

# STRATEGIC MANUFACTURING INVESTMENT ADVISORY

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**Establishment of a Potato Starch Manufacturing Unit**  
M/s. Dhampur Sugar Mills Limited, Bijnor, Uttar Pradesh

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*"From Investment Idea to Industrial Reality — Powered by NPCS Expertise"*

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Prepared by: Niir Project Consultancy Services (NPCS)  
Asia's Leading Industrial Knowledge Ecosystem

## About Niir Project Consultancy Services (NPCS)

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Niir Project Consultancy Services (NPCS) is India's foremost industrial knowledge and advisory organization, providing data-driven feasibility studies, Detailed Project Reports (DPRs), market intelligence, and strategic consulting to entrepreneurs, MSMEs, startups, and large-scale investors across the globe.

NPCS is part of Asia's leading industrial knowledge ecosystem with thousands of project profiles and global consulting expertise. Our multi-disciplinary team of engineers, economists, market analysts, and industry specialists delivers end-to-end project intelligence that empowers businesses to make confident, bankable investment decisions.

### Core Service Offerings

- Detailed Project Reports (DPR) — Comprehensive, bankable manufacturing project reports
- Techno-Economic Feasibility Studies — Investment validation through technical and market analysis
- Market Research & Demand Analysis — Actionable intelligence for informed business decisions
- Engineering & Technical Advisory — Manufacturing process optimization and plant design guidance
- Financial Modelling — ROI, IRR, payback analysis, and investment scenario planning

## NPCS by the Numbers

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<b>30,000+</b> Project Reports Published	<b>50+</b> Countries Served	<b>30+</b> Years of Expertise	<b>250,000+</b> Industrial Projects Delivered
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## Project Snapshot

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<b>Client Name</b>	M/s. Dhampur Sugar Mills Limited
<b>Location</b>	Bijnor, Uttar Pradesh, India
<b>Industry</b>	Agro-Processing / Large Scale Manufacturing Investment
<b>Project Recommended</b>	Potato Starch Manufacturing Unit
<b>Consultancy Provided</b>	Techno-Economic Feasibility Study, Market Assessment, Raw Material Analysis, Technical Feasibility Evaluation, Project Cost Estimation, Financial Viability Assessment, Strategic Advisory
<b>Implementation Status</b>	Client Agreed to Proceed with Project Implementation

## Client Overview & Investment Objective

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M/s. Dhampur Sugar Mills Limited is an established industrial enterprise based in Bijnor, Uttar Pradesh — one of India's key agro-industrial belts. As a forward-thinking industrial group, the company sought to diversify its operations and unlock the growth potential of the expanding agro-processing sector.

The client approached NPCS with a clear strategic mandate: to identify a commercially viable, technically feasible, and regionally aligned manufacturing opportunity capable of delivering long-term profitability and operational sustainability.

### Key Investment Objectives

- Identify a manufacturing venture with strong and diversified market demand
- Ensure alignment with regional agricultural resources and supply chain strengths
- Achieve scalable production capabilities with room for capacity expansion
- Secure a project with favourable financial returns and manageable investment risk
- Leverage established operational infrastructure for a faster market entry

## Challenges & Problem Statement

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Identifying the right manufacturing venture requires navigating complex layers of technical, market, financial, and operational variables. The client faced several key challenges before engaging NPCS:

### Market & Competitive Gaps

- Difficulty identifying a high-potential niche within the broader agro-processing landscape
- Limited visibility into the competitive intensity and growth outlook of candidate sectors

### **Technical Complexity**

- Uncertainty around manufacturing process requirements, plant specifications, and technology choices
- Need for independent validation of raw material availability and quality standards

### **Financial & Investment Risk**

- Inability to independently assess project costs, working capital requirements, and ROI timelines
- Exposure to investment risk in the absence of independent financial due diligence

### **Regulatory & Compliance Complexity**

- Navigation of applicable environmental, food safety, and industrial licensing requirements
- Need for expert guidance on phased regulatory compliance during project implementation

## Our Approach & Consulting Methodology

NPCS deployed a structured, five-stage consulting methodology to evaluate the opportunity and deliver a comprehensive techno-economic feasibility recommendation to the client:

<b>01</b>	<b>Project Identification</b>	Comprehensive review of manufacturing sectors aligned with client goals, regional strengths, and market dynamics.
<b>02</b>	<b>Market Analysis</b>	In-depth demand assessment covering domestic and export markets, key consumers, and growth trajectories.
<b>03</b>	<b>Technical Feasibility</b>	Evaluation of manufacturing processes, technology selection, plant layout, raw material sourcing, and production planning.
<b>04</b>	<b>Financial Modeling</b>	Detailed cost estimation, investment planning, ROI projection, and profitability analysis under various scenarios.
<b>05</b>	<b>Implementation Strategy</b>	Phased execution roadmap covering pre-project setup, procurement, plant commissioning, and operational readiness.

