), *Rahetnama Bhai Parihlad Singh*, edited by Piara Singh Padam, p. 65)].
4. Persons in the age group of 14+ and up to 65 years constitute the workforce. Work participation rate means percentage of total workers (main and marginal) to the total population.
5. The share of area under wheat and paddy in the total cropped area in Punjab was 31.8 per cent and 6.0 per cent, respectively, in 1965-66 which increased to 44.10 per cent and 33.34 per cent in the year 2006-07 (Government of Punjab, 1971, 1987 and 2008). This cropping pattern led to an enormous increase in the number of tubewells. The number of tubewells in Punjab increased from 1.92 lakh in 1970-71 to 12.32 lakh in 2006-07 (Government of Punjab, 2008).
6. Rough estimates generated from various reports by the farmers' unions and some individual academics appeared in newspapers from time to time and in a recent study (PAU, 2009). The phenomenon of suicides by the farmers and agricultural labourers became visible in Punjab during the 1990s. It is, however, worth noting that no government, irrespective of their political affiliation, has taken up the issue seriously. Since 1992 government leadership in Punjab has alternated between the Congress and Shiromani Akali Dal-Bhartiya Janta Party.
7. The share of primary sector (mainly consisting of agriculture, live-stock and dairying) in net state domestic product (NSDP) declined from 54.38 per cent in 1961-62 to 34.34 per cent in 2006-07 (Ghuman and Gill, 2009). The proportion of total agricultural workforce (both cultivators and labourers) in Punjab's total workforce declined from 55.29 per cent in 1991 to 39.40 per cent in 2001 (Government of India, 2002). The percentage share of total agricultural workforce in total rural main workers in Punjab declined from 79.8 in 1971 to 53.5 in 2001 (Census of India, 1971 and 2001).
8. No reliable estimates are available on the number of overseas Punjabis. The numbers mentioned in the text are based on various guess estimates floating around in official and unofficial circles,

both documented and undocumented (Dhesi, 2008; p. 427). Thandi (2008) gives an estimation of Punjabi diaspora, predominantly Sikhs, of between 1.5 to 2 million.

References

AFDR (2000) *Suicides in Rural Areas of Punjab: A Report*, Association for Democratic Rights Punjab, Patiala unit, Punjab, India.

Agarwal, Anurag (2003) *Female Foeticide: Myth and Reality*, (Starling Publishers, New Delhi).

Barro R.J. (2001) Human Capital and Growth, *American Economic Review*, Vol. 91 (2), pp. 12-17.

Barro, R.J. and Sala-i-Martin, X. (1995), *Economic Growth*, (McGraw Hill, New York).

Bassi, Raghbir S. (2008) 'The Contribution of Non-Resident Indians: Constraints and Possibilities' in Dhesi Autar S. and Gurmail Singh (eds.), *Rural Development in Punjab: A Success Story Going Astray*, (Routledge, New Delhi), pp. 482-493.

Basu, D.N. and S.P. Kashyap (1992) 'Rural Non-Agricultural Employment in India: Role of Development Process and Rural-Urban Employment Linkages', *Economic and Political Weekly*, Vol. 52, NO. 52, pp. A173-89.

Becker, Garry S. (1964) *Human Capital: A Theoretical and Empirical Analysis, with special reference to Education***, (**Chicago, University of Chicago Press).

Benihabib, J. and Spiegel, M.M. (1994) 'The Role of Human Capital in Economic Development: Evidence from Aggregate Cross-country and Regional U.S. Data', *Journal of Monetary Economics*, Vol. 34 (2), pp. 143-174.

Bhalla, Sheila (1987) 'Trends in Employment in Indian Agriculture, Land and Asset Distribution', *Indian Journal of Agricultural Economics***,** vol. 42, No. 4, pp. 537-60.

_____ (1989) 'Employment in Indian Agriculture: Retrospect and Prospect', *Social Scientist***,** Vol. 17, Nos, 5-6, pp 3-21.

Bose, Ashish and Mira Shiva (2003) *Darkness at Noon: Female Foeticide in India*, (Voluntary Health Association of India, New Delhi).

Chadha, G.K. (1986) 'The Off Farm Economic Structure of Agriculturally Growing Regions: A Study of Indian Punjab', in R.T. Shand (ed.), *Off Farm Employment in the Development of Rural Asia*, Vol. 2, (Canberra National Centre for Development Studies).

____ (2004 'Human Capital Base of Labour Force: Identifying Worry Spots', *The Indian Journal of Labour Economics***,** vol. 47 (1), pp. 3-38.

