

Executive Summary

Profile of Development and Change

Punjab is a classic example of a fast developing economy with agriculture at its base. It enjoys the credit of ushering the green revolution in the country. A progressive mix of irrigation, fertilizers and high-yielding variety seeds laid its foundation; a process, which was further strengthened by agricultural credit societies, rural link roads, village electrification, and a variety of extension services. Punjab today contributes nearly 40 per cent of wheat and 60 per cent of rice procured for distribution through the public distribution system. Along with this, the state went in for promoting the white revolution, resulting in the highest per capita availability of milk to the people. A regular agro-based and agro-oriented industrialization has been another prominent feature of the state economy. No less commendable has been the efforts at strengthening the infrastructure, particularly irrigation and power. The cumulative effect of all this is manifest in the highest per capita income of the state, a position of pride which Punjab has been holding for most of the years since its formation in 1966. A paradox may be stated here and explained: Despite its relatively high-income level, the state is noted for considerable outmigration to other parts of India as also emigration to several countries. This is attributed not to any distressful situation at home but to attraction of greater prosperity outside.

Historically, Punjab has experienced many upheavals and turmoil, which, in turn, have influenced its path of development. In fact, the administrative map of Punjab has undergone stupendous changes in the past. At the time of the partition of the Indian sub-continent in 1947, Punjab was bifurcated into two parts: West Punjab (Pakistan) and East Punjab (India). Of its 3,59,179 square kilometres and 29 districts only 1,52,649 square kilometres and 13 districts were left with Indian Punjab. The most prosperous and developed western part went to Pakistan and the relatively backward eastern part remained in India.

Punjab now with an area of 50,362 square kilometres and a population of 2,42,89,296 persons are one of the smaller states of India. The state accounted for 1.5 per cent of the total area of the country and 2.4 per cent of the total population in 2001.

Being a border state, both external as well as internal changes have influenced the path of development. In 1947, the state was partitioned. In 1966, the state was trifurcated into Punjab, Haryana and Himachal Pradesh. The period of militancy, in the recent past due to an internal crisis, had its own influence on shaping the development pattern of the state. Despite all this, it has been able to achieve remarkable success in accomplishing reasonable conditions for a better standard of life.

The development was in accord with the prevailing infrastructure in the state. Its flat physiography has helped laying roads and creating infrastructure at low cost, which is very difficult in a hilly tract. Higher accessibility to services and the strong linkage between rural and urban areas are partly due to this flat physiography. However, its weak points are deteriorating soil health, change in the water table, and lack of minerals and fossil-fuel resources.

The perspective of development that Punjab identified for itself was to boost economic development through the improvement of the rural areas. Rural development was to be achieved through agricultural development, rural electrification, and road connectivity. The state economy has been characterized by the predominance of the agriculture sector, the base for which was available and further developed in a planned manner. Agriculture has been the backbone of the state economy. Even though the share of the agricultural sector has declined, yet two-fifths of the state domestic product is from this sector alone.

The state economy, which was growing at a faster pace than the national economy until the late seventies and was moving ahead almost at the same pace during the eighties, received a setback in the nineties. During the last decade, the annual growth rate of the state economy was slower (4.7%) than that of the national economy (6.9%). Punjab held the top position in per capita income among the major states at the beginning of the nineties, but came down to the fourth place by the end of the decade.

Taking a longer-term view, the share of the primary sector has decreased considerably, from 55.1 per cent to 42 per cent during last three decades or so; the share of the secondary sector on the other hand has increased from 18.1 per cent to 27.5 per cent, and the tertiary sector has recorded a marginal rise from 27 per cent to 30.5 per cent. As required, the major share of expenditure during all the plan periods was reserved for irrigation and power, the critical factors for development of agriculture and industry, respectively. The sad part is that the investment on these two has not given matching returns. There is an unbearable amount of subsidy involved in both. Among other factors, such a situation has led to a considerable decline in the share of development expenditure, from 72 per cent in 1980-81 to 44 per cent in 1999-2001.

Agriculture in the state found a favourable environment in the extensive level topography, sub-tropical continental climate, fertile soils, and favorable conditions of water supply through water bodies and irrigation. All this provided a favorable foundation for the green revolution. The state's remarkable success in agriculture laid down a base for rapid strides in other sectors of the economy. Today, however, the agricultural sector is going through a crisis. Constraints in respect of a shift from wheat-rice rotation to other crops and difficulties involved in the virtually static level of per hectare yield of rice and wheat are symptoms of the crisis in this sector. There is urgent need to diversify not only the cropping pattern, but also the economy, towards non-farm activities.

Fortunately, for the state, large/medium industries are picking up, as also small-scale industry. This is not to say that industry is free from any problem. These are several, especially those relating to technology upgradation, marketing and foreign investment. These call for speedy resolution, if the problem of rising unemployment among the educated youth, in particular, is to be taken care of,

Despite a strong concern for the development of human capital and a perspective for eliminating the worst forms of human deprivation, the state's achievements are mixed. Its infant mortality rate of 52 in 2000 was a little less than the world average, but four times more than Kerala. With a sex ratio of only 874 in 2001, the state ranked 27th among the 28 states of India. The most telling commentary is that, of the ten districts in India noted for the lowest sex ratio in 0-6 age group, seven are in Punjab. There is something seriously wrong in the social sphere of this economically progressive state.

Punjab now needs to prioritise its requirements for making rapid strides. The foremost task ahead is to revive the decelerating rate of its economy. Acceleration must be achieved by the end of the 10th plan. An upgradation of human capital is basic to ensuring a sustained economic development of the state. Improvement in the quality of infrastructure, transport, telecommunication, information technology and irrigation are the prerequisites for achieving sustainable development. It follows that Punjab has the twin task of accelerating economic growth and upgrading human capital by 2020, so as to ensure sustainable development.

Development and Management of Natural Resources

Major natural resources of Punjab are land and water. Both have been over-exploited due to intensive agriculture.

Most of the agricultural soils are nutritionally exhausted and have an all time low level of organic carbon contents.

Over the years the underground water level has gone down by 10 to 15 metres in the central zone. Efficiency of canal irrigation is hardly 40 per cent as against the optimum of 60 per cent in the case of irrigation.

More and more cultivable areas are going out of cultivation due to water-logging and soil salinity, while conservation efforts for reclaiming degraded soils and recharging underground water are slow and inadequate.

The scarce forest cover of Punjab lacks appropriate conservation efforts.

Fiscal and Financial Management

Punjab economy decelerated during the 1990s, after recording the fastest growth in the seventies and mid-nineties. Factors, which seem to have adversely affected the state's fiscal situation over the past 15 years are a high salaries and wage bill, mounting debt burden, heavily subsidized social and economic services, slow growth of revenue and loss-making PSUs.

Public debt has been a convenient tool for raising resource and the state continues to rely on borrowings to finance its deficit.

The tax base in Punjab continues to be narrow and tax compliance poor.

The ratio of own tax percentage to GSDP has been consistently lower than in the six fast growing states of the country.

Relatively higher revenue expenditure, with lower resources mobilization, indicates scope for improvement in the revenue deficit by improving the tax ratio to GSDP.

Punjab continues to rely heavily on raising funds through the expensive route of small savings. With the reduction of interest rates there is a possibility of swapping expensive loans with cheaper funds.

The state continues to forgo and dissipate scarce resources by giving concession and freebies amounting to Rs. 900 crore per year.

