

## RECOMMENDED ACTION PLANS FOR THE MARKET TOWNS WITH MOST POTENTIAL

### Rationale for Action Plan Development

The assessment of market towns with the most potential for development in each district context was carried out with the objective of developing Action Plans that would identify the course of action necessary, on a priority basis, for the promotion of these market towns. The idea was to help realise the potential of these market towns so that they could become the vehicle for spatio-economic transformation of the districts.

### Consideration in Action Plan Development

Annex 1 provides general guidelines with respect to the development of action plans for 'intervention' in market towns selected on the basis of their development potential. It also indicates the principal areas of investigation, the specific components that need to be better understood in each area, the method of enquiry that may be appropriate, and the reasons for investigation. The guidelines cover almost all the main areas of concern.

In preparing the Action Plans, the following concerns/guidelines were adapted to each situation and context.

- Spatio-economic diagnosis of the market towns with most potential (situation, problems, constraints, and current bottlenecks to action)
- Land use (present and future projects and the rationale for future projection)
- Action Plan development in the following areas as appropriate: production-related; basic infrastructure-related; human resource development (with a particular focus on women) related; environment-related project identification and action plan development; justification of the projects and action plans for market town development; identification of the financial resources required to undertake projects
- Identification of the following with respect to each major project:

- ▶ who benefits from the projects
  - ▶ who pays for the project (the idea is to be able to 'sell' these projects on the basis of their economic viability to relevant existing financial institutions)
  - ▶ who (what institution/agency) takes the lead in the initiation of the project
  - ▶ what are the institutional mechanisms to ensure sustainability of the project (in terms of management, maintenance, etc)
  - ▶ what are the financial implications of the project and what are the possible agencies that can be approached for financing
  - ▶ the environment and gender implications of the project (mitigation of environmental effects and avenues for involvement and participation of as well as direct benefit to women)
  - ▶ a process for using current institutional mechanisms for market town development or suggesting mechanisms that might be needed
- A major concern in the process of Action Plan development is that of ensuring the participation of local leaders, community workers, businessmen, and beneficiaries in the process of identifying problems; justifying the projects or activities to mitigate the problems; and identifying the process through which the project cost will ultimately be met.

Action Plans for the Market Towns with most potential were prepared, following the above guidelines in each context. A brief summary of Action Plans is presented below.

### Summary of Action Plans

#### *Dechang County, China*

Among the ten formally announced market towns in the county, Dezhou, Yonglang, and Badong were found to be the market towns with the most potential in Dechang County.

## A) Dezhou

Dezhou is one among 2,171 county towns in China and is located in the middle of the Anning River Valley. It is located between two large cities; Xichang, the capital city of Liangshai Yi Nationality Autonomous Prefecture about 55km away to the north, and Panzhuhua about 100km to the south. The population of Dezhou was 36,278 in 1992, nearly 64 per cent of which was comprised of rural population with agricultural IDs. It is a third grade<sup>7</sup> town in the city and town system of the Panzhuhua-Xichang region. The general characteristics of the *county towns* in China are: 1) they are the largest centrally-located towns in the county territories; 2) they are multi-functional towns and have a long background as historical, political, economic, and cultural centres of the county; 3) they manifest both urban and rural characteristics; and 4) they are administrative centres that play leading roles in the overall development of both urban and rural areas.

The town itself covers an area of 178ha, with a population of 14,300. The town has 1,000 households engaged in commercial activities. Nearly 50 per cent of these households are engaged in general stores and shops.

There are altogether 731 commercial units employing 1,309 people in the town. There is also an agricultural product exchange market. It opens every day for trading (retail and wholesale) and involves several hundred people each day.

The main sources of town income are industrial and commercial taxes. They account for nearly 1.2 million *yuan* per year. Agricultural tax accounts for about 600,000 *yuan* and the others, mainly fines, account for about 300,000 *yuan* per year.

One of the specific characteristics of Dezhou is that it is better connected with areas outside the county than with areas within the county. The existence of the agricultural products' exchange market evidences the fact that Dezhou acts as the hub of the agricultural economy of the region. Comparatively speaking, growth in the secondary and tertiary sectors is slower than in the agricultural sector.

The town itself suffers from poor infrastructure, which results in a low level of per capita income. Women's involvement in secondary and tertiary activities remains limited.

The annual population growth rate in Dezhou at present is more than four per cent per annum, which is a relatively rapid rate of growth for a county town. It is expected to reach six per cent before the year 2000. Keeping in mind this high rate of population growth in the area, it has to improve its infrastructure as well as its socioeconomic conditions. There is scope for further development of the metallurgical industry, food industry, rural industry, and tertiary sectors in the town and agricultural products, mainly rice, wheat, cash vegetables, sugarcane, fruit, and livestock products, in the rural areas. In order to raise the standard of living, further improvements have to be made in the existing drinking water supplies, drainage and sewage disposal systems, electricity supply, gas supply, and postal and telecommunication systems. The main constraints to meeting these development expectations in Dezhou are as follow.

- Limited capacity for revenue generation due to low level of per capita income
- Lack of rural enterprises and slow development of the industrial sector
- Growing labour force but shortage of skilled labour
- Heavy losses in state-owned enterprises which have to be subsidised at the cost of other productive investments
- Limited financial institutions with the capacity to invest in infrastructural development
- Limited specialisation/commercialisation in agriculture
- Lack of sufficient financial support from the government
- Lack of integrated market town development strategies and policies and institutions that deal with these concerns

In recent years, the promotion of industrial growth has been a major priority of the county government. The county government has identified a number of projects deemed necessary for the further development of Dezhou town. It has proposed the establishment of new industries and companies ranging from a silk plant, steel rolling mill, silica plant, carbon product plant, rare-earth element alloy mill, magnesium brick, and tour services' enterprises. Public infrastructure projects include construction of a stadium, library, recreation facilities for children and teenagers, and a scientific and technological hall. Other projects identified by the county government were the extension and maintenance of road and railway

7. The city and town system of the Panzhuhua-Xichang Region is classified into four grades

networks, telecommunications, drainage, and construction of parks and a green belt.

Almost all the projects identified by the county government are necessary for the further development of the town. Keeping in mind the present investment capability of the county government, it is doubtful whether all the projects can be undertaken at the same time. Prioritisation is necessary for the successful completion of projects. It is in this context that the study teams, in consultation with local bodies and community groups, formulated new projects that can contribute to the town economy. These new projects are expected to be financially viable and self-supporting with obvious socioeconomic benefits for the community and the county at large. Further, the projects are not expected to degrade the quality of the environment. A brief description of these projects is given below.

