

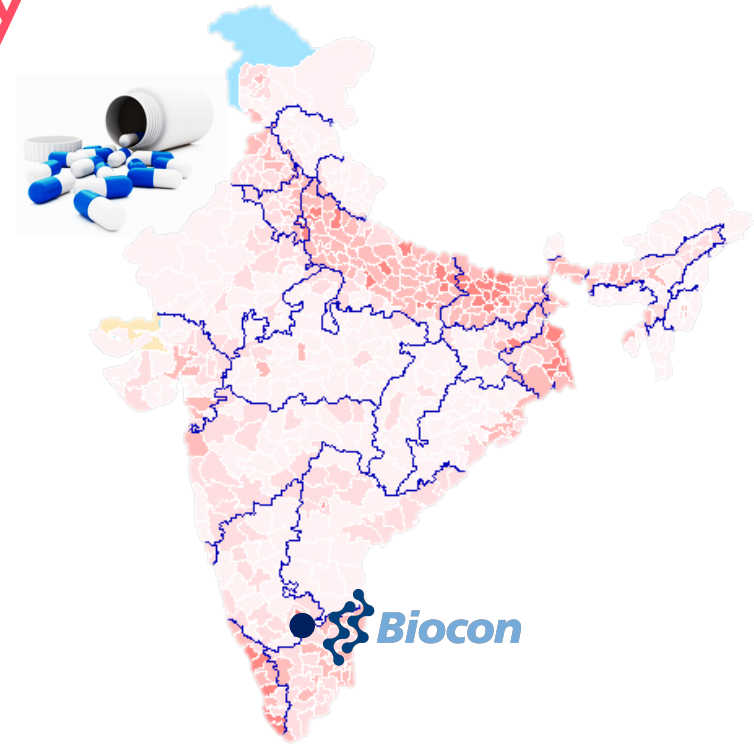
Future Through the Lens of Biocon : The Indian Pharmaceutical Industry

A Case Study of Biocon India Group

Presented by

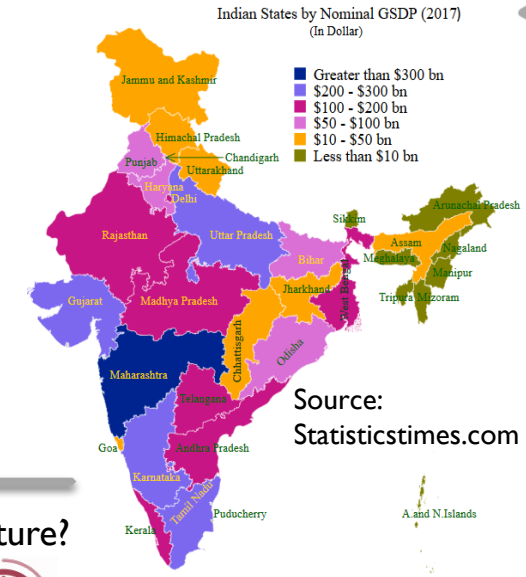
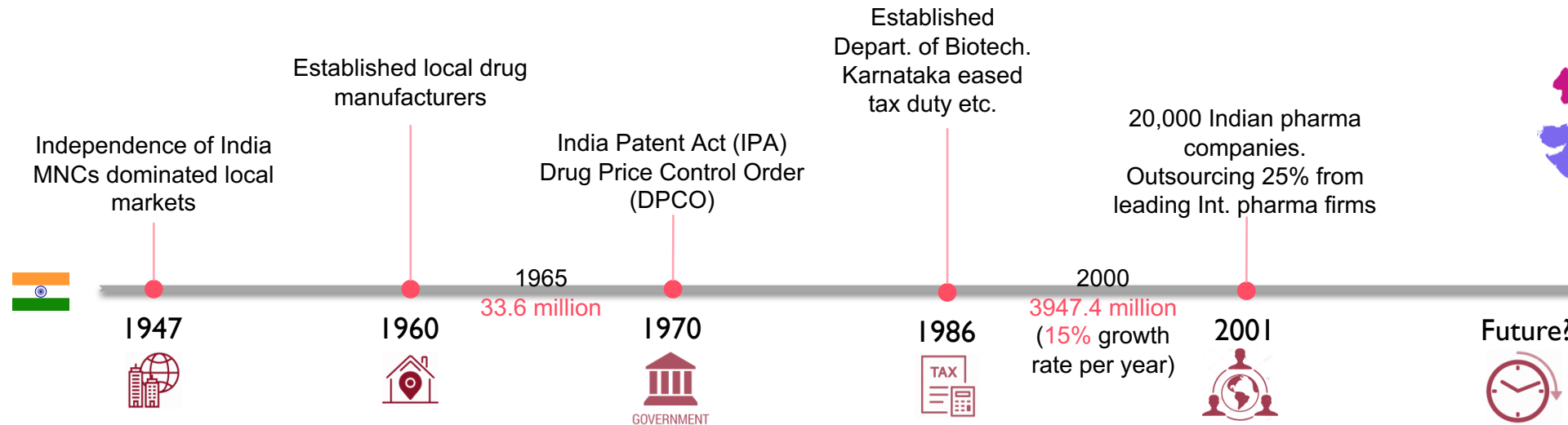
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Business Advantages and Disadvantages

The Indian Pharmaceutical Industry



1. Phenomenal growth in pharma sector (15% per year)
2. Gov regulation (IPA/DPCO) and tax-ease support (ex. Karnataka)
3. Large pool of cheap educated/trained professionals (ex. PhD salary 6.6 times cheaper than US)
4. Organic growth/potentially attractive to VC funding

Especially for Clinical trials services:

1. Emerging as prime target for outsourcing (25%) in India
2. Diverse genetic structures among population

1. Difficulties in differential strategy among 20k pharma companies
2. High cost of drug development chain goes to clinical trials (60%)

Especially for Clinical trials services:

1. Negative externalities with high publicity and ethics risk
2. Financial crisis from failed clinical trials
3. Ethical challenges for employees





Should Biocon Aggressively Invest in Clinigene?

Decision in the Context of Indian Pharma Industry



- Established in 1978, by K. Mazumdar-Shaw
- "Earn as you learn" philosophy
- Non-hierarchy structure
- Meritocratic hiring & trust build-up

Syngene

- Established in 1994
- R&D, aim to discover original molecules

Clinigene

- Established in 2000
- Offer clinical trial services in the traditional pharmaceutical value chain
- Expected to sustain itself with external clients in CRO business (grow from 0.7% in 2002 to 20% in 2020)
- Positioned in low- to medium-value segment of the value chain



Biocon is suggested to **invest Clinigene** with joint venture capitals to **mitigate the financial risks** and establish public relation team to carefully deal with **publicity and ethic risks**.

- + Rapid growth in pharma sector promotes Biocon's expansion towards fulfilling of value chain with Syngene and Clinigene
- + With the advantages of cheap human resource and diverse genetic structure in India, Clinigene could compete with foreign CROs by lower costs.
- + As India became targeted outsourcing market for clinical trials, Clinigene can attract more venture capital investments to develop itself further.

- High costs for clinical trials bring financial risks in terms of failed trials and compensation to victims
- Publicity and ethics challenges for Biocon and its employees, damage to external reputation even organizational survival.
- Internally the Clinigene employees could easily lost the loyal to its parent company Biocon.
- Moving up the value chain might be long-run profitable but would entail significant costs both financially and culturally.