Current Financial Position of Punjab

- Revenue deficit is Rs. 3,842.00 crore. 5.48 per cent of the GSDP.
- Gross fiscal deficit is Rs.5,211.00 crore, 6.92 per cent of the GSDP.
- Public debt at Rs.33,037.46 crore, 47.16 per cent of GDP.
- Annual interest liability at Rs. 3,149.00 crore accounts for 32.71 per cent of the state's revenue.
- Revenue receipts are not enough even to pay salaries, pension and interest and other committed expenditure, which was 112 per cent in 2001-02.
- With such a record it is not possible to approach multilateral funding agencies, financial institutions and capital markets for funding development programmes.
- The government will not be able to access funding under Centrally Sponsored Schemes in the absence of the desired sectoral reforms and its inability to contribute its own share.

Immediate attention needs to be paid to correcting the revenue/fiscal deficit and substantially reducing public debt. The measures required are:

- Fiscal deficit, which at present is around seven per cent of GDP be reduced to 3.5 per cent by the end of 2007.
- Revenue deficit be reduced by 0.5 per cent per annum with 1999-2000 as the base year and reduced to zero by 2007.
- Public debt as a percentage of GDP be reduced from 47.16 per cent currently to 25 per cent by 2007.
- Committed expenditure, which is 112 per cent of the revenue, should be reduced to 60 per cent by 2007.

Structural Fiscal Measures

- A three-year rolling budget from 2002-03 onwards, for the sake of consistency and continuity.
- Action taken report (ATR) on announcements made in the budget.
- The Punjab Fiscal Responsibility Act will ensure long-term financial stability and put a cap on state borrowing, state guarantees and deficits.
- Revision of user charges for services, such as transport, drinking water, technical and medical and higher education, secondary and tertiary health care, to finance improvement of quality.
- Stop issuing of future government guarantees and create sinking fund for the purpose.
- The State Finance Department should compile a quarterly statement of its income-expenditure and make it available for wide circulation, for the sake of transparency and accountability.

Other Measures for Improving Fiscal Health

- Strict enforcement of tax laws for higher yield from sales tax, registration/stamp duty and motor vehicle tax.
- Compression of non-tax and non-plan expenditure.
- Enhancing quality of public expenditure and governance.
- Aggressive disinvestments in public sector undertakings.

- Power sector reforms and improving the finances of the PSEB by implementing in full the recommendations of the State Electricity Regulatory Commission Report.
- Diversification of agriculture.
- Improvement in the quality and delivery of education and health services.
- Fast-track disinvestments of PSUs.
- Accessing capital market for infrastructure development through bankable projects.

The economy of Punjab cannot improve in isolation. It should be the outcome of political consensus. The growth of the economy has to be a long-term programme to be continued with the same tempo, zeal and fervour, irrespective of the type or shade of the political party in power.

With these extensive reform measures the budgetary support can be accessed from the World Bank (WB), supported by a 'Project Report' highlighting the state's development and poverty alleviation programmes. The WB prepares a Project Report at its own cost. Ordinarily the World Bank and other international institutions look forward to support development plans, which are growth-oriented and self-sustaining in the long run.

Measures for stabilizing the financial position of the state should be strictly enforced so that growth of revenue income and control of expenditure bring down the revenue deficit to zero and fiscal deficit to 3.5 per cent by the end of 2007. The fiscal scenario in 2012 and 2017 at the end of the 11th and the 12th Five Year Plans respectively, and up to 2020, should generate revenue surplus in each year after 2007-2008, provided the structural fiscal reforms, as suggested, are consistently implemented, particularly the levy of user charges on a cost-plus basis. This will attract support from international financial institutions and the private sector for augmenting non-budgetary funds for accelerated development.

Without tough measures to consolidate the fiscal situation and accelerate structural reforms, including abolition of untargeted subsidies, the fiscal position of the state is not likely to improve. The longer the fiscal deficit goes uncorrected, the greater the risk of steep reduction in the developmental activities.

Development of Agriculture and Allied Sector

Punjab is an agriculturally progressive state producing over eight tonnes per hectare of wheat and rice, with 94 per cent of the cropped area irrigated, and 186 per cent cropping intensity. It uses 184 kg/ha of chemical fertilizers and has 9.35 lakh tractors in use. Lately, agricultural activities have begun to show signs of fatigue, because of:

- Monocropping of paddy and wheat with attended manifestations of stagnating yields, increase in cost of production and low returns.
- Over-exploitation of water and soil resources.
- Declining public and private sector investments.
- Inadequacies in marketing, pricing and processing of vegetables, fruits and other crops.
- Dwindling agricultural research and extension inputs.

Agricultural development can be rejuvenated through:

- Crop diversification with high yielding, remunerative alternative crops, supported by pricing and marketing.
- Soil, water and environmental conservation.
- Efficient management of input-use for increasing crop and animal yields.
- Facilitating contract, commercial and organic farming.
- Introduction of corporate sector in services and agro-processing sectors.
- Re-vitalization of research and extension.
- Re-orientation of subsidies in the light of WTO.
- Strengthening Panchayati Raj and co-operative systems.

Rural Development

The term rural development connotes overall development of rural areas, to improve the quality of life of the people. In the Indian context, rural development assumes greater significance as three-fourths of its population still lives in rural areas. Strategically, the focus of planning was to improve the economic and social conditions of rural society, especially its underprivileged sections, thus, economic growth with social justice became the proclaimed objective of the planning process under rural development.

In the case of Punjab, high priority was given to setting up local-level administrative infrastructure at the block level, to promote agriculture and allied activities to meet the food grains requirements of the nation during 1965-66 to 1980-81. As production increased, expenditure on infrastructure development such as irrigation, communication, pavement of streets, construction of drainage and village betterment also increased. Better infrastructure further helped in increasing production. Although the spread of the green revolution has helped rural society in increasing levels of living considerably, today rural Punjab is facing a peculiar situation arising out of increasing cost of production and stagnating returns in the agricultural sector. Moreover, the value addition of agricultural produce cannot take place because of low investment flow towards agro-processing activities. This has resulted in less employment avenues for rural unemployed. Despite better rural infrastructural facilities than other Indian states, rural Punjab has lagged behind in terms of social and human development. Moreover, within Punjab there are disparities between rural and urban areas in accessibility of basic facilities in respect of households having pucca houses, toilet facilities, electricity connections and safe drinking water. The situation regarding education, health and demographic indicators too is no different. Punjab has one of the lowest sex ratios in India. In rural areas too the sex ratio is on a lower side. In spite of increasing flow of credit, the share of institutional credit has not expanded at the required level, towards crop diversification and promotion of the rural non-farm sector.

Though decentralized planning under the new Panchayati Raj set-up has also brought with it the decentralization of finances and delegation of powers, however, in actual implementation these are not given to PRIs. Even time-bound action plans have not yet been developed for state, district and block levels, for organizing orientation/education training programmes for the representatives of PRIs and development functionaries.

Industrial Development

The industrial sector has shown impressive growth during 1980 to 1997, covering the Sixth, Seventh and Eighth Five Year Plans, but declined in 1997 to 2000, the first three years of Ninth Plan. During 1980-2000, employment increased three times, the number of industrial units five times, investment and production 18 times, both in the large and medium and small scale sector. Small-scale industry (SSI) accounts for 80 per cent of the total employment, contributes 40 per cent to production and 60 per cent to exports, with 20 per cent investment of the industrial sector.

Regional disparities in industrialization persist. Ludhiana, Patiala and Ropar districts account for half the industrial production in the state. On the other hand, Faridkot, Mansa and Muktsar districts have a share of less than one per cent each.