- 1) **Food Processing.** Dezhou is rich in agricultural resources, and it produces large volumes of good quality fruits, vegetables, and edible fungi. At present, there is only one small food processing plant. Most of the agricultural products are sold at low prices. Therefore, it is recommended that: (i) a new fruit processing plant be established; (ii) the existing wheat flour mill, which is part of the food processing factory, be expanded; (iii) the existing pig slaughterhouse be rebuilt and expanded with the addition of a new 40-tonne capacity refrigerator; and (iv) a new grain market be built to facilitate the exchange and sale of foodgrains. The total estimated cost of these activities is 3.4 million *yuan*. These activities will help to increase profits and taxes amounting to one million *yuan* per year and will create employment for over 100 people as well as increase farmers' income. The funding source is the already existing food processing factory (one million *yuan*). Funds can also be raised from the farmers themselves (1.4 million *yuan*) and from low-rate agricultural bank loans (one million *yuan*).
- 2) **Cement Plant.** The county has tens of millions of tonnes of high grade limestone deposits. This is enough to run a cement plant with a capacity of 0.3 million tonnes per year. The produce can easily be transported by the Chengdu-Kunming Railway or along the No 806 National Road. There is a 10KV transformer to supply electricity and a lot of labour is available for relatively low wages. The

estimated total cost is 50 million *yuan*. The output would be nearly 20 million *yuan* per year with a net profit of two million *yuan*. It will provide employment to 300 people. The main source of funds will be loans from the Construction Bank, the joint stock of the county inhabitants, investment from the cement plant, and cooperation from other counties.

- 3) **Metallurgical Mill.** At present there is a ferroalloy mill producing ten thousand tonnes of iron alloy a year. Raw iron ore is available from the county iron mine which has a deposit of ten million tonnes. Besides, there are several silicon mines with deposits of tens of million tonnes. The ferroalloy mill has been connected to the iron mine and the silicon mines by railways and highways. It has been recommended that the rated capacity of the electric stoves be expanded from 2x1,800KVA to 2x3,200KVA and that two new electric stoves with a capacity of 2x5,000KVA be installed. After the completion of the proposed activities, the output of alloy steel will increase from ten thousand tonnes to forty thousand tonnes a year, and its value will increase from 231 million to 800 million *yuan*. It will provide employment for 500 people. The estimated cost is 15 million *yuan* and the funding source could be the ferroalloy mill itself.
- 4) **Training Centre.** It has been recommended that a Silkworm Technical Training Centre with a capacity for training 150 participants be established. Farmers from around who are taking up sericulture as an off-farm activity will greatly benefit from the Training Centre. The required investment is one million *yuan*. The source of funding could be the county government.
- 5) **Others.** Other projects identified in order to improve the infrastructure in Dezhou, which will also help to develop tertiary activities, are construction of a new bus park, extension of old bus stations, construction of new housing, construction of a supermarket, hotel, grain market, agricultural and by-product market, national stadium, small parks, and 15 new retail departments. The total estimated cost of these activities is 12.2 million *yuan*.

#### B) **Yonglang**

Yonglang falls in Yonglang township which is located in the southern part of Dechang County.

It is located about 30km south of Dezhou, the county town. The total population of the township was 8,135 in 1993. The average annual growth rate between 1982 and 1990 was 1.5 per cent and between 1990 and 1993, 2.2 per cent. Many people, though living in the town, were engaged in farming. About 56 per cent of the total population in the town had agricultural IDs. Besides these, some 200 to 300 people have immigrated from other counties, such as Huili and Huidong, to run their businesses. Nearly 68 per cent of the total population above the age of six were literate. However, women had fewer opportunities for higher education and employment. More than 75 per cent of the total labour force were engaged in agriculture, and this figure was lower than the county average.

The township is relatively small, both in terms of area and population, but has the advantages of location and accessibility. It is located at the nodal point of three counties. The Chengdu-Kunming railway and Highway 108 pass through the town and there is also one railway station.

Compared to other townships, its resource base, both in terms of agriculture and minerals, is very limited. The per capita cultivated land is only 0.043 ha. It has to import grains every year. There is one prefecture-run silica mine and a township-run kaolin mine. Sugarcane is produced as a cash crop in Yonglang township, and it provides the material base for the sugar refinery in Dechang.

Yonglang is the second largest market town in Dechang County. The town has a total area of 7.82 ha with an elementary school, a high school, a nursery school, a post office, a cinema, a bank, a grain store, a marketing cooperative, a hospital, and government offices. The Urban Construction Bureau of Dechang County has built a market square and street. On market day, nearly 5,000 people visit the market to trade their farm products, handicrafts, firewood, and general groceries and on traditional holidays more than 10,000 people visit the market. Other roads with regional importance radiate from this market to other counties, namely Huidong and Huili, which are rich in mineral resources such as lead and zinc. These mineral products, along with other agricultural and forest products from these counties, are brought to Yonglang railway station to export to other areas. Similarly, manufacturing goods are brought first to Yonglang and transported to these areas. Hence, Yonglang is a major bulking and distribution centre.

The financial resources for the development of this market town can be raised jointly by the county government, township government, and private investors. The market square and market street were successfully built with the active participation of private investors in 1992 and 1993.

It is evident that Yonglang has been playing an important role in transferring, collecting, and distributing goods and services in the region. So it has a lot of potential for the development of secondary and tertiary sectors such as transport companies, wholesale businesses, handicrafts, food processing industries, and service industries.

The main constraints to exploiting the potentials of this market are shortage of power (electricity) and drinking water, poor communications, and shortage of development funds.

The following are the market town development projects that were identified after discussions with the local authorities and private dealers.

- 1) Electricity. Yonglang does not have its own power station and has to import power from outside. Industrial development in Yonglang has suffered mainly because of the lack of power. The existing transformer does not have sufficient capacity to fulfill the present needs. Thus, it has been recommended to install a new transformer with a larger capacity. The estimated total cost is 0.2 million yuan, and the probable investors are the township government and the county's Electric Power Company.
- 2) Water Supply. The demand for water at present is high, but the supply system capacity is limited to 2,000 persons per day only. It is recommended that the present water supply system be expanded. The estimated total cost of this project is 0.11 million yuan and the probable investor would be the township government.
- 3) Communication. A quick and prompt communication system is important for Yonglang town where trading, bulking, and distribution are the most important activities. With approximately 0.3 million yuan, Yonglang can utilise the communication cables and can be equipped with a modern communication system. Probable investors for this project would be the township government and private dealers.
- 4) Cement plant. This area is rich in limestone. It has been recommended that a cement plant

be installed on the west bank of Anning River; the cost of this is about 200 million yuan, and this includes the cost of the bridge over the river.

