

Prospects, Potentials and Opportunities of Several Emerging Sectors of Bangladesh: Light Engineering Sector, Automobile Sector, Toy Industry and Ship Building



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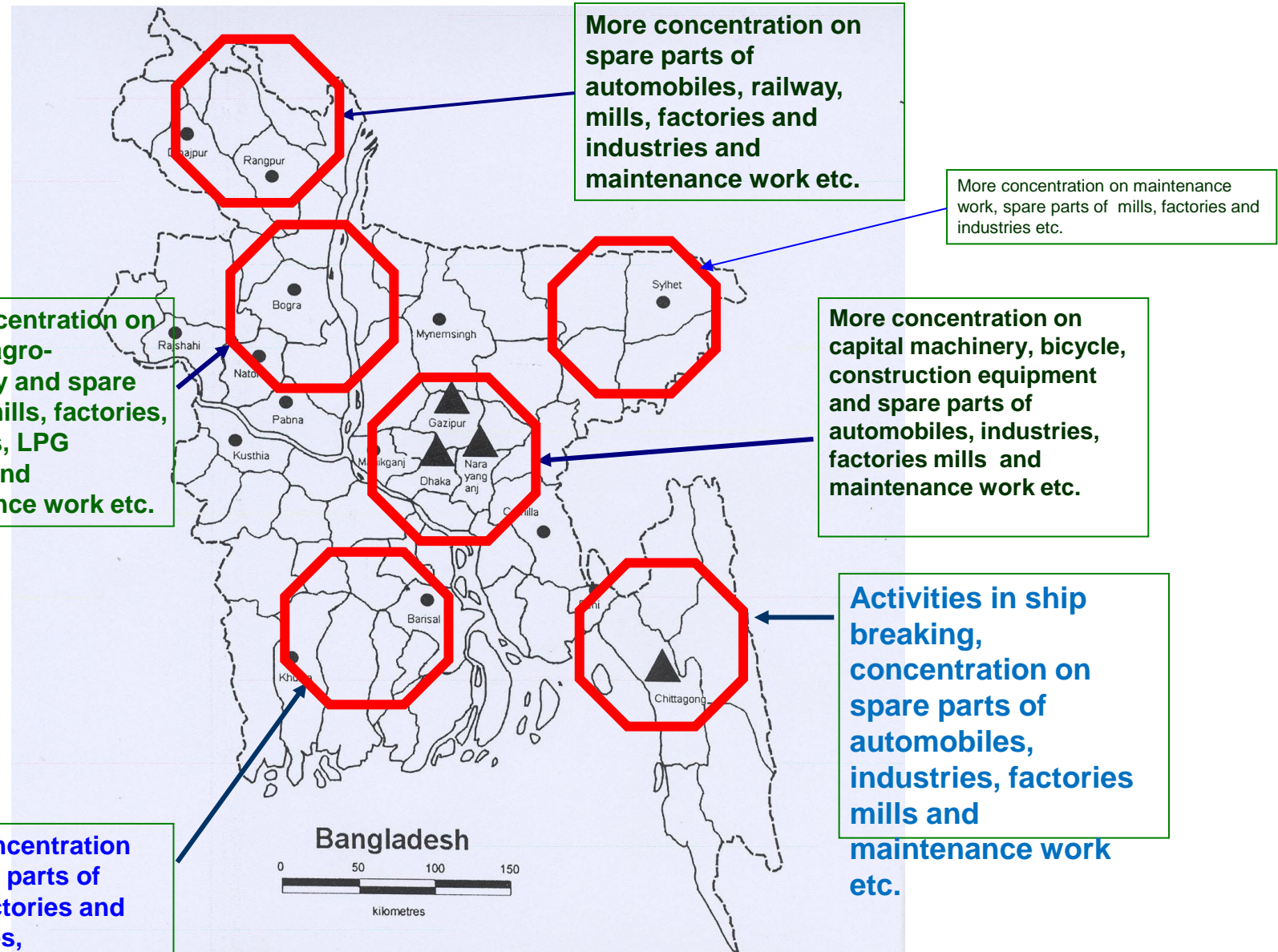
Light Engineering Sector of Bangladesh

