

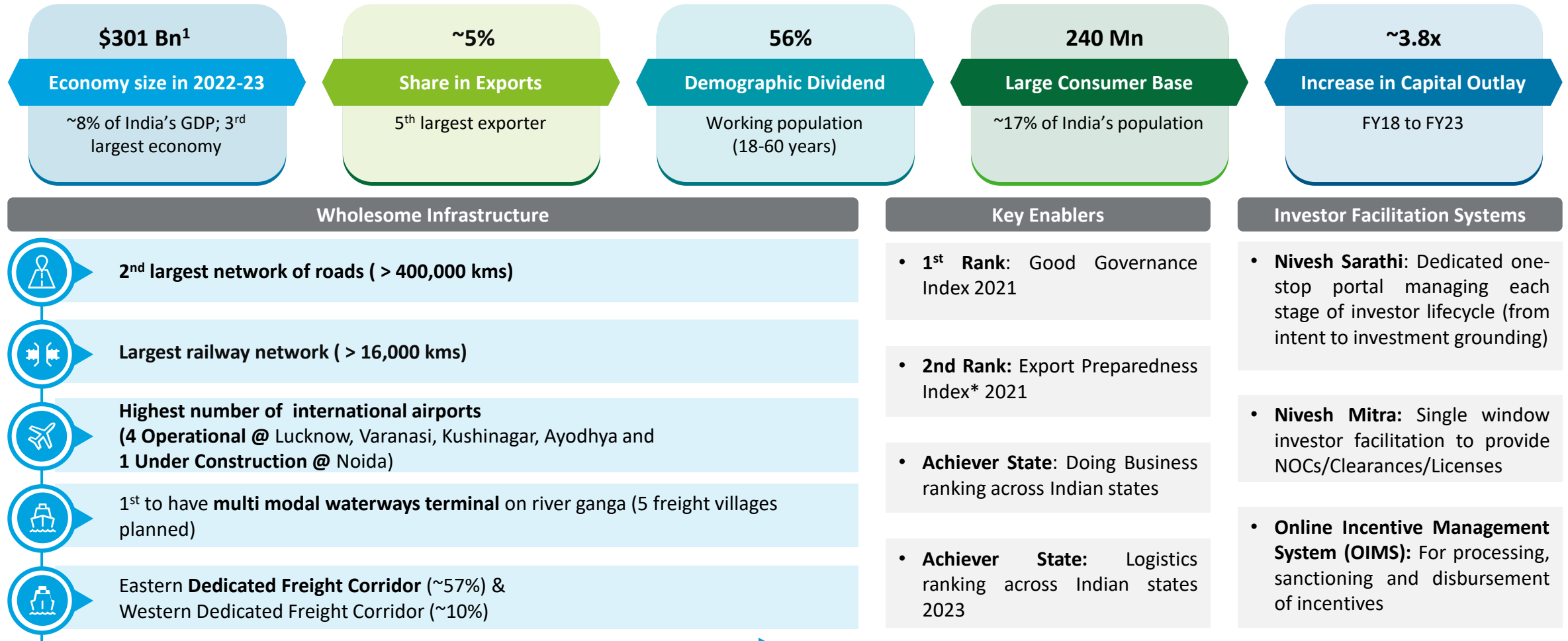


Uttar Pradesh Food Processing

Sowing Prosperity, Harvesting Progress
April 2024

UP – State with Robust and Resilient Economy

The economic momentum of UP is well-poised to continue on a higher trajectory



¹Exchange rate assumed as \$1 = ₹75

*Among landlocked states

Sources: UPDES; Population Projections – MoHFW for FY22, GSVA at current prices 2011-12 series; InvestUP; RBI; World Bank; DGCIS; Deloitte Analysis




Section A – Agriculture & allied (Food Processing) in UP | An overview


Agri & Allied Sector

UP is one the leading states in agriculture and food processing in India.


Sector Overview




Largest
Production of Milk,
Grain, Sugarcane,
Mangoes and Indian
Gooseberries




#3
In India in
Production of
fruits



#3
In India in inland
fish production



Largest
Exporter of
processed frozen
meat in India



77
Government community
fruit preservation and
training centers at district
level

Advantage UP

- 15 Agro & Food Processing Parks/clusters established in Varanasi, Barabanki, Saharanpur, Gorakhpur etc.
- Mega Food Park, Baheri: 40 KM from Bareilly bordering Uttarakhand. 247.60 Acres have been earmarked for the Mega Food Park
- 250 Regulated Market; 225 Rural Market; 100 eNAM Mandis
- 4 Agriculture Export Zones, 10 ICDs, 1909 Cold chains, 35 FPOs
- Premier institutes like Kanpur University, Ayodhya University, SHUATS Prayagraj, SVPUA&T Meerut and Indian Veterinary Institute, Bareilly

Current Scenario

- Top commodities: Buffalo meat, Rice (Basmati and Non-Basmati), Cereal preparations, Wheat and Dairy products
- Current key markets for UP - South Africa, USA, Australia, Canada.
- UP's Production of Basmati rice: 25.5 lakh MT (#3 in area)
- UP has GI tag for Kalanamak rice.
- UP's production of Kalanamak rice: 15,000 MT (2021); ~7% leveraged for exports.
- UP's Basmati exports (2021-22): \$0.05 bn; India: \$3.5 bn (expected to grow at 6% CAGR)