### C) **Badong**

Badong town, the centre of Badong township, is located on the lower reaches of Cida River. It is 13km from the county town, Dezhou. The highway from Dechang County to Yabin County passes through this town. Strategically located as it is, Badong has been playing an important role in the economy of Cida Valley.

Badong township has an area of 119sq.km. with a total population of 8,321. The population growth rate is high. About 57 per cent of the Badong township population are literate with a literacy level above the primary level.

Badong market town itself is small, covering about 50ha, with a population of about 2,500. Agriculture is the main economic activity in Badong. Nearly 95 per cent of the total labour force are engaged in agricultural activities. In recent years, rural industries, such as food processing, paper-making, ore dressing, and bricks, have been developing rapidly. There are about 121 enterprises employing 246 persons. Privately-owned enterprises have been increasing rapidly compared to state-owned and collectively-owned enterprises and their turnover is also increasing day by day.

Badong town has service institutions such as a primary school, senior middle school, junior middle school, hospital, and a grain shop run by the government.

Though the importance of Cida Valley decreased after the construction of the Chengdu-Kunming railway and Highway 108, Badong town has been developing slowly as a local market place typical of Chinese mountain areas. Trading is confined to local agricultural goods. In the past, between 1949 and 1979, it was also an administrative centre.

The major constraint to developing market towns like Badong is the total lack of knowledge among government officials about the role of market towns in the development of the rural economy, on the one hand, and the lack of the experience of a market economy among rural farmers on the other. The township government pays more

attention to agricultural and industrial development and less to social services. It has not yet been realised that brisk business through organised trading can help to promote the rural economy.

The absolute lack of integrated physical, economic, and social development planning, the township government's lack of financial resources, and very poor infrastructural development are the other major constraints in the further development of this market town.

After consulting and interviewing the concerned officials and community groups, the following projects have been identified for further development of Badong town. As regards financing, the county government and Badong's growing private traders could supplement low interest loans from the existing financial institutions.

- 1) Physical Development Plan. The unplanned growth of Badong market town has been creating problems of traffic congestion and other socioeconomic and environmental problems. A physical development plan with clear environmental guidelines needs, therefore, to be formulated and implemented.
- 2) Water Supply and Drainage. At present, people are using water directly from the Hongqi River, which is contaminated by the wastage of pulp mills located in the upper reaches, without any treatment. It has been recommended that a water treatment plant be installed in order to purify the drinking water and also to reduce the level of pollution in the river. Construction of street drains would help to create a healthy environment in the town.
- 3) Expansion of Power. At present, Badong market uses electricity from the Hongqi hydroelectric plant which has a capacity of 320kW; and this is not enough for further growth. Therefore, expansion in power supply becomes a priority.

### *Tehri Garhwal District, India*

In Tehri Garhwal District, the Mussoorie-Chamba-Rishikesh Axis was assessed as the axis with the most potential for the promotion of market towns. Among the settlements in this axis, New Tehri, Chamba, and Thatyur were assessed to be relatively important.

### A) New Tehri Township

What started as a resettlement township for the to-be-submerged Tehri Town is now the administrative headquarters of Tehri Garhwal District. Strategically located on the slopes of the mountain, it includes within its area half a dozen villages. The construction of the township, which is still going on, has been simultaneous with the construction of a network of new roads around it. It covers an area of 10.27sq.km, one third of which is to be conserved as a green belt. The population in 1991 was 4,494 and is estimated to be around 5,000 at present. Functionally an administrative town, it has more than 50 government offices/institutions.

The township consists of more than 180 functional units but does not have much scope for becoming a regional trade centre like old Tehri town. It offers excellent potential for development into a tourist town - an alternative to Mussoorie. Some specialised non-polluting industries could also be set up in New Tehri Township considering its infra-structural and institutional base.

The main problems of the town, as revealed in a random household survey, and ranked in order, are: water scarcity (in summer), erratic power supplies, very cold winters, inadequate market, and fuel shortage.

### B) Chamba

Chamba is a town situated mostly on a ridge with little flat land available for expansion. Its location is very strategic, being at the junction of two major transportation routes, one between Mussoorie and the New Tehri Township and the other connecting Rishikesh with Tehri (old) and Uttarkashi.

The population was less than 5,000 in 1991, but an additional area was included when Chamba was brought under a Notified Area Committee in 1992. The present population, within the notified area of seven square kilometres, is a little over 10,000. The number of commercial units has increased from only 74 in 1971 to 260 in 1994. Chamba was notified as a *Nagar Panchayat* in June 1994. The upgrading and enlargement of Chamba *Nagar Panchayat's* jurisdiction has rendered the land-use planning proposals made in 1989 somewhat redundant.

Problems of development in Chamba include inadequate drainage/sanitation, inadequate water supplies, poor power supply, lack of employment

opportunities, inadequate educational facilities, poor garbage clearance, inadequate market, and absence of community facilities.

The principal development problems result from its difficult terrain and scarcity of land suitable for development for a growing population and its activities. As a market town, it also lacks storage facilities, parking space, accommodation, and communication facilities.

### C) Thatyur

Thatyur is the headquarters of the Jaunpur Block. About 10,000MT of vegetables and fruits are exported from Aglar Valley, where Thatyur is situated, to Mussoorie, Dehradun, and beyond every year. Though the volume of trade and the potential for improvement are enormous, the town, with a population of around 600, is badly in need of even the most basic infrastructure and facilities essential for market development. The main development problems of Thatyur are: poor road connections between Thatyur and Suavakholi and Thatyur and beyond; inadequate transport services; a highly erratic power supply; insufficient water supply; lack of civic amenities; lack of telecommunication facilities; accommodation for visitors; absence of cold storage and godowns; lack of technical know-how; and so on.

A very peculiar but nonetheless real reason for its backwardness is that, while it belongs to Tehri Garhwal District, administratively Thatyur is part of the Uttarkashi MLA constituency. Hence, it does not get the benefit of budget allocations for development purposes from either district.

In spite of all this, Thatyur has substantial potential for becoming the main marketing centre for agri/horticultural products and tourism activities. It also has potential for the growth of agro-industries.

In looking at the Mussoorie-Chamba-Rishikesh axis, Action Plans have been developed with a view to exploiting the potential for diversifying economic activities in the region as a whole. The region has potential for the development of a number of farm activities, industrial activities, and tourism.

#### Farm Activities

1) *Apiculture*: The region offers potential for the development of apiculture as a cottage industry. Given the altitude variations, this is

possible at low and mid-altitudes. An individual bee box can generate as much as 10kg of honey annually. Extension support for the promotion of apiculture is necessary.