The SSI sector, the backbone of the industrial economy in the state, is passing through a critical phase, mainly on account of such factors as low level of technology resulting in low industrial productivity and poor quality of products leading to competitive disadvantage both in domestic and global markets. The small-scale sector has to acquire the capability to produce quality products, to compete in the international market. It has to transform itself from a protective to a competitive environment.

For the survival of industry and to sustain the tempo of growth, the broad measures suggested are modernization and technological upgradation through innovative R&D; product adaptation; human resource development through skills upgradation and training; planned development of quality infrastructure; market-oriented policy and institutional framework.

The state must follow a pro-active policy to promote partnership with industry for both utilizing existing infrastructure and establishing badly required new facilities.

The government's role should be limited to that of an effective facilitator and co-ordinator of the process of growth, providing transparent, conducive policy framework and efficient delivery mechanism through good governance.

Upgradation of existing research and development centres in the state has been suggested so as to provide the latest design and testing techniques to the industry. Keeping in view the emerging requirements of industry and lack of financial support from central and state governments, the management of these may be entrusted to the relevant associations of industry, on the basis of binding partnership protocols evolved through a consultative process. This approach will ensure effective working of R&D centres to meet their objectives.

Industrial clusters and parks should be set up sector/product-wise, with a focus on agro-food processing, bicycle and bicycle parts, automobile and automobile parts, machines and machine tools, sports goods, leather and leather goods, hosiery and textile industries. This will facilitate building a centralized and modern infrastructure. The private sector and financial institutions should be encouraged to participate in these activities. In addition, infrastructure in all existing industrial areas and focal points should be upgraded.

Agri-export zones (AEZs) for different products should be set up expeditiously. These will facilitate provision of all export incentives to boost exports, centralized modern

facilities, value addition, better productivity and higher incomes to the farming sector. The Government of India should also set up special economic zone, (SEZ), for linkage with the global market with focus on the export of industrial products.

It is essential to set up industries in the large and medium (L & M) sector in the state for their balanced growth. Appropriate facilities and incentives should be provided to multinational companies (MNCs) to set up manufacturing facilities in the state, especially in agro-food processing, light engineering and electronic hardware industries. NRIs should be encouraged to invest in the state.

An appropriate institutional mechanism, consisting of representatives of the Reserve Bank of India, financial institutions, banks, industry and state government, with adequate powers and the resources, should be created, to provide requisite financial support to small-scale units suffering from sickness or showing symptoms of sickness. A system should be evolved for timely detection of sickness at the initial stages for speedier necessary action.

The tax structure should be simplified and rationalized, compatible with that of the neighbouring states. Easy and timely credit at interest rate equal to prime landing rate (PLR) should be available to the SSI sector.

Infrastructure Development

Societal development uses infrastructure as a base, and therefore, it cannot be allowed to become a limiting factor in the process of development. Analysis of the vision reflected in the various plan documents reveals that the future of Punjab lies in changing the cropping pattern, agro-processing, and development of the service sector. This is in the light of the fact that Punjab is highly urbanized and will emerge as the most urbanized state of India by 2020.

Power

This vital sector is in the doldrums in Punjab. There is free power to agriculture, exorbitant rates for industry, and unpaid bills to both coal suppliers (Coal India) and transporters (Northern Railways). The Goindwal project is stagnating, with lending agencies staying away, because of the unsustainable economic basis of this sector in Punjab.

The possibility of a major increase in power generation in Punjab exists only via the thermal route. This is relatively inefficient, since transmission of electricity from pit-head thermals through grids is cheaper than carrying coal. Increase in thermal generation with attendant problems of ash disposal, is also undesirable ecologically. Punjab is already buying 25 per cent of its requirements, from other agencies, and this will go up to 50 per cent by 2015. The state should immediately act in accordance with the emerging road map in the power sector, and take advantage of trading power on the grid. The measures required include setting up of a functional State Electricity Regulatory Commission, and structural changes in generation, transmission and distribution.

Punjab should involve people in the reforms process. A participative model has been suggested that hands over distribution and user-charge collection to panchayats and

urban local bodies. An innovative scheme to bring about VRS in Punjab State Electricity Board by involving the surplus employees in power maintenance activities at the panchayat could also operate in tandem to further leverage the success of the rationalization of staff.

IT & Telecom

Punjab is treating this sector like any other government function, with 'departments', 'apex bodies', '(government) corporations'. This is precisely how IT & Telecom should *not* be dealt with. Government should stay away from any control aspect and act *only* as a facilitator. There must be no 'approvals' in the traditional mould; the emphasis of government should be only on removing bottlenecks.

As a priming aid to the IT services sector, the government should move in inducting IT in the state through two time-bound initiatives:

- e-governance at the government-public interface, such that the total cost of service deliveries goes down.
- bring in virtual 'mandis' through a State Commodity Exchange, to empower the farmer, and expose his produce to national and international trading.

In inducting IT in the government, it has been emphasized that no new jobs would be created for executives (programmer, data entry operator, etc.). The new employment will be automatically generated in the non-government IT services sector, in the task of laying down of links, writing software, and network commissioning and management.

Transport

The dominant forms of transport are roads and railways.

The government has laid down a policy for private participation in the road sector, but has made a fundamental error of allowing the bidders to shift the risk to the government. This should be reviewed; otherwise liabilities are likely to result. The toll-road model has really not taken off well in many states; and what is suggested is a model of petroleum-product taxation for road development. A levy of Rs 1/- per litre on MS / HSD should maintain the funds required for future road projects. The roads should be capable of handling container trucks to move produce for agro-processing. It is also suggested to make cycle tracks between towns and surrounding villages.

Railway infrastructure needs both strengthening and fresh creation. Using the power of the central government to permit taxation, a Punjab Rail Development Fund should be created by levies on passengers to and from Punjab. A large differential exists between road and rail fares, permitting the levying of such a cess. This fund can generate Rs 1,200 crore needed for rail infrastructure over the next decade.

Policy Recommendations

- The state should give up a subsidy-based approach and move towards a techno-commercial basis for infrastructure projects.
- Realize that users are willing to pay for services, provided their overall quality meets their requirements. People would rather pay for good services, than suffer a defective free service.

- Major reforms should be brought through people's participation, not governmental diktat.
- Induction of new technologies should not give rise to new bureaucracies, but result in enhanced service deliveries, through process re-engineering.

While the rural sector will remain important, a policy shift emphasizing an increasingly urban character to Punjab should be inbuilt in the decision-making processes.

Urban Development

In Punjab, which is the fifth major urbanized state in India and a highly urbanized state in the northwest region, the growth pattern of urban centres is creating imbalances in infrastructure, housing and level and quality of services. The situation is the worst in small and medium towns. City governments are financially weak and functionally unstable.

There is urgent need of an 'urbanization strategy' to cover the entire population with water supply, sewerage, solid-waste management, basic amenities, civic services and infrastructure; strengthen urban local bodies (ULBs) through devolution of functional and financial powers; capacity building of urban administrators; construction of connecting roads, housing in peripheral areas; and efficient transportation facilities with special emphasis on small and medium towns.

Local government, being a state subject, operates under state control. Legislations conforming to the 74th CAA have been passed but there has been no change in the functional and financial domain of ULBs. Fragmented functioning, due to parastatals involvement in municipal affairs, is affecting the functional domain of ULBs. There is need to reduce interference by the state government in municipal affairs. Constitution of Ward Committees, District Planning Committees and Metropolitan Planning Committees is a must for the empowerment of ULBs. The Mayor-in-Council/President in Council System will strengthen functional democracy in the state.