Production (MT) vs Processing (MT)

Produce	UP - Rank in Production	UP - Rank in Processing
Wheat	1	3
Paddy	2	6
Sugarcane	1	2
Mango	1	6
Potato	1	6
Peas	1	4
Milk	1	4
Fish	6	10+

Agri & Allied Sector | Food Processing

UP has over ~2K organized players with major presence in Gautam Buddha Nagar

Existing players in UP

Produce	Key Industrial Clusters and Investment Zones/ Districts
Wheat	Hardoi, Aligarh, Budaun, Bulandshahar, Shahjahanpur, Azamgarh, Meerut, Moradabad, Bareilly, Kanpur, Gorakhpur, Faizabad, Varanasi
Rice	Shahjahanpur, Barabanki, Kheri, Siddharth Nagar, Gorakhpur, Gonda, Kheri, Bareilly, Moradabad, Meerut
Mango	Lucknow, Saharanpur, Unnao
Banana	Gorakhpur, Kushi Nagar, Kaushambi, Maharajganj, Baharaich, Barabanki, Lucknow, Prayagraj, Fatehpur, Lakhimpur- Khiri
Guava	Budaun, Kasganj, Aligarh, Farrukhabad, Hathras, Unnao, Kanpur Nagar, Kaushambi, Prayagraj
Potato	Agra, Hathras, Firozabad, Kannauj, Aligarh, Farukkhabad, Mainpuri
Peas	Jalaun, Lalitpur, Jhansi
Tomato	Mainpuri, Agra, Etah, Barabanki, Unnao





Section B – Government initiatives to boost the sector

Agri/Horti Sector initiatives under UP \$1TN

Policy Highlights – Uttar Pradesh Food Processing Industry Policy 2023

Subsidies & Incentives

01

Capital subsidy

- Plant, machinery, and technical civil work - 35% capped at INR 5 Cr
- Expansion and modernization / up-gradation – 25% capped at INR 1 Cr

Incentives

- Exemption from charges: 2% of the value at circle rate
- 75% rebate on external development charges
- 50% fees waived off on CLU (Conversion of Land Use)
- Stamp Duty Exemption @100%

Infrastructure Support

02

- Cold Chain and value addition infrastructure: 35% capped at INR 10 Cr
- Frozen storage/deep freezer & value addition: 50% capped at INR 10 Cr
- Agro processing clusters: 35% capped at INR 10 Cr
- Creation of backward and forward linkages: 35% capped at INR 10 Cr

Technology & Innovation

03

- Solar power projects: 50% subsidy in rural areas, 90% for women entrepreneurs
- Assistance for modern technology adoption: Up to Rs. 5 crores
- Promotion of decentralized processing and storage: Assistance for SHGs/FPOs/Farmers capped at 50% of total project cost or Rs. 50 lacs

Market Facilitation

04

- 25% Freight Subsidy on exports excluding Nepal, Bangladesh and Bhutan
- Exemption from Mandi fees and cess
- Support for food processing start-ups and SHGs/FPOs/Farmers

Key supporting measures:



Affirm fair & remunerative price of the produce to the growers



Ensure Value addition to the price of raw produce



Promote setting up of food processing industries



Easy availability of processed food products to consumers at competitive prices

Agri/Horti Sector initiatives under UP \$1TN

Policy Highlights

As part of UP govt's initiative to achieve a \$1Tn Economy, UP Govt has introduced multiple policies which would greatly benefit investors in the state.

UP Agriculture Export Promotion Policy 2022

Cluster Area	Incentives
50 – 100 ha	10 lakhs
100 – 150 ha	16 lakhs
150 – 200 ha	20 lakhs
200 – 250 ha	28 lakhs
250 – 300 ha	34 lakhs
300 – 350 ha	40 lakhs

If area of cluster increases, increase in amount of INR 6 lakh permitted

The incentive limit is on completion of cluster construction, registration and export obligation

UP Industrial Investment & Employment Promotion Policy 2022

Categories	Capital Investment
Large	Above ₹50 Cr but below ₹200 Cr
Mega	₹200 Cr or above but below ₹500 Cr
Super Mega	₹500 Cr or above but below ₹3,000 Cr
Ultra Mega	₹3,000 Cr or above

Investment Promotion Subsidy: A **one-time choice** is given between **three mutually exclusive options** during the time of application. Request for additional chance of changing the option has been processed and is pending for the approval.

- **Option 1:** Capital subsidy with boosters (Employment booster, Export booster & Ecosystem booster)
- **Option 2:** Net SGST 100% Reimbursement subject to conditions
- **Option 3:** PLI Top-up

A Policy Implementation Unit (PIU) will be established under Invest UP for effective implementation of the policy



FDI, Fortune Global 500 & Fortune India 500 Companies Investment Promotion Policy, 2023

Eligibility Criteria:

- ✓ Projects with Foreign Direct Investment (FDI) Capital Investment of above ₹100 crores.
- ✓ Projects with Capital Investment of more than ₹100 crores by companies included in the list of Fortune Global-500 and Fortune India-500, subject to Negative list.

