SIKKIM

The People's Vision

ASHOK K. LAHIRI
SAUMEN CHATTOPADHYAY
ANURADHA BHASIN

in association with

A. PREMCHAND
SUBIR ROY

GOVERNMENT OF SIKKIM, GANGTOK

in association with

INDUS PUBLISHING COMPANY, NEW DELHI

Published by
Indus Publishing Company
FS-5, Tagore Garden, New Delhi 110027
Ph.: 5151333, 5935289
E-mail: indusbooks@vsnl.com
and
Government of Sikkim, Gangtok

ISBN 81-7387-123-X

Printed at B.B.N. Printers, Najafgarh Road Indl. Area, New Delhi

FOREWORD

'Sikkim—the People's Vision' is about the people and for the people of Sikkim. This document is also a substantive example of transparent functioning of the State. It has not hidden anything but has had a hard and dispassionate look at what we are at the turn of the century. It has captured facts and figures as much as other details. We now have a benchmark from where we can continue to measure our progress well into the 21st century. This is perhaps the greatest aspect of this book and exercise.

It is indeed wonderful that we have been able to make this document happen. It is due to the tireless work of the authors that this has come to see the light of day. This document provides us with an excellent futuristic perspective of Sikkim. I would like to acknowledge the contribution of Dr. Ashok K. Lahiri, Director, National Institute of Public Finance & Policy (NIPFP) and his team in the preparation of this vital document.

We are working toward documenting our old values with new and contemporary thinking. We have a lot to imbibe in terms of wisdom from our tradition and culture. Much of it is lost in the march toward uncontrolled development.

We are not only looking at economic development *per se*. We are for the overall improvement of the quality of life of the people of Sikkim so that in the process they become much more resilient and competitive. The world is demanding this and we have but little choice in terms of these parameters. However, in this process we must not lose sight of our overall goal of seeing that our biodiversity, our environment and our culture are kept intact, perhaps enriched. This calls for a balanced approach to development.

The key to this is to be able to control our population growth. We hope to achieve a constant population figure of 5 lakhs by the year 2050. We can do this by a *'we two, our one'* policy that we need to foster and encourage. Our people must enjoy the best health that is possible today; the best of education that should be within the reach of our people and also the best in terms of development benefits. The purchasing power must and will improve.

After Sikkim became the 22nd State of India in 1975, the State made remarkable strides in all fronts. The basic indicators in economic, social, cultural, environmental and political arena are quite revealing. The Human Development Index which has consistently improved from 0.454 in 1991 to 0.532 in 1998 in Sikkim is also significantly higher than many other States of India. This is recorded and published in another landmark report, ***The Sikkim Human Development Report 2001***, produced by our Government. Another noted economist, Dr. Mahendra P. Lama, Professor, Jawaharlal Nehru University, New Delhi, has prepared this report.

We have conserved our ecology without jeopardizing the development needs. Our State has been one of the most peaceful States in the country with a very high degree of political stability and unparalleled socio-communal harmony. There is political consensus on major issues including that of adopting second-generation economic reforms to make the Sikkimese economy more dynamic and competitive.

The challenges ahead are diverse and formidable. They are primarily brought about by a new paradigm of development we are now increasingly advocating. Under this new development instruments, the role of State will be increasingly diminished. We strongly desire that the market-oriented development interventions we are now designing and implementing should inevitably cater to the needs and aspirations of the people. We have no other alternative than to keep aside the popular apprehensions and work towards maximizing the gains.

On the other hand, no one is sure about the real impact of the ongoing process of globalisation. It is quite expected that Sikkim will also be both positively and adversely affected by this worldwide phenomenon. Our State being a small, landlocked and developing one, we have always tried to protect it from the external shocks. A critical question is that of meeting and tackling these challenges without adversely affecting the present political economy and traditional socio-cultural norms and practices.

Therefore, we have to gear up ourselves on all fronts. We need to devise very effective institutional responses. We are moving towards more scientific management of our economy aimed at changing the entire face of governance, productivity and efficiency in the State.

Sikkim is now being repositioned by indigenising and internalising the entire process of globalisation which are primarily triggered by forces that are actual alien to our system. This is a Herculean task for us in Sikkim. We want each segment of Sikkim and every Sikkimese to be comfortable with the globalisation process.

This is why we would like to build on our strengths like high socio-economic indicators, friendly and congenial social atmosphere, democratic freedom based on sound principles of decentralisation and empowerment of have-nots, and most crucially environmental security. The political stability and existence of strong multi-culturalism based on well-established traditions of secularism are also our great advantages.

Like many other States in India and many other communities, we do have systemic weakness. We would like to decimate all of them without underplaying them. We in the government are fully aware of critical issues like fiscal prudence, employment strategy, environmental dislocation, privatization and disinvestments, demographic onslaughts, service deliveries, persistent poverty and inequality syndrome raised in this report. In fact, my Government has been keenly promoting democratic values and institutions that are aimed at doing away with all these inherited inequality and deprivation.

We are committed to consistently and effectively implement at least some of the very critical and useful recommendations. We have planned a very time-bound implementation of these recommendations. The process has already begun.

As the head of the Government and also an all-season friend of the downtrodden and hapless, I would like to dedicate this document to the People of Sikkim who discovered, nurtured, built and provided this distinct stature to this Himalayan State. The villages are the greatest asset and strength of the Sikkimese society. We will ensure that every Sikkimese is going to be an equal partner in both the process of participating in and sharing the benefits of development process.

I would also like to assure the people of Sikkim in particular and the people of India in general that we will all work towards making Sikkim a model State in the country where every citizen will live to his and her full potential both as a human being and a responsible citizen of this great nation.

Gangtok
1 August 2001

PAWAN CHAMLING
Chief Minister of Sikkim

ACKNOWLEDGEMENTS

We would like to express our appreciation for the co-operation extended to us by the officials of the Government of Sikkim. Our extensive discussions with people from different government ministries and departments and from various institutes were invaluable in the preparation of this document. A list of those we met and would like to thank follows.

Task force reports prepared by the departments of Animal Husbandry and Veterinary Sciences, Horticulture, Education, Health and Family Welfare, Tourism, Public Works, Urban Development and Housing, Industries and Power, and material supplied by the Department of Finance provided basic information and data for the report.

We would also like to thank Mr. S.W. Tenzing, Chief Secretary, Government of Sikkim for his help during our visits to the state and for his insights into major aspects of the Sikkimese economy.

Mr. G. Goparma, current Director and Mr. Chettri, former Director of the Bureau of Economics and Statistics provided us with support during our visit to the state. Mrs. Jyotsna Subba, Deputy Director of the Bureau of Economics and Statistics, was extremely helpful in organising meetings and travel around the state and as a resource person for supplying data for the report. Mr. S. Mitra, Joint Director, Bureau of Economics and Statistics has been helpful in providing us with the necessary help. Mr. Suresh Lamichaney, of the Bureau of Economics and Statistics, who accompanied us on our trip to the South and West Districts, was a valuable source of information on the state.

Dr. Indira Rajaraman, Professor, NIPFP, provided extremely useful comments on the structure and content of the report. Secretarial assistance was given by Mr. R. Parmeswaran. We would like to express our thanks to Ms. Jeeta Mohanty for her research assistance in the final stage of the Report preparation.

ASHOK K. LAHIRI
SAUMEN CHATTOPADHYAY
ANURADHA BHASIN

Hon'ble Chief Minister, Mr. Pawan Chamling

Mr. Gyaltsen, Hon'ble Minister for Tourism and Land Revenue

Mr. P.T. Gyamtso, Secretary to Chief Minister
Mr. B.B. Gooroong, Political Advisor to the Chief Minister
Mr. A.W.K. Langstael, Accountant General

Mr. Sonam Wangdi, Chief Secretary
Mr. Alok Rawat, Resident Commissioner
Mr. Tashi Tobden, Principal Secretary, Finance

Mr. Rinzing, Secretary, Law
Mr. Tashi Densapa, Secretary (formerly Tourism)
Mr. G.K. Gurung, Secretary, Agriculture
Mr. H.R. Pradhan, Secretary, Horticulture
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Mr. T.T. Dorjee, Secretary, Health and Education
Mr. G.K. Subba, Secretary, Animal Husbandry
Mr. Karma Gyatso, Secretary, Tourism
Mr. L.B. Rai, Secretary, Urban Development
Mr. S. Basi, Secretary, Co-operatives
Mr. N.S. Lepcha, PCE-cum-Secretary, Roads and Bridges

Mr. Rudra Pradhan, Director, Budget and Finance
Mr. Pintso Bhutia, Director, Pay and Accounts
Mr. S. Pauljor, Principal Director, Animal Husbandry
Mr. P.P. Sharma, Director (Veterinary Services), Animal Husbandry
Mr. A.K. Singh, Joint Director (Dairy), Animal Husbandry
Mr. S.K. Pradhan, Director, Health and Family Welfare
Mr. B.B. Subba, District Development Officer, Gayzing
Mr. M.B. Gurung, District Engineer (East), Roads and Bridges

Mr. T.M. Roy, Deputy Accountant General

Mr. P.S. Banerjee, Deputy General Manager, NABARD
Mr. K.K. Bhaduri, Chief Manager, State Bank of India
Mr. S.K. Bhattacharya, Assistant General Manager, State Bank of India
Mr. K.B. Chhetri, Chairman-cum-Managing Director, State Bank of Sikkim

Mr. M.P. Chamling, Manager, Temi Tea Estate

Mr. H.P. Chhetri, Director, State Institute of Rural Development, Karfector
Dr. D.K. Pradhan, Senior Veterinary Officer, Animal Husbandry Farm, Karfector
Mr. T.B. Subba, Sikkim Co-operative Milk Producers' Union
Mr. M.G. Kiran, Director, Industries, Managing Director, SIDICO
Mr. C. Raju, General Manager, SIDICO
Mr. Taga Khampa, MD, SITCO
Mr. A.D. Mishra, General Manager, State Tourism Development Corporation

Mr. Panniker, Principal, Pelling Senior Secondary School, West District
Mr. R. Kumar, Joint Director, State Institute of Education
Mr. Sharma, DIET
Mr. K.R. Chakravorty, HoD, Political Science, Sikkim Government College
Mr. K.S. Brar, Lt. Col SO1 (Res) Chief Engineer, Project Swastik
Ms. N. Yethenpa, Addl Secretary, P & D
Mr. T. Sharma, Joint Director, P & D
Mr. Lama, Research Officer, P & D
Mr. S.K. Pradhan, Research Officer, P & D

Bureau of Economics and Statistics
Mr. N.S. Alley, Deputy Director
Mr. S. Mitra, Joint Director
Mr. B.B. Bagdas, Asst. Director
Mr. K.P. Gupta, DSO (Namchi)
Mr. R.R. Nepal, Section Officer
Mr. D.K. Chettri, Section Officer
Mr. P. Bhutia, Statistical Assistant
Mr. W.T. Bhutia, Statistical Assistant
Mr. R. Gyatsho, Computer Assistant
Ms. Kunzang Lhamu

Mr. D.K. Mukhopadhyay, Director (SP), Planning Commission, New Delhi
Dr. Mahendra P. Lama, Professor, Jawaharlal Nehru University, New Delhi
Mr. P.D. Rai, Managing Director, Sikkim Computers, Gangtok
Mr. M.L. Lakhotia, Managing Director, Tashi Delek Hotel, Gangtok
Mr. Vinay Sheel Oberoi, United Nations Development Programme, New Delhi

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Key Indicators: Sikkim
Capital: Gangtok
Population 1991 Census: 4,06,457
Status: *Special Category State*

	Sikkim	India
Total area (sq. kms.)	7,096	32,87,263[6]
Operational holdings (% of total land mass) 1990-91	15.69	59
Forest area (%) 1997	44.9	19.4
Districts (no.)	4	466
Taluks/sub-divisions (no.)	8	3,298
Urban agglomerations/towns (no.)	8	2,987
Villages (no.)	453	5,89,226
Rainfall (millimetres) 1998[1]	3274.5	NA
Land elevation (metres)	440 to 8540	0 to 8611
Demography		
Population, (lakhs) 1991	4.06	8,463.03
Urban (lakhs)	0.37	2,176.11
Rural (lakhs)	3.69	6,286.91
Male (%)	53	52
Female (%)	47	48
Scheduled caste (%)	5.93	6.48
Scheduled tribe (%)	22.36	8.08
Estimated mid-year population (lakhs) 1/7/2000[5]	5.65	10,059.23
Population density (per sq. km.) 1991	57	267
Females per '000 males 1991	878	927
Estimated birth rate (per '000)1997	19.8	27.2
Estimated death rate (per '000) 1997	6.5	8.9
Infant mortality rate (per '000) 1997	51	71
Life expectancy at birth 1995	n.a.	59
Male	65.7	64.1
Female	46.7	39.6
Infrastructure		
Index of social and economic infrastructure[2]	108.99	100.00
Roads (km. of road per '000 sq. km.)	220	544
Per capita power consumption (kwt. hrs/per person)	98.5	236
Banks (no. per lakh population)	8.3	7.3
Economy		
Population below poverty line (%) 1993-94	41.43	35.97

	1995-96	1996-97	1995-96	1996-97
Per capita income (rupees)	9,472	12,128[4]	9,578	10,771[3]
Sectoral share of income				
Primary (%)	52.03	32.44	29.9	28.8
Secondary (%)	13.65	17.47	28.2	28.3
Tertiary (%)	34.31	50.09	41.9	42.9
Rainfall (millimetre) 1997		2920.50[1]		
Land elevation (metres)		440 to 8540		

Notes: 1. Data for Sub-Himalayan West Bengal and Sikkim—Statistical Abstract India, 1999, CSO. 2. *Report of the Eleventh Finance Commission*, Annexure VI-5. Original reference, T.C.A. Anant, K.L. Krishna and Uma Datta Roy Chaudhury (1999) 'Measuring Inter State Differentiation in Infrastructure'. 3. Per capita NNP at current prices—National Accounts Statistics 1997, 1998, CSO. 4. Sikkim ranks thirteenth among the states. 5. From *Population Projection for India and States*, Registrar General, India, New Delhi, 1996. 6. Statistical Abstract India, 1999, CSO.

EXECUTIVE SUMMARY

Sikkim, a small and beautiful state nestled in the Himalayas, scores well in terms of human development indicators, but faces problems of poverty and unemployment. The vision for Sikkim sets the state on an accelerated path of eco-friendly sustainable development. The key objectives of the development strategy are to alleviate poverty, create income generation opportunities by empowering the people through education and employable skills and building the requisite infrastructure. Historically, Sikkim has played a major role as a gateway to Tibet and northern China from the warm waters of the Bay of Bengal and Indo-Gangetic plain. A large part of the population derived their economic sustenance from cross-border trade with Tibet, through Nathu La, an all-weather pass situated at a height of 14,000 ft in the Himalayas. Nathu La has been closed for traffic since the Chinese conflict in 1962. Employment generation in Sikkim will benefit substantially once trade resumes through Nathu La with the relative normalisation of relations with China. However, Sikkim aspires to be far more than an entrepôt to Tibet. The next decade will see the state building on its inherent strengths and, with the government as a facilitator, benefiting from the liberalisation and globalisation processes that are sweeping the rest of the country.

Economy: The present challenges

The state's total population is only around 5.5 lakh and nominal income has been growing at an impressive annual rate of around 14.5 per cent since 1989-90; however, Sikkim has the fifth highest incidence of poverty among the states, with 41.4 per cent of the population below the poverty line (1993-94). Furthermore, with 38 per cent of the population below the age of 15, the number of young people entering the workforce and looking for jobs in industry and services will increase in the near future.

A stagnant agricultural sector combined with steadily declining industrial activity has severely limited employment opportunities outside the government. Public administration has, by default, become the propelling force behind income growth. Further, growth that has taken place has been regionally imbalanced, with the North District still remaining relatively backward in comparison with the other three districts.

Business as usual: Unsustainable and precarious

The cornerstone of the development strategy pursued so far has been a **super-active government** in all areas of economic activity. This has put the government under severe fiscal stress. Expenditure on wages and salaries (including pensions) and interest payments pre-empt almost half of total

government expenditure. Fuelled partly by the implementation of the State Pay Commission recommendations, the fiscal deficit rose to a staggering 21 per cent of gross state domestic product (GSDP) in 1998-99; outstanding debt as a percentage of GSDP touched 72 per cent the same year. At the same time, revenue collection, both tax and non-tax, has been falling. Grants, plan and non-plan, have been financing nearly 43 per cent of government expenditure, which has risen to more than 40 per cent of GSDP in recent years.

The expansionary impact of high government expenditure in terms of income generation has, however, been limited, indicating a 'missing multiplier' within the system. This could be partly because of the high import intensity of consumption and partly the result of beneficiaries maintaining their funds outside the state. The little impact there has been of government expenditure has been unsatisfactory: the modern infrastructure that has been built up in education and health over the last two decades under several Plan schemes is currently in a state of disrepair and underutilisation.

A continuation of the present fiscal stance is unsustainable and precarious for the government. This document delineates three scenarios facing the government depending on the path it follows to bridge the widening resource gap in the next five years: one, through additional grants from the centre which will amount to around 20 per cent of projected GSDP by 2004-05; two, through additional borrowing, which will result in a very sharp increase in the debt-to-GSDP ratio; and three, by compressing capital outlay to zero by the terminal year of projection, 2004-05. All three scenarios are bleak and unacceptable. There is an urgent need for devising a new strategy.

Designing a new strategy

Achieving the goal of an accelerated path of eco-friendly, sustainable development requires three fundamental pre-conditions. These are (i) empowering people with the right education and skills to enable them to benefit from recent developments in science and technology, (ii) building up the right infrastructure, particularly in roads and power, and (iii) fiscal consolidation and reform, which will constitute the core of economic restructuring.

The strategy consists of fostering a public-private sector partnership in key infrastructural areas with the application of science and technology. The state's strength in horticulture and animal husbandry is to be promoted with the help of roads and power on the one hand, and education on the other. These two critical inputs are prerequisites for the application of science and technology in the state. Industry, especially service-oriented industries such as tourism and information technology, has tremendous potential that needs to be exploited through vibrant public-private sector partnerships.

Defining the role of the public sector

Given the fact that the government is under severe fiscal stress, the role of the public sector needs to be redefined. The objectives of the public sector would be (i) the pursuit of economic stability, (ii) improving the delivery of services, (iii) promoting efficient utilisation of allotted resources and (iv) creating an enabling framework for private sector to invest in the state, while disseminating the message that "Sikkim is open for business." The achievement of these objectives will need (i) a rationalisation of government staff, (ii) introduction of Electronic Data Processing (EDP) systems

on a selective basis, (iii) utilisation of public expenditure benefits, (iv) introduction of competitive tendering, and (v) strengthening of public expenditure management systems.

Sectoral strategy

In spite of increasing literacy and growing school enrolment figures, **educational** achievement continues to be relatively low, mainly because of a lack of access to schooling and a low level of school completion. The absence of regular or cheap mass transport to and from school, poor state of schoolroom infrastructure and largely untrained workforce of teachers are some of the factors behind this. Though non-completion of education is largely the result of economic factors, the major non-economic reason for the high rate of school dropout is the curriculum and teaching methods: what children learn in schools is often rigid, formally taught and unrelated to their lives. The universal teaching medium is English, even though the vast majority of the teachers are not fluent in the language.

Increased access to schools, compulsory and good quality teacher training, and curricula that are relevant to the state and in line with the medium-term goals of the economy, will greatly improve the employability of the emerging school graduates. Skill-based secondary education and well-targeted vocational training will also support the thrust areas in the economy which will allow it to move to a higher growth path. The immediate introduction of compulsory computer training courses in schools will lay the groundwork for a computer-literate workforce in the near future.

Health standards have improved significantly in the last 15 years; but, a high child mortality rate, low immunisation rate for children and high death rate for rural women of child-bearing age indicate that family health needs attention. Despite the creation of impressive health infrastructure—in excess of the national norms—poor rural connectivity between villages and health centres means that many people still do not have access to primary healthcare. Further, the excess health infrastructure has led to high administrative expenses in healthcare, added to which patients are reimbursed for treatment outside the state.

The state should move from providing free health services to every one, to making basic health services widely accessible, especially to the poor. The basic health service package will include pregnancy-related care, family planning services, treatment for common serious illnesses of young children and control of tuberculosis, a major killer in the region. Other preventive measures will focus on providing a healthier environment especially for the poor through proper sanitation, sufficient and safe water supplies, good living conditions, and adequate garbage disposal.

Sikkim's diverse ecological conditions support the cultivation of different kinds of fruits, vegetables and commercial crops like cardamom, ginger, and oranges. However, fruit and vegetable production has fallen, and production of even the lucrative cardamom crop has stagnated.

Horticultural yields are low and cultivation costs high because of outdated farming practices and the high cost and inadequate supply of inputs like seeds and seedlings. Almost all inputs have to be imported into the state and then transported across long distances; the rocky terrain means that transportation costs are high and supply is erratic, which tends to erode producers' competitive edge.

There is a shortage of well-trained, specialised staff on government farms to disseminate information on good farming practices and modern techniques. The marketing structure—or lack of it—is one of the weakest links in the value chain for horticulture. Farmers' cooperatives have, so far, played hardly any role in disseminating information on markets and prices or in helping farmers market their produce; there are no functioning cold storages or wholesale markets. Farmers, especially in the interior regions, are largely dependent on middlemen for credit and for a marketing outlet.

Animal husbandry forms an integral part of the household economy of the state. However, the increase in the output of livestock products has not kept pace with demand. This sector shares some of the problems of horticulture, such as the difficulties of transporting inputs and their high costs, (which has resulted in a severe feed and fodder shortage), outdated farming practices and the almost complete absence of a marketing structure. In addition, the quality of animal stock is poor and animal health care facilities inadequate.

The development of horticulture to fully exploit its employment and income generating potential will mean strengthening all three stages: production, procurement/transportation, marketing and distribution. Yields can be vastly improved by encouraging modern farming practices, ensuring the timely supply of inputs like seeds and irrigation facilities, and through better linkages between farmers and the market to allow them to assess prices and consumers' needs. Animal husbandry also stands to gain considerably from the application of modern technology—more scientific farming techniques, such as breeding and animal health services, improved inputs and access to marketing information through better communication facilities.

The experience of direct government involvement in horticulture and animal husbandry has not been a happy one. The government should now endeavour to become a facilitator for promoting private sector activities in the identified sectors, especially in agro-processing, seeds and nursery plants, feed and fodder supply and marketing infrastructure such as cold storages. It has an invaluable role to play in spreading awareness among farmers of the benefits of private sector entry, in setting up autonomous agricultural boards, liaising between farmers and the state for improved extension services, and working closely with producers' co-operatives to improve farm management practices and the quality of produce. The government must shift its focus from monitoring 'inputs' (money spent) to monitoring 'outputs.' 'Voice' is critical for maintaining productivity and effectiveness of government expenditure. Community participation can strengthen the users' 'voice' and improve the effectiveness of government expenditure in extension services.

Apart from the private sector, **producers' co-operatives** can supplement direct government involvement in a host of areas such as input and credit supplies, as well as marketing networks. While the government has to act as a catalyst (without financial exposure) to energising and promoting co-operatives, the latter will have to bear all the risks and with the aim of becoming commercially viable ventures.

Tourism is an area that has, so far, remained underdeveloped in the state. While this has had undeniable environmental benefits, judicious development of the tourist potential of the state could provide a major source of revenue for many years to come. The limited growth of tourism is a reflection of the lack of awareness of the tourist opportunities in Sikkim, inadequate tourism

infrastructure and poor connectivity of the state. To prevent the untrammeled exploitation of the tourist potential of the state, it is important that the government formulate policies to promote environmentally sustainable tourism; added to this will be a greater role for Sikkim Tourism Development Corporation, and development and promoting of special interest tourism such as travel to cultural and religious heritage sites, adventure tourism and business tourism.

Despite its tremendous hydro-potential, the state suffers from **power** shortages. Seasonal shortfalls and operational inefficiencies have reduced the plant load factor to only 30 or 40 per cent. Administrative expenses are high and tariffs are below cost, which have seriously constrained the sector financially. The state should capitalise on its hydro-potential by inviting independent power producers to set up power plants, so that Sikkim becomes a net power exporter: additional power generation is becoming necessary for any expansion of economic activity, for the application of the latest technology and to generate revenue to fund development in identified sectors. Setting up a Regulatory Board/Power Commission and strengthening the transmission line from Melli to Gangtok are important first steps for this process. A high-level expert committee can also be set up for advice on private sector participation and to increase public awareness on the relative eco-friendliness of small hydro-power projects.

The state's lifeline is its **roads** and they are a critical input for the growth of all sectors. The absence of a rail network or commercial air services into the state means that roads are the only means of access. Unfortunately, the topography and climate of the region make the terrain vulnerable to landslides and erosion, and the roads are in continuous state of disrepair; poor maintenance of the roads has exacerbated the problem of poor connectivity. It has become imperative to examine the feasibility of widening National Highway 31A, the state's main link with the rest of the country, to upgrade existing roads and to improve their maintenance. Expenditure management has to be reviewed to ensure cost effectiveness. One major step could be to tender projects at the national and international level.

Given the pattern of resource endowment of the state, the focus of promoting income generating activities should be on processing of raw materials produced within the state, such as **horticulture and animal husbandry** and on service-oriented industries, such as **tourism** in the short to medium term and **information technology** in the medium to long term.

The broad contour of the **fiscal reform** includes raising more through tax revenues, revamping the tax administration, revising user charges, and containing spiralling subsidies, explicit and implicit. Expenditure management/prioritisation is another major area for reform. The thrust should be on rightsizing the public sector by putting a ban on all fresh employment. The state should consider disinvestment for all the state level public sector units.

1

VISION FOR SIKKIM: GOALS AND OBJECTIVES

The State of Sikkim, nestled in the Himalayas with exceptional natural beauty and a rich wealth of alpine meadows, rhododendrons, orchids, butterflies and birds, has set the goal of putting itself on an accelerated path of eco-friendly sustainable development. The aim is to build on the state's strengths, benefit from the post-liberalisation spurt in growth in the rest of the country and, with judicious use of modern technology, in less than two decades, leave the centuries of underdevelopment rapidly behind.

Among the thirty-two states and Union Territories in India in 1993-94, Sikkim had the fifth highest incidence of poverty with the proportion of people below the poverty line (2,400 calories and 2,100 calories per day per person in rural and urban areas, respectively) at an unacceptably high of 41.4 per cent. The population of the state is expected to increase from 5.5 lakh in 1999 to 7.4 lakh in 2015. Furthermore, with the number of young people below the age of 15 at almost 38 per cent of the total population, there will be a large increase in the number of people entering the work force in the near future.

Box 1.1 A Historical Entrepôt

Historically, Sikkim has played a major role as a gateway to Tibet and northern China from the warm waters of the Bay of Bengal and the Indo-Gangetic plain. A large part of the population derived their economic sustenance from cross-border trade through Nathu La, an all-weather pass at a height of 14,500 ft. to Tibet across the Himalayas. Nathu La has remained closed for traffic since the Chinese conflict in 1962. Employment generation in Sikkim will benefit substantially once trade resumes through Nathu La with the relative normalisation of relations with China. But, Sikkim aspires to be much more than just an entrepôt to Tibet.

KEY GOAL

Development is about people, and importantly about people at the lower rungs of income distribution. Given the considerable level of income-poverty and the changing age-profile of the population, the key goal of the development strategy is income generation for the young and the bottom half of the population mostly through providing opportunities for self-employment in services and small scale industry. While poverty may be expected to come down with rapid growth, empowering the poor with education and technical skills is not only a good in itself but will also accelerate the process of poverty alleviation.

Two-Pronged Approach

The key goal is sought to be achieved through a two-pronged approach. The *first* relates to modern advances in science and technology that enable Sikkim today to aspire for much more than just being an entrepôt. Science has compressed distances and shrunk the world into a global village. "Distant and inaccessible" Sikkim should aim at becoming a thriving centre of information technology, bio-medical and scientific research of tomorrow. Sikkim should seek to benefit from science and technology in three areas.

- First, the enormous hydroelectric potential from the run of the two snow-fed perennial rivers Teesta and Rangit can be harnessed to yield an estimated 8,000 MW of power valued at approximately Rs. 1,600 crore per annum. The pollution-free nature of hydel power, the low variable costs of generation, and the growing demand-supply gap for electricity in the country argue in favour of such projects in Sikkim. Given the considerable cost of civil engineering works for hydroelectric power projects, the main challenge lies in strengthening the transmission linkage with the Eastern region grid, improving the investment climate (including through proper tariff policy) and attracting investors —with the involvement of the Power Trading Corporation—to bear the costs and risks of such projects.

- Second, with modern technology, it is possible to overcome the problem of accessibility that has historically thwarted Sikkim's potential as a tourists' paradise. Sikkim has tropical and temperate forests, alpine meadows and snow-capped peaks, including the spectacular Kanchenjunga (28,169 feet), the third highest peak in the world and its presiding deity. It is richly endowed with several lakes, two major rivers, the Teesta and Rangit, and an almost incredible treasure of flora and fauna. The religious, aesthetic and cultural traditions—for example, the collection of Tibetan books at the Namgyal Institute of Tibetology, the Rumtek monastery of the Karma Kargyupa sect of Buddhism, and the Phlaglhapsol festival with masked dances in honour of Kanchenjunga—are the other major attractions for tourism in Sikkim. Modern technology should be utilised to build roads, airlinks, cable cars, and comfortable tourist accommodations, so that Sikkim can become a recognisable centre on the international tourist map. Given the considerable investments needed for these purposes, the main challenge here again is how to attract investors who will not only fund these projects but also share the associated risks. Furthermore, rules have to be framed and enforced to promote tourism in an environmentally sustainable manner.

- Third, the potential for a wide range of fruits, vegetables and flowers from Sikkim's tremendous agro-climatic variation—from semi-tropical lowlands to temperate terraces—should be utilised through the strengthening of marketing machinery. Improved linkages with the rest of the country will allow Sikkim to attract tourists, and to tap into the expanding domestic and global markets for orchids, cut flowers and bulbs, "winter" vegetables during summer, and exotic fruits.

The *second* element of the approach is to envisage a substantially different public sector which aims at promoting the first goal through active collaboration with the private sector and the community, in addition to being more responsive to local needs and effective in the provision of services.

The vision, thus, is of a prosperous Sikkim with an effective public sector, thriving trade, abundant

hydroelectric power, tourism, horticulture and floriculture and without poverty, illiteracy and unemployment.

Scope of the Report

This report aims at articulating, in the first instance, the goals that Sikkim should aim at achieving during the medium term. Subsequently, the report spells out, in some detail, the economic strategy, the contours of the supporting fiscal policy framework, and indicates the future roles to be played by the public and the private sectors, and the community in the fulfilment of the goals.

Fulfilling the Vision

The government cannot make the vision come true by carrying on its "business as usual." There has to be a strategic withdrawal of the state from widespread untargeted subsidies and direct employment creation, combined with a critical emphasis on setting up a congenial business infrastructure including the legal framework to foster private sector activities.

Private investment—both from within and outside the state—will be attracted to Sikkim only if the state has good infrastructure, both physical and social. Highest priority needs to be accorded to roads, bridges, telecommunication and power on the one hand and to top quality basic education and basic health on the other. An important infrastructural agenda item for the government will be the preservation of Sikkim as a "green" state. Development will be pursued without damaging Sikkim's natural wealth and beauty—its forests, lakes and the entire natural environment. To do otherwise will be shortsighted and counterproductive. Thus, for all projects—roads, infrastructure for tourism, hydroelectric projects, clearing land for horticulture and floriculture—the government will work out a compensatory programme of trees planted for trees cut, forest area extended for forest area sacrificed, and green cover restored for green cover destroyed.

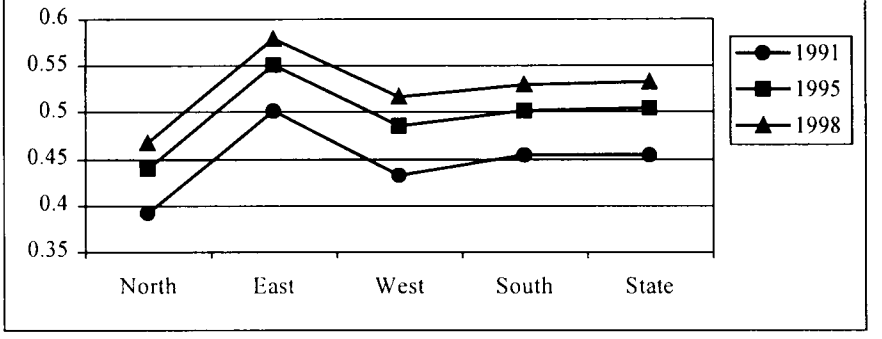
2

BACKGROUND: RECENT TRENDS AND EMERGING ISSUES

2.1 HUMAN DEVELOPMENT: A SATISFACTORY RECORD

The state has registered impressive improvement in human development since the mid-1970s and scores well in its human development indicators. It has lower birth, death and infant mortality rates than the country as a whole. Its population is currently growing at an annual rate of 1.3 per cent compared to the all-India rate of 1.8 per cent. The Human Development Index (HDI), recently computed for Sikkim,[1] has shown steady improvement since 1991, although the rate of increase has slowed down between 1995 and 1998. The HDI which was 0.454 in 1991 rose to 0.509 in 1995 and to 0.532 in 1998 (chart 2.1). The East District has the highest HDI scores, followed by the South, West and the North.

Chart 2.1 Sikkim's Human Development Index



Source: The Sikkim Human Development Report, 2000.

2.1.1 EDUCATION

Trends

Sikkim's literacy rate of 78 per cent is well above the national average of 62 per cent.[2] In government schools, students pay no tuition fees and receive textbooks and exercise books free; uniforms are

[1] The HDI has been calculated as the average value of the income index, the life expectancy index and educational attainment index. These in turn are based on life expectancy at birth, adult literacy rate, enrolment ratio, per capita income and adjusted per capita income. See Lama (2000).

[2] This is the literacy rate according to the National Sample Survey, 1996-97. The 1991 census estimates the literacy rate at 56.94 per cent.

distributed free upto Class V. As a further incentive the government gives generous scholarships and other grants. As a result, Sikkim's monthly expenditure of Rs 960 per student is far above the all-India average of Rs 210 per student.[3]

In spite of the good progress in education in the last decade, there are continuing problems such as lack of access to schooling and a low level of school completion. These interrelated problems have combined to keep achievement levels lower than they could have been. Only 37 per cent of the 2,201 students who appeared, passed the AISSE Class X examinations in 1999.[4] Sikkim shares many education-related problems with other parts of India. These include poverty, low educational status of parents, occupational pressures, poor quality of education and teaching, poor schoolroom infrastructure. Furthermore, the physical environment and climate of this hill state make attending school an arduous task.

Issues

Increasing Access—The Supply Side

The Human Development Report for Sikkim attributes the slowing down of the rate of growth of the HDI in recent years to the poor performance of the education attainment index, which in turn is a function of decreasing rates of school enrolment. Secondary school enrolment ratios, which rose from 49.52 in 1991 to 56.67 in 1995, fell to 53.95 in 1998.

While overall school enrolment has grown by 30 per cent during 1991-99, the dropout rate is high (table 2.1). More than half the students who enroll do not go on to higher education or training and thus have limited employable skills, even to set up their own businesses. Earlier, most found jobs in the government, but more recently these opportunities have tapered off. Girls get married at a relatively young age, and the resulting low level of female schooling and awareness contributes to larger family size. Many of the children who drop out or do not attend school live in remote locations. On paper, schools exist within walking distance for each child; the reality could be more than an hour's walk each way for some very young primary school children. The absence of regular or cheap mass transport to and from the school makes school attendance difficult especially during the rainy season.

Another important reason for non-attendance is the poor state of schoolroom infrastructure. There are schools with no toilet facilities and broken windowpanes, which make school attendance a physically uncomfortable experience, especially in winter.[5] Further, imparting hygienic standards to children becomes difficult when toilet facilities and running water are not available in the school. Buildings that have been built as residences for students are occupied by teachers, and teaching aids such as laboratory supplies and library books are in very short supply. In fact, school facilities have been found to have a critical impact on pupil achievement, especially in educationally backward states in the country.[6]

[3] Task Force Report, Department of Education, Government of Sikkim.

[4] See table A5.4 in the Appendix.

[5] See box 2.5, "A Visit to Chung Thang in the North District" in Section 2.3, Unplanned Urban Development.

[6] See PROBE (1999).

Table 2.1: School Dropout Rate, 1998

(per cent)

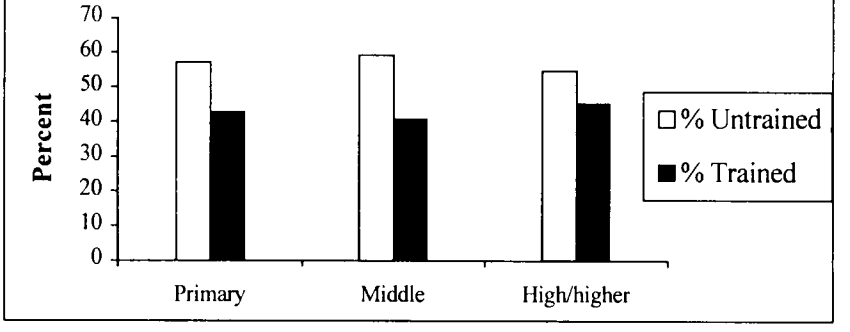
	North	South	East	West
Class II	27.3	27.7	31.3	41.3
Class III	13.6	12.2	6.8	4.6
Class IV	26.0	27.5	16.3	19.6
Class V	22.0	9.3	16.6	15.7
Class VI	12.3	19.5	-0.8	4.9
Class VII	31.1	23.4	26.9	28.0
Class VIII	-12.1	-12.9	-4.2	-9.4
Class IX	56.0	49.0	43.8	61.1
Class X	30.6	34.8	39.7	17.1
Class XI	21.3	41.4	11.4	6.3
Class XII	3.7	25.4	22.2	46.9

Source: Department of Education, Government of Sikkim.