- 2) *Angora Rabbit Farming*: Angora rabbit farming can be promoted in belts where the temperature does not exceed 25°C (above 1,000 to 1,200m). There are enterprises close to Mussoorie and Ranichauri. The productivity per rabbit, per annum is around one kilogramme. Local people have responded well to training programmes. However, the provision of veterinary care and marketing support remains inadequate.
- 3) *High-Value Plant Culture*: Floricultural activities have now been introduced at higher altitudes close to Mussoorie and Dhanaulti. The focus currently is only on flowers for religious purposes in the holy towns of Haridwar and Rishikesh. Hitherto, this was largely catered to by growers further down in the plains. The future focus must be on exploiting the growing demand for cut flowers in metropolitan centres.

Medicinal plants and herbs can be grown in several places and at a range of altitudes. Moisture content in the soil is the critical factor in the cultivation of these plants. There are many off-the-shelf technologies available which can enhance the cultivation of flowers, medicinal herbs, and aromatic plants.

One aspect of the diverse plant practices of the people is the production of certain traditional exotic plants such as Amaranth and Gehath. The former, also called *Ramdaana* locally, is billed as the food of the 21st century by virtue of its low-calorie and high-nutritional value and easy cultivability.

Gehath is a legume that has been found to be extremely useful for treating patients with gallstones and kidney stones. These crops have to be promoted and their value realised for local communities.

- 4) *Sericulture*: Sericulture is an important activity that has economic and environmental spin-offs. The national sericulture programme has till now been focussed in Dehradun District. Since the infrastructure exists within the axis, it could be extended to Tehri Garhwal District. According to the project authorities,

sericulture, using a one-acre plot, can generate up to Rs 10,000 net income annually.

- 5) *Mushroom Farming*: A major hurdle to large-scale farming of mushrooms is their rapid rate of perishability. Sites will, therefore, have to be strategically chosen keeping proximity to the markets of Mussoorie, Dhanaulti, and Narendranagar in mind.

### Industries

- 1) *Food processing*: This activity offers considerable scope for development in the belt. In fact, the quality of certain horticultural crops currently produced, particularly apples and peaches, is not good enough to command better prices in comparison to those from the adjoining state of Himachal Pradesh. These could be processed into more valuable commodities.

Similarly, a variety of vegetables is available which requires storage facilities for certain periods. The abundant growth of rhododendrons in the Mussoorie-Chamba belt offers scope for high value canned exports provided a properly coordinated effort is evolved.

Places such as Chamba and New Tehri Township offer good prospects for electronic cottage industries as well.

- 2) *Mineral Water*: The Chamba-Narendranagar road alone has as many as 24 natural springs which can be developed to produce high-value mineral water. Those at higher altitudes and with catchments in uninhabited areas would be free of pollutants. The substantial market that the tourist traffic offers will in itself be sufficient, hence, no major marketing effort is required. These projects can be run by sustainable and manageable, wieldy small units and can yield greater economic returns to the locals themselves.
- 3) *Essential Oils*: Many plants grown in the region are excellent sources for the manufacture of high-value exportable essential oils. Virtually no effort has been made in this area so far. Inviting bio-technologists and technocrat-entrepreneurs to look into the prospects is bound to yield rich dividends.
- 4) *Tourism*: The single, largest potential economic activity is tourism. There are over 20

million tourists visiting the U.P. Hills. This belt itself, inclusive of Rishikesh and Dehradun, receives about 15 million tourists who, at present, travel to Mussoorie and Dhanaulti. A concerted effort is needed to promote destinations in the region by creating weekend getaways (at Narendranagar, Agrakhal, and in the proximity of Nag Tibba) and launching annual fairs and festivals at several other lesser-known centres of religious significance.

Action Plans have been developed for the promotion of apiculture in the Thatyur area, Hemval Valley, and the Siwalik slopes. Similarly, Action Plans for Angora rabbit farming have been proposed for Ranichauri, Suavakholi, Dhanaulti, and Kanatal. High-value horticulture is proposed in some areas, including Nagni, Dhanaulti, Ranichauri, Jajal, and Thatyur. Sericulture is proposed at lower altitudes around Thatyur, Jajal, and Fakot. Tourism promotion is proposed along the entire axis.

The Action Plans developed for the Mussoorie-Chamba-Rishikesh axis identify the locations for promoting the above activities, the spearhead agency, investment, and suggested phasing of the activity, and the implications and impact of the activity (Table 4.1). In addition, infrastructural facilities needed in Thatyur, Dhanaulti, Khaddukhal, Kanatal, Chamba, New Tehri, Ranichauri, Nagni, Agrakhal, and Narendranagar have also been identified (Table 4.2). The most frequently reported infrastructural facilities needed in the market towns along the entire axis are cold storage, a vegetable-processing centre, fax/public telephone, improved electricity supply, improved civic amenities, a veterinary hospital, accommodation, a plant nursery, a regulated market, drinking water, and improved public transport.

#### *Dang District, Nepal*

In Dang District, Lamahi, Bhaluwang, and Narayanpur were identified as the market towns with most potential. Action Plans were developed for these towns on the basis of the assessment of problems and prospects following a participatory methodology. Meetings with local people were organised in these three market towns. The participants were the members of the *Ilaka* Chamber of Commerce, members of the local club, local

businessmen and women, social workers, and local political leaders. The participants were requested to list measures that they feel are necessary for the sustained growth of the market centre and its hinterland. After listing all the required measures, the participants were asked to prioritise them. Discussions were also held to identify the financial source and implementing and maintaining institutions/agencies for the implementation of the proposed programme.

#### A) Lamahi

Lamahi in Chaulahi VDC is a fast growing market in Dang District. It has emerged as an important market centre for most of the settlements located south of the Highway. Before the construction of the Highway (i.e., before 1975), this market existed as an overnight stop. At present, Lamahi market has 284 functional units, of which 194 units are commercial. In 1988, it had only 201 functional units.

Lamahi has good market prospects because, apart from in the extreme east, there are no sizeable market centres in Deukhuri Valley. The highway has provided linkages with the major settlements in this region. The declining market conditions of Koilabas have further extended Lamahi's trading area. The main trading areas are Sonpur, Shishahaniya, Satbariya, Gangaparaspur, Gadawa, Bela, and some parts of Lalmatiya VDC. Wholesale trade of agricultural goods from Lamahi extends to Bhairahawa, Butwal, Nepalganj, and Kathmandu.