The fiscal domain needs to be strengthened by broadening the taxation powers of ULBs; levying new taxes; improving tax administration of octroi, property tax, water supply and sewerage charges; pricing and cost recovery; local resource mobilization and full implementation of recommendations of State Finance Commissions and Central Finance Commissions.

There are serious deficiencies in the volume as well as quality of municipal services and infrastructure. The task of financing urban infrastructure and services is challenging and needs Rs.6,000 crore at Rs.1,200 crore per annum. With the contributions of Urban Local Bodies at Rs.150 crore per annum, the Punjab Infrastructure Development Board at Rs.75 crore per annum and state government transfers at Rs.75 crore per annum, it will be easy to access Rs.900 crore per annum from the capital market. Additional resource mobilization of Rs.60 crore from property tax, user charges and fees and rents will help improve the fiscal base of ULBs and attract the private sector for financing urban infrastructure.

Raising municipal bonds for financing urban infrastructure calls for reforms, through rationalization of tariffs, pricing and cost recovery, preparation of commercially viable

projects, investment-grade credit rating, effective billing and collection, asset management and upgradation of professional skills of municipal staff. Pooled financing mechanism will enable smaller ULBs to raise funds for financing infrastructure. A state level regulatory body should be created to monitor quality of services, prices charged and involve private sector participation (PSP) in infrastructure development and service delivery.

PSP and people's involvement in municipal affairs and urban development activities should be promoted to offload financial, functional, managerial and administrative burden of ULBs. PSP in water supply, sewerage, solid-waste management, maintenance of parks/street lights, bill distribution, etc., on the pattern of municipal towns of Hyderabad, Alandur, Tirupur, Rajkot, Pali, CIDCO (Mumbai), Belgaum, Hubli, Mysore and Ludhiana can help ULBs of Punjab to improve O&M of services, pricing and cost recovery and infrastructure development. People's involvement in municipal affairs on the pattern of Baroda Citizen Council (BCC), EXNORA (Chennai), SRISTHI (Delhi), Muskan Jyoti Scheme (Lucknow), Surat Citizen Council, and Urban Community Development Project (Pune) can dramatically improve sanitation, sensitise people to comply with user charges, urban poverty alleviation and slum development. The Government of India introduced Urban Reform Incentive Fund (URIF), City Challenge Fund (CCF), Pooled Finance Development Scheme (PFDS) and constituted a Task Force in its budget of 2002-03 to promote PSP in urban infrastructure development.

Housing is a must for low-income groups and below-poverty line population. In Punjab, the requirement of funds for this purpose is huge and HUDCO, National Housing Bank (NHB) and BMTPC are not doing much to provide housing to vulnerable groups. The Government of India, through NHB, introduced 'Mortgage Guarantee Scheme' to protect lenders against default and formulated the National Housing and Habitat Policy (1998). It constituted URIF to provide reform-linked assistance as an incentive for reforms in rent control laws, simplification of legal and procedural frameworks for conversion of agricultural land and revision of by-laws. The Punjab Government needs to revamp its institutional set-up for housing, provide housing loans at affordable interest rates, raise funds from the private sector through PIDB, involve ULBs and promote development and use of low cost and locally available material and user-friendly technologies for construction of houses for the poor.

Slums/slum population need immediate attention. Programmes and schemes should be implemented properly for improving the living conditions of slum dwellers. The state must utilize central government grants. Slum dwellers should be involved in slum development activities and assistance from national and international agencies should be mobilized.

In Punjab, urban poverty is an issue but of dimensions different from other states. It manifests itself in various forms such as deprivation of shelter, basic amenities, such civic services as education, health and calories, and miserable living conditions. The poverty level of Punjab, as defined by the Planning Commission of India, is slightly higher than Bihar and considerably lower than U.P., Orissa and Rajasthan. A slight upward revision of the poverty line can raise the number of the poor considerably. District-wise trends of urban poor indicate that Ludhiana and Jalandhar districts have the largest number of urban poor (i.e., more than 50% BPL families), and hence require immediate attention. Poverty alleviation schemes have not had much impact because of the inadequate participation of the poor, lack of convergence of line-departmental

schemes and programmes. Programmes and schemes need to be re-oriented in the pattern of Kerala and Self Employed Women's Association (SEWA) of Ahmedabad. ULBs should create poverty alleviation funds with special emphasis on employment, security and opportunity as envisaged in the *World Development Report 2000-01*.

Punjab's future is urban. By 2020, Punjab will have about 45 per cent urban population or even more. At present, deficiencies in urban infrastructure/services are crucial problems of urban development. The slums/slum population, urban poverty, houselessness and poor fiscal position of ULBs are inhibiting sustainable urban development. Without a long-term urban development strategy, cities, big and small, will become unmanageable, unlivable and unproductive.

Well managed 'urbanization' will facilitate and sustain economic growth, improve service delivery and develop environmental infrastructure to improve the quality of life. The 'urban development strategy' should promote good governance, provide cent per cent coverage of basic civic services and adequate housing to the shelter less urban poor, reduce urban poverty and emphasize on efficient management of municipal assets and development of municipal lands for income generation. Protection of urban environment, involving the private sector, for low cost and efficient delivery of services, offloading functional and fiscal responsibilities, ensuring people's participation in urban affairs and change of current policies and practices including legal and administrative reforms, are the other aspects which constitute essential components of a forward-looking development strategy. The vision for urban areas of Punjab by 2020, or even earlier, is one of sustainable development. In the short term, emphasis should be on full coverage of the population with infrastructure and services as part of a long-term perspective, qualitative improvement of governance, urban basic civic services and environment protection.

Demographic Development

Fertility has been falling consistently in Punjab since the beginning of the 1970s and the state has reduced its total fertility, approximately by half, from the early seventies to the late nineties in a totally different socio-cultural environment. Except for 1977-79 to 1982-84, during which the decline stalled, the process of fertility transition is reasonably consistent in Punjab. Diminishing crude birth rate (CBR) and total fertility rate (TFR) point towards new environment of reproduction in Punjab. The decline in fertility is extensive in the state, and is not confined to any specific community or region. Rural and urban areas are experiencing transition in fertility in different ways in the state, depending on changes in local conditions. The sizeable decrease in fertility, despite some of the key social indicators, such as strong son preference, sizeable presence of socially backward population and relatively higher infant mortality being against the decline, is a manifestation of the primacy of intervention by selected development factors, namely, the family planning programme, female literacy and prosperity at the household level. The age pattern of childbearing in Punjab has undergone a change during the last three decades with fertility limitation being increasingly common at relatively old ages. Though fall in fertility has been observed among women in all ages, the contribution to the fertility decline has been mostly from women in the age 35 years and above. Recent indications do not signal the possibility of reaching the replacement level in the state by 2010, and the state's fertility is estimated to be 5-24 percent above the replacement level, with sharp rural and urban variation. With nearly two-thirds of the

population still living in villages, the prospects of stabilizing the population in the near future in Punjab depends on the success of the population control effort in rural areas. Fertility differentials are sharp, and over time, there has been little change in relative positions by social or economic class in terms of the respective contribution to overall fertility, though the major social and economic groups have shown a decline in current pregnancy rates and fertility.

