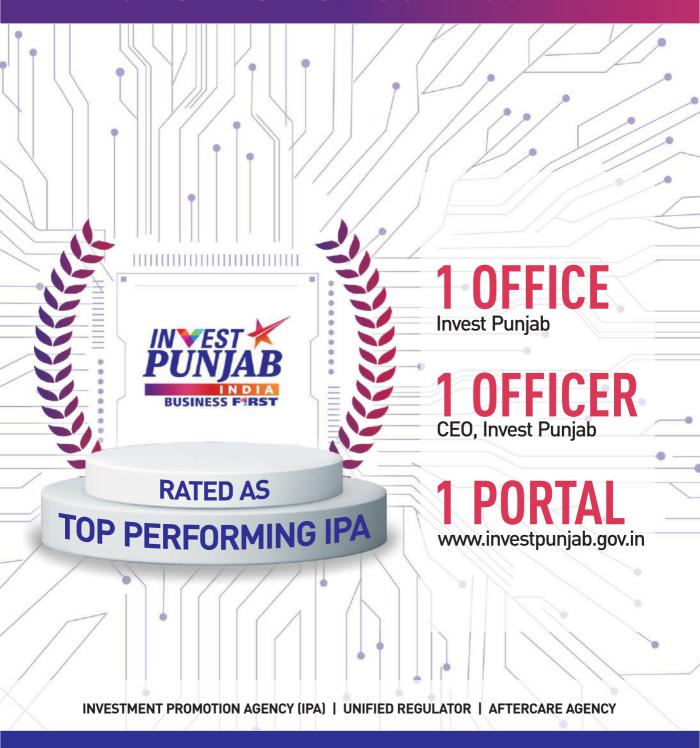


PUNJAB'S UNIQUE MODEL FOR EASE OF DOING BUSINESS



WE COMMIT. WE DELIVER.



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India: Snapshot of Pharmaceuticals Sector

3rd **highest** producer of Pharmaceuticals by volume globally

Largest manufacturer and exporter of Generic drugs; 20% Global share by volume

4th **largest** medical device market in Asia

Largest vaccine producer in the world; 62% of global demand for vaccines

Amongst top 10 sectors for FDI inflows in India with USD 18 bn (INR 1.3 lakh cr) (Apr 2000- Sep 2021)

Highest No. of US-FDA* compliant manufacturing units outside USA

Domestic pharmaceutical industry valued at USD 41.7 bn (INR 3.1 lakh cr)

6.6 % share to total merchandise exports USD 18.4 bn (INR 1.4 lakh cr)

Presence of **80** pharma clusters, **3,000** pharma companies, **10,500+** manufacturing facilities

Fulfils over **80%** of the **global Antiretroviral drug demand** to fight AIDS

Supplies over 40% of generic demand in the US and 25% of all the medicine in the UK

60,000+ generic brands across **60** therapeutic categories

Market size of Pharma in India expected to show 3x growth and touch ~ USD 120 – USD 130 bn (INR 9 - 9.75 lakh cr) by 2030



Growth Drivers for Indian Pharma Industry

Favourable Policy Measures

- End-to-end drug discovery: Pharma Vision 2020 of Department of Pharmaceuticals, Government of India (GoI)
- Healthcare: National Biopharma Mission, National Health Mission, National Commission for Homoeopathy, Prime Minister Atmanirbhar Swasth Bharat Yojna, Ayush Bharat Yojna
- Biotechnology: Biotechnology Industry Research Assistance Council (BIRAC)

Unmatched Incentives

Production Linked Incentive Scheme

For Key Starting Materials (KSMs)/ Drug Intermediates (DIs) and Active Pharmaceutical Ingredients (APIs) PLI 1.0

 Scheme outlay USD 910 mn (INR 6,825 cr); 6 years; 41 eligible products which cover 53 APIs

For Pharmaceutical PLI 2.0

 Scheme outlay USD 2 bn (INR 15,000 cr); 6 years; product diversification to high-value goods

Medical Devices

Scheme outlay USD 449 mn (INR 3,367 cr); 5 years

Scheme for Bulk Drug Parks

- Budget Outlay: USD 393 mn (INR 2,947 cr)
- No. of Parks to be approved: 3
- Type of Assistance: Financing Common Infrastructure Facilities

Scheme for Medical Devices Parks

- Budget Outlay: USD 52 mn (INR 390 cr)
- No. of Parks to be approved: 4
- Type of Assistance: Financing Common Infrastructure Facilities