The locational advantages of Lamahi have been well realised and the government is attempting to develop this market in a planned way. For this purpose, the Town Development Committee was established in 1986. This committee has prepared a Town Plan of Lamahi. Nearly 68 hectares of land are allotted for town development, and this will extend up to Arjunkhola in the west, Arnahawa in the east, and Kolahi in the south.

Lamahi also faces many problems in its development. Some of the problems for the sustained growth of this town, in order of priority, after discussions with the local people, are as follow:

- ownership right to the land,
- drinking water,
- solid waste management,
- street drain,
- uncontrolled growth of buildings,

**Table 4.1: Action Plans Developed for the Mussoorie-Chamba-Rishikesh Axis**

Action Plans	Location	Activities	Spearhead agencies	Implementing agencies	Duration (years)	Investment (in million IRs)	Anticipated gross revenue	Employment generation
1. Apiculture	Aglar and Hemva valleys and Siwalik slopes	Production and promotion	Khandi and Village Industries' Board	NGOs, communities, groups, individual families	3	11.6	13.2	5,000-8,000
2. Angora rabbit farming	Ranichauri, Suvakholi, Dhanaulti, Kanatal	Production, promotion and marketing	NGO	Individual families, community groups, local entrepreneurs	3	37.0	56.0	2,000
3. High value plant culture	Potential throughout the region	Research on selection of species, promotion, and marketing	Jhardhar Gaon Sabha/ Almus Gaon Sabha	Jhardhar Gaon Sabha, Hill Campus of Pant University, Farmers and Entrepreneurs	4	11.0	33.5	1,000
4. Sericulture	Low and mid altitude area of Thatyur, Jaljala, Fakot	Production and promotion	National Sericulture Programme, Central Silk Board	National Sericulture Programme, NGOs, communities, and individual farmers	3	83.0	135.0	2,500
5. Tourism	Entire Axis	Development and promotional activities	Garhwal Mandal Vikas Nigam	NGOs, community groups, individual families	3	12.6	15.5	1,000-3,000
6. Others (artisanal products, mineral water, oil preparation)		Detailed investigation		Technological and Professional agencies		2.0		

**Table 4.2: Infrastructural Facilities Needed at Different Market Towns along the Mussoorie-Chamba-Rishikesh Axis**

Infrastructural needs	1	2	3	4	5	6	7	8	9	10	Total
Renewable energy	x					x				x	3
Cold storage	x	x	x	x	x	x	x	x	x	x	10
Improved water supply		x	x	x	x	x	x				6
Improved road access	x										1
Alternative farming resource centre	x			x						x	3
Fax, public telephone	x	x	x	x	x	x	x	x	x	x	10
Regulated market	x	x	x		x	x			x	x	7
Handicraft training and market centre	x				x						2
Veterinary hospital	x	x		x	x	x	x	x	x	x	9
Vegetable processing centre	x	x	x	x	x	x	x	x	x	x	10
Improved electricity supply	x	x	x	x	x	x	x	x	x	x	10
Plant nursery	x	x		x		x	x	x	x	x	8
Improved public transport	x	x	x	x		x	x				6
Improved civic amenities	x	x	x	x	x	x	x	x	x	x	10
Accommodation	x		x	x	x	x	x	x	x	x	9
Total	14	10	9	11	10	12	10	8	9	11	

1. Thatyur  
2. Dhanaulti

3. Khaddukhal  
4. Kanatal

5. Chamba  
6. New Tehri

7. Ranichauri  
8. Nagni

9. Agrakhaal  
10. Narendranagar

- lack of income-generating activities,
- deforestation,
- lack of public awareness about sanitation and health,
- lack of local-level institution to orient development initiatives.

A major problem is the lack of land ownership rights of the residents. The land where the market has been developing is legally owned by a Trust (Gorakchhya Nath - Ratna Nath *Guthi*). Because of the insecurity in land ownership rights, people stay for trade only for a few years and leave the area selling their tenancy to newcomers. This kind of migration has been continuing since the initial growth of this market town. It has been creating problems in developing institutions and in managing the environmental conditions of the area. In the absence of a land ownership certificate, which is required as collateral evidence, local businessmen cannot obtain loans from commercial banks. This has been limiting investment as well as trading activities in the area.

The Town Development Committee does not have the direct authority to raise funds from user groups, nor can it implement market development programmes. The committee has been trying to transfer landownership rights to the users from the *Guthi* (Trust). But this proposal has not yet been passed by the Central *Guthi Sansthan*. Immediate action should be taken to transfer the landownership rights from the *Guthi* to the users.

Drinking water is another major problem at present. However, a drinking water project is planned for completion within a year.

## B) Bhaluwang

Bhaluwang is an important market centre on the extreme eastern border of Dang District. It has altogether 168 functional units, of which more than 140 units are commercial. It was one of the important market centres in Rapti Zone. People from Pyuthan, Rolpa, and parts of Arghakhanchi District converged here for marketing in the past as well. The traders in this market town were initially from centres such as Koilabas. The importance of this market centre has been affected by the construction of the Ghorahi-Pyuthan and Rolpa roads. With the construction of the East-West Highway, which is aligned one kilometre south of old Bhaluwang market, a small new market began to emerge. The construction of the Bhaluwang-Pyuthan road in connection with the

construction of the Jhimruk Hydro-electricity project has spurred the rapid growth of this town. The growth rate of the old market town has been somewhat slower, but it is expected that both the old and the new *bazaar(s)*, separated by a distance of a few hundred metres, will merge into a single market town soon in the near future.

Bhaluwang market town faces many constraints to its sustained growth. The following are the problems reported by the people of this market place, in order of priority:

- ownership rights to the land,
- electricity,
- health service,
- drinking water,
- river bank cutting,
- parking,
- post offices and telephone,
- educational institutions (secondary school), and
- lack of local-level institutions to orient development initiatives.

The major problem for the growth of this market centre, as in Lamahi, is the land ownership rights of the residents. Almost all the land in the old market is public land and has not yet been registered in the names of the current residents. Almost all the buildings on these lands are temporary in nature though they have been situated in this place for the last 20 years. This insecurity has been restricting investment activities and the growth of the market town. Immediate action needs to be taken to give ownership rights to the users. Another major constraint to the growth of this market town is that many of the service institutions, such as telephone, post office, and health posts, are not available in this market town, although these services are available in the VDC.

## C) Narayanpur

Narayanpur market town in Narayanpur VDC extends in a linear fashion along the Ghorahi-Tulsipur road about 10km. west of Ghorahi, the district headquarters of Dang District.