Teachers are the Critical Educational Input

A major lacuna in the education system is the lack of training for teachers. Sikkim has a workforce of teachers that is still largely untrained. In fact, local teachers do not have to be trained to teach at any level in Sikkim. At the primary level, 1,825 out of 3,188 teachers had not been trained, while 973 out of 2,147 at the higher level are untrained (chart 2.2).

Chart 2.2 Proportion of Untrained Teachers, 1992-93



Source: Department of Education, Government of Sikkim.

Teachers often do not have a good grasp of the material they have to teach, of English, in which they impart the knowledge, and teaching methods. Many have completed less than 10 years of schooling, and the quality of education the teachers themselves have received may not equip them to teach effectively. Studies show that there is a positive relationship between the average number of years of teacher education and student achievement. Demand for training will be created when

teachers are given incentives to improve their qualifications and enrol in in-service training programmes through distance learning or open universities.

Sikkim's teacher/pupil ratio of 1:19 at the primary level is good compared to the all-India ratio of 1:46 in 1995.[7] However, the distribution is highly uneven, and in certain schools the actual number of students per teacher could be far above the state average. In secondary schools, the number of students in humanities sections is typically far higher than the number in science classes, and teacher/pupil ratios could go up to 1:80, thus adversely affecting the teacher's effectiveness.

Creating a Need for Education—The Demand Side

For poor families the opportunity cost of schooling children is often higher than the actual costs. Children are needed to help in the fields, or at home to look after younger siblings or farm animals. In some parts of Sikkim, "dry rations" in the form of uncooked rice is distributed as an "incentive" for parents to send children to primary school. However, as experience in other parts of the country has shown,[8] this tends to reward enrolment rather than actual school attendance. Also, dry rations have none of the nutritional and socialisation benefits that accrue from a mid-day meal. A hungry child makes a poor learner, and mid-day meals have clearly had a beneficial effect on school attendance, by providing an incentive to both parents and children.

One of the most important factors influencing enrolment and attendance is active parent participation in education. Parents have to feel that their children are benefiting from attending school—and for this, the quality of education has to be high so that children's skills and their earning power are seen to have been visibly enhanced. "Pupil achievements are significantly influenced by the teaching-learning process. In many states, regularity of classwork and homework is positively associated with pupil achievement. Other significant variables are the frequency of tests, and parental involvement."[9]

Reducing Dropout—Toward more Relevant Education

Non-completion of education is largely because of economic factors, but the major non-economic reason for dropout is that what children learn is rigid, formal and unrelated to their lives. As in other parts of the country, teaching is done mainly through lectures, dictation of notes and rote memorisation. The lack of teacher training means that there is a huge reliance on the centrally produced government textbooks, often of poor quality and irrelevant to the hill-culture of Sikkim.

Teaching in Sikkim is done in the official language, which is English. However, the vast majority of teachers are not fluent in the language. Studies have shown that literacy is slow if teaching of basic skills is conducted in a language that is not spoken at home, and is even slower when the teachers themselves are not fluent in the dominant official language. This has been a problem in many countries and one solution has been to teach the first few grades of primary school only in the first language so that children develop solid skills; only then are other languages introduced.

[7] Ibid.
[8] Ibid.
[9] Ibid.

Lowering Regional and Gender Disparities

For a variety of reasons the North district has remained less developed than other parts of the State, and the East has been relatively most developed (box 2.1). This is clear from the HDI, which is partly based on educational attainment and enrolment ratio. In terms of the enrolment ratio, the North has consistently lagged behind the other districts in the three periods over which the HDI has been computed; on educational attainment, it performs better than only the West district. In comparison the East district is significantly ahead of the other districts in both indices and in all periods.

Even though the State performs well on its Gender Development Index (GDI),[10] the enrolment of girls is lower than that of boys' at all levels, except in the middle school. Their dropout rate is

Box 2.1 Regional Disparities

Development has not been regionally balanced. The East District, which is closest to the large markets of Siliguri in West Bengal and which is home to the capital city, Gangtok, is most developed in terms of its infrastructure, civic facilities, access to health and education schemes and employment opportunities. The South and West districts have also benefited as a consequence of their location and proximity and better connectivity with West Bengal and Gangtok.

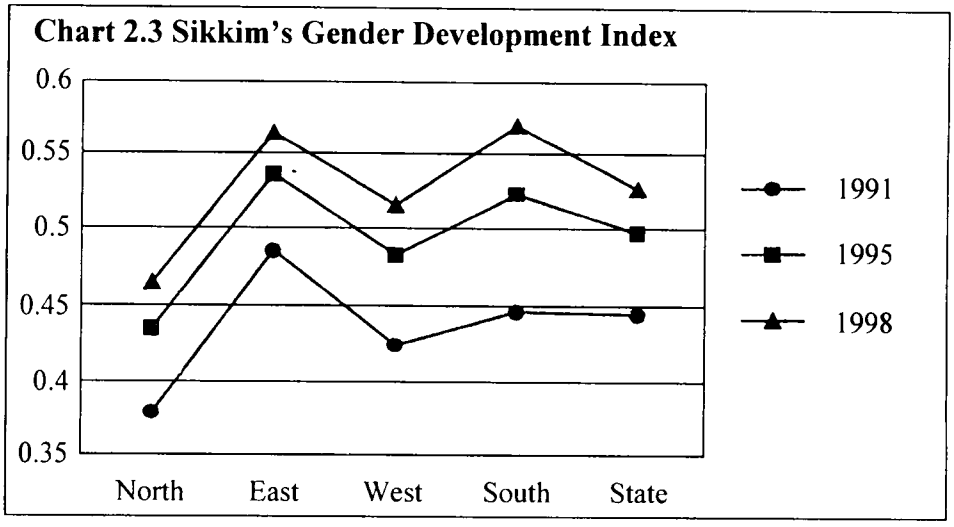
The North, in contrast, is farthest from domestic markets and, because of its mountainous terrain and more extreme climate, is sparsely populated. It is almost entirely surrounded by the high mountains and spurs of the Himalayas, which range in height from 17,000 feet to 28,000 feet. Unlike the other districts, the habitations are scattered, there are very few roads, and the area is traversed by a single state highway. Only 7.69 per cent of Sikkim's population live in this district, which accounts for 60 per cent of the land area; its population density is consequently extremely low at only 7 persons per square kilometre, compared to 187, 131 and 84 in the East, South and West, respectively. Only 14 per cent of the land is cultivated, compared to the East, South and West where cultivated area is approximately 29 per cent of the total area in the district.

Even though its position has been improving, the North still scores lowest on both the human development and gender development indices in all three time periods, compared to the other districts.

Health-wise, the North has the highest crude death rate and infant mortality rate; IMR is 60 per thousand live births, compared to the state average of 51 and the crude death rate is 9.94 (per thousand) compared to the state figure of 7.23. The sex ratio in the North is most unfavourable: 916 per 1000, compared to 927 in the East, 922 in the West and 924 in the South.

In the North only 66.24 per cent of the rural houses have electricity, compared to 81.82 per cent in the East, 77.78 per cent in the West and 71.17 per cent in the South (see Gyatso and Bagdass, 1998).

[10] See chart 2.3. Between 1991 and 1995 the GDI rose from 0.445 to 0.499; the rate of increase slowed down after 1995 and in 1998 the GDI was 0.528. See Lama (2000).



Source: The Sikkim Human Development Report, 2000.

higher, because of the relatively early age of marriage. Over 60 per cent of rural women and 70 per cent of urban women get married before they are 20 years old.[11] Investment in girls' education is important; studies have shown that family health and education are positively linked with the level of the mother's education.

Table 2.2: Number of Educational Institutions

Institutions	North	South	East	West	Total
Senior secondary schools	2	16	18	7	43
Secondary schools	11	24	22	20	77
Upper primary schools	9	38	44	31	122
Primary schools	33	100	119	83	335
Lower primary svhools	21	48	35	75	179
Pre-primary schools	76	212	235	216	739
Total schools	**152**	**438**	**473**	**432**	**1495**

Source: Department of Education, Government of Sikkim.

Box 2.2 Better Education Means Better Health Care

There is a close link between education and better health care. Education, particularly of females, greatly improves the ability of households to manage basic childcare, increases the nutritional content of diets, ensures more effective diagnosis of diseases, and improves elementary health care. The role of education in bringing down the rate of population growth is even more dramatic. There is a particularly strong link between female literacy and fertility.

Source: Haq and Haq (1998).

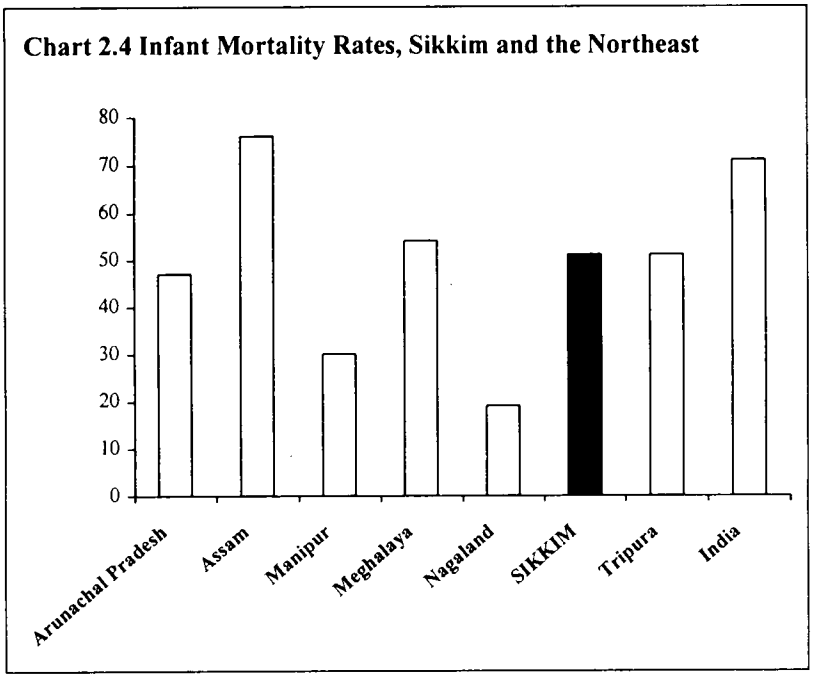
[11] See Gyatso and Bagdass (1998), p 88.

2.1.2 Health

Trends

Sikkim's health standards have improved significantly over the last 15 years. Better health and medical facilities have reduced the infant mortality rate from 88 per thousand in 1988 to 51 per thousand in 1997, against the national rate of 71 per thousand (see chart 2.4). The birth rate in 1997 was 19.8 per thousand and the death rate was 6.5 per thousand, which are lower than the all-India average of 27.2 and 8.9 per thousand, respectively. Medical services are free for almost everyone in the state, and food and medicines are distributed at no cost to all inpatients in hospitals and primary health centres. The state also pays for secondary and tertiary health care treatment outside the state.

Chart 2.4 Infant Mortality Rates, Sikkim and the Northeast



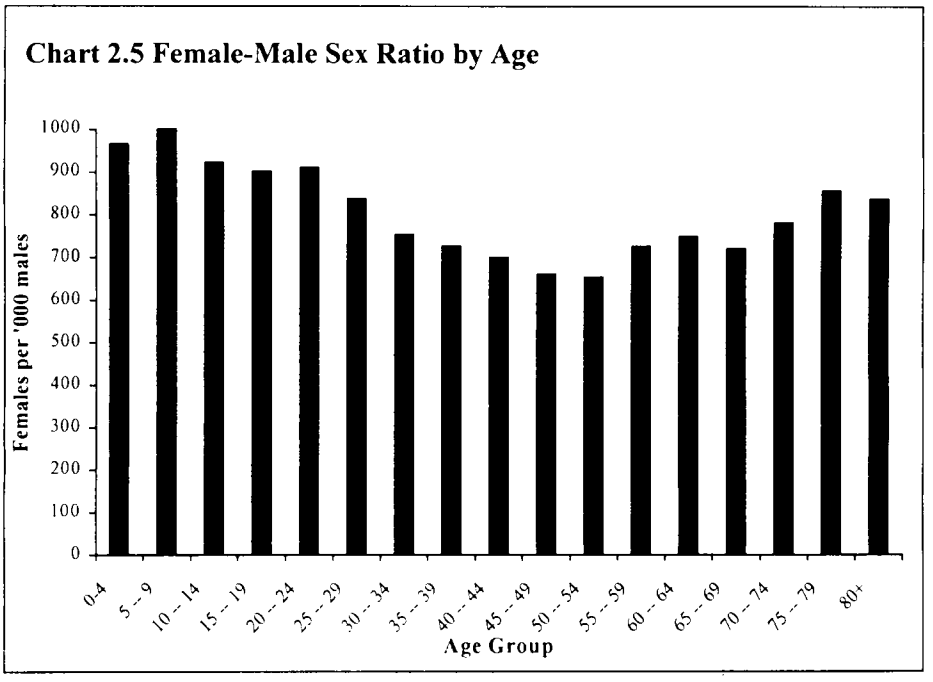
Issues

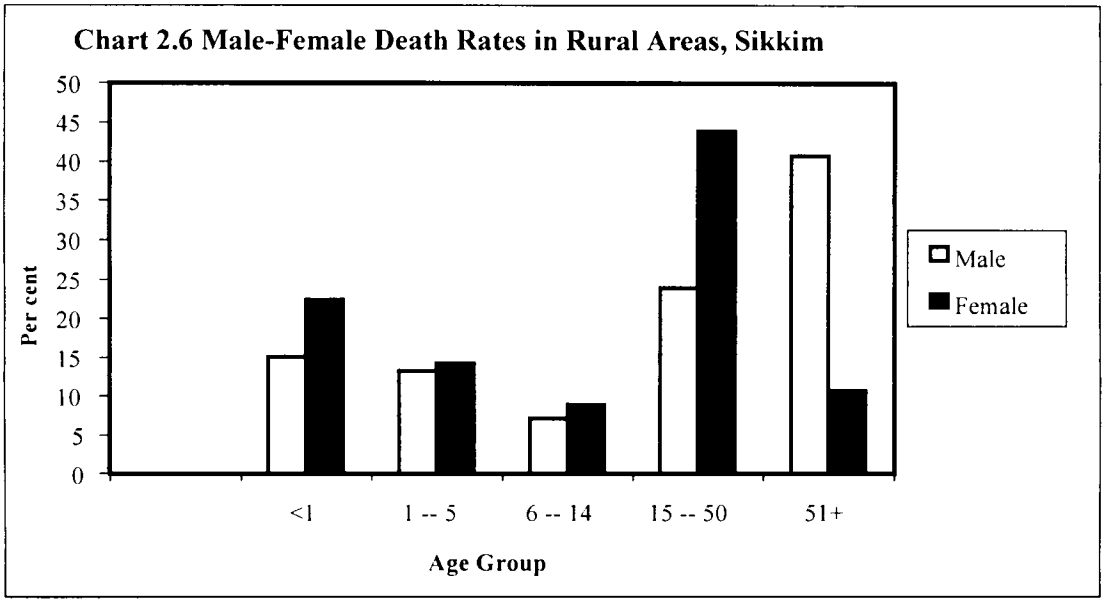
Despite the strides made in health care, there is a need for better family health care. The child mortality rate of 32.12 per cent is far higher than national rate of 11.1 per cent (1996). Female babies below the age of one year have a far higher death rate (22.28 per cent) than male babies (15 per cent). One reason could be the low rate of child immunisation: Only around 53 per cent of children below the age of one year (both rural and urban) were immunised against all six vaccine preventable diseases. Only 62 per cent of rural children and 66 per cent of urban children below the age of five were fully immunised.[12]

The female/male ratio (females per 1,000 males) is far below the all-India figure. In the 1991 census the female/male ratio was 878 for Sikkim, compared to the all-India ratio of 927. The sex ratio for Sikkim deteriorates steadily between the ages of 30 and 59 to touch a low of 655 in age

[12] Gyatso and Bagdass (1998).

group 55-59 (chart 2.5). The death rate for rural women aged 15 to 50 years is extremely high (43.85 per cent) compared to men (23.87 per cent) in the same age group (chart 2.6).[13] A major reason could be a high maternal mortality rate (no data is available to verify this) as natal care is still largely undertaken by untrained people. Despite the numerous PHCs and staff, most of the deliveries take place outside the health centres. Around 53 per cent of the deliveries in the rural areas are carried out by relatives or untrained midwives. Further, 41.24 per cent of the rural women and 22.91 per cent of the urban women do not receive any antenatal care.





[13] Ibid.

Alcoholism is an emerging problem in the state. While it is difficult to put a figure on how many people are alcoholics, consumption is especially high among men over the age of 31. Experience elsewhere in the country has shown that strong community efforts are generally more effective than medical interventions to help people overcome alcohol dependence.

The detection and cure rates of tuberculosis (24.5 per cent and 58.6 per cent, respectively) continue to be low, making it the primary cause of known deaths in the State.

Box 2.3 Tuberculosis is a Killer

Tuberculosis kills or debilitates more adults between the ages of 15 and 59 than any other single infectious agent. Without appropriate treatment, 60 per cent of those with the full-blown disease will die. Tuberculosis is best prevented by curing infectious persons early in the course of the disease, thus interrupting transmission to others. Well-run programmes can cure up to 80-90 per cent of patients, poorly administered programmes cure 30 per cent or less, leading to larger numbers of sustained cases of infection and related deaths and to new infections.

Source: *World Development Report*, 1993.

Administrative expenses are high. The state exceeds the national norms on primary health centres (PHCs) and primary health sub-centres (PHSCs) by 10 and 62 respectively. Staffing and operating costs are high, especially as many of them function from rented premises. Thus for every rupee of health care provided, the administrative expense of dispensing the care is more than Rs 2. In addition to excessive infrastructure within the state, expenses for treating people outside the state are high.

Family health and preventive care need to be strengthened. Inadequate primary health care is partly a result of the poor connectivity of many villages with the nearest health centre. While medical services are free, often the facilities are more than a day's journey away. The recent mandatory inclusion of a woman doctor in every PHC should have a positive impact on women's health, but until roads and access is improved, the effects will be limited. Improving healthcare for infants and children, an important goal in itself, will also help reduce family size.

2.2 Unfulfilled Potential: Some Sectors—Performance, Promise and Potential

2.2.1 Horticulture

Trends

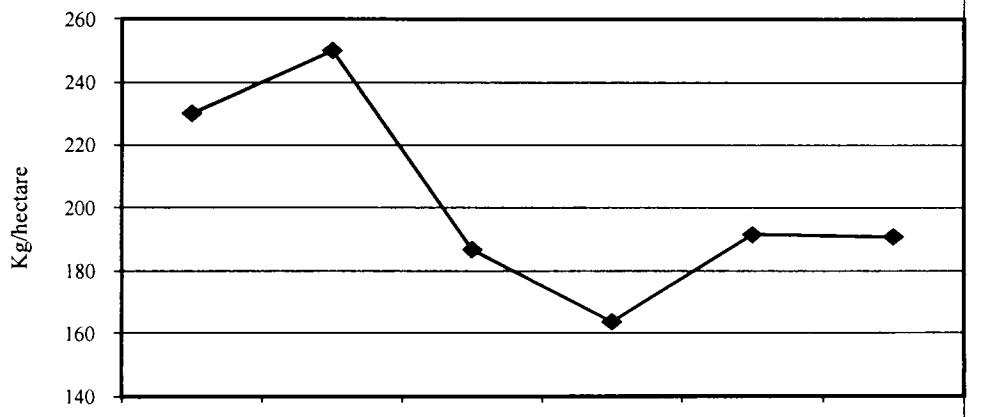
Sikkim's diverse ecological conditions ranging from tropical to alpine support the cultivation of a variety of fruit, vegetables, in and out of season, and are also excellent for commercial crops like cardamom, ginger, oranges, etc. The varied climate also allows Sikkim to supply to the neighbouring areas "winter" vegetables grown at higher altitudes during summer.

Productivity and yields, however, have remained low because horticulture, like the other land-based activities in the state, is practised in a largely traditional fashion. Most of the area is still under

mono-cropping (one estimate put it at 93 per cent of the unirrigated area); farmers use traditional tools and follow traditional practices; crop cultivation is mainly manual or animal-based; and the use of chemical fertilizers and pesticides is low.

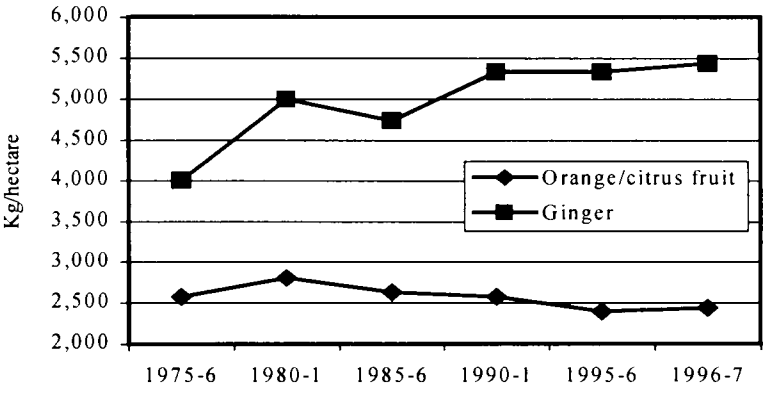
Fruit and vegetable production has been declining. Between 1990-91 and 1996-97, fruit production fell from 8.05 thousand tonnes to 3.5 thousand tonnes, vegetable output fell from 35 thousand tonnes to 27 thousand tonnes and production of even the lucrative cardamom crop stagnated at 3.6 thousand tonnes. Ginger is the only major cash crop whose output has increased from 16 thousand tonnes to 25 thousand tonnes during this period (see charts 2.7 and 2.8).

Chart 2.7 Large Cardamom Yield, 1976-1997



Source: Department of Agriculture, Government of Sikkim.

Chart 2.8 Citrus and Ginger Yield, 1976-1997



Source: Department of Agriculture, Government of Sikkim.

Issues

Horticulture is still largely a small-scale operation in the state, and production is mainly for the domestic and local markets. Apart from bottlenecks in the supply of inputs such as seeds and nursery plants, farmers are hampered by the lack of any marketing infrastructure for their produce, and lack the incentive to change their methods. Farming techniques will improve and productivity will rise only when farmers have access to vastly improved marketing channels. A simultaneous take-off in tourism could give horticulture a big thrust by increasing the local demand for flowers, top quality fresh, frozen and canned fruit and vegetables, and processed fruit in the form of jams, juices and pulp.

Production

The cost of cultivation is high, which is partly because of bottlenecks in the supply of inputs. One reason why crop yields have fallen, or stagnated at best, is because of the poor quality of seeds, and because of the untimely or inadequate supply of seedlings. At present, almost all the indigenously grown seeds are produced in government farms, which cannot meet the demand. Seeds have to be brought in from other states, involving higher costs and often delays in delivery.

Orange/citrus fruit production has fallen from 15,450 tonnes to 9,000 tonnes between 1990-91 and 1996-97 (chart 2.8); while orange growers face many of the problems plaguing other horticulturists, low orange yields is a result of aging orchards. Most of the orchards are over 25 years old and orchardists are reluctant to replant despite a subsidised replanting package provided by the state horticulture department, because they do not want to lose even the small income generated by the old trees. Similarly, most of the cardamom plants have reached the end of their economic life of 25 years and need to be replaced. Here, too, replacement rates have been slow. Of the 23,600 hectares under cultivation, only around 500 hectares are being replanted annually; ideally, the annual replanting should be 1,500-2,000 hectares. One reason for this is the shortage of seedlings, 20 lakh seedlings are needed per 500 hectares. State farms supply around 2-3 lakh seedlings and the Spice Board arranges around 5 lakh seedlings from their certified nurseries, leaving a large demand-supply gap uncovered.

Only a small percentage of the cultivated area is irrigated, and cultivators typically time their crop cultivation to coincide with the monsoon. This has contributed to keeping yields low and limited the range of crops that can be grown. Most of the streams flow through deep gorges, making them impossible to tap for irrigation purposes. Diverting water from these streams through field channels has resulted in poor water use efficiency, and has had a disastrous effect on the fragile landscape, causing landslides.

There is a shortage of well-trained, specialized staff on government farms to disseminate information on good farming practices and modern techniques. Furthermore, the facilities for soil and plant analysis in these government units are inadequate.

Procurement/Transport, Marketing and Distribution

The marketing structure is one of the weakest links of the horticultural value chain. Farmers have no access to market information on crops. This hampers them in making informed decisions about what to cultivate, when and where to sell and, combined with the absence of any wholesale markets, makes them completely dependent on the marketing structure of the middlemen; collusion among the middlemen has kept farmers' margins very low.

Most of the cardamom crop, for example, is grown on very small holdings, in the interior of the North District, the least well-connected region in the state. Growers have limited access to motorable roads or to road transport and the majority of the crop is marketed through private traders who buy the produce at very low margins, and even underweigh the crop. Similarly, orange producers enter into pre-harvest contracts with traders—who often loan them money at the beginning of the season; this leaves the farmer with no room for maneuverability on prices.

The transport infrastructure is poor. There is an exclusive dependence on roads for transport of inputs and marketable produce. The mountainous terrain tends to keep transportation costs high and erodes producers' competitive edge. Bad weather conditions can delay the supply of inputs and lead to spoilage of fresh produce and flowers. Produce is also wasted because of poor storage facilities and the near absence of cold storages. Non-scientific post-harvest technology for harvesting, packing and grading often results in produce being damaged by insects, pests and fungi. A significant amount of cardamom output, for example, deteriorates post harvest, because of poor storage and curing conditions.

Expanding Tea Cultivation

The largest tea estate in Sikkim is Temi Tea Estate, which produces some of the finest quality tea. It currently produces at full capacity and in 1997-98 earned Rs. 86 lakh in revenues. It can only increase production by expanding its cultivable area through acquiring contiguous forest land (which will require central government permission) or persuading the neighbouring small-holders, who farm the surrounding areas, to shift to tea cultivation. However, concerns of food security have tended to make them reluctant to release land from the current subsistence farming activities for non-food production. The gestation period for tea bushes is 4-5 years, and one way would be to compensate them for income lost in the interim through some loan facility. One-fourth of the tea produced is sold in the local market at subsidised rates which just cover costs, and the remainder through auction houses in Kolkata.

2.2.2 Animal Husbandry

Trends

An estimated 50 per cent of Sikkim's total area of 7,100 sq. kms. is used for livestock farming. The importance of animal husbandry in Sikkim becomes evident when the figure of 50 per cent of total area under livestock farming is compared with only 11 per cent of area under cultivation. As the traditional occupation of 90 per cent of the population, animal husbandry already forms an integral part of the household economy of the state. Almost every family supplements its income through rearing of some livestock.

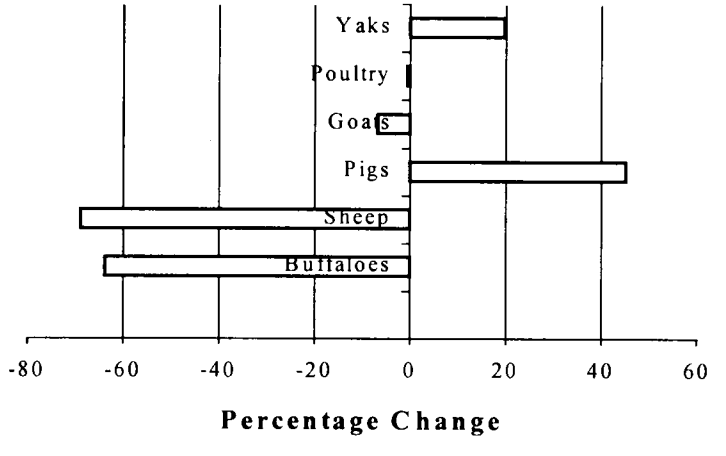
Box 2.4 World Demand for Livestock Products

A new study by the International Food Policy Research Institute (USA), the Food and Agriculture Organization and the International Livestock Research Institute (Kenya), has found the demand for livestock products rising dramatically in developing countries. 'For all developing countries the combined per capita consumption of beef, mutton, goat, pork, poultry, eggs and milk rose by an average of about 50 per cent per person between 1973 and 1996.' In 2020, per capita demand for meat in the developing world is likely to be about 29 kilograms, while demand for milk will be 63 kilograms of milk a year, up from 21 kilograms and 41 kilograms, respectively, in 1993.

Source: http://www.ilri.org.

Even though the output of livestock products has risen in the last 20 years, it has not kept pace with local demand. There has been a sharp fall in livestock numbers (chart 2.9) and the poor quality of animals has kept yields very low. Efforts are being made to improve the stock of animals but a severe feed and fodder shortage, poor animal healthcare facilities and unscientific farm techniques keep constraining yields to low levels.

Chart 2.9 Livestock population, 1977-97



Source: Department of Animal Husbandry, Government of Sikkim.

Efforts are being made to cross breed local cows with Jersey varieties to increase milk yield. Breeding activities are handled exclusively by the Animal Husbandry Department, but it has not been able to keep up with the demand, mainly because of a shortage of funds.

Issues

There is an acute scarcity of feed and fodder: A recent study has estimated that there is a shortage of

up to 65.6 per cent in green fodder, 44.76 per cent in dry fodder and 78.66 per cent in concentrate. Feed and fodder accounts for 60-70 per cent of the cost of producing livestock products, and this is consequently the weakest link in the production chain. Farmers use poor quality fodder because they are short of funds, or do not have the necessary knowledge, or do not have access to improved varieties of seeds. With the gap made up by imports from outside the state, the availability and price of feed vary according to weather and road conditions. Good quality, balanced and nutritive feed, which is more economical than low-cost, unbalanced feed because of the higher productivity, is essential for fostering livestock development in Sikkim.

Farmers still follow old, traditional practices. New, more scientific techniques have not been introduced to improve productivity and to prevent the spread of disease. The lack of trained technical people in this sector, largely because of the absence of post-secondary school vocational training in animal husbandry, continues to constrain the diffusion of best practices in the sector.

Animal health services are inadequate. Outbreaks of diseases—like swine fever, rabies, anthrax—are frequent. There are not enough healthcare service centres, and no disease investigation laboratories in the districts; most polyclinics have inadequate facilities; and there is a shortage of technically trained manpower to run the centres.

The procurement and marketing of animal products is inadequate. Milk procurement in particular is extremely low and the Sikkim Milk Union (a major milk producers' cooperative) is currently running at a deficit of Rs 45 lakh because of its declining procurement levels and high operating costs. A recent study of the Sikkim Milk Union has recommended that it would have to double the quantity of milk processed if it is to break even. Poor milk collection infrastructure and lack of local milk processing facilities result in a high degree of spoilage. Poor road conditions also constrain the transportation of milk from the producing to the processing and consuming centres.

2.2.3 Industry

Trends

There is little industrial activity in the state, and recent years have, in fact, seen a decline in industrial output. At end-March 1996 there were only 1,683 provisionally registered and 313 permanently registered private sector industrial units, mostly in the small scale or tiny sector and promoted by first-generation entrepreneurs. Of the registered industrial units, only 225 are functioning while most others are sick. There are no central government enterprises in the state, and of the 14 state public sector enterprises, only Sikkim Time Corporation (SITCO) is functioning efficiently.

The Indian Companies Act and the Industrial Disputes Act do not apply in Sikkim. Companies are registered under the Registration of Companies Act, Sikkim, 1961, and cannot raise equity from the domestic capital markets.

Issues

Industrial development in the state has been inhibited by inherent factors such as physical remoteness, difficult terrain, lack of raw materials and markets, and high transport and marketing costs. These

have tended to keep industrial development low if not non-existent, despite the many steps taken by the government to encourage development. The government set up the Sikkim Industrial Development and Investment Corporation (SIDICO) to accelerate industrial development by providing financial assistance, technical consultancy, marketing assistance and to distribute technical inputs to small and micro enterprises. However, several units that were set up with equity from SIDICO have found themselves in financial difficulties because they were not able to access working capital funds. This, in turn, has had an adverse effect on SIDICO's finances. SIDICO has a very poor recovery rate, and its losses accumulated to Rs 11.66 crore in 1997.

Several concessions and subsidies were given to private entrepreneurs under the Industrial Policy of 1996. But, these have not resulted in any noticeable increase in industrial activity. In many cases, entrepreneurs allegedly did not receive the benefits promised. Some departments did not comply with the provisions of the policy; for example, in some cases, deferment of excise duties was not carried through. The state has thus experienced a process of de-industrialisation in the recent past.

2.2.4 Power

Sikkim has an installed capacity of 38.10 MW and a peak deficit of 17 MW (in 1997-98), which means that at peak hours 45 per cent of the demand for power is unmet. In addition, transmission and distribution losses in the state are over 20 per cent. Most of the power projects are hydro and run-of-the-river type, which yields only 50 per cent of the installed capacity during winter. All these factors—seasonal and operational inefficiencies—make the plant load factor in Sikkim a low 30 to 40 per cent.

At present Sikkim's power is supplied through a combination of the state's own generation and the state's quota from the central sector generation. Central sector power flows into Sikkim from the West Bengal State Electricity Board (WBSEB) grid via the Vidyutnagar-Melli 66 KV line. Unfortunately the weakness of the WBSEB grid and the large dependence on run-of-the-river projects results in frequent tripping of power in Sikkim. Demand, on the other hand, has been growing at 15 to 20 per cent per year, which is likely to accelerate when all the houses have a power link.

The power sector is seriously constrained by financial resources. Revenue has been consistently less than half of the non-plan expenditure and the gap has been increasing at an average of around 20 per cent per year. The share of plan expenditure in total expenditure has also been declining from 84 per cent in 1987-88 to 66 per cent in 1997-98. Revenue losses have increased with increasing sales, given the difference in the power tariff of Re 1 per unit against a central sector purchase price of Rs. 1.53 per unit.

The state has not yet appointed a State Electricity Regulatory Commission (SERC) nor has the State Electricity Department been corporatised. The first steps towards privatisation of the sector have been taken with the recent creation of the Sikkim Power Development Corporation, which will be responsible for all future generation projects.

2.2.5 Tourism

Sikkim's most important asset is its natural beauty. The altitude of the terrain ranges between 300 and over 5000 metres. It is covered with tropical forests, temperate forests, alpine meadows and snow-capped peaks. It is also richly endowed with several lakes, two major rivers, the Teesta and the Rangit, and a treasure of flora and fauna. The tourism potential of the state has been very thinly exploited. Consequently, the degradation of environment from tourism has also been limited. But, there remains an excellent opportunity to exploit the tourism potential in a sustainable manner without damage to the environment.

Tourism in Sikkim caters mainly to two types of travellers. The majority is low-budget tourists, who typically spend a day or two in Gangtok, and hardly venture outside the capital. A smaller segment of tourists consists of mountaineers and trekkers, who head for the more remote regions of the state. More than 60 per cent of the 1.45 lakh tourists that visit Sikkim annually are from West Bengal. The average stay of one to two days is low, compared to the national hill-station average of 6 days, and is highly seasonal, being concentrated around the months of May and October.

The limited growth of tourism is a reflection of the lack of awareness of Sikkim as an attractive tourist destination and inadequate tourism infrastructure. While the Information and Publicity Section of the Tourism Department has offices in Siliguri, Kolkata and Delhi, it has made little effort to disseminate information on the attractions of the state, and tourist traffic remains largely regional and confined to the capital. Road infrastructure and hence connectivity within the state is poor, hotels are few and tourists are dependent on private taxis, whose service and rates are unregulated. The nearest airport and railhead are a four-hour road journey (140 kms.) away, a journey, which can be extremely unpredictable, especially during the monsoon.

2.3 Unplanned Development

2.3.1 Managing Urban Growth

Development efforts have largely been concentrated in urban areas, and the state has witnessed a high rate of migration from the villages to the towns. Rapid urbanisation has far outpaced the supply of infrastructure and civic amenities. Although the census data show a decline in urban population from 16.65 per cent in 1981 to 9.15 per cent in 1991, urban population according to the Annual Plan, 1998-99 is closer to 20 per cent. Lower urban population figures in the census data are a result of the re-demarcation of some of the revenue blocks surrounding Gangtok as rural land. Earlier these blocks were part of the Gangtok Municipal Corporation.

With no firm policy for the acquisition and disposal of plots in urban areas, urban development has been largely unplanned. Most of the towns have seen rapid building activity in the last few years, with little attention to aesthetics, building laws, civic amenities or even to local materials and styles. Apart from the environmental hazards that result from overbuilding and congestion, many of the towns and their surrounding areas are fast becoming eyesores in an otherwise serene and beautiful Himalayan landscape. The process is not reversible, and if unchecked could—for a start—destroy the tourism potential of the state. If detailed master plans are drawn up for taking place. Building

plans should be approved in advance: norms on height and areas of structures the development of all towns, and strictly adhered to, this would check the haphazard development that is, location, etc. have to be enforced and, if feasible, the use of traditional materials or architectural styles promoted. If possible, buildings should be constructed only on the hill-ward side of roads, so that the mountain views are not obstructed.