Scheme for Strengthening of Pharmaceuticals Industry

- Budget Outlay: USD 67 mn (INR 500 cr)
- Assistance to Pharmaceutical Industry for Common Facilities
- Pharmaceutical Technology Upgradation Assistance Scheme
- Pharmaceutical & Medical Devices Promotion and Development Scheme

Lower Cost of Production

- Production cost in India ~50% of that in developed countries
- R&D costs 87% lower
- Clinical trial cost 97% lower

Economic Drivers

- High economic growth along with increasing penetration of health insurance
- Increasing expenditure on healthcare and medicine

Patent Cliff

By 2026, patented products worth USD 240 bn (INR 18 lakh cr) expected to go
off-patent providing a large opportunity to Indian generic formulation
companies

India: Emerging leader in the post pandemic world

Pharma Exports

- USD 18.4 bn (INR 1.4 lakh cr)
- 200+ nations
- 13.3% y-o-y growth

Production Facilities (during pandemic)

- Accounted for 12% of all production facilities serving US market
- 50 Indian companies with combined market authorization for 5000+ medical items through Abbreviated New Drug Application (ANDA)

Covid-19 Vaccination

- Amongst few nations that developed its own indigenous vaccine
- Emerged as a global hub for pharma innovation



Key Trends



Medicine Market

Strong spending trends (9% -12%) over the next 5 years will push India to become one of the **Top 10** countries in medicine spending



API Industry

Ranked 3rd globally; contributes 57% of APIs from prequalified list of the WHO



R&D spending

Setting up of 3 National Centres of Excellence (CoE) for drugs & medical devices and 1 CoE for drug discovery



ePharmacy

Complementing Telemedicine growth, ePharmacy market to touch USD 4.5 bn (INR 0.3 lakh cr) by 2025



Generics Drugs Market

90% of prescription drug sales and **76%** of total sales; expected to grow from USD 21.9 bn (INR 1.6 lakh cr) to USD 64.7 bn (INR 4.8 lakh cr) by 2030



Enhanced Govt spending on public healthcare

73% y-o-y growth to USD 63 bn (INR 4.7 lakh cr) in Government expenditure on public healthcare in 2021-22



Vision 2035

Niti Aayog published Vision 2035: Public Health Surveillance in India with recommendations to improve the existing health surveillance system

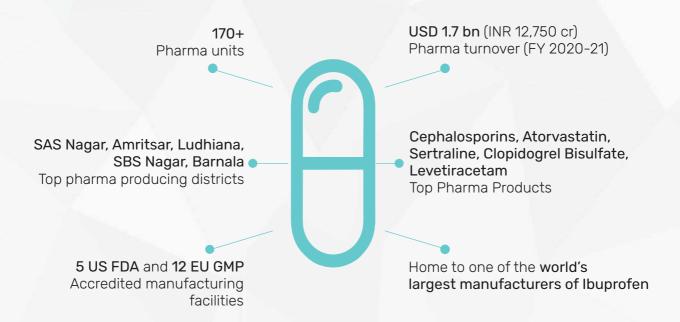


Affordability

Pradhan Mantri Bharatiya Janaushadhi Kendra; making quality generic medicines available at affordable prices to all



Emerging Pharmaceutical Ecosystem



Top Pharmaceutical Companies































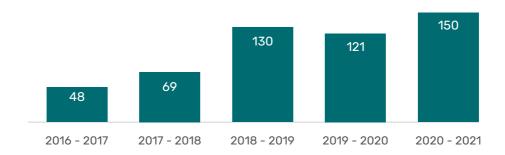






Exporting Pharma Products to the World

Punjab Pharma Exports (USD mn): 26% CAGR over 5 years



Major Exports Destinations

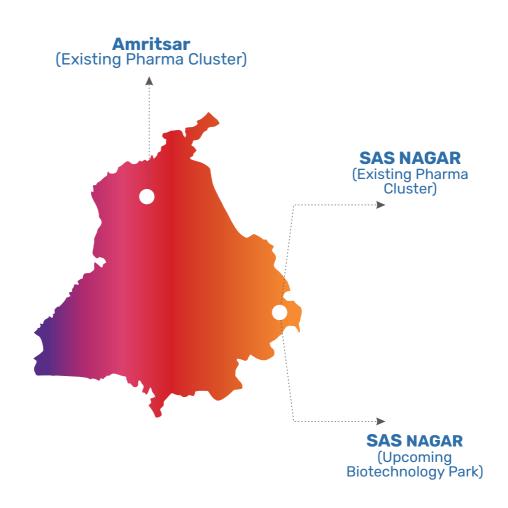


Top Export Products

- Cephalosporins
- Clopidogrel Bisulpahte
- Strontium Ranelate
- Rifaximin
- Levetiracetam