UP FDI and Fortune 500 Policy 2023 – Fiscal Incentives

Major benefits

Capital subsidy

- 25% of *ECI (excluding land cost) in Gautam Buddha Nagar and Ghaziabad regions
- 30% of ECI (excluding land cost) in Paschimanchal and Madhyanchal regions
- 35% of ECI (excluding land cost) in Bundelkhand and Purvanchal regions

Capital Subsidy will be provided in 7 equal annual instalments with annual capping of INR 100 crores

SGST reimbursement/ refund

- **Option A - Net SGST reimbursement on sales:**
 - 100% of net SGST paid for 10 years
 - Annual capping: Upto 10% of ECI, Overall capping: Upto 100% of ECI (excluding land cost and capital subsidy)
- **Option B - Input SGST refund on capital goods:** 100% SGST refund in 5 annual instalment (Applicable only in case of inverted duty structure)

Note: Option to choose any one out of A and B is available

Land subsidy

- Upto 75% in Paschimanchal and Madhyanchal region
- Upto 80% in Bundelkhand and Purvanchal region

Other fiscal benefits

- **Stamp Duty & Registration Fees:** 50% - 100% exemption/ reimbursement

- **Electricity Duty:** 100% exemption from for 5 years

- **Skill development subsidy:** Upto INR 5,000 p.m. per person for 5 years (max. 500 persons)

- **Green Industry Incentives:** 50% capital subsidy on the cost of Effluent Treatment Plant capped at INR 2.5 crores

- **Industrial Housing Incentives:** Reimbursement upto 10% of the cost of development of workers' housing or dormitory for 7 years overall capped at INR 10 crores

- **R&D incentives:** Reimbursement upto 25% of the cost of standalone R&D centre capped at INR 10 crores (with minimum capital investment of INR 20 crores)

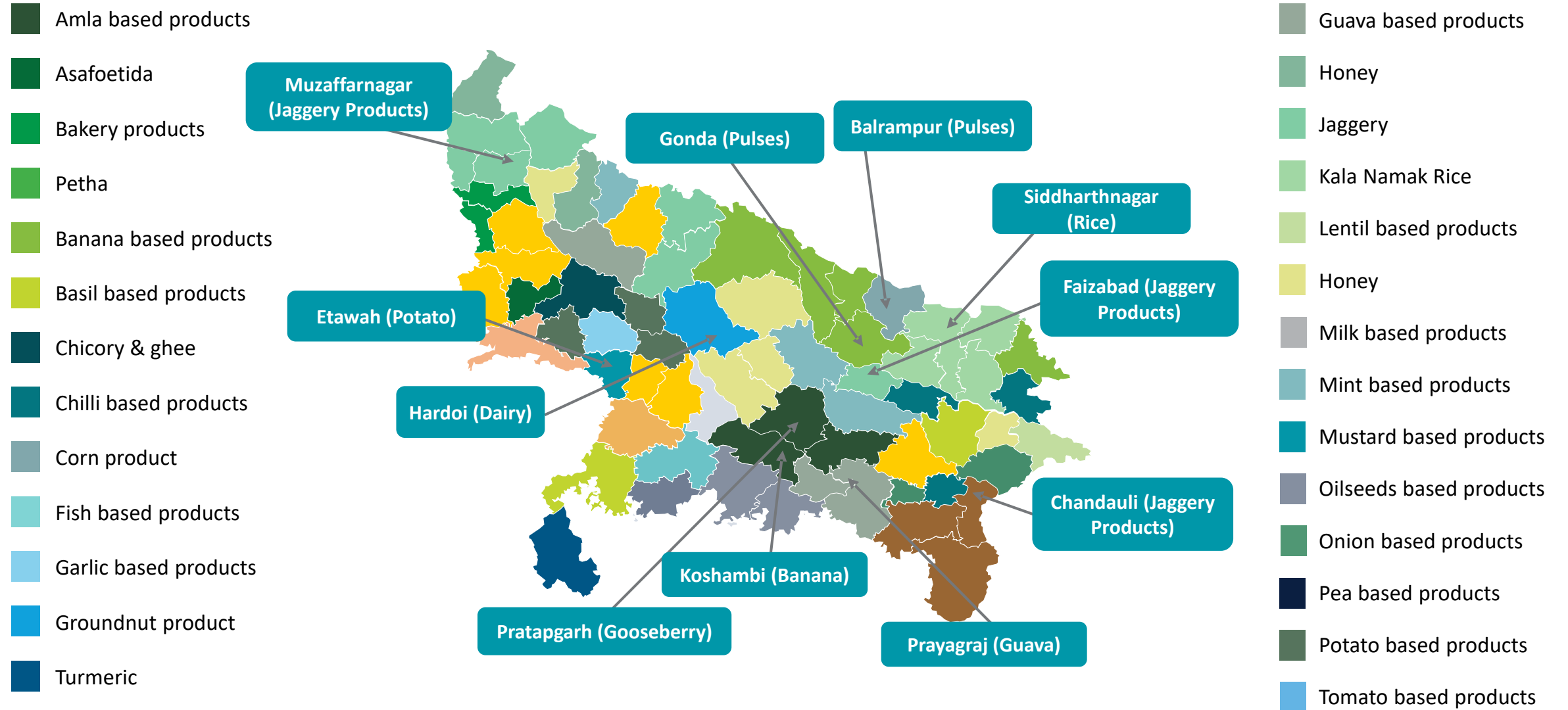
- **Centers of Excellence (CoE):** Grant upto 50% of the project cost capped at INR 10 crores per project
Note: Option to choose any one out of above is available

- **Logistics Subsidy:** Reimbursement upto 50% of the transportation cost on import capped at INR 12 crores per unit (in case of shifting of existing plant from international or domestic locations to UP)

- **Patent cost:** Reimbursement upto 75% of the cost capped at INR 10 lakh (for domestic) and INR 20 lakh (for international)

Strengthening ODOP scheme




UP has identified ODOP for its 75 districts under the PMFME scheme.





