



Government of the Punjab

A Strategy for Accelerating Economic Growth and Improving Service Delivery

June, 2009



Planning & Development Board

URL: www.pndpunjab.gov.pk



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List of Acronyms and Abbreviations

ADP	Annual Development Programme
BHU	Basic Health Unit
BOT	Build Operate Transfer
GDP	Gross Domestic Product
GoPb	Government of Punjab
GPP	Gross Provincial Product
LEAPS	Learning and Educational Achievement in the Punjab Schools
MTDF	Medium Term Development Framework
P&DD	Planning and Development Department
PER	Punjab Economic Report
PESRP	Punjab Education Sector Reform Programme
PIHS	Pakistan Integrated Household Survey
PPPs	Public Private Partnerships
RHC	Rural Health Centres
SME	Small and Medium Enterprises
TFP	Total Factor Productivity
WAPDA	Water and Power Development Authority

Foreword

Punjab has a robust and broad-based economy. It contributes about 60% of the country's gross domestic output. Since 1990 Punjab's economy has posted a higher rate of growth than the national average across all major sectors – agriculture, industry and services. Indeed Punjab has been the main driver of economic growth for Pakistan.

The Government of Punjab has supported this growth process through substantial investments in infrastructure such as irrigation, roads, water supply and urban services, as well as the provision of social services such as education and health. To accelerate economic growth and to ensure that its benefits reach all classes of society, it is important to formulate a coherent strategy that underpins all public sector investments and provides an enabling environment for the private sector.

In order to address this need, the Government of Punjab has prepared a strategy for accelerating economic growth and improving service delivery. The strategy provides a broad framework within which specific policies, programmes and projects can be conceived and formulated. It is also designed to be a guide for other stakeholders to channel and synergize their efforts.

Based upon an objective assessment of the current situation as well as the challenges and opportunities it presents, as embodied in the detailed *Report*, the strategy underscores the need to achieve sustainable growth by realizing the untapped potential of agriculture, small and medium enterprise and domestic commerce sectors, by leveraging the potential of the expanding workforce and by addressing the need to reduce poverty and ensure equitable income distribution. It is hoped that this wide-ranging agenda will put the Punjab firmly on the path to economic prosperity and growth.

SAMI SAEED

Chairman

Planning & Development Board

June, 2009

Message from the Chief Minister

Punjab has tremendous economic potential - a large population, strategic location sharing borders with Pakistan's other three provinces, rich agricultural resources, strong manufacturing and service industries and good infrastructure. Our challenge is to realise this potential and deliver rapid, sustainable and equitable growth with more jobs for our growing population. No one must be left behind in the push for development and prosperity: the benefits of a strong economy must be felt by all. We want to ensure a decent quality of life for all of our people. We want to provide higher quality services in education, health, water and sanitation as well as to augment our existing infrastructure for boosting our trade, industry and agriculture.

The plans to achieve this are laid out in this Strategy for Accelerating Economic Growth and Improving Service Delivery. It is a realistic strategy, based on an objective analysis of our situation and the problems we face. It is a people-centred strategy, based on our commitment to the goal of improving the lives of the people of Punjab. It is a private sector-based strategy in which Government's role is to facilitate and support by strengthening its institutions. Above all it is a strategy that draws on the assets we already possess - our labour force, agriculture sector, small and medium sized enterprises, domestic commerce, our large cities and well-developed infrastructure and shows how these can be utilised to generate and sustain rapid and inclusive growth.

It is an ambitious programme. The Government appreciates that mobilising resources for this will not be easy. Nor do we underestimate the challenges in implementing such a wide-ranging agenda, especially in the context of global economic downturn and current security environment.

Our government is committed to overcome these daunting challenges and to implement policies and programmes that help realize our potential for growth and development. Our ultimate goal is a vibrant, developed and prosperous Punjab in which every citizen enjoys a decent quality of life. Insha' Allah we will succeed.

MUHAMMAD SHAHBAZ SHARIF
Chief Minister, Punjab

Message from the Minister for Finance, Planning and Development

Government of the Punjab is committed to achieving higher levels of economic growth. It sees this as the key to generating jobs for the province's expanding workforce, giving people higher incomes and a better standard of living. Punjab has the most impressive economic indicators in Pakistan. But the Government recognises this has to be an on-going effort. It also recognises that in order to derive the maximum results a coordinated approach is needed.

This approach is laid out in this Strategy for Accelerating Economic Growth and Improving Service Delivery. It has been prepared after extensive consultations with stakeholders and drawing on the vast body of available literature and research. The strategy is based on the premise that the Punjab needs to generate one million new jobs each year, which requires a sustained growth rate of 7-7.5%. It proposes to achieve this by developing untapped potential in a number of key sectors: agriculture, small and medium sized enterprises, domestic commerce and construction, as well as harnessing the tremendous opportunities offered by the province's 'demographic dividend' – the bulge in the working age population and relatively few dependents.

The strategy's focus is less on increased inputs as on improving productivity: making use of existing assets but doing so more efficiently. This is based on past experience which shows that most of the Punjab's growth has resulted from inputs and only a tiny percentage from productivity gains – making the scope for the latter correspondingly high. It is also based on appreciation of the fact that our resources are limited.

Government of the Punjab sees the private sector as the driver of economic growth with government creating a facilitating and enabling environment. The strategy is consistent with this. It calls for reform and strengthening of state institutions in order to perform this role effectively.

It is important to stress that the ultimate goal of this strategy is not simply achieving higher rates of economic growth, but ensuring equitable income distribution and poverty reduction. Hence it prioritises improvements in education, health and other services essential for a decent quality of life, and demands that social protection systems be put in place to help the most vulnerable.

In conclusion, this strategy lays out a plan for higher levels of sustainable and equitable growth. Government is committed to implementing it and taking the Punjab further along the path of progress and development.

