

- (i) Providing adequate health facilities including specialized facilities
- (ii) Providing facilities to produce qualified medical professionals.

### Power

It is evident that MIEC region is facing demand-supply mismatch and it is likely to continue in future with development of proposed Growth Nodes/ Poles and other industrial hubs. Several power projects are under planning or implementation stages but unable to meet the ever increasing demand for power. Thus MIEC will support development of power projects to reduce demand-supply gap, reduce electricity costs and improve generation. The strategy suggested for power sector for MIEC is as follows:

- Increase generation capacity to lower demand-supply gap in MIEC countries.
- Promote rural electrification and make proper use of available fuels
- Promote cross-border power trade
- Promote renewable or alternative energy sources.

## 8. Proposed Initiatives for Growth Poles

**Bangkok Zone:** Bangkok Zone serves as the chief growth pole of MIEC. The city is also a major regional financial and logistics hub. It is expected that the zone would grow further and major need to address problems of congestion, environment, transport, housing etc. One of the strategies could be adopt to promote satellite towns creating sufficient incentives for industries to move outside the zone. Following initiatives are planned for Bangkok Growth Pole:

### Key Initiatives

- ✓ **Comprehensive Development Zone (CDZ)<sup>20</sup>:** It is proposed that two Comprehensive Development Zones be designated in this Growth Pole clustered around Samut Prakan and Pathum Thani provinces. Samut Prakan CDZ shall focus on expanding its electronic manufacturing industry to upstream value chain such as semiconductor material, diodes, transistors, etc. and downstream industries for exports like auto electronics. Pathum Thani CDZ shall focus on knowledge based industry i.e. IT/ITES/software and biotech.
- ✓ **IT/ITES/Biotech Parks:** Pathum Thani has potential to become hub/cluster of Knowledge-based industry because of high concentration of higher education institutions particularly in science and technology<sup>21</sup> and many research agencies in the province. Thus it can be developed as the preferred location for IT/ITES/biotech companies desirous of setting up/expanding their operations in GMS. The creation of Technology Parks like Thailand Science Park will further facilitate growth of knowledge industry.
- ✓ **Integrated Townships:** Pathum Thani and Samut Prakan have robust industrial activity that should continue to grow further. Thus it is proposed that an integrated township be developed as part of Comprehensive Development Zone. It would provide residential, institutional, commercial and leisure/recreation facilities for the workforce and resident population. Integrated townships will assist in of CDZs.

**Eastern Seaboard:** For both export and local manufacturing, the Eastern Seaboard has become Thailand's destination of choice for foreign investors. The Eastern Seaboard is home to major automobile giants and has more than 300 suppliers of auto parts and components apart from the firms engaged in automotive assembly. Superior logistics facilities like Laem Chabang Port (one of the world's busiest

<sup>20</sup> Note: Comprehensive Development Zone is a self-sustained area. Please refer to end note.

<sup>21</sup> Note: Asian Institute of Technology, Bangkok University etc

container port) and motorways provide this region a good connection with rest of the world and facilitate easy import/export of goods. The following Initiatives are planned for Eastern Seaboard:

#### Key Initiatives

- ✓ **Augmentation of Rail Link<sup>22</sup>:** Rail link between Laem Chabang Port and Bangkok (ICD Lat Krabang) shall be augmented to provide high-speed movement of cargo from port to rest of the country. The augmentation is proposed to reduce dependence on road, which has 68% share<sup>23</sup>, leading to reduction in freight costs and congestion on roads.
- ✓ **Expansion of ICD/Logistics Hub<sup>24</sup>:** Expansion of the existing Inland Container Depot at Lat Krabang and establishment of a Logistic Park shall be taken to cater to expected demand due to growth of port traffic and planned expansion of Laem Chabang Port to 11 million TEUs. This project is underway along with double tracking of rail line to Laem Chabang Port.
- ✓ **Water Recycling Plant:** In 2005, Eastern Seaboard faced a severe water crisis and going forward the water demand will keep on increasing. Thus a large shared Water Recycling Plant might be built for industries in order to supplement the existing water supply and enable judicious use of water resources.
- ✓ **Desalination Plant:** Desalination Plant can be evaluated as an option for provision of water at later phases. Thailand has already established small desalination plants in Phuket. The economic and technical feasibility of construction of such desalination plant shall be conducted for Eastern Seaboard to supplement the water sources.