Dhesi, Autar S. (2008) 'Overseas Punjabis and Rural Development' in Dhesi, Autar S. and Gurmail Singh (eds.), *Rural Development in Punjab: A Success Story Going Astray*, (Routledge, New Delhi), pp. 427-445.

Dhillon, Harish (2009) 'The daughter and the tree: Both need tender care to bloom', *The Tribune*, May 6, p. 9, Chandigarh.

Friedman, J. and M. Douglas (1976) 'Agropolitian Development: Towards a New Strategy for Regional Planning in Asia', in *Growth Pole Strategy and Regional Development Planning in Asia*, by United Nations Centre for Regional Development, as quoted by Subrata Dutta.

Ghuman, Ranjit Singh (1986) *Indo-Pakistan Trade Relations*, (Deep and Deep Publications, New Delhi).

____ (2001) 'WTO and Indian Agriculture: Crisis and Challenges – A Case Study of Punjab', *Man and Development*, Vol. 23, No. 2, pp. 67-98.

____ (2005) 'Rural Non-Farm Employment Scenario: Reflections from Recent Data in Punjab', *Economic and Political Weekly*, Vol. 50, No. 41, pp. 4473-4480.

____ (2005b) 'Softening of Borders Between India and Pakistan', *Man and Development*, Vol. 27, No. 4, pp. 29-38, (CRRID, Chandigarh).

____ (2006) 'Political Economy of India-Pakistan Trade Relations and SAARC', Kulwant Kaur & Baljit S. Mann(eds) *South-Asia', Dynamics of Politics, Economy and Society***, (**Knowledge World, New Delhi); pp. 293-307.

____ (2008) 'Socio-Economic Crisis in Rural Punjab', *Economic and Political Weekly*, Vol. 43, No. 7, pp. 12-15.

____ (2008b) 'Why Waiver is not enough: Non-institutional loan a big burden on farmers', *The Tribune*, March 6, 2008, p. 11.

____ (2008c) 'Make Higher Education Affordable', *The Tribune*, Chandigarh, August 5, p. 14.

Ghuman, Ranjit Singh and Kanwaljit Kaur Gill (2009) 'The Development and Structural Changes in Punjab Since 1960s: An Economic Analysis', in Dhanwant Kaur and Narinder K. Dogra (eds.), *Samajak Vigiyan Pattar*, (Publication Bureau, Punjabi University, Patiala), p. 136.

Ghuman, Ranjit Singh, Inderjeet Singh and Lakhwinder Singh (2007b) *Status of Local Agricultural Labour in Punjab*, (The Punjab State Farmers Commission, S.A.S. Nagar, Mohali, Punjab, India).

Ghuman, Ranjit Singh, Sukhwinder Singh and J.S. Brar (2006) *Rural Students in Universities of Punjab*, (Punjabi University, Patiala).

____ (2007) *Unit Cost of Higher Education in Punjab: A Study of Universities and their Affiliated Colleges*, A study sponsored by AIU, New Delhi.

____ (2009) *Professional Education in Punjab: Exclusion of Rural Students*, (Punjabi University, Patiala).

Gill, Anita and Lakhwinder Singh (2005) 'Farmers' Suicides and Response of Public Policy', *Economic and Political Weekly*, Vol. 41, No. 26, pp. 2762-68.

Gill, Gurdev S. (2008, 'Modern Approaches to Village Sanitation', in Dhesi Autar S. and Gurmail Singh (eds.), op. cit., pp. 494-513.

Gill, Sucha Singh (2002) 'Agriculture, Crop Technology and Employment Generation in Punjab' in S.S. Johl and S.K. Ray (eds.), *Future of Agriculture in Punjab*, (CRRID, Chandigarh), pp. 56-98.

____ (2005) 'Economic Distress and Farmers Suicides in Punjab', *Journal of Punjab Studies*, Vol. 12, No. 2, pp. 219-238.

Gill, Sucha Singh and Ranjit Singh Ghuman (2001) 'Changing Agrarian Relations in India: Some Reflections from Recent Data', *The Indian Journal of Labour Economics***,** vol. 44, No. 4, pp. 809-26.

Government of India (1968) *Report of the Education Commission: 1964-1966*, New Delhi.