The market town has a population of 374, is connected by a public bus service between Ghorahi and Tulsipur, and has altogether 52 functional units. The important functions include a drug store, readymade store, hotel/lodge, photo studio, goldsmith, agro-based mills, cooperatives, extension service, godown, police station, high

school, campus, and post office. These services are provided mainly to the people living in the surrounding villages.

Though this market centre lies almost midway between the two municipalities of Ghorahi and Tulsipur, it is growing due to its densely-populated hinterland. Of all the potential rural market towns in Dang District, Narayanpur is the fourth largest in terms of functional magnitude.

The main constraints in the growth of this market town, as identified by the townspeople, in order of priority, are as follow:

- lack of banking facility,
- lack of telephone facility,
- insufficient and unreliable supply of drinking water,
- lack of periodical market,
- insufficient health facility,
- lack of street drain,
- lack of employment generating activities,
- lack of irrigation facility,
- lack of rest houses near bus stops, and
- lack of local-level institutions to deal with the problems.

The Action Plans for these market towns were developed in light of the existing critical needs and were broadly categorised into four groups: 1) Physical Plans, 2) Infrastructural Needs, 3) Infrastructure and Environment-related Specific Projects, and 4) Production, Service, and Environment-oriented Human Resource Development Plan (Table 4.3). In each case, the lead agencies for the proposed project and the financial implications have also been delineated.

In **Lamahi**, a physical land-use plan has been developed keeping the needs of present and future growth in mind. Drinking water and upgrading of the road have been identified as the priority infrastructural needs. Among the environmental and infrastructural projects identified are Solid Waste Management and Street Drains. In the area of Human Resource Development, training activities for off-season vegetables and mushroom cultivation and livestock development have been proposed.

Experiences from other places in the *Terai* region of Nepal show that regional markets for vegetables, such as tomatoes, cauliflowers, and capsicum, already exist. Among the three vegetables identified, capsicum will have a market in

**Table 4.3: Infrastructural Needs and Action Plans for the Market Towns with Most Potential in Dang District, Nepal**

Action Plans	Lamahi	Bhaluwang	Narayanpur
<b>A. Infrastructural needs</b>			
1. Drinking water	x	x	
2. Electricity		x	
3. Irrigation			x
4. Schools		x	
5. Road improvement	x		x
6. Health service		x	x
7. Telephone		x	x
8. Post office		x	x
9. Bank			x
<b>B. Infrastructure and environment-related specific projects</b>			
1. Drinking water		x	
2. Bus park		x	
3. Solid waste management	x		
4. Street drain	x		x
5. Waiting shed			x
6. Road construction			x
7. Protection of river bank		x	
8. Irrigation			x
9. Hygiene and cleanliness	x		
<b>C. Production and Service Oriented Human Resource Development Plan</b>			
1. Off-season vegetables	x	x	x
2. Mushroom cultivation	x	x	x
3. Livestock development	x	x	x
4. Hair cutting saloons	x		
5. Tailoring	x		

the adjoining hill region and even in urban centres, such as Kathmandu and Pokhara, where the important consumers are hotels and restaurants. Immediate training needs identified by the prospective entrepreneurs at Lamahi, Bhaluwang, and Narayanpur are associated with capsicum. Training programmes on the cultivation of vegetables, such as cabbages, cauliflowers, and tomatoes, can be tied to national and regional institutions such as the Vegetable Development Department of HMG/Nepal. The training could be conducted locally

through the District Agricultural Development Office. The trainees from these programmes can then impart skills to other farmers at the grassroots' level.

Mushrooms fetch a good price, both in the local markets and in other urban centres. There are mainly two varieties promoted in Nepal and the spores are available at Khumaltar agricultural station. *Plutorus* can be cultivated without much difficulty and over a relatively longer period (six months). Another variety, i.e., *Agicus*, is limited to only one growing cycle (three months). Since both varieties can be cultivated in cooler months in this district, excess produce could be dried and sold in different markets. Presently, the government has been conducting training programmes on mushroom cultivation. The department has a laboratory for the production of mushroom spores which are distributed and sold to prospective farmers. However, the department does not have subsidised or paid training programmes for farmers outside the Kathmandu Valley. These need to be developed.

With the growing rate of urbanisation, the demand for livestock products will grow. Therefore, prospective entrepreneurs should be trained in livestock development.

Training for prospective entrepreneurs in hair dressing and tailoring will help to generate employment opportunities within the market towns. There are good prospects for one or two saloons and some tailoring shops specialising in *Tharu* dresses in Lamahi. Moreover, training programmes to create awareness about cleanliness and hygiene among women in different households need to be launched.

It is suggested that all these training activities be linked with existing government or NGO programmes.

In **Bhaluwang**, a physical land-use plan has been proposed in view of the present and future prospects of growth. Priority infrastructural needs include drinking water, electricity, health, and communication services. Among the environment-related projects are the Drinking Water Project, a project to control river bank cutting along the Rapti River, and construction of a Bus Park to relieve traffic congestion. Similar to Lamahi, off-season vegetables, mushroom cultivation, and livestock development have also been proposed as human resource development and training activities.

Unlike Lamahi and Bhaluwang, **Narayanpur** is expected to undergo a slower rate of physical expansion. The land-use plan for Narayanpur has been formulated with a view to expanding commercial and institutional functions in the future. However, land-use control will be difficult due to the fact that most of the land is privately owned.

The major infrastructural needs relate to communications, road improvement, health services, and banking. The specific infrastructural and environment-related projects that have been proposed relate to street drainage; irrigation (to increase marketable agricultural production); construction of a Bus Park and shed; and road construction and improvement (for improved access from the hinterland). Training programmes for the development of off-season vegetables, mushrooms, and livestock have also been proposed.

The Action Plans that have been proposed are complemented by a set of policy recommendations. The overall emphasis is on creating institutions at the local level for market town development. Minimum infrastructural standards need to be maintained; a road transport master plan has to complement efforts to promote investment in market towns; and a regular system of creation and updating of a basic data set for market towns needs to be introduced.

#### *Ghizar District, Pakistan*

In Ghizar, the four settlements assessed to have the most potential for development are Gupis, Yasin, Chatorkhand, and Gahkuch. In order to develop action plans, questionnaires covering several pertinent issues were formulated and interviews were conducted with government officials, local businessmen, social organisers, and activists from Village/Women's organisations in all these market towns. After analysing this information, action plans were developed. The required infrastructural facilities and proposed action plans for further development of these most potential market towns are presented in Table 4.4.