- Atorvastatin
- Sertraline
- Amoxicillin
- Ampicillin
- Trihydrat

Pharmaceutical Destinations in the State



Existing

Pharma Cluster, SAS Nagar

- Location: Mohali & Derabassi
- No. of units: 50+ API & formulations units
- Major companies: Sun Pharma, IOL Chemicals, Torque, Nectar, Saurav Chemicals, Ind-Swift.

Pharma Cluster, Amritsar

- No. of units: 155
- Major companies: Kwality, Jackson, Ramson Remedies
- Features: WHO GMP certified pharma unit located in the cluster

MediCity, SAS Nagar

- Location: New Chandigarh, Mohali
- Area: 250 acres
- Type of units: Multi-Specialty Hospitals, Super-Specialty Hospitals, Biotechnology & Pharma R&D centre
- Major Hospitals: Max Multi-Specialty Hospital & Grewal Eye Hospital

Proposed

Biotechnology Park, SAS Nagar

- Location: Mohali
- Land: 80 acres
- No. of units expected: 50+ API & formulations units
- Employment expected: 50,000
- Type of industry allowed: Orange category
- Facilities: Plug-and-play Lab space (5,000 sq. ft.), Skill development centre, Incubation centre, housing for executives and workers etc.

Presence of complete value chain in the state

Research & Development

Center of Excellence:



National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar, an institute of national importance, was set up to build the talent pool required to acquire leadership position in drug formulations.



Established in 2018, NIPER Mohali was the first NIPER in India



Ranked 1st amongst other 6 NIPERs in the country



Ranked 4th in India and 151-200 globally in QS ranking (under Pharmacy & Pharmacology) 2021



76 articles published in journals of repute* in 2021

05 05

Research carried out in areas of Drug development & formulation and diseases like cancer, leishmaniasis, neurodegeneration, tuberculosis, etc.



198 patents applications (families) filed; 109 patents granted till date

*Till 31st October 2021



MoUs signed in 2019, Johnson & Johnson, Zoetis, Andijan State Medical Institute (ASMI) Uzbekistan and National Research Development Corporation (NRDC)



Till Nov,2021, 4004 students have passed out (Masters 2968, MBA 689 & Ph.D. 347)



Multi-faceted research proposals submitted towards the containment, identification and treatment of COVID-19

Major Institutes:

All India Institute of Medical Sciences (AIIMS) and Postgraduate Institute of Medical Education and Research (PGIMER):

- Premier medical & research institutions of National importance
- Consistently ranked amongst top institutes for medical education

Council of Scientific & Industrial Research-Institute of Microbial Technology (CSIR IMTech):

• Fore-runner in niche domain of microbial biotechnology

Institute of Nano Science and Technology (INST)

- An autonomous institution of Department of Science and Technology (DST), Government of India (Gol)
- Established under the umbrella of NANO MISSION to boost R&D in Nanoscience & Nanotechnology

Indian Institute of Science Education and Research (IISER):

- Premier science research institute
- Work areas include Chemical Sciences, Life Sciences & Biotechnology

National Agri-Food Biotechnology Institute (NABI):

- First Agri-Food Biotechnology Institute
- Work areas include Agricultural Sciences, Life Sciences & Biotechnology

Department of Bio-Medical Engineering (DBME), Indian Institute of Technology (IIT):

• Work areas include biomedical imaging, biomedical - photonics, medical devices, cancer diagnostics and therapy, bio-materials and tissue engineering









NIPER-S.A.S. Nagar

CSIR-IMTech

Institute of Nano Science and Technology

PGIMER

Country's 2nd campus of National Institute of Virology upcoming:

- Research centre for Virology
- Part of Indian Council of Medical Research (ICMR)

Formulation

- Major Companies: Sun Pharmaceuticals, Abryl Laboratories, Torque, Nectar Lifesciences
- Major Districts: SAS Nagar and SBS Nagar
- Infrastructure: Upcoming Pharma Park in Wazirabad, District Shri Fatehgarh Sahib across 133 acres, and Biotechnology Park in Mohali, District SAS Nagar across 80 Acres

Active Pharmaceutical Ingredients (API)