TANVIR ASHRAF KAIRA
Minister for Finance, Planning and Development

1. Introduction

The Government of the Punjab has set out to create a more dynamic and equitable economy for the province. Reaching this goal will not be easy, and is made more difficult by the ongoing terrorist threat to Pakistan and the consequent necessity to divert resources to meet this menace. The current recession in Pakistan's and the world's economy has of course made the problem more onerous. The Punjab will thus have to seize its opportunities and overcome a number of short- and medium-term challenges. To this end, the government is developing a people-centered strategy to address the fundamental issues that the province faces. The strategy draws upon reports and papers prepared by academics, think tanks, development agencies, the business sector and individuals, in addition to discussions within the provincial government. Broadly speaking, the pillars of the strategy are a rapid growth of the Gross Provincial Product based on a high-value agriculture sector and an investor-friendly climate that would encourage rapid private sector growth; human resource development; and the strengthening of institutions (in particular the judicial system and the bureaucracy).

This paper lays out the main contours of the government's strategy, and is based on an objective analysis of the major issues that affect the overall economy of the Punjab as well as its most important sectors. It describes the broad policy initiatives that the government will undertake in order to sustain growth and to remove the impediments that have prevented the Punjab from realizing its potential. The report provides a strategic framework within which specific programmes and projects will be prepared.

1.1 The Opportunity and the Challenge

Punjab is confronted with a demographic situation that could turn out to be a tremendous opportunity, but which brings with it serious challenges. As a result of past fertility trends, the share of the population in the age groups 15-60 years will keep growing for the next 30 years or so. This will increase the ratio of the working age population to that of the dependent population. Thus, for a number of years, the Punjab will be able to harness a much larger labour force, while at the same time carrying a relatively smaller percentage of dependants.

The boon that is offered to the province is the potential of greatly increased production because of the much larger numbers of persons in the working age group. However, this "demographic dividend" will not come automatically, but will have to be earned by investing in infrastructure, manufacturing and other productive facilities and by a greatly enlarged and much more effective system of education and training. These demographic developments, however, also carry major risks. First, the province needs to provide jobs

for the vastly increased numbers in the working age groups. The second drawback in the situation is not contingent, but is inescapable—these members of the population will inevitably age, and the bulge in the working age groups will become a bulge in the dependant age groups. At this time, the ratio of dependants to the working age population will increase. This means that Punjab must make the most of the years in which the demographic dividend is available and build up its productive capacity and social institutions so as to be able to cope with the financial, medical, and social problems of an ageing population. This paper presents a strategy to deal with these fundamental issues.

2. Macroeconomic Context: Poverty, Income Distribution & Economic Growth

There are five key objectives for the government regarding macroeconomic management of the Punjab:

First, the challenge for the policymakers is to make the Punjab's economy grow at a rate of 7–7.5 percent a year in order to absorb the additions to the labour force and to cut into the backlog of the previously unemployed and underemployed. An allied challenge is to ensure that the benefits of growth reach all classes of society and all regions of the province. The government is increasingly cognizant of the need to address the requirements of relatively less developed regions.

Second, future growth of the GPP must be based to a larger extent on productivity improvements than has been the case so far;

Third, policymakers must attempt to damp down the fluctuations in the growth rates of sectoral output in order to reduce the volatility of the overall growth rate. It will be particularly important to try to stabilize the agricultural growth rate because almost 60 percent of rural employment and nearly 45 percent of overall employment in the Punjab depends on this sector;

Fourth, while the economy of Punjab is deeply affected by economic variables such as the exchange rate and the interest-rate, it has no control over them. The provincial government must maintain a dialogue with the federal authorities in order to ensure that attention is paid to the Punjab's interests in taking decisions concerning these variables;

Fifth, in order to achieve its macroeconomic goals, the government must be much more proactive in economic management. Among other matters, it will strengthen the

analytical capabilities of planning, statistics, and other economic departments to: maintain up-to-date GPP accounts; provide estimates of provincial savings and investment (both public and private); estimate and track movements in the informal or “grey” economy; regularly take stock of the investment climate and the cost of doing business in the Punjab; maintain up-to-date information on movements in the labour force, employment, and poverty; and regularly collect data on an intra-provincial basis of indicators such as the district-wise distribution of population by age-groups, of poverty, and so on.

The foregoing lays out a medium-term framework for the government’s policies. In view of the pressures on resources, the government will have to prioritize its actions, of course ensuring that they are consistent with the medium-term framework. In the short-term, the government intends to do the following:

- it will step up investment in infrastructure and will increase expenditure to improve the effectiveness of health, education and skill development
- it will implement the recommendations of the Task Force on Food Security. The government will expand food production—by, for example, announcing incentive-based procurement prices well in time for wheat sowing, making sufficient amounts of inputs available, taking measures to increase meat production (see agriculture section)—acquiring adequate supplies of food grains, and expanding storage capacity
- it will provide quality services to the growing urban population, including smaller cities and towns, as well as improve the coverage and quality of social services in the rural areas
- it will reinforce social safety nets by strengthening ongoing programmes and creating opportunities of income generation for the poor and the vulnerable

3. Agriculture, Irrigation and Livestock

3.1 Agriculture

The agricultural sector features large in the Punjab's economy—in 2007 it accounted for about 28 percent of the province's GPP and provided jobs for 44 percent of the labour force. Moreover, bulk of the province's poor are located in rural areas which, of course, depend to a large extent on agriculture for their incomes. The efficient development of

the agricultural sector is therefore of prime importance, and occupies centre stage in the government's strategy for increasing incomes and relieving poverty. With a sector as large and with as long a history as agriculture in the Punjab, one could think of a fairly long list of issues that might be discussed. However, since the aim of the present paper is a more operational strategy, only the most pressing structural issues will be mentioned.

The first, and perhaps the most important, issue is that the possibilities of input-driven growth are becoming exhausted (the constraints on water and land have become much tighter) and thus the approach for the future will have to be different from that in the past. A long-term study of the sources of agricultural growth in the Punjab estimates that between 1970 and 2003 total factor productivity (TFP) grew at about 1.3 percent annually. Thus, the sector's productivity (in the sense of using inputs efficiently) was low, with two-thirds of the increase in output resulting from higher applications of capital and labour. The contribution of productivity was lower than in several other Asian agricultures—comparable estimates of TFP growth are 1.9 percent for the Indian Punjab (1970–95), 2.2 percent for China (1965–85), 1.9 percent in Taiwan (1951–80), 1.8 percent in Thailand (1971–2002), and 2.1 percent in Vietnam (1985–203).