Infrastructure and civic amenities have developed in response to problems rather than as a result of planning based on projections. The result is that in the major towns only around 61 per cent of the population is covered by water supply schemes. Only 52.82 per cent of the urban population have access to sanitation facilities and some parts of the urban areas are still covered only by the old system of septic tanks, with waste being mostly emptied into streams.

Economic Rates

The government has been the sole provider of infrastructure in the state, and it provides most of these services at prices that are a fraction of the costs. Revenue generation is particularly low in the urban areas: trade license fees are assessed at old, antiquated rates and user charges either do not exist or are not enforced for civic amenities like parking and sanitation.

Road Infrastructure

Roads play a critical role in the mountainous state. They are not only costly to build and maintain, but are like lifelines for the population. Inadequate access control, allowing shops and other establishments to be built along the roadside, lax parking rules and even more lax enforcement of rules have resulted in traffic congestion and delays in commuting.

The absence of a rail network or commercial air services means that motor transport is the only means of getting around. And among the roads, there is a heavy dependence on a single highway—National Highway 31A (NH 31A)—which is Sikkim's main transport link with the rest of the country, and the world for that matter. Any major disruption to NH 31A cuts Sikkim's only link with the outside world. The proposed second highway linking Darjeeling, Singla, Naya Bazar, Namchi and Singtam, once built, will not only increase mobility, but also bring down costs. It will serve as an alternative route to NH 31A, and will also provide an important road link between several towns.

Roads and highways are not well maintained. The topography and climate of the region make the terrain vulnerable to landslides and erosion. The average rainfall is 400-600 cm from June to October and the entire state falls in Seismic Zone IV, which is subject to earthquakes of severe intensity. Thus roads are in constant need of repair. While the climate and terrain make road maintenance an ongoing and expensive exercise, timely maintenance can save a lot of work and money in the long run. Several tracts of roads, including the main highway, have not been repaired for long periods. In many places, the rubble has been cleared only to the extent that traffic can squeeze through. This makes the journey into and out of the state time-consuming, arduous, and dangerous in places.

Sikkim's expenditure on road maintenance is high. The national standard for road maintenance is 0.3 worker per kilometre, or one worker to maintain three kilometres of road. Sikkim, in comparison

allots 2 workers per kilometre, which has resulted in 600 to 700 workers on the muster rolls of the East District alone. At a monthly salary of over Rs 2,000 per worker, the wages and salary bill for road maintenance is a huge outgo from the state's exchequer, despite which road conditions continue to be very poor.

2.3.2 Utilisation of Public Expenditure Benefits

The experience of Sikkim shows that benefits intended to be reaped through public expenditure appear to be unutilised or underutilised by the community either because of inertia or other reasons. As a consequence, there are schools with damaged facilities and health centres with vastly underused expensive equipment (see box 2.5).

Box 2.5 A Visit to Chung Thang in the North District

The Primary Health Centre at Chung Thang has impressive medical facilities: an operating theatre, laboratory, dispensary, labour room, stores, and expensive dental equipment. However, much of this infrastructure is underutilised:

The operation theatre has not been used since 1998, when the last operation—minor sterilisation surgery—was performed.

Of the two doctors in the health centre, one had been transferred and the other was on leave. The only healthcare patients could receive at the Centre was medication that was being dispensed by the nurse—a Class X graduate with only two years of training. Thus, for any ailment other than minor aches and pains, patients had to go to Gangtok.

Fairly sophisticated dental equipment (supplied by Confident Dental Equipment Private Ltd.) was covered with dust and had apparently hardly, if at all, been used.

The toilet had sinks with no taps or mirrors and flushes that were not functioning.

The Government Secondary School in Chung Thang also showed poor infrastructural upkeep.

Many of the windows had no windowpanes.

The hostel that had been built to house students was sparsely occupied by teachers. The canteen for students was not functioning, but a cook was on the payroll.

Two toilets built for teachers and students were covered with garbage and were inaccessible. Girls were allowed to use the toilet in the neighbouring Primary Health Centre, which itself did not have a functioning flush.

2.3.3 Governance and Corruption

Good governance is essential for development (see box 2.6). In Sikkim many of the elements that contribute to good governance have been eroded over the years. In particular, the large-scale recruitment of under-qualified persons to government posts has had an adverse impact on many areas of the economy and particularly on governance standards in the state. In per capita terms, Sikkim

has the highest public sector employment in the country: There are over 11,000 employees on the muster roll of various government offices.

Misgovernance and corruption lower state revenues and increase the fragility of the financial system. Government expenditure increases as commissions to various people have to be accommodated; its composition also tends to shift from spending on operations and maintenance to spending on new equipment.

Box 2.6 Good Governance is Important

Key institutional capacity elements of good governance are a comprehensive legal framework defended by an impartial and competent judicial system, accountable, open and transparent executive decision-making, coupled with a capable, flexible and efficient bureaucracy and strong civil society participation. Opportunities for corruption increase with the number and complexity of rules, licenses, taxes, and subsidies which set up conflicting property rights and require complicated resolutions. An efficient, uncorrupt bureaucracy is a key factor and it tends to encourage investment. Efficiency of public services is particularly important for the poor, who depend on public services, such as primary education and health, to improve their lot and mitigate the risks they face. Non-transparent budgeting and spending, widespread subsidies, and corruption are likely to lower the efficiency and equity of public spending.

Source: India: Policy to Reduce Poverty and Accelerate Sustainable Development, 2000, World Bank.

Governance in Sikkim in this century has to set a standard for other states to emulate. As the government increasingly moves out of many of its traditional spheres, it can begin a serious downsizing process, which will allow it to focus on better delivery of truly public services. Since the government has a vital role to play in fostering development, one way to rein in corruption is to ensure the broad-based participation of people in the process: development should involve all government branches, civil society and the business community and ensure their commitment to an anti-corruption agenda. Plan schemes should be reviewed and prioritised, as over the years several Plans have been continued and expanded incrementally. All the schemes should be thoroughly reviewed and prioritised; new schemes should be made contingent on the availability of resources.

2.3.4 Decentralisation

People's participation in the development process and their influence on decision-making in the government are important if the delivery of goods and services is to improve. The decentralisation of power to local bodies such as the panchayats increases the efficiency and responsiveness of the government, as public involvement in the design and implementation of systems makes them more transparent, and bureaucrats and elected leaders more accountable. (In this regard, the state should expedite the submission of the Report of the State Finance Commission and act on its recommendations after due deliberation.)

Box 2.7 Failures in Delivery in Sikkim

Administrative expenses were alarmingly high; for example, in medical services administrative expenditure accounts for 64 per cent to 73 per cent of total expenditure.

For health care worth one rupee, administrative expenses were more than Rs. 2.

The state had 10 primary health centres and 62 primary health sub-centres more than the norms stipulated by the Central government, resulting in huge extra avoidable expenditure on maintenance, rents and wages and salaries.

Despite the massive infrastructure and excessive manpower within the state, the Health Department has incurred substantial expenditure for treatment of the general public outside Sikkim.

Source: Government of Sikkim, March 31, 1998.

2.4 Anomalies of Growth

Sikkim has been growing at a satisfactory nominal rate of nearly 14.5 per cent per annum between 1980-81 and 1995-96. Real growth rate during 1980-81 to 1991-92 was impressive at 10 per cent, which is far higher than the all-India average growth. Nevertheless, the excellent growth performance masks fundamental problem of unemployment and poverty facing the economy today. High growth should have ideally led to low unemployment and eradication of poverty. But according to Planning Commission estimates (1994-95), Sikkim ranks fifth in the country in terms of poverty. It is clear that the benefits of growth have not percolated down to the people at the lower rungs of the economic ladder. Furthermore, with almost 38 per cent of the population below the age of 15, a large number of young people will be joining the labour force in the near future, which could exacerbate the unemployment problem, unless job opportunities are created for them.

For at least 65 per cent of the population, agriculture is the main means of livelihood. However, the stagnant share of agriculture in the state income could compel people to look for jobs in industry or the services sector. Available evidence indicates a very limited organised sector in the state.[14]

With liberalisation of the Indian economy, private investment, both domestic and foreign, has received a tremendous boost. Sikkim, however, has received neither any major domestic investment nor any foreign investment. The benefits of economic reform sweeping the economy seem to have bypassed Sikkim, notwithstanding its high growth performance.

2.4.1 Sectoral Growth

Agriculture contributes nearly 49 per cent of the state's income (table 2.3), compared to 25 per cent at the all-India level; industry accounts for only 15 per cent, compared to 27 per cent for the nation; and services account for 36 per cent of the state's income, in comparison to the all-India figure of 48 per cent.[15] In recent years, the sectoral composition has shifted from industry to services. While

[14] According to the new GSDP estimates published by the CSO, the share of agriculture declines, while the share of the tertiary sector increases (see table 2.3).

[15] According to GDSP estimates. However, the new estimates indicate a substantial increase of upto 50% in the share of services at the expense of agriculture (see table 2.3).

the combined share of industry (manufacturing) and services has remained the same at around 52 per cent during the last decade and a half, the share of manufacturing has declined to 2.5 per cent in 1995-96 from around 6 per cent in 1980-81. Public administration has, by default, become the propelling force behind the growth of services. In spite of high growth rates in the state, employment opportunities outside the government have remained restricted.

Sectoral shares for the period 1996-97 and 1997-98 according to the new GSDP series published by the CSO are given in the table below.

Table 2.3: Sectoral Shares of GSDP at Current Prices

(per cent)

Sector	1980-81	1985-86	1990-91	1993-94	1995-96[1]	*1995-96[2]*	*1996-97[2]*
Agriculture and Allied activities	**48.68**	**47.40**	**42.63**	**45.30**	**48.99**	*33.30*	*32.44*
Industry	**20.91**	**19.62**	**14.74**	**14.90**	**14.94**	*19.37*	*17.47*
Mining & quarrying	0.23	0.21	0.21	0.26	0.22	*0.21*	*0.12*
Manufacturing	6.07	5.35	3.97	3.04	2.51	*4.94*	*4.61*
Construction	15.10	13.28	10.41	11.10	10.54	*11.48*	*10.30*
Services	**30.40**	**32.98**	**42.63**	**39.80**	**36.08**	*47.33*	*50.09*
Transport	1.11	2.55	3.65	3.05	2.63	*2.34*	*3.39*
Trade, hotels, etc.	5.95	5.46	8.66	8.05	6.62	*12.22*	*13.46*
Public administration	9.28	8.88	11.98	11.99	11.10	*11.25*	*12.04*

Notes: 1. Provisional data. 2. New estimates of GSDP published by CSO.
Source: Central Statistical Organisation.

Constant Share of Agriculture

Population has grown faster than economic activity in the agricultural sector. With few employment opportunities outside the sector, the growth of agricultural labour force has also exceeded the growth of cultivated area. The mounting demographic pressure and physical limits to cultivable land have made Sikkim a net importer of all the essential agricultural goods.

Declining Share of Industry

Industry's share in GSDP is only 15 per cent, of which 10 per cent is accounted for by construction, and 2.5 per cent by registered manufacturing (table 2.3). Industrial activity is quite rudimentary. There is virtually no organised private industry of any size in the state. Nearly, all the units of any size are in the public sector, most of which run at a loss.

Rising Share of Services

Of the 36 per cent share of services in the state's income, 11 per cent is accounted for by traditional subsistence activities, unskilled construction work or government employment. The share of public administration has risen nearly by 2 per cent points during the period, which in part reflects the philosophy that the government's major task is to provide employment. For example, the Public Works

Department organises its work with the non-commercial objective of generating employment. It justifies its demands for more funding for road building projects in remote areas, not on the grounds that roads are important for economic development but that these projects will result in more jobs.

From the new estimates (shown separately in the last two columns of the table 2.3) it is clear that share of agriculture has drastically declined to around 32 per cent in the year 1996-97. Industry's share has shown a modest increase to around 17 per cent in 1996-97 which is still lower than the 21 per cent share it had in 1980-81. The services sector has witnessed a large increase to around 50 per cent in 1996-97.

2.4.2 "Jobless" Growth

The lack of correspondence between the growth of employment opportunities in the private sector and the impressive growth rate attained by the state deserves a deeper probe. The rise in the share of services in GSDP (propelled mainly by public administration) at the expense of industry is one explanation for this phenomenon. Sikkim is non-industrial and, therefore, mainly characterised by significant 'imports' from outside. So the expansionary impact of expenditure within the state in terms of employment and income generation is minimal, as a significant part of the demand leaks out of the state economy. The high import intensity of expenditure has restricted the potential for income and, therefore, employment generation within the state.

2.5 State Finances: Government Under Pressure

2.5.1 Sikkim's Special Relationship with the Centre

Sikkim is one of 10 Special Category States (SCSs) which receive substantial financial and non-financial support from the central government. It currently gets 90 per cent of its plan assistance as grants, and the remaining 10 per cent as loans.

Box 2.8 Financing in Special Category States

Special Category States (SCSs) receive preferential treatment in the distribution of normal central assistance for state plans. From the total central assistance available for state plans, funds are earmarked for externally aided projects and special area programmes (hill areas, tribal sub-plans, border areas, North-East Council, etc). The remaining state plan assistance is distributed in the ratio of 30:70 between the 10 SCSs and 15 non-SCSs. This gives the SCSs a far higher proportion than is warranted by population proportionality, given that the total SCS population was only around 6 per cent of the national population in 1999. The Gadgil formula does not apply in the determination of the distribution between non-SCSs and SCSs. If it had, the SCSs would have been at a disadvantage since the formula assigns higher weights to population (according to the 1971 census) and deviation of per capita income from the national average.

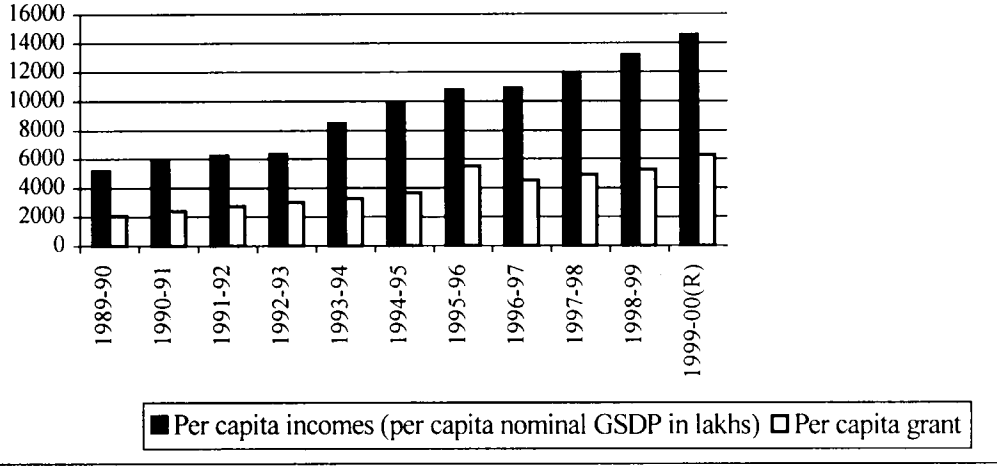
The SCSs also receive plan assistance on far more favourable terms than do other states. Their grant-loan ratio is 90:10, which is 30:70 for non-SCSs. The *inter se* distribution among the SCSs is determined by previous plan size and the special problems and priorities of each state.

The Missing Multiplier

In Sikkim, per capita grants (including plan and non-plan grants) have been a substantial 60 per cent of per capita income since 1989-90 (chart 2.10). Inflows of grants from the Centre have been financing nearly 50 per cent of state government expenditure.[16] Although the share has been fluctuating, there is no clear sign of a decline. Transfers from the Centre are exogenous injections of resources into the state's economy. A part of such transfers pays for the wages and salaries of government employees, while the rest goes into government consumption and investment. Either way, the inflow of grants directly generates incomes and expands the size of the market. Normally a rupee spent by the government should lead to many rupees worth of income being generated in the state.[17] The chain of income generation that results in additional income generation of a multiple of the additional government expenditure is known as the multiplier effect.

The ratio of total government expenditure (revenue expenditure and capital outlay) to GSDP was as high as 82.4 per cent in 1995-96, which implies an average multiplier of only 1.21. Normally, high expenditure should lead to a much higher level of income. The low value of the average multiplier or the "missing multiplier" could either be a result of a large proportion of government expenditure on goods and services produced outside the state, which would fail to trigger off a chain of income generation within the state, or the result of beneficiaries parking their funds outside the state. It could also point to the possibility of gaps in expenditure management and leakages.

Chart 2.10 Per Capita Income and Per Capita Grants



Source: Annual Financial Statement (Budget) 2000-01, Government of Sikkim.

[16] Grants, both plan and non-plan, as a proportion of total government expenditure, comprising capital outlay and revenue expenditure (net of lotteries), was nearly 49.9 per cent in 1989-90 and has been raised to 51.3 per cent in 1999-2000.

[17] For example, a rupee paid as income to a government employee will not only directly generate a rupee of additional income for the employee, but indirectly generate say another 80 paise of income for the grocer, baker, weaver, etc. when the employee spends 80 paise out of the Re 1 income. Subsequently, there will be further rounds of income generation as the grocer, baker and weaver in turn spend parts of their additional income on their consumption and so on. Ultimately, at the "end" of the chain, income could rise by as much as Rs. 5.

2.5.2 Trends in Revenue and Expenditure

The government's collection of tax and non-tax revenue is declining, even though recorded GSDP has been growing steadily (chart 2.11). Further, the low buoyancy of the state's own taxes has resulted in the unsatisfactory performance of taxes (table 2.4). Except for state sales tax and motor vehicles tax, buoyancies are well below one. Over the years, own-tax revenue as well as non-tax revenue (net of lotteries) as a proportion of GSDP have fallen from a peak of 7.79 per cent and 10.07 per cent, respectively, in 1989-90 to 6.66 percent and 3.97 per cent, respectively, in 1998-99 and have been revised to 6.45 per cent and 4.74 per cent, respectively, in 1999-2000. As a result, total own receipts (own-tax and non-tax) in terms of GSDP dropped by nearly 7 per cent during the period 1989-90 to 1997-98.[18]

Table 2.4: Buoyancies of the State's Own Taxes

Taxes	Buoyancies[1]
Total own-tax revenue	**0.579**
Taxes on income levied under the state laws	0.572
Land revenue	0.642
Stamps and registration fees	0.710
State excise tax	0.326
Total state sales tax (inclusive of CST)	1.061
State sales tax	0.931
Tax on vehicles	1.278
Other taxes on commodities and services	0.009

Note: 1. Estimated for the period 1989-90 to 1998-99.

Source: National Institute of Public Finance and Policy, Working Estimates.

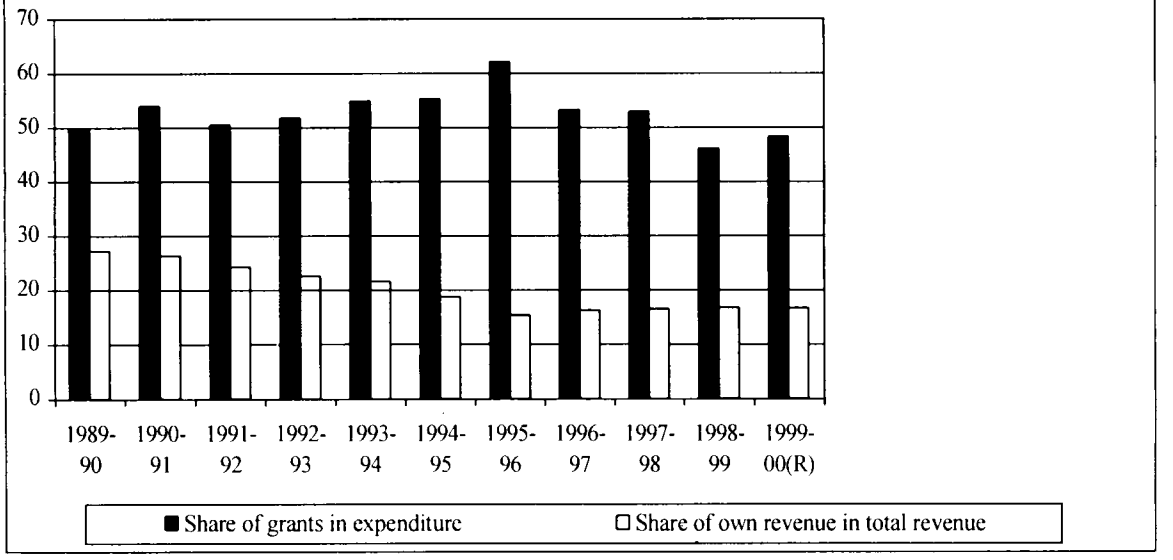
Even within total state sales taxes, a category that has a buoyancy in excess of unity, it is the Central Sales Tax (CST) collected on inter-state sales that has performed well. Sikkim collects CST at the rate of 4 per cent on declared goods, which are goods specified under Section 14 of the CST Act, 1956. However, the CST on commercial crops, such as cardamom, ginger and tea is levied at 3 per cent of sale value. Total revenue from CST was as much as Rs 1.27 crore out of total state sales tax revenues of Rs 7.4 crore in 1995-96. State sales tax had a buoyancy of only 0.931, indicating a falling share of such revenues in the GSDP.

The fall in the collection of tax and non-tax revenue by the state was compensated by a marginal rise in the share of Central taxes and a large increase in grants. In terms of GSDP during 1989-90 to 1995-96, the share of Central taxes and grants have risen from 8.33 and 39.62 per cent, respectively, to 9.52 and 51.08 per cent, respectively. Although the share of Central taxes is expected to go up to 13.10 per cent, grants are expected to go down to nearly 43 per cent in 1999-2000. The composition of own revenues has also been changing over the years: in 1989-90, own-revenues—both tax and non-tax (without lotteries)—constituted nearly 27 per cent of total revenue receipts (without lotteries), and the share is expected to go down to only 20.61 per cent in 1999-2000.

[18] Lotteries are excluded.

The fall in non-tax revenue has been mainly due to poor collection from interest receipts, profit and dividends, and economic services. The share of social services in non-tax revenue (net of lotteries) has remained nearly stagnant while the shares of interest receipts, etc., and economic services have actually fallen.[19] In economic services, the growth in yields has been particularly poor in education, health and road transport, indicating the non-revision or inadequate revision of user charges over the years.

Chart 2.11 State's Dependence on Central Resources



Note: Own revenue includes own-tax and non-tax; grants-in-aid include plan and non-plan grants; total revenue excludes lotteries; total expenditure is the sum of revenue expenditure (net of lotteries) and capital outlay.

Sources: *Finance Accounts*, various issues; *An Abstract of Public Finance: 1979-80 to 1994-95* and *Annual Financial Statement (Budget) 2000-01*, Government of Sikkim.

Over the period 1989-90 to 1999-2000, capital outlays in terms of GSDP have fallen by more than 4 per cent. Capital outlay in terms of GSDP, after rising to 26.33 per cent in 1991-92 from 22.84 per cent in 1989-90, fell to 13.07 per cent in 1998-99. Though the proportion of public sector capital outlays in GSDP as well as the shares of both social and economic services in GSDP have been fluctuating over time, a clear downward trend is visible.

There has been a substantial rise in revenue expenditure during the late nineties, with a significant jump in 1998-99 by more than 10 per cent points. The rise may be ascribed to the implementation of the Pay Commission recommendation. There is an apparent shift towards social services and away from economic services. A cause for concern is the steady rise in interest payment (in terms of GSDP) from 3.65 per cent in 1989-90 to 6.12 per cent in 1995-96 and projected at more than 9 per cent by

[19] The shares of interest receipts, profits, and economic services in non-tax revenue (without lotteries) are likely to fall to 1.7, 1.2 and 42.4 per cent in 1999-2000 from 6.3, 0.96 and 61 per cent, respectively, in 1989-90.

Table 2.5: Key Fiscal Variables: 1989-90 to 2000-01

(per cent of GSDP[1])

	1989-90	1991-92	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000[2]	2000-01[3]
Revenue Receipts	**65.81**	**70.31**	**62.21**	**55.75**	**71.51**	**65.87**	**64.72**	**63.75**	**67.47**	**NA**
Own-tax revenue	7.79	5.95	5.78	4.40	5.75	5.54	5.92	6.66	6.45	6.00
Non-tax revenue[4]	10.07	11.04	7.62	5.99	5.16	5.12	4.71	3.97	4.74	NA
Share of central taxes	8.33	9.83	9.97	8.51	9.52	13.57	12.97	13.13	13.10	12.57
Grants from the centre	39.62	43.50	38.85	36.85	51.08	41.64	41.11	39.99	43.18	43.80
Revenue Expenditure	**56.50**	**59.77**	**52.24**	**51.13**	**61.03**	**60.86**	**60.29**	**73.71**	**70.92**	**NA**
Interest Payment	3.65	5.73	6.01	6.07	6.12	6.10	7.08	7.93	9.36	9.68
Social services	19.23	20.19	17.44	17.42	22.26	23.12	23.29	30.22	25.46	21.32
Economic services	25.19	25.15	19.88	19.13	23.17	21.83	20.75	22.16	23.89	22.35
Capital Expenditure										
Capital Outlay	22.84	26.33	18.61	15.52	21.35	17.43	17.41	13.07	18.49	21.30
Social services	6.80	6.38	6.37	5.00	6.79	5.05	5.37	4.23	5.87	8.52
Economic services	15.24	18.42	11.46	9.77	13.46	11.39	10.97	8.18	12.17	12.44
Deficits and Debt										
Revenue deficit[5]	-9.31	-10.54	-9.96	-4.61	-12.66	-7.17	-6.70	7.82	-0.03	-5.26
Fiscal deficit	14.25	15.83	8.50	10.62	8.46	10.35	10.96	20.91	18.49	16.02
Primary deficit	10.60	10.09	2.50	4.55	2.34	4.24	3.88	12.98	9.13	6.34
Outstanding debt	55.26	63.29	59.40	56.59	58.33	57.88	57.88	71.87	80.33	84.43

Notes: 1. GSDP from 1995-96 has been projected to grow at an estimated rate of 14 per cent per annum.
2. Revised estimates.
3. Budget estimates.
4. Excludes collection from lotteries.
5. Difference between revenue expenditure and revenue receipts, but inclusive of lotteries.

Sources: *Finance Accounts*, various issues and *Annual Financial Statement (Budget) of the Government of Sikkim*, June 2000.

1999-2000. The rise in the interest burden is attributable to a shift in the composition of debt towards the more expensive internal borrowing, and saving and provident fund, away from loans and advances from the centre.

Sikkim's fiscal health is good if judged by its revenue surplus. The revenue balance has been in surplus every year since 1989-90 except for 1998-99. In 1998-99, the revenue surplus turned into a deficit of Rs 54.94 crore, but the problem appears to have been rectified, with a revenue surplus of Rs 48 crore budgeted for the year 2000-01. There is a problem, however, with the state's high non-plan revenue deficits, which have increased from Rs. 3.39 crore in 1990-91 to Rs. 58.7 crore in 1997-98. The Eleventh Finance Commission estimates for 2000-01 show a very high non-plan revenue deficit of Rs. 169.70 crore. The surplus on the revenue account is, therefore, primarily attributable to transfers from the centre on plan account, which have allowed the state to spend more than its borrowings on capital formation.

The fiscal deficit which had been fluctuating during this period at around 12 per cent, has shown an upward trend in recent years. It went up to Rs. 146.86 crore in 1998-99 from Rs. 67.53 crore in 1997-98. As a percentage of GSDP, the fiscal deficit touched an alarmingly high level of 20.91 per cent in 1998-99, up from 10.96 per cent in 1997-98. Payment of salary arrears arising out of pay

revision as reflected in the profile of revenue expenditure led to a rapid rise in the fiscal deficit in 1998-99, a part of which was impounded into the provident fund. Budget estimates indicate that the primary deficit is expected to decline from 10.6 in 1989-90 to 6.34 in 2000-01 after soaring to 12.98 in 1998-99. A steady rise in interest payment is exerting pressure on the government to economise on expenditures and limiting the primary deficit to make room for interest payments (see table A3.9).

2.5.3 Debt

The state's outstanding debt as a percentage of GSDP has been rising. Sikkim's indebtedness to the centre and the financial institutions has reached very high levels, with larger plan sizes leading to higher borrowing. Continuation of the trend will soon result in a scenario where debt servicing (repayment of loans) and interest payment together will outweigh borrowings, and thereby lead to a reverse flow of resources. Outstanding debt which was estimated to be Rs. 112.7 crore at end-March, 1990, has grown nearly six times by 2000.

Interest payment and debt servicing as a percentage of borrowing from the three alternative sources tends to be very close to 100 (table 2.6). For internal debt (which is market borrowings), in fact, debt service has exceeded 100 per cent of gross borrowings almost continuously since 1993-94,

Box 2.9 A Comparison Amongst the Special Category States

A per capita comparison of the major fiscal variables of the Special Category States (SCS) is presented in table 2.7. In 1995-96, Sikkim's per capita income (NSDP at factor cost at current prices), while lower than the national average, was less than that of only two of the North-Eastern states. Sikkim also has the lowest population amongst all the SCSs.

For own-tax revenues per capita, Sikkim, like all the SCSs, ranks below the national average, but is second among all the SCSs.

For non-tax revenues (excluding lotteries), Sikkim is far above the all-India average, ranking just below Arunachal Pradesh.

In terms of share in tax devolution, Sikkim ranks fourth amongst the SCSs.

In terms of per capita grants, not only is Sikkim higher than the national average (as is to be expected), it is the highest among the SCSs, followed by Arunachal Pradesh and Mizoram.

For per capita plan outlay in 1997-98, Sikkim was second only to Arunachal Pradesh and far above the national figure. Given the poor state of infrastructure in the state, expenditure on this front is in line with the priorities of the government.

In comparison with the other SCSs, Sikkim performs well in terms of per capita own-tax and non-tax revenue. Plan expenditure-wise too, Sikkim is close to the top. These positive features, however, are clouded by its high outstanding debt, although the per capita debt estimates tend to be high partly because of Sikkim's low population.

Source: State Finances: A Study of Budgets of 1999-2000, Reserve Bank of India, January 2000.

implying a net outflow of resources. This is a serious cause for concern, as debt service in such a situation starts to displace other government expenditures.

Table 2.6: Net Inflow/Outflow of Resources from Borrowing

(per cent)

Year	Debt servicing + Interest payment / Addition during the year		
	Internal debt	Loans & advances from Centre	Other liabilities[1]
1993-94	127	102	74
1994-95	101	93	89
1995-96	99	89	92
1996-97	116	89	86
1997-98	105	98	87

Note: 1. Includes small savings, provident fund, reserve funds and deposits.

Source: *Report of the Comptroller and Auditor General of India*, Government of Sikkim, 1998.

Table 2.7: Finances of Special Category States: A Per Capita Comparison, 1997-98

(in rupees)

	Own Tax	Non-tax	Share in Central Taxes	Grants	Outstanding Debt (on March 30, 1998)	Plan Outlay
Arunachal Pradesh	86.1	480.7	2,143.2	4,646.7	6,845.3	5,272.4
Assam	342.7	148.1	573.3	616.8	2,414.1	586.8
Himachal Pradesh	736.1	325.8	1,006.6	1,269.1	6,129.2	1,558.2
Jammu & Kashmir	382.7	283.9	1,182.1	2,617.2	6,100.4	1,616.5
Manipur	148.4	168.7	1,291.8	1,978.0	3,595.2	1,704.1
Meghalaya	316.4	128.5	1,233.0	1,318.1	2,411.9	1,642.3
Mizoram	86.9	327.1	2,727.2	4,618.3	6,523.7	3,190.3
Nagaland	208.7	282.2	2,611.8	3,084.1	7,395.6	1,813.1
Sikkim	**513.1**	**543.6**	**1,666.7**	**4,741.6**	**6,685.4**	**4,119.9**
Tripura	198.2	96.6	1,189.6	1,510.7	3,113.8	1,217.8
All States	*833.3*	*250.7*	*414.6*	*248.5*	*2,884.9*	*650.0*

Note: 1. Excludes lotteries.

Source: State Finances: A Study of Budgets of 1999-2000, Reserve Bank of India, January, 2000.

2.6 Business as Usual: Unsustainable and Precarious

The management of state finances is becoming increasingly difficult. The revised estimates of the fiscal deficit and outstanding debt at 18.49 per cent and 80 per cent, respectively, of GSDP in 1999-2000 are clear indications of the unsustainability of the present fiscal stance. A continuation of the present situation will result in the government being forced to take several strong and unpopular measures in the future to avert a crisis and restore sustainability. Forced adjustments to deal with crises are invariably arbitrary, and have adverse and undesirable consequences. The base scenario presented below is one of the many ways events could unfold if 'business carries on as usual'. The

idea is not to predict the shape of the things to come, but to illustrate the adverse consequences of not initiating on an urgent basis the process of adjustment and fiscal reforms.

2.6.1 The Projection Methodology

The total resources of the government comprise revenue receipts and capital receipts (net). Revenue receipts have been projected on the basis of historical trends. The different components of own-tax revenue have been projected till 2004-05, based on their respective buoyancies estimated for the period of 1989-90 to 1997-98 and an assumed GSDP nominal growth rate of 14 per cent per annum.[20] Given that the rate of growth of nominal GSDP is higher than in the past and the lack of own-tax buoyancy (apart from sales and motor vehicles taxes), the share of own-tax revenues in GSDP declines further from 6.40 per cent in 1999-2000 to 5.25 per cent by the year 2004-05.

Non-tax revenues have also been projected at a disaggregated level. The four components of non-tax revenues are revenues from (i) interest receipts, dividends and profits, (ii) general services, (iii) social services, and (iv) economic services. For interest receipts, dividends and profits, the historical negative annual growth rate of 4 per cent has been extrapolated until 2004-05. Revenues from general services include (under the miscellaneous head) receipts from lotteries, which tend to be very high, although the associated expenditures for lotteries also tend to be considerable. The average rate of growth of 6 per cent in the last two years has been applied to revenues from general services to obtain the projections. Similarly, for projecting the other two components—revenues from social and economic services—the average growth rates of 14 per cent and 6 per cent, respectively, observed during 1989-90 to 1999-2000, have been used. Because of the considerably slower growth in the components of non-tax revenues relative to GSDP, non-tax revenues decline from 3.69 per cent of GSDP in 1999-2000 to 2.55 per cent in 2004-05.[21]

Sikkim's share of Central tax revenues as estimated by the Eleventh Finance Commission has been incorporated for the period 2000-01 to 2004-05 (see the *Report of the Eleventh Finance Commission*, June 2000, Annexure VI-8) for the projection exercise. Sikkim's share in Central taxes falls marginally over the period by 1.15 per cent under the baseline scenario.

The total plan grants of the state government have been allowed to grow at a robust rate of 14 per cent, which is higher than the Plan Authority estimates contained in the memorandum submitted to the Eleventh Finance Commission. Non-plan grant estimates have been taken from the Eleventh Finance Commission and comprise two parts: non-plan revenue grant and upgradation and special purpose grants. The estimates of the Eleventh Finance Commission have been used to project the future profile of non-plan grants. This results in an increase in grants, including the share in taxes as a proportion of GSDP, from 44 per cent in 1999-2000 to 49 per cent in 2004-05.

[20] Tax revenue in period (t + 1) = tax revenue at t x (1 + tax buoyancy x GSDP growth rate). The Finance Commission has used a GSDP growth rate of 13 per cent for its projection.

[21] The projected estimate of own-tax revenue exceeds the state's estimate by 5 per cent in 2004-05, whereas the projected non-tax revenue is lower than the state's estimate. The state's estimate is based on an application of 10 per cent annual growth rate to the 1999-2000 estimate of non-tax revenue, which is lower than the Budget estimate resulting in a higher profile of non-tax revenue. Growth rates have been applied to the Budget estimate of non-tax revenue in the above projection exercise.

According to the Eleventh Finance Commission, since a substantial amount of grants-in-aid is being given to SCSs to meet the demand on non-plan revenue account, the diversion of plan expenditure to the non-plan category should be discontinued, and Planning Commission funds should be used for plan expenditures and to build sound infrastructure for accelerated development. Total grants are expected to experience a downfall from 42.80 to 40.91 during 1999-2000 to 2004-05.

Capital receipts (net), comprising internal debt, loans and advances from the Centre, savings and provident fund, recoveries and net withdrawal of funds from the Public Account net of small saving and provident fund, have also been taken to be the same as the estimates submitted to the Eleventh Finance Commission by the state government. The drastic fall is expected because the state had an abnormally high fiscal deficit for two consecutive years as a result of the implementation of the State Pay Commission's recommendations. Under the baseline scenario, total receipts decline by nearly 15 percentage points from 84.4 per cent in GSDP in 1999-2000 to 69.7 per cent in 2004-05 (net of lotteries).

Box 2.10 Determining a State's Share in Union Tax Revenue

Based on an assessment of the Centre and states' budgetary resources and requirements, the Eleventh Finance Commission (EFC) has suggested that the states' share should be fixed at 29.5 per cent of the net proceeds of all taxes and duties in the Union List from 2000-01 to 2004-05. The *inter se* distribution among the states will be based on 28 per cent of net proceeds; the additional 1.5 per cent of all shareable Union taxes and duties will be allocated separately. States that levy and collect sales tax on sugar, textile and tobacco are not entitled to a share of this 1.5 per cent.

The *inter se* distribution of the aggregate share of the states in central tax revenues is determined by the following criteria and relative weights.

Relative Weights to Determine the Inter se Shares of States

Criteria	Population	Income	Area	Infrastructure Index	Tax Effort	Fiscal Discipline
Relative Weight (%)	10.0	62.5	7.5	7.5	5.0	7.5

The major considerations in the selection of these criteria, which are based on equity and efficiency, are resource deficiency, the cost of providing services and fiscal discipline

To evolve a suitable structure of incentives to provide for fiscal discipline, the tax effort and index of fiscal discipline together have been assigned a weight of 12.5 per cent.