Both rural and urban areas gained consistently from the onset of mortality decline, even if rural death rates continue to exceed urban death rates in Punjab, as elsewhere in India. Gains to males as well as females from mortality decline are distinct over the years, with net gain to females, notwithstanding early-age vulnerability, surpassing the gains to males in the process of mortality transition. In fact, a notable feature of mortality transition between 1971 and 1998 has been the larger gains for the females than for males in general. The narrowing down of sex differential in mortality, characterized by comparatively higher female mortality, has yielded to a reverse, yet, more common pattern, where male crude death rate outstrips female crude death rate. At some specified ages, the sex of the individual is one of the important indicators of exposure to death. While female mortality-disadvantage is greatly pronounced during childhood and adolescence (0-14 years), male vulnerability begins to be high from the age of 20 and onwards. In spite of a seemingly lower infant mortality rate (IMR) in Punjab, than in most of the major states of India, the number of deaths before the first birthday is very high. Mortality, among infants is not showing signs of real decline since the early nineties. Reasons for this merit some investigation, in the context of the link between overall economic deceleration in Punjab and living standards of households, particularly in the rural sector. Infant and childhood mortality in Punjab is characterized by sharp sex-differential between male and female children. Data show comparatively high female mortality in Punjab than in other states of India. In spite of improvements in literacy, expansions in outreach of health care services and overall standards of living in recent times, the sex composition of infant mortality trends in Punjab indicate greater vulnerability of the girl child remains virtually unchanged. On the contrary, more recently, data reveal intensification of gender disparity in mortality in Punjab at every stage of childhood, particularly before the fifth birthday. Rise in female disadvantage in mortality between 1992-93 and 1998-99 is a worrisome sign, implies preponderance of social, cultural and economic rather than health and medical factors, and reinforces the need for corrective measures.

Lack of knowledge about contraceptive methods is no more a barrier to spread of family planning, as knowledge about any method of contraception is most widespread in Punjab (100%). It is interesting to note that among different methods of family limitation--condom, intra-uterine device (IUD) and pill--are most well known in Punjab than in any where in India. In general, modern methods are better known among the eligible women (100%) than the traditional ones (78%). Rural areas almost match urban centres in the knowledge of modern contraceptive methods, but the later have an edge in the awareness of some traditional ones, namely the rhythm or safe period and withdrawal. Social, economic and demographic backgrounds of the couples are no more a determining factor in the spread of awareness regarding methods of family planning. Comparison of sources of contraception by current users between 1993 and 1999 points towards the growing role of the private sector. In Punjab there are indications of virtual non-existence of social marketing outlets in rural areas for the oral pill and condom. Available outlets have meagre stocks of supplies, depend more on government sources for procurement of supplies, and secure better participation of women than men in the

majority of the villages. The social marketing network is marked by little segmentation of clients, poor need-based vending, limited access, cultural insensitivity and lack of motivation. On a better side, Punjab is widely recognized for its good performance in implementing the family planning programme. Since the inception of the programme, as compared to the national average, the contraceptive prevalence rate (CPR) has consistently remained high in Punjab. Apart from awareness, the growth in CPR can be attributed to vigorous programme implementation strategies, mainly tagged to incentives and disincentives to programme-staff and clients.

Attempts at greater economic and social development in Punjab must also include focus on demographic dynamics. The contours of population planning must go beyond the goals set in the National Population Policy and cover grounds that are central to larger issues of human development. Some of the direct and foreseeable demographic challenges that Punjab faces today can be outlined as attainment of replacement level of fertility, elimination of early-age child-bearing, reducing infant and childhood mortality coupled with excess female disadvantage, getting rid of sex-selection during conception and practice of female foeticides, balancing a skewed sex ratio that is highly masculine among children, eliminating extensive son-preference, raising low hospital delivery rates resulting in undesirable maternal deaths, changing the unfavourable demographic regime among socially and economically weaker sections, meeting the unmet need for contraception, promoting men's participation in family planning, removal of regional demographic disparities, and preparations for dealing with an ageing population. Enunciation and implementation of a State Population Policy can be an effective instrument of desired demographic change in Punjab.

Health

During the formulation of each of the Five Year Plans, the state government has continued to focus largely on strengthening the health infrastructure in the form of buildings, machinery, equipment and manpower for primary health care. It has not realized the importance of having a proper health-management information system, which would have helped in setting need-based priorities. Moreover, the state did not make much effort to establish referral linkages, management of life-style diseases -- diabetics, cancer and cardiovascular diseases, regulation of private health care services, and involving the voluntary sector in various health programmes.

Analysis of allocations and expenditures indicate that during all Five Year plans, outlays for MPH have remained between 1.9 per cent and 4.5 per cent of the total outlay, nutrition between 0.04 to 0.5 per cent and other social services between 12.3 to 28.3 per cent. On the other hand, expenditure patterns indicate that in reality the percentage share of MPH had been between 1.5 and 2.5 up to the Eighth Plan, rising to 4.2 per cent during the Ninth Plan. The percentage share of nutrition was insignificantly low at 0.04 to 0.3 of the total expenditure during all the Five Year Plans. However, the share of expenditure on other social services (excluding MPH and nutrition) rose considerably during all the Plans, from 10.8 per cent in the Fourth Plan to 24.0 per cent in the Ninth Plan. This indicates clearly that health and nutrition has been accorded a lower priority among the social services.

Punjab has 2,852 Sub-Centres, 1,465 Subsidiary Health Centre (each having a medical officer and a pharmacist), 484 PHCs, 117 Community Health Centres, three medical and

two dental colleges along with attached hospitals. In addition, 40 mobile dispensaries have been provided for intensive health care to serve the population living within 16 km of the international border. There are 230 Allopathic hospitals in the state. They range from 50-beds hospitals in smaller towns to larger hospitals attached with the five medical colleges, one each at Patiala, Faridkot and Amritsar and two at Ludhiana having facilities for dealing with complicated cases and acting as referral hospitals and teaching colleges. There are 473 Ayurvedic dispensaries, 17 Ayurvedic Swasthya Kendras, five 10-bedded Ayurvedic hospitals (one each at Jalandhar, Bathinda, Ludhiana, Hoshiarpur and Amritsar), and one government Ayurvedic college at Patiala, 105 Homeopathic dispensaries, and 34 Unani (Arab/Persian medical system) dispensaries in the state to promote the Indian system of medicines and Homeopathy (ISM&H). The state has one doctor for every 1,470 of the population, and one hospital bed for every 864 people -- ratios that are probably the best in the country. There have been significant improvements in the average radius covered per institution and a consistent increase in the availability of manpower (both medical and para-medical). The provision of health institutions in the state increased 4.5 times (6.4 times in rural areas and two times in urban areas) during 1966-2001. The percentage share of rural health institutions improved from 55.4 in 1966 to 81.6 percent in 1990. The local self-government and the voluntary sector have withdrawn from the health sector. No information is available on the number of private practitioners, number of private clinics and nursing homes.

The incidence and prevalence rates of morbidity patterns in Punjab are higher than the all India average. Morbidity is higher in rural than in urban areas. More people suffer from chronic diseases with increase in age. Education has not had much impact on the morbidity patterns, except that the reporting of illness was less among the illiterates, or not formally educated, in both rural and urban areas of Punjab. There were fewer patients with chronic diseases in rural areas of Punjab compared to all-India and vice versa for urban areas. The number of persons reporting ailments generally increase with increase in age. Chronic illness is generally more prevalent among those who are 40 years, or older. Reporting of ailments is generally higher for general castes than the Scheduled Castes. Examination of the reasons for untreated episodes of sickness reveals that in the majority (83%) of the cases treatment was not taken because the ailment was not considered serious. Financial reasons were cited by very few persons (six percent in rural areas and two percent in urban areas).