Second, water has become the major limiting factor to further growth, but the productivity of water used in agriculture has declined in the past three decades. Moreover, it will not be easy to increase the supply of water through physical means. The province will have to use the available water more productively—"more crop per drop" will have to be the motto. The incentives to do this will have to form an important part of economic governance.

Third, the cropping pattern in the province does not conform fully to its comparative advantage or to realities of the international market. Four major crops (wheat, rice, cotton and sugarcane) accounted for about 47 percent of value added in agriculture in the Punjab in 2007. Optimizing the use of the province's resources may require adjustments to the area sown to these crops.

Fourth, Punjab suffers from considerable "yield gaps." There is a considerable difference between the productivity of the most efficient farmers and the average. The gap between the average and the "best practice" farmer ranges from about 46 percent for wheat to 77 percent for cotton. This shows how much the province's output could be increased merely by improving performance of the average farmer in the direction of what progressive farmers in the province are already achieving. The gap between the highest averages in the world or the yields obtained at agricultural research stations, on the one

hand, and the Punjab average, on the other, is of course quite wide, and shows an even greater potential for the province.

3.2 Irrigation

Pakistan is one of the world's most arid countries, with an average rainfall of less than 240 mm a year. Much of the Punjab would be desert were it not for the elaborate irrigation system. It is therefore not surprising that the water economy of Pakistan has been studied in considerable detail. This report does not propose to survey these details; rather, it highlights some of the key issues that demand the provincial government's attention.

Recent studies emphasize four issues:

- crop water requirements are not adequately met by canal irrigation due to issues of water availability and delivery constraints
- groundwater is being over-exploited in many areas, and its quality is deteriorating. In 1960, groundwater accounted for only 8 percent of the farm gate water supplies in the Punjab. By 1985, this figure was 40 percent, and by 2008 groundwater used for agriculture accounted for more than 55 percent of the water at the farm gate in the Punjab
- relative to other arid countries, Pakistan has very little water storage capacity; this makes the country (and the Punjab) very vulnerable to fluctuations in rainfall and snowmelt, which provide the main source of water for the Indus system. This also does not allow meeting seasonal variations in water demands. The United States and Australia have over 5000 cubic meters of storage capacity per inhabitant, while China has 2200 cubic meters; Pakistan has only 150 cubic meters of storage capacity per capita
- water productivity in the Punjab is low. Crop yields in the Punjab, both per hectare and per cubic meter of water, are much lower than international benchmarks, and much lower even than in neighbouring areas of India. Thus, in 2004 wheat yields in the Imperial Valley of the United States averaged 7 tons per hectare and 1.0 kg per cubic meter of water; in Bhakra (India) the average yield was about 4 tons per hectare and 0.8 kg per cubic meter of water. However, yields in the Punjab averaged only 2 tons per hectare, and just over 0.5 kg per cubic meter of water

3.3 Livestock

Pakistan's livestock population, estimated at 125 million in 2006, is one of the largest in the world. Punjab had 52 percent of the total livestock population of Pakistan in 2006. Livestock population is divided roughly equally between small and large ruminants and is growing at about 4 percent per annum.

Almost 75 percent of the Punjab's population is involved in the livestock sector—this is not surprising, as small ruminants and other animals form part of rural households' food basket, provide a cushion in case of crop failures, and can be sold to meet emergency expenditures. The sector is dominated by small operators; in 2006, over 90 percent of those involved possessed less than four animals, and only 5 percent of the operators owned more than 100 animals.

Productivity of the livestock sector is low compared with international markers, in terms both of meat and milk output. Given the wide participation of small operators, developing this sector could provide an important source of increased incomes for a substantial part of the rural population.

Failure to adequately develop the livestock sector rests on a combination of financial and governance issues. On the financial side, more investment is needed in this sector. On the institutional and governance sides, the province has been slow to create collection centres for milk for delivery to urban areas, to set up marketing chains, to conduct adequate research into the improvement of breeds, to move towards market-determined prices that would provide incentives for the growth of the sector, to set standards for health and quality (both of animals and of output), and to develop public-private partnerships for the development of this very large and potentially very profitable sector.

3.4 The Strategy

The government's strategy for accelerating the growth of the Punjab's agricultural sector is to increase the productivity of some of its existing crops; to provide incentives to shift the cropping pattern in the direction of higher value-added activities, such as horticulture; to expand the output of other high-value items, such as meat and dairy products; and to use the province's scarcest resource, water, more efficiently.

In order to implement the strategy, the government will adopt a multifaceted approach.

First, it will substantially increase investment in the agricultural sector. The government recognizes that the Punjab cannot create modern agriculture without substantially

upgrading its facilities and creating new ones, and this requires a significant increase in investment. The government is determined to do this.

Irrigation has also reached a stage in which increased investment, both public and private, is needed simply to maintain the current level of efficiency. This investment is required to support measures (such as modernization of barrages, lining and remodelling of irrigation conveyance network, introducing on-farm drainage, etc). In addition, a very considerable amount of investment will be required to build water storage capacity to levels that would provide greater security against fluctuations of rainfall and snowmelt as well as cater for seasonal variations in water demands. Focus on broad-based policy and institutional reforms in the sector will continue, with appropriate refinements in the light of experience gained so far.

Second, the government will utilize all possible methods of mobilizing more financial resources for investment in the agricultural sector. Three avenues offer substantial opportunities: (a) the government will examine carefully what aspects of its activities constitute public goods and continue to perform these, while transferring to the private sector those aspects that are of a commercial nature. (b) The government will take measures to improve cost recovery for the provision of public services. Cost recovery for canal maintenance still averages less than 30 percent, and should be increased on grounds both of equity and efficiency. (c) Within total current expenditures, the share of establishment costs has been identified as being disproportionately high and will be reduced in order to free up resources that the government could target towards more pressing needs.