Sikkim's share has been fixed at 0.184 per cent. It may be noted that the index of fiscal discipline for Sikkim (which measures its own revenues as a proportion of revenue expenditure) has deteriorated from a ratio of 0.2023 (1990-91 to 1992-93) to 0.1395 (1996-97 to 1998-99). The deterioration is also reflected in the index which is 71.44 vis-à-vis 100 for all states.

Source: Report of the Eleventh Finance Commission for 2000-05, June 2000.

Expenditures have also been projected at a disaggregated level. The different components of revenue expenditure (except for interest payments which are state government's estimates) have been extrapolated; capital outlays are based on historical growth rates. Past trends indicate a shift in the composition of revenue expenditure from economic services to social services. For 1989-90 to 1997-98, the growth rates for social and economic services have been estimated to be 18 and 12.5 per cent per annum, respectively, in conformity with this compositional change.[22] For the components of general services, organs of state and pension and miscellaneous services, the historical growth rates for the period 1989-90 to 1997-98 of 14 and 5.7 per cent, respectively, have been applied. For the period 1992-93 to 1997-98, for fiscal and administrative services, the growth rates applied are 18.2 and 15 per cent, respectively.[23] The surplus in the revenue account turns eventually to a deficit by the year 2001-02 and rises further to 12 per cent of GSDP by 2004-05.

Capital outlay has been projected to grow at nearly 12 per cent per annum, the rate estimated for the period 1989-90 to 1999-2000. The falling share of capital outlay observed in the past not only continues but gets accentuated over the projection years. By 2004-05, the share falls by 1.6 percentage points to 16.7 per cent. The historically determined growth of expenditures is obtained by aggregating revenue and capital expenditure.

Total receipts from all sources, including borrowing, fall short of the resource requirements for financing the projected expenditures, which consist of revenue and capital outlays over the projection period.[24] The balance of resources is defined as total receipts minus total expenditure and this is negative for all years. This is clearly a precarious and unsustainable situation. Since the state cannot freely borrow more, the brunt of adjustment is likely to be borne by some combination of expenditure compression, in particular capital outlay and maintenance (the discretionary elements of expenditure) and additional resource mobilisation, for example, from tax and non-tax sources. Three scenarios have been delineated to indicate what the state may have to do to deal with the evolving fiscal stress (table 2.8).

2.6.2 The Scenarios

In the first scenario, the entire burden of adjustment is borne by a compression of capital outlay, which is completely squeezed (and turns out to be a negative per cent of GSDP by 2004-05). This illustrates how precarious and unsustainable the scenario is as capital outlay, which is linked to Plan grants, cannot decline to such a level.

In the second scenario (chart 2.12), additional grants from the Centre (over the normal share that the state receives) are expected to finance expenditure. The requirement for additional grants

[22] Estimated growth rates for social and economic services for the period 1989-90 to 1999-2000 were higher by 19.69 and 13.5 per cent, respectively. This may partly reflect the implementation of the recommendations of the State Pay Commission.

[23] Growth rates for the period 1989-90 to 1997-98 were higher at 21.4 and 16.5 per cent, respectively. The applied growth rates were chosen as they relate to the recent past.

[24] Since receipts and expenditure are net of lotteries, the future revenue profile is underestimated by the extent of the net revenues from lotteries, which was around 3.45 per cent of GSDP (or Rs. 27.9 crore) in 1999-2000.

Table 2.8: Base Scenario: Summary of Results

(per cent of GSDP)

	1999-2000[1]	2000-01	2001-02	2002-03	2003-04	2004-05
A. Revenue Receipts (net of lotteries)	**66.88**	**72.08**	**68.06**	**65.60**	**63.31**	**60.54**
Own Tax Revenue	6.40	6.13	5.88	5.65	5.44	5.25
Non-Tax Revenue (net of lotteries)	3.69	3.42	3.18	2.95	2.74	2.55
Share in Central Taxes	12.98	10.75	11.05	11.28	11.58	11.83
Grants	42.80	51.78	47.96	45.71	43.54	40.91
B. Capital Receipts (net)	**14.10**	**9.81**	**11.84**	**11.16**	**10.06**	**9.18**
Total Receipts (net of lotteries) (A+B)	**84.37**	**81.89**	**79.91**	**76.75**	**73.37**	**69.72**
I. Revenue Exp. (net of lotteries)	**68.04**	**69.93**	**71.18**	**71.74**	**72.81**	**74.30**
Social Services	25.24	26.13	27.04	27.99	28.98	29.99
Economic Services	23.68	23.37	23.06	22.76	22.46	22.17
Gen. Service of which Interest Payment	8.76	9.91	10.41	10.20	10.49	11.18
II. Capital Outlay	**18.33**	**18.00**	**17.67**	**17.35**	**17.04**	**16.73**
Total Expenditure (net of lotteries) (I+II)	86.37	87.93	88.85	89.09	89.85	91.02
Revenue Deficit	-0.03	-4.18	1.22	4.39	7.88	12.25
Balance of Resources		**-4.01**	**-7.05**	**-10.59**	**-14.86**	**-19.79**
Fiscal Deficit	**16.10**	**9.68**	**11.73**	**11.05**	**9.96**	**9.09**
Primary Deficit	7.34	-0.23	1.32	0.85	-0.53	-2.08
Outstanding Debt	**77.47**	**77.58**	**79.73**	**80.94**	**80.92**	**80.04**
Scenario I Residual: Capital Outlay		13.99	10.62	6.77	2.18	-3.07
Scenario II Residual: Additional Central Grants		4.01	7.05	10.59	14.86	19.79
Scenario III (Res. Add. Borrowing) Fiscal Deficit		13.69	20.22	25.03	30.43	37.01
Primary Deficit		3.78	8.37	11.44	14.32	17.71
Outstanding Debt		81.65	91.84	105.59	123.05	144.95
Memorandum Items						
Revenue Receipts[2]	191.44	188.50	176.01	165.68	156.11	146.58
Non Tax Revenue[2]	129.25	119.84	111.12	103.04	95.54	88.59
Net Borrowing[3]	14.91	9.63	11.68	11.00	9.92	9.06
Total Receipts[2]	205.53	198.31	187.86	176.84	166.17	155.77
Total Revenue Expenditure[2]	191.40	184.32	177.24	170.08	163.99	158.83
Total Expenditure[2]	209.74	202.32	194.91	187.43	181.03	175.56

Notes: 1. Revised estimate; 2. Includes lotteries; 3. Includes recovery of loans and net public account transactions other than small savings and provident fund.

Source: NIPFP, Working Estimates.

steadily increases to 19.79 per cent of the projected GSDP by the end of the projection period. This again is clearly unrealistic, given the stress that Central government finances are already experiencing.

In the third scenario (chart 2.13), the state borrows from the market to meet the shortfall in resources. Once the state takes recourse to additional borrowing in the first year of projection, interest payments rise. These feed into the next year's expenditure, which are then higher than what they

Chart 2.12 Scenario 2: Additional Central Grants

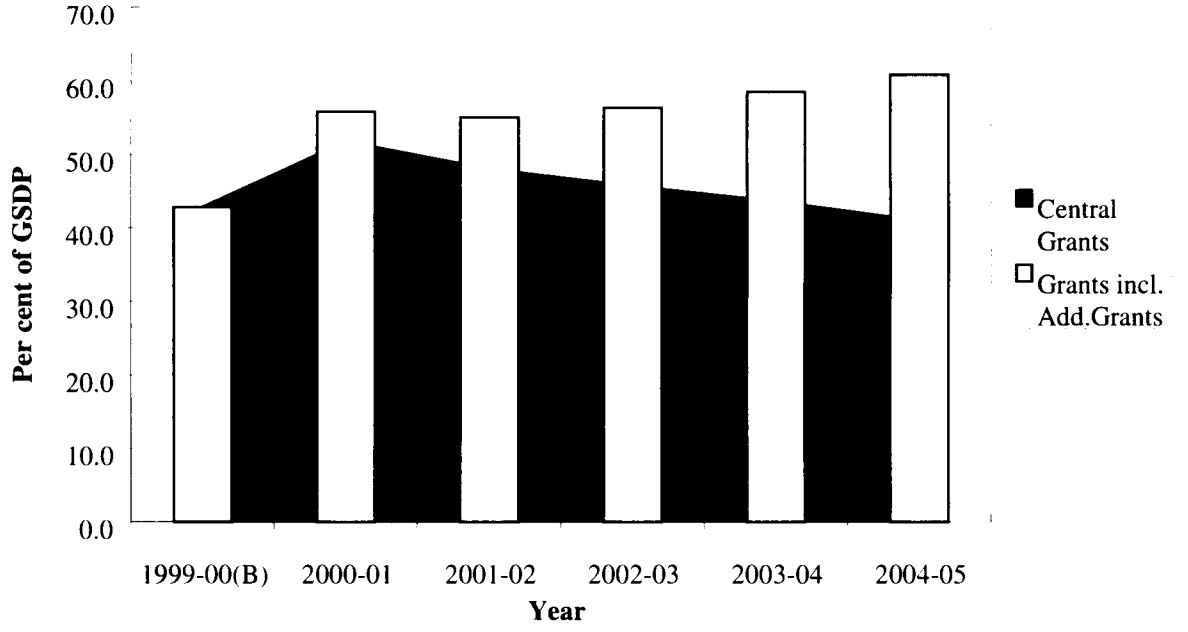
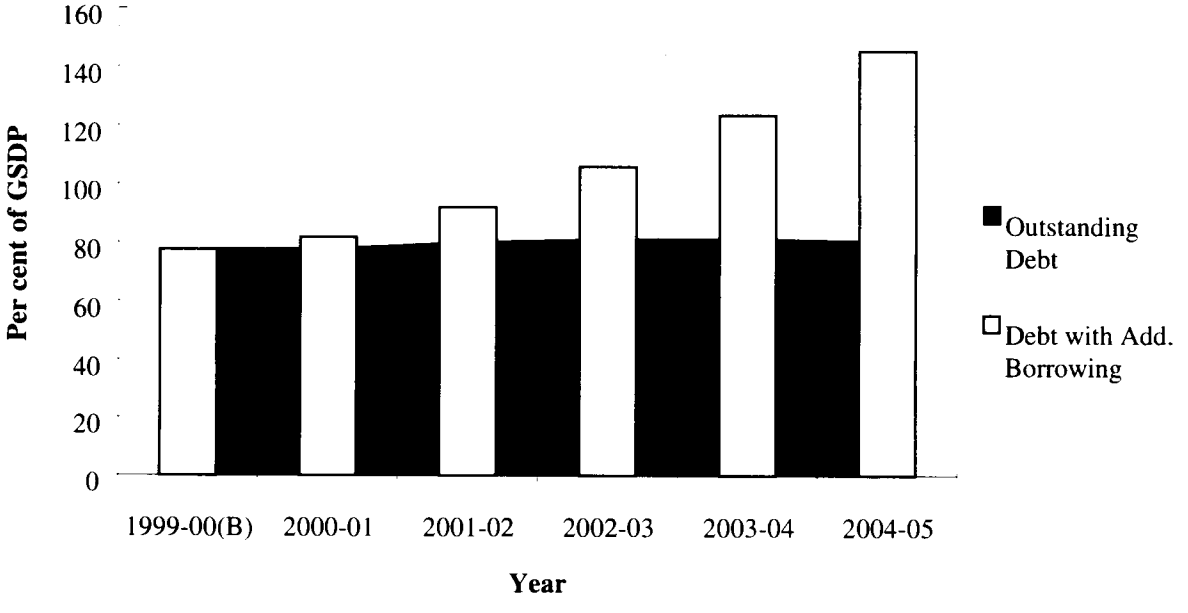


Chart 2.13 Scenario 3: Debt with Additional Borrowing



Box 2.11 The Eleventh Finance Commission's Recommendations on Restructuring Special Category States (SCSs) Finances

The Eleventh Finance Commission (EFC) Report has outlined how state finances should be restructured. The poor economic bases of the SCSs mean that their own revenue sources can finance only a small fraction of their revenue expenditure. The gap is generally bridged by resources from the Centre. The non-plan revenue deficits of SCSs before devolution tend to be very large. Since 90 per cent of central assistance for the state plans is in the form of grants, their revenue accounts are generally in surplus. Even so, the SCSs have high fiscal deficits, often exceeding 10 per cent of their GSDP. In view of this, the EFC has suggested the following:

The non-plan revenue account gap after devolution of central taxes should be bridged by Finance Commission grants. This would halt the diversion of plan resources to the non-plan account.

The Centre should assume responsibility for development infrastructure in key areas that require large investments.

The system for plan assistance to SCSs needs to be reviewed.

Source: Report of the Eleventh Finance Commission for 2000-05, June 2000.

would have been. The state falls into a vicious debt trap with the fiscal deficit reaching an unmanageably high level of nearly 37 per cent by the end of the projection year, and the debt-to-GSDP ratio skyrocketing to nearly 145 per cent.

The three scenarios clearly indicate a deep-rooted malaise in the current situation which needs to be addressed through vigorous reforms. Even if the second scenario is accepted as remotely plausible, the desirability of building Sikkim largely on the basis of Central grants needs to be examined: while this may be possible in the medium term, in the longer run such a dependency could be disastrous. The falling share of capital outlay in scenario 1 or burgeoning debt to GSDP ratio (scenario 3) is not the only manifestations of the crisis. Despite a continuous rise in Central grants, the result is a fall in capital outlay as a percentage of GSDP. The declining share of own revenue, and steadily increasing revenue expenditure as reflected in the revenue deficit are at the root of the crisis.

3

FULFILLING THE VISION

3.1 ECONOMIC STRATEGY

3.1.1 SATISFACTORY PROGRESS

Sikkim has made great progress in terms of human and gender development in the last three decades. For example, literacy has gone up from 17.7 per cent in 1971 to 78 per cent in 1996-97, well above the all-India average of 62 per cent. The infant mortality rate, similarly, went down from 88 per thousand in 1987-89 to 51 per thousand in 1997. The state does not have the problems of female infanticide and dowry deaths, and in 1995, female enrolment ratio in middle school was higher for girls than for boys. During recent years there has been considerable progress with the Human Development Index (HDI) improving from 0.454 in 1991 to 0.532 in 1998.[1]

Per capita income (net state domestic product at factor cost at 1980-81 prices) more than doubled from Rs 1,571 in 1980-81 to Rs 3,492 in 1991-92.[2] This increase was much sharper than the 37 per cent increase in the average per capita income in the country. The rapid increase resulted in per capita income in Sikkim, which was lower than the all-India average in 1980-81, exceeding the country average by 57 per cent in 1991-92.

In spite of good progress in HDI, the Gender Development Index (GDI), and per capita income, problems of poverty and unemployment persist and the sustainability of the development strategy of the past is under serious doubt. Doubts about the sustainability of the strategy get reinforced by the deceleration in the growth of HDI and GDI in recent years. For example, the HDI, after increasing from 0.454 in 1991 to 0.509 in 1995, improved only to 0.532 in 1998. Similarly, the increase in the GDI from 0.499 in 1995 to 0.528 in 1998 was smaller than the increase from 0.445 to 0.499 between 1991 and 1995.

3.1.2 PAST STRATEGY

The cornerstone of the development strategy pursued so far has been a super-active government in all spheres of economic activity. Direct government employment has increased to about 25,000 in 1999, implying a quarter of the population (assuming 4 dependants per government employee)

[1] See Lama (2000).

[2] Data for real per capita income in Sikkim is available only up to 1991-92, *Indian Public Finance Statistics (1998-99)*.

depending directly on the government for their livelihood.[3] Expenditure on wages, salaries and pension, and on interest payments, constitute 35.4 per cent and 8.9 per cent, respectively, of total government expenditure. For example, in 1998-99 the share of these two items in total government expenditure was pre-empting almost half of total government expenditure. The impact of public spending on the state's economy has been somewhat limited. With the Gross State Domestic Product (GSDP) at only 1.2 times government expenditure, there is a problem of the "missing multiplier". A rupee of government expenditure appears to be generating little extra income beyond the rupee of income that it directly generates in the first round. While the implementation of several plan schemes has contributed to the establishment of relatively modern infrastructure in education and primary health, available evidence suggests that some of these assets are in a state of bad repair and utilisation, and some services have already been adversely affected.

Revenues of the government—including devolved funds from the centre, plan assistance, and own revenues—have not kept pace with galloping expenditure resulting in double digit fiscal deficits in seven out of the past ten years. Fuelled partly by the implementation of the Pay Commission's recommendations, the deficit reached a staggeringly high figure of 20.91 per cent of GSDP in 1998-99; the revised figure for 1999-2000 is 18.5 per cent of GSDP. High deficits have resulted in mounting debts. The debt-to-GSDP ratio has rapidly increased from 55.3 per cent in 1989-90 to over 80 per cent in 1999-2000. In 1995-96, in terms of the debt-to-GSDP ratio, Sikkim was the third highest in India after Jammu and Kashmir, and Nagaland. The debt-dynamics, by contributing to the burgeoning interest burden, has squeezed the share of capital expenditure in total government expenditure in Sikkim. The relevant share has fallen from 28.8 per cent to 21.4 per cent between 1989-90 and 1999-2000. The strategy of generating further direct employment in the government and stepping up government expenditure in other areas without improving the effectiveness of government expenditure is unsustainable.

3.1.3 Designing a New Strategy

Strategy may be defined as a consistent well-articulated plan to achieve stated goals over a specified time frame. The stated goal is achieving an accelerated path of eco-friendly sustainable development, with a sharp focus on income and employment generation for the youth and the economically weaker sections of the population. Past strategy not only has not delivered the stated goals, but also is unsustainable. Thus, there is an urgent need for devising a new strategy.

The strategy design has to contain a clear delineation of the instruments to achieve these goals. Further, as already stated, the goal has to be achieved through a two-pronged approach of applying science and technology to economic activity and through government-private sector partnership. These instruments have to aim at promoting private sector initiatives in identified sectors, enhancing the application of science and technology in these activities, and empowering the people with appropriate skills for employment in the identified sectors. Such a strategy specifying the components of the vision or goals, the sectors that will act as thrust areas to these goals, and the instruments that will

[3] Government for this purpose includes departments of the Government of Sikkim and district administration. It does not include public sector enterprises.

promote activities in the specified sectors to realise the vision are shown in the economic strategy matrix that follows. The last column of the matrix explains in brief how the instruments will help in the realisation of the goals.

Horticulture (including the growing of fruits, vegetables, flowers, ornamental shrubs and trees), poultry and animal husbandry can help the state build on its existing strengths, generate employment and alleviate poverty. The sectors have languished without the application of modern science and technology (including improved seeds, feed and fodder, and modern farm practices), proper roads, smooth transportation and storage facilities, access to markets and remunerative prices, and veterinary facilities. Given the eco-friendly income and employment potential of these sectors, the government must redress these deficiencies.

3.1.4 Economic Strategy

The experience of direct government involvement in agricultural farms, animal breeding, and cold storage (which was closed for over six years and has only recently been leased out) has not been a happy one. Accordingly, the government needs to shift its role to that of a facilitator for promoting private sector activities in horticulture, poultry and animal husbandry. The government must attract the private sector to set up a feed and fodder plant to alleviate supply problems. It must also encourage the private sector to set up cold storage and processing factories. The mission of attracting private investment will have to involve identifying problems faced by private entrepreneurs, aiding them with land acquisition and funding from banks and financial institutions. While joint venture projects can be considered, the prime aim of the government should be to entrust full management responsibility and risk to the private investor.

Vision/Goals	Sectors	Instruments	Intended Effects
Removal of poverty; creation of employment opportunities in the economy, both in self-employment and in the private sector.	**Horticulture, Poultry, Animal Husbandry**	• Strengthen co-operatives to improve the input and credit supply, access to information and marketing networks. • Encourage private sector participation in areas such as feed and fodder development, setting up cold storages, veterinary services and agro-processing; • Strengthen extension services.	• Farmers will be better informed about new technologies, prices and markets, and have access to more timely supply and better quality of inputs and health services. • Better storage facilities & the introduction of agro-processing will encourage farmers to increase production and generate a surplus for export.
Promotion of congenial business infrastructure and resources.	**Industry**, especially service-oriented industry such as tourism and information technology.	• Promote Sikkim as an investment and tourist destination. • Announce a new industrial policy, with emphasis on IT.	• The growth of private industry will increase employment opportunities directly and indirectly, with the growth in supporting and related industries.

Vision/Goals	Sectors	Instruments	Intended Effects
		• Identify land to be used as industrial growth centres; lease sheds to private individuals. • Simplify laws to allow land to be used as collateral. • Develop an envionmentally sound tourism policy; strengthen the State Tourism Development Corporation.	• The growth of eco-friendly tourism will create jobs at all income levels, directly and through its high trickle down effect, reduce regional disparities and boost the demand for local industry and services.
	Education	• Education Department to set up a cell to monitor job opportunities in the medium term. • Reorient the education curriculum and set up vocational training institutes in line with thrust areas.	• Children will grow up with a vision and employable qualifications/training that will equip them to get jobs and contribute towards the development of the state and the country.
	Roads, Power	• Review expenditure management in the road sector and improve cost-effectiveness. • Widen NH 31A and other link roads from West Bengal to the South and West Districts of Sikkim. • Improve state roads. • Set up a Regulatory Board/ Power Commission. • Strengthen the transmission line from Melli to Vidyutnagar (Siliguri). • Set up a high-level expert committee to advise the state on the modalities of attracting private investment in the power sector.	• Sikkim's connectivity with the rest of India will improve. This will improve marketing opportunities for Sikkimese goods, lead to better and more timely supply of inputs, and increase the attractiveness of Sikkim as a tourist destination. • The state will become a more attractive investment destination for independent power producers; by becoming a net exporter of power, this sector can be a revenue earner for the state.
Strategic withdrawal of the state and the attainment of fiscal viability.	**Fiscal Reform**	• Increase tax revenues. • Revise user charges. • Revamp tax administration.	• Tax and non-tax revenue will be buoyant and the growth of committed unproductive expenditure will be reined in.

Vision/Goals	Sectors	Instruments	Intended Effects
		• Redirect subsidies to the economically needy in the medium term. • Impose a ban on all new government employment, disinvest all state-level public enterprises. • Strictly monitor all state and centrally sponsored projects.	Funds will be released for public investment in the thrust sectors and this will lay the ground for a thriving private sector.

Apart from the private sector, producers' co-operatives can supplement direct government involvement in a host of areas such as input and credit supplies, as well as marketing networks. While co-operatives have to be promoted by the government, it is imperative that the co-operatives bear the risks, so that they become viable ventures. What is important is to limit the government's financial exposure to co-operatives either through direct loans or guarantees; the government has to act more as a catalyst to energise existing co-operatives and promote new ones in areas where they do not exist. Co-operatives need not supplement private ventures, but complement them through better dissemination of information, pooling of risks, and filling in where private initiatives are lacking. Examples are networking through Internet or telephones to inform members about prices of products such as cardamom or ginger ruling in important trading centres in the country, and facilitating borrowing from banks and financial institutions against the collective security of all members (on the Bangladesh Grameen Bank model). The aim of the co-operatives should be to improve market efficiency by improving access to information and reducing imperfections such as excessive middlemen's margins.

The government's direct involvement, however, will be required in extension services. While private sector (for example, seed manufacturers') initiatives can be a substitute in areas such as familiarising the farmers with improved seed varieties, in the short run most extension services, because of the strong externalities associated, will have to be provided by the government. Although the government's outlay on extension services in agriculture, horticulture and animal husbandry in 1998-99 has been Rs 640 lakh, results have been unsatisfactory and this is despite a 884 strong force of extension service workers in these sectors. The government must change the focus from monitoring of 'inputs' (money spent) to monitoring of 'outputs' (e.g., oranges produced, quality of curing of cardamoms, etc.).'Voice' is critical for maintaining the productivity of government expenditure, and community participation can strengthen the users' 'voice' and improve the effectiveness of government expenditure in extension services.

Given the location of the state and its resource endowments, the viability of processing large amounts of raw materials transported from outside the state appears to be questionable. The focus has to be on processing of raw materials produced within the state and service-oriented industries. Service-oriented industries such as tourism in the short to medium term and information technology in the medium to long term hold important promise for employment and income generation.

Encouragement of these industries, however, will require promotion of Sikkim as a tourist and investment destination. Such promotion through advertisement campaigns in the print and electronic media, both at home and abroad, can be costly. Thus, it needs to be orchestrated with the help of media and advertisement experts, experienced travel agents, tour operators and investment bankers. A new industrial policy needs to be announced with the government playing the role of a facilitator. In this policy framework, the emphasis should be not on tax benefits but on making land and buildings available on an ownership or lease basis for industrial purposes, and on smooth processing of government permits and clearances. Promotion of tourism will require strengthening the Sikkim Tourism Development Corporation through staff restructuring and clearly defined performance benchmarks.

Achieving the goal of sustainable development will only be possible if three fundamental conditions are met. These are: (i) empowering the people with the right education and skills to benefit from the progress of modern science and technology, (ii) building up the right infrastructure, particularly in roads and power, and (iii) fiscal consolidation and reform. Fiscal reforms are needed to ensure that there is some fiscal space for augmenting expenditure on infrastructure, both physical and social. The tremendous progress of literacy in Sikkim hides the lack of emphasis on vocational and technical areas. A surfeit of liberal arts graduates and inadequate supplies of workers with vocational training has hampered the process of employment expansion in Sikkim. The Education Department has to monitor job opportunities, revise the curriculum and set up training institutes for equipping students for jobs in the thrust areas in the long run. Failure to impart the appropriate skills to the local residents for absorption in the growth industries and sectors will lead to not only unnecessary loss of jobs to out-of-state workers, but also increases in recruitment and employment cost of industry.

Power shortages and the lack of road-connectivity have been two major impediments to economic growth in the state. The power shortfall of 14.03 MW with an installed capacity of 38.10 MW in 1997-98 is not only ironic when viewed in the context of the 8,000 MW hydroelectric potential of the state, but also a serious impediment to the development of industry and tourism in the state. While the generation of hydroelectric power will not only promote economic activity in the state but also contribute to the state exchequer, the investments required for setting up hydroelectric power projects are considerable. It is neither feasible nor desirable for the state to pump huge funds into hydroelectric projects and bear the associated management responsibility as well as risks of executing and running such projects. On the other hand, attracting private investment in hydroelectric power involves paying attention to a considerable amount of technical and financial details such as the optimum concession period, power purchase agreement, and financial structuring of the project. The government should set up a high-level committee of distinguished experts to advise and guide it on how to attract private investors and negotiate with them. The high-powered committee can also help in explaining the nature of the proposed projects and neutralise hostility to hydroelectric projects because of environmental considerations. The committee can build up popular support for the proposed run-of-the-river projects in Sikkim by highlighting their eco-friendly characteristics.

Given that power may have to be exported to the rest of the country, strengthening of the links to the Eastern grid by upgrading the transmission line between Melli and Vidyutnagar (as recently

proposed by the Power Grid Corporation) is a prerequisite for attracting private investors into the power sector. Further, private investment is hampered by the existing tariff structure—the current electricity tariff of Re. 1 per KWh compared to the generation cost of Rs. 1.53 per KWh implies higher losses with higher production—and this needs to be revised to make generation a profitable activity. Tariff determination will have to be depoliticised by setting up a State Electricity Regulatory Commission.

Lack of proper road communication facilities is another serious constraint on the growth of the state. In the absence of a rail network or commercial air services, roads are the only means of getting to and around the state.[4] A single highway—National Highway 31A under the jurisdiction of the Border Roads Organisation, an all-India organisation—is Sikkim's main transport link with the rest of the country and the world. Travel and transportation along this important highway is slow not only because of inadequate width but also because of the shops, houses and establishment on the sides with an inappropriate access control policy. Furthermore, given the state's fragile terrain, heavy rain resulting in landslides on NH 31A often cuts Sikkim's only link with the outside. State highways and village link roads suffer from the same limitations as NH 31A, only more acutely. Marketing opportunities for goods produced in Sikkim, the price, quality and timely availability of inputs, and the attractiveness of Sikkim as a tourist destination cannot improve without a second highway linking Sikkim to the rest of the country and improvement in the quality of all roads, including village link roads. While the second highway linking Sikkim to the rest of the country may be developed by the Border Roads Organisation, the responsibility for the other roads will have to be borne by the state government. The government should review and improve the cost-effectiveness of the expenditure management system, including workers per kilometre of road maintenance, the muster-roll system of employment and the tendering system.

The fiscal position of the state has become precarious and unsustainable with the fiscal deficit and debt as a proportion of GSDP at 20.91 per cent and 71.87 per cent, respectively, in 1998-99. Thus, reform is essential for restoring fiscal sustainability. Fiscal reform is also essential for opening up fiscal space and step-up outlays on infrastructure such as education, roads, water supply, sanitation and urban facilities and for achieving sustainable growth. Necessary steps include raising more revenues and rationalisation of user charges in line with costs, revamping the tax administration, redirecting subsidies only to the needy in the medium term, containing the growth of the public sector through a ban on all new employment, privatisation of public sector enterprises, and better expenditure management with strict monitoring of all projects and departmental activities. In expenditure management the emphasis has to shift to a monitoring of output and actual delivery of public services (away from a purely mechanical analysis of outlays) and scrutiny of processes and an exploration of alternative ways for the delivery of services.

While the economic strategy has to be consistently pursued over the medium term to achieve the goal of sustainable growth, a bold beginning should be made with some immediate steps that are delineated below.

[4] The Eleventh Finance Commission has recommended a grant of Rs. 50 crore for the construction of an airport near Pakyong (East District).

3.1.5 Immediate Steps

Announcing two major policy changes in the budget speech for 2000-2001 could make a bold beginning. First, the new focus is on fostering growth through private sector participation. And, second, the new policy is one of adjusting the size of the government and improving its effectiveness. These policy announcements will send the right signal to the people and the investor community that it is no longer 'business as usual', and improve the investment climate as well as the morale of public administration.

The State Budget for 2000-2001 should also announce two important schemes for making a fresh start in the promotion of horticulture and improving the quality of education in the state. In horticulture, the scheme relates to the promotion of producers' co-operatives to share marketing information and technical know-how in cardamom and ginger, the two most important cash crops of Sikkim. The scheme should be initiated on a pilot basis in a few areas with the stated aim of evaluating the success of the scheme at the end of the year and extending it to other areas only if the scheme is deemed successful. In education, the scheme relates to the introduction of computer training to students in secondary schools. Again the scheme should be introduced on a pilot basis in a total of twenty schools appropriately selected from the four districts. While the government will provide part of the finances for the purchase of computers in the selected schools, matching contribution will be sought from the students at the rate of at least Rs 25 per month to improve parent participation. The scheme will be extended to more schools only after an evaluation of the pilot schemes at year-end and on the basis of demands for such an extension from students and parents. It should be clarified that the levy of fees is essential to solicit a proper feedback from the parents and the students about the quality of computer education being provided by the schools.

Immediate steps involve the appointment of two committees for attracting private investment to the state. One committee should be asked to focus exclusively on the power sector, and should consist of distinguished experts in the field from all over the country. This committee should advise the government on the appropriate modalities for harnessing the hydroelectric potential of the state in an environment-friendly way and through a public-private partnership. The second committee should consist of senior bureaucrats and be entrusted with adequate powers and one immediate goal, namely to promote a joint venture or a purely private enterprise in poultry feed and cattle fodder within the next twelve months. After the successful promotion of such a venture, the committee may be asked to advise on how and in what areas similar joint ventures may be attracted.

On the revenue front, after having implemented the uniform floor rate of sales taxes recommended by the Chief Ministers' Committee on November 16, 1999 and putting an end to the granting of fresh sales tax incentives to industries, the state should try to augment revenues through better tax administration. Introduction of computerised collection of data, including assessment, scrutiny and audit, can bolster revenue administration significantly. The setting up of computerised check posts at the four border crossings into the state to register the names and addresses of the consignee and the consignor, and the nature and value of the consignment can provide the state with an independent source of information on its tax base.

The rate of stamp duty in Sikkim is a low of 1 per cent of the consideration value. The corresponding rates in Andhra Pradesh, Bihar, Madhya Pradesh, Orissa and West Bengal vary between 4.2 per cent and 7.5 per cent. The rate of stamp duty in Sikkim should be increased to 5 per cent.

What is needed is a forceful statement of the goals that Sikkim has decided to achieve, followed by immediate actions to demonstrate the resolve of the government and the leadership to implement policies that will steer Sikkim to the stated goals. The key to success lies in enabling and empowering people with the right skills and information, promoting a market and private sector friendly economic, legal and administrative environment, providing sound social and physical infrastructure, and ensuring that the government is an efficient and cost-effective machinery for delivering public goods. The strategy delineated above should help Sikkim achieve its stated goals.

3.2 Strategy: The Fiscal Components

Fiscal reform forms the core of the economic strategy and is a necessary condition for all the other reforms. For one, the funds for implementing the other areas of reform will be available only through fiscal restructuring. While fiscal reforms are essential for waste reduction and public dependency on the system, the thrust would mainly be on two areas: improving tax and non-tax collection and expenditure restructuring.

3.2.1 Tax and Non-Tax Collection

The low buoyancy of almost all the state's own taxes has meant that tax collection has been declining, a situation that can be addressed in the ways listed below.

- Land revenue is a major area of concern. The Department of Land Revenue collects fees and taxes annually for various work contracts and as land revenue. Rates, which remained unchanged for decades, were revised upward on September 1, 1998, which may have a positive impact on collection. A point of major concern is the alarmingly high cost of land revenue collections; it was more than seven times the gross collection[5] between 1994-95 and 1996-97. One reason for this is the high departmental expenditure on other activities, which are subsumed under tax administration expenses. Other states face a similar problem, but even by national standards, Sikkim's expenditure on tax collection is high. These need to be reduced and realigned along with the rates of collection so that the Department of Land Revenue becomes a net revenue earner.
- Sikkim, like many other states in India, does not levy agricultural income tax. However, taxes on commercial crops, such as cardamom, ginger and oranges, levied at the time of inter-state sale of produce as central sales tax are a major source of revenue.
- There is no urban land tax, but the state collects some taxes from urban land (excluding private land) in the form of ground rent from different markets. The rate of ground rent was last modified on April 1, 1998. In a medium-term framework, the state needs to introduce an agricultural income tax with a generous threshold level, and an urban land tax.

[5] According to the *Memorandum to the Eleventh Finance Commission*, expenditure on gross collection was 900 per cent in 1994-95 and 718.75 per cent in 1996-97.

- Stamp duty is 1 per cent of consideration value and registration fee is 2 per cent of consideration value. While these have been recently revised, they are still far below national norms. The Committee of State Finance Ministers (NIPFP, 1996) recommended a maximum rate of around 8 per cent, to be eventually reduced to 6 per cent. The maximum rates of stamp duty on conveyance (consideration value) for some states are given in table 3.1.

Table 3.1: Maximum Rate of Basic Stamp Duty on Conveyance

State	Conveyance *(per cent)*	Additional Duties
Orissa	4.2	A surcharge on stamp duty is levied at the rate of 2 per cent of the value of immovable property within the area of the Orissa Town Planning and Improvement Trust Act; a surcharge is also levied at the rate of 3 per cent of the value of immovable property under the Orissa Development Authority Act.
Andhra Pradesh	5.0	A surcharge of 5 per cent is levied on the value of consideration in the entire state.
Bihar	7.0	A surcharge on duty is levied at 85 per cent; an additional surcharge of 10 per cent is also levied.
Madhya Pradesh	7.5	Additional stamp duties of 4 per cent and 2 per cent are levied in corporation and municipal areas, respectively, on instruments of sale, gift and usufructuary mortgage of immovable property. Depending on the location, the rural counterparts of this additional duty are 1 per cent and 1.5 per cent.
West Bengal	5.0	Additional duty of 2 per cent is levied on instruments of sale, gift, and usufructuary mortgage of immovable property located within the Calcutta municipal area.

Source: Sen, Tapas (1999), Reform of Stamp Duty Administration in Orissa, mimeograph, NIPFP, New Delhi.

- The state has taken steps to implement uniform floor sales tax rates of 4, 8, and 12 per cent and the upper and lower rates of zero and 20 per cent, recommended at the Chief Ministers' Conference on November 16, 1999. The Sales Tax Act (1983) has been modified by the promulgation of the Sikkim Sales Tax (Amendment) Ordinance, 2000. The Ordinance was followed by a Notification dated January 17, 2000 detailing the sales tax rates of the listed items.

  It should focus next on overhauling the tax administration. There should be a gradual move towards computerisation of data collection, including assessment, scrutiny and audit. The four check-posts to the state should also be computerised to facilitate cross-checking of information to prevent any leakage of revenue.

- Revenues from motor vehicle taxes collected under the Sikkim Motor Vehicles (Taxation) Act, 1982 constitute only 4.6 per cent of own-tax revenue compared to 8.2 per cent for all states (Sen, 1998). Sikkim does not levy road tolls or entry taxes on passengers and goods, and could consider introducing these in the medium term.

- All enlisted contractors are now under the purview of "works contract" under the State Sales Tax Act and they now are liable to pay sales tax of 2 per cent, which will be deducted at source from their gross bill amounts. However, the state has so far not levied any tax on professionals, which is an important revenue source in some states.
- Sikkim does not accept its share of Central income tax because the Sikkim State Income Tax Manual, 1948 is in operation in the state, which implies that the provisions of the Income Tax Act (Central Act) 1961 have yet to be implemented in the state. The outcome is that the state government accepts the state's share of Union excise duty, but not its share of income tax from the centre. Table 3.2 shows this amount along with the collection of income tax levied under the state laws.

