

33	Industrial Potential survey for Manipur and Sikkim	Pricewaterhouse-coopers, Kolkata	2003
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Executive Summary

A. MANIPUR

The report on ‘Pre-investment Feasibility Study on Industrial Potential Survey for Manipur’ provides a vision for development of potential industries in the State for the next ten years.

Manipur lacks behind the national norms with respect to their agrarian output resources, level of industrialization and infrastructure facilities. Lack of entrepreneurial culture, poor transport linkage, inadequate infrastructure facilities, poor employment opportunities with resultant diverse ethnic insurgency are the main factors which has caused an over all adverse economic development of this region.

A study had been carried out in Section 6.1 to 6.3 with respect to the physical profile, status of present infrastructure and mapping of existing resources of the State covering the following:

- ✓ **Physical Profile of Manipur:** Geographical Features, Area, Population, Climate, Temperature, Rainfall, Agro-climatic Condition, Soil Classification, Land Use Pattern and Cropping Pattern
- ✓ **Infrastructure of Manipur:** Physical Infrastructure, Social Infrastructure and Commercial Infrastructure
- ✓ **Natural Resources of Manipur:** Agriculture, Horticulture and Floriculture, Animal Husbandry, Sericulture, Mineral Resources and Forest Resources

The roles of Central and State Government organisations operating in the State have also been discussed in this section.

A diagnostic study has been carried out in Section 6.4 while analyzing the current industrial scenario of Manipur. The industrial development in Manipur has been very slow. Various factors, i.e., lack of infrastructure like power, transportation, communication, are responsible for the slow process of development which has a cascading effect on other factors like poor storage facility, lack of marketing network, lack of credit facility, lack of technological know how etc.

In section 7.1, projection has been done for natural resources of the State for the next ten years. Resource mapping has been carried out for the major agriculture, horticulture, plantation, sericulture and animal husbandry produces, which require processing or otherwise. The past production statistics have been analyzed and then projections have been made for future availability of surplus produces after normal consumption. The

additional production of resources will provide sufficient raw material to attract processing industries for value addition. Please refer Appendix V and VI for detailed analysis in this regard.

Potential Industries

Based on the various factors, sector wise survey by the PwCPL team, existing infrastructure, market demand a possible industrial investment projection is set out in the following sections for the potential sectors:

(i) Agro Based

The potential industries in this sector are integrated rice parboiling, hulling/de-husking/milling, bran stabilizing and captive power generation (based on rice husk biomass gasified dual fuel) unit, Non-flavoured potato chip projects.

(ii) Horticulture Plantation Based

The potential industries in these sectors are Multi-fruit juice project, Orange Squash & Jam/Marmalade, Pineapple/Mixed Fruits Jam and Jelly, Tomato sauce, Ginger oleoresin Extraction

(iii) Bamboo Based

Substantial bamboo resource in Manipur provides a good prospect for integrated bamboo based project of Bamboo Mat Board, Bamboo Mat Corrugated Sheets and Bamboo Floor Board. There is scope for setting up of Bamboo shoots project in the State.

(iv) Animal Husbandry Based

Demand of pasteurized and pouched milk is ever increasing with increase in per capita income, better education and sense of hygiene in this State. Pasteurized Milk & Cream Project can be viable in this sector.

(v) Mineral Based

Green marble (serpentine) slab, tiles & idocrase stone (semiprecious jewelry stone) processing plant may be set up based on the resource survey.

One Cement unit can be set up based on the locally available raw material resources.

(vi) Power Sector

Manipur has the potential of several biomass gasifier based rural/remote local area power project exploiting endless and regenerative bamboo resource.

(vii) Other Sectors

Investments in following demand-based industries are suggested for Manipur:

- ✓ Galvanized corrugated/plain steel sheet
- ✓ Aluminium extruded household product project
- ✓ PVC insulated electrical wire
- ✓ Nursing Home cum Diagnostic Centre Project
- ✓ Garment Project
- ✓ Silk Reeling unit

Model Project Profiles:

The Model Project Profiles for setting up units in the potential sectors have been given below covering the following:

- ✓ Location analysis
- ✓ Proposed Facility
- ✓ Technical study
- ✓ Brief market analysis
- ✓ Manpower requirement
- ✓ Availability of Central Govt. Scheme, if any,
- ✓ Government Regulation
- ✓ Promotional Agencies and Assistance
- ✓ Equipment Suppliers
- ✓ Financial analysis covering estimation of project cost, mode of financing the project, profitability, Cash Flow Statement and Projected Balance Sheet. The feasibility of the projects have been established using standard project evaluation criteria like Break-even analysis, Pay Back Period and Internal Rate of Return.