## Business Opportunity: Potato Starch Manufacturing

Following rigorous analysis, NPCS identified the establishment of a Potato Starch Manufacturing Unit as the optimal investment opportunity for the client. Potato starch is a versatile, high-demand industrial ingredient with broad application across multiple high-growth sectors.

### Why Potato Starch? Key Strategic Drivers

- Abundant and consistent availability of potato raw material in Uttar Pradesh's agricultural belt
- Rising domestic and export demand for food-grade and industrial-grade starch products
- Relatively moderate capital investment with strong scalability potential
- Growing consumer and industrial preference for naturally derived plant-based ingredients
- Significant import substitution opportunity in India's specialty starch segment
- Strong alignment with the client's existing supply chain and agro-processing capabilities

## Market Opportunity & Demand Outlook

The Indian and global markets for potato starch present a highly promising commercial landscape. NPCS's market intelligence identified strong and diversified demand across the following end-use sectors:

End-Use Sector	Key Applications
Food Processing Industry	Baked goods, snacks, confectionery, convenience foods
Pharmaceutical Sector	Tablet binding agents, capsule fillers, excipients
Textile Industry	Fabric sizing, finishing agents, textile processing aids
Paper Manufacturing	Paper coating, surface sizing, retention aids
Adhesives & Industrial	Specialty adhesives, industrial binders, packaging

### Key Market Growth Drivers

- Rapid expansion of India's packaged and processed food industry, driving starch demand
- Increasing penetration of starch-based excipients in the pharmaceutical sector
- Government support for agro-processing industries under schemes such as PLI and PMFME
- Rising institutional demand from paper and textile mills expanding their capacity
- Growing export potential for food-grade potato starch to Southeast Asian and Gulf markets

## Scope of Consulting Services Delivered

NPCS provided a comprehensive suite of consulting deliverables tailored to the client's investment objectives and project requirements:

✓ Identification of Manufacturing Opportunity	✓ Market Potential Assessment
✓ Raw Material Availability Analysis	✓ Technical Feasibility Insights
✓ Project Cost Estimation	✓ Financial Viability Evaluation
✓ Implementation Planning Inputs	✓ Strategic Advisory Support

### Key Deliverables

- Detailed Project Report (DPR) covering all technical, market, and financial parameters
- Plant layout and production process flow design
- Machinery selection guide with key equipment specifications and vendor considerations
- Financial model with investment estimates, ROI projections, and payback analysis
- Market demand validation report with demand-supply gap analysis
- Implementation roadmap with phased milestones and timelines

## Technical Insights: Manufacturing Process Overview

NPCS conducted a thorough technical assessment of the potato starch manufacturing process to validate operational feasibility and identify optimal production methods. The manufacturing process follows an established wet-milling approach:

### Step-by-Step Production Process

- Step 1 — Raw Material Receipt & Washing: Potatoes are received, cleaned, and washed to remove soil and impurities, ensuring a high-quality feedstock.
- Step 2 — Rasping & Cell Disruption: Cleaned potatoes are rasped using high-speed rasps to rupture cells and release starch granules into a slurry.
- Step 3 — Starch Extraction & Screening: The slurry passes through fine screens to separate starch milk from potato pulp and fibrous residue.
- Step 4 — Concentration & Washing: Starch milk is concentrated using hydrocyclone systems and washed in multi-stage countercurrent circuits.
- Step 5 — Dewatering: Concentrated starch is dewatered using vacuum drum filters or centrifugal decanters to remove excess moisture.
- Step 6 — Drying: Wet starch cake is dried to a moisture content of 18–20% using flash dryers, ensuring product shelf stability.
- Step 7 — Milling, Sieving & Packaging: Dried starch is milled to specification, sieved for uniformity, and packed in food-grade packaging.