Table 3.2: Sikkim's Share of Union Income Tax and Tax Collection Under State Laws

(Rs. crore)

Year	Share of Income-tax from Centre	Amount Returned by Sikkim	Collection of Income Tax Under State Laws
1995-96	17.64	17.64	6.55
1996-97	17.08	9.24[1]	8.20
1997-98	26.58	17.01[2]	9.05
1998-99	18.27	18.27	15.00

Notes: 1. The difference of Rs 7.84 crore from the refund of income tax will be paid in monthly instalments of Rs 2 crore from December, 1999. 2. The difference of Rs 9.57 crore which was released on account of Voluntary Disclosure of Income Scheme has been treated as non-Plan grants-in-aid.

Sources: Government of Sikkim, *Finance Accounts* (various issues) and *Annual Financial Statement (Budget) of the Government of Sikkim, 1999-2000.*

- User charges are low, and even these low charges are usually not recovered. User charges should be increased, new areas should come under the net and the government should take firm measures to recover unpaid dues. An increase in user charges will improve accountability and the quality of goods and services provided. Some areas in education, health and transport are potentially good sources of non-tax revenue: for example, tuition fees could be charged at the secondary and higher school levels and parking fees could be introduced in Gangtok and other major towns. Apart from enhancing the exchequer, the former measure will inculcate a sense of responsibility and participation among the parents.
- There are some goods and services that the government provides free to all state residents. It would be better off gradually phasing out the blanket provision of these and directing subsidies to only people below the poverty line, after they have been properly identified.

3.2.2 Recovery of Loans and Advances

The recovery rate of government loans to departments and institutions is very low according to the Accountant General's Report. There was no recovery in the housing, crop husbandry, animal husbandry, dairy development, fisheries, industries and minerals sectors for the five years between

April 1, 1993 and April 1, 1998. Outstanding loans at the beginning of 1997 totalled Rs 8.64 crore, of which only Rs 72.5 lakh has been recovered. No interest has been paid on outstanding loans.

The enforcement of loan and interest recovery will, apart from raising resources, send a strong signal to borrowers that they cannot continue to misuse the loans facility. It will also improve monitoring and evaluation in the sanctioning of loans.

3.2.3 Expenditure Prioritisation

It is imperative that the state redefines its expenditure priorities to promote sustainable income- and employment-generating activities in identified sectors. As long as there are people below the poverty line, subsidies for primary education and primary health should continue. At the same time subsidies have to be well-directed and accrue only to the truly needy. The basic objective of the subsidy policy should be to encourage the formation of human capital, foster the setting up of industries and provide infrastructure.

The annual cost of subsidies in Sikkim has increased significantly in recent years. While subsidies for industries, co-operatives and agriculture are on the decline, they have been increasing rapidly in areas such as food and civil supplies. Subsidies are both explicit and implicit; the estimates of "subsidies" in the Budget refer only to explicit subsidies, but there are many subsidies that arise outside the Budget and remain unnoticed, such as government investment in public enterprises in the form of equity and loans. An assessment of the full impact of subsidies on state finances would require a quantification of implicit subisidies as well. Implicit subsidies are estimated as the unrecovered cost in the provision of public goods and services (apart from pure public goods[6] such as defence and public administration). In theory it is possible to recover the cost of providing the services in proportion to the extent of their consumption (see box 3.1 for the estimation method). Recovery rates have been calculated for Sikkim and are listed in table 3.3.

The deterioration of recovery rates shown in table 3.3 is an indication of the alarming growth in subsidies, which is a cause for concern. The government should review the profile of beneficiaries

Table 3.3: Explicit and Implicit Subsidies: Recovery Rates

(per cent)

Sectors	1991-92	1997-98
Education: Primary	0.35	0.12
Education: Secondary	0.30	0.20
Medical and Public Health	0.58	0.32
Road Transport	68.00	28.37
Power	10.63	7.46
Tourism	22.00	5.96

Sources: NIPFP Working Estimates; *Finance Accounts, 1991-92 and 1997-98*, Government of Sikkim.

[6] Where the principle of non-excludability and non-rivalry are applicable.

Box 3.1 Estimation of Budgetary Subsidies

A subsidy (S) may be defined as the excess of variable or recurring cost (Cv) and annualised capital cost (Cc) over recoveries (R) in the form of user charges, dividends, interest received, etc.

Therefore,

$$S = Cv + Cc - R$$

Correspondingly, the subsidy rate and the recovery rate may be defined as

$$s = S/C \text{ and } r = R/C,$$

where $C = Cv + Cc$ and $(s + r) = 1$

For the purpose of estimation,
Cv can be taken as revenue expenditure for the sector, and Cc is capital expenditure (K) for the sector (excluding equity investment at the beginning of the period) multiplied by the sum of d and i, where d and i are the depreciation and interest rates, respectively, and the sum of equity and loans (L) advanced for the service at the start of the period, i.e.,

$$K(d + i) + Li$$

R is the sum of revenue receipts from the service (RR), interest (I) and dividend (D) and other revenue receipts from the sector concerned, i.e.,

$$R = RR + I + D$$

Interest rates are taken to be 13 and 11.7 per cent for the years 1997-98 and 1991-92, respectively. The depreciation rate is generally taken to be the sum of nominal inflation rate and some real depreciation rate reflecting the average life of the asset. For transport, d is taken as 20 per cent, and for the rest, it is 10 per cent. The estimates of the recovery rate are sensitive to assumptions regarding i and d, but the extent of subsidies in the sectors concerned are unlikely to be grossly overestimation or underestimated.

Source: Srivastava and Sen (1997).

and redirect subsidies to only those below an appropriately defined income limit. A vision for the state cannot be delineated with the continued provision of subsidies to the entire population.

3.2.4 Expenditure Management

Expenditure management and control is a vital aspect of fiscal reform. The state government has instituted some austerity measures since 1992-93, including an attempt at downsizing the government and restricting official tours, but these have had an insignificant effect on savings (which increased from Rs 20 lakh to Rs 50 lakh between 1997-98 and 1998-99). A bigger impact on savings will be possible by curbing discretionary expenditure and careful monitoring and assessment of plan expenditures on various schemes. Other areas of expenditure management are listed below.

- One-third of total government expenditure goes towards financing wages and salaries. The Pay Commission provisions which were implemented from 1996 has increased the expenses of the state exchequer by Rs 53.20 crore per annum. The present annual liability for wages and salaries is more than Rs 175 crore, which is an increase from 20 per cent to 34 per cent of GSDP between 1995-96 and 1998-99. The government is grossly overstaffed. New appointments and creation of new posts should be halted. Staffing of all the departments should be reviewed and the existing labour force more efficiently deployed.
- Out of the plan allocation, nearly 20 per cent is spent on wages and salaries. Employment that is created under the plan and centrally sponsored schemes (CSS) should be temporary in nature; at present, these workers continue to be employed even after completion of the schemes.
- Current employment in the work-charged and muster-roll establishments—particularly the departments of Public Works and Roads and Bridges—should be reviewed for downsizing.
- The provision of vehicles to government employees is excessive. In states like Rajasthan this facility has been curbed substantially and effectively. Given the absence of a public transport system in Gangtok, buses can be introduced to transport employees to and from work: apart from economising on expenditure, this will also improve office attendance and punctuality.
- Non-plan expenditures need to be focussed on to bring down the costs of operation and maintenance. This to ensure that the assets created over two decades of planning are well maintained. In fact, maintaining roads, schools and dispensaries has become more important than creating new assets, which, without proper maintenance, become dysfunctional in a few years' time.

Table 3.4: Tax and Non-Tax Concessions

(Rs. lakh)

Description	1992-93	1995-96	1996-97	1997-98	1998-99	1999-2000
Concessions on						
Excise duties	77.38	51.12	61.05	64.15	71.00	71.00
Land revenue	2.20	2.20	2.20	2.20	2.20	2.20
Road transport	1.80	1.98	2.05	1.98	2.00	2.50
Education						
Fee exemptions	335.00	383.00	417.00	438.00	460.00	483.00
Textbooks	82.00	79.41	126.00	71.37	130.00	150.00
Exercise books	—	68.02	81.56	87.32	89.16	100.00
Uniforms	—	108.76	256.56	205.36	235.00	260.00
Public lighting	62.48	104.32	103.81	127.39	150.00	175.72
Total	**560.86**	**798.81**	**1,050.23**	**997.77**	**1,139.36**	**1,244.42**

Source: Memorandum to the Eleventh Finance Commission, 1998.

The table above (table 3.4) shows details of concessions (tax and non-tax) given by the state government. It gives an estimate of the loss in government revenue.

Table 3.5: Annual Cost of Explicit Subsidies

(Rs. lakh)

Sectors	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99[1]
Industries	15.4	11.8	5.2	6.1	13.7	0.9	0.5
Food/ Civil Supplies	-	-	-	54.0	489.0	992.0	1,200.0
Animal Husbandry	17.5	20.0	21.6	43.1	58.8	35.0	77.9
Co-operatives	47.5	22.0	65.1	37.6	27.7	3.0	10.1
Agriculture	162.7	174.6	196.9	227.6	259.1	114.3	97.0
State Rural Development	23.0	25.2	27.4	105.0	103.0	86.0	72.5
National Rural Employment	12.8	11.2	10.1	13.4	12.1	13.6	
Rural Housing	280.0	156.0	200.0	1,200.0	1,799.9	2,121.0	2,136.0
Total	**559.0**	**420.8**	**526.4**	**1,686.8**	**2,763.3**	**3,365.8**	**3,593.9**

Note: 1. Budget estimates.

Source: *Memorandum to the Eleventh Finance Commission*, 1998.

In table 3.5, the annual cost of various subsidies given by the state government to its enterprises have been listed separately. Subsidies/concessions to various industrial units may be in the form of capital investment subsidy, concessionary state sales tax, subsidies on interest on working capital, on power consumption, power generation sets, etc. The Cooperatives Department receives, among other concessions, managerial and rent subsidies. The Department of Animal Husbandry and Veterinary Services broadly gives two types of subsidies: for the purchase of animals (cows, pigs, sheep and goats) and to the Sikkim Milk Union to meet the operational losses of the government.

3.2.5 Public Sector Enterprises

Several of the state's 11 public sector undertakings (PSUs) are functioning at a loss. Although the dividends and interest received from government investment statutory corporations, government companies and PSUs has increased over the years, the return from dividends and interest as a ratio of total investment has fallen from 6 per cent in 1991-92 to 4 per cent in 1997-98. In 1993-94 and 1995-96 it was only one per cent.[7]

In a recent study of PSU performance in Sikkim, the Indian Institute of Cost and Management Studies and Research (INDSEARCH)[8] recommended the closure of four enterprises: Sikkim Mining Corporation, Sikkim Industrial Development and Investment Corporation Ltd., State Bank of Sikkim, and Sikkim Nationalised Transport. Sikkim Nationalised Transport, for example, has made no profits since 1990-91 and its operating losses have been mounting. Its total deficit (expenditure minus revenue) almost tripled between 1993-94 and 1995-96, from Rs 3.6 crore to Rs 9.6 crore,[9] a fact which is reflected in the rise in loss per kilometre from Rs 6.34 in 1993-94 to Rs 12.07 in 1995-96 (it fell in 1997-98 to Rs 9.33).

[7] Finance Department, Government of Sikkim.

[8] *Memorandum to the Eleventh Finance Commission*; see Appendix table A3.12.

[9] *Memorandum to the Eleventh Finance Commission*; see Appendix table A8.3.

The financial results of these state companies show that among the consumer enterprises only Sikkim Jewels Limited and Sikkim Time Corporation made profits; Sikkim Flour Mills broke even in 1993-94 with an accumulated loss of Rs 1.27 crore. SIDICO made profits of Rs. 2.44 crore in 1997-98; the Chanmari Workshop, Sikkim Mining Corporation and State Bank of Sikkim incurred losses during 1994-95, 1995-96, and 1996-97, respectively, the latest years for which their accounts have been finalised.[10]

Sikkim does not have a state electricity board and the Power Department does not maintain accounts on a commercial basis: there are no annual reports, balance sheets, or profit and loss accounts. The accounts of the department are rendered to the Accountant General of Sikkim. The gross operating deficit of the Department has been rising steadily, from Rs 4.46 crore in 1993-94 to Rs 10.07 crore in 1997-98, as revenue expenditures have increased more rapidly than revenue receipts (including realisation of arrears). With the recent creation of the Sikkim Power Development Corporation, keeping track of profit and loss accounts, etc., should become easier.

A comprehensive disinvestment plan is needed for each of these enterprises, including the profit-making Sikkim Time Corporation, which should be considered for privatisation. The rest, which are burdens on the state exchequer, should be privatised or liquidated.

3.3 Strategy: The Sectoral Components

Horticulture

To allow horticulture to realise its full potential in terms of employment and income generating opportunities requires strengthening of all three stages between the producer and the consumer, namely, production, procurement/transportation, marketing/ distribution. Horticulture, like many of the other sectors in the economy, has stagnated without the application of modern science and technology in farming methods, inputs and the other stages in the value chain.

Yields can be vastly improved by introducing modern farming practices and implements that are suitable for hill farming, through an improved supply of inputs like seeds and irrigation facilities, and by creating linkages between farmers and the market to allow them to assess prices and consumers' needs. The area under horticulture can be increased by extending cultivation to land that is presently not being cultivated because it is steeply sloped or undulating or being left fallow.

Increased fertiliser use will increase yields, but care should be taken that it does not drastically change the soil's ecological balance. The efficacy of different pesticides, their mode of application and concentration should be tested before they are used. The current low chemical, fertiliser and pesticide use can be converted to an advantage by promoting organic farming and building up a brand equity for Sikkim's products. The state should encourage the use of organic fertiliser and pesticides to produce fruit and vegetables that can be exported to specialised international markets for organic produce.

[10] Comptroller and Auditor General, Government of Sikkim, March 31, 1998.

Similarly, marketing and distribution will benefit with improvements in communication like telephones and Internet, which will allow farmers to access current market information on crop prices, techniques of production, and inputs.

Focus on Two Crops: Tea and Citrus

Tea Production

A quarter of the tea produced by the Temi Tea Estate is sold in the local market at prices marginally higher than cost, and the remainder is sold through auction houses in Kolkata. The estate could realise a better price if the tea were sold directly to buyers abroad. Worldwide, and particularly in the West, there is an increasing demand for organic tea, and several of the tea growers in and around Darjeeling have started tapping into this lucrative market. In Sikkim, the small-growers' scheme to initiate tea cultivation in the Sang Martham area should prove to be very profitable, especially since it has tied up with the Makaibari tea estates in Darjeeling. Much of the Makaibari tea is now organically grown and has found excellent markets in other countries.

Citrus Processing

Till recently, Sikkim was a fruit processing state, which supplied some processed oranges to the rest of the country. Now, however, its citrus and orange produce is sent to Bhutan for processing. With a large part of the value-addition done elsewhere, the state loses out on valuable income and employment generation. The government should seriously explore the feasibility of reviving its fruit-processing factory in Singtam, modernising it and expanding it so that fruit processing can be carried out on a large scale. Apart from providing local orange farmers an assured market for their produce, reducing

Box 3.2 Pioneers in Ecological Tea Cultivation

The organic cultivation of plants produces unpolluted food, provides health protection for plantation workers, and on a long-term basis helps to increase soil fertility and restore the ecological balance which gets lost with intensive tea cultivation. In monocultures, intensive use of pesticides and fertilizers leaches the soil and is dangerous for those who live and work there. Insufficient safety regulations and growing contamination of drinking water damage the health of plantation dwellers.

Organic farming replaces artificial fertilizer by compost made of cow dung and plants gathered from around the plantation and distributed on the fields by hand. Shade trees prevent soil erosion and improve the microclimate around the plants. Initially, yields decline drastically but then stabilise over the years. Organic tea cultivation has lower crop yields than conventional cultivation, but the slower growth produces tea that is more aromatic and fetches higher rates. It employs more people on a regular basis who benefit from the improved infrastructure and social services, such as health care, housing and education. Through workers' committees, plantation workers have a say in the way things are done on the plantations. The European fair trade organisations buy organically grown tea from different plantations in Asia, including the Samabeong plantation in Darjeeling, Singampatti in South India and Idulgashena in Sri Lanka.

spoilage and transportation costs, this will create direct employment opportunities, as well as in spin off ancillary industries like packaging, transporting, etc.

In keeping with the government's new role as a facilitator rather than a producer, the factory at Singtam could be operated by a major food processing chain or a large corporation, which will work closely with farmers to improve yields, invest in specific infrastructure to reduce wastage and in research to develop specific varieties of fresh and processed produce for export, and improve quality through better packaging and storing technology. Over time competition provided by the entry of more than one major food-processing corporation will benefit farmers and employees.

The domestic market for packaged fresh orange juice is increasing. Several new brands have recently entered the market, many international fast-food chains have set up outlets in metros and their demand for juice, jams, etc is growing. However, growth will probably take place mainly through exports, once agricultural subsidies are phased out under WTO agreements. Rationalisation of tariffs and restrictions on food items will give India access to larger export markets and make it more price competitive in global markets.

The government could provide support through setting up an autonomous board for orange growers to act as a nodal point for extension work, help in farmer education and work closely with the farmers' cooperatives to improve farm management practices and the quality of farm produce. The board can also help with credit, marketing, and information on the market. A customer export cell may be set up to deal with all formalities and simplify documentation procedures.

It is most important to create awareness among the farmers that the entry of large investors is to the benefit of the entire industry. So far, farmers have been reluctant to replant their orchards, preferring to live off the little income generated by the old trees. The entry of large companies, who will guarantee the purchase of good quality oranges, is likely to encourage replanting at a faster rate (see box 3.3, on citrus processing in Uruguay). Once success has been achieved with citrus, fruit and vegetable processing can be extended to other fresh produce grown in the state.

Box 3.3 Uruguay: Growing and Processing Citrus

Azucitrus, a citrus growing and processing enterprise in Uruguay, has had a remarkable development impact despite its continuing struggle for commercial viability. The International Finance Corporation (IFC) decided to invest in the project because of its strategic development potential. In May 1982, the company had already begun to use cutting-edge irrigation technology from California and had imported and planted world-class citrus fruit varieties on a commercial scale for the first time in Uruguay. It had a well-run nursery for propagating and promoting imported varieties and introduced a frozen orange juice concentrate plant.

Development Impact

The combination of relative abundance of land and historically unfavourable incentives in Uruguay had promoted a low-technology agriculture that exhausted natural resources. Open-range grazing and monoculture cropping were producing low yields and degrading the resource base. On a micro level, Azucitrus, as the first major attempt to develop a citrus sector, has played a key role in shifting resources into an activity where Uruguay has a comparative advantage.

The country's citrus output more than doubled in the 1981-96 period (233 per cent) and exports rose more than sixfold, from less than $10 million annually to $60 million. Rapid growth in earnings from citrus exports has been achieved by high growth rates of output suitable for export and by an increasing shift from low-value, low-quality produce to high-quality, high-value produce sold in North America and the European Union. This shift has been achieved by developing irrigated land suitable for production of high-quality output, by importing and adapting the best varieties of citrus fruit, and by efficient processing and marketing. What is most impressive is that this industry did not exist before the mid-1970s. The economic impacts have been far-reaching:

Transferring Technology: Creating a state-of-the-art producer and exporter of citrus in Uruguay has brought new technology to the country. Azucitrus's management has incorporated advanced technology into the design of its production and processing operations. An advanced irrigation system used in conjunction with meteorological equipment to measure daily evapo-transpiration, which, together with tensiometer readings, is used to determine irrigation needs. It has imported plant varieties that set the international standard. These imported varieties have been adapted to local conditions through an ongoing program of research at the company's laboratory and nursery.

Creating Jobs: Azucitrus is an important source of employment in the local area. The project employs 1,500 workers and staff, 200 of who are permanent employees and the rest seasonal, part-time workers. At harvest time, 750 fruit pickers may supplement the regular work force of 125 persons at the orchard, depending on crop size and weather. Similarly, at the packing shed and processing plant, 570 part-time workers may join the regular work force of about 70 persons. Seasonal workers are employed an average of seven months a year, and their wages are well above the country's minimum wage.

Spinning Off Investments: The company has invested in a refrigerated shipping terminal nearby which sells refrigeration facilities and loading services to several fruit packers and shippers in the area. With this facility, Azucitrus no longer needs to truck its fresh fruit exports to the nearest port, which is some 450 km away. Other companies are also clearly benefiting, as is the economy.

Protecting the Environment: The shift of resources to citrus growing has improved soil productivity in the region. Citrus growing has no adverse impact on the soil. In fact, the project has no known harmful environmental effects whatsoever.

Demonstrating Success: Before the project, Uruguay had no modern citrus plantations. By innovating in a number of important areas, including export, state-of-the-art irrigation, international marketing, packaging, crop adaptation, and research, the company has created a path for a wide range of other Uruguayan firms to initiate similar activities. Its irrigation operations, for example, have had a profound effect on the way agriculture will be carried out in northwestern Uruguay.

Source: Fitchett, Delbert A., and Frederick Z. Jaspersen: The Private Sector and Development: Five Case Studies, International Finance Corporation.

ANIMAL HUSBANDRY

As in horticulture, the sector offers great potential benefits from the application of modern technology to the different stages: modern farm techniques, better breeding and animal health services, improved inputs, and access to marketing information through better communication facilities.

The expansion of both poultry and pig farming, which are currently small-household enterprises, would offer excellent employment and income-generating opportunities in rural areas for women, small and marginal farmers, weaker sections of the community and educated, unemployed youth. The consumption of meat and eggs among the local population is very high, and likely to increase as incomes rise. Pig farming is already a widespread activity in which approximately 25,000 households are engaged; pigs are among the most efficient feed-converting animals, with a carcass return of almost 60-80 per cent of their live weight.

Box 3.4 Tanzania: Poultry Farming

In 1994 the International Finance Company (IFC) lent $1 million to Tanbreed, which produces day-old-chicks (DOCs) and has strong ties to smallholders, mainly women, who make a living breeding chickens for home consumption or for sale to restaurants. Tanbreed and its parent company Interchick produce nearly 5 million DOCs a year, of which 4.5 million are sold and 300,000 retained for fattening and subsequent sale as frozen meat. Between 1991 and 1995, sales increased by 140 per cent. Each year since the IFC loan the company has ploughed back its profits to expand production. The market for chicken and eggs has grown with urbanisation and rising incomes.

Developmental Impacts

Creating jobs: Interchick is a large employer by Tanzanian standard. Also, most of the shopkeepers, like their customers, are women. In the plant, most of the employees are men, but women sew the feed bags, do other manual work, and perform some clerical work.

Providing business opportunities: Interchick's sales of broilers and layers and bags of feed have increased the number of poultry farmers in the neighbouring areas and greatly increased their profits.

Fostering entrepreneurship: Poultry keeping does much to foster the elements of entrepreneurial success, while providing opportunities to many people who can afford to begin only on a small scale. Successful poultry farmers can gradually increase the size of their operations and may eventually diversify by adding livestock, fruit, vegetables, and other crops. Or, they may link forward by acquiring outlets for what they produce.

Providing a market for domestic suppliers: Interchick also provides a market for domestic suppliers by purchasing a variety of ingredients for its feed. It also offers income-earning opportunities to producers, traders, and transporters of these ingredients. Feed producers give farmers, fishermen, ginneries, and hulleries a market for products they could never sell elsewhere. Feed production and DOC sales to outlying areas open income-earning opportunities for middlemen and transport contractors.

Transferring knowledge and technology: By introducing sophisticated methods into its own operation Interchick has educated its own employees and suppliers. It distributes information to its customers on different aspects of poultry keeping. Interchick is also setting up a farmers' club to run training seminars, provide free vaccines, supervise the vaccination process, and promote disease control, which will especially help first-time poultry farmers.

Improving Diets: Tanzania's average calorie intake of 2,250 Kcal a day (FAO estimates) is slightly above the 2,007 Kcal average for Sub-Saharan Africa as a whole. In the early 1990s it had the lowest meat and egg production per capita in East Africa. This transformation has been made possible by the large expansion in poultry production and consumption, partly from the liberalisation of the economy, from the removal of price controls on meat and eggs, and partly from efforts of firms like Interchick to increase rapidly the supply of DOCs from satisfactory overseas grandparent stock.

Source: Fitchett, Delbert A., and Frederick Z. Jaspersen: The Private Sector and Development: Five Case Studies, International Finance Corporation.

Two of the weakest links in the development of animal husbandry are the supply of adequate feed and fodder and an efficient marketing network. Most livestock breeders are small farmers who face difficulties in marketing their produce, and this has in a large way hampered the expansion of production. In areas such as poultry, despite good progress by the Venketeshwara Hatcheries in supplying day-old-chicks (DOCs) to breeders, it has not been able to meet the demand and DOCs still have to be imported from West Bengal. In all these areas, there is a need for private initiatives to supplement the existing government efforts.

Industry

As the outcome of the Industrial Policy of 1996 has shown, incentives and sales tax concessions cannot have a sustained positive impact unless the fundamentals of the economy are sound. The new policy failed to attract any noticeable amount of private investment in industry either from outside or locally. Local motivation to initiate business enterprises seems low; road and power conditions are still poor in the state, and leasing land by investors from outside the state is a tenuous process.

Industrial strategy has to be based on encouraging private investment not through tax benefits but by improvements in infrastructural facilities, easing the process of land leasibility and applying for approvals. The gradual withdrawal of the state as a large-scale employer coupled with encouragement of private investment in industry through basic inputs and infrastructural facilities would be an important starting point.

Privatisation of the state's public sector undertakings, if it occurs, could lead to an expansion of employment and income opportunities. The withdrawal of the state as a provider of direct employment will also improve the supply side of the labour market, by motivating people to acquire skills suitable for employment in modern industry and cutting down on search costs for public sector employment.

The government has to not only announce that "Sikkim is open for business," but back it up

with concrete action such as facilitating the setting up of business through providing single- window clearances and improving infrastructure.

Tourism

Tourism is a human-resource intensive activity; it is a major source of jobs at varying levels of skills. The wide range of climatic zones in the state and its diverse cultural, religious and ecological base could—if tourism targets the right kind of traveller—expand the industry to a year-round business. The very high trickle-down effects of tourism means that an expansion in the industry will not only increase incomes of those directly employed, but will provide a tremendous boost to allied sectors such as transport, telecommunications, retailing, etc. The indirect and induced benefits could, in fact, be several multiples of the direct benefits of tourism development (see box 3.5).

Appropriate and effective development of tourism in Sikkim could help alleviate poverty as well as remove some of the regional disparities. For example, careful promotion of tourism in the North District, which is least developed and has most of the high-altitude land, would certainly enhance development in the region.

Tourism development should be sustainable and undertaken with an environment impact analysis at every stage. Otherwise, expanding the industry could prove counterproductive: the wrong type of development, such as over-construction for example, could create landslides and deprive the region of its rich flora and fauna. The next phase of tourism development has to be based on a new administrative culture, which is more responsive to environmental needs.

The opening of Nathu La can be expected to increase not only the passage of goods from the country to Tibet but also the flow of tourists travelling to Tibet, including Lhasa and Manas Sarovar.

Box 3.5 Measuring the Impact of Tourism: The Tip of the Iceberg

New research has shown that the impact of economic activity in tourism and travel is much wider than is currently captured in national income accounting. Today the tourism industry in India is estimated to support 9.3 million jobs directly, but the trickle down effects of this industry are such that it actually provides employment to 17.4 million people. At present travel and tourism "economy" accounts for 5.8 per cent of total employment in India and 5.6 per cent of GDP; in 2010 this is expected to grow to 6.8 per cent of total employment and 8.2 per cent of GDP. Tourism and travel goes beyond providing products and services for directly tourist "consumption," such as lodgings, restaurants, travel services, etc; there is a multiplier effect on an enormous and diverse range of activities like security services, food and beverage suppliers, furnishings and furniture products, glass, iron and steel products, etc.

The result is that so far public analysis and related policy have tended to underestimate the impact of tourism in terms of its employment and income generation potential. It is important that policy makers analyse the full effects of the tourism and travel "economy."

Source: World Travel Tourism Council.

Sikkim can expect to benefit from both. But, the quantum of benefit will depend upon how the state positions itself for providing facilities such as good all-weather roads, motor repair shops, gas stations, hotels, restaurants and rest houses. Transit tourists will be tempted to spend a few extra days in Sikkim if tourist facilities such as conducted tours, comfortable accommodation and awareness about Sikkim's natural beauty can be created.

In several areas, such as Pelling and Mangan, the government will have to act as a catalyst for creating transit facilities. First and foremost, is the need for rapid transportation of the traveller from the plains to the transit facilities in the state. The modern tourist will be loath to spend a day commuting from Bagdogra to her destination in Sikkim. The widening and improvement of NH 31A and the development of an alternative road from Siliguri to Gangtok is a prime necessity in this regard.

Second, in tourist centres such as Pelling, the government has to attract private hoteliers of repute to set up world-class facilities for world-class tourists. These facilities may have to include cottages with modern-day comforts, restaurants with gourmet and local cuisine, shopping and entertainment facilities, pony rides and guided treks. Given the lumpiness and long gestation period of such investments, the government may have to think of making land available on concessional lease, and even taking up an equity stake in such ventures.

Third, the private investor in such transit centres will have to be encouraged to build toll roads, with generous government assistance from the nearest connecting point on NH 31A, to rapidly transport the visitor to the destination. Last but not least, the full potential of tourism benefits will accrue to the state only if the government promotes the training of the local people in acquiring such tourism-related skills as knowledge of language of the tourists, how to be a guide, hoteliering and cooking.

Power

The power shortfall in the state is a serious impediment to growth in the other sectors of the economy. Apart from being essential for growth, development of the hydro-electrical potential can be an important source of revenue. The proposed five-stage power projects on the River Teesta have been estimated by the Central Electricity Authority to have a potential of 3,635 MW. The export of surplus power to power deficient areas, once the transmission link with the Eastern grid has been strengthened, will be a major source of revenue for the state government.

The state's topography lends itself ideally to run-of-the-river projects, constructed as a series of small-sized units along the river. Apart from the lower civil engineering costs and shorter gestation period of these projects vis-à-vis larger hydro projects, they are far more environmentally friendly as they do not submerge large tracts of land or displace populations. An important first step for the Expert Committee could be to make people aware of the relative environmental friendliness of such smaller hydro projects. A further advantage of a series of hydro projects is that the revenue from the units first constructed can be partly used to build the next project and partly accrue to the government as revenue.

These projects should ideally be developed and operated by private producers. The size of the

projects would generate sufficient interest among international power producers, which would result in the use of up-to-date technology, and possibly shorter gestation periods. The state government would not need to give a counter-guarantee because such projects would be covered by the central government's Mega Power Project policy. Under this policy, the recently constituted Power Trading Corporation (which has equity participation from the Power Grid Corporation of India, National Thermal Power Corporation and the Power Finance Corporation) will buy all the power generated from such plants for further sale. However, the government has to lay down the groundwork to attract private producers, and among other things this includes raising tariff rates and privatising distribution.

The recent proposal by the Power Grid Corporation of India to provide a 132 KV transmission line from Vidyutnagar in Siliguri to Gangtok will help transfer power from the Eastern grid to meet the growing demand-supply gap in the state. The transmission link is expected to terminate with a 2x50 MVA, 132/66 KV substation at Gangtok. The link would also enhance the reliability of Sikkim's power system, which is currently largely dependent on run-of-the-river hydro projects which have very low firm capacities and need to be backed up by thermal capacity from the Eastern region. Strengthening this link and the connections with the Eastern/National grid will reduce the market risk and encourage investors in hydro projects.

Roads

Much of the road network is a relic from the past, when roads were built to accommodate the transport requirements and limited resources of the time. They are narrow, have numerous blind curves, and often a very steep gradient; bridges tend to have a low tonnage capacity. Increased demand for road transport services have made it imperative that the major connecting links are widened, the steep gradients and curves smoothened and bridges strengthened and widened to handle heavier loads.

New roads have to be very carefully planned and should be sanctioned only after rigorous environmental impact analysis. The importance of roads to the state's development means that they cannot be built based on short-term goals, such as employment generation or saving funds. Such an approach could prove more expensive in the long run as poorly built roads get washed away and have to be entirely replaced. It would be far more cost effective in the long run if the roads are built using the best available material and with all the appropriate supporting structures—retaining walls, drains and parapets—to allow them to withstand landslides, heavy monsoon rain—and even earthquakes. Another advantage of well-built roads, especially in hill areas, is that maintenance is easier and so is repair after a calamity, both of which prolongs longevity.

Urban Development

The scarcity of usable land in Sikkim makes it imperative that there are well-formulated laws to govern its use. A key task for the government is to formulate a land-use plan for the next 50 years. The plan will have well-demarcated areas, and within these areas, sectoral development should be planned with a 15-20 years timeframe. Land for this purpose should be acquired and put to use only according to the land-use pattern prescribed. Much of the recent buildings in Gangtok and other towns have been based on materials and styles of the larger cities of the plains. Apart from being

inappropriate for the climate and topography of Sikkim, they impinge on the aesthetics of the serene Himalayan landscape. Building rules could be formulated to promote a return to traditional building styles and materials, which are more in harmony with the surrounding landscape and also serve to preserve and promote a pride in the culture of the region.

Utility fees have to be use-based and strictly enforced. Cost recovery has to be enhanced not just for fiscal reasons, but to increase economic efficiency as well. There is no urban land tax and user fees for sewerage and water are not enforced. Roads are a precious commodity in this hill region; they are difficult to build and expensive to maintain. Parking on them in congested urban areas should entail some cost; a parking fee structure should be evolved for parking on the main thoroughfares of the larger towns.

As in other parts of the country, most of the service providers are government monopolies, and the incentive to improve efficiency is low. To finally attract private funding in the infrastructure, a beginning has to be made to charge commercial rates for infrastructure services.

3.4 Role of the Public Sector: Pursuit of Progress with Stability, Equity and Efficiency

In the fulfillment of the vision articulated in the previous pages, the public sector continues to play a major role, but with a change. It is no longer envisaged as the employer of the first and last resorts, but seen as a provider of economic stability and a facilitator of growth with equity and efficiency through the promotion of a series of networks with the corporate sector, non-governmental organisations and the community.

The objective of the public sector continues to be (a) pursuit of economic stability, (b) emphasis on delivery of services, and (c) promotion of efficient utilisation of allotted resources. The achievement of these objectives requires, in turn, (i) rationalisation of government staff, (ii) introduction of EDP systems on a selective basis, (iii) utilisation of public expenditure benefits, (iv) introduction of competitive tendering, and (v) strengthening of public expenditure management system.

3.4.1 Rationalisation of Staff

The public sector has so far played the role of being the major employer in the state. While government, as the biggest organisation tends to be the largest employer, it is admittedly clear that its present levels of staffing are not tenable. Attempts have to be made to reduce the pervasive surplus staff. Toward this end the following approaches should be considered:

- Elimination of overlap, fragmentation of functions and amalgamation of some tasks and organisations.
- Selective contracting out, including maintenance operations and shifting the work charged established from government to the private sector.
- Pooling of services within each department through the establishment of secretarial pools and other common services.
- Leasing rather than purchasing; and the application of electronic technology.

3.4.2 Introduction of EDP Systems

The government of Sikkim has already made a beginning in the application of electronic technology to government operations. But the use of computers is largely viewed as a mechanical adjunct to the existing mechanical process and utilised mostly for data storage. It is important that the government also takes steps to advance the application of technology, both to demonstrate its usefulness and to reduce costs of operations (see section 3.7 entitled 'Role of Technology in the Delivery of Selected Services').

3.4.3 Utilisation of Public Expenditure Benefits

The experience of Sikkim shows that some intended benefits may have been created well ahead of their demand. As a consequence, there are schools with damaged facilities and health centres with vastly underused expensive equipment. The intended benefits to be reaped through public expenditure are not in fact finally taken advantage of by the community either because of traditional inertia or due to other factors.

Better utilisation of the existing facilities could be ensured through inspection by government officials, provision of incentives to the intended users or through greater participation and oversight by the local community of users. Of these three approaches, the most relevant for Sikkim in the current setting and the trends of the immediate future is the participation of the local community. The maintenance of the existing assets should be handed over to the user community, which should be permitted to explore the levy of small fees for services rendered, or partnerships with the corporate sector. This has been deliberated upon in section 3.6.

3.4.4 Introduction of Competitive Tendering

The experience of Sikkim shows that outlays on construction and maintenance have come to acquire a non-commercial and social dimension as well; they are used as a vehicle for employment of the local people in the form of work charged establishment on a regular basis. Moreover, contracts under Rs 10 lakhs are determined at the local level and it is far from clear whether the advantages of competitive bidding are availed of.

It is appropriate that the government envisages some degree of commercialisation so that, where appropriate, contracts could be awarded on a state-wide basis. This could attract more private investment from outside. More important, competitive bidding would enable the government to take advantage of securing economies in expenditure.

3.4.5 Improved Public Expenditure Management Systems

In securing improved functioning of the government, attention has to be paid to the system of expenditure management. The existing practices lack focus; there is no anchor of expenditure control and there is very little review of budget estimates. Personnel requirements are dealt with by one agency while plan programmes are considered by another, and the revenue account is assessed by yet another agency. The plan programmes are supply driven while a major part of the revenue budget is devoted to personnel, debt, and transfers. The budget outcome is invariably different from the initial estimates,

largely due to the increase in subsidies because of price increases. There is very little organised cash management, and when requirements tend to exceed the amounts of ways and means agreed with the State Bank of Sikkim, issues to departments are reduced. The whole process reveals a lack of recognition of the resource restraint.