- Major Companies: IOL Chemicals, Centrient Pharmaceuticals, Saurav Chemicals, Ind-Swift, Punjab Chemical and Crop Protection Ltd.
- Major Districts: SAS Nagar, Amritsar, Ludhiana, Barnala
- Infrastructure: Upcoming Bulk Drugs Park in Bathinda with an investment of USD 187.94 mn (INR 1500+ cr) across 1300 acres under the Gol's scheme of Promotion of Bulk Drugs Park

Support Services

 Major Companies: Parexel International, world's 2nd largest Clinical research organisation, has developed extensive operational presence in Mohali, employing over 2000 Pharmaceutical professionals

Market

 Market for APIs: Huge demand centre for APIs located within a radius 55 km from SAS Nagar and 260 km from Bhatinda. This centre meets 35% of Asia's pharma products demand

ADVANTAGE PUNJAB

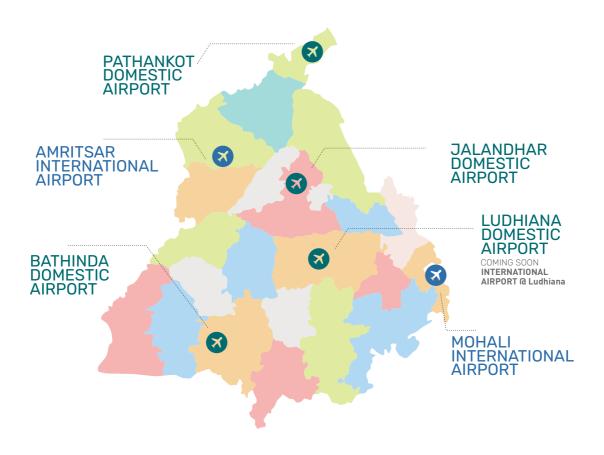
The Next Generation Investment & Innovation Destination



STRATEGICALLY LOCATED & WELL CONNECTED



Robust Connectivity



Flights to International locations including London, Rome, Dubai etc. and domestic locations such as Delhi, Mumbai, Bangalore, Hyderabad, Pune etc.

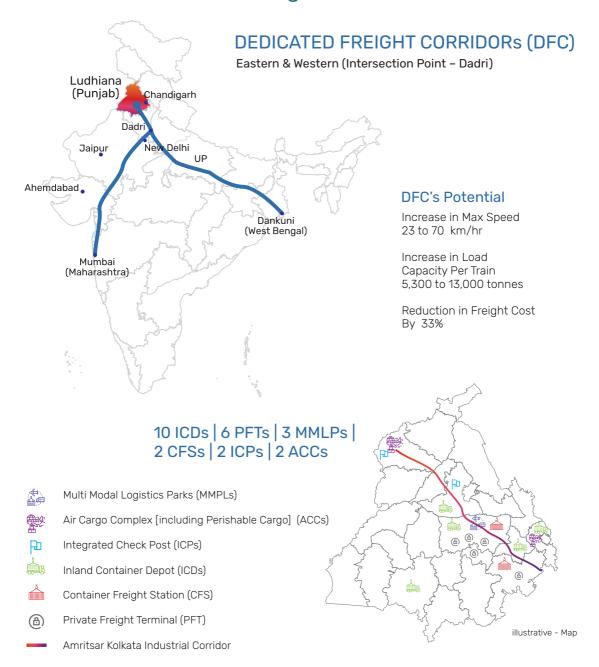


- 100% Road Connectivity
- 4/6 Lane Highways
- Road density is 1.75 times of India's road density



Rail density is twice the all India density

Ranked 3rd in Ease of Logistics in India



Amongst Top 10 States in Export Preparedness Index 2021



Quality Power at Competitive Rates

ABUNDANT		QU	ALITY	LOW COST	
TOTAL INSTALLED CAPACITY		LOW T&	D LOSSES	POWER AT COMPETITIVE RATE	
13,845 MW [^]		Punjab	5,033 MW		
Non Renewable 8,812 MW			VS	INR 5/unit (vc*)	
Renewable	5,033 MW	India	8,812 MW	to all industries	

Peaceful Workforce & Relaxaed Labour Laws

PEACEFUL LABOUR

- No Lockouts
- No Strikes

BOLD REFORMS

- 24x7 shifts allowed across Genders
- Flexibility In Hiring

No disruptions in Working Environment

- ^ As on 30.04.2021
- * Variable Cost

Skilled Human Capital

Ranked 4th in Human Capital by Niti Aayog on India Innovation Index 2020

103

47

26

190

D Pharma

B Pharma

M Pharma

Engineering Colleges*

141

101/

352

3

Polytechnics**

Skill Development Centres Industrial Training Institutes Health Sector Skill Development Centres