Section C : Overview of Key Opportunities in UP

Primary Opportunities:

-  **Processing-** With strong supply side advantages, local demand, rising export potential and policy support, processing of food products offer immense potential in the State. Considering the abundance of naturally existing agro-resources, investments in mango processing, turmeric processing, aonla processing, breakfast and cereal manufacturing, garlic and chilli processing, etc. is a promising opportunity in Uttar Pradesh.
-  **Manufacturing & Supply of Agro inputs** – Given the huge agrarian economy of the State, immense potential exists in manufacturing, production and supply of necessary fertilizers, seeds, agro-chemicals, farm equipment, machinery and irrigation systems to increase production and productivity.
-  **Integrated Units-** Investment in developing integrated units with processing, preservation, packaging and warehousing facilities at notified Agro Parks in the state is a promising investment opportunity. These agro parks include Mega Food Park at Baheri, Agro Park at Barabanki, Khemsepur (Farukhabad), Karkheon (Varanasi) and Barhgarh-II (Chitrakoot).

Other Opportunities



Establishment of Centre of Excellence for Agriculture sector



Processing of Potatoes and Mangoes



Development of packhouses



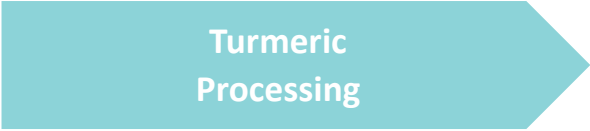


Development of storage infrastructure






Development of Special Agriculture Economic Zones



Few Identified Opportunities – Food Processing – 1/3

Sub Sector	Product opportunities	Value Proposition
 <p>Mango Processing</p>	<ul style="list-style-type: none"> Mango juice Pulp Candy Leather (mango papad) Squash 	<ul style="list-style-type: none"> The global mango juice market is anticipated to reach INR 1,43,650 Cr the end of 2024, expanding at a compound annual growth rate of 4.1% over the period i.e. 2016-2024. The fruit juice market in India is expected to grow at a CAGR of 35%-40%. The mango drink segment has 80% share of the fruit juices market. With production of 4,512.7 Thousand Tonnes of Mango in 2015-16 Uttar Pradesh is the highest producer of Mangoes in India.
 <p>Potato Processing</p>	<ul style="list-style-type: none"> Chips Wafers Granules Sticks 	<ul style="list-style-type: none"> The global potato market as on year 2022 is INR 963 Cr and expected to grow at a CAGR of over 9% till 2028. Potato varieties cultivated in Uttar Pradesh include Kufri Bahar, Sadabahar, Kufri Surya and Kufri Chipsona The demand for processing quality potatoes is estimated to rise at the fastest pace for French fries (11.6% CAGR) followed by potato flakes and powder (7.6% CAGR) and potato chips (4.5% CAGR). Thus, actual demand for processable potatoes (i.e., raw material demand for the potato processing industry) is estimated to rise from 2.8 million MT in 2010 to 25 million MT in 2050 at a CAGR of 5.61%.
 <p>Turmeric Processing</p>	<ul style="list-style-type: none"> Turmeric Powder 	<ul style="list-style-type: none"> Global market size is expected to reach INR 645.45 Crore by 2024 and is expected to grow at a CAGR of over 6% till 2021. The cultivation of turmeric is growing in the State. The State is poised to cater to the increased demand of turmeric.

Few Identified Opportunities – Food Processing – 2/3

<u>Sub Sector</u>	<u>Product opportunities</u>	<u>Value Proposition</u>
 Aonla Processing	<ul style="list-style-type: none">• Pickles• Jam• Jelly• Murabba• Squash• Juice	<ul style="list-style-type: none">• The global Aonla market is expected to grow from INR 395 Cr in 2023 to INR 766 Cr by 2033, with a compound annual growth rate (CAGR) of 6.8%.• Uttar Pradesh is the largest producer of aonla in India, with about 60% of the country's production coming from the state. Pratapgarh district is the largest producer with about 20,000 hectares of aonla orchards.
 Breakfast & Cereal Processing	<ul style="list-style-type: none">• Wheat• Rice• Corn• Oats• Millets• Rye	<ul style="list-style-type: none">• The global breakfast cereal market was estimated at INR 2.79 Cr in 2016 and is expected to grow at a CAGR of 4.3% to INR 3.57 Cr by 2022• Uttar Pradesh is the largest producer of food grains in India, accounting for 18.89% of the country's total output• The state produces many major food grains, including wheat, rice, maize, millet, gram, pea, and lentils. Uttar Pradesh produced approximately 58 million metric tons of food grains as on 2021.
 Garlic and Chilli processing	<ul style="list-style-type: none">• Garlic powder paste• Instant mix• chili paste, sauce	<ul style="list-style-type: none">• Global condiments sauces market is expected to grow at a CAGR of 3.21% during 2014-20.• With rise in production of Garlic, Chilli and other condiments in the State, the opportunities of processing these commodities in Uttar Pradesh is immense.