It is appropriate that the financial management system is improved through the following measures:

- Location of all budget responsibilities in a single office;
- Introduction of EDP systems in the budget process;
- Formulation of finding resource ceilings within which adjustments have to be made in the event of resource shortage; and
- Evaluation of completed projects and programmes.

3.4.6 Promoting Sectoral Growth

In promoting growth in selected sectors, the government will have to shift its role from active participant to facilitator and promoter of private sector activities. In general terms, it will formulate policy that sets the stage for a takeoff, by ensuring the basic infrastructure such as roads, power, etc., that supports the activity, removing bottlenecks in inputs and credit supplies and in marketing, and encouraging the entry of the private sector in the appropriate areas. To do this effectively it will identify problems faced by private investors—whether connected with project funding, approvals, or land acquisition—and then ease the process for their entry. Even in the case of joint ventures, the government will entrust full management responsibility and project risk to the private investor.

Horticulture

The government will encourage growth of the horticultural sector by formulating policy that encourages the use of modern technology and more scientific techniques and eases the entry of private enterprise. It will

- actively encourage private sector entry into setting up cold storages and agro-processing industry;
- spread awareness among farmers about the benefits of private investor entry;
- to modernise the sector and make it more efficient, apply selected fiscal incentives, such as subsidies on modern equipment, fiscal incentives for private entrepreneurs who set up businesses particularly in the rural areas and lower sales tax on processed foods.

The government, however, still has a very important role to play in the area of extension services because of the strong externalities associated. Its efforts so far have not been adequate: despite an outlay of Rs 640 lakh on extension work in agriculture, horticulture and animal husbandry in 1998-99, results have not been satisfactory. The focus will be on building a skilled workforce of scientific and extension government officers who are recruited with stringent minimum standards, and who regularly attend retraining and refresher courses that keep them in touch with the latest developments in the field.

The Horticulture Department will continue to have an important if altered role: firstly, to make farmers aware of the latest developments in their areas and of changes in market conditions and secondly, to encourage the formation of farmers' groups and societies, and work through these societies to help farmers access inputs, including credit.

Supply of Inputs

- Encourage the development of commercial nurseries to allow the supply of quality plant material and hybrid seeds. The government will not produce seeds itself, but encourage a well-regulated seed market. To control quality, foundation seeds will be produced in the government farms and then distributed to registered private seed farms which have seed processing units.
- Have a mandatory replacement schedule for old orange trees with new cultivars (which have greater disease resistance and higher yields) with a time-bound package to compensate cultivators for the loss in income during the transition. Old trees and plants are more disease prone, and more likely to spread disease to others.

Supporting Infrastructure

- Improve roads and transport systems
- Encourage the development of wholesale markets. The Indo-Swiss Project has recently decided to partially fund the setting up a wholesale market at Rangpo. However, the Agricultural Marketing Act needs to be amended to give farmers a larger role in its functioning and to allow them to benefit directly from prevailing prices.
- Remove procedural bottlenecks so that fresh goods are cleared quickly at transport junctions to prevent spoilage.

It will also set up special autonomous boards for all major fruits and vegetables whose task will be to

- work with co-operatives to update farm management practices, help spread the use of new technology and tools and generally improve the quality of produce;
- liase with the government department on extension work;
- act as a resource in farmer education;
- collect and maintain information on prices, analyse market trends, domestically and internationally, so that farmers and co-operatives can make more informed decisions on cropping patterns, etc.;
- facilitate the provision of crucial inputs like credit extension to individuals and co-operatives;
- provide basic and specialised infrastructure and develop market mechanisms like market yards, export promotion boards, etc., to develop this fairly dispersed activity.

ANIMAL HUSBANDRY

In this sector, too, the public sector needs to gradually give way to private initiatives in some areas

in which it traditionally has had a monopoly: agricultural farms, animal breeding, the supply of feed and fodder, and the provision of veterinary services. It will, however, remain in the area of extension services (see above in Horticulture) while it strengthens its role by hiring a well-trained workforce. The Extension and Training Wing of the Animal Husbandry Department has an important role to play in dissemination of information on and demonstration of new techniques, breeds and equipment to the farmers through livestock shows, calf rallies and exhibitions. Such shows and exhibitions provide an opportunity for interaction between officials and livestock breeders, and encourage healthy competition among breeders.

Supply of Inputs

- Develop natural pastures and grazing grounds, in conjunction with the Forest Department.
- Ensure that feed is available at all times to even the most remote areas in the quantity needed.
- In animal health, allow private providers into basic animal health services and restrict its role to providing only services like sanitary control, border controls, quarantine operations, etc.

Supporting Infrastructure

- Set up one slaughterhouse in each district; at present there is only one in the state. Introduce regular meat inspection procedures to ensure hygienic and wholesome quality of meat.
- Promote post-secondary school vocational training in animal husbandry to deal with the lack of adequately trained staff.
- Identify marketing bottlenecks and set in place regulatory, infrastructure, and institutional policies to minimise marketing costs.

INDUSTRY

In keeping with its new role, the government has to adopt a pro-investor approach of encouraging the private sector into industry, by formulating clear and simple guidelines for the thrust areas. Procedures for setting up enterprises should be transparent, and incentives and schemes have to be followed through. The focus will be on promoting industries which are essentially environment friendly, make use of indigenous raw materials and produce high-value, low-volume products. Service-related industries, such as tourism and information technology, will receive priority.

The state will encourage the entry of private enterprise into the industrial sector by announcing a new industrial policy that will focus not on fiscal incentives but on:

- creating the enabling framework in which private capital will be encouraged to set up business in the state; the message to be transmitted is "Sikkim is open for business";
- setting up regulatory mechanisms so that private capital can enter infrastructure development;
- expanding vocational training programmes in schools and colleges in line with industry needs;
- setting up industrial estates with accompanying services to help entrepreneurs from outside Sikkim circumvent issues of land leasing. Apart from attracting private entrepreneurs to set up business, industrial parks with their own captive mini-power plants, industrial water supply,

roads, street lighting and sanitation will contain the negative environmental effects of industrialisation.

Power

While it is not feasible for the government to directly fund and manage hydroelectric projects, it has to lay the groundwork for private entry into this area. It will encourage the entry of independent power producers by laying out clear guidelines for private sector entry and setting up a strong regulatory mechanism.

An initial step will be setting up a high-level committee of distinguished experts for advice and guidance on how to attract private investors and negotiate with them, as well as clarify to the public at large the environment friendliness of run-of-the-river hydro-electric projects. The Power Grid's decision to strengthen the transmission link to the Eastern grid, between Vidyutnagar and Gangtok should be implemented as soon as possible—apart from making Sikkim a more attractive destination for power investors, it will improve the quality of power in the state. The power tariff structure also needs a thorough overhauling if private producers are to be invited to set up projects. The current low tariff makes increases in generation a loss-making proposition. In fact, the whole issue will have to be depoliticised by setting up a State Electricity Regulatory Commission, as other states have begun to do.

The Sikkim Power Development Corporation has to be strengthened and its functions more clearly defined. At present, its activities overlap with the Power Department, and a first concrete step towards unbundling power services could be to shift the generation functions to the Corporation while transmission and distribution activities remain with the Department.

Tourism

The state has an important role to play in developing tourism and promoting Sikkim as an attractive tourist destination. It will

- formulate policy that promotes environmentally sustainable tourism;
- strengthen the Sikkim Tourism Development Corporation (STDC) to function along the lines of similar organisations in Kerala, Himachal Pradesh, etc. The STDC will develop a strategy to market Sikkim as a must-see tourist destination. A first step would be to analyse the different tourist segments and adapt promotion programmes for each segment. A joint government-private sector approach to promotion can be done through professional advertising agencies and public relations companies which sell Sikkim in the domestic and foreign markets; and
- develop and promote special interest tourism such as cultural and religious heritage sites (which will have a special bearing for Buddhist visitors from East Asia), adventure tourism, flora and fauna trails (a rhododendron trail or valley of the butterflies) and business tourism (as a location for conventions and conferences). The STDC could develop special interest tours, and organise hotels, transport facilities, etc. so that they can be sold as a package to tourists.

3.4.7 The State's Role in Basic Services: Education and Health

Provision of basic health services and education will remain within the purview of the state, especially to the poorer sections of society; it will seek to eradicate regional and gender differences in the provision of basic services by investing in these areas. It is responsible for providing its citizens a good quality of life, including clean air and water, civic amenities and infrastructure like power, housing and transport. It will involve local communities, such as the panchayats, strengthen co-operatives and seek to attract private sector funds in selected areas.

Education

The state has played a very active part in education in the last 20 years, with good results. But, the next educational thrust has to involve a new role for the government. It has to make better, more efficient use of its funds: by targeting the beneficiaries more carefully and by inviting non-governmental organisations and the private sector to do some of the tasks it now performs, such as the implementation of training programs. This will free public funds and allow the government to focus on more fully and better providing the infrastructure and other services that only it can—universal primary education, building and transport infrastructure, food incentives, facilities, etc.

Box. 3.6 Schooling is Vital for Development

Schooling fosters agricultural innovation. Farmers with more basic education are more productive and more likely to profit from new technology. The benefit is therefore greatest in areas of faster innovation, because schooling provides the fundamental cognitive skills that farmers need to respond to changing circumstances and to learn from new experiences.

It enhances one's ability to reallocate resources in response to economic change - to weather, price fluctuations or the peaks and troughs of business cycles. People with more schooling tend to be more venturesome and more willing to take the risks necessary to adapt quickly to a changing economic environment.

Schooling promotes the use of new technologies in the home, for health, nutrition, learning and contraception. Here, parents' schooling, especially the mother's, is critical. Child mortality declines and nutritional status rises with increased parental education, contributing greatly to children's welfare and development.

Source: World Development Report, 1998/99.

Improving Access to Schooling

- New schools should be well located. While providing some transport to school children could be a medium-term goal, the location of new schools should be carefully planned so that they are constructed in areas that are easy to get to. Even more important than new school buildings, however, is maintaining, expanding and upgrading facilities in existing schools: making sure there are enough classrooms, toilets, furniture and that the libraries and laboratories are up-to-date, well equipped and receive supplies as and when needed.

- The number of teaching staff also has to keep pace with student enrolment. While the overall teacher-pupil ratio of 1:20 (on average) is good, some classes—such as the humanities sections in senior schools—have a large number of students per teacher because of substantially higher enrolment of students vis-à-vis the science sections.
- Providing daycare for siblings either at the school or in a village crèche has very effectively improved the schooling of rural girls in other parts of the country.
- Good quality non-formal education programmes can supplement existing education systems, especially in the more remote areas. These are most successful when they are set up by the state and conducted with active community participation.

Improving the Quality of Teaching

- Minimum qualifications should be enforced when hiring teachers and they should be given incentives to improve their qualifications and enroll in in-service training through distance learning or open universities. Qualifications for hiring teachers have been relaxed for locals, but the school children may have been short-changed in the process. While preference may be given to local candidates in the hiring process, there should be no compromise on the minimum level of qualifications. In addition, the minimum number of years of schooling for teachers could be raised from the current 10 to 12 years.
- Teachers' training courses need to be restructured. Pedagogy courses will move teachers away from lecture, dictation of notes and rote-memorisation ways of teaching. Primary teachers especially could be encouraged to teach, wherever possible, less through textbooks and more through play and activity-based learning, through songs, dance, storytelling, playacting, sketching, etc. Regular workshops could be organised at the district and state levels. Teachers should receive in-service training to equip them to handle curricula materials and impart them to children.
- Students in Sikkim have traditionally not been predisposed to the study of mathematics, physics and chemistry. It is important to focus on this lacuna by training teachers of these subjects in the subject matter and pedagogy. Also, since English is the official language of instruction, some kind of English language certification could be made mandatory for teachers.

Developing a Locally Relevant Curriculum

- Information on Himalayan life, culture, and the eco-system could very effectively be integrated into the syllabus from primary school and become a separate course from classes V onward. This will inculcate in children an awareness of the fragility of the environment in which they live, as well as make learning more relevant.
- New textbooks and workbooks, containing more relevant material, which is attractively presented, should be introduced. Encouragement should be given to local initiatives to develop supplementary learning materials. The production and distribution of textbooks could be handed over to the private sector, with the state regulating the quality of the materials.

Improving Job Prospects Through Skill-Based Secondary Education

- Education can be better targeted if a two-pronged approach is adopted: a) improving teaching and classroom equipment for students in Classes XI and XII who intend to pursue higher studies or a professional degree so that they are on par with the best in the rest of the country; and b) developing appropriate vocational training courses to equip students to find employment in some of the emerging areas in the state such as agronomy, floriculture, the hospitality industry, etc.
- The Education Department could set up a cell to analyse the kinds of jobs that are likely to be generated in the next 20 years and divert educational resources towards developing appropriate skills in these areas. This will help prevent a continued mismatch between training and employment. Comprehensive surveys have to be conducted regularly, especially among the emerging sectors like power, tourism, software, so that a market-oriented planning approach can be undertaken for education.
- It is important to market the employment and business opportunities of vocational courses to students and their parents. Setting up an employment cell in some of the major schools can help students explore their career options at the beginning and at the end of their training. Until students get more exposure through Internet, travel, etc., they will remain largely unaware of their job options other than the family vocation or the government. The Department of Education could help increase their exposure by organising routine visits by and discussions with people from different professions—banking, information-technology, accountancy, architecture, sociology, engineering, etc.—especially to the more remote schools.

Lowering Regional and Gender Disparities

Regional and gender disparities could be dealt with by having conveniently located schools, more hostels, especially girls' hostels in rural areas, flexible school hours, more female teachers and better school facilities.

Improving Targeting of Subsidies

The demand for education will increase if the actual cost and opportunity costs of sending children to school decreases. While tuition, textbooks and uniforms are given to all the students, there are many hidden costs to sending children to school, such as admission fees, development fees, and the costs of workbooks and stationery.

- To attract more students to school, the government should *fully* subsidise students who cannot pay, while recovering full costs from those who can afford it. A recent excellent move towards better targeting educational grants has been made with the Chief Minister setting up a task force to examine the introduction of fees at the secondary school level. There are several private schools in the state, which have no trouble attracting fee-paying students.
- The current provision of uncooked rice to increase enrolment in primary schools does not have the same benefits as the mid-day meal scheme, because the rice is shared with other family members or sold in the open market. Further, unlike the mid-day meal scheme, it does not ensure

school attendance. The scheme should be replaced with a better targeted incentive, such as providing a wholesome hot meal of perhaps nutri soyabean biscuits (as is being done in some districts under the UNICEF programme) and noodles during school hours. In some states the task of providing the meal is done in rotation—a different family cooks and provides the meal for all the schoolchildren each day. Another incentive would be to give children milk at school —this would have the advantages of improving their nutrition as well as increasing the off-take of milk especially in areas like the North District where the demand for milk is low.

HEALTH

Providing Primary and Secondary Services for the Poor

The state should move from providing all health services free to everyone, to giving only primary and secondary services. At a minimum, it will provide access to an essential package of clinical services with special focus on the poor. The basic package will include:

- Pregnancy-related care (prenatal, childbirth and postpartum);
- Family planning services—to reduce maternal and child deaths;
- Treatment for common serious illnesses of young children, such as gastro-related disease, acute respiratory infection, etc.; and
- Control of tuberculosis, which is the leading killer of adults in the state.

For pregnancy-related care, three major components need to be strengthened:

- Information, education and communication which will be designed to create a demand for clinical services, and to alert women and others to danger signs;
- Community-based obstetrics with trained nurse-midwife staff to provide prenatal care, including immunisations, detection of complications, early referrals and safe abortion; and
- District hospital facilities to provide essential obstetrics services and neonatal resuscitation. In regions where women are highly isolated, priority should be prenatal care and the prevention and cure of infections.

Prevention

State-provided health care has to have a strong preventive focus by providing a healthier environment, ensuring full immunisation, especially for children, and strengthening the prevention of diseases, particularly tuberculosis, pneumonia, asthma and gastro-intestinal infection which are the main causes of mortality. The public sector will

- provide a healthier environment especially for the poor through proper sanitation, adequate supply of clean water and garbage disposal systems, good living conditions, etc.;
- set up a strong education programme to spread information on individual hygiene, a clean environment and the incidence of common water-borne diseases like diarrhoea, dysentery, and gastro-enteritis;

- complete immunisation coverage of children against the vaccine preventable diseases;
- spread awareness on TB control through effective IEC (information, education and communication) activities, and an information system for management, monitoring and evaluation. Ensure the regular and timely supply of drugs.

Encourage the Private Sector in Tertiary Healthcare

The state will create an environment to encourage the entry of private providers into tertiary healthcare. It will also need to frame regulations to ensure that the quality of services is maintained. The construction of the new Manipal Medical College and Hospital in Gangtok will introduce a variety of tertiary healthcare facilities into the state over the next few years. While the government may continue to partly fund tertiary care, funding needs to be increasingly directed towards the poorer sections of society.

Lowering Administrative Expenses

- Effective targeting of publicly subsidised clinical services to the poor and corresponding efforts to encourage cost recovery from more affluent groups are important. Modest fees collected at health centres could be retained and reinvested locally to improve the quality and reliability of basic services.
- Costs would be greatly reduced if outpatient diagnostic tests were performed before admitting patients to the hospital; home-care is supported as an alternative to long-term hospitalisation for some ailments; treatment protocols are modified, for example, reducing unnecessary surgeries; and treating TB patients and many surgical cases on an outpatient basis.

Improving Delivery of Services

- To deal with the lack of connectedness between villages and health centres, one solution would be to have a roving, mobile medical service linked to the primary health centres (PHCs) or district hospitals. The service could have a fixed routine for visiting villages that are not well linked or are relatively further away from the PHCs and dispense primary healthcare services, first aid and drugs. However, until roads improve, all services that depend on roads, will continue to be erratic.
- Public health services should move from monitoring inputs such as immunisations carried out, to assessing the effects, such as the effectiveness of these measures. If this shift is made it will help the state better assess its current programs, target its efforts and measure the effectiveness of health personnel.

INFRASTRUCTURE

Some of the funds for building the physical infrastructure will be available from the centre and the state as in the past, but an increasing proportion of investment will have to be drawn from the private sector. As in several other areas, the state will need to formulate an active policy to attract private

investment; it will also have to make more effective and efficient use of its own funds and secure the cooperation of the central government in areas under the latter's control.

Pricing of services has to be rationalised to reflect economic costs—and this will further attract private investors into infrastructure services. The government has so far almost exclusively provided infrastructure, and subsidised the pricing of these services. Before private investors are likely to enter areas like power, the tariffs will have to be revised upward. Also, the state will need to target subsidies and to structure them as transparent transfers from the state budget to a given utility.

Central government's support will have to be coopted for those areas like telecommunications and airports, which are under central control. On areas like power and roads, where there is overlapping authority between centre and state, policy will have to be coordinated.

ROADS

- *New roads* have to be carefully planned, especially as the threat of landslides becomes exacerbated as more roads are built. Building the proposed second highway linking Darjeeling, Singla, Naya Bazar, Namchi and Singtam will increase mobility of people and goods, and bring down costs. Not only will it provide an alternative route to the NH 31A, it will also provide an important road link between several towns.
- *Maintenance* of hillroads is very important because there are usually no alternate routes, nor can traffic be diverted. Repairs and the removal of debris have to be done promptly, because if delayed they can snowball into major crises, with severe effects on the ecology and environment. Most of the roads lack an efficient drainage system, and this has further weakened their structure and resulted in distress. Effective drainage on both sides of the road is a way of drastically reducing maintenance costs.
- *Upgrading existing roads*: The increased movement of goods and people have made it important that the major connecting links (many of which were built to handle a different type of traffic) are widened, the steep gradients and curves smoothed, and bridges strengthened and widened to handle heavier loads.
- *Expenditure management*: NH 31A is maintained by the Border Roads Organisation, which is also responsible for any expansion activities on NH 31A. So far, only local tenders have been floated for road and bridge building projects. Projects costing less than Rs 5 lakh are tendered at the panchayat level, and usually contracted by a local resident. Larger projects can be tendered at the national or even international level, so that the state has access to the latest technology and top-quality construction, which will mean better service and perhaps eventually lower costs.
- *Better managed public transport system*: In the absence of a well-connected bus service, the government should encourage the private taxi services, but should strongly regulate them. Bus services should be reliable, more frequent and routes and timings planned so that they link all the villages, markets and towns. The transport system should be tailored to the growing needs of tourism and adventure sport travel. A luxury bus service connecting Gangtok and Bagdogra airport could be timed to link with the arrival of flights to and from Kolkata and Delhi, to allow "seamless"

travel into the state. A major reason why visitors prefer to visit Sikkim as part of organised tours is the lack of regulated and reliable transport options.

OTHER TRANSPORT

Until a full-fledged airport is built, the existing helicopter service between Bagdogra and Gangtok should be expanded to accommodate more people and more flights. The possibility of introducing small (50-seater) commercial plane services from Bagdogra to Gangtok should be explored for the medium-term.

3.5 ROLE OF THE PRIVATE SECTOR

The private sector will play an increasingly important role in the growth of the economy. Many of the services and goods so far provided by the public sector have been inadequate (seeds and seedlings, animal health, breeding, etc.) or disappointing (citrus processing, cold storages).

HORTICULTURE

There are a number of areas in which private producers should be encouraged to supplement or replace government efforts.

- The supply of seeds and seedlings can improve if private nurseries and seed farms are set up. These could even be run by cooperative societies. Given the government's inability to cope with the demand, private entrepreneurs should be encouraged to set up progeny orchards and nurseries.
- To improve marketing conditions, private providers could be encouraged to set up cold storage facilities at appropriate locations. This will allow the mass export of perishables like flowers, fruit, meat products, etc. The cold storage at Majithar, with a capacity of 2,000 MT has only recently been leased out after lying closed for over six years. It is important that this and other storage facilities be linked with cooperatives and private producers.
- Agro-business, based on fruit and vegetable processing, should ideally be undertaken by a large food chain or other corporate house. Sikkim once was a major supplier of processed fruit to hotels and airlines in the rest of India, but it now exports fruit for processing outside the state. In 1997-98, 760 tonnes of oranges were exported, mainly to Bhutan, for processing into orange products. Making the value-addition within the state would benefit local producers and industry, especially given the high transportation costs involved. Once more-modern techniques are adopted and surpluses generated, fruit and vegetables that are not top quality can be used for processing or semi-processing. The success of many international fast food chains in the main cities, has given a big boost to farmers who grow tomatoes (for sauce), potatoes (fries), fruit (juices and jams), etc. in states like Punjab and Himachal Pradesh.

ANIMAL HUSBANDRY

- Providing daycare for siblings either at the school or in a village crèche has very effectively improved the schooling of rural girls in other parts of the country.

- To tackle the problem of short supply, private producers should be invited to set up plants for manufacturing of feed and fodder.
- Improvements in animal stock can be supplemented by private initiatives. Another bull breeding farm (like the one at Karfectar) could be set up under private management. The government should, however, regulate livestock breeding activity to maintain the genetic pool of indigenous stock.
- Animal health services would be improved and public services and funds better directed if the state withdraws from providing services such as clinical treatment, in favour of the private sector. The government should set up a system of full cost recovery for services where private participation is promoted, like non-compulsory vaccinations and clinical services.

Power, Industry and Tourism

The private sector has to capitalise on the opportunities for value addition and utilise the assistance offered by the state.

Education

- The state's efforts in providing secondary school education and teacher training need to be supplemented by private initiatives. Good private boarding institutions can be encouraged to set up schools in the state: this will ease some of the pressure on the existing schools, improve educational standards and improve job opportunities for well-qualified teachers. A boarding school of national excellence would attract students from other areas, including abroad; several students from Nepal and Bhutan are currently studying in private boarding schools in and around Gangtok.
- There is one teacher-training institute in Sikkim, which is privately run. It could expand the number of courses and take in more students per session (at present it only enrolls 20 students for its nine-month B.Ed. course).
- Vocational training programmes and courses in computer education have been very effectively provided by the private sector in other parts of the country.

Health

- As in education, the private sector can help supplement the government's efforts to deliver healthcare services, especially in tertiary care. Given the vast infrastructure of health centres that already exist in the state, primary and secondary healthcare is best provided by the public sector. But the private sector has an important role in tertiary care. Regulation by the government will help ensure the quality of private service.
- It is important that the new Manipal Medical College focus on training health professionals in areas of special concern to the state, such as tuberculosis, gastro-diseases, etc.

3.6 Role of the Community

The community has traditionally played a very strong role in Sikkimese society, especially in the rural areas. Many of the functions that are now being dispensed by the state can be taken over by the community, perhaps via the panchayat or the farmers' cooperatives. A Cooperatives Department was set up in Sikkim at the time of the state's merger with the Union in 1974-75, and it now has offices at the district level and sub-divisional levels. At present, there are 304 registered societies in the state, with a membership of 32,881 farmers. There are relatively few non-governmental organisations functioning in the state.

Greater utilisation of the existing facilities could be ensured through inspection by government officials, provision of incentives to the intended user or through greater participation and oversight by the local community of users. Greater participation by the local community associated with inspection by government officials should ensure greater and more efficient utilisation of the existing facilities.

The biggest danger to development in the state is environmental degradation and only the community at large can prevent this from occurring. Hill communities, having developed in relative isolation, are relatively closely knit and are the most effective guardian of forests, lakes and the environment in general.

Education

- Non-formal education programmes can supplement primary schooling in areas that are not located near a formal institution. These programs are most successful when there is active community participation, when the local people themselves design the programme and take responsibility for it. The building is often donated by the local community, school hours and holidays are determined keeping in mind local needs, learning is practical and costs low to make it affordable. Most important, the schoolhouse is in the vicinity, and bad weather conditions and poor roads and transport facilities do not keep children and the teacher from attending. Teachers, with a minimum of stipulated training, should be selected from within the community, to cut down on teacher absenteeism.
- Another system, that has worked in other states, is to employ a village woman (who has been educated till at least Class V) who will teach in school in place of the frequently absent teacher. Experience shows that education levels improve especially when local monitoring controls the quality of the education. Frequent training workshops are held for these teachers to learn and teach, and they are encouraged to make their classes relevant to local needs.

Health

- NGOs in the area of health can be encouraged in various aspects of health at the grass-roots level through logistical and technical support. They along with the panchayats can help raise people's awareness about identifying their own health problems and solving them with local resources. A large proportion of health problems can be resolved or prevented by people

themselves if they have the knowledge. Preventive health programmes can be run by NGOs, the panchayat, or other community-based groups, using as a medium the radio, television, community gatherings, etc.

- A system of community health workers can help complement the work of primary care providers in rural areas. They will spread information on sanitation, nutrition, family planning, child health, and immunisation, be on hand at all times to provide primary services and first aid and be a valuable referral point between the PHCs and the rural community. Apart from imparting information about family planning measures, health community workers or NGOs should encourage couples to postpone the birth of their first child, better space their children, etc.
- Alcoholism is an emerging problem. Successful alcohol rehabilitation programs in South India show that community efforts are generally more effective than medical interventions in helping individuals overcome alcohol dependence, partially because of the importance of sustained encouragement, which is more easily offered by the community than by health service institutions.
- Many of the rural people rely on more holistic indigenous medical remedies and local herbs for prevention and treatment. This could be effectively incorporated into the community health programme as they provide effective and low-cost solutions to many health problems.

Horticulture and Animal Husbandry

Producers' cooperatives have an important role to play in horticulture and animal husbandry, by supplementing direct government involvement in a host of areas such as input and credit supplies and marketing. The aim of the cooperatives should be to improve market efficiency by improving access to information and reducing imperfections such as excessive middlemen's margins. They can help complement private ventures by better dissemination of information, pooling of risks and helping to fill in gaps in private initiative. These include keeping members informed about prices of relevant products in important trading centres in the country—through Internet or the telephone—and borrowing from banks and financial institutions against the collective security of all the members (as in the Bangladesh Grameen Bank model). Apart from this, they can use technology to supplement government extension work by disseminating information on the latest techniques, seeds, and other inputs. As one of the immediate steps, the government should promote producers' cooperatives in the two major cash crops, cardamom and ginger, to disseminate marketing information and technical know-how. The scheme will be initiated on a pilot basis in a few areas, and the success of the scheme evaluated at the end of the fiscal year. It will be extended to other areas only if successful.

In the area of milk supply, for example, cooperatives can provide farmers an assured market (which is critical for a perishable commodity like milk), provide a farmer-controlled mechanism for delivering essential support services and allow farmers a direct share in the benefits. Farmer members should have full control of the cooperative, with no intervention from the government. They can also supplement state efforts to cope with the demand to improve the breeding stock of cattle and tackle the problem of poor quality fodder by undertaking fodder development activities. Currently, ginger growers are being organised under the Indo-Swiss Project into associations or producers'

societies so that they can more effectively interact with the Department to increase production and to control diseases.

New scientific methods of animal rearing can be spread through the local panchayats; the State Institute of Rural Development (SIRD) is conducting training courses for panchayat members on these issues. Similarly, milk quality can be improved if farmers are taught to handle milk more hygienically, through workshops and sessions conducted by the SIRD.

While cooperatives have to be promoted by the government, it is imperative that they bear the risks and become commercially viable ventures. What is important is to limit the government's financial exposure to cooperatives either through direct loans or guarantees, with the government acting more as a catalyst to energise the existing ones and to promote new ones in areas that they do not exist. Growers' cooperatives have to be strengthened and made independent of the government—in fact, the more independent they are, the more effective will be their functioning.

3.7 Role of Technology in the Delivery of Selected Services

The use of technology in the delivery of government services is particularly relevant in a state like Sikkim where communication and access are major problems. The Government of Sikkim has already made a beginning in the application of electronic technology to government operations. It is the first state in the country to have computerised all its land records. But the use of computers is still largely viewed as a mechanical adjunct to the existing mechanical process and utilised mainly for data storage. It is important that the government takes steps to advance the application of technology, both to demonstrate its usefulness and to reduce costs of operations.

A beginning may be made with the introduction of on-line systems in the office of the Chief Pay and Accounts Officer. This office should be made responsible for the (i) pay-roll, including those that are now maintained by the self accounting departments, (ii) payment of pensions, and (iii) transfers to zilla parishads. These operations are rendered easier through the availability of off-the-shelf software that lends itself to easy customisation and the homogeneous nature of transactions. The application of on-line systems will result in staff savings and more important, quick delivery of services not to mention the quick compilation of a substantial part of public outlays.

Information technology can be effectively used to increase the government's interface with the public and to enhance the quality of state services. The government will keep a database of citizens, which will help target welfare programmes and minimise the misuse of funds. The spread of electronic networks and incorporation of information technology in the day-to-day functioning of the government will allow the public easy, quick and convenient access to government services and help cut down on corruption. For example, individuals will be able to apply for a birth certificate or renew their driving licences electronically; and projects could be given clearances online.

Within the government, too, the process of decision making will be quicker by cutting down on transit delays in sending and receiving information. Video-conferencing of meetings between ministers, bureaucrats and district officials, could speed up decision making and shorten the time period between policy decision and implementation.

Tax revenues can be enhanced by the introduction of computerised collection of data, including assessment, scrutiny and audit. Computerised checkposts at all the four border crossings into the state would provide an independent source of information on its tax base regarding the names and addresses of the consignor and consignee and the nature and value of the consignment.

3.8 Laying the Foundation in Secondary Schools

To lay the basis for this boom in electronic governance, technical education has to become an integral part of the secondary school syllabus; computer classes should be made mandatory and schools should be wired to the Internet to put students in touch with world developments and recent technologies. As mentioned in the section on Economic Strategy, one of the schemes the government should announce in the Budget for 2000-01 is the introduction of computer training in secondary schools. It will initially be introduced on a pilot basis in around 20 schools across the four districts. The government will provide part of the finance for the purchase of computers for these schools; and matching contributions will be sought from the students at the rate of at least Rs 25 per month to improve parent participation. The scheme will be extended to more schools only after an evaluation of the pilot scheme at the end of the year and only on the basis of demands for such an extension from the students and their parents.

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Appendix Tables

List of Appendix Tables

Table A1.1: Key Indicators: District-wise

	Total	**North**	**East**	**South**	**West**
Area (sq. kms.)	7,096	4,226	954	750	1,166
Disrticts (no.)	4	1	1	1	1
Sub-divisions (no.)	8	2	2	2	2
Zilla panchayat wards (no.)	92	20	27	23	22
Gram panchayat units (no.)	159	20	48	42	49
Gram panchayat wards (no.)	873	98	269	243	263
Revenue blocks/ villages (no.)	453	53	134	145	121
Towns (no.)	8	1	3	2	2
Cultivated area (hectares)	1,09,068	15,272	31,707	29,498	32,591
Households (no.) 1991	76,329	6,658	34,241	17,924	17,506
Population 1991	4,06,457	31,240	1,78,452	98,604	98,161
Urban population (%)	9.10	2.57	17.86	2.61	1.80
Rural population (%)	90.90	7.49	36.06	23.63	23.72
Scheduled tribe population (%)	22.36	19.03	41.4	18.34	21.23
Scheduled caste population (%)	5.93	4.61	51.83	23.10	20.46
Decennial growth rate (%) 1981-91	28.47	18.90	28.60	29.78	30.55
Population density (per sq. km.)	57.00	7.00	187.00	131.00	84.00
Literacy rate (%) 1991	56.94	53.55	65.13	54.08	45.62
Males (%)	65.74	63.64	73.10	63.18	54.92
Females (%)	46.69	40.69	55.66	43.7	35.26
Total main workers (%) 1991	40.45	42.9	37.14	41.8	44.32
Marginal workers (%) 1991	1.06	1.23	1.37	0.98	0.54
Non-workers (%) 1991	58.49	55.87	61.49	57.22	55.14

Source: Bureau of Economics and Statistics, Government of Sikkim

Table A 2.1: Gross State Domestic Product at Factor Cost by Industry of Origin at Current Prices

(Rs lakh)

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96[1]
Gross State Domestic Product	**5,207**	**5,899**	**6,969**	**8,013**	**10,190**	**12,212**	**14,520**	**16,724**	**18,465**	**20,401**	**23,394**	**25,946**	**26,714**	**36,155**	**43,029**	**47,397**
Agriculture and Allied Activities	**2,535**	**2,881**	**3,486**	**3,853**	**4,824**	**5,788**	**6,676**	**7,818**	**8,157**	**9,191**	**9,974**	**10,670**	**9,661**	**16,379**	**22,886**	**23,218**
Agriculture	2,501	2,845	3,407	3,752	4,745	5,670	6,545	7,710	8,097	9,128	9,739	10,442	9,409	16,007	22,579	23,169
Forestry & logging	32	33	70	92	69	105	117	93	45	42	210	189	213	337	263	10
Fishing	2	3	9	9	10	13	14	15	15	21	25	39	39	35	44	39
Industry	**1,089**	**1,204**	**1,342**	**1,557**	**2,153**	**2,396**	**3,022**	**3,326**	**3,496**	**3,588**	**3,448**	**4,065**	**4,105**	**5,387**	**5,406**	**7,079**
Mining & quarrying	12	18	7	11	11	26	19	9	63	67	50	75	68	94	103	103
Manufacturing	316	422	464	530	598	653	745	1,026	1,012	1,170	929	1,015	1,054	1,099	1,135	1,191
Registered	184	275	288	349	396	417	479	-	668	785	721	-	-	-	-	-
Unregistered	132	147	176	181	202	236	266	-	344	385	208	-	-	-	-	-
Construction	786	788	850	961	1,457	1,622	2171	2,217	2,500	2,344	2,436	3,044	3,028	4,013	3,992	4,998
Electricity, gas & water supply	-25	-24	21	55	87	95	87	74	-79	7	33	-69	-45	181	176	787
Services	**1,583**	**1,814**	**2,141**	**2,603**	**3,213**	**4,028**	**4,822**	**5,580**	**6,812**	**7,622**	**9,972**	**11,211**	**12,948**	**14,389**	**14,737**	**17,100**
Transport, storage & commun.	58	90	119	125	153	312	314	520	559	636	854	941	1,009	1,102	1,173	1,248
Railways	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other transport	-	-	-	-	-	-	-	-	540	617	-	-	-	-	-	-
Communication	-	-	-	-	-	-	-	-	19	19	-	-	-	-	-	-
Trade, hotels and restaurants	310	351	397	449	527	667	749	869	990	1,109	2,025	2,266	2,479	2,912	3,016	3,137
Banking & insurance	99	82	84	117	159	212	244	313	509	642	736	843	1,026	1,064	1,098	1,198
Real estate	319	395	448	538	647	761	895	1,064	861	1,023	1,169	1,347	1,505	1,688	1,881	2,023
Public administration	483	554	700	810	969	1,084	1,340	1,560	2,135	2,210	2,803	3,124	3,803	4,335	3,673	5,263
Other services	314	342	393	564	758	992	1,280	1,254	1,758	2,002	2,385	2,690	3,126	3,288	3,896	4,231

[1] Provisional.

Source: Central Statistical Organisation.