____ (2001) *Census of India, 2001*, Paper 1 of 2001, *Provisional Population Tables*.

____ (2001) *Census of India, 2001, Paper 2 of 2001, Rural Urban Distribution of Population*, Series 4, Punjab.

____ (2004) *Census of India 2001, The First Report on Religion: Data abstract*.

____, NSSO (2005a) *Indebtedness of Farmer Households*, NSS 59th Round.

____, NSSO, (2005b) *Situational Assessment Survey of Farmers*, 59th Round, January-December 2003.

Government of Punjab (1971) *Statistical Abstract of Punjab, 1970*.

____ (1974) *Statistical Abstract of Punjab, 1973*, Section on Public Finance.

____ (1983), *Statistical Abstract of Punjab, 1982*.

____ (1987), *Statistical Abstract of Punjab, 1986*.

____ (2008), *Statistical Abstract of Punjab, 2007*, Section on Public Finance.

Grewal, J.S. (2005) 'Foundation of the Sikh Faith', in Grewal, Reeta and Sheena Pall (eds.), *Five Centuries of Sikh Tradition: Ideology, Society, Politics and Culture*, (Manohar Publishers, New Delhi), pp. 39-54.

*Gurū Granth Sāhib***,** p. 474.

Ho, Samuel P.S. (1986) 'The Asian Experience in Rural Non-Agricultural Development and Its Relevance for China', World Bank Staff Discussion Papers, No. 757, p. 1.

IIPS (International Institution for Population Sciences) [2007] *National Family Health Survey (NFHS-3), 2005-06*, Table No. 13.12, p. 437.

Joshi, Manita (2003) *Primary Education in Rural Punjab: A Case Study of Ropar District*, M. Phil. Dissertation (Unpublished), Punjabi University, Patiala, Punjab, India.

Kaldor, Nicholas (1967) *Strategic Factors in Economic Development*, (Carnell University Press, Ithaca, New York).

Kaur, Anurupita (2005) 'Sikhs in the Early Census Reports', in Grewal, Reeta and Sheena Pall (eds.) op. cit., pp. 121-149.

____ (2005) Report of the Census of the Punjab, 1868 [Appendix to General statement No. 1. 1881 (pp. 351, 367, 370, 372, 375); 1891, pp. 211, 217, 218; and 1901, pp. 202, 203, 206 as reported by (Kaur, Anurupita, 2005), ibid.].

Kaur, Jaswinder (2004) *Changing Scenario of Primary Education of Ferozepur District, M. Phil. Dissertation* (Unpublished), Punjabi University, Patiala, Punjab, India.

Kohli, Surinder Singh and Bachan Singh (eds.) (1992) *Punjabi Akhaan Kosh*, (Panjab University, Publication Bureau, Chandigarh), p. 6.

Krishan, Gopal (2005) *Sikh Spatial Dispersal: 1881-2001* in Grewal, Reeta and Sheena Pall (eds., op. cit.), pp. 239-257.

Kruger, A.B. and Lindahl, M. (2001) 'Education for Growth; Why and For whom?' *Journal of Economics Literature*, Vol. 39 (4), pp. 1101-1136.

Kuznets, Simon (1965) *Economic Growth and Structure*, (Oxford and IBH Publishing Company, New Delhi).

Lucas, R.E. (1993) 'Making a Miracle', *Econometrica*, Vol. 61, p. 270.

Nelson, Richard and Edmund Phelps (1966) 'Investment in Humans, technological diffusion and economic growth', *American Economic Review*, Vol. 61, pp. 69-75.

NGO, Pratham (2007) *ASER (Rural) Report* (2006).

OECD/UNESCO (2002) *Financing Education – Investment and Returns: An Analysis of the World Education Indicators*, www.oecd.org and www.unesco.org/publications.

P.A.U. Ludhiana, Department of Economics (2009) *Farmers and Agricultural Labourers Suicides due to indebtedness in the Punjab State- A Pilot Project of Sangrur and Bathinda Districts*, The project was commissioned by the Government of Punjab.

Padam, Piara Singh (ed. 1989) *Rehatnama* Published by Chatar Singh, Jeewan Singh, Amritsar, (*Rehatnama Bhai Parhilad Singh*), p. 65.

Psacharopoulous, George (1994) 'Returns to Investment in Education: A Global Update', *World Development*, Vol. 22, No. 9, pp. 1325-43.

Psacharopoulous, George and Harry Patrinos (2002) 'Returns to Investment in Education: A Further Update', *World Bank Policy Research Working Paper, 2881*, Washington, D.C.

Punjab State Electricity Board (PSEB, 2008) *Aggregate Revenue Requirements and Tariff Revision Petition for the Financial Year 2008-09*.