Regarding the utilization of health care services, NFHS-2 indicates that the public sector is the major provider of vaccination for children in Punjab. Eighty-eight percent of all the children received vaccination from the public sector, but for curative services, a large majority of households (86%) normally visit the private medical sector. In fact, the use of private sector is much higher in Punjab than at the all India (69%) level. Allopathic treatment is the most preferred form in both the rural and urban areas of the state. The people here believe less in obtaining treatment from a medical shop, or store in the adjoining areas, than in other parts of India. Households in Punjab also do not believe in going to faith healers or religious persons for treatment. The percentage of ailments receiving non-hospitalised treatment from government sources in Punjab declined from 12 per cent to seven per cent in rural areas, and 11 per cent to six per cent in urban areas, during the 42nd and 52nd rounds of NSSO. Though the all-India trend shows a similar picture, the gap is not as steep as in case of Punjab. As for non-hospitalised cases, the cost of treatment is less in the private sector than the public sector, in both the rural and urban areas of Punjab and in the country as a whole. Cheaper outdoor treatment in the private sector indicates that it is striving to provide curative services at

par with the public sector in the state. The cost of treatment is usually higher for males and boys than for females and girls, in Punjab as well as all-India. At least, two-thirds of the cost of medical treatment is towards fees and medicines. The cost for clinical tests in rural areas is higher than in urban areas. These are expensive in both rural and urban areas of Punjab, as compared to all-India.

The health status of women and children in Punjab is reflected in such depressing features as the declining sex ratio (874 per 1000 live births), high proportion of IMR (51 per 1000 live births) and a high prevalence of anemia. Thus, women and children in Punjab are the vulnerable sections and their needs call for precedence. Antenatal care has moved down on the priority list of the para-medical staff. Non-utilization of antenatal care, particularly among women in rural areas, has increased from 13.6 per cent in 1992-93 to 30.8 per cent in 1998-99 (NFHS I & II), causing different kinds of health problems among women and children. Less than two-fifths of the deliveries in Punjab are institutional (37.5%). Privatization of maternity health care services is much evident in Punjab, particularly for conducting deliveries and treating reproductive health problems. This is increasing the number of caesarian section births in Punjab. It has doubled from 4.1 per cent in 1992-93 to 8.2 per cent in 1998-99 (NFHS I & II), and particularly in urban areas (NSS 52nd round), either because of inadequate antenatal care or vested economic interests of the doctors.

Obesity as a problem exists amongst women in Punjab. With 30.2 per cent obese women it ranks second, next to Delhi (34%). Prevalence of anemia amongst women and children exists and has serious implications. In Punjab, 80 per cent of the children (in the age group 6-35 months) and 41.5 per cent women (in the age group 15-49 years) suffer from anemia. The state has 8.9 per cent of its population facing the risk of fluoride deficiency as compared to 6.9 per cent at the national level. The Iodine Deficiency Cell has enforced ban on the sale of non-iodized salt to reduce iron deficiency. It can be further reduced by enforcing food fortification. Considering the level of urbanism and the impact of consumerism in Punjab, fortified food would be a welcome change. Breast feeding practices in Punjab are faulty and can be enhanced significantly by increasing institutional deliveries. Women delivering in public institutions are reported to be following the right kind of breast feeding practices (14.2 % within the first six hours) and not wasting the first milk by squeezing out the precious colostrums, which is vital for child survival. Dietary patterns in Punjab reveal that, the consumption of milk is higher than in the other states in India (875 grams per day). Further, a decline in the intake of calories and proteins is evident, while there is an increase in the intake of fats.

Education

School Education

Punjab ranks 16th in terms of literacy among Indian States and Union Territories. Although the literacy rate has increased from 58.51 per cent in 1991 to 69.95 per cent in 2001, an overall increase of 11.44 per cent, there are still 95 lakh illiterates in the state (2001 Census).

There has been a quantitative expansion of educational institutions. The total number of schools increased from 9,394 in 1970 to 16,038 in 1980 and further to 18,998 in 2000-2001. The most massive expansion has taken place at the primary level. Today, except

for some remote areas, every village has access to primary schools. However, 16 per cent habitations do not have access to an elementary school within the norm of three kms. Further, the shortages of secondary schools within a distance of five kms, and senior secondary schools within a distance of eight kms are ten per cent and 20 per cent, respectively. Nearly one-fourth of the children is either not enrolled in schools or are in unrecognised schools. There are still about 2.97 lakh children of 6-14 age group who are out of school.

The share of government schools in total enrolment in primary classes is gradually decreasing and has come down from 71.86 per cent (1996) to 66 per cent (2000), but there has been a larger growth in the share of unrecognised private schools from 19 per cent to 25 per cent during the same period. It reflects the disenchantment of the public with government run schools. Punjab has the highest number of students enrolled in private schools after UP.

Although the dropout figures in Punjab have declined to some extent, its rate is still very alarming; 20 per cent of the children drop out at the primary level, 37 per cent at the middle level, 40 per cent at the secondary level and 78 per cent at the 10+2 level. It is shocking that out of 100 children enrolled in class I, only 22 reach senior secondary level.

Infrastructural facilities and civic amenities are lacking in the schools. There are schools without buildings and many of those with building, need urgent repairs. These are in a dilapidated condition and have been declared unsafe for use as classrooms. The majority of the schools are also facing the problem of shortage of toilets, classrooms, playgrounds, boundary walls and verandas.

Apart from physical inputs, the most glaring weaknesses are lack of motivation in teachers, outdated teaching methodology and unskilled teachers. Although Punjab has a respectable pupil-teacher ratio of about 41 at the primary level, a one-way dialogue between teachers and students has remained the norm and learning by rote the only methodology. Further, the education provided is hardly relevant to the day-to-day life of the students. The quality of teaching in schools can be judged by the poor examination results. At present 50 per cent of the students fail at the matriculation level.

The heavy syllabus prescribed and the faulty system of examination for awarding marks in most of the schools, adversely affect the quality of school education and fail to rouse the inherent creativity of the children. Schools without any sanctioned post of a teacher and teacher absenteeism are other causes of poor quality of school teaching.

The allocation of resources in education is only 2.88 per cent as against the target of 6 per cent of the SGDP. Further, 99 per cent of the expenditure on education at the primary level and 90 per cent at the secondary level go to meet salaries, leaving very little for development in other spheres of education.

Higher Education in Punjab

There has been vast progress in higher education since the reorganization of Punjab in 1966. According to the census figures of 1981 and 2001, not only has there been significant expansion, in institution building, but also considerable progress in

enrollment. Figures in the table given below show the comparative expansion between 1980 and 2000.

Significant Expansion in Higher Education

Sr. No.	Institutions	Year	Year	Increase (Absolute)
		1980	2000	
I.	Expansion in Educational Institutions			
(i)	Universities	4	7	3 (75%)
(a)	General courses	3	3	- (-)
(b)	Professional courses	1	4	3 (300%)
(ii)	Colleges	188	287	99 (52.7%)
(a)	General courses	162	204	42 (25.9%)
(b)	Professional courses	26	83	57 (219 %)
II.	Expansion in Enrollment			
	Total Enrollment	91254	193665	102411 (112.2%)
(a)	Post-graduate level	6901	13848	6947 (100.6%)
(b)	Graduate level	84353	179817	95464 (113.1%)
III.	Enrollment of Women and Scheduled Castes to Total Enrollment			
(i)	Post-graduate level			
(a)	Women	50.5%	69.6%	(19.1%)
(b)	Scheduled Castes	7.4%	9.1%	(1.8%)
(ii)	Graduate level			
(a)	Women	39.9%	51.0%	(11.1%)
(b)	Scheduled Castes	8.9%	10.3%	(1.4%)

Issues and Recommendations

- District-wise Imbalances in educational status and development are significant. All the universities and three/four colleges are located in urban areas. Therefore, educationally backward and under-developed districts and rural areas must be given more attention.
- More educational institutions have to be established in rural areas with more vocational courses, to equalize educational opportunities.
- Existing resources must be optimally utilized for this purpose.
- As no autonomous institutions of higher education exist in Punjab, such colleges should, therefore, be promoted.
- There is no universal system of admission policy; even degree programmes are not organized on the basis of the established manpower needs; therefore, the admission system needs to be restructured.
- There is a wide gap in the enrollment status of students between upper-castes and lower castes. Therefore, education opportunities for the Scheduled Castes should be equalized. Further, distance education must be developed into a viable and effective alternative, to enable education reach most deprived and needy sections of the population.