The total investment potential for Manipur in the next ten years is estimated at Rs. 18535 Lakhs with direct and indirect employment generation of 2435 and 7305 people respectively. The Number of Proposed Units, Locations, Key Indicators and total Investment required and total employment generation in various sectors are set out in the project profiles of the following:

A. Agro Based:

1. Integrated Rice Mill
2. Potato Chips (Small Scale)

B. Horticultural & Plantation Based:

1. Passion Fruit Vine
2. Pineapple/Orange Squash & Jam/Marmalade and Tomato Sauce Project
3. Multi Fruit Juice
4. Ginger Oleoresin

C. Bamboo Sector:

1. Bamboo Mat Board, Bamboo Mat Corrugated Sheets and Bamboo Floor Board
2. Bamboo Shoot Project

D. Animal Husbandry Based:

1. Pasteurized Milk and Cream

E. Mineral Based:

1. Cement
2. Green Marble

F. Power Based:

1. Bio Mass Gasifier Project

G. Other Industries:

1. Galvanized Corrugated Steel Sheet
2. Aluminum Extruded Household Product
3. PVC Insulated Wire
4. Nursing Home cum Diagnostic Centre
5. Garment Unit
6. Silk Reeling Unit

Conclusion and Way Forward

The objective of the Pre-investment Feasibility Study was identification of potential areas where industries can be set up and service sector activities can be generated on a sustainable basis. This evaluation combined with the selective Model Project Profiles will provide a vision on the industrial potentiality of Manipur.

The benefits of NEIP has been reflected in terms of the lower pay back period, break even point, higher IRR and sufficient cash generation to serve the interest and debts in the Model Project Profiles. This should bear a positive impact in the mind of the investors and encourage the merchant bankers to provide working capital loans.

The socio-economic development of Manipur will largely depend upon small and medium scale industries promoted by local entrepreneurs for which a number of suitable project profiles are incorporated in this report. The scope of few large-scale industries exists in agro-horticulture, bamboo, cement, green marble and power sector. This will generate direct and indirect employment and setting up of various forward and backward linkage support service sector units.

It is envisaged that the proposed industrial value addition activities will at large be able to reverse the trade flow across Indo-Myanmar border through Moreh, resulting into economic benefit for the people of Manipur.

B. SIKKIM

The report on 'Pre-investment Feasibility Study on Industrial Potential Survey for Sikkim' provides a vision for development of potential industries in the State for the next ten years.

The State lacks behind the national norms with respect to their agrarian output resources, level of industrialization and infrastructure facilities. Lack of entrepreneurial culture, inadequate infrastructure facilities are the main factors which has caused an over all adverse economic development of this region.

A study had been carried out in Section 6.1 to 6.3 with respect to the physical profile, status of present infrastructure and mapping of existing resources of the State covering the following:

- ✓ **Physical Profile of Sikkim:** Geographical Features, Area, Population, Climate, Temperature, Rainfall, Agro-climatic Condition, Soil Classification, Land Use Pattern and Cropping Pattern
- ✓ **Infrastructure of Sikkim:** Physical Infrastructure, Social Infrastructure and Commercial Infrastructure
- ✓ **Natural Resources of Sikkim:** Agriculture, Horticulture and Floriculture, Animal Husbandry, Sericulture, Mineral Resources and Forest Resources

The roles of Central and State Government organisations operating in the State have also been discussed in this section.

A diagnostic study has been carried out in Section 6.4 while analyzing the current industrial scenario of Sikkim. The industrial development in Sikkim has been very slow. Various factors, i.e., lack of infrastructure like irrigation, power, transportation, communication, are responsible for the slow process of development which has a cascading effect on other factors like poor storage facility, lack of marketing network, lack of credit facility, lack of technological know how etc.

In section 7.1, projection has been done for natural resources of the State for the next ten years. Resource mapping has been carried out for the major agriculture, horticulture, plantation, sericulture and animal husbandry produces, which require processing or otherwise. The past production statistics have been analyzed and then projections have been made for future availability of surplus produces after normal consumption. The additional production of resources will provide sufficient raw material to attract processing industries for value addition. Please refer Appendix IV and VI for detailed analysis in this regard.

Potential Industries

Based on the various factors, sector wise survey by the PwCPL team, existing infrastructure, market demand a possible industrial investment projection is set out in the following sections for the potential sectors.

It is assumed that the proposed industries would be set up in the proposed Growth Centers/IIDCs or other notified areas, where the State Government would provide land on leasehold basis at concessional rates. In case the potential investors are interested in setting up of industries at other locations, the land cost considered in the model project profiles has to be taken at Rs. 10 to 15 lakhs per acre in view of the scarcity of suitable industrial land near highway with a lesser slope.

(i) Agro Based

Based on the projections set out, industrial investment for value addition processing of the additional production in the case of potato is envisaged.

The potential industries in this sector are flavoured and non-flavoured potato chip projects, both in large scale and small scale.

(ii) Horticulture, Floriculture and Plantation Based

The additional production of horticultural, Floriculture and plantation produces will provide enough raw material resources to attract processing industries for value addition.

Agri-processing activities in the State largely consist of fruits and vegetables, spices and grain processing. There is good potential for the processing activities of the horticultural and food crops in Sikkim which also envisages the scope of agro-industrial infrastructure like cold storage, pre-cooling chambers, refrigerated vans, packaging facilities and other ancillary activities.