Third, in order to continue the drive towards a more commercial agriculture and to provide greater incentives for production of high-value items, the government must urgently modernize wholesale markets. These markets are regulated by the Agricultural Produce Markets Act of 1939 and encourage a structure of production and forms of activity that are at substantial variance with the requirements of the Punjab of today and of the future. The markets suffer from poor infrastructure, highly bureaucratic regulation, little involvement of the private sector, with the infrastructure biased towards major crops and inadequate attention to high-value crops and livestock.

Modernizing wholesale markets will require action in four areas:

- a) *Improving connection between farms and the market.* About one-third of the Punjab's farmers are located more than 15 km from any fruit and vegetable market, and 8 percent must travel more than 5 km to reach a metalled road. It

has been estimated that about 25 percent of fruit and vegetable production is lost before it reaches consumers, and this does not include the loss in value because of deterioration in quality. These factors increase the cost of doing business in the agricultural sector and discourage private sector investment; they will be addressed by the government. The government will re-examine the Agricultural Produce Markets Act so as to permit the private sector to play a much larger role; this will reduce the amount of financial resources that the government will have to commit in order to improve the market infrastructure.

- b) *Modernizing the dissemination of price information in different markets.* The provision of market information is inefficient and uncoordinated, leading to high price differences for the same commodity between markets. The government will upgrade the collection and dissemination of market prices, collecting price data by trained staff and electronically linking all markets in the province. The timely provision of market information will enable farmers to sell their produce in the most appropriate markets.
- c) *Expanding the human capacity for grading quality and maintaining health and safety standards.* A main thrust of the agricultural strategy proposed is to encourage the production of items of high value, such as fruits, vegetables, oilseeds, livestock, and dairy products. If the farmer is to obtain the best prices for these commodities, it is essential to ensure the safety and consistent quality of these products. The most serious constraint on implementing food quality and safety standards has been shown to be institutional capacity. This is an area in which the government will involve producers and exporters in developing and implementing the required management systems.
- d) *Maintaining a dialogue with the federal government.* A number of areas in the modern marketing of food products fall under the ambit of the federal government. Since the development of a commercialized agriculture requires action in some of these areas, the Government of the Punjab will play a strong advocacy role with the federal government to ensure that the required changes are brought about. Some important areas that require this sort of attention are:
- allowing the private sector to establish cold storage at major ports

- streamlining laws and regulations to provide swift but transparent punishment for those supplying substandard food products
- defining minimum grades and standards for agricultural raw and processed products for the domestic market and ensuring equivalence with the WTO's standards for export markets.

Fourth, the government's strategy for improving the livestock sector will build on the issues identified in this chapter. In order to enhance meat production, the government is drawing up a programme that will emphasize the following actions:

- induction of beef breeds and improvement of local animals
- promotion of a programme to save calves that are being slaughtered in the first month of their lives
- modernization of slaughter-houses
- provision of storage facilities
- improvement of cattle markets.

The government will also take measures to boost milk production. The strategy entails building up a dairy supply chain on a cooperative basis; developing a private-sector-led animal feed industry; facilitating commercial farming; and encouraging genetic improvement.

Fifth, a number of institutional issues will be addressed regarding the markets for land and water. Lack of a transparent and efficient land administration system has injected many impediments in the functioning of a land market. The imperfections from the antiquated land administration and registration system lead to high transaction costs in land transfers. These imperfections slow the exit from agriculture of inefficient and very small farms that cannot provide a livelihood, and reduce the incentives for very large holdings to sell off underutilized land. The consequence is to promote fragmentation of landholdings, which results in suboptimal mechanization and irrigation operations. The government will examine ways to overcome the diseconomies arising from land fragmentation. It will examine the results of cooperative programmes in other countries to see if some of their experience would be useful in the Punjab situation.

The government plans to put in place an effective land recording system that would promote the smooth transfer of titles. The Punjab has already initiated a project to computerize land registration records. The government will ensure that this vital project receives all the resources, financial and human, that it requires in order to complete its work.

Sixth, the increasing scarcity of water will be addressed in a multipronged manner. A strong incentive to utilize water efficiently would be provided by pricing water to reflect its scarcity value. As part of the agricultural development strategy, the government will invest in devices to measure and meter water flows, to rationalize *abiana* rates and to ensure transparency in water allocations.

Seventh, another important institutional issue that the government will address is to strengthen the agricultural research system. This involves not only allocating more funds to this area, but also developing a human resource and incentive framework that would encourage research. Measures that would accomplish this include:

- a transparent system of recruiting scientists
- promotions based on some objective indicator of merit
- improving the salary and benefits structure
- establishing a career service
- supporting advanced training abroad, especially in fields where Pakistan lacks capacity.

In the short-term the government will prioritize its policies, and will concentrate particularly on the following. It will:

- increase the proportion of development expenditure within the total budget
- expand the programme of remodelling and modernization of irrigation infrastructure
- optimize conjunctive use of canal and ground-water
- support on-farm high efficiency irrigation systems

- improve connections between farms and the market, and modernize the dissemination of price information in different markets
- support the average farmer in enhancing productivity
- restructure and reinvigorate agriculture research
- facilitate commercial farming in the dairy sector
- enhance meat production by promoting a programme to save calves that are being slaughtered in the first month of their lives.

4. The Investment Climate

Accelerating the growth of Punjab's GDP to a sustained rate of 7–7.5 percent a year will require a substantial increase in the province's investment rate. Most of the investment in the output-producing sectors will have to come from private sources. It is essential, therefore, to examine the factors that the private sector views as raising the cost of doing business in the Punjab and thus discouraging investment.

Firm level data from surveys shows that a large share of Pakistan's productivity and employment is determined by the investment climate. An improved investment climate increases efficiency at the firm level by directly increasing its productivity; raising the level of competition in the market; and decreasing the degree of informality. All these should lead to an increase in investment and employment.