Few Identified Opportunities – Food Processing – 3/3

Sub Sector	Product opportunities	Value Proposition
 <p>Oil Seeds Processing</p>	<ul style="list-style-type: none"> • Cooking oil • Shortenings • Margarine/Salad oils • Hulls • Oil cakes/meals • Different Seeds Oils (Sunflower, Groundnut, Pumpkin, Sesame, etc.) 	<ul style="list-style-type: none"> • The global Oil Seeds market is expected to grow from INR 244.09 Cr in 2022 to INR 374.60 Cr by 2030, with a compound annual growth rate (CAGR) of 5.5%. • In Uttar Pradesh around 13 lakh hectare of land is used for sowing of oilseeds. The major oilseeds grown in UP include groundnut, mustard, sesame etc.
 <p>Sugarcane Processing</p>	<ul style="list-style-type: none"> • Sugar • Jaggery • Syrups • Cellulose • Bagasse • Molasses 	<ul style="list-style-type: none"> • The global Sugarcane market was estimated at INR 44.56 Cr in 2022 and is expected to grow at a CAGR of 4.6% to INR 69.67 Cr by 2032 • Sugarcane and sugar industry is a vital industry, a total of 118 sugar mills operated in the state during crushing season 2022-23. • The total sugarcane area of the state is 28.53 lakh hectares and sugarcane productivity is 839 quintals per hectare.

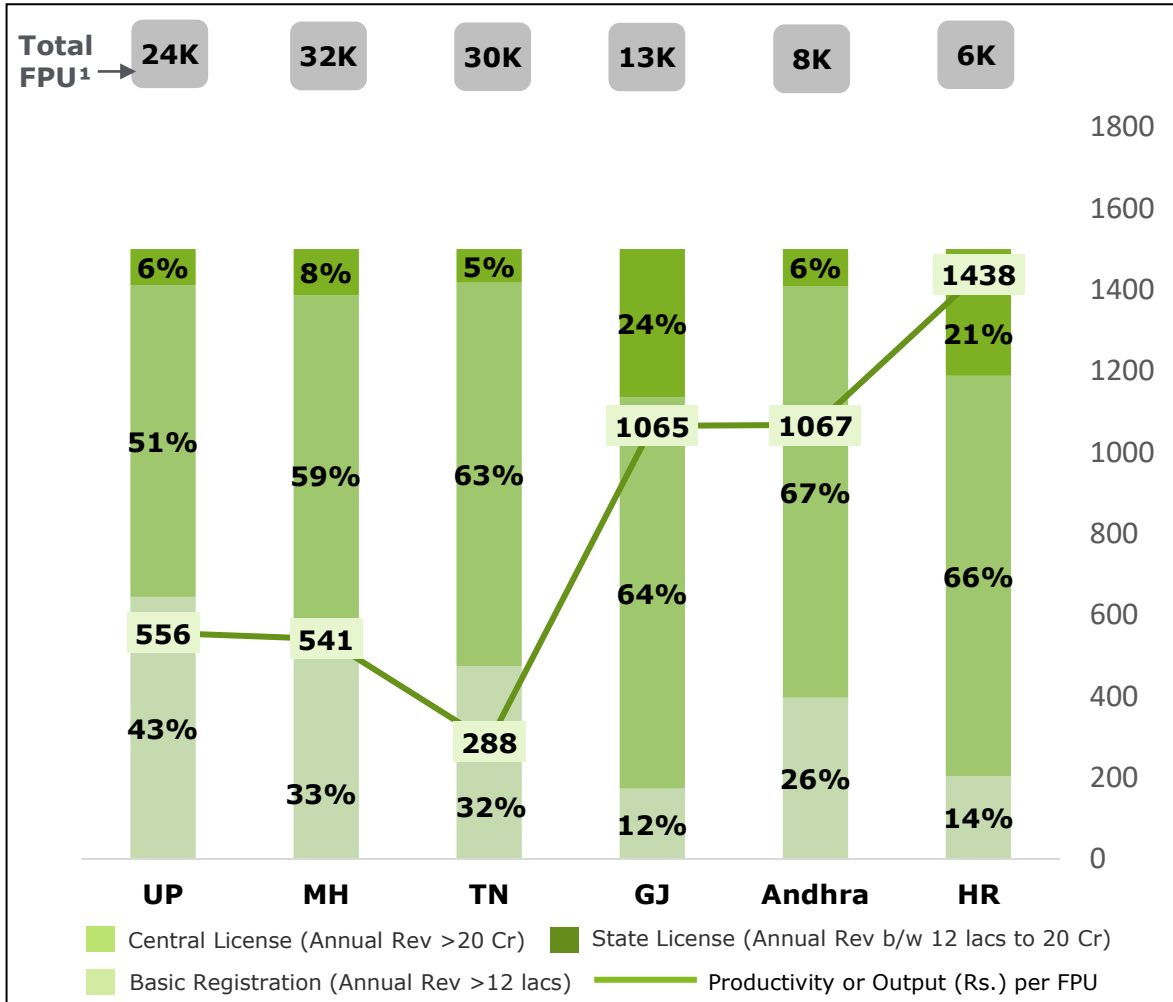
Production in the year 2022-23 in Uttar Pradesh