- UGC recommendations of 200 working days in a year, 40 working hours in a week per teacher, 75 per cent attendance of students in a year, have to be adopted to improve the quality and accountability of higher education. The number of holidays can be reduced by papering date-based information of working norms in each institution.
- Subsidy to students belonging to better-off families should be removed and privatization of higher education encouraged to achieve better standards and status of higher education.

Labor and Employment

Areas of Concern

Though the rate of unemployment rate in the state is not very high as compared to other states of the country, it has increased from 3.08 per cent during 1993-94 to 4.15 per cent on current daily statuses during 1999-2000. This is a matter of concern. Urban unemployment rates are higher than those of rural rates. Unemployment among the educated youth is much more serious, especially among those with general education in arts, commerce and science.

The existing employment resources in the state are not large enough to provide adequate income and regular employment. Both visible and invisible underemployment is high in the state. It has increased during the period caused by the last quinquennial survey of NSSO. Casual labour, especially of rural males, at 28 per cent during 1999-2000 is high. There has been a marked increase in the percentage of those available for additional or alternative work, in both rural and urban areas during 1993/94-1999-00.

Female work participation rate has been very low in the state. It reflects the status of women empowerment. Large proportion of women workers in the state engage themselves in a subsidiary capacity in low productivity activities with very low earnings. Female marginal workers have increased over the decadal census period from 1.6 per cent in 1991 to 6.8 per cent in 2001.

The growth of organized sector employment, especially in the public sector has declined. The decline in the public sector is from 1.01 per cent during 1990-95 to 0.19 per cent during 1999-00. The growth rate of employment in the private sector too has also declined during the same period from 2.34 per cent to 0.80 per cent. A large proportion of workers (53%) still depend on the agricultural sector in the state for employment and income, despite disguised unemployment.

Special employment generating schemes for the poor have been playing an important role, by providing employment to them through wage employment and self-employment schemes, especially in the rural areas of the state, and creating economic and social infrastructures. However, the performance of these schemes is severely affected by several lacunae, as revealed by evaluation of the functioning of these schemes from time to time. These have prevented the near optimum utilization of the schemes concerned.

A large section of the labourforce (42%) in the state is illiterate. The proportion of skilled manpower is low. The quality of skills is low. Skill-imparting institutions in the state have

lagged behind in upgrading them. A large number of job seekers, trained through ITIs, are unemployed. There is a mismatch between supply of and demand for skill requirements. The present system of vocational training is not adequate.

According to Planning Commission estimates, if during the Tenth Plan period (2002-07) growth of employment continues to be the same as in Ninth Plan (0.73%) and the labourforce grows according to the projected demographic profile, the level of unemployment in the state would be higher than what was expected at the end of the Ninth Plan.

Suggested Steps

Special attention has to be given to generation of appropriate employment opportunities in the rural areas of the state. In fact, the major challenge is the replacement of existing low-level jobs with regular jobs. Efforts to provide decent employment to women should be made in order to properly empower them. There is need to study in detail the different activities in which women are engaged and the potential for their diversification.

It is only through the private sector that regular jobs can be created in the future. Hence, it has to be encouraged to invest in the state for the generation of more employment. Even through this process it might not be possible to generate substantial regular employment in the near future. A large volume of better quality employment has to be generated through self-employment, especially in the unorganized sector. Therefore, adequate policy steps have to be taken to promote self-employment opportunities.

The sectors which have comparative potential of higher employment generation in the future are agro- and food-processing, construction, trade, transport, communication, and other services. Faster development of non-farm activities, especially in the rural areas, will also be helpful in checking excessive rural-to-urban migration, thereby relieving pressure on the urban infrastructure. Special employment programmes for the vulnerable sections need to be effectively implemented after proper restructuring, making them leakage-proof through constant monitoring and fixing of responsibility for any lapses.

The ITIs and other technical institutions have to be upgraded and modernized as far infrastructure, staff and courses are concerned. All-out efforts are needed to promote vocational education. Industry should be involved in the management of these institutions. The role of the private sector has to be encouraged in imparting vocational training services. Such institutions as IITs and IIMs, which are known for quality and talent, have to be promoted and expanded. Proper manpower planning and human resource development must be given utmost priority.

However, it will not be possible to achieve significant improvement in the employment situation at the prevailing growth rate. Indeed, a very high investment rate is required if we want to achieve higher rate of growth of the state economy during the Tenth Five-Year Plan, along with an efficient use of scarce resources.

Labour/Industrial Relations in Punjab

Industrial relations constitute one of the most complex and delicate problems of the modern industrial production process. The structure of industrial relations in India draws

its spirit from the concept of a welfare state. Labour policy was directed initially towards maintaining harmony in industrial relations to ensure the realization of the objectives of National Economic Planning. Four types of institutions were created to deal with industrial conflicts: i) interventionist labour laws; (ii) industrial democracy; (iii) code of conduct, moral as well as disciplinary; and (iv) consultation machinery, collective bargaining, both bilateral and trilateral. Among all these, state intervention has played the most dominant and significant role. Wherever conflicts arose between employees and employers, the state came in to sort out problems. In this process the state introduced an array of regulations to maintain harmonious relations between employer and employees. Presently, in the wake of the new economic policy of liberalization, privatization and globalization, the government has started reducing its intervening role.

Industrial relations in Punjab are part and parcel of industrial relations in India. The broad pattern of industrial relations in the state is that the trade union movement, as in the rest of the country, developed along with freedom struggle of India. In Punjab, trade unions are strong in the organized sector and weak in the unorganized sector. The increasing trend in the state is of unions with large membership. Independent and small unions have decreased over the years. The future of trade unions without affiliation to central federations is totally unviable. The pattern of industrial disputes has been declining since 1991. The number of work stoppages has been going down since 1981. There has been a sharp downward trend in the number of workers involved in work stoppage since 1989. The number of man days lost has been fluctuating, especially since 1982. Maximum disputes have been raised by AITUC and CITU, both federations with left leanings. Issues related to wages, allowances, bonus and other matters are the primary causes of work stoppage in Punjab. Adjudication continues to be the most effective method for resolving industrial disputes.

Continuation of harmonious and peaceful labour relations has emerged as a subject for research in the present circumstances. However, emerging realities demand peaceful industrial relations, to attract investments. At the same time there is need for a suitable policy framework for ensuring adequate social security for labour, which is possibly a major condition for harmonious relations between employer and employees.

Information Technology: Growth and Development Strategy

The Indian software and service industry, comprising IT Services, IT Product and Technology Services and IT Enabled Services, has emerged as one of the fastest growing sectors in the Indian economy, with a growth rate exceeding 50 per cent in exports and 40 per cent in the total IT industry over the last five years. However, the share of Punjab in the total turnover and exports from India has been dismal. It was only 0.26 per cent of the total exports of India during 2000-2001.