____ (PSEB, 2009) *Estimates of Financial Resources 2008-09 and 2009-10***.**

Qian, X. and Smyth, R. (2007) 'Education and Economic Growth: Complementarities or Threshold Effects? Some Empirical Evidence from China', *The Indian Economic Journal*, Vol. 55(2), July-September, pp. 24-38.

Rani, Kavita (2007) *A Socio-Economic Analysis of Primary Education in Rural Punjab: A Case Study of District Bathinda*, M. Phil. Dissertation (Unpublished), Punjabi University, Patiala, Punjab, India.

Romana, Gurjinder Singh (2006) *Sustainability of Alternative Cropping System in the Cotton Belt of Punjab***,** Ph.D. Thesis (Unpublished), Punjabi University, Patiala, Punjab, India.

Romer, P.M. (1990) 'Endogenous Technological Challenge', *Journal of Political Economy*, Vol. 94 (5), pp. 1002-36.

Sarva Sikhya Abhiyan Authority (2008) *Door to Door Survey*, reported in *Punjab Mail Online* (22 March 2008), appeared under the title 'Punjab to Track out of School Kids'.

Seth, Ashwani (1992) *The Rural Non-Farm Economy – Process and Politics*, Geneva, ILO.

Sethi, Amarjit Singh (1972) *Universal Sikhism*, (Hemkunt Publishers, New Delhi).

Shergill, H.S. (2010) *Growth of Farm Debt in Punjab: 1997 to 2008*, (Institute for Development and Communication, Chandigarh).

Singh, Fauja (2000) 'Development of Sikhism under the Gurus', in Joshi, L.M. (ed.), *Sikhism*, (Publication Bureau, Punjabi University, Patiala), pp. 1-2.

Singh, Gurpreet (2008) *Farmers Suicides in Punjab: A Socio-Economic Analysis*, M.Phil. Dissertation, Punjabi University, Patiala.

Singh, Inderjit (2007) *Sex Ratio Among Punjabis Within and Outside Punjab: Differentials and Determinants*, Ph.D. Thesis (unpublished), Punjabi University, Patiala, pp. 191-95 and 220.

Singh, Joginder (2005) 'Transition from Socio-Religious to Political Concerns in Sikh Periodicals of the Early Twentieth Century' in Grewal, Reeta and Sheena Pall (eds.), *op. cit*, pp. 151-167.

Singh, Karam (2007) *Punjab: The Dance of Water Table*, **(**The Punjab State Farmers Commission, S.A.S. Nagar, Punjab, India).

Singh, Karam, Sukhpal Singh and H.S. Kingra (2007) *Status of Farmers Who Left Farming in Punjab*, (The Punjab State Farmers Commission, Government of Punjab), pp. i-v.

Singh, Sukhpal, Manjeet Kaur and H.S. Kingra (2007) *Flow of Funds to Farmers and Indebtedness in Punjab*, (The Punjab State Farmers Commission, Government of Punjab), p. ii.

Tatla, Darshan S. (2008, 'The Punjabi Diaspora's Impact on Punjab's Economy and Society: An Assessment', in Dhesi Autar S. and Gurmail Singh (eds.), op. cit., pp. 446-459.

Thandi, Shinder S. (2008) 'Evaluating the Potential, Contribution of the Punjabi Diaspora to Rural Development' in Dhesi Autar S. and Gurmail Singh (eds.), op. cit., pp. 446-459.

The Tribune (2008) 'Women in state unsafe: Panel', Chandigarh, September 24, p. 4.

____ (2008), 18 July, Chandigarh.

____ (2009) 'What has SAD-BJP done for Punjab, asks Manmohan', Chandigarh, May 3, p. 24.

The World Bank (2000) *Higher Education in Developing Countries, Peril and Promise*, (Washington, D.C, USA)., pp. 42-43 and 69.

____ (2000) *World Development Indicators 2000*, **(**Washington, DC, USA).

____ (2002) *Constructing Knowledge Society: New Challenges for Tertiary Education*, **(**Washington, D.C. USA).

Thukral, Gobind (2009) 'Drug Addiction Spreads', *The Tribune*, May 9, p. 13.

Tilak, J.B.G. (1994) *Education for Development in Asia*, (New Delhi, Sage Publications).

____ (2001) 'Education and Development: Lessons from Asian Experience', *Indian Social Science Review*, Vol. 3 (2).

UNDP (1990) *Human Development Report*, p. (i).

____ (2006) *Human Development Report*, New York, USA, p. 394.