Table A2.2: Gross State Domestic Product at Factor Cost by Industry of Origin at 1980-81 Prices

(Rs lakh)

	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Gross State Domestic Product	**5207**	**5567**	**6271**	**6459**	**7394**	**8093**	**9569**	**11331**	**12543**	**13845**	**15147**	**15661**
Agriculture and Allied Activities	**2535**	**2812**	**3249**	**3231**	**3709**	**3638**	**3744**	**5458**	**5657**	**5932**	**6179**	**6256**
Agriculture	2501	2778	3184	3144	3650	3576	3674	5374	5622	5910	6135	6199
Forestry & logging	32	32	60	83	54	57	65	79	30	16	38	51
Fishing	2	2	5	4	5	5	5	5	5	6	6	6
Industry	**1089**	**1125**	**1240**	**1360**	**1444**	**1738**	**2605**	**2478**	**2635**	**3102**	**2744**	**2878**
Mining & quarrying	12	17	6	9	10	12	5	3	33	35	18	24
Manufacturing	316	396	412	464	501	520	566	719	879	1016	753	791
Registered	184	254	258	299	321	332	364	-	-	697	584	-
Unregistered	132	142	154	164	180	188	202	-	-	319	169	-
Construction	786	733	803	830	857	1135	1969	1700	1776	1941	1995	2157
Electricity, gas & water supply	-25	-21	19	57	76	71	65	56	-53	110	-22	-94
Services	**1583**	**1630**	**1782**	**1868**	**2241**	**2717**	**3220**	**3395**	**4251**	**4811**	**6224**	**6527**
Transport, storage & communication	58	76	85	86	95	214	213	360	384	433	482	688
Railways	0	0	0	0	0	0	0	0	0	0	0	0
Other transport	0	0	0	0	0	0	0	0	0	0	0	0
Communication	-	-	-	-	-	-	-	-	-	417	423	-
Trade, hotels and restaurants	310	328	349	362	382	464	669	705	813	918	1640	1793
Banking & insurance	99	60	51	57	95	156	175	224	338	399	494	517
Real estate	319	352	389	431	478	532	594	664	745	571	653	750
Public administration	483	492	577	494	667	709	805	866	1082	1103	1379	1568
Other services	314	322	331	438	524	642	764	576	889	970	1153	1211

Source: Central Statistical Organisation.

Table A2.3: Per Capita GSDP of States: New Series

(In Rupees)

	1994-95	1995-96	1996-97	Average	All India ranking
Special Category States					
Nagaland	12,153.00	12,919.00	13,726.00	12,932.67	8
Mizoram	10,378.00	12,489.00	14,267.00	12,378.00	9
Himachal Pradesh	11,018.00	11,693.00	13,750.00	12,153.67	11
Sikkim	**10,133.00**	**11,067.00**	**12,128.00**	**11,109.33**	**13**
Arunachal Pradesh	9,708.00	11,371.00	11,037.00	10,705.33	14
Jammu & Kashmir	8,820.00	10,139.00	11,063.00	10,007.33	17
Meghalaya	9,055.00	10,145.00	10,271.00	9,823.67	18
Manipur	7,817.00	8,218.00	10,363.00	8,799.33	20
Tripura	7,460.00	7,474.00	9,017.00	7,983.67	21
Assam	7,457.00	8,042.00	8,406.00	7,968.33	22
Other States					
Andhra Pradesh	9,992.00	11,316.00	12,791.00	11,366.33	12
Bihar	5,099.00	5,242.00	6,245.00	5,528.67	25
Goa	21,110.00	24,569.00	29,548.00	25,075.67	1
Gujarat	14,560.00	16,105.00	18,330.00	16,331.67	5
Haryana	14,728.00	16,347.00	19,707.00	16,927.33	4
Karnataka	10,890.00	12,244.00	13,968.00	12,367.33	10
Kerala	10,874.00	13,203.00	15,197.00	13,091.33	7
Madhya Pradesh	8,383.00	9,602.00	10,783.00	9,589.33	19
Maharashtra	16,109.00	19,644.00	21,541.00	19,098.00	2
Orissa	7,340.00	8,246.00	8,141.00	7,909.00	23
Punjab	16,620.00	18,177.00	20,908.00	18,568.33	3
Rajasthan	9,053.00	10,068.00	12,010.00	10,377.00	15
Tamil Nadu	12,171.00	13,679.00	15,929.00	13,926.33	6
Uttar Pradesh	6,748.00	7,409.00	8,950.00	7,702.33	24
West Bengal	8,922.00	10,271.00	11,320.00	10,171.00	16

Source: Report of The Eleventh Finance Commission, June 2000.

Table A3.1: Revenue Receipts

(Rs. lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1 B
Total Revenue Receipts	**13,426**	**15,952**	**18,244**	**20,932**	**22,493**	**54,626**	**94,120**	**115,759**	**129,947**	**104,066**	**154,595**	**99,352**
Total revenue receipts (net of lotteries)	***13,426***	***15,952***	***18,244***	***20,932***	***22,493***	***23,989***	***33,894***	***35,593***	***39,867***	***44,763***	***54,009***	*NA*
I. Total tax revenue (A+B)	**3,290.0**	**3,650.1**	**4,093.0**	**5,233.7**	**5,691.9**	**5,555.0**	**7,237.7**	**10,325.2**	**11,640.6**	**13,896.7**	**15,651.3**	**16,951.4**
A. Own tax revenue	**1,589.6**	**1,530.2**	**1,543.7**	**1,627.4**	**2,088.9**	**1,893.0**	**2,727.7**	**2,991.2**	**3,649.6**	**4,675.7**	**5,166.3**	**5,477.4**
Taxes on income levied under State laws	417.7	397.9	409.0	464.6	659.3	517.5	655.3	820.6	905.6	1,832.4	1,800.0	1800
1. Taxes on Income and Expenditure	**417.7**	**397.9**	**409.0**	**464.6**	**659.3**	**517.5**	**655.3**	**820.6**	**905.6**	**1,832.4**	**1,800.0**	**1,800.0**
Land revenue	7.4	27.7	7.7	4.8	34.6	10.7	14.8	16.4	95.9	12.2	10.0	12.5
Stamps and registration fees	19.8	17.7	15.7	12.6	22.7	23.3	33.5	41.9	36.6	50.9	53.9	52
2. Taxes on property and capital trans.	**27.2**	**45.4**	**23.4**	**17.5**	**57.2**	**34.0**	**48.3**	**58.3**	**132.5**	**63.1**	**63.9**	**64.5**
State excise tax	757.3	643.4	665.1	611.5	722.7	688.8	1,064.0	1,054.4	1,081.1	1,185.9	1,456.4	1567.85
Total sales tax	271.4	307.6	327.6	398.5	509.0	511.6	739.3	822.5	1,271.1	1,306.2	1,600.0	1,650.0
Central sales tax	0.7	18.3	38.2	58.2	52.0	51.6	126.7	9.7				
State sales tax	270.7	289.3	289.4	340.2	457.1	460.0	612.7	812.8	1,271.1	1,306.2	1,600.0	1650
Tax on vehicles	33.3	36.7	37.0	46.6	52.1	62.1	125.1	121.7	154.4	151.4	116.0	160
Other taxes on commodities and services	82.6	99.2	81.6	88.8	88.6	78.9	95.7	113.5	104.9	136.7	130.0	235
Entertainment tax	25.1	18.8	23.2	14.3	6.6	14.8	16.8	16.5	20.1			
Other receipts	57.4	80.5	58.4	74.4	82.0	64.1	78.9	97.1	84.8			
3. Total taxes on commodities and serv.	**1,144.6**	**1,086.9**	**1,111.3**	**1,145.4**	**1,372.4**	**1,341.4**	**2,024.1**	**2,112.2**	**2,611.5**	**2,780.2**	**3,302.4**	**3,612.9**
B. Share of Central taxes	**1,700.4**	**2,119.9**	**2,549.3**	**3,606.3**	**3,602.9**	**3,662.0**	**4,510.0**	**7,334.0**	**7,991.0**	**9,221.0**	**10,485.0**	**11,474.0**
State's share of Union Excise Duties	1,627.4	2,042.4	2,453.5	3,482.6	3,483.4	3,536.0	4,399.0	7,215.0	7,802.0	9,047.0	10,485.0	11474.0
State's share of A.E.D. in lieu of sales. tax	**73.0**	77.6	95.8	123.7	119.6	126.0	111.0	119.0	189.0	174.0		
II. Non tax revenue	**2,054**	**2,669**	**2,864**	**3,092**	**2,755**	**33,216**	**62,673**	**82,934**	**92,983**	**102,092**	**104,378**	**42,428**
Non Tax Revenue (net of lotteries)	***2,053.7***	***2,669.4***	***2,864.5***	***3,091.9***	***2,755.3***	***2,579.0***	***2,446.1***	***2,768.0***	***2,902.9***	***2,788.6***	***3,792.0***	
Interest receipts, dividends & profits	130.6	384.4	327.0	186.8	106.4	101.6	132.9	319.8	165.3	149.2	130.6	130.0
General services	649.5	668.8	783.6	1,168.4	874.3	31,477.6	60,498.3	80,115.8	90,558.1	99,913.0	101,400.6	39,278.5
Social services	19.7	27.6	27.5	26.9	32.0	33.5	50.0	41.9	41.1	94.9	77.5	146.1
Economic services	1,254.0	1,588.5	1,726.5	1,709.8	1,742.6	1,603.3	1,992.0	2,456.5	2,218.4	1,934.5	2,769.3	2,873.0
III. Total grants	**8,083**	**9,633**	**11,286**	**12,607**	**14,046**	**15,855**	**24,210**	**22,500**	**25,324**	**28,078**	**34,566**	**39973**
Plan grants	6,484.3	7,564.7	9,312.6	10,677.6	12,226.0	14,010.3	19,071.9	17,723.3	21,639.6	25,847.2	35,197.3	
Non-plan grants	1,598.3	2,068.2	1,973.6	1,929.1	1,819.8	1,845.0	5,138.0	4,776.4	3,684.2	2,230.8	725.5	

Note: R denotes revised estimates and B denotes budget estimates.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.2: Non-Tax Revenue

(Rs. lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-00 R	2000-1 B
Total Non Tax Revenue	**2,054**	**2,669**	**2,864**	**3,092**	**2,755**	**33,216**	**62,673**	**82,934**	**92,983**	**102,092**	**164,378**	**42,428**
Tot Non Tax Reven(net of lotteries)	***2,054***	***2,669***	***2,864***	***3,092***	***2,755***	***2,579***	***3,481***	***3,934***	***4,303***	***5,141***	***6,530***	***NA***
Interest receipts	60.5	278.4	230.6	129.6	91.4	34.6	112.9	181.6	5.8	26.2	30.6	30.0
Dividends	70.0	106.0	96.4	57.2	15.0	67.0	20.0	138.2	159.5	123.1	100.0	100.0
I. Interest rec, dividends & profit	130.6	384.4	327.0	186.8	106.4	101.6	132.9	319.8	165.3	149.2	130.6	130.0
II. General services	**649.5**	**668.8**	**783.6**	**1,168.4**	**874.3**	**31,477.6**	**60,498.3**	**80,115.8**	90,558.1	99,913.0	101,400.6	39,278.5
III. Social services	**19.7**	**27.6**	**27.5**	**26.9**	**32.0**	**33.5**	**50.0**	**41.9**	**41.1**	**94.9**	**77.5**	**146.1**
Education, sports, art & culture	8.7	11.5	9.1	5.3	6.0	12.1	11.0	8.6	9.8	11.5	15.1	75.1
Medical & public health	4.7	4.6	6.3	9.5	14.2	8.5	21.2	11.0	9.6	41.8	10.0	20.0
Water supply & sanitation	3.6	4.2	6.2	5.9	7.3	8.7	12.4	10.9	14.0	15.1	26.5	26.5
Housing		0.2					0.0	0.0		15.1	15.6	15.6
Information & publicity	2.6	5.3	2.3	3.5	1.4	1.8	1.8	6.2	4.9	8.2	5.0	5.0
Labour & employment	0.0	1.6	3.0	2.2	2.0	1.4	2.4	4.6	1.8	2.4	4.5	3.0
Social security & welfare	0.0	0.2	0.4	0.5	1.1	0.5	1.2	0.6	1.1	0.8	0.9	0.9
Other social services			0.0			0.4						
IV. Economic services	**1,254**	**1,588**	**1,726**	**1,710**	**1,743**	**1,603**	**1,992**	**2,456**	**2,218**	**1,934**	**2,769**	**2,873**
Crop husbandry	17.0	14.4	40.7	26.2	29.9	39.5	44.4	62.7	42.0	20.9	24.0	32.0
Animal husbandry	12.0	13.8	17.6	13.5	11.6	13.7	16.7	20.3	17.7	14.1	24.0	30.0
Dairy development						0.0	0.0	0.0				
Fisheries	0.4	0.7	0.8	0.3	0.3	0.5	0.6	0.6	0.8	0.5	1.2	1.2
Forestry & wild life	122.4	111.1	109.7	150.4	106.3	128.7	193.7	121.6	135.8	159.6	145.0	145.0
Plantations	83.6	140.4	144.2	84.6	126.3	149.7	172.0	200.0	218.0	222.0	235.0	240.0
Food storage & warehousing	5.5	1.7	2.3	0.1	3.0	1.7	2.5	1.9	1.8	3.2	1.8	1.8
Co-operation			2.6	0.8			0.1	0.2	0.3	0.8		

Contd.

Table A3.2: Continued

(Rs. lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-00 R	2000-1 B
Other agricultural programmes	3.6	1.5	3.0	1.4	0.2	0.3	0.0	0.1				
Other rural development prog.#	0.8	1.2	1.9	0.3	0.4	0.5	4.3	0.6	2.3	11.1	1.2	1.5
Minor Irrigation	0.5	0.8	1.9	1.7	0.1	0.2	0.3	0.8	1.3	0.0	1.5	1.5
Power	181.8	262.4	290.6	307.7	357.4	384.9	608.3	585.9	550.1	644.0	900.0	1,100.0
Non conventional energy			1.0	2.0	4.2	3.6	2.9	1.1	1.9	1.8	1.9	1.0
Village & small industries	15.1	18.2	22.2	29.2	32.5	32.5	54.4	46.3	41.4	49.6	50.0	50.0
Industries	12.7	12.0	16.8	11.7	3.8	7.7	4.2	11.7	4.0	11.0	21.0	21.0
Non-ferrous mining & metallurgical	1.1	5.4	0.7	1.0	0.3		7.2	4.2	8.1	6.1	5.0	2.0
Road transport	780.7	985.1	1,029.0	1,062.2	1,042.8	819.4	847.1	1,379.1	1,166.7	749.2	1,318.0	1,203.0
Tourism	16.5	19.2	40.8	16.0	22.6	19.5	32.0	18.0	25.4	39.4	38.0	40.0
Other	0.4	0.6	0.6	0.6	0.8	0.9	1.2	1.3	0.9	1.2	1.7	3.0

Note: R denotes revised estimates and B denotes budget estimates.

Source : Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.3: Revenue Expenditure

(Rs. lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1 B
Total Revenue Expenditure	**11,527**	**12,815**	**15,509**	**17,973**	**18,891**	**52,642**	**88,118**	**111,886**	**125,819**	**149,560**	**154,569**	**94,549**
Total Revenue Expenditure (net of lotteries)	***11,527***	***12,815***	***15,509***	***17,973***	***18,891***	***22,005***	***28,926***	***32,887***	***37,139***	***51,762***	***56,773***	**NA**
I. Developmental Expenditure (A+B)	**9,061**	**9,852**	**11,762**	**13,427**	**13,492**	**15,726**	**21,533**	**24,285**	**27,129**	**36,783**	**39,510**	**39,846**
A. Social Services	**3,922**	**4,289**	**5,237**	**6,043**	**6,306**	**7,496**	**10,550**	**12,492**	**14,345**	**21,221**	**20,384**	**19,454**
(a) Education, sports, art & culture	2,254.6	2,359.2	2,637.5	3,056.3	3,275.6	4,007.4	4,758.5	5,717.7	6,015.5	11,191.7	10,938.6	11130.41
(b) Health & family welfare	708.2	793.2	1,065.3	1,223.0	1,329.3	1,441.0	1,913.1	2,184.7	2,126.6	4,189.1	4,000.0	4125.28
(c) Water Supply, sanitation & urban dev.	528.4	636.0	743.5	914.5	834.8	1,079.2	2,396.0	3,095.3	3,413.5	3,802.9	2,822.6	1966.34
(d) Information & broadcasting	52.0	52.2	63.7	87.5	75.1	83.0	92.8	147.2	119.9	178.6	161.8	185.97
(e) Welfare of SC, ST and OBC	104.5	124.1	144.1	136.2	141.8	158.9	212.9	231.0	287.9	482.7	306.7	264.72
(f) Labour and labour welfare	17.4	7.5	6.7	24.3	28.3	28.7	37.7	41.1	48.6	86.1	83.5	93.16
(g) Social security and welfare, nutrition	213.5	273.0	529.5	491.9	561.9	624.6	1,061.2	985.9	2,246.8	1,120.9	1,939.1	1563.85
(h) Others	43.5	43.8	47.3	109.2	58.9	73.2	78.2	88.8	86.6	169.0	132.0	124.49
B. Economic Services	**5,138.9**	**5,562.6**	**6,525.0**	**7,383.8**	**7,186.5**	**8,230.3**	**10,982.4**	**11,793.2**	**12,783.5**	**15,562.7**	**19,125.55**	**20,391.9**
(a) Agriculture and allied activities	2,008.8	2,224.3	2,704.8	3,085.0	2,926.3	3,651.2	4,725.9	4,498.3	4,105.7	5,619.3	5,790.5	6,238
(b) Rural development	152.2	239.2	270.2	330.4	207.6	264.1	1,082.8	973.2	771.1	839.1	866.9	1,143
(c) Special area programmes												
(d) Irrigation & flood control	231.5	198.9	257.8	265.7	234.5	287.8	333.3	557.5	344.9	633.4	1,314.1	3,648
(e) Energy	583.4	724.9	852.6	870.7	902.4	1,060.8	1,333.9	1,556.8	1,801.1	2,233.0	2,724.4	2,605
(f) Industry and minerals	190.4	252.4	299.2	273.2	287.2	291.0	391.8	466.5	469.6	670.1	659.2	683
(g) Transport & communications	1,702.8	1,698.9	1,854.1	2,215.4	2,252.7	2,328.2	2,553.3	2,694.0	3,288.4	3,147.1	4,046.0	4,035
(i) Science, technology and environment	36.0	55.1	76.8	67.9	82.0	74.7	103.5	81.3	76.7	91.2	122.3	99
(j) General economic services	233.9	168.9	209.7	275.6	293.8	272.5	457.9	965.5	1,926.1	2,329.5	3,602.2	1,941
II. Non Developmental Expenditure	2,466.0	2,963.2	3,746.7	4,546.5	5,398.6	36,915.4	66,585.5	87,601.1	98,690.3	112,777	115,059.1	54,703.2
C. General Services	**2,466**	**2,963**	**3,747**	**4,546**	**5,399**	**36,915**	**66,585**	**87,601**	**98,690**	**112,777**	**115,059**	**54,703**
(a) Organs of State	291.1	301.0	331.2	344.5	356.6	520.3	606.7	616.4	809.5	1,025.6	1,120.0	1,029

Contd.

Table A3.3: Continued

(Rs. lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1 B
(b) Fiscal services	94.2	111.1	136.5	156.1	262.8	263.1	466.8	475.3	315.2	542.5	635.2	652
(c) Interest payments & servicing of debt	**744.3**	**1,044.0**	**1,488.0**	**1,891.6**	**2,171.6**	**2,613.3**	**2,899.6**	**3,298.1**	**4,361.2**	**5,570.8**	**7,491.1**	**8,835**
Interest payments	744.3	1,044.0	1,488.0	1,891.6	2,171.6	2,613.3	2,899.6	3,298.1	4,094.2	5,246.7	7,071.4	8,278
Interest on loans from the Centre	369.1	512.2	756.2	880.6	937.9	1,070.7	1,240.7	1,214.6	1,779.8			
Interest on internal debt	246.7	368.2	564.0	760.1	910.6	1,143.1	1,205.0	1,549.4	1,686.1			
of which Market loans		125.6	217.8	300.5	521.5	579.3	689.5	1,072.5	1,174.2			
Interest on small savings (PF etc.)	128.5	163.6	167.8	250.9	323.1	399.5	453.9	534.1	628.2			
Others (interest on reserve funds)												
Appropriation for reduction or avoidance of debt									267.0	324.0	419.7	557
(d) Administrative services	1,194	1,366	1,600	1,958	2,299	2,561	3,037	3,564	3,880	6,324	6,188	6,583
(e) Pensions & misc. general services	142	142	191	196	309	30,958	59,575	79,648	89,324	99,314	99,625	37,605
Pensions and other retirement benefits	138.8	129.8	180.4	195.3	287.4	303.7	366.2	497.5	564.0	1,470.5	1,714.4	2,010
Miscellaneous general service	3.5	11.7	10.5	1.1	21.2	30,654	59,209	79,150	88,761	97,844	97,910	35,595
D. Compensation & assignment to local bods												

Note: R denotes revised estimates and B denotes budget estimates.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.4: Capital Expenditure

(Rs. Lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1B
Total Capital Expenditure	**29782.6**	**31674.0**	**42270.6**	**41920.0**	**44625.7**	**43703.8**	**62556.6**	**69016.5**	**73631.4**	**75379.9**	**20316.2**	**24330.3**
Total Capital Outlay (1+2)	**4659.6**	**5037.5**	**6830.5**	**6364.5**	**6728.0**	**6677.6**	**10116.9**	**9416.1**	**10722.5**	**9175.8**	**14804.7**	**19436.7**
I. Developmental (A+B)	**4494.6**	**4784.2**	**6433.9**	**6081.5**	**6446.4**	**6353.2**	**9599.0**	**8881.4**	**10064.0**	**8716.1**	**14440.1**	**19128.3**
A. Social Services	**1386.4**	**1434.0**	**1654.3**	**1611.0**	**2302.4**	**2149.6**	**3220.4**	**2729.1**	**3305.5**	**2972.07**	**4698.8**	**7771.6**
(a) Education, sports, art & cult	282.9	344.6	389.5	269.2	233.0	203.4	368.5	385.5	554.2	652.58	1438.06	3485.13
(b) Medical, public health &fam	101.0	217.6	274.9	383.0	1104.8	1094.1	834.5	411.7	283.9	212.82	163.28	253
(c) Water supply, sanitation etc	992.9	871.7	988.8	958.9	964.7	852.1	2017.4	1931.9	2467.5	2106.67	2997.41	4004.89
(d) Welfare of SC,ST & OBC	0.9									0	100	28.6
(e) Social Security & welfare	8.7		1.0									
(f) Others												
B. Economic Services	**3108.2**	**3350.2**	**4779.6**	**4470.4**	**4143.9**	**4203.6**	**6378.6**	**6152.2**	**6758.5**	**5744.1**	**9741.3**	**11356.6**
(a) Agriculture & allied activits	114.4	144.9	202.9	196.1	174.3	181.7	186.3	202.2	215.4	156.02	227.8	907
Rural development prog								115.7	85.9	75.9	666	1046
(c) Major & medium irrig. & flood control							5.0	2.5	2.05	2	503.5	
(d) Energy	1661.3	1666.8	2705.7	2345.4	2207.0	2165.5	3044.0	3068.8	3104.5	3384.48	3856.8	3634
(e) Industry and minerals	117.6	344.6	234.5	372.4	241.4	258.7	552.6	409.0	245.9	177.89	173	345.04
(g) Transport	1170.6	1174.0	1551.1	1528.1	1466.9	1504.9	2517.6	2346.4	3074.3	1902.92	4664.66	4415.05
(h) General economic services	44.4	19.9	85.4	28.5	54.4	92.7	78.1	5.2	30.0	44.8	151.05	506.05
2. Non Developmental (general services)	165.0	253.3	396.7	283.0	281.7	324.4	517.9	534.7	658.5	459.67	364.63	308.42
II. Discharge of Internal Debt[1]	**24.1**	**25.7**	**49.1**	**85.7**	**195.6**	**295.8**	**380.8**	**520.7**	**458.0**	**464.6**	**352.3**	**565.0**
Discharge of internal debt	24.1	25.7	49.1	85.7	195.6	295.8	380.8	520.7	458.0	464.55	352.3	565.02
Ways and means advances												
III. Repayments of Loans to the Centre[1]	**291.8**	**299.5**	**330.2**	**352.6**	**391.7**	**430.2**	**538.1**	**2123.7**	**2252.0**	**2834.8**	**1131.7**	**1631.6**
Repayments of loans to the Centre	291.8	299.5	330.2	352.6	391.7	430.2	538.1	2123.7	2252.0	2834.8	1131.7	1631.62
Ways and means advances							0.0					

Contd.

Table A3.4: Continued

(Rs. Lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1B
IV. Loans and Advances by State												
Governments	182.0	143.7	41.5	238.7	63.2	92.5	96.2	123.5	180.5	107.7	121	121
Transfer to Contingency Fund									50.0			
Total Consolidated Fund												
(Capital Account)[1]	**5157.5**	**5525.9**	**7251.4**	**7079.2**	**7378.5**	**7496.1**	**11132.1**	**12183.9**	**13663.0**	**12583**	**16409.7**	**21754.3**
Total Consolidated Fund (Capital Account)	5157.5	5506.4	7251.4	7041.5	7378.5	7496.1	11132.1	12183.9	13663.0	12583	16409.7	21754.3
V. Contingency Fund		19.5		37.7						0	98.25	52.57
VI. Public Aceount	**24625**	**26148**	**35019**	**34841**	**37247**	**36207.6**	**51424.5**	**56832.5**	**59968.4**	**62797**	**3808.3**	**2523.4**
Small savings & Provident Fund	121.6	154.5	194.5	208.4	315.4	615.1	636.3	711.5	934.0	951.31	1216	916
Reserve funds			0.5		146.5	222.0	566.4	468.4	1619.0	695.59	2592.3	1607.43
Deposits & advances	314.2	397.9	436.0	414.6	443.0	654.5	893.0	543.2	609.5	602.55	0	0
Suspense & miscellaneous	16059	16767	22440	23226	25185	23229.7	31017.8	34816.1	37668.4	41054	0	0
Remittances	8130.5	8828.6	11948	10992	11158	11486.3	18311.1	20293.4	19137.5	19494	0	0
Inter-Govt. adjustment accounts	-	-	-	-	-	-	-	-	-	-	-	-
Total Consolidated Fund												
(Revenue & Capital)	16685	18321	22761	25015	26270	60137.9	99250.4	124070	139482	162143	170979	116304
Total-Disbursements (Rev. & Cap. acc.)	**41310**	**44489**	**57780**	**59893**	**63516**	**96345.5**	**150675**	**180903**	**199451**	**224940**	**174885**	**118880**
Closing cash balances	*377.2*	*2065.2*	*480.7*	*1690.6*	*1645.9*	*1807.4*	*1328.5*	*-1141.2*	*-2884.6*	*-1580*	*-3296.29*	*-5236.44*
Grand total (Disbursements)	*41687*	*46554*	*58261*	*61584*	*65162*	*98152.9*	*152003*	*179761*	*196566*	*223360*	*171589*	*113643*

Note: R denotes revised estimates and B denotes budget estimates.

1. Exclusive of Ways and means advances.

2. For 1996-97 others includes information and publicity.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.5: Capital Receipts

(Rs.lakh)

	1989-90	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-00R	2000-1 B
Capital Receipts (net)	**1991.3**	**3757.3**	**2602.3**	**4940.7**	**3340.0**	**5242.8**	**4112.6**	**2217.5**	**3581.7**	**13935.1**	**11383.5**	**15011.7**
Borrowing (net)	**3124.9**	**2799.5**	**2422.7**	**2891.4**	**2445.8**	**3170.4**	**3675.0**	**2649.3**	**2878.8**	**12666.1**	**12043.5**	**14940.9**
Internal debt[1]	**848.6**	**1554.4**	**1225.1**	**1483.8**	**869.0**	**1427.5**	**1603.0**	**1783.0**	**1587.4**	**3788.5**	**6150.7**	**8813.0**
A. Internal Debt (net)	848.6	1554.4	1225.1	1483.8	869.0	1427.5	1603.0	1783.0	1587.4	3788.5	6150.7	8813.0
Market loans	536.0	611.0	672.0	665.0	665.0	1165.0	1565.0	1721.0	1900.0	4090.0	0.0	0.0
Loans from LIC & GIC	40.0	43.0	57.0	47.0	54.0	0.0	38.0	62.0	100.0	110.0	0.0	0.0
Loans from NABARD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ways & means from RBI	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Others	272.6	900.4	496.1	771.8	150.0	262.5	0.0	0.0	45.4	0.0	0.0	0.0
Loans & adv. from Central Govt.[1]	**2013.2**	**933.8**	**818.0**	**829.2**	**913.4**	**1178.3**	**1470.6**	**113.7**	**377.1**	**318.8**	**3808.8**	**4543.9**
B. Loans & adv. Fr. Centr.Govt (net)	2013.2	933.8	818.0	829.2	913.4	1178.3	1470.6	1613.7	1877.1	2518.8	3808.8	4543.9
Non Plan Loans	1606.3	454.6	173.4	40.2	72.9	277.2	4.1	401.0	478.1	661.7	0.0	0.0
Share of small savings collections	1597.0	441.0	170.0	34.0	65.0	274.0	4.1	401.0	474.0	634.0	0.0	0.0
Others	9.3	13.6	3.4	6.2	7.9	3.2	0.0	0.0	4.1	27.7	0.0	0.0
Loans for state plan schemes	607.6	680.7	873.4	983.9	1088.4	1254.6	1866.1	1702.3	2151.1	2438.1	0.0	0.0
Loans for Central plan schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loans for Centrally spons. plan sch.	91.2	98.0	101.4	157.6	143.7	76.7	138.6	134.0	0.0	53.8	0.0	0.0
Others (Pre 1984-85 loans)	-291.8	-299.5	-330.2	-352.6	-391.7	-430.2	-538.1	-2123.7	0.0	0.0	0.0	0.0
Ways & means Advances	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1500.0	1500.0	2200.0	0.0	0.0
II. Recovery of loans	**36.0**	**22.4**	**30.4**	**229.2**	**114.7**	**216.4**	**201.7**	**76.3**	**72.5**	**92.2**	**100.0**	**135.0**
III. Contingency fund (net)	**0.0**	**-15.8**	**54.2**	**-37.7**	**46.7**	**2.7**	**0.0**	**0.0**	**50.0**	**0.0**	**0.0**	**0.0**
IV. Public account (net)	**-906.3**	**1262.5**	**474.5**	**2436.2**	**1396.2**	**2417.9**	**837.3**	**244.6**	**1494.6**	**9735.6**	**1323.9**	**1519.8**
Small savings & provident fund	263.2	311.4	379.6	578.4	663.5	564.7	601.4	752.6	914.3	8558.9	2084.0	1584.0
Reserve funds	0.0	0.0	-0.5	0.5	153.5	78.0	23.6	2.6	130.1	487.6	-810.1	-114.2
Deposits & advances	-33.7	36.9	111.5	90.1	-76.1	-16.6	57.1	130.7	81.5	-150.2	50.0	50.0
Suspense & miscellaneous	-1152.4	375.5	104.3	943.5	718.7	1105.6	-246.9	-64.0	-1418.7	537.0	0.0	0.0
Remittances	16.6	538.8	-120.4	823.6	-63.4	686.2	402.1	-577.4	1787.5	302.4	0.0	0.0
Inter-Govt. adjustment accounts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Withdrawal of Funds (net)[2]	-1169.5	951.2	94.9	1857.7	732.7	1853.3	236.0	-508.1	580.3	1176.7	-760.1	-64.2
Miscellaneous capital receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Note: R denotes revised estimates and B denotes budget estimates. 1. Exclusive of Ways and means advances, 2. Public Account net of small saving and provident fund.
Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.6: Structure of Grants

(Rs lakh)

	1989-90	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9 R	1999-00 B
Total Grants from Centre	**8,083**	**9,633**	**11,286**	**12,607**	**14,046**	**15,855**	**24,210**	**22,500**	**25,324**	**28,078**	**35,923**
Grants for State Plan Schemes	**5,465**	**6,233**	**7,858**	**8,850**	**9,863**	**11,822**	**16,235**	**15,426**	**19,304**	**21,828**	**29,198**
Block Grants	5,465.4	6,233.2	7,857.9	8,850.3	9,806.6	11,822.0	16,235.2	15,423.4	19,303.9	21,828.4	29197.8
Proviso to Article 275(1)								2.3			
Other Grants					56.3						
Grants for Central plan schemes	50.2	85.2	47.9	88.3	74.3	96.7	117.3	98.6	218.8	71.8	158
Grants for Centrally sponsored schemes	968.8	1,246.3	1,406.8	1,739.0	2,288.8	2,091.7	2,719.4	2,199.0	2,116.9	3,947.1	5841.52
Grants for special plan schemes											
Total Non-Plan Grants	**1,598.3**	**2,068.2**	**1,973.6**	**1,929.1**	**1,819.8**	**1,845.0**	**5,138.0**	**4,776.4**	**3,684.2**	**2,230.8**	**725.5**
Grants to meet no plan revenue deficit				1,703.0	1,650.0	1,619.0	4,805.0		1,380.5	638.5	0
Towards calamity relief fund				225.0	168.8	225.0	333.0	905.0	1,073.0	494.0	408
Non-plan grants: other	1,598.3	2,068.2	1,973.6	1.1	1.0	1.0	0.0	3,871.4		1,098.3	317.5

Note: R denotes revised estimates and B denotes budget estimates.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999).

Table A3.7: Structure of Debt

(Rs. lakh)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 R	2001 B
Outstanding Debt*	**7857.6**	**11273.4**	**14047.2**	**16420.8**	**19226.5**	**21476.7**	**24351.3**	**27645.5**	**31274.1**	**35652.9**	**50466.0**	**64309.5**	**77053.8**
Internal Debt of the State Government	**2194.9**	**3334.4**	**4863.0**	**6039.0**	**7437.1**	**8110.5**	**9242.2**	**10464.4**	**11726.7**	**13314.1**	**17049.5**	**23200.2**	**31448.2**
Receipts		1163.6	1554.4	1225.1	1483.8	869.0	1427.5	1603.0	1783.0	2045.4	4200.0	6503.0	8813.0
Disbursements		24.1	25.7	49.1	85.7	195.6	295.8	380.8	520.7	458.0	464.6	352.3	565.0
Debt to Central Government	**4675.1**	**6688.3**	**7622.1**	**8440.1**	**9269.3**	**10182.6**	**11360.9**	**12831.5**	**14445.2**	**16322.3**	**18841.1**	**24449.9**	**27362.2**
Receipts		2305.0	1233.3	1148.2	1181.8	1305.0	1608.5	2008.7	3737.4	4129.2	5353.6	6740.5	4543.9
Disbursements		291.8	299.5	330.2	352.6	391.7	430.2	538.1	2123.7	2252.0	2834.8	1131.7	1631.6
Debt to Savings & Provident Funds	**987.6**	**1250.7**	**1562.1**	**1941.7**	**2520.1**	**3183.6**	**3748.2**	**4349.6**	**5102.2**	**6016.5**	**14575.4**	**16659.4**	**18243.4**
Receipts		384.7	465.8	574.1	786.8	978.9	1179.8	1237.7	1464.1	1848.2	9510.2	3300.0	2500.0
Disbursements		121.6	154.5	194.5	208.4	315.4	615.1	636.3	711.5	934.0	951.3	1216.0	916.0

Note: R denotes revised estimates and B denotes budget estimates. *As on 31st March.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.8: Fiscal Deficit

(Rs.lakh)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1 B
Fiscal deficit	**2906**	**2021**	**4107**	**3415**	**3074**	**4569**	**4009**	**5590**	**6753**	**14686**	**14799**	**14620**
Financing of Fiscal Deficit												
(1) Net borrowing[1]	3416	2774	2374	2806	2250	2875	3294	3629	4379	14813	13844	12744
(2) Withdrawal of funds	-1169	951	95	1858	733	1853	236	-508	580	1177	-760	-64
(3) Ways & means adv.(RBI & Centre)	0	0	0	0	0	0	0	0	0	0	0	0
(4) Overall deficit	660	-1,688	1,584	-1,210	45	-161	479	2,470	1,743	-1,304	1,716	1,940
(5) Contingency fund (net)	0	-16	54	-38	47	3	0	0	50	0	0	0
Fiscal deficit =(1 + 2 + 3 + 4 + 5)	2906	2021	4107	3416	3074	4569	4009	5590	6753	14686	14799	14620
Composition of Fiscal deficit												
(a) Revenue deficit	-1,899	-3,138	-2,734	-2,959	-3,602	-1,985	-6,002	-3,873	-4,128	5,494	-26	-4,802
(b) Capital outlay	4,660	5,038	6,831	6,364	6,728	6,678	10,117	9,416	10,723	9,176	14,805	19,437
(c) Net lending	146	121	11	9	-52	-124	-105	47	108	15	21	-14
(d) Transfer to contingency fund	0	19.48	0	37.67	0	0	0	0	50	0	0	0
Fiscal Deficit = (a + b + c + d)	2,906	2,021	4,107	3,415	3,074	4,569	4,009	5,590	6,703	14,686	14,799	14,620
Memo: Primary Deficit	2162	977	2619	1523	903	1956	1109	2292	2658	9439	7728	6342

Note: R denotes revised estimates and B denotes budget estimates.