Leading Universities/Colleges







Dayanand Medical College



Punjab Institute Of Medical Sciences



Dr. S. S. Bhatnagar University Institute of Chemical Engineering & Technology



IIT, Ropar



Government Medical College



Baba Farid University









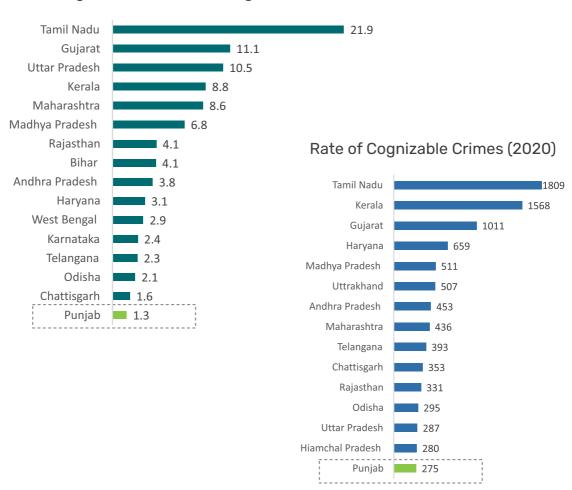




Safest Place To Do Business

One of the Lowest Share of Cognizable Crimes amongst major industrialized states of India

Percentage Share of State in Cognizable Crimes (2020)



Ranked 1st in Safety and Legal Environment by Niti Aayog

*Source: As per NCRB 2020 21

Unmatched Incentives

Attractive Incentives for Anchor Units (Highest incentive category)

Minimum Investment (FCI)	OR	Minimum Direct Employment
USD 25 mn (INR 200 cr)		1000 Persons

Pharmaceuticals, Biotechnology, Lifesciences

GST Reimbursement on inter and intra State sales for 15 years. Recovery of up to 200% of FCI. Land cost is a part of FCI

Employment subsidy up to USD 601 (INR 48,000) per employee per year for 5 years with NO DOMICILE RESTRICTIONS

100% Electricity Duty Exemption for 15 years

100% Exemption of Land CLUD/ EDC charges & Stamp Duty

100% Exemption of Property Tax for 10 years

Incentives for Thrust Sector Units

Pharma Sector defined as Thrust Sector

GST Reimbursement on inter and intra State sales for 10 years. Recovery of up to 125% of FCI. Land cost is a part of FCI

100% Electricity Duty Exemption for 10 years

100% Exemption of Land CLU/ EDC charges & Stamp Duty

100% Exemption of Property Tax for 10 years

Additional* Incentives to MSMF Units

- Reimbursement of 50% of expenses up to USD 6,265 mn (INR 5 lakh) under ZED scheme of GOI
- 50% financial support up to USD 31,325 mn (INR 25 lakh) on capital cost for setting up of ETP and for installation of Air Pollution Control Devices
- 75% of the expenses up to USD 25,606 mn (INR 20 lakh) for patent
- 100% Reimbursement of expenses in quality certifications up to USD 12,530 mn (INR 10 lakh)
- 1% of FOB value or actual freight paid from the place of Manufacture to shipment, whichever is less up to USD 25,606 mn (INR 20 Lakh) p.a
- Assistance for Finance, Technology, Infrastructure, Marketing & Exports etc.

INDUSTRIAL PARK - 25 ACRE & ABOVE



UPTO 50% ALLOWED FOR OTHER USE & NO CLU/EDC CHARGES

Ease Of Doing Business



Punjab is amongst the **Top Acheivers** in the **Ease of Doing Business Ranking 2020** as per Gol



INVESTMENT PROMOTION

REGULATORY CLEARANCES



ONE STOP OFFICE

ADVANCED SINGLE
WINDOW SYSTEM
ONE OF ITS KIND IN INDIA

FISCAL INCENTIVES

INVESTMENT FACILITATION







OFFICER



DIGITALAPPROVALS



TOP PERFORMING STATE INVESTMENT PROMOTION AGENCY OF INDIA (GOI)



Quality of Life

Ranked 5th on Health Index by Gol

 $\textbf{4}^{\text{th}} \ \textbf{highest} \ \textbf{Average Life Expectancy in India}$