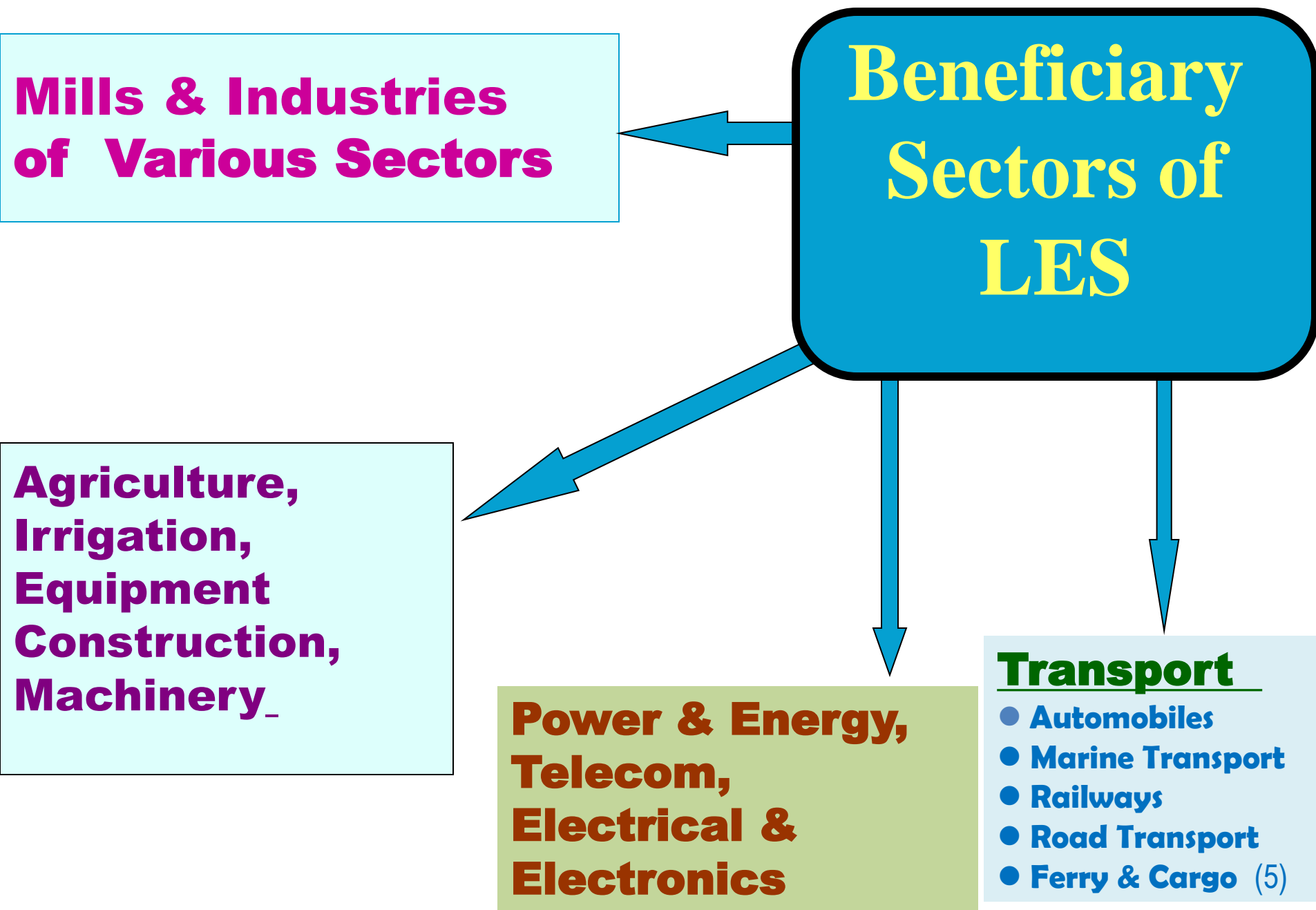


Geographical Distribution of LEIs: Thrust & Priority Sector



Product Country Map of Light Engineering Industries

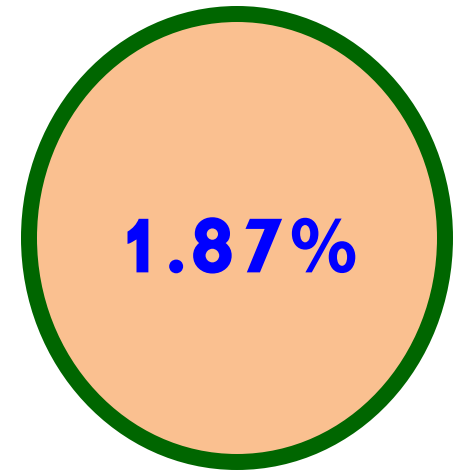




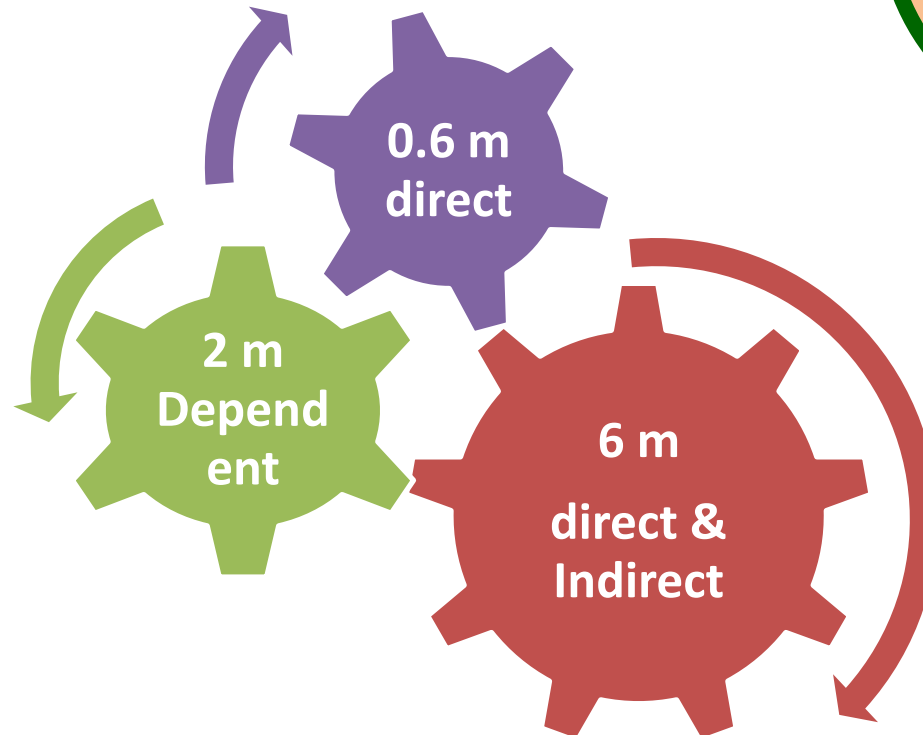
Light Engineering Sector

Total Enterprises (nos)