1. Net Borrowing reflects change in debt stock. This equals fiscal deficit when 2,3,4 and 5 are all zero.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.9: Fiscal Deficit as Percent of GSDP

(as per cent of GSDP)

	1989-0	1990-1	1991-2	1992-3	1993-4	1994-5	1995-6	1996-7	1997-8	1998-9	1999-0 R	2000-1 B
Fiscal deficit	**14.25**	**8.64**	**15.83**	**12.78**	**8.50**	**10.62**	**8.46**	**10.35**	**10.96**	**20.91**	**18.49**	**16.02**
Financing of Fiscal Deficit												
(1) Net borrowing[1]	16.74	11.86	9.15	10.50	6.22	6.68	6.95	6.72	7.11	21.10	17.29	13.96
(2) Withdrawal of funds	-5.73	4.07	0.37	6.95	2.03	4.31	0.50	-0.94	0.94	1.68	-0.95	-0.07
(3) Ways & means adv.(RBI & Centre)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(4) Overall deficit	3.24	-7.22	6.11	-4.53	0.12	-0.38	1.01	4.57	2.83	-1.86	2.14	2.13
(5) Contingency fund (net)	0.00	-0.07	0.21	-0.14	0.13	0.01	0.00	0.00	0.08	0.00	0.00	0.00
Composition of Fiscal deficit												
(a) Revenue deficit	-9.31	-13.41	-10.54	-11.08	-9.96	-4.61	-12.66	-7.17	-6.70	7.82	-0.03	-5.26
(b) Capital outlay	22.84	21.53	26.33	23.82	18.61	15.52	21.35	17.43	17.41	13.07	18.49	21.30
(c) Net lending	0.72	0.52	0.04	0.04	-0.14	-0.29	-0.22	0.09	0.18	0.02	0.03	-0.02
(d) Transfer to contingency fund	0.00	0.08	0.00	0.14	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00
Memo: Primary Deficit	10.60	4.18	10.09	5.70	2.50	4.55	2.34	4.24	4.32	13.44	9.65	6.95

Note: R denotes revised estimates and B denotes budget estimates.

For 1996-97 onwards, the ratios correspond to projected GSDP at the rate of 14 percent per annum.

1. Net Borrowing reflects change in debt stock. This equals fiscal deficit when 2, 3, 4 and 5 are all zero.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000).

Table A3.10: Fiscal Variables

(as percentages of GSDP)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00 R	2000-01 B
Revenue receipt	**65.81**	**68.19**	**70.31**	**78.36**	**62.21**	**55.75**	**71.51**	**65.87**	**64.72**	**63.75**	**67.47**	**NA**
Own tax revenue	**7.79**	**6.54**	**5.95**	**6.09**	**5.78**	**4.40**	**5.75**	**5.54**	**5.92**	**6.66**	**6.45**	**6.00**
Non tax rev (net of Lotteries)	**10.07**	**11.41**	**11.04**	**11.57**	**7.62**	**5.99**	**5.16**	**5.12**	**4.71**	**3.97**	**4.74**	NA
Share of Central taxes	**8.33**	**9.06**	**9.83**	**13.50**	**9.97**	**8.51**	**9.52**	**13.57**	**12.97**	**13.13**	**13.10**	**12.57**
Grants from the Centre	**39.62**	**41.18**	**43.50**	**47.19**	**38.85**	**36.85**	**51.08**	**41.64**	**41.11**	**39.99**	**43.18**	**43.80**
Net borrowing (Internal)	**5.59**	**6.53**	**4.53**	**5.23**	**1.86**	**2.63**	**2.58**	**2.34**	**2.58**	**5.32**	**7.68**	**9.04**
Borrowing from Centre	9.87	3.99	3.15	3.10	2.53	2.74	3.10	2.99	3.05	3.59	7.01	3.19
Savings & provident fund	1.29	1.33	1.46	2.17	1.84	1.31	1.27	1.39	1.48	12.19	2.60	1.74
Net debt capital receipts	16.74	11.86	9.15	10.50	6.22	6.68	6.95	6.72	7.11	21.10	17.29	13.96
Revenue Expenditure	**56.50**	**54.78**	**59.78**	**67.28**	**52.25**	**51.14**	**61.03**	**60.87**	**60.29**	**73.71**	**70.92**	**NA**
of which Interest Payment	3.65	4.46	5.73	7.08	6.01	6.07	6.12	6.10	7.08	7.93	9.36	9.68
Social services	19.23	18.33	20.19	22.62	17.44	17.42	22.26	23.12	23.29	30.22	25.46	21.32
Economic services	25.19	23.78	25.15	27.64	19.88	19.13	23.17	21.83	20.75	22.16	23.89	22.35
Capital expenditure of which												
Capital Outlay	**22.84**	**21.53**	**26.33**	**23.82**	**18.61**	**15.52**	**21.35**	**17.43**	**17.41**	**13.07**	**18.49**	**21.30**
Social services	6.80	6.13	6.38	6.03	6.37	5.00	6.79	5.05	5.37	4.23	5.87	8.52
Economic services	15.24	14.32	18.42	16.73	11.46	9.77	13.46	11.39	10.97	8.18	12.17	12.44
Total Expenditure net of lotteries	79.34	76.31	86.10	91.10	70.86	66.66	82.37	78.29	77.70	86.78	89.41	NA
Deficits and Debt												
Revenue deficit	-9.31	-13.41	-10.54	-11.08	-9.96	-4.61	-12.66	-7.17	-6.70	7.82	-0.03	-5.26
Fiscal deficit	**14.25**	**8.64**	**15.83**	**12.78**	**8.50**	**10.62**	**8.46**	**10.35**	**10.96**	**20.91**	**18.49**	**16.02**
Primary deficit	10.60	4.18	10.09	5.70	2.50	4.55	2.34	4.24	3.88	12.98	9.13	6.34
Outstanding debt	**55.26**	**60.05**	**63.29**	**71.97**	**59.40**	**56.59**	**58.33**	**57.88**	**57.88**	**71.87**	**80.33**	**84.43**
Internal debt	16.34	20.79	23.28	27.84	22.43	21.48	22.08	21.70	21.61	24.28	28.98	34.46
Centre	32.78	32.58	32.53	34.70	28.16	26.40	27.07	26.73	26.50	26.83	30.54	29.98
Small savings & provident fund	6.13	6.68	7.48	9.43	8.81	8.71	9.18	9.44	9.77	20.76	20.81	19.99

Note: For 1996-97 onwards, the ratios correspond to projected GSDP at the rate of 14 percent per annum.

Source: Finance Accounts, various issues, Government of Sikkim and Annual Financial Statement (1999 and 2000) and Central Statistical Organisation.

Table A3.11: Financial Results of State Public Sector Units

Name of Department	Year of Account	Profit (+) / Loss (-) (Rs lakh)	Accumulated Profit / Loss (Rs Lakh)	Total return on capital employed
Consumer Industries				
Sikkim Jewels Ltd.	1997	(+) 14.21	(+) 118.02	2.65
Sikkim Time Corporations	1998	(+) 86.90	(+) 593.13	7.15
Sikkim Flour Mills Ltd.	1994	nil	(-) 12.76	Nil
Financial Trading				
SIDICO	1998	(+) 24.20	(-) 1166.06	2.7
Animal Husbandry				
Sikkim Livestock Procesing & Development Corporation	1998	(+) 0.99	(+) 0.13	0.49
Transport Department				
Chanmari Workshop & Automobiles Ltd.	1997	(-) 14.19	(-) 1.53	

Source: CAG, 1998, Government of Sikkim.

Table A3.12: Financial Results of Working Statutory Corporations

(Rs. crore)

Year	Amount Invested	Total Investment upto the end of the year	Dividend received	Percentage of Dividend or Interest to Total Investment
1991-92	1.98	16.17	0.96	5.94
1992-93	1.99	18.16	0.57	3.14
1993-94	2.52	20.68	0.15	0.73
1994-95	2.48	23.16	0.67	2.89
1995-96	5.66	28.90	0.20	0.69
1996-97	5.83	34.73	1.38	3.97
1997-98	3.06	37.79	1.59	4.21

Source: Finance Department, Government of Sikkim.

Table A4.1: Estimated Birth and Death Rates

Year	Birth Rate		Death Rate		Natural Growth Rate	
	Sikkim	India	Sikkim	India	Sikkim	India
1981	31	33.9	8.9	12.5	22.1	21.4
1982	31.6	33.8	9.5	11.9	22.1	21.9
1983	34.5	33.7	10.9	11.9	23.6	21.8
1984	31.7	33.9	10.2	12.6	21.5	21.3
1985	33.1	32.9	10.7	11.8	22.4	21.1
1988	33.8	31.5	10.1	11	23.7	20.5
1989	31.4	30.6	9.1	10.3	22.3	20.3
1990	26.3	30.2	7.3	9.7	19	20.5
1991	22.5	29.5	7.5	9.8	15	19.7
1992	22	29.2	5.8	10.1	16.2	19.1
1993	24.3	28.7	6.9	9.3	17.4	19.4
1994	24.6	28.6	2.9	9.2	21.7	19.4
1995	22.5	28.3	6.9	9	15.6	19.3
1996	20		6.5		13.5	
1997	19.8	27.2	6.5	8.9	13.3	18.3

Source: Sample Registration Scheme, Office of the Registrar General.

Table A4.2: Birth, Death and Infant Mortality Rates

States	Crude Birth Rate			Crude Death Rate			Infant Mortality Rate			CPR*
	Total	*Rural*	*Urban*	*Total*	*Rural*	*Urban*	*Total*	*Rural*	*Urban*	1998
Arunachal Pradesh	21.4	22.3	12.2	5.8	6.1	2	47	49	17	12.6
Assam	28.2	29	20.7	9.9	10.3	5.9	76	79	37	17.6
Manipur	19.7	20.5	17.6	5.9	5.8	6.2	30	21	28	21.3
Meghalaya	30.2	32.9	16.6	8.8	9.7	4.4	54	56	52	3.9
Mizoram	15	16.4	13.3	4.8	5.7	3.7	19	22	15	38.2
Nagaland	-	-	7.9	-	-	2.7	-	-	16	7.9
Sikkim	**19.8**	**20**	**12.8**	**6.5**	**6.6**	**3.5**	**51**	**51**	41	**20.7**
Tripura	18.3	18.9	15.5	6.8	6.9	5.8	51	53	39	25.6
India	27.2	28.9	21.5	8.9	9.6	6.5	71	77	45	45.4

* Couple Protection Rate.

Source: Central Statistical Organisation, 1998.

Table A4.3: Age and Sex Distribution of Population

Age group	Males		Females		Total	
	No.	%	No.	%	No.	%
0 — 1	4,418	2.83%	4,384	3.04%	8,802	2.97
2 — 3	7,539	4.83%	7,451	5.17%	14,990	5
4 — 5	8,164	5.23%	7,863	5.45%	16,027	5.4
6 — 14	36,997	23.71%	36,247	25.14%	73,244	24.56
15 — 20	20,145	12.91%	20,154	13.98%	40,299	13.36
21 — 25	14,125	9.05%	15,011	10.41%	29,136	9.57
26 — 30	13,694	8.78%	13,253	9.19%	26,947	8.82
31 — 35	10,247	6.57%	9,248	6.41%	19,495	6.38
36 — 40	10,375	6.65%	8,482	5.88%	18,857	6.23
41 — 45	7,006	4.49%	5,262	3.65%	12,268	4.1
46 — 50	6,265	4.02%	4,897	3.40%	11,162	3.73
51 — 60	8,979	5.75%	6,361	4.41%	15,340	5.19
61 & over	7,909	5.07%	5,448	3.78%	13,357	4.59
Not recorded	165	0.11%	124	0.09%	289	0.1
Total	156,028	100.00%	144,185	100.00%	300,213	100

Source: Health Status of Sikkim, 1998, Department of Health and Family Welfare, Government of Sikkim.

Table A4.4: Females' Age at Marriage

(percent)

	Age at Marriage						
	10-14	15-19	20-24	15-44	60-69	70-79	80+
Arunachal Pradesh	2.2	25.4	77.1	69.9	49.6	42.5	33.5
Assam	1.9	23.4	66.5	87.7	59.2	20.9	12.7
Manipur	1.3		39.4	55.9	65.1	46.7	34.3
Meghalaya	1.4	16.8	62.8	66.6	56.6	43.4	35
Mizoram	0.7	9.6	53.3	59.6	62.6	43.9	27.6
Nagaland	1.3	7.7	36.2	53.4	78	68.7	56.7
Sikkim	**1.4**	**24.4**	**66.3**	**67.5**	**69.5**	**55.7**	**42.5**
Tripura	1.2	24.4	70.1	71.7	49.1	32.3	19.3
India	4.5	35.3	81.8	79.5	52.5	30.7	23.4

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A4.5: Sex Ratio by Age Group

(females per thousand males)

Age Group	Sex Ratio
0 — 4	965
5 — 9	1000
10 — 14	922
15 — 19	902
20 — 24	911
25 — 29	838
30 — 34	754
35 — 39	727
40 — 44	701
45 — 49	662
50 — 54	655
55 — 59	726
60 — 64	750
65 — 69	721
70 — 74	781
75 — 79	857
80 +	838
Total	878

Source: Population Census.

Table A4.6: Health Statistics

(total numbers)

	North	East	South	West	Total
Hospitals	1	2	1	1	5
PHCs	3	8	6	7	24
PHSCs	19	48	39	41	147
Beds	80	500	220	120	920
Doctors	12	104	28	21	165
Auxiliary nurses & midwives	42	186	111	97	436
Staff nurses	5	81	8	4	98
In-patients	117	2,786	2,938	3,826	9,667
Out-patients	3903	99,743	79,201	74,561	2,51,408
Population per doctor	3114	2,052	4,212	5,590	2,950

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A4.7: Unemployment Rate

(per thousand)

		Rural			Urban		
		ST	**SC**	**Others**	**ST**	**SC**	**Others**
Arunachal Pradesh	*Male*	10	0	8	0	0	10
	Female	2	0	1	0	0	9
Assam	*Male*	31	32	33	44	14	36
	Female	21	8	14	16	18	34
Meghalaya	*Male*	3	0	3	3	0	15
	Female	0	0	0	5	0	12
Mizoram	*Male*	10	0	0	2	0	0
	Female	2	0	0	2	0	0
Nagaland	*Male*	10	0	0	39	0	7
	Female	0	0	0	1	0	20
Sikkim	***Male***	**0**	**0**	**4**	**0**	**0**	**9**
	Female	**0**	**0**	**7**	**0**	**0**	**13**
Tripura	*Male*	0	6	10	0	0	40
	Female	5	5	12	0	13	32
India	*Male*	6	9	12	99	26	24
	Female	2	3	4	4	10	11

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A4.8: Occupational Distribution

(per cent)

Occupation	**North**	**East**	**South**	**West**	**Total**
Agricultural labourers	14.95	8.4	5.12	7.29	7.82
Livestock, forestry, fish.	3.39	3.28	2.12	1.49	
Mining & quarrying	0.01	0.44	0.09	0.07	0.22
Household industry	1.3	0.92	0.68	0.47	0.77
Other manufacturing	1	5.61	2.71	0.89	3.26
Construction	12.39	10.61	4.63	2.42	7.09
Trade and commerce	3.06	8.67	3.67	2.14	5.23
Transport, storage, communication	0.92	3.26	1.21	0.5	1.82
Other services	16.74	19.54	8.97	7.32	13.43

Source: Working Group Zonal Planning Team, Assam Agricultural University, 1998.

Table A5.1: Literacy Rate

	Sikkim			India		
Year	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
1951	11.19	1.2	6.59	27.16	8.86	18.33
1961	19.5	4.2	12.3	40.4	15.34	28.31
1971	25.37	8.9	17.74	45.95	21.97	34.45
1981	43.85	22.2	34.05	56.5	24.97	43.67
1991	65.7	46.76	56.94	64.13	39.29	52.21

Source: Population Census.

	Sikkim	**India**
1993 (Jan-Dec)	67	56
1991 (July-June)	69	57
1994-95	74	58
1995-96	75	59
1996-97	78	62

Source: NSS Sample Surveys.

Table A5.2: Classwise Enrolment

	North	**South**	**East**	**West**	**Total**
Pre-primary	2,298	6,895	9,696	6,772	25,661
Class I	1,809	6,999	10,893	6,927	26,628
Class II	1,316	5,064	7,480	4,064	17,924
Class III	1,137	4,444	6,974	3,876	16,431
Class IV	842	3,221	5,835	3,118	13,016
Class V	657	2,921	4,868	2,630	11,076
Class VI	576	2,353	4,909	2,502	10,340
Class VII	397	1,802	3,587	1,801	7,587
Class VIII	445	2,034	3,737	1,970	8,186
Class IX	196	1,038	2,100	766	4,100
Class X	136	677	1,267	635	2,715
Class XI	107	397	1,122	595	2,221
Class XII	103	296	873	316	1,588

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A 5.3: Teacher-Pupil Ratio

Class	Students	Teachers	Teacher-pupil ratio
Pre-primary	23,538	761	1:31
Classes I — V	84,986	4,520	1:19
Classes VI — VIII	23,949	1,076	1:22
Classes IX — X	6,777	726	1:09
Classes XI — XII	3,331	296	1:11

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A 5.4: Results of the AISSE (Class X)

District	Total Examinees	Pass	Compartment	Failed	Absent	Pass Percent
East	1,127	498	302	321	6	43
West	492	96	110	277	9	20
North	120	29	24	64	3	24
South	462	203	102	150	7	43
State Result	2,201	826	538	812	25	37

Source: Department of Education, Government of Sikkim.

Table A5.5: Results of the AISSC (Class XII)

District	Total Examinees	Pass	Compartment	Failed	Absent	Pass Percent
East	943	724	150	69		54
West	430	234	82	114		78
North	148	104	21	23		70
South	18	17	1	0		86
State Result	1,539	1,079	254	254		70

Source: Department of Education, Government of Sikkim.

Table A5.6: Number of Educational Institutions

Institutions	North	South	East	West	Total
Senior secondary schools	2	16	18	7	43
Secondary schools	11	24	22	20	77
Upper primary schools	9	38	44	31	122
Primary schools	33	100	119	83	335
Lower primary schools	21	48	35	75	179
Pre-primary schools	76	212	235	216	739
Total schools	152	438	473	432	1,495
Degree-level colleges		1	2		3
Teacher training colleges		1			1
Sheda, Deorali			1		1
Sanskrit mahavidyalaya				1	1
Law colleges			1		1
Teachers' training institutes			1	2	3
Sanskrit pathshalas		2	8	2	12
Monastic schools	14	12	16	8	50
Madrasa			1		1
I.T.Is			1		1
Total colleges	14	14	29	13	70

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A5.7: Expenditure on Educational Institutions

	Sikkim		India	
	in lakh	% of Total	in lakh	% of Total
High/higher school	573	35.05	4,25,710	40.88
Midlle school	346	21.16	249,252	23.94
Primary school	502	30.70	3,09,491	29.72
Pre-primary school	80	4.89	2,292	0.22
Vocational	-	-	19,091	1.83
Others	134	8.20	35,478	3.41
Total direct expenditure	**1,635**	**100.00**	**10,41,314**	**100.00**
Per cent of total expenditure		71.52		97.36
Indirect expenditure	651	28.48	28,209	2.64
Total expenditure	**2286**	**100.00**	**10,69,523**	**100.00**

Source: Expenditure on Recognised Education Instituions: 1991-92.

Table A5.8: Human Development Index and Education Components: 1991, 1995 and 1998

	Literacy Index			Enrolment Ratio Index			Educational Attainment Index		
	1991	**1995**	**1998**	**1991**	**1995**	**1998**	**1991**	**1995**	**1998**
State	0.569	0.674	0.738	0.436	0.476	0.448	0.525	0.608	0.641
North	0.535	0.657	0.73	0.351	0.382	0.362	0.473	0.565	0.607
East	0.651	0.748	0.806	0.458	0.5	0.47	0.587	0.665	0.694
West	0.456	0.587	0.666	0.423	0.462	0.436	0.445	0.545	0.589
South	0.541	0.638	0.696	0.433	0.472	0.446	0.505	0.583	0.613

Source: Lama, The Sikkim Human Development Report, 2000.

Table A6.1: Land-Use Patterns: 1976-91

(in hectares, percentages in italics)

	1976-77	**1980-81**	**1990-91**
Land under operational holdings			
Net area sown	64,927	78,321	63,254
	9.15	*11.04*	*8.91*
Area under current fallow	501	4,428	3,906
	0.07	*0.62*	*0.55*
Other uncultivated area excluding fallow	4,925	4,560	10,830
	0.69	*0.64*	*1.53*
Fallow, other than current fallow	944	9,474	9,204
	0.13	*1.34*	*1.3*
Cultivable wasteland	1,153	681	9,807
Area unavailable for cultivation	6,613	11,604	14,300
	0.93	*1.64*	*2.02*
Total operated area	**79,062**	**1,09,068**	**1,11,302**
Per cent of total geographical area	*11.14*	*15.37*	*15.69*
Permanent pasture and grazing area	**1,34,289**	**72,937**	**1,25,997**
Area under non-agricultural use	6,612	85,362	14,301
Barren area	2,04,010	1,80,250	1,60,000
Area under miscellaneous trees & groves	417	5,450	NA
Forest area	2,85,210	2,56,533	2,98,000
Total un-operated area	**6,30,538**	**6,00,532**	**5,98,298**

Note: Total geographical area of Sikkim = total operated area + total un-operated area = 7,09,600 ha.

Source: Department of Agriculture, Government of Sikkim.

Table A6.2: Foodgrain Output

(thousand tonnes)

Crop	1975-76	1980-81	1985-86	1990-91	1995-96	1996-97	1997-98
Rice	10.00	10.63	17.05	22.04	21.68	22.06	21.45
Wheat	0.15	10.30	11.22	13.08	15.30	14.81	14.20
Maize	16.50	28.93	49.25	57.50	56.56	56.63	55.71
Finger-millet	3.20	3.84	4.30	4.62	4.75	4.71	4.73
Barley	0.50	0.46	1.30	1.18	1.57	1.56	1.51
Buckwheat	0.80	1.38	1.38	1.42	1.74	1.61	1.60
Total cereals	**31.15**	**55.54**	**84.50**	**99.84**	**101.60**	**101.38**	**99.20**
Urd	0.60	2.92	2.90	3.05	3.22	3.30	3.30
Other pulses	0.10	0.20	1.70	2.38	2.70	2.69	2.31
Total foodgrain	**31.85**	**58.66**	**89.10**	**105.27**	**107.52**	**107.37**	**104.81**
Rapeseed & mustard	0.20	0.90	2.30	2.65	4.38	4.24	4.27
Soyabean	0.50	1.81	3.10	3.02	3.20	3.36	3.29
Other oilseeds	–	–	0.15	0.04	0.04	0.04	0.04
Total oilseeds	**0.7**	**2.71**	**5.55**	**5.71**	**7.64**	**7.64**	**7.6**
Orange/citrus fruit	3.60	7.35	12.10	15.45	8.70	9.00	
Other fruit	1.10	3.00	6.10	8.05	3.30	3.50	
Total fruits	**4.70**	**10.35**	**18.20**	**23.50**	**12.00**	**12.50**	
Vegetables	5.00	3.40	23.90	35.00	28.00	30.00	
Potatoes	8.00	6.64	26.40	34.97	24.00	27.80	26.00
Large cardamom	2.30	3.50	3.90	3.60	3.60	4.58	
Ginger	2.00	3.20	10.90	16.00	29.00	25.00	
Rhizomatic crops	0.10	0.20	1.10	3.00	1.60	1.00	
Cut flowers (in lakh)	–	–	–	–	8.00	12.00	15.00
Miscellaneous	12.40	13.54	42.30	57.57	58.20	58.38	

Source: Department of Agriculture, Government of Sikkim.

Table A6.3: Area Under Different Crops

(thousand hectares)

Crop	1975-6	1980-1	1985-6	1990-1	1995-6	1996-7
Rice	11.4	14.8	15.5	16.05	15.94	15.95
Wheat	0.15	7	7.4	7.82	8.43	8.4
Maize	28.5	30.2	39	39.9	39.93	39.94
Finger-millet	4.8	5	4.8	4.9	5	5
Barley	0.9	0.58	1	0.9	1.08	1.1
Buckwheat	1.5	2.76	2	1.72	2.19	2.06
Total cereals	**47.25**	**60.34**	**69.7**	**71.29**	**72.57**	**72.46**
Urd	1.55	4	3.9	4.01	4.44	4.41
Other pulses	0.15	0.12	1.6	2.12	2.29	2.3
Total pulses	**1.7**	**4.12**	**5.5**	**6.13**	**6.73**	**6.71**
Rapeseed & mustard	0.5	1.7	2.7	3.1	5.84	5.66
Soyabean	1	2.3	3.7	3.62	3.81	4.02
Other oilseeds			0.3	0.07	0.08	0.08
Total oilseeds	**1.5**	**4**	**6.7**	**6.79**	**9.73**	**9.76**
Orange/citrus fruit	1.4	2.62	4.6	6	6.6/3.63	6.8/3.69
Other fruit	1.5	3.08	4.45	5.5	2.6/2.08	2.65/2.2
Total fruits	**1.91**	**5.7**	**9.05**	**11.5**	**9.2/5.1**	**9.35/5.89**
Vegetables	1	0.84	3.8	5.15	5.8	6
Potatoes	2.4	1.9	5	5.36	5.5	5.7
Large cardamom	11.1	14	20.9	22	23.5	23.6
Ginger	0.5	0.64	2.3	3	4.5	4.6
Rhizomatic crops	0.1	0.1	0.42	1.15	1.6	1.6
Flowers					0.35	0.5
Total miscellaneous				**13**	**28.62**	**31.51**

Source: Department of Agriculture, Government of Sikkim.

Table A6.4: Agricultural Yield: 1975-97

(kilograms/hectare)

Crop	1975-6	1980-1	1985-6	1990-1	1995-6	1996-7
Rice	877.19	718.24	1,100.00	1,373.21	1,372.61	1,378.96
Wheat	1,000.00	1,471.43	1,516.22	1,672.63	1,817.60	1,761.90
Maize	578.95	957.95	1262.82	1,443.61	1,416.02	1,419.52
Finger-millet	666.67	768	895.83	942.86	950	932
Barley	555.56	793.1	1,300.00	1,311.11	1,451.48	1,400.00
Buckwheat	533.33	500	690	825.58	790.97	776.7
Total cereals	659.26	920.45	1,212.34	1,401.88	1,402.60	1,398.07
Urd	387.1	730	743.59	760.6	724.1	748.3
Other pulses	666.67	833.33	1,062.50	1,122.64	1,179.04	1,173.91
Total pulses	**411.76**	**733.01**	**836.36**	**885.81**	**878.9**	**894.19**
Rapeseed & mustard	400	529.41	851.85	854.84	750.96	752.65
Soyabean	500	786.96	837.84	834.25	841.99	820.9
Other oilseeds			500	571.43	500	500
Total oilseeds	**466.67**	**677.5**	**828.36**	**840.94**	**784.54**	**778.69**
Orange/citrus fruit	2,571.40	2,805.34	2,630.43	2,575.00	2,396	2,439
Other fruit	733.33	974.03	1,370.79	1,463.64	1,587	1,590
Total fruits	1,620.60	**1,815.79**	**2,011.05**	**2,043.48**	**2,102**	**2,207**
Vegetables	5,000	4,047.62	6,289.47	6,796.12	4,482	4,500
Potatoes	3,333.33	3,494.74	5,280.00	6,524.25	4,000	4,093
Large cardamom	230	250	186.6	163.64	191.48	190.67
Ginger	4,000.00	5,000.00	4,739.13	5,333.33	5,333.00	5,434
Rhizomatic crops	1,000.00	2,000.00	2,619.05	2,608.70	2,625.00	8,812
Flowers					3,000	3,333
Total miscellaneous					**1,477.99**	**1,827.04**

Source: Department of Agriculture, Government of Sikkim

Table A6.5: Veterinary Services

	North	East	South	West	Total
Veterinary hospitals	3	4	2	3	12
Veterinary dispensaries	4	9	7	5	25
Stockman centres	9	18	15	16	58
Veterinary doctors	5	34	5	7	51

Source: Department of Animal Husbandry and Veterinary Services, Government of Sikkim.

Table A7.1: Registered Industries

(number)

As on 1.3.1997	East	North	South	West	Total
Registered	958	120	435	265	1778

*Source:*Bureau of Economics and Statistics, Government of Sikkim.

Table A7.2: Co-operatives

(number)

As on 31.3.1997	East	North	South	West	Total
Milk Producers Co-operative Societies	10	5	9	11	35
C.C.S.	55	10	23	27	115
Number of Milk P.C.S.	30	1	19	35	85
Membership of all Co-operative Societies	9453	1482	8863	9438	29236

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A7.3: Tourist Traffic

(number)

	1995	1996	1997*
Domestic	98556	107169	67225
Foreign	5866	8639	5601

*Till June, 1997.

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A8.1: Road Statistics (the Special Category States)

	Road Length in relation to Area & Population 1995-96		Total and Surfaced Road Length in India 1995-96			Connectivity of villages* with population less than 1000	Expend. on Roads & Bridges (State Sec) Per Capita Expend (Rs.)	Total Outlay for the Eighth Plan	
	Per 100 sq. km. of area	Per Lakh of Population	Surfaced Length as % of total	Surfaced Length per 100 sq. km.	Surfaced Length per Lakh of popn.			Share of Expenditure on Roads	Per Capita Outlay (Rs.)
Arunachal Pradesh	12.2	1137.8	38	4.6	432.4	21.2	4676	36.44	12833
Assam	86.8	305.3	16.8	14.6	51	64.7	146	7.02	2081
Himachal Pradesh	53.2	580.6	49	26.1	278.8	43.8	742.4	15.43	4811
Jammu & Kashmir	5.9	169.4	62.5	3.7	108.8	57.8	455.8	8.77	5194
Manipur	48.2	597.8	33.4	16.1	195.4	40.7	1039.8	19.54	5321
Meghalaya	37.4	466.2	47	17.6	222.9	49.9	1477.7	25.42	5813
Mizoram	32.8	987.1	34.1	11.2	337.1	76.2	1748.6	16.04	11058
Nagaland	82.8	1144.3	18.3	15.2	207.8	90.8	567	8.13	6975
Tripura	140.4	545.4	31.1	43.6	163.5	80.8	427.3	10.59	4094
Sikkim	**25.8**	**458.5**	**83.3**	**21.8**	**381.7**	**70.9**	**2251.5**	**16.37**	**13415**
All India	**73**	**284.1**	**55.5**	**40.6**	**157.6**	**37.8**	**149.1**	**6.78**	**2200**

*The ratio of villages connected upto 1994-95 to total number of villages.

Source: Basic Road Statistics of India, 1995-96.

Table A8.2: Road Length

(Km.)

	1992-93	1994-95
Nationalised Highway	40.00	40.00
State Highway	225.00	186.00
Major District Road	446.00	464.00
Other District Road	845.00	849.00
Total Roads (State)	1516.00	1727.75
Surfaced	719.00	776.75
Unsurfaced	897.00	911.00

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A8.3: Operational Performance of the Transport Sector

	1993-94	1994-95	1995-96	1996-97	1997-98
Average number of vehicles held	328	328	315	308	307
Average number of vehicles on road	259	214	212	215	222
Fleet utilisation (%)	79	65	67	70	72
Effective Km operated (in lakhs)	84	82	82	82	82
Average effective km. Covered per fleet per day	70	68	71	73	73
Loss per Km (in paise)	634	837	1207	1034	933
Passengers km scheduled (in lakhs)	1108.87	1108.87	1108.87	1108.87	1180.41
Passengers km operated (in lakhs)	451.97	445.62	470.88	517.47	412.58
Occupancy ratio (%)	41	40	42	47	35

Source: Accountant General, Memorandum to the Eleventh Finance Commission.

Table A8.4: Communications

Particulars	East	North	South	West
Telephone Exchange (All electronics)	8	3	5	3
Telephone in use	4575	178	909	440
Public Call Office	5	–	–	1
Village Panchayat Telephones	36	26	69	64
STD/ISD/PCO	73	1	10	1
PBX	2	–	–	–
Telegraph Office	1	–	–	1
Combined Office	5	–	–	1

Source: Bureau of Economics and Statistics, Government of Sikkim.

Table A8.5: Power

Year	Installed Capacity	Firm Power Load	Peak Load	Peak Shortfall
1988-89	21.50	11.30	17.00	5.70
1989-90	21.60	11.40	20.00	8.60
1990-91	21.60	11.40	23.00	11.60
1991-92	21.80	11.65	23.00	11.35
1992-93	25.80	13.65	23.00	9.35
1993-94	31.80	16.65	25.00	8.35
1994-95	33.80	18.65	28.00	9.35
1995-96	35.80	19.65	30.00	10.35
1996-97	35.80	19.65	32.00	12.35
1997-98	38.10	19.95	33.98	14.03

Source: Annual Report 1996-97 & 1997-98, Power Department, Government of Sikkim.

Table A9.1: Banking Indicators

	East	North	South	West	Total
Number of Branches					
Total	21	6	7	8	42
Rural	12	6	7	8	33
Semi-urban	9	–	–	–	9
Number of Loans Accts. (Priority Sector)	8455	1774	4818	4049	19096
Number of Loans Accounts per branch (Priority Sector)	403	295	688	506	455
Average Population covered per branch	8498	5206	14086	12270	10015
Average No. of Villages covered per branch	6	7	18	14	10
Total Deposits (31.3.1998) (Rs.in lakh)	22525.43	662.95	2212.86	1536.45	26937.69
Average Deposit per Branch (Rs.Lakh)	1072.04	110.49	316.12	192.05	641.37
Growth in Deposit					
1998 over 1997	9.81	18.78	14.04	16.70	10.73
1997 over 1996	25.42	26.42	34.35	12.56	25.33
Total Loans Outstanding (31.3.1998) (Rs Lakh)	4869.45	199.75	441.89	394.95	5906.04
Percentage increase in Outstanding					
1998 over 1997	44.10	30.16	15.91	10.40	38.27
1997 over 1996	0.01	40.21	30.98	1.82	3.41
Outstanding per accounts (Rs Lakh)	0.57	0.11	0.09	0.10	0.31
Outstanding per branch (Rs Lakh)	231.87	33.29	63.12	49.36	140.62
Percentage of agricultural advances to total advances	7.30	38.92	28.02	38.96	12.04
Credit deposit (CD) Ratio (as on 31.3.1998)	21.60	30.13	20.00	27.00	21.90

Source: Potential Linked Credit Plan: 1999-2000, National Bank for Agriculture and Rural Development, Gangtok, Sikkim.

Table A9.2: State-wise Credit Deposit Ratio

(Percent)

State	Credit-Deposit Ratio						
	1996		1997		1998		1999
	As per Sanction	As per Utilisation	As per Sanction	As per Utilisation	As per Sanction	As per Utilisation	As per Sanction
North Eastern Region	35.5	41.1	32.1	36.1	30.4	33.5	28
Arunachal Pradesh	12.8	24.6	12.4	17.6	13.3	16.8	14.1
Assam	40.3	45.4	36.3	41.5	33.6	37.8	31.5
Manipur	56	55.7	63.7	63.4	58.2	58.6	41.7
Meghalaya	15.2	23.6	15.1	14.1	15.4	15.7	16.7
Mizoram	15.9	23.5	13.8	14.7	23.2	25.2	20.6
Nagaland	28.9	37.3	22.2	29.9	19	21.2	15.7
Tripura	43.9	44.7	38.7	39.3	33.8	35.1	29.4
Sikkim	**21.1**	**22.3**	**17.4**	**18.1**	**21.3**	**18**	**20**
All India	**59.8**	**59.8**	**56.8**	**56.8**	**55.3**	**55.3**	**55.5**

Source: Report on Trend and Progress of Banking in India 1998-99, Reserve Bank of India.

Table A 9.3 Number of Bank Branches

Districts	Rural			Semi Urban			Total		
	Public Sector Bank	State Bank of Sikkim	Sikkim Bank Ltd.	Public Sector Bank	State Bank of Sikkim	Sikkim Bank Ltd.	Public Sector Bank	State Bank of Sikkim	Sikkim Bank Ltd.
East	11	5	3	9	4	1	20	9	3
North	6	2	0	0	0	0	6	2	0
South	8	5	1	0	0	0	8	5	1
West	8	5	0	0	0	0	8	5	0
Total	**33**	**17**	**4**	**9**	**4**	**1**	**42**	**21**	**4**

Source: Potential Linked Credit Plan:1999-2000, National Bank for Agriculture and Rural Development, Gangtok, Sikkim.

Table A9.4: Credit Deposit Ratio

District	1995-96	1996-97	1997-98
East	20.66	16.47	21.6
North	24.79	27.5	30.13
South	20.15	19.64	19.96
West	30.04	27.17	26.51
Total	**21.28**	**17.56**	**21.90**

Source: Potential Linked Credit Plan:1999-2000, National Bank for Agriculture and Rural Development, Gangtok, Sikkim.

Table A9.5: Recovery Rate: District-wise

District	1995-96	1996-97	1997-98
East	26.17	25.48	29.7
North	25.92	38.59	31.12
South	22.31	35.99	34.00
West	37.5	50.45	35.14
Total	**27.01**	**32.5**	**33.50**

Source: Potential Linked Credit Plan:1999-2000, National Bank for Agriculture and Rural Development, Gangtok, Sikkim.

Table A9.6: Recovery Rate: Bank wise

Percent recovery

District	As on 30.6.97	As on 30.6.98
State Bank of India	26.15	29.1
Central Bank of India	42.77	37.4
U C O Bank	34.4	30.90
Canara Bank	68.13	82.6
Vijaya Bank	96.31	88.30
Bank of Baroda	33.87	48.3
Bank of India	95.79	71.1
Total	**32.52**	**33.54**

Note: Percent of recovery is defined as (collection/demand).

Source: Potential Linked Credit Plan:1999-2000, National Bank for Agriculture and Rural Development, Gangtok, Sikkim.

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