Commodity	Area (000 Hectare)	Production (000 MT)	Value (in Lakhs)
Paddy	6179.3	24842.8	5387783.4
Wheat	10193.1	38070.5	8616691.4
Cereals	25516.8	67781.9	15155910.4
Pulses	2755.6	2978.7	1859812.0
Sugarcane	2853.0	239462.0	8299370.8
Oilseeds	1810.3	2156.5	1242370.6

Leveraging existing Clusters and processing Landscape

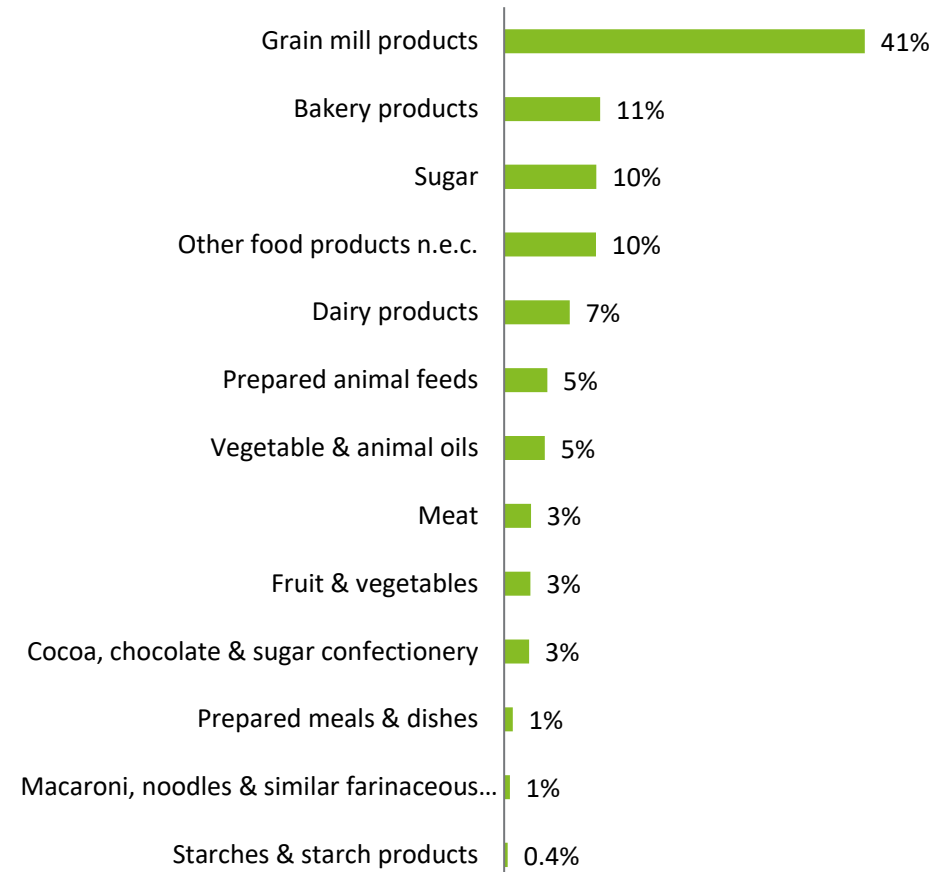
Present Processing Infrastructure of Uttar Pradesh

Active manufacturing units and Productivity (Value per FPU)



Type & % of Organized processing players

Number of Players ~2,094





**Section D : Existing Processing Infrastructure –
Identified Gaps [F&V, Maize, Rice & Seed]**

Fruits & Vegetables Processing

UP's Food processing sector is forecasted to be ~\$25 Bn by FY28 witnessing CAGR ~26% during 2022-28

Processing Facilities for Fruits & Vegetables

Production

- UP Ranks 1st in potato (32.35%), 2nd in vegetables (14.11%) & 3rd in fruit (10.03%) production in India
- UP hosts major fruit belts for **mango** (1st in production in India), **amla** (1st in India) and **guava** (2nd in India)
- Major vegetables grown in the State are **peas, potato, cabbage, tomato, okra**, etc.