##### A) **Gupis**

Gupis has a better economic and social infrastructure. It has an agricultural bank, hydroelectricity, one national bank, a post office, a public call office, a 10-bed hospital, a basic health unit, one middle school for boys and high schools for both boys and girls. In addition, Gupis has a

**Table 4.4: Infrastructural Needs and Action Plans for the Market Towns with Most Potential in Ghizar District, Pakistan**

Activities	Gupis	Yasin	Gahku- ch	Chatork- hand
<b>A. Infrastructural needs</b>				
1. Irrigation	x		x	
2. Water supply	x			
3. Hospital	x		x	
4. Civil supply depot	x			
5. Road improvement	x	x	x	x
6. Improved supply of electricity		x	x	x
7. Postal service				x
8. Fruit nursery				x
9. High school				x
<b>B. Production and service-related specific plans</b>				
1. Irrigation	x			
2. Manufacturing skills' development by establishing a vocational training centre (spinning weaving, garments)	x	x	x	x
3. Tanning factory			x	
4. Fruit processing		x		x
5. Vineyard			x	
6. Nursery research				x
7. Livestock development	x		x	x
8. Vegetable seed production				x
9. Training on extraction and processing of minerals				x

drinking water scheme, though not all the inhabitants benefit from it at present. It has over 70 functional units and the growth in commercial functions has remained rapid. It has a population of about 3,000. The main agricultural products grown in Gupis are wheat, maize, potatoes, and tomatoes. Potatoes and tomatoes are the two main products traded in the village *bazaar(s)*, but only on a marginal scale. Tourism is growing, with about 400 to 600 people visiting the place annually. Accommodation facilities are also growing. Gupis imports wheat, manufactured goods, and fuelwood and exports skins of goats, sheep, and yak in addition to horticultural produce such as apples, apricots, walnuts, and almonds.

8. In 1993 there were 29.77 Pakistani rupees to the US Dollar.

In terms of infrastructural requirements for market town development, the following were ranked as important: metalling of the road from Gilgit to Gupis, irrigation channels, a hospital, a water supply scheme, and a civil supply depot. Since the creation of a better basis for market town development requires an increase in marketable production, the irrigation channel project is regarded as vital to the development of the market. There are about 1,125 acres of land which can be used for productive purposes. If 50 per cent of this barren land was irrigated, the villagers could grow an extra 527 metric tonnes of wheat. Gupis town could then become a net exporter of wheat. This would boost the village economy substantially and give rise to a more market-oriented economy. It would cost PRs.<sup>8</sup> 2.5 million. Complete restoration of the 10-bed hospital and an increase in capacity to 25 beds would be a valuable infrastructure in this area. A number of income-generating activities for women has been proposed. These include promotion and marketing of poultry and vegetable goods and training for sewing and knitting.

#### B) Yasin

Yasin is situated at about 2,400m in a flat open and picturesque valley. It has electricity and a sanitation system, but the road condition is very poor. Trucks cannot reach Yasin market town. It has a population of a little above 2,500 and about 20 general stores. It has a post office, a public call office, a middle school for boys, a high school for girls, (the boys' high school is located a few kilometres away from Yasin proper) a basic health unit, and five government offices. The main agricultural commodities in Yasin are wheat, maize, barley, and vegetables. Almost all these products are being used for home consumption. It also has seven flour mills and six sawmills. Though this valley is suitable for the development of trekking tourism, it has not yet picked up.

Almost all the items in the general stores are imported. Exports from Yasin are virtually non-existent, aside from a few individual households taking small amounts of dried apricots down to Gilgit. Though the area is suitable for walnut cultivation, very few households grow them for sale. The reason for this limited production of walnuts in the area is that earlier generations refused to plant fruit trees because the *Mir* de-

manded an excessive portion of the produce in taxes. The *Mir* system was abolished in Yasin in 1974, but, even today, very few households have walnut trees. The valley is rich in minerals and marble, but there is very little commercial activity.

The main infrastructural needs are upgrading of the road from Gilgit, which is regarded as the key to development in many other areas, and sufficient supply of power. The lack of non-agricultural enterprises prevents the town from becoming a significant market centre. It has therefore been suggested that upgrading of manufacturing skills would have a significant impact on the area in terms of economic growth.

Action Plans proposed for Yasin include a Vocational Training Centre for imparting training in manufacturing garments and shoes and a fruit processing unit. The Training Centre could be operated through the involvement of existing village organisations. Training in livestock management and promotion of family planning were the other projects considered.

### C) Gahkuch

Gahkuch is the most developed market town in Ghizar District. It is situated at an altitude of 1,670m and has a population of over 5,000. As the district headquarters, Gahkuch has several government offices. It has a post office, a public call office, commercial banks, an agricultural bank, a hospital, a basic health unit, and primary and high schools. It also has electricity. It has a total of 55 general stores. This market town has been growing rapidly in terms of functional units, range, and magnitude, as well as population. The main agricultural products of this area are wheat, maize, barley, and potatoes. The most important fruits are apricots, grapes, and walnuts. There is very little industry. There are only two sawmills, three welders, four blacksmiths, and 25 masons in lower Gahkuch. Tourism is nascent, although tourist attractions, including cross-country skiing prospects, exist. Vegetables and potatoes are the local commercial produce. The goods being exported from Gahkuch are primarily dried apricots, walnuts, almonds, apricot kernels, and skins and hides. There is one wholesaler in Gahkuch dealing in nuts and dried fruits. All the produce is exported directly to Rawalpindi. Few perishable fruits are exported to Gilgit as the road condition is very poor. One Pathan wholesaler comes to this market town once a year to collect skins and hides

for down country export. Annually, one truck load is taken to Lahore. It is expected that when the road has a metal surface, all sorts of exports can be increased, in particular perishable fruits like fresh apricots and grapes.

In addition to upgrading and metalling the road from Gilgit to Gahkuch, the other infrastructural requirements include a hospital, a better electricity supply, lift irrigation, and control of the river channel.

Among the productive activities for promotion are the establishment of a tannery for processing skins and hides and a vineyard for grape cultivation. In spite of the government's apathy towards the establishment of a winery, there are good prospects for exports. Villages in Ghizar have an average of 100 grapevines. Villages in Punial have more than 3,600 vines. Presently, there is barely any market for grapes in the district and taking fresh grapes to Gilgit results in a lot of wastage and, hence, low prices. It has also been recommended that the winery be located in the vicinity of Gahkuch town; the prime product would be white wine at first and rosé and red wine and cherries in the later stages; bottles, corks, and labels would be brought from down country, unless these are produced locally; and the final products will be sent to Islamabad and Karachi for sale to the non-Muslim/expatriate community and also for export. The Government of Pakistan would have to play a leading role in the venture as it would be giving the permit to run these operations and also outlining the rules and regulations to be followed.