**Phnom Penh Zone:** The economic activity of Cambodia centres in Phnom Penh and neighboring province of Kandal. In addition to promote industries, Cambodia needs to develop service industries like Financial Services, IT and other business services which play an important role in economic advancement. Thus the need would be to promote service industry in Cambodia building upon its 'demographic dividend'. Thus in addition to promoting industries Phnom Penh shall be developed as the main service centre for Cambodia. Following initiatives are planned for Phnom Penh Growth Pole:

#### Key Initiatives

- ✓ **Comprehensive Development Zone:** It is proposed that a Comprehensive Development Zone be designated in this Growth Pole ideally clustered with existing industrial estates across two provinces Phnom Penh and Kandal. Cambodia has focused on SEZs for export promotion. However, this zone shall focus on promoting self-reliance by providing infrastructure to industries for domestic consumption. The development of industrial estates and supporting infrastructure in Phnom Penh will facilitate growth of industries related to machinery, tractors, vehicles, consumer goods, chemical fertilizers, pharma, among others.
- ✓ **Road Links/Development of bypasses around Phnom Penh<sup>25</sup>:** In order to avoid the non-destined long distance traffic entering into Phnom Penh, construction of a bypass around Phnom Penh is suggested. This would entail economic benefits to the city through savings in vehicle operating costs, reduced travel time costs as well as reduced pollution for the city.

**Ho Chi Minh City Zone:** The zone witnesses significant amount of economic activity and is among the economically most developed regions in Vietnam. The rapid growth of the region has led to congestion. Thus, it is likely that rapid growth of Ho Chi Minh City would trigger economic growth of adjacent

<sup>22</sup> Note: Refer to Transport Linkages for detail discussions on Rail (page 13)

<sup>23</sup> Note: Road has 65% share in total Container Transportation of Laem Chabang. Source: Laem Chabang Port

<sup>24</sup> Note: Refer to Transport Linkages for detail discussions on Logistic Parks (page 17)

<sup>25</sup> Note: Refer to Transport Linkages for detail discussions on Roads (page 13)

provinces of Dong Nai and Binh Duong. The key initiatives planned for the HCM City zone are elaborated below:

#### **Key Initiatives**

- ✓ **Comprehensive Development Zone:** It is proposed that a Comprehensive Development Zone be designated in this Growth Pole clustered around existing industries/estates in area between HCM City and Bien Hoa. The zone shall focus on attracting electronic industry. Saigon Hi-tech Park and upcoming investments like Intel's new chip plant will give fillip to cluster electronics industry as there would be important synergies that would be generated in the zone in terms of core technologies, human resource, etc. It shall integrate clusters of light machinery industries producing electrical machinery, general machinery and its parts and components.
- ✓ **Software Technology Parks:** Software industry in Vietnam is a 'sun-rise' sector and Vietnam has potential to emerge as a major software sourcing destination in Southeast Asia. Zone. The park based on Indian development model can be important tool to facilitate growth of software industry<sup>26</sup>. Software Incubation Centre shall be also housed as an integral part of software park to provide workspace for start-ups. It shall also house a research institution for R&D activities.
- ✓ **Integrated Townships:** Bien Hoa has potential to be developed as satellite to HCM City. It already has robust industrial activity<sup>27</sup> and continues to get huge chunk of foreign investment to Southern Vietnam. Thus it is proposed that an integrated township be developed as part of Comprehensive Development Zone.

## 9. Proposed Initiatives for Growth Nodes

**Chachoengsao-Prachinburi Growth Node (Thailand):** Chachoengsao-Prachinburi showcases necessary potential to be developed as future industrial hub with focus on electronics, auto parts and components, high-value engineering machinery, etc. The key initiatives planned for Chachoengsao-Prachinburi growth node are given below:

#### **Key Initiatives**

- ✓ **Mega Industrial Zone:** It is proposed that Mega Industrial Zone be designated in this Node clustered around existing Industrial Estates in Chachoengsao and Prachinburi. The auto parts industry in Thailand manufactures most of the components used in automotive assembly and showcases sufficient skills. However, some of the high-end components<sup>28</sup> are still imported. Thailand can now focus on moving up the value chain and produce these components in-house. This area emerges as potential location for manufacturing firms for high-end auto parts because of proximity to Eastern Seaboard. MIZ will also house a Skill Development Centre providing specialized courses in electronics application, precision mechanics as well as industrial, mechanical, electrical engineering to meet up with skilled labour demand of industries.
- ✓ **Integrated Township:** Since Chachoengsao-Prachinburi can emerge as potential cluster of manufacturing industries, there would be need to provide residential, institutional, commercial and

<sup>26</sup> Note: India established many Software Technology Parks like Bangalore, STPI Chennai, STPI Hyderabad, STPI Mangalore, among many others.

<sup>27</sup> Note: Light machinery producing electrical machinery, general machinery and its parts and components are main industries.

<sup>28</sup> Note: Like Electronic-fuel injection systems, Moulds and Dyes, Jigs and fixtures, Anti-lock Braking Systems, Substrates for Catalytic Converters, etc.