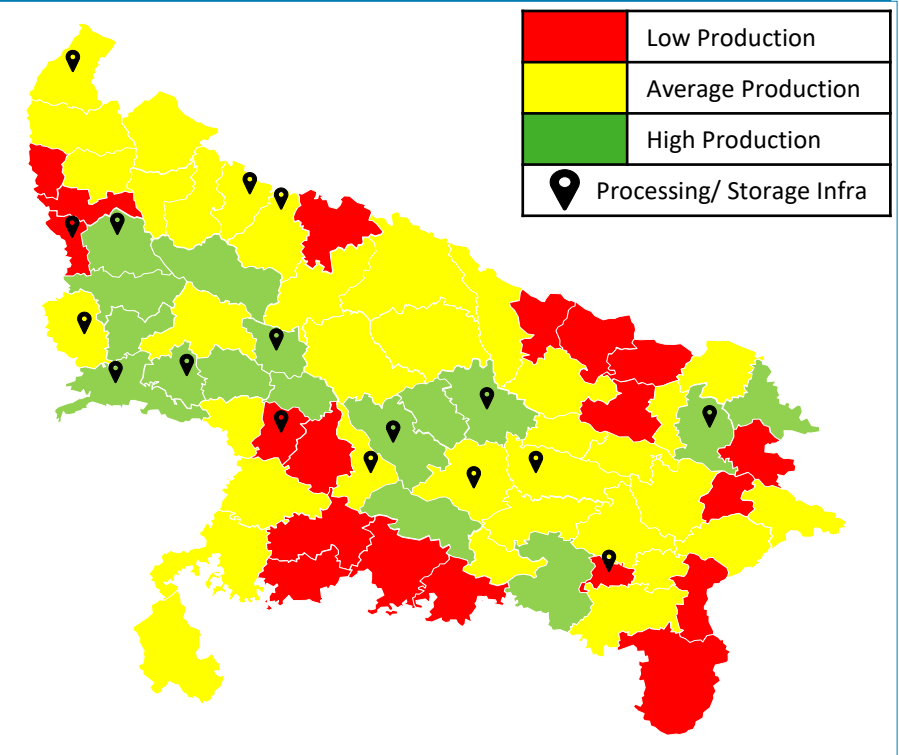
Processing Infrastructure

- State has **23 Cold Chain projects, 3 Agro-Processing Clusters, 22 Food Processing Units under PMKSY**
- U.P. has 5 food parks, 4 industrial parks and 9 cold chains for companies to set up processing plants; Cold chain capacity: ~154 Lakh MT*

Processing

Produce	UP - Rank in Production	UP - Rank in Processing
Mango	1	6
Potato	1	6
Peas	1	4

Fruits & Vegetable Production in UP



Policy & other support for setting up units in UP

Benefits as envisaged under:



Policy



UP Food Processing Policy 2023



UP Agri Exports Policy



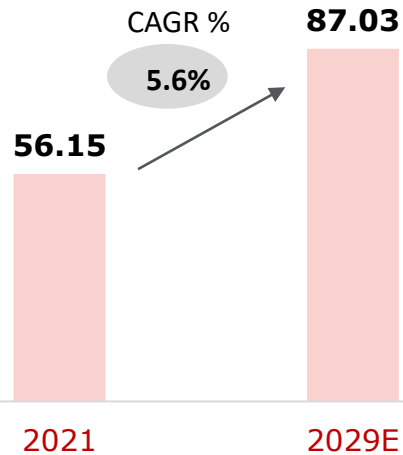
UP Industrial Investment & Employment Promotion Policy

Maize processing

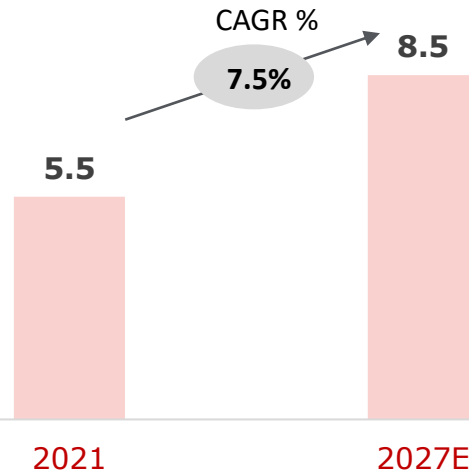
India is the biggest exporter of corn starch in the world; Indian native starch market expected to grow at 7.5%

Setting up Maize processing for starch production

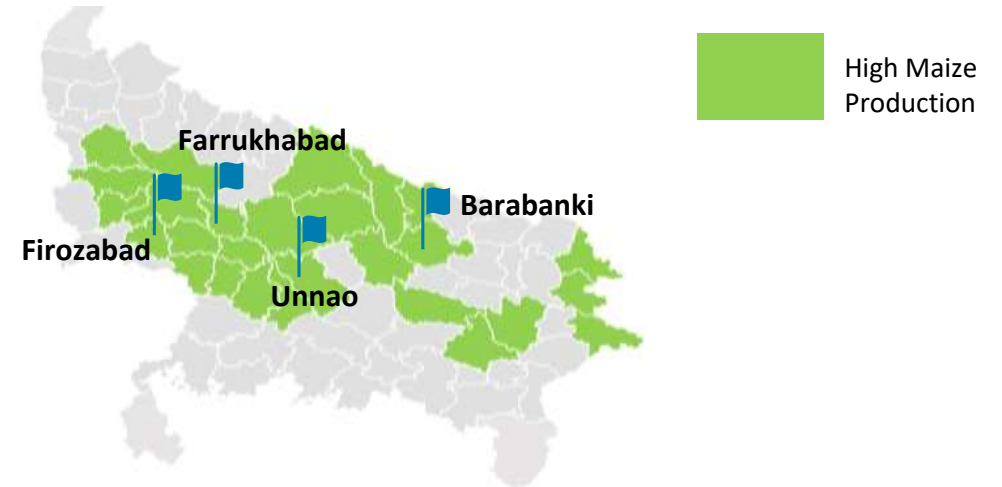
Global starch market (\$ bn)



India native starch market (mn T)