Contribution to GDP



People Involved



Light Engineering Sector

**Size of
Global
Market**

**US\$8
Trillion**

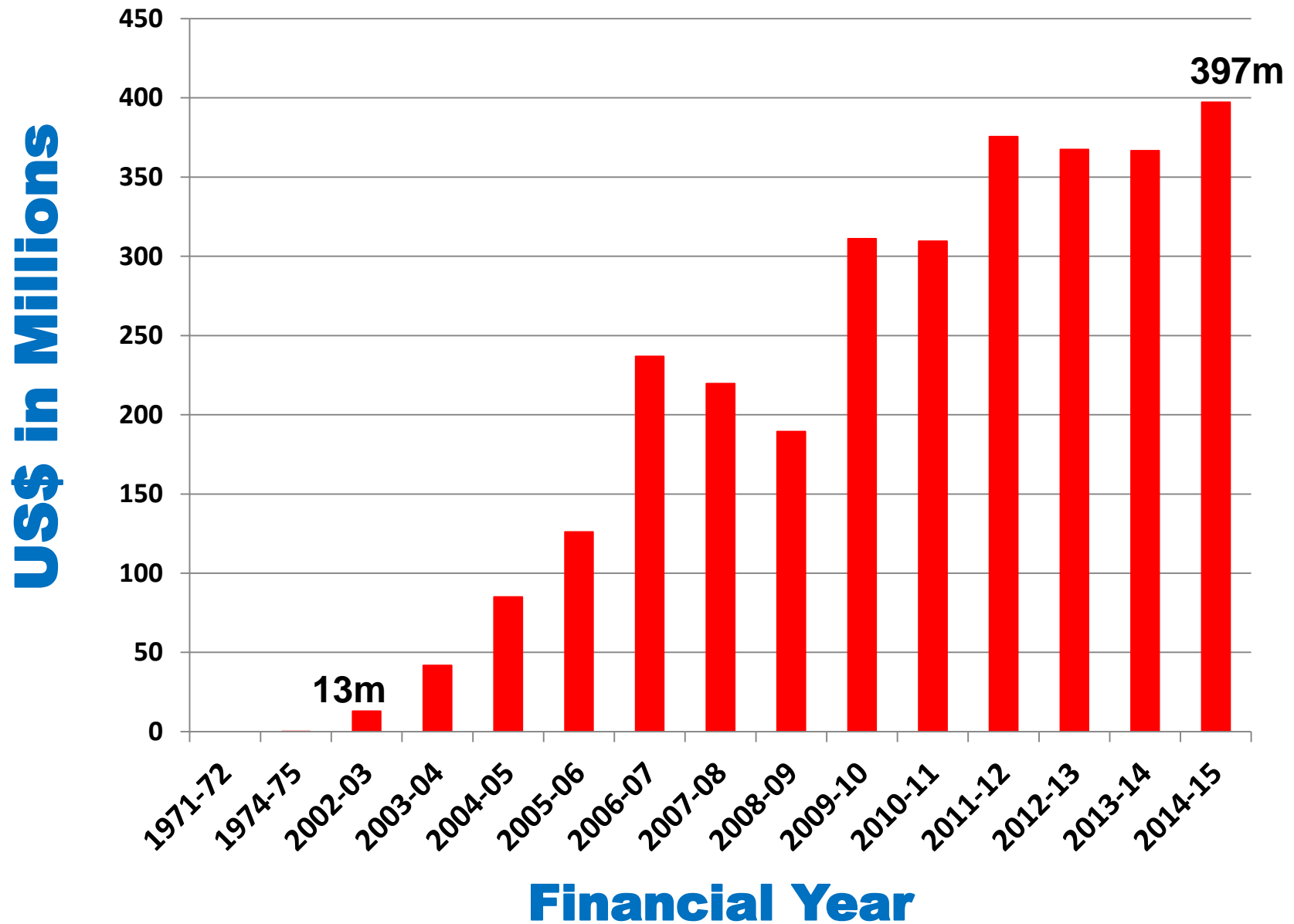
**Size of
Local
Market**

**US\$7
Billion**

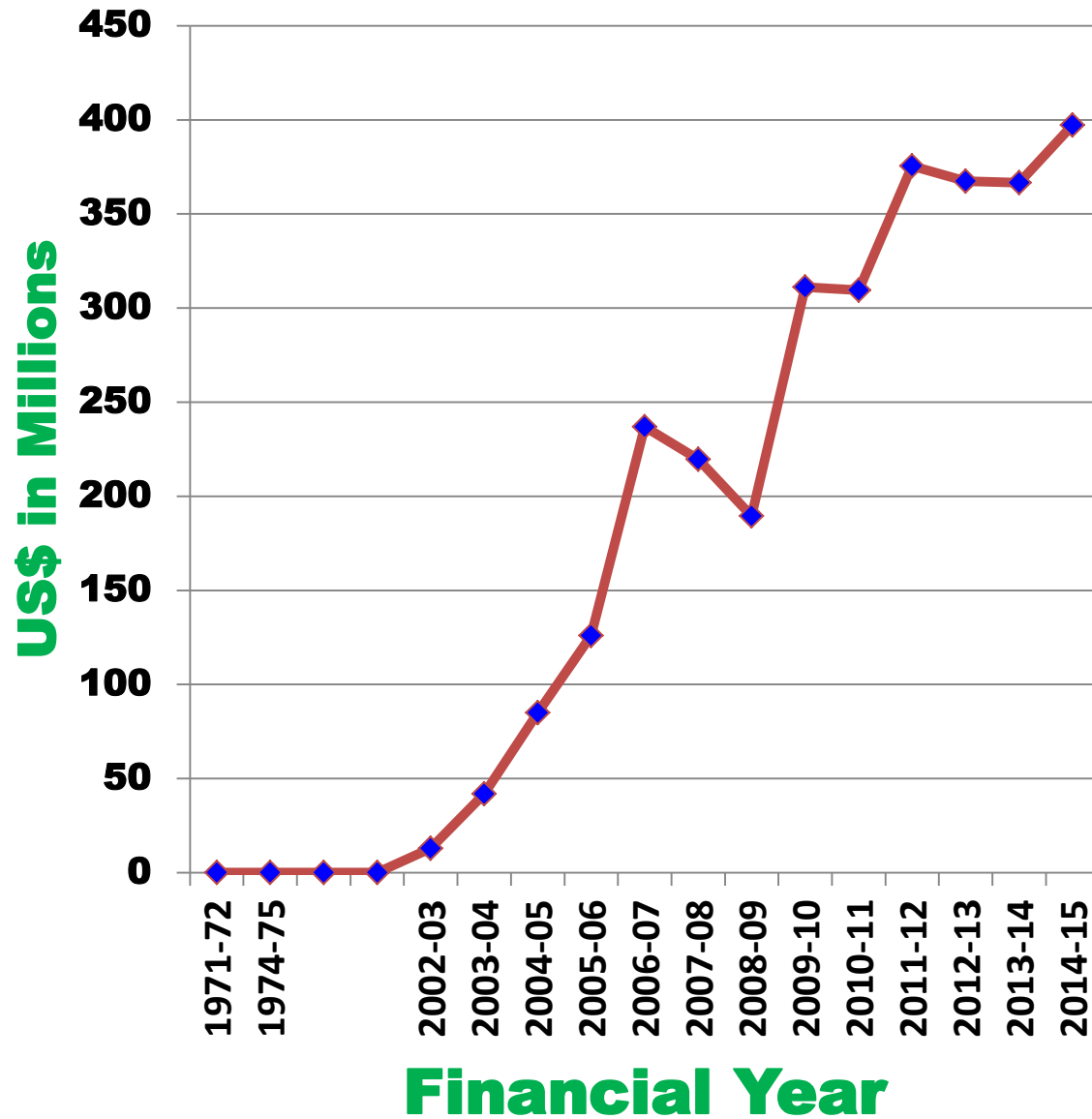
**Annual
Turnover.
US\$ 3.2
Billion**

Total numbers of products of LEI: 25,250 nos

Export performance of the Light Eng Sector of Bangladesh



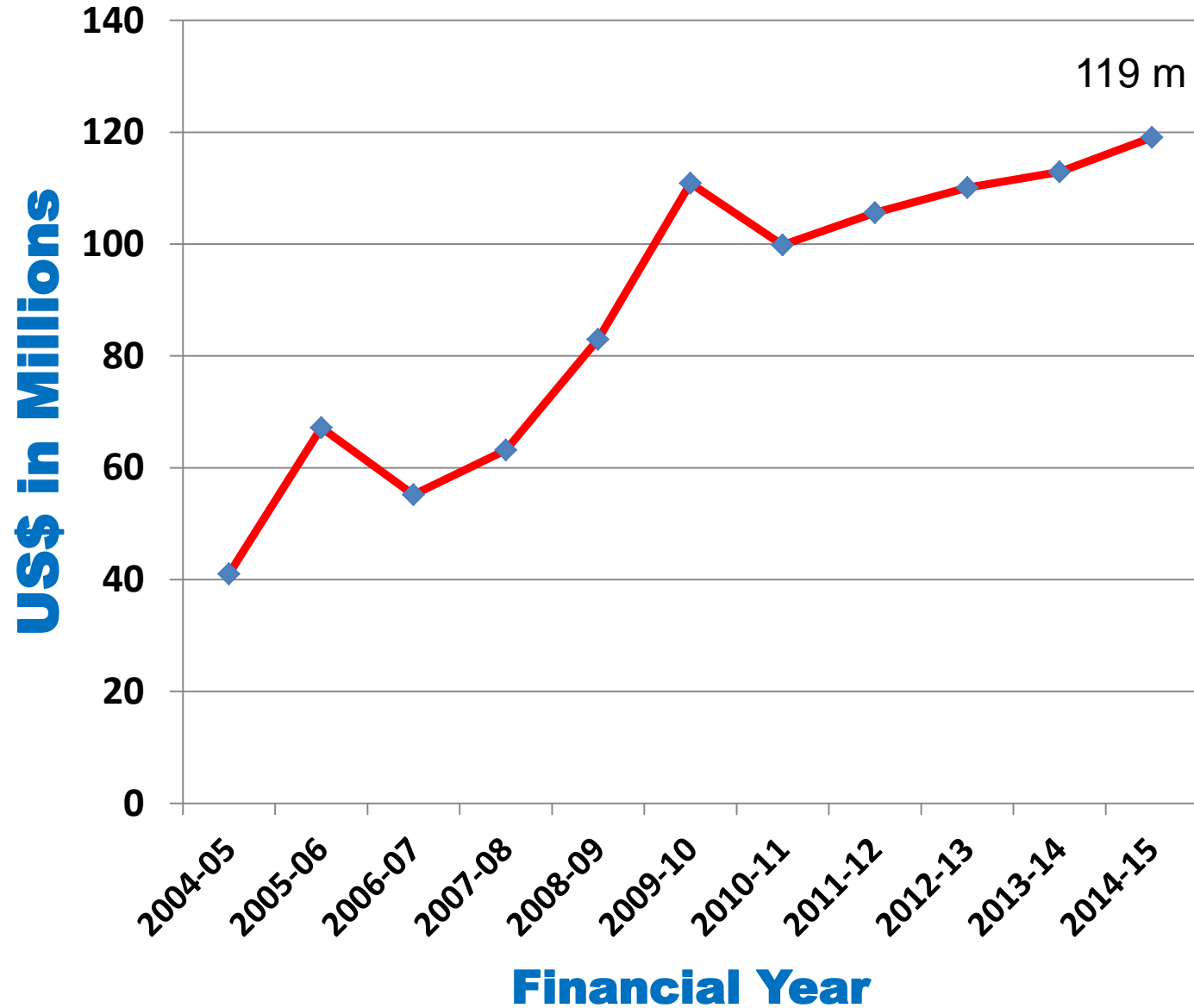
Export Growth of Light Eng Products



Bicycle and Spare Parts



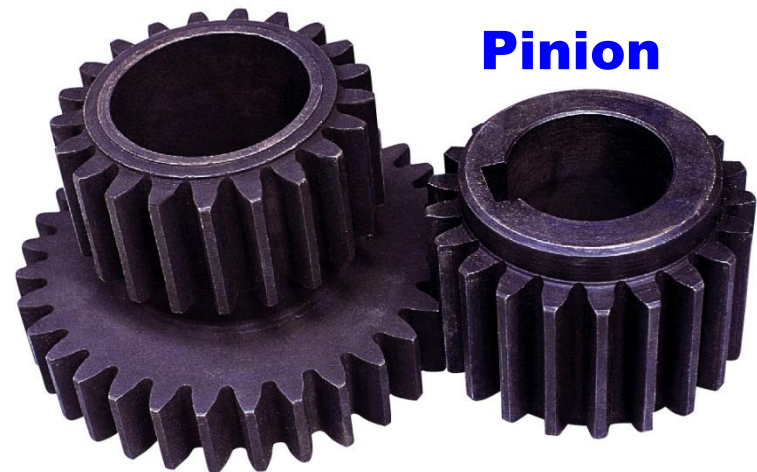
Export of Bicycle



Automobile Sector



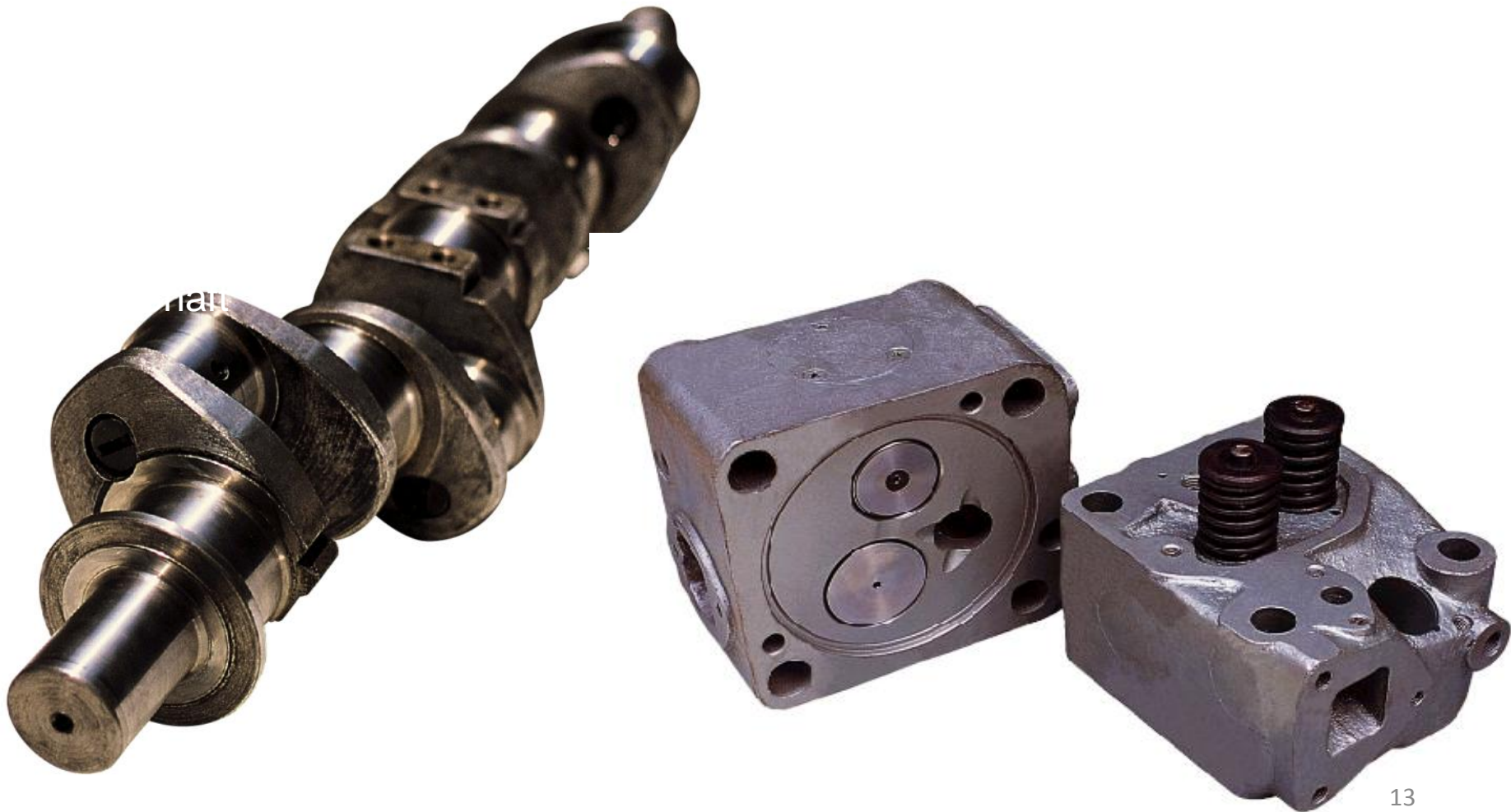
Crankshaft



Pinion



Automobile Sector



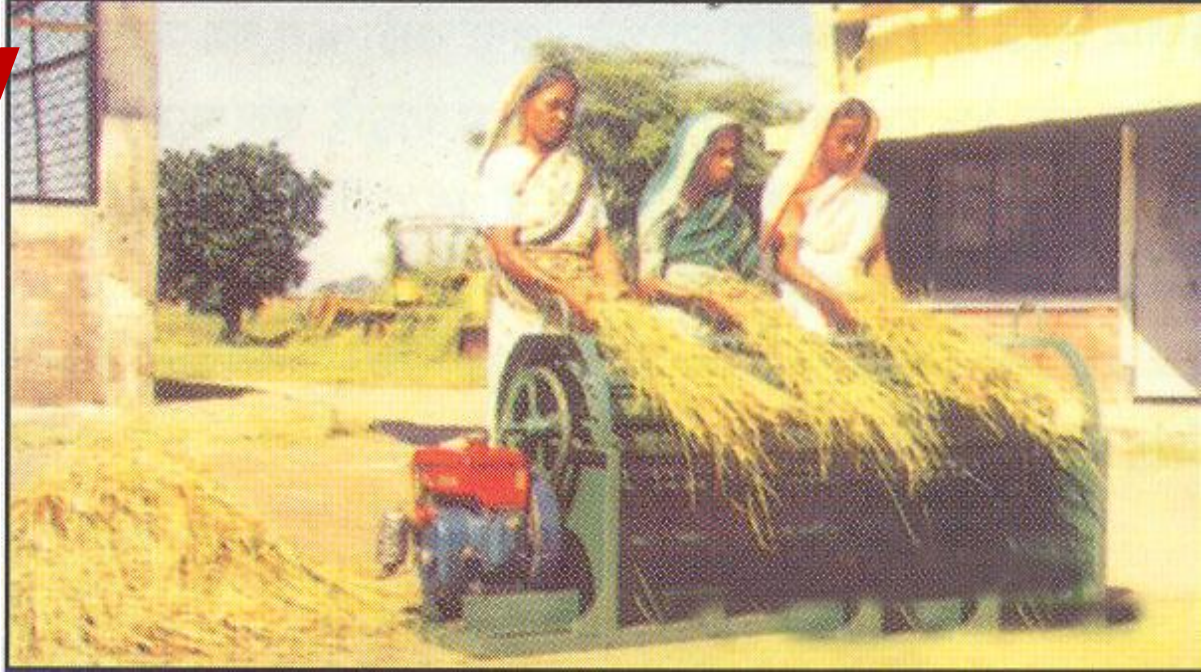
Agricultural Sector

Power tiller Driven Reaper for Paddy/ Wheat



Agro-Machinery

**Open Drum
Power
Thrasher**



**Automatic
Reaper for
Paddy/
Wheat**

Garments Sector

**Washing Plant, Steam
Boiler, Continuous
Fusing Machine, Dying
Plant, Finishing Press
Machine, and Spare
Parts, etc.**

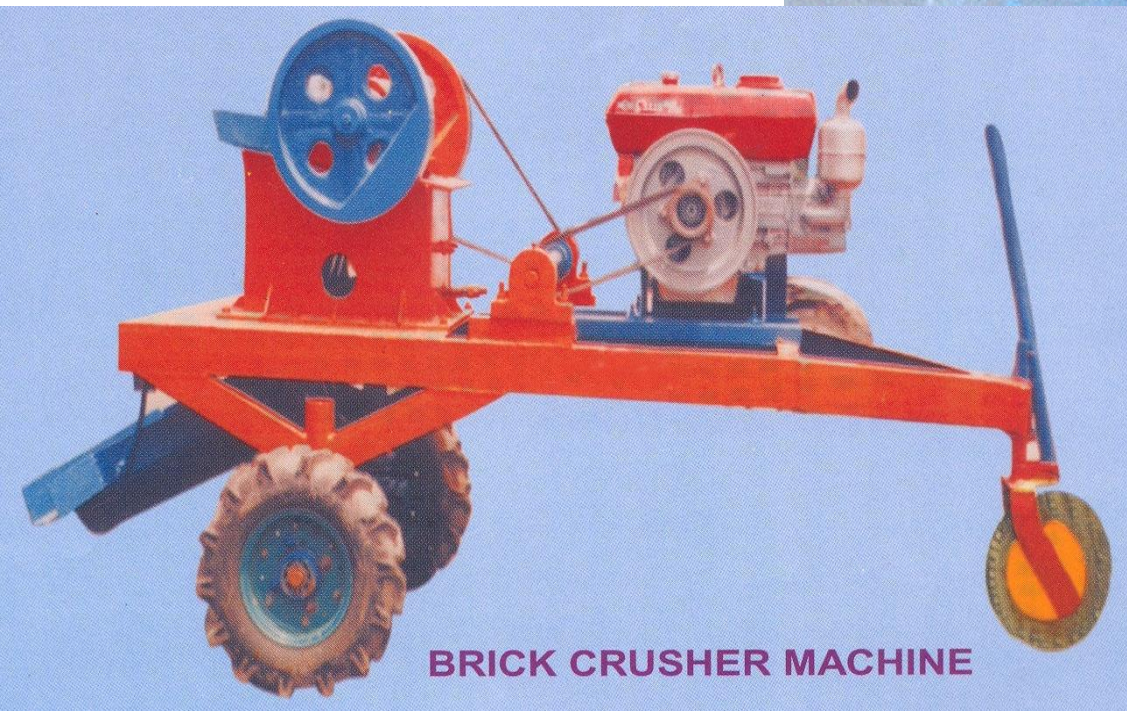