The potential industries in these sectors are Multi-fruit juice project, Orange Squash & Jam/Marmalade, Mixed Fruits Jam and Jelly, Tomato sauce, Cut Flower, Ginger and large cardamom oleoresin Extraction

(iii) Animal Husbandry Based

Dairy development in India has been acknowledged the world over as one of modern India's most successful developmental programme. Demand of pasteurized and pouched milk is ever increasing with increase in per capita income, better education and sense of hygiene in this State. One Pasteurized Milk & Cream Project is suggested in this sector.

(iv) Other Sectors

Aluminium extruded household product project

Market demand of extruded aluminium building hardware is growing day-by-day. Due to growing urbanization and house building activities, there is good prospect for setting up of such unit in Sikkim.

Nursing Home cum Diagnostic Centre Project

Health care is gaining increasing importance in recent years. The concept of health care is emerging from providing treatment to the disease for improvement of overall health status and also maintenance of good health. There is good prospect of setting up of this project.

Garment Project

Textile Industry has been playing a pivotal role in Indian economy. The prospect of garment industries all over the world is very bright. Sikkim being a peaceful State coupled with quality manpower resources can be a good location for development of garment sector. The proposed apparel unit will be engaged in the business of manufacturing and trading of garments, mainly for export purpose.

Cut Flower

The climatic condition of Sikkim is conducive for cut flower business. It has a good market and can generate self employment for a number of people.

(v) Tourism Sector

Investments in the following areas may be made for a sustainable development of tourism in Sikkim:

- Adventure Tourism
 - Hot Air Ballooning
 - Para Gliding
 - Skiing
 - Mountaineering
 - Rafting
 - Mountaing Biking
 - Bungi Jumping
 - Trekking

- Health Tourism
- Luxury Tourism
 - Conference Tourism
 - Ecotourism

- Community based Tourism (CBT)
- Circuit Tourism

Model Project Profiles:

The Model Project Profiles for setting up units in the potential sectors have been given below covering the following:

- ✓ Location analysis
- ✓ Proposed Facility
- ✓ Technical study
- ✓ Brief market analysis
- ✓ Manpower requirement
- ✓ Availability of Central Govt. Scheme, if any,
- ✓ Government Regulation
- ✓ Promotional Agencies and Assistance
- ✓ Equipment Suppliers
- ✓ Financial analysis covering estimation of project cost, mode of financing the project, profitability, Cash Flow Statement and Projected Balance Sheet. The feasibility of the projects have been established using standard project evaluation criteria like Break-even analysis, Pay Back Period and Internal Rate of Return.

The total investment potential for Sikkim in the next ten years is estimated at Rs. 7234 Lakhs with direct and indirect employment generation of 998 and 2994 people respectively. The Number of Proposed Units, Locations, Key Indicators and total Investment required and total employment generation in various sectors are set out in the project profiles of the following:

A. Agro Based:

1. Potato Chips (Large Scale)
2. Potato Chips (Small Scale)

B. Horticultural & Plantation Based:

1. Passion Fruit Vine
2. Orange Plantation
3. Orange Squash & Jam/Marmalade and Tomato Sauce
4. Multi Fruit Juice
5. Ginger Oleoresin
6. Large Cardamom Oleoresin

C. Animal Husbandry Based:

1. Pasteurized Milk and Cream

D. Other Industries:

1. Aluminum Extruded Household Product
2. Nursing Home cum Diagnostic Centre
3. Garment Unit
4. Cut Flower

Conclusion and Way Forward

The objective of the Pre-investment Feasibility Study was identification of potential areas where industries can be set up and service sector activities can be generated for on a sustainable basis. This evaluation combined with the selective Model Project Profiles will provide a vision on the industrial potentiality of Sikkim.

In recent past a number of entrepreneurs are showing interest in setting up of industrial units in Sikkim in view of its peaceful environment and proximity to a large market through Siliguri. Moreover since December 2002, Sikkim has also come under the purview of NEIP. This has encouraged a number of investors to come forward and invest in Sikkim to reap the benefits of NEIP. The benefits of NEIP has been reflected in terms of the lower pay back period, lower break even point and higher IRR and sufficient cash generation to serve the interest and debts in the Model Project Profiles. This should bear a positive impact in the mind of the investors and encourage the merchant bankers to provide working capital loans.

The socio-economic development of Sikkim will mostly depend upon small-scale industries promoted by local entrepreneurs for which a number of suitable project profiles are incorporated in this report. The scope of few large-scale industries exists in hydel power sector and tourism (5 star hotel and health resort) from large-scale corporate houses from outside the State. This will generate direct and indirect employment and setting up of various forward and backward linkage support service sector units.

In conclusion it is reiterated that, the proposed agreement with China of reopening the trade route through the Nathula Pass, will definitely have a positive impact on the economy of Sikkim by way of generation of employment opportunities in trading activities, transport related businesses and tourism sector especially if one Buddhist circuit can be conceptualized and operated through a combined tour of monasteries in Tibet and India.