Potential areas for Maize processing in UP



Policy & other support for setting up units in UP

Benefits as envisaged under:



UP Food Processing Policy 2023



UP Agri Exports Policy



UP Industrial Investment & Employment Promotion Policy



Production

UP produces 19.5 LMT of Maize accounting for ~6% of India's production

Demand from food processing, textiles, paper, pharma & biofuels

Industry	Usage
Food processing	Binding, thickening in baked foods, confectionaries, noodles, pastas, soups, sauces, mayonnaises
Textiles	Imparting gloss and removing wrinkles during fabric preparation
Paper, packaging	Binder for coatings, adhesive in corrugated board, lamination
Pharmaceuticals	Disintegrant for capsules and tablets, preparation of antibiotics
Biofuels	Ethanol production

Rice Processing & Exports

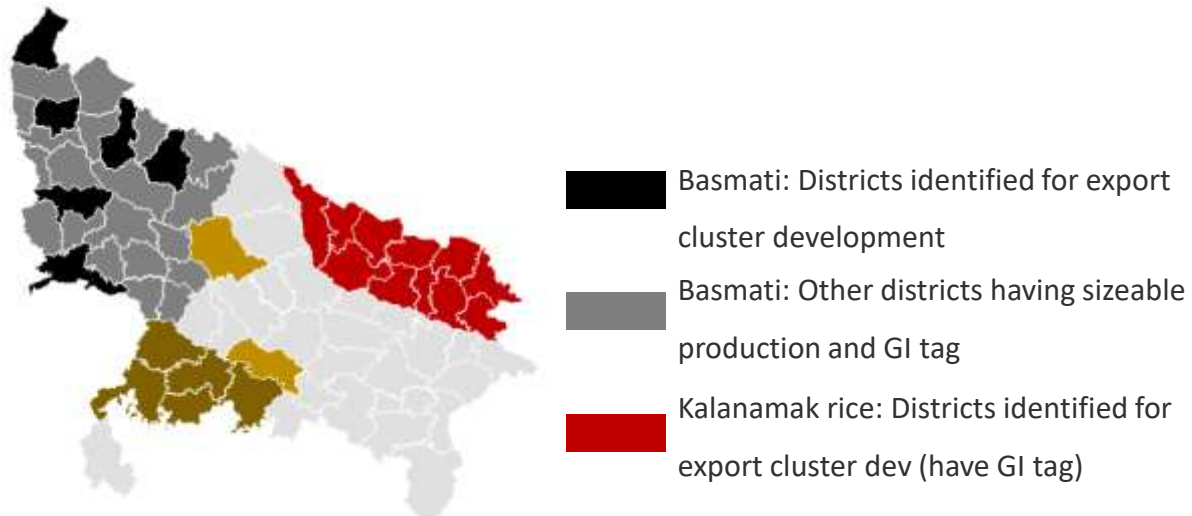
Global aromatic rice market is expected to grow at ~15% CAGR during 2022-28 with India's Basmati exports growing at 6%

Setting up Export focused processing plants/ centers for Rice

Rice production in UP

1. UP produces ~12% of India's non-Basmati rice
2. UP has 24% of India's GI tagged area under Basmati Rice spanning across 30 districts of Western UP
3. It ranks 3rd in Basmati acreages after Haryana & Punjab
4. UP has a GI tag for Kalanamak rice produced in 11 districts of eastern UP; this rice has high demand in south-east Asian countries

Districts for export cluster development



Key export destinations

Middle east is the largest consuming market (27% of global consumption of Basmati rice) % share of Indian Basmati Rice exports:

- Iran (22%)
- Saudi Arabia (18%)
- Iraq (11%)
- UAE (10%)
- UK (5%)
- Kuwait (4%)

Policy & other support for setting up units in UP

Benefits as envisaged under:



UP Food Processing Policy 2023



UP Agri Exports Policy



UP Industrial Investment & Employment Promotion Policy

Double taxation for rice processors removed by UP government

Seed production within UP

UP is one the leading states in agricultural production in India; UP government plans to strengthen this by developing UP Seed Park to become self-sufficient in seeds/seedlings production

Seed processing under UP Seed Park Policy

UP Seed Park policy

1. To make UP self-sufficient in terms of quality seeds/seedlings production
2. To attract new investments in seed industry
3. To provide all seed related infrastructure facilities to private players at one place

Focus Areas

1. Production of short duration variety for Rice
2. Development of Thermo-insensitive Wheat varieties though focused R&D
3. Production of seeds for Groundnut, Til, Gram, Dhaincha & green manuring crops
4. Production of seedlings for Potato
5. Production of bio-fortified varieties with R&D focus

Segments

Proposed policy support (not exhaustive)



Ease of doing business

Single desk for all industrial clearances to units



Infrastructure support

Power subsidy, land allotment to units
Approach roads, electric lines, training centres, water supply, sewers, etc.



Fiscal support

- Capital subsidy
- Interest subsidy
- Stamp duty exemption
- APMC cess/ fee exemption



Patents, R&D, Technology

Reimbursements on patent filing expenses, financial support on approved R&D, Tech partnership projects

Infrastructure Development



Lucknow



Processing plants



Cold Storages



R&D labs



Tissue culture labs



Germination labs



Seed Bank



Model farms

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