**Garments
Finishing
Machinery**



Construction Machinery



**2000 LITRES MULTI-NOZZLE
BITUMIN SPRAYER**



BRICK CRUSHER MACHINE



DREDGING PUMP
ড্রেজিং পাম্প

Electrical Merchandise Sector



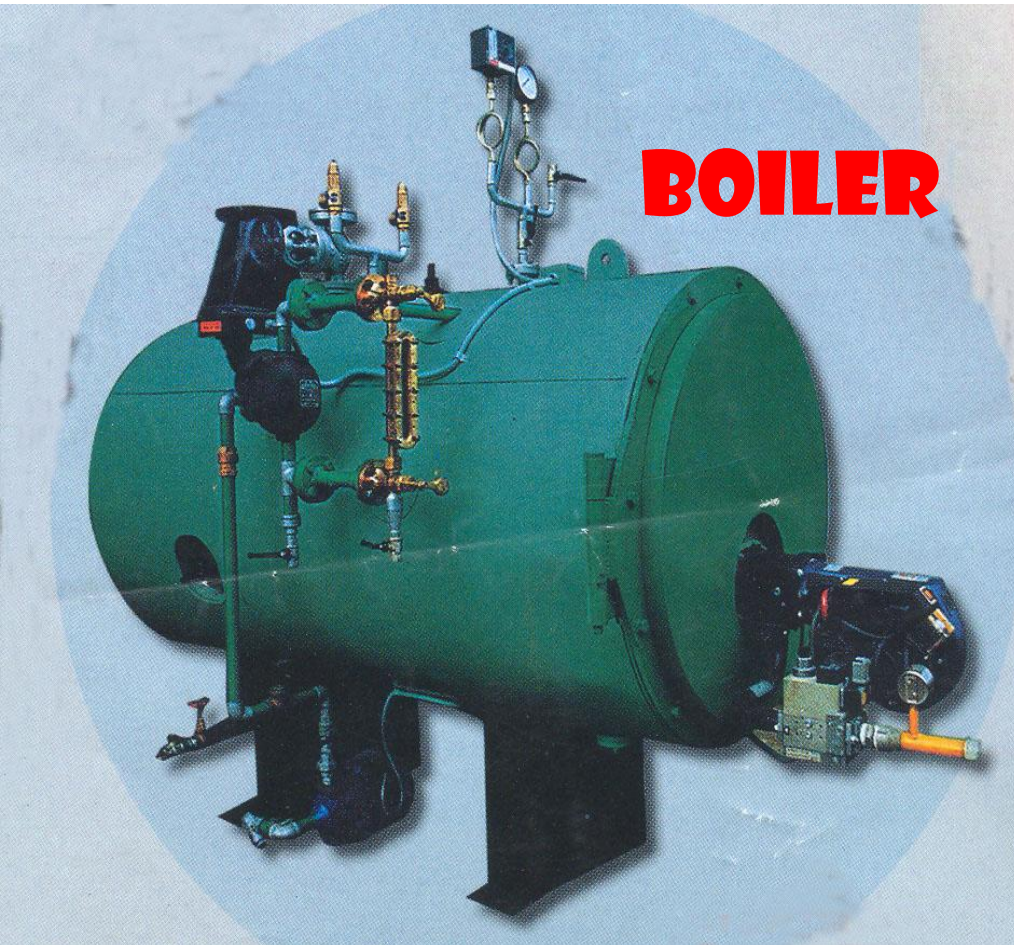
Distribution Panel



**MICRO CONTROLLER
REMOTE SWITCH**

Industrial Units

Water Treatment Plant



LOCALLY PRODUCED LOW COST LIFT

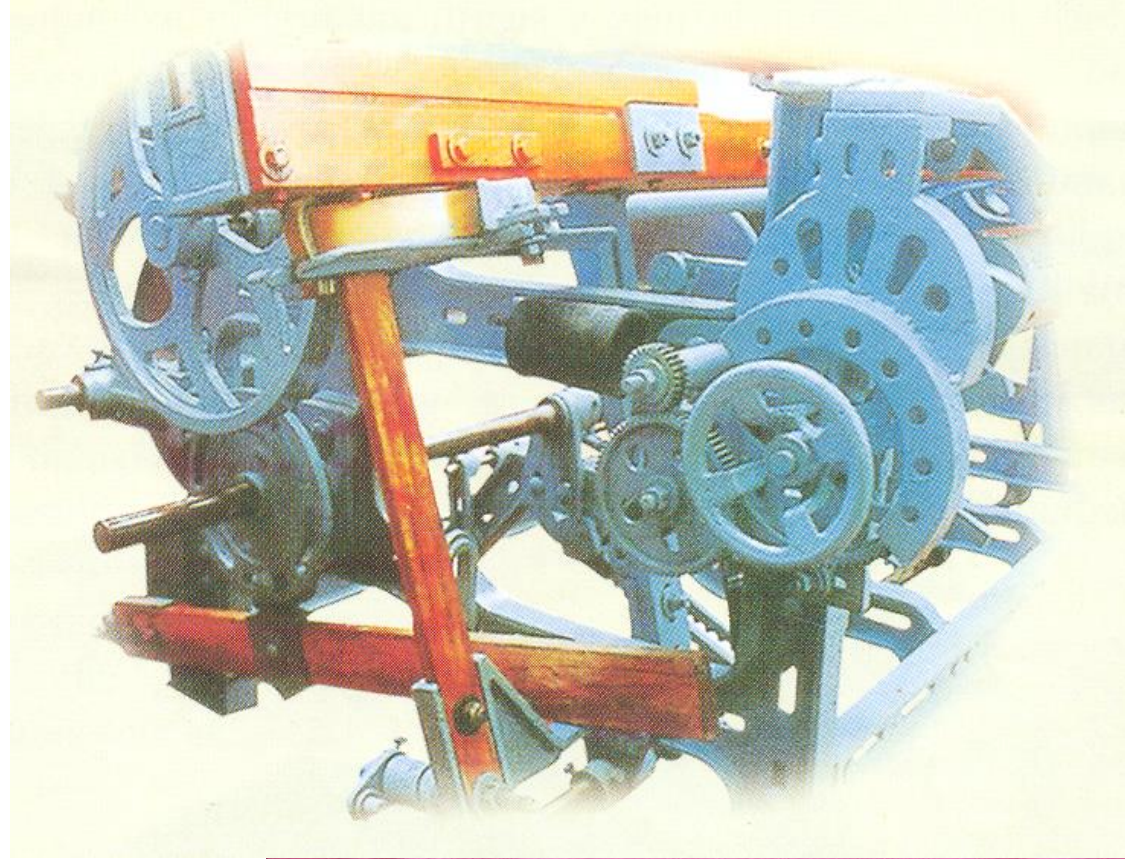


LIFT

Textile Sector

Textile: Handloom, Power loom, Spare Parts of all Textile Machinery, Bobbin, Bracket, Carding, Die, Dye, Gear & Pinion, Liner, Pulley, Ring, Silver Can, Spinning Tubes, Spinning Can, Dobbies & Jacquards, Timing Wheel, Rubber Roller, Twisting Machine, Doubling Machine, Scroll Roller etc.

**Used significantly in
Tangail, Pabna,
Sirajganj, Narsindi**



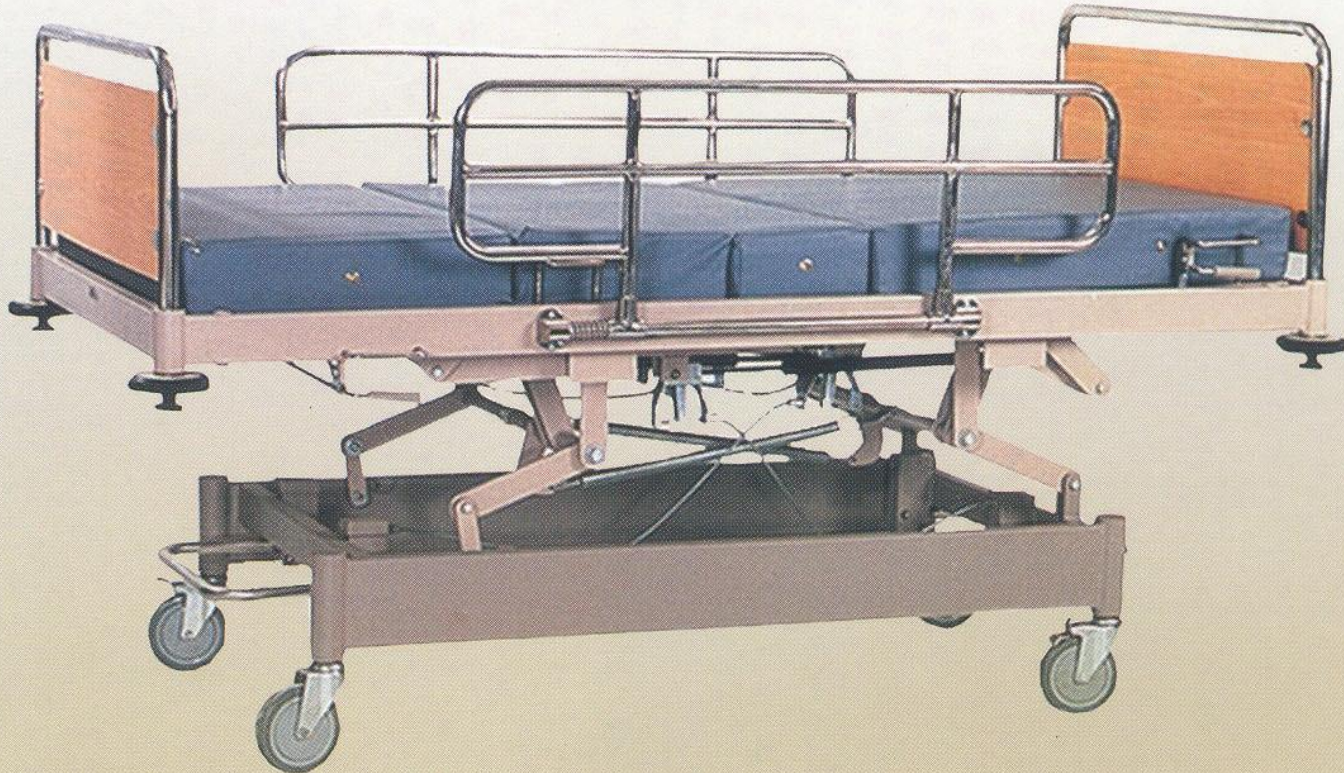
Pharmaceuticals



Blister Packing Machine, Die & Punch, Filling & Sealing Machine, Mixture Machine, Blending Machine etc

Mechanical Furniture

HOSPITAL FURNITURE



BONE RONGUERS



BR-1

BR-2

BR-3

GS-1

GS-3



GUM SCISSORS

Surgical Instruments

ORTHODONTIC PLIERS



OP-1

OP-2

OP-3

OP-4

OP-5

OP-6

OP-7

EXTRACTING FORCEPS



EF-1

EF-2

EF-3

EF-4

EF-5

EF-6

EF-7

EF-8

Sponge Iron



LE Industrial Sectors : Area of Cooperation

- **Steel making Industry**
- **Sponge Iron Making Industry**
- **CNC machine production industry**
- **Machine Tools Industry**
- **Ferrous & non-Ferrous Industrial Parts and products**
- **High powered Batteries**
- **Automobiles spare parts**
- **Railway spare parts**
- **Construction machinery**
- **Electrical & Micro Electronics Products**
- **Laboratory equipment industries**
- **Biomedical instruments, equipment & Machinery**

(41 type of industries)

Investment Needed for machinery and Technology Up gradation

If you invest on 1% of selected LEIs

Investment:

400 Nos. x US\$ 0.25m (Average)= **US\$ 100 Million**

Result

Profit: Production of additional Import Substitute Product and Export Products
= **US\$ 35 million per annum**