## Key Plant & Machinery

- Industrial potato washers and conveyors for raw material handling
- High-speed rasps and pulp centrifuges for extraction
- Hydrocyclone units for starch concentration and washing
- Vacuum drum filters and dewatering centrifuges
- Flash drying systems with temperature and moisture control
- Automated sieving, milling, and packaging lines

## Financial & Investment Highlights

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NPCS conducted a detailed financial viability evaluation to assess the investment attractiveness and long-term commercial sustainability of the proposed potato starch manufacturing unit. Key findings from the financial assessment include:

### Financial Assessment Parameters Covered

- Total project cost estimation including land, building, plant & machinery, and pre-operative expenses
- Working capital requirements and funding structure analysis
- Revenue projections based on installed capacity and market pricing benchmarks
- Cost of production analysis covering raw materials, utilities, labour, and overhead
- Projected profitability across years 1–5 of operations
- Return on Investment (ROI), Internal Rate of Return (IRR), and Payback Period estimation
- Break-even analysis and sensitivity modelling under conservative and optimistic scenarios

The financial assessment confirmed that the project presents a viable investment case with moderate capital requirements, strong revenue generation potential, and a commercially attractive return profile — making it suitable for large-scale industrial investment by M/s. Dhampur Sugar Mills Limited.

## Project Results & Outcomes

Through NPCS's structured consulting engagement, M/s. Dhampur Sugar Mills Limited gained comprehensive intelligence to make a well-informed, risk-calibrated investment decision. The following outcomes were delivered:

✓ Entry into a high-growth agro-processing manufacturing segment	✓ Alignment with regional agricultural strengths (potato-growing belt)
✓ Strong and diversified industrial demand potential across 5+ sectors	✓ Potential for stable commercial returns over time
✓ Long-term operational sustainability with consistent revenue prospects	✓ Reduced investment uncertainty through structured feasibility validation
✓ Opportunities for product diversification into modified starches	✓ Improved investor and lender confidence with a bankable project report

The client confirmed confidence in the project's commercial and technical viability and proceeded to move forward with implementation of the proposed Potato Starch Manufacturing Unit.

## Client Testimonial



*NPCS provided us with valuable techno-economic insights and strategic guidance that helped us evaluate a promising agro-based manufacturing opportunity with confidence. Their structured feasibility approach and professional support enabled us to make a well-informed, bankable investment decision aligned with our long-term business objectives.*

— M/s. Dhampur Sugar Mills Limited, Bijnor, Uttar Pradesh

## Why Choose NPCS as Your Industrial Consulting Partner?

For over 30 years, NPCS has been the trusted industrial consulting partner for entrepreneurs, MSMEs, and large-scale investors looking to identify, validate, and execute profitable manufacturing ventures. Here is why NPCS stands apart:

<b>Proven Industrial Expertise</b>	30+ years of deep domain knowledge across 50+ industrial verticals, covering everything from food processing to chemical manufacturing.
<b>Global Market Understanding</b>	Clients across 50+ countries with nuanced insights into international trade dynamics, import substitution opportunities, and global demand patterns.
<b>Data-Driven Feasibility</b>	Every recommendation is backed by rigorous market data, financial modelling, and technical validation — not assumptions.
<b>End-to-End Project Support</b>	From initial opportunity identification through DPR preparation, plant layout, machinery advisory, and commissioning — NPCS covers it all.
<b>Risk Mitigation Approach</b>	Structured feasibility frameworks identify project risks early, allowing proactive mitigation before capital commitment.

## Conclusion

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Successful manufacturing investments are built on three pillars: rigorous technical validation, market intelligence, and disciplined financial planning. The NPCS engagement with M/s. Dhampur Sugar Mills Limited exemplifies how a structured consultancy approach can transform an investment idea into a commercially viable and technically sound manufacturing project.

From opportunity identification and market assessment to financial modelling and implementation planning, NPCS delivered a holistic advisory framework that gave the client the clarity, confidence, and data-backed intelligence to commit to a large-scale industrial project.

This engagement reinforces NPCS's positioning as Asia's leading industrial knowledge and consulting ecosystem — empowering businesses at every stage of the project lifecycle.

### READY TO BUILD YOUR NEXT INDUSTRIAL PROJECT?

Partner with Niir Project Consultancy Services (NPCS) to transform your investment idea into a profitable industrial venture.

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