Promoting women entrepreneurs for commercial activities, particularly poultry-raising, is also suggested.

### D) Chatorkhand

Chatorkhand has a population of around 2,500. It has grown pretty rapidly in the last decade. Currently, it has 40 general stores, has electricity, and has a commercial bank, a post office, a public call office, one 10-bed hospital, a basic health unit, and schools and government offices. The only industries are four sawmills. There is no tourism and the prospects are not bright. Chatorkhand imports wheat and manufactured goods. Dried apricots, walnuts, and almonds are the main export items. The village is self-sufficient in vegetables and fruits.

Road improvement is the foremost infrastructural requirement, as the roads are in an appalling condition and are not suitable for trucks. Other requirements for Chatorkhand include improvements in the postal and educational services. Establishment of a fruit nursery and a fruit processing unit could further enhance market town development in Chatorkhand. It is expected that the proposed fruit nursery will be able to identify and recommend high yield varieties of fruit trees based on its research findings. Prospects for commercialising existing weaving activities also exist. Weaving rugs (*sharma(s)*) and knitting overcoats are common activities, but very few items are ever sold. Therefore, it has been suggested to establish a centre where *sharma(s)*, overcoats, and other articles can be made for export. There is also scope for the exploitation of mineral resources by providing technical skills for extraction and processing. A Vocational Training Centre to impart training in these areas has been proposed. This centre should work in close association with the Aga Khan Educational Services already active in the area.

Setting up poultry farms, promoting the commercial production of vegetable seeds, and training women in weaving would also address the needs of women in the area.

The general conclusion from the remote Northern Areas of Pakistan shows that here the need is for the provision of the most basic infrastructure and the focus must be on laying the foundations for rapid development of market towns in the future. The Action Plans, in this sense, are expected to help upgrade villages into market towns.

### Action Plans: A Comparative Perspective

The major constraints in the development of the market towns with most potential in the study areas are summarised and presented in Table 4.5. The Action Plans proposed for the market towns basically reflect these constraints. Various elements of the Action Plans can be generalised to show the kind of programmatic focus that may be required for the promotion of market towns in the HKH mountains. In almost all cases, subsistence agriculture; lack of rural infrastructure; very weak links with the production system in the hinterland; lack of a marketing culture and enterpreneurial skills; lack of institutional support to encourage group production, marketing, and transport; lack of storage and processing facilities; a limited capa-

city for revenue generation; lack of investment opportunities; lack of integrated market town development strategies and policies; and lack of institutions dealing with these problems emerge as the constraints to the development of market towns.

Almost all the market towns in the study areas demonstrate the lack of basic infrastructure such as drinking water supplies, electricity, communication facilities, road linkages with the immediate hinterland, and a physical planning framework to guide contemporary and projected developments. The lack of mechanisms at the national, regional, and district/county levels to recognise and support the process of spatio-economic development appears as a major caveat to the growth and promotion of market towns with potential.

The Action Plans emerging from the studies also reveal that the market towns cannot prosper unless the production potential of the hinterland is adequately tapped. In the context of a lack of specialisation and/or diversification of production activities of the hinterland, market towns can only play the role of bulking and distribution centres. There is a need, in almost all cases, to enhance both the forward and backward linkages of market towns. The role of market towns in encouraging market-oriented, specialised agricultural production, on the one hand, and agro-processing and related activities, on the other, is recognised in each case. It is only through this process that market towns can play effective roles as centres of rural production and employment. Institutions that encourage this process appear to be conspicuous by their absence in each context. In the context of the mountain areas of the HKH region, local institutions capable of playing this role may emerge only at a later stage. Therefore, the role of supporting government institutions becomes all the more important.

An area of enormous importance that emerges from the Action Plans is Human Resource Development. Recognition of the type and level of requisite skills and creation of such skills in a demand-driven context are therefore matters for priority attention. Since there are no local-level institutions and organisations that can articulate the needs of market towns, it has, in most cases, not been possible to strengthen local-level *receiving mechanisms* in the market towns. There seems to be enough scope to tap the HRD training capability of district, regional, or national level agencies in the market towns. This is an important area requiring further exploration.

**Table 4.5: Major Constraints in the Development of Market Towns in the Study Areas**

	Dechang, China			Tehri Garhwal, India			Dang, Nepal			Ghizar, Pakistan				Total
	1	2	3	1	2	3	1	2	3	1	2	3	4	
Drinking water		x	x	x	x	x	x	x	x	x				9
Electricity		x	x	x	x	x		x					x	7
Road			x			x				x	x	x	x	6
Irrigation									x	x				2
Drainage/sanitation			x		x		x		x					4
Cold storage/godowns	x			x	x	x								4
Telecommunications		x	x	x	x	x		x	x			x		8
Regulated markets				x	x	x			x	x				5
Civil supply depots										x				1
Civic amenities	x			x	x	x								4
Accommodation	x			x	x	x			x					5
Bus park/taxi stand	x							x						2
School/college					x			x						2
Hospital								x		x			x	3
Veterinary services				x	x									2
Plant nurseries				x		x						x		3
Handicraft/weaving centres			x		x	x						x		4
Agro-processing plants	x		x		x	x				x	x	x	x	8
Vocational training			x			x						x		3
Ownership right to land							x	x						2
Deforestation							x							1
Guided physical plan			x				x	x	x					4
Income-generating activities			x		x		x		x					4
Public awareness							x							1
Local institutions		x					x	x	x					4
River cutting								x						1
Mineral-based industries	x	x												2

- China:** 1. Dezhou, 2. Yonglang, and 3. Badong  
**India:** 1. New Tehri, 2. Chamba, and 3. Thatyur  
**Nepal:** 1. Lamahi, 2. Bhaluwang, and 3. Narayanpur;  
**Pakistan:** 1. Gupis, 2. Yasin, 3. Chatorkhand, and 4. Gahkuch

Financing the proposed Action Plans presents the most crucial of all constraints. Some market towns under study, for example, Dechang County, China, are examples of the financing role that the local private sector can play in market town development. In most cases, financial resources invariably have to be drawn from the existing public sector financial institutions. A process for market towns to qualify for such assistance and institutional accountability with respect to such assistance must, therefore, be established as a matter of priority.

In most of the Action Plans, environmental concerns do not emerge as strongly as one would assume they would. Although the issues of water pollution, river bank cutting, and the need to mitigate the adverse consequences of these problems are brought out in a few cases, the entire issue of seismicity and its implications for construction in the market towns, the issue of environmental sanitation and hygiene, and so on have to be addressed in the development of market towns. Awareness about these aspects is definitely warranted.