Automobile Sector





Motor Cycle Industries in Bangladesh

0.5 m People Involved

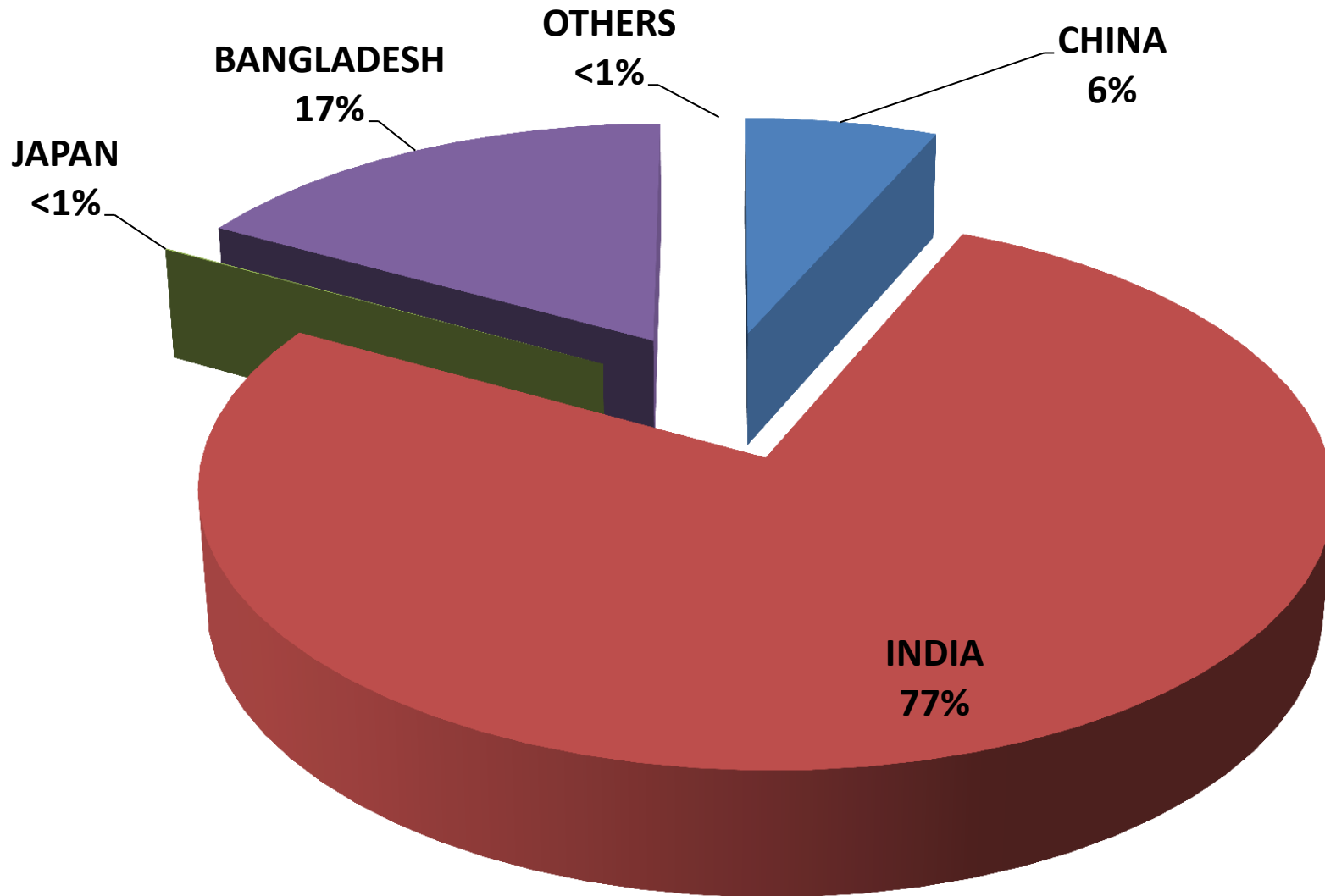
**US \$ 120m industry
of two companies**

Walton: 200.000/ Yr

Runner: 100.000/yr



MARKET SHARE COUNTRYWISE 2013



Maximam Sales Upto 2021

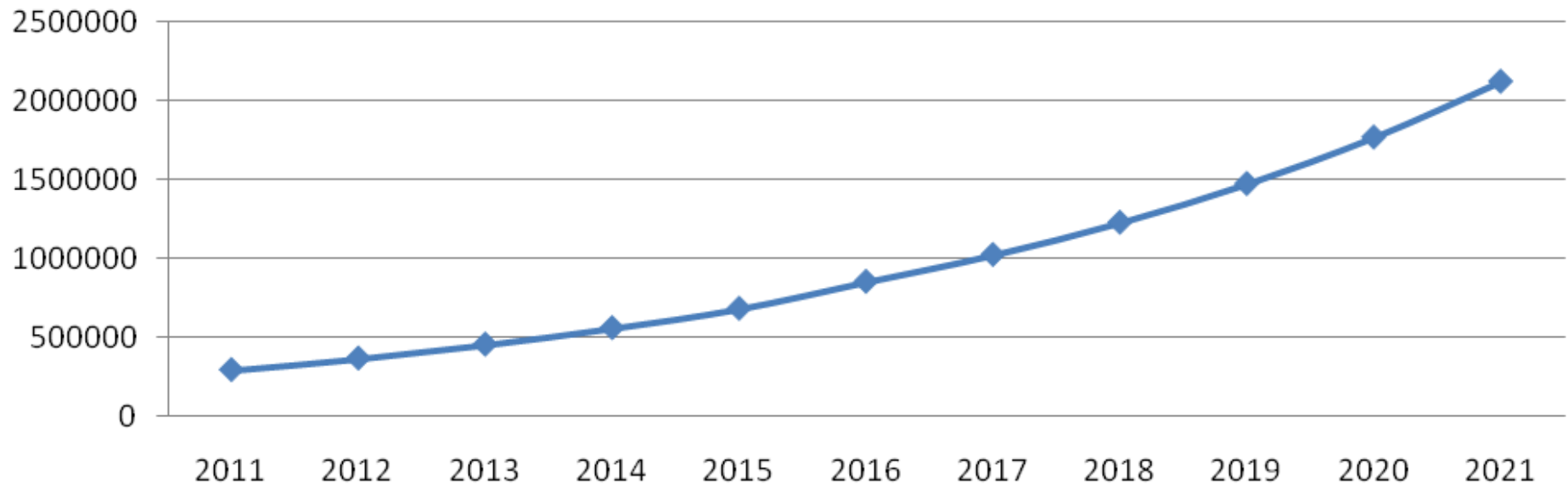


Figure : Maximum forecasted sales up to 2021.

Sales Vs Capacity

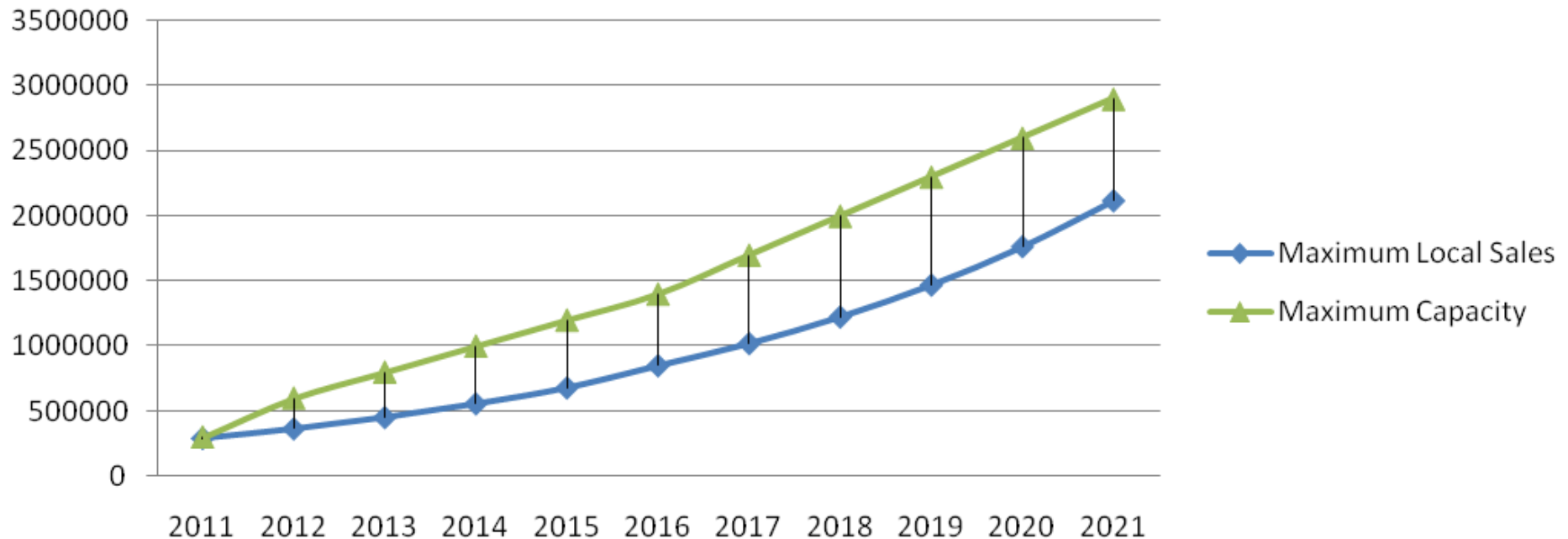


Figure : Maximum sales vs. maximum capacity up to 2021.