The data show that large firms were more productive than small and medium firms, and older firms more than younger. Firms in Sindh (a province dominated by the larger and more established firms of Karachi) have higher levels of productivity than firms in the Punjab and the other provinces. Four groups of constraints topped the list for Punjab firms: infrastructure, particularly electricity and water; macroeconomic stability; governance in different forms; and taxation matters.

Power Supply: Access to power supply was a serious deterrent for Punjab's firms; over 77 percent of the managers surveyed considered electricity as a major or very severe obstacle for operation and growth (the national average was 79.7 percent). Waiting period for a new connection in the province was 55.5 days, compared with an all-Pakistan figure of 91.8 days. Punjab suffered from the largest number of power outages. Many of the province's enterprises therefore had to resort to generating their own power.

This somewhat moderated the impact, but financial losses still remained close to 9 percent of sales. Moreover, enterprises had to bear the additional cost of generating their own power. Almost 80 percent of the managers of Punjab's enterprises sampled in the World Bank survey considered electricity as a major impediment to operation and further growth.

Governance: A great many of the factors impacting on the investment climate were issues of governance, in one form or the other. This entailed higher transaction costs on account of over-regulation, weak contract enforcement and lack of transparency.

Taxation Issues: Taxation issues figured prominently in the thinking of managers. About 40 percent of managers in the Punjab regarded tax rates as a major obstacle to business operation and growth. The Punjab fared somewhat better regarding tax administration—about 21 percent of managers in the province regarded tax administration as a major or very serious obstacle for operation and growth, versus a national average of just over 23 percent.

4.1 The Strategy

Government of the Punjab has noted the results of the foregoing studies. It is determined to reduce the cost of doing business in Punjab and to make the province a much more investor-friendly region. It will move to reduce the number of impediments that managers considered to be significant. Removing some of these obstacles will involve investment in physical projects, and these will be incorporated into successive Annual Development Programmes; removing others will require changes in policies, strengthening the working of institutions (such as the judicial system), and the modification of outdated laws.

The government will make a particular effort to speed up access to justice. It has already stepped up investment in the judicial physical infrastructure. It will add substantially to the number of judges and attract able persons into the profession; to this end it has already very substantially raised salaries and some levels of the judiciary so as to make the compensation package competitive with other professions.

The government will take the following measures to improve the Punjab's investment climate in the short term:

- it will increase investment in infrastructure projects, the costs of which will be incorporated into successive Annual Development Programmes

- it will support the private sector in setting up power plants
- it will rationalize cumbersome and unnecessary regulatory procedures
- it will support the establishment and up gradation of judicial infrastructure

4.2 Infrastructure

A substantial part of the cost of doing business is determined by the extent and quality of the infrastructure. This section deals only with roads, because the other major elements of infrastructure—for example, the railways, power, and telecommunications—fall outside the remit of the provincial government.

4.2.1 The Strategy

The strategy aims at consolidation and rehabilitation of the existing network as well as opening new arteries under a strategic plan. The government will undertake a number of measures to implement this strategy:

- the government will aim to complete projects that have already been started
- public-private-partnerships (PPPs) will be encouraged, wherever possible, in order to help fill in the financing gap, to bring in private sector tools of management and control, and to make the relevant project more efficient
- prepare asset management plan and prioritise the requisite investments
- prepare and implement rural roads rehabilitation plan

5. Human Resource Development

5.1 Education

The most important issues in education and policies to address them are discussed below.

First, despite the gains in the past decade, the situation in the education sector leaves much to be desired. Even with the increases in school attendance and the improvement in the literacy rate, the fact remains that nearly 30 percent of the age group 5–9 years is not enrolled in schools. This raises a challenge, because it falls short of the performance of our competitors. Moreover, since the Punjab's net-enrolment rate is below that of neighbouring countries, it suggests that school attendance in the future is likely to be

lower than desirable. The primary school net-enrolment rate was lower than many of the neighbouring countries. The overall literacy rate for males and females combined still hovers at about the 65 percent level.

Second, substantial gaps still persist between the genders and between urban and rural areas. The literacy rate for males in 2006 was almost 20 percentage points higher than that for females; the gap was particularly wide in the rural areas, amounting to about 26 percentage points in favour of males. A key issue in improving aggregate educational outcomes of the Punjab, therefore, is to increase the enrolment and literacy rates for females.

Third, inadequate access to schools remains a key issue. Accessibility may be understood at two levels: horizontal and vertical. Horizontal accessibility refers to the presence of a schooling facility within a 2 km radius of a household, while vertical accessibility refers to the ability to ensure smooth transition from one level of education to the next. Punjab needs improvement on both counts.

Fourth, many schools lack essential facilities such as infrastructure, sanitation, and water. The lack of such facilities depresses enrolment in schools. It is estimated that Rs 125 billion would be required to provide Punjab's schools with the minimum level of essential facilities.

Fifth, schools catering specifically for girls are used less intensively than those for males. For example, while the average number of students in all-female schools in 2005/06 at 103 had increased from 1994/95 when it stood at 70, it was still much lower than the average of 128 for males in 2005/06. This difference was wider than the difference in the size of the two types of schools, and suggests that female enrolment could be significantly increased without incurring additional construction costs.

Sixth, the quality of education provided is often very poor. A wide-ranging study—the Learning and Educational Achievement in the Punjab Schools (LEAPS)—found that children were performing significantly below curricular standards for common subjects and concepts at their grade-level.

Seventh, the public school system is perceived not to be producing outcomes commensurate with the resources expended on it. While educational outcomes in both the private and public schools systems are poor, the public school system performs much worse, even though the costs to society of educating a child in the public system are more than twice as much as in the private system.

Eighth, skill concentration in the education system does not match the demands of the market place. The consequent creation of an educated but unemployed labour force is not only a human tragedy, but also a waste of resources, as the resources devoted to education will not have translated into increases in GDP and higher standards of living.

Ninth, budgetary allocations are increasing and should help address some of the problems in the sector; however, higher financial allocations in themselves are unlikely to provide a complete solution. With the initiation of the Punjab Education Sector Reform Programme (PESRP), budgetary expenditures on education in Punjab have started to rise. While total expenditure on education tripled from Rs 9,200 million in 2005/06 to Rs 21,480 million in 2007/08, the benefits of increased budgetary allocation have primarily been concentrated in primary schools, which have experienced a marked increase in enrolment rates.

However, the increases in expenditures were translated into higher enrolment figures, but were not congruent with educational outcomes. Since the government is concerned with the output rather than the input, it will have to supplement the expenditures with policy measures that will enable higher spending on education to produce the benefits, in the form of better learning outcomes that are desired by the Punjab's citizens.

5.2 The Strategy

In the foregoing sections, the government has presented a very candid analysis of the problems in the public school system. The government realizes that these difficulties have arisen over the course of many years, that it will take a determined effort to correct the situation, and will require action on a number of fronts.

- *increase budget allocations for education.* The government has already made a strong start; however, more needs to be done, and will be done in successive years. Among other things, it will increase budgetary allocations to help in providing essential facilities such as infrastructure, sanitation and water; and in improving the accessibility of schools
- *improve the training and capacity building of teachers and education managers.* Training of teachers and their continuous professional development programmes need to be strengthened further. Career progression and work environment improvements are important elements of a functional educational system.
- *increase accountability.* The government will explore different methods of accomplishing this, for example, by providing a framework for parents to be more

involved in the education of their children (such as through Teacher-Parent Associations) and to provide feedback on teacher performance

- *recruit teachers strictly on merit.* The government has already made a firm start in this direction, and this will be forcefully adhered to
- *provide flexibility to school administration to reward teachers who produce better educational results.* Such rewards could take the form of a bonus, or some form of special incentive
- *reduce mismatch between skill concentration in education and market demand.* A start has been made in this direction, however more needs to be done to ensure that the skills produced by the education sector match market demand. Greater cooperation between the private sector and educational institutions, especially such as engineering universities, will help ensure that the products of the education sector find jobs and realize the productive potential of the demographic dividend

5.3 Health

The underlying issues relating to poor service delivery in the health sector fall into broad areas of governance and human resource.

Governance Issues

The first major reason for poor health outcomes in the Punjab is the long-standing urban bias in provision of public health services. The health system is biased in favour of the urban elite and against the provision of primary health care. The situation is particularly bad in the rural areas.

A second reason for citizens' reluctance to use even the government health facilities that may be available is the high degree of absenteeism of key personnel from the facility. A survey reported that the biggest problem was the motivation of staff in the service providers and the "culture of absenteeism" that pervaded the sector. Moreover, the prevailing environment did not offer any credible possibility of disciplinary action.

Third, there is little public involvement or interaction with the providers of health services. The public are very largely unaware of their rights in terms of service delivery and so there is little pressure for accountability from the service providers.

Personnel Issues

The stock of human resources in the health sector is skewed, with a relative oversupply of doctors and a shortage of nurses and paramedics—it is estimated that there are two doctors per nurse in the Punjab, instead of a desirable ratio of one doctor per at least three qualified nurses. The shortage of nurses and health technicians is a major contributor to poor standards, in that it undoes much of the good work performed by doctors. This shortage impacts with particular severity on the poorer groups, who are not able to afford private nursing care to fill the gaps in the public sector.

Many health workers are unwilling to work in remote districts; these further imbalances the availability of health services in rural areas. The government has made an effort to provide accommodation for doctors in far-flung areas of the province, but the lack of other amenities (such as good schools for their children) acts as a powerful disincentive. Moreover, the scope for health practitioners to make money from private practice in remote areas is limited, thus further discouraging them to transfer from the more densely populated urban areas.

5.3.1 The Strategy

The government is committed to achieving the Millennium Development Goals and will address health sector issues through a combination of financial allocations, institutional strengthening, and policy measures. Preventive health will remain in focus, specially water supply and sanitation. The government will undertake measures to improve water supply and sanitation with a special focus on Barani and Brackish areas. It will encourage participatory management and community participation in projects. Specifically the government will focus on: a) treating waste water for reducing environmental pollution; and b) developing integrated rural water supply and sanitation schemes. On the curative side;

- financial allocations will be substantially increased. To address pending health needs, the government has already increased the allocation for health in the budget and will sustain appropriate increases in the coming years. These will cover upgrading of facilities as well as training needs
- catchment areas for the BHUs will be reorganized in order to provide integrated primary health care services, irrespective of the Union Council limits. Models of Basic Health Units (BHUs) and Rural Health Centres (RHCs), which identify the optimal levels of infrastructure, staffing, equipment, drugs supply and vertical linkages with other healthcare tiers will be put into place. Ultimately, all families

residing in such catchment areas will be provided with registered health cards, so that households across different geographic areas of the province gain easy access to one-stop, integrated preventive and curative facilities at the BHU and RHC

- primary health care staff will be retrained and their capacity enhanced. Preparation and introduction of a minimum service delivery standard/package including a manual of standard medical practices, state-of-the-art job descriptions, and standardized medical protocols and procedures will be initiated
- supplemental incentives will be put in place, where required. These may especially be needed to improve the availability of doctors in more remote areas and to attract more persons into the nursing profession
- management of health service delivery will be strengthened. The government will improve measures to contract health services to nongovernment organizations, and will strengthen the existing performance monitoring and evaluation systems
- private healthcare facilities will be brought under clearly defined standards. The private sector can provide preventive health services in rural areas where public services are inadequate. The Punjab Health Department will evolve a mechanism to bring private health care facilities within the ambit of clearly defined standards and a code of ethical conduct to protect the rights of the poor and their claim to quality health care
- special school health and pre-school nutrition programmes through Public-Private Partnerships will be considered
- The government will continue to strengthen tertiary healthcare. It will: upgrade health facilities and add new specialties in *tehsil* and district hospitals; expand specialized health facilities (e.g. cardiology hospitals and kidney centres); and provide training facilities for medical students in teaching hospitals

6. Urbanization and Domestic Commerce

Punjab has been the most rapidly urbanizing province of Pakistan. The 1951 Census estimated that 17.4 percent of Punjab's population of roughly 22 million lived in urban areas; in 2009 the figure exceeds 30 percent of a provincial population of close to 95 million. Indeed, the city of Lahore alone has a population today that is larger than the total urban population of the Punjab in 1951. In 2009, Punjab had five cities with

populations of over one million, and another eight with populations between 200,000 and one million inhabitants.

Urbanization encourages economic growth. The sports goods and surgical instruments in Sialkot, tubewell pumps and light engineering in Daska, electric fans and small appliances in Gujranwala and Gujrat, specialized tiles and pottery in Multan, all offer examples of industries that have benefited from clustering made possible by the concentration of skills in their host cities. But rapid urbanization can also create major problems by putting pressure on housing, infrastructure, public services, and the environment. The challenge for Punjab is to develop a strategy to manage the accelerating urbanization in such a manner that the province's cities become more livable while also serving as engines of growth.

In devising such a strategy, the government recognizes that a fundamental shift in approach will be required. It will move away from the practice of regarding municipal service delivery as consisting of elements or projects to be funded on a piecemeal basis towards a more holistic concept of managing cities as social and economic systems. Such a change has profound implications for finance, human resource capacity, governance, and city management.

A basic element in such an approach is to devolve responsibilities to cities. This will require several steps. The metropolitan area will have to be more carefully and consistently defined than is the case at present. The cities' administrations will have to be restructured to make them more accountable. This will involve strengthening the capacity for financial management, audits, and transparent disclosure. It will require measures (including incentives) to strengthen the cities' ability to raise revenues. The boundaries and the fiscal catchment areas of service providers will have to be made congruent with the municipal boundary changes and restructuring of the cities' administrations. The experience of cities in other countries that have undergone similar transformations shows that the cities' existing administrative structures and human capabilities are unlikely to be able to meet all these, and other, additional responsibilities. As part of the medium-term strategy, therefore, the government will assist cities to increase their capacity to manage their own affairs more efficiently.

One of the aims of the medium-term strategy is to avoid the problems that can arise with a pattern of urban development in which one or two cities overwhelmingly dominate the urban landscape. The chief problem that arises with such a development is that the mega cities act as magnets that attract immigration from the rural areas as well as from the smaller cities. The consequence is that these large focal points continue to grow

rapidly, most often in an unplanned manner, putting an intolerable strain on their infrastructures and their abilities to deliver key services. If the Punjab is not to fall victim to such trends, it will have to develop the infrastructure and other capabilities of the medium-sized cities. The government will pay due attention to such trends and as part of its medium-term strategy will support a strengthening of infrastructure and the creation of industrial estates and ancillary facilities in the medium-sized cities (say, those with populations ranging between 100,000 to 500,000 which are presently home to one-third of the province's urban population). The government will develop a number of fiscal incentives to encourage the location of industry and other viable economic activities in these urban centres. Job creation must be stepped up in the smaller urban centres so that the relentless pull of the mega-cities is moderated and the province's development can proceed in a more harmonious and balanced manner.

In order to encourage such development, the government will focus special attention on three areas. First, it will invest more in infrastructure in the medium-sized cities. Second, it will put particular emphasis on measures to develop the SMEs in these cities, because this sector provides jobs for about 90 percent of the labour force employed outside agriculture. A number of sectors present opportunities for location in medium-sized cities; particular examples are offered by food-processing and the manufacture of components and parts for supply to manufacturing enterprises based in the large cities. Third, government will support the development of transport services and linkages between these cities and rural areas, and between the medium-sized cities and the larger ones. The growth of regular and efficient transport between these areas will make it unnecessary for SMEs serving larger industrial establishments to locate physically close to the latter in large cities, because such cities tend to be much higher-cost locations than the medium-sized urban areas.

Government will increase allocation of resources to smaller cities. This does not, of course, mean that the development of the larger cities will be neglected; rather, it means that the government's medium-term strategy will be more nuanced when it comes to urban growth, and will seek measures to create a supportive environment for economic development more equitably over the geography of the Punjab.

Substantially, but of course not exclusively, connected with the growth of urban areas is the growth of the domestic commerce and construction sectors. Moreover, these sectors offer the potential of considerable multiplier effects. The construction sector draws upon a very wide range of activities—brick-making, masonry, carpentry, glazing, roofing, furniture making, plumbing, electrical work, etc., while the observed tendency of low-

income earners to spend a larger proportion out of their incomes will sustain the multiplier impulses.

The government will work to remove the constraints that impede the growth of these sectors. The construction sector will benefit from more clearly defined and enforced property rights, more secure land titling, as well as rationalization of some of the taxes. The government will also encourage city and small-town administrations to review their rules and regulations relating to zoning and commercialization and to revise them in a direction that would facilitate commercial development. The main towns in every district will be supported in establishing markets or mandis for agricultural produce, as well as storage facilities. City and town administrations will be encouraged to establish markets dedicated to small stalls, kiosks and barrows in different areas of the city; this will provide regularized locations for these very small entrepreneurs and bring cheaper products within the range of a larger number of the city's inhabitants.

7. Concluding Note

The substantial programme for work to be done under the strategy does not mean that nothing was done in the past. One simple fact should put that notion to rest. At the time of independence, Punjab had a population of about 22 million; in 2009, the population of just four districts (Lahore, Faisalabad, Rawalpindi, and Gujranwala) would add up to this number—the population of the province has risen close to 95 million. The difference between the Punjab's population of 1947 and 2009 is equal to the present-day population of North and South Korea put together. These 95 million persons, more than four times the number at the time of partition, have higher incomes, and are better fed, housed, clothed, educated, connected to the rest of the world, and have much greater opportunities of fulfilling their capabilities than their counterparts in 1947. This fact alone would attest to the resilience of the economy and bear witness to the distance that it has traversed over the last 60 years.

Looking ahead, the agenda outlined here is ambitious because the extent and nature of the opportunities and challenges that the province now faces are much larger and different from those in the past. Punjab cannot rest on its achievements, but has to look forward to tackling bigger problems in a more competitive global environment. Moreover, the government considers that the potential of the Punjab far exceeds what has been tapped. The present strategy is designed to deal with the looming problems, to take advantage of the opportunities, and to realize the full potential of the material endowments of the Punjab and the mental spirit and vigour of its people.

8. Policy Matrix

Policy area	Policies	Responsibility
Macroeconomic Management	<ul style="list-style-type: none"> a) play advocacy role with federal government on economic variables (e.g., interest rates.) that strongly affect the Punjab; b) strengthen statistical data to enable calculation of provincial GPP, investment and saving rates etc; c) strengthen analytical capacity of P&D. 	<ul style="list-style-type: none"> a) P&D Department & Finance Department b) P&D Department (Bureau of Statistics) c) P&D Department (Punjab Economic Research Institute)
Agriculture	<ul style="list-style-type: none"> a) substantially increase investment; b) improve cost recovery for the provision of public services and reduce the share of establishment costs; c) provide greater incentives for the production of high-value items; d) improve connection between farms and the market; e) modernize the dissemination of price information in different markets; f) expand the human capacity for grading quality and maintaining health and safety standards of agricultural products; g) maintain a dialogue with the federal government for allowing the private sector to establish cold storage at major ports, streamline laws and regulations to deter supply of substandard food products, define minimum grades and standards for agricultural raw and processed products; h) put in place an effective land recording system; and i) strengthen agricultural research system. 	<ul style="list-style-type: none"> a – c) Agriculture Department d) Agriculture Department in conjunction with C&W Department e - g) Agriculture Department h) Board of Revenue i) Agriculture Department

Policy area	Policies	Responsibility
Irrigation	<ul style="list-style-type: none"> a) substantially increase investment in the agricultural and irrigation sectors to upgrade facilities and create new ones; b) improve cost recovery for the provision of public services and reduce the share of establishment costs; c) institute pricing water to reflect its scarcity value; d) invest in devices to measure and meter water flows; e) improving on-farm water management 	<ul style="list-style-type: none"> a - d) Irrigation Department e) Agriculture Department
Livestock	<ul style="list-style-type: none"> a) enhance meat production by induction of beef breeds and improvement of local animals, save calves that are being slaughtered, modernization of slaughterhouses; provision of storage facilities and improvement of cattle markets; and b) undertake measures to boost milk production. 	<ul style="list-style-type: none"> a & b) Livestock Department
Investment	<ul style="list-style-type: none"> a) improve the environment for doing business in the major cities of the Punjab by adopting the best practices that already exist in Pakistan; b) speed up access to justice by stepping up investment in the judicial physical infrastructure. 	<ul style="list-style-type: none"> a) Commerce and Investment Department b) Law Department & Finance Department

Policy area	Policies	Responsibility
Infrastructure	<ul style="list-style-type: none"> a) complete ongoing projects on priority b) encourage public-private-partnerships (PPPs) wherever possible to help fill in the financing gap. c) prepare asset management plan and prioritise the requisite investments d) prepare and implement rural roads rehabilitation plan. 	a – d) Communication and Works Department
Human Resource Development: Education	<ul style="list-style-type: none"> a) increase budget allocations for education; b) improve governance, management and accountability; c) recruit teachers strictly on merit; d) provide flexibility to school administration to reward teachers who produce better educational results; and e) reduce mismatch between skill concentration in education and market demand. 	a) Education Department (in conjunction with Finance Department) b – e) Education Department & Technical Education and Vocational Training Authority
Human Resource Development: Health	<ul style="list-style-type: none"> a) substantially increase financial allocations; b) reorganize catchment areas for the BHUs in order to provide integrated primary health care services, irrespective of the Union Council limits; c) retrain primary health care staff; d) provide supplemental incentives to improve the availability of doctors in more remote areas and to attract more persons into the nursing profession; e) strengthen management of health service delivery; f) bring private healthcare facilities under clearly defined standards; g) consider establishing special school 	a) Health Department (in conjunction with Finance Department) b - h) Health Department i) Public Health Engineering Department

Policy area	Policies	Responsibility
	<p>health and pre-school nutrition programmes through Public-Private Partnerships;</p> <p>h) invest in tertiary health and medical education; and</p> <p>i) reinvigorate efforts on the preventive health side including water supply and sanitation.</p>	
Urbanization	<p>a) move away from the practice of regarding municipal service delivery as consisting of elements or projects to be funded on a piecemeal basis towards a more holistic concept of managing cities as social and economic systems;</p> <p>b) devolve responsibilities to cities.</p> <p>i. define the metropolitan area with greater precision;</p> <p>ii. restructure the cities' administrations and make them more accountable; and</p> <p>iii. make the boundaries and the fiscal catchment areas of the service provider congruent with municipal boundary changes and restructure the cities' administrations.</p> <p>c) increase the capacity of the cities to manage their own affairs more efficiently;</p> <p>d) invest more in infrastructure in the medium-sized cities;</p> <p>e) place particular emphasis on measures to develop the SMEs in medium sized cities;</p> <p>f) support the development of transport services and linkages between these cities and rural areas, and between the medium-sized cities and the larger ones; and</p> <p>g) increase the allocation of resources to the smaller cities.</p>	<p>a – d & f – g) Local Government and Community Development Department</p> <p>e) Commerce and Investment Department, Finance Department, & Punjab Board of Investment and Trade</p>

Policy area	Policies	Responsibility
Domestic Commerce	a) remove constraints that impede the growth of domestic commerce and construction sectors; b) encourage city and small-town administrations to review their rules and regulations relating to zoning and commercialization and to revise them in a direction that facilitates commercial development; and c) support the main towns in every district by establishing markets or <i>mandis</i> for agricultural produce, as well as storage facilities.	a – c) Commerce and Investment Department