Some of the specific constraints for the growth of IT industry in Punjab are non-availability of the required quality of infrastructure and human resource, insufficient funds for the development and promotion of the sector, lack of direction, vision and a non-conducive environment. It is essential for the state to overcome these specific constraints. A target of five per cent share of the total turnover projected for India at US\$ 60 billion by 2007, has been suggested for Punjab. Although this is optimistic, it is achievable through a fast track approach. This will help to generate 99,000 jobs by the 2007, 77,000 in IT Enabled Services (ITES) alone.

Special emphasis is recommended to develop IT Enabled Services, as it has a large employment potential and a short gestation period. Its success mainly depends on the availability of trained manpower and quality infrastructure with adequate bandwidth and fault-free and uninterrupted power supply.

The state must formulate policies and provide a conducive environment to attract MNCs, to set up IT industry in Punjab, Special efforts have to made to attract NRIs of Punjab origin actively involved in the IT Industry in USA and other developed countries.

The state needs to train 99,000 high quality manpower with the right mix of technical, business and functional skills, to achieve a five per cent share of the total IT Industry by 2007. (IT Services: 16,000, IT Software Product and Technology Services: 6,000 and IT Enabled Services: 77,000). Upgradation of the infrastructure of engineering colleges, including networking and the training of the faculty, is important to meet the required standards. An Indian Institute of Information Technology of international standard should be set up in Punjab to meet the requirements of quality manpower. It is recommended that a State Council for Computer and IT Education (SCCE), a body of experts responsible for monitoring and fixing minimum standards for quality IT education, both by government and private institutions, should be set up.

Punjab must ensure timely implementation of special norms for bandwidth during the Tenth Plan period, as recommended by the Government of India, to develop quality IT infrastructure. It is recommended that three new IT cities are developed at Patiala, Jalandhar and Ludhiana, besides upgrading the existing infrastructure at Mohali. Each such IT city should have a separate development authority on the pattern of Noida Development Authority and function independently. A fund of Rs. 30 crore may be allocated to create a venture capital fund during 2002-07.

Punjab should strengthen the Department of Information Technology (DoIT) in terms of expertise and funds, for promoting and implement e-governance in the state. A monitoring cell, with defined rules and procedures, should be set up for monitoring performances of all the projects and departments against the set targets.

It is recommended that 140 Community Information Dissemination Centres (CIDCs) be set up, one in each block, linking all the villages on a state-wide network, for creating an IT culture and its usage among the masses, This will facilitate effective dissemination of information related to the 29 subjects transferred to panchayats under the 73rd Amendment Act. These centres will also function as IT kiosks, providing direct linkages between the masses and the government, and training to the panches, sarpanches and social workers. After initial investment, these centres should be financially self-sustaining.

In the Tenth Plan, Ministry of Information Technology has recommended three to five per cent of the plan outlay for the development of IT. The state has provided Rs. 110 crore, i.e., 0.47 per cent of the total outlay. It should be enhanced to a minimum of two per cent of the state's total Tenth Plan outlay.

Development Perspective and Strategy

Context

While enunciating a development perspective for Punjab, an essential prerequisite is to spell out the vision of Punjab – the kind of economy, society, polity, ecology and ideology envisaged for it, over a given period of time.

One can envision Punjab eventually as a region, which is sub-urban, displaying a continuum of rural and urban, agricultural and non-agricultural, with a hierarchy of settlements interlinked by a free-flowing transport network.

The popular development perspective seeks transformation of the state in the mould of a western country. An oft repeated self-question is: Why cannot Punjab be like the United States, or the United Kingdom, or like Israel, or Denmark among the smaller countries? However, Punjab has to construct its own model of development, based on the available natural resources, rich cultural heritage, quality of human capital, progressive agriculture, fairly advanced industry, and newly emerged opportunities in the field of information technology. The greatest asset of Punjab is the native genius, skill and work-culture of its people. Once all this is mobilized, the sky is the limit.

Punjab is an extrovert entity, actively interacting with areas all over the world. Its globalised psyche has to be taken care of as a valuable resource in any development perspective. Here poverty is not an issue; achieving a higher level of economic well-being is!

One specific feature of the development process in Punjab may be underlined: As soon as a new growth activity is initiated, it picks up momentum, and reaches a plateau rather too soon. The green revolution is one such case. Sustainability of the development process and providing new channels for its flow are now the crux of the matter.

On the whole, Punjab emerges as a grand success story. Evolved in the mode of a 'culture of competition', the state is taking time to acquire a 'culture of co-operation'. Human development is yet to reach the expected level. Succinctly put, Punjab has not been in a position to realize its potential fully.

Time Frame

What should be the time frame for the realization of the development perspective visualized for Punjab? In the medium-term, it could be placed at 1 November 2016, when Punjab would be celebrating the golden anniversary of its formation; in the short-term, it can be placed at 31 March 2007 when the Tenth Plan gets completed; and as a relatively long-term scenario, it can be dated as 31 December 2020, in the spirit of a new vision. These three datelines can adopt evolving development dimensions as their top priority: financial recovery as the necessary base (2007); human development (education and health) by 2016; and habitat (environment) by 2020.

Tasks

The main strands of any development strategy for Punjab include: rejuvenation of the socio-economic dynamism of the state; improvement in the quality of life as well of

habitat in both rural and urban areas; upgradation of the human resource base by improving the quality of educational and health services; diversification of the economy from agriculture to non-agriculture, of agriculture toward non-farm activities, and of wheat-rice rotation towards ecologically viable crop-combinations; and effective management of water and soil.

Additional issues pertinent to the development perspective can be listed as: How to make Punjab investment-friendly for industry? How should the state be meeting the challenges posed by the globalisation of the economy, labour-replacing new technologies, and over productive biotechnology? How to promote a culture of taking rational locational decisions, wherein economics leads politics rather than politics leading economics? An item not to be missed on any agenda of a development perspective for Punjab relates to raising the 'status of women'.

Currently, the state is organized into four divisions, 17 districts, 72 subdivisions, and 140 development blocks. A close scrutiny of the administrative map of Punjab shows some serious distortions in the organization of administrative space. A periodic administrative area reform, not on an ad hoc but a comprehensive basis, emerges as an essential task, for the sake of both administrative efficiency and development administration. In particular, there are some issues to deliberate. Should the state continue with its existing system of divisions, districts, subdivisions, or development blocks, or dispense with divisions and subdivisions and retain only districts and development blocks? What is the relevance of a division in a small state like Punjab? Do we need subdivisions when the average number of development blocks in a district is just eight?

There is still another moot point for deliberation. Should development blocks continue to remain exclusively rural, as they were originally designed, or should any town/s falling within their territorial jurisdiction be also included as a part of the block? The rationale of keeping rural and urban areas as separate in any scheme of things is difficult to justify in the present context.

As a development strategy, there is still another way of reforming the administrative areas. Let the boundaries of the state assembly constituencies and those of blocks correspond with each other, and likewise the boundaries of parliamentary constituencies should conform to those of higher-level administrative units, such as divisions or a group of districts.

In the final analysis, 'rejuvenation, quality, and management' emerge as the three key ingredients for reinventing Punjab today.

For years after independence, Punjab effectively demonstrated that it could lead in the mode of a model state in India. Today, it is craving to be led for the full realization of its potential in the making of a prosperous, just and civil society. The tide will turn only when leaders with foresight awaken the state from the slumber of its past glory and create a space for new dreams to manifest.