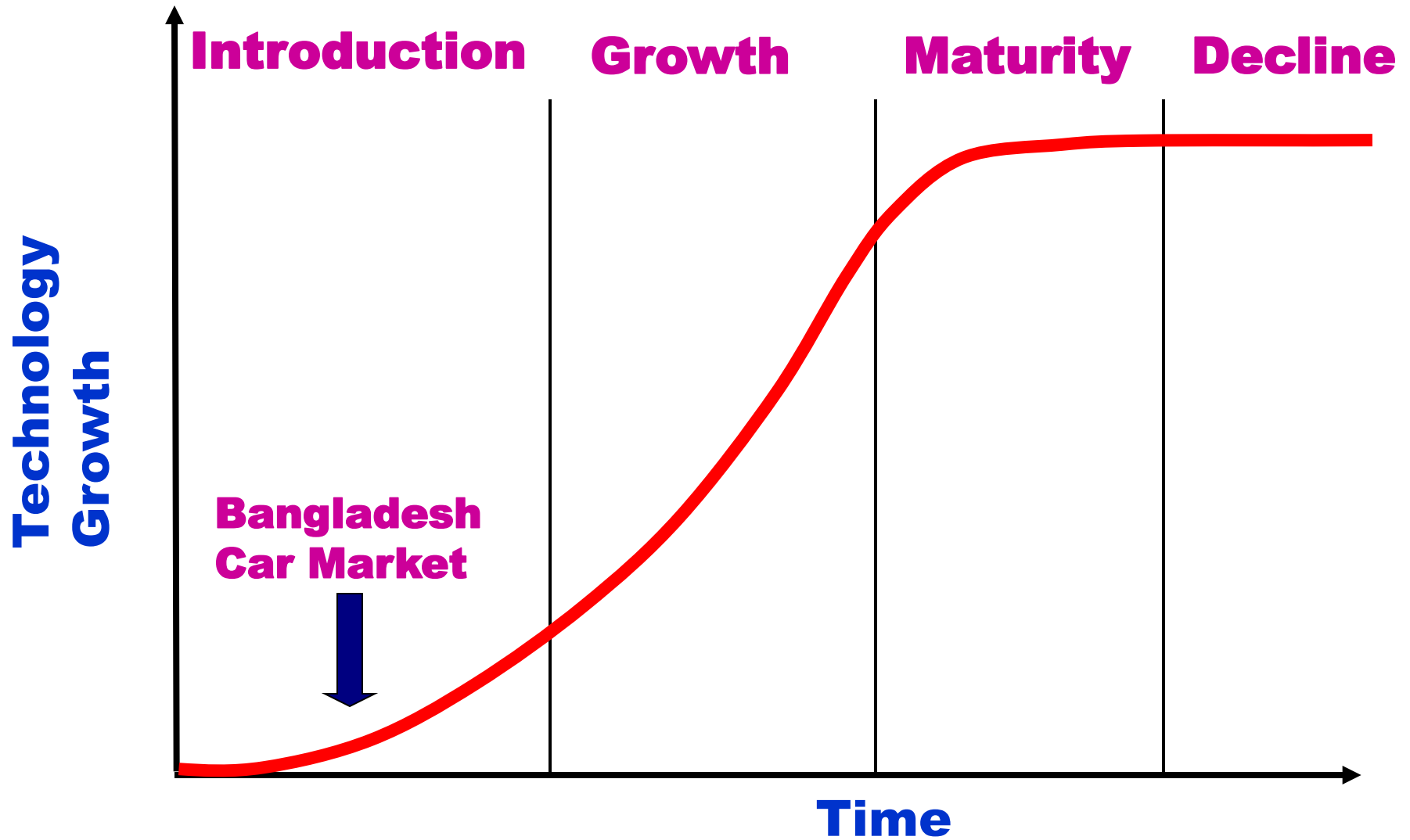
New Motor cycle Policy



4 wheeler



Car Production Tech Life Cycle in Bangladesh



Bangladesh car market is being on the early introduction phase and it could be estimated to grow rapidly over the next 5 years

Some Auto Components



1. Cross Tie-Rod Socket
2. Spindle
3. Spindle Knuckle
4. Yoke
5. Torque Rod End
6. Tube Flange
7. Spindle Hub
8. Crankshaft
9. Hub
10. Knuckle
11. Anchor Pin
12. Shift Fork
13. Slip Yoke
14. Connecting Rod Cap
15. Connecting Rod
16. Flange Yoke
17. Gear
18. Block Anchor
19. End Yoke
20. Fork Bottom Bridge
21. Fork Bottom Bridge

A Potential joint venture project Automobile Industrial Town

Progati Industries



PROGATI Industry Ltd is doing: Pazero Zip assembly

BMTF



Nitol with Collaboration of TATA



NITOL group is performing well in collaboration with Tata group

Body Making and Vehicle Assembly



AFTAB AUTOMOBILES

Japanese Bus Hino

Luxury AC bus: Body making & assembly cost

Exporting Auto Parts to Milbert Int, USA

Collaboration of BEIOA, BITAC & Milbert Int, USA



Toy Industry of Bangladesh



Bangladesh is Producing Currently (100 comps)

- **Non-Motorized Plastic Toys**
- **Motorized Toys**
- **Toys with electronic devices**
- **MEMS Toys**
- **Computer games for Children**
- **Electronic Games and Indoor Games as Commercial Enterprises**

General Types of Toy of Bangladesh



- **Digital-virtual toys**
- **Digital-mechanical toys**
- **Mechanical-physical toys**
- **Electro-physical toys**
- **Physical toys**



Ship Building Industry of Bangladesh



- 200 Ship Building and Repair-yards in Bangladesh
- Internal demand: US\$ 20 B is met
- Production: 4500-6100 dwt; Value Addition: 30-40%
- Export incentive: 5%
- Ship Building is a labor intensive industry. Labors are still cheaper than China, Korea and Japan
- Small & Medium Size Global Ship Market: US\$400B. To capture 1% , 20 shipyards are required

Ship Building Industry



Entrepreneurs Expect that earning of this sector would be
=US\$ 1.25B per year.

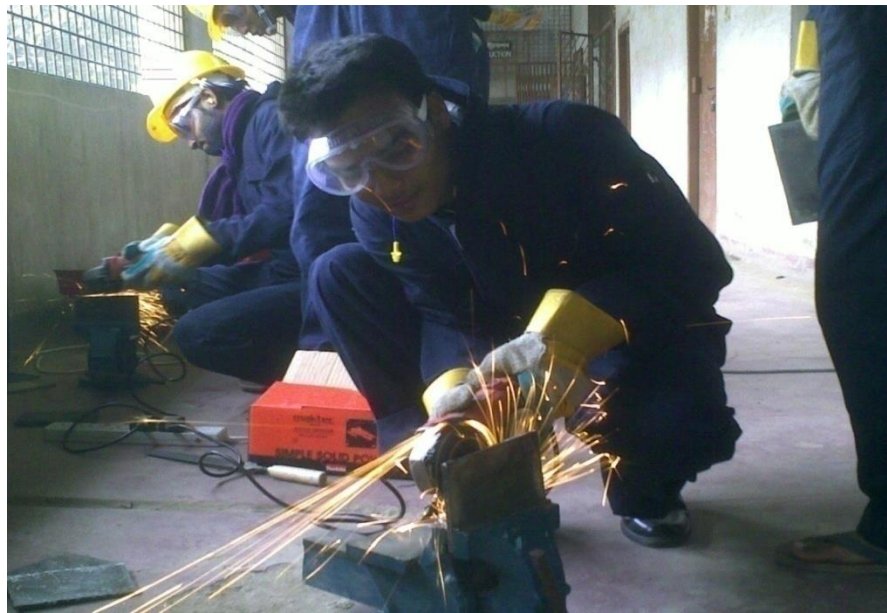
In Fiscal year, 2011-12 receive US\$ 0.5B crore earning

Bangladesh could be next hub

- **Skilled Labor availability with low labor cost**
- **Excellent infrastructure facilities for FDI in EPZ area**
- **Competitive, young skilled manpower available**
- **Bonded warehouse license allows for export**
- **Duty Draw Back and Cash Incentive facilities for export**
- **FDI with attractive package**
- **Strong Backward & Forward Linkage**
- **Preferential Market Access over the world**
- **Strong local entrepreneurial class**