Performs better than India on SDG 3 (Health) (Score of 77 vs National Average 74)

BEST HEALTHCARE FACILITIES



















BEST EDUCATIONAL FACILITIES







































Colleges

HOSPITALITY



















RECREATION

















Bestech Square Mall

Trilium Mall

Pavilion Mall





Investment Opportunities



Active Pharmaceutical Ingredients/ Bulk drugs



Contract research



Generics Medicines



Pharmaceutical Consultancy



Biotechnology



Medical Devices



Nanotechnology



Logistics & Warehouses



Formulations



Incubation Centers



R & D Centers



Dietary Supplements

Investor Voice



66

Sun Pharma has positive experience of working with the Government of Punjab and setting up two of its manufacturing facilities in the State with a total investment of more than INR 1,000 Cr. As a result of sound infrastructure in the State, like quality educational institutions and world-class healthcare facilities, it has been easier for Sun Pharma to retain its skilled workforce. We are also very happy with the good work culture in the State and the availability of trained manpower.

We also plan to invest INR 500 Cr towards expansion of our facilities during the next three financial years.

Mr. Dilip ShanghviManaging Director
Sun Pharmaceutical Industries Ltd.



66

The team of Invest Punjab was very collaborative & supported us from inception of Project. For one of our associate companies, we filed a request for a new plant in August 2018 and were allotted land within a short span of 2 months only. The project commercialized in April 2019. The facilitation provided by Invest Punjab has incentivized us to expand operations in the state. We would like to thank Government of Punjab for its investor friendly policies that have propelled growth of businesses in the state.







66

The State of Punjab has a strong presence of complete value chain in Pharmaceutical Sector. Presence of players in API/bulk drug manufacturing to drug formulation provides complete eco-system for the companies to invest and grow in the region. State of Punjab also provides eco system which facilitates ease of doing business such as single window time bound approval system for all regulatory clearances and incentives. Centrient made an investment of approx. INR 170 crores in 2019/ 2020 to double company's API capacity to meet growing demand for high quality Atorvastatin and Rosuvastatin under Product linked Incentive scheme of Central government. The team at Invest Punjab has been very pro-active in providing necessary support and approvals in a timely manner.

Mr. Shalabh Goel

Country President & Finance Director
Centrient Pharmaceuticals India Pvt Ltd.





66

Nectar Lifesciences Ltd. (NLL) started its operations in 1997 in Derabassi, Punjab in 10 acres facility & over the last 25 years has expanded to 120 acres campus, giving employment to ~3000 personnel by dint of excellent facilitation by Government of Punjab, particularly Invest Punjab. NLL has domain global leadership in APIs in the high technology field of antibiotics classified as Cephalosporins both in Steriles (Injectables) & Orals (API-s).

We're indeed grateful to the Government of Punjab to have helped us to be a partner in progress, which led NLL exporting to 50 countries as well as establish dominance in domestic markets. NLL proposes to expand its operations in pharmaceuticals-API, Intermediates, Key starting Raw Materials, and Specialty & Fine Chemicals in Lalru, Punjab, in the future. We look forward to working synergistically & strategically with Invest Punjab, which is a "One Stop Shop" & Single Window for promoting "Ease of Doing Business.

Mr. Dinesh Dua

Executive Director Nectar Lifesciences Ltd.





66

Akums Lifesciences had a great experience of investing in Punjab. We have always received a prompt response and established a very cordial relationship with the Invest Punjab team. Although Akums has 2 manufacturing units in the State with an investment of INR 200 Cr, Akums further plans to invest additional INR 150 Cr in the next 2 years in Punjab. The Government of Punjab handheld us in obtaining various regulatory approvals, in the process ensuring timely commencement of operations. Further, a vibrant and positive work environment and skilled manpower have ensured smooth operations. In addition, lucrative subsidies offered by the State is a great motivation to grow. We are grateful to the Government of Punjab for its industry friendly approach.

Dr. Shekhar BhirudChief Executive Officer
Akums Drugs & Pharmaceuticals Ltd.





66

Saurav Chemicals has its presence in Punjab since last three decades. For Saurav Chemicals, Punjab has always been the preferred destination for doing business. The overall ecosystem in the State is dynamic, transparent and provides strength to the business.

The availability of skilled manpower, infrastructure network, fast approvals and Industry-Government association are some of the encouraging factors in Punjab that make it a sound business hub.

Mr. Parveen GoyalChairman cum Managing Director
Sauray Chemicals Ltd.







Partners in Growth































































NOTES

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