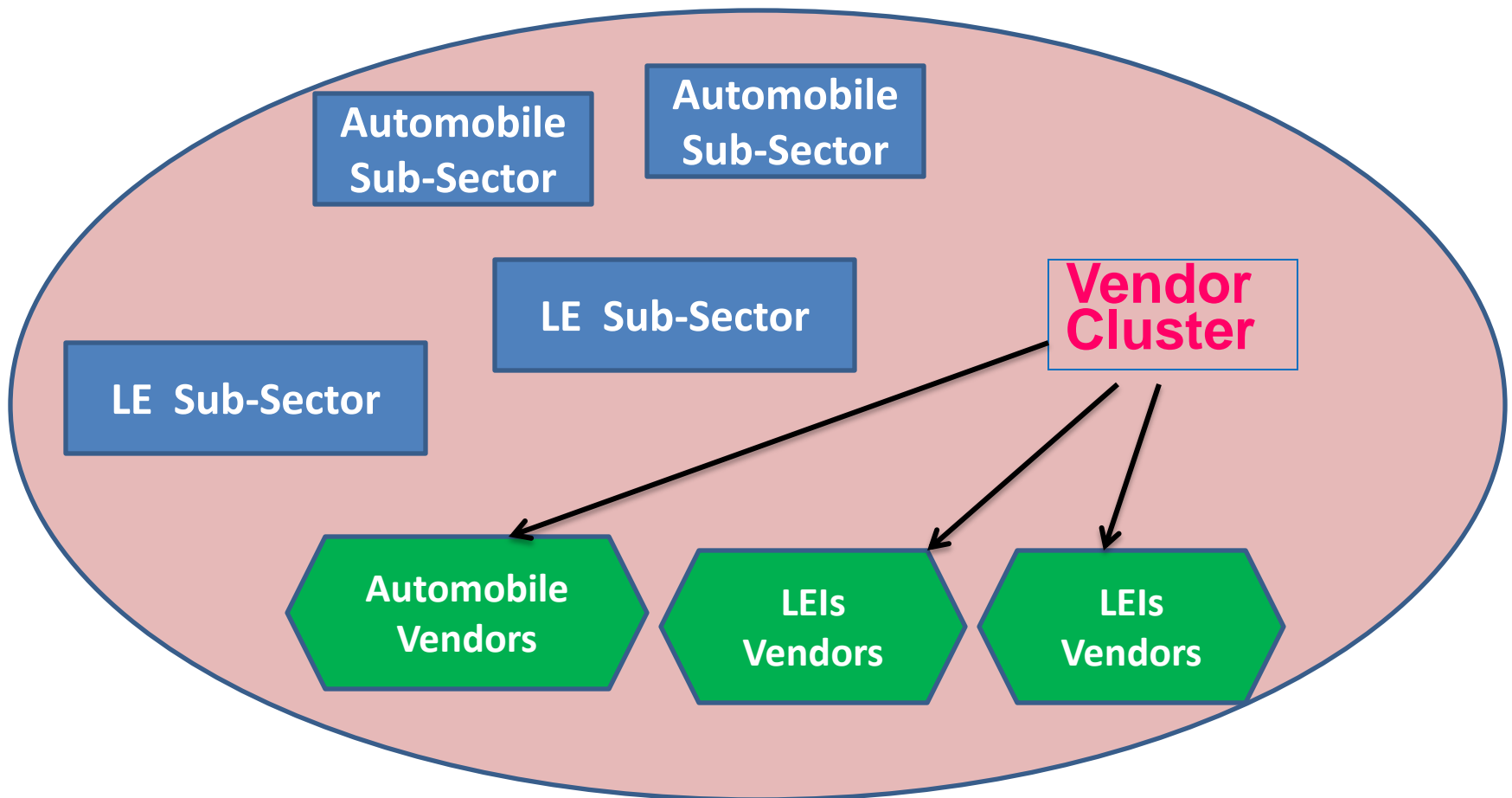
POTENTIALS OF BANGLADESH

- + Stable Economy
- + Low-cost, hardworking, skilled and trainable labour
- + **Geographic location: Sea and Air route**
- + Natural gas, coal, hardrock, limestone, fertile land
- + **Cost of utilities and services: Lower than other developed countries**
- + **Tax holiday up to 7 years, cash incentive up to 20% availability of GSP and other facilities, 100% repatriation of capital and profit**



Special Economic Zone / Industrial Park

Bangladesh Economic Zones : A New Horizon for Investment



100 Economic Zones →

Investment Opportunity with Foreign Partnership

**Technology Incubation
Centre**

**Technology Transfer
Centre**

LEI Industrial Park

**Technology Innovation
Centre**

**LES Special Economic Zone
(SEZ)**



Duty Free Access of Bangladeshi Products

**Duty
Free
Access**

- **EU, Canada, Australia, New Zealand, Norway**
- **Partial: India, Pakistan, Thailand**
- **In Process: China, Russia, Malaysia & Tanzania, Malawi, Mozambique, Vietnam, Zambia & India**

Potentials of Bangladesh



Bangladesh with its availability of trainable & quick learning manpower at competitive cost, availability of almost all the raw materials at a competitive cost can emerge as one of the favorite investment destinations for the automotive manufacturers.

Government Role as Facilitator is Marvelous



Invest in Export Processing Zones: **A Manufacturer of Global Brands**

**500
Factories in
EPZ:
Manufacturing Export
Products**



South Korea, China, Hong Kong, Taiwan, Japan, USA, Europe and Canada

**Nike, Rebok, Adidas, Marks and Spencer, Walmart,
Nissan, Mitsubishi, Hino, Toyota, Sony Ericson,
Konica, Nikon, Fuji, Olympus, etc.**

Investment Environment is very Attractive in Bangladesh

- **The LES is still unexplored and have opportunity to investment**
- **Very High Value Addition Potentials of LEIs(10 to 70%)**
- **High demand of Products in Local and Int'l market**

Cooperation with Other Countries

The cooperation & collaboration between Bangladesh and other countries can be in the following areas:

1. Investment on infrastructure development such as

- Automotive Industrial park (IP),
- Automotive Special Economic Zone (SEZ),
- Automotive Cluster Development,
- Automotive Common Facility Centre (CFC),
- Automotive Testing Facility,
- Automotive R&D and Design office
- Vendor development

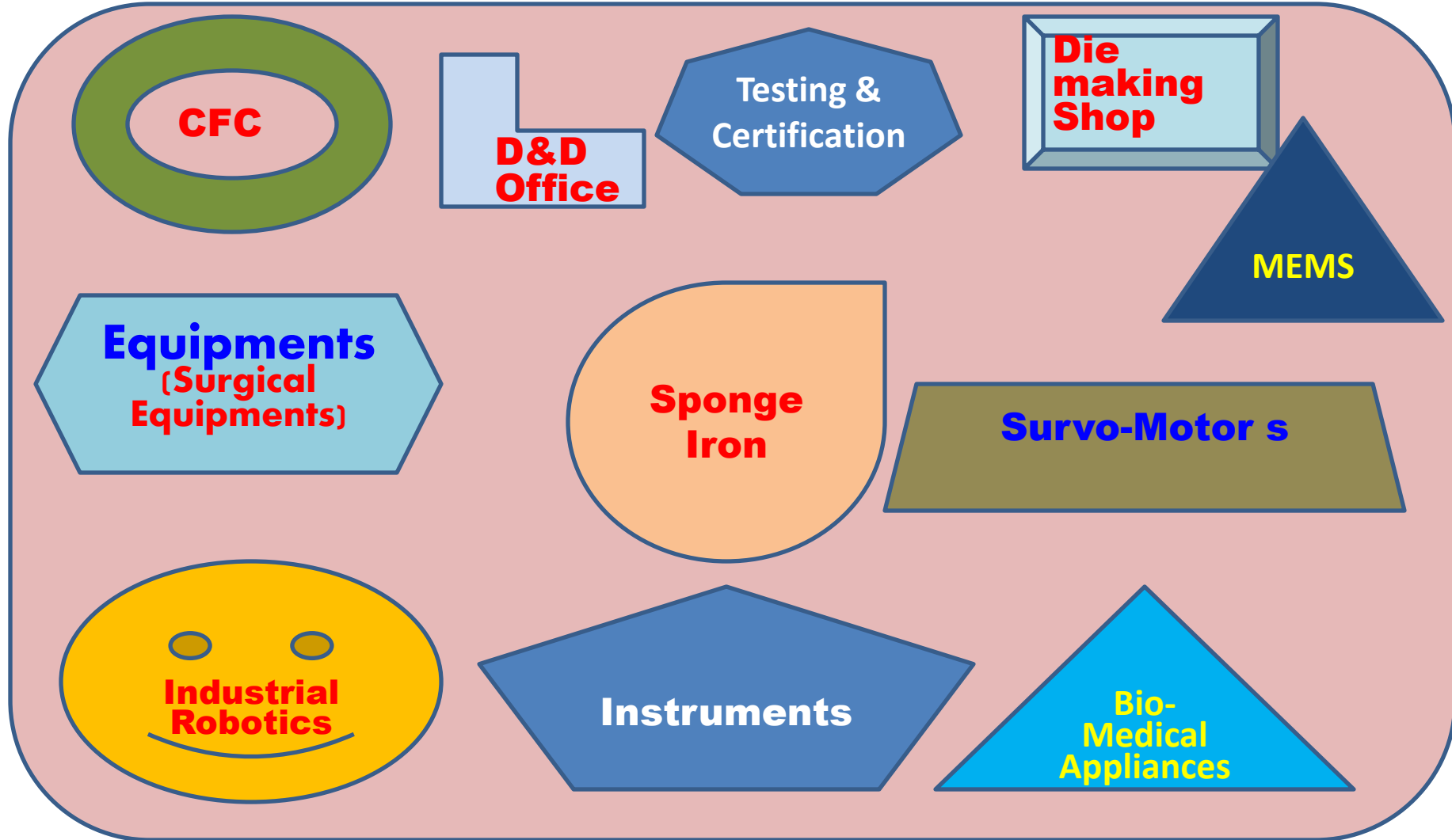
2. R&D with Venture Capital

3. Outsourcing of spare parts

4. Production Sharing Contract (PSC)

Proposed LE & Automobile Industrial Town

100 Acre Land



Proposed LE Industrial Sector

300 Acres Land



- **New Product Development**
- **Development of Quality product**
- **Instruments**
- **Equipments**
- **Capital Machinery**
- **Industrial Robotics with artificial intelligence**
- **MEMS Products** (Micro Electro-Mechanical System Products)

Business Modes with International Partners

- < **Foreign Direct Investment**
- < **Technical collaboration (Licensing, technical services agreements)**
- < **Joint Venture**



Thank You
Pledging for Greater Cooperation

For further information, contact: Prof. Dr. M. Kamal Uddin, BUET